



TransCanada PipeLines Limited  
450 - 1<sup>st</sup> Street S.W.  
Calgary, Alberta, Canada T2P 5H1

Tel: 403.920.7184  
Fax: 403.920.2347  
Email: celine\_belanger@transcanada.com

May 1, 2006

National Energy Board  
444 Seventh Avenue S.W.  
Calgary, Alberta  
T2P 0X8

Filed Electronically

**Attention: Mr. Michel L. Mantha, Secretary**

Dear Sir:

**Re: TransCanada PipeLines Limited (TransCanada)  
Short Notice Services Application**

Enclosed for filing with the National Energy Board (Board) is an application by TransCanada for an order approving amendments to the Tariff of TransCanada's Mainline natural gas transmission system to implement two new services. The proposed Firm Transportation-Short Notice service (FT-SN) and Short Notice Balancing service (SNB), which are together referred to in the Application as "Short Notice Services", have been designed to meet the requirements of gas-fired electrical power generators.

TransCanada looks forward to receiving the direction of the Board in respect of the procedure to be used to consider the Application. Should the Board decide that a written proceeding is not appropriate, TransCanada respectfully requests that the Board bear in mind that the Ontario Energy Board is conducting its generic Natural Gas Electric Interface Review (NGEIR) proceeding which involves many of the parties that would be interested in the TransCanada Application. The commonality of parties and people in both proceedings would preclude coincident oral hearings. The oral hearing portion of the NGEIR proceeding is scheduled to begin on June 12, 2006, and continue if necessary until July 14, 2006.

Should the Board require additional information with respect to this Application, please contact Alex Harris, Regulatory Project Manager, TransCanada PipeLines Limited (403-920-6201) or TransCanada's counsel, C. Kemm Yates, Q.C. (403-266-9070).

Yours truly,

Céline Bélanger  
Vice President, Regulatory Services

Encl.

cc RH-2-2004 Interested Parties  
Mainline Tolls Task Force  
Mainline Customers

# **NATIONAL ENERGY BOARD**

**IN THE MATTER OF** the *National Energy Board Act*, R.S.C. 1985, c. N-7, as amended, and the Regulations made thereunder; and

**IN THE MATTER OF** an Application by TransCanada PipeLines Limited pursuant to Part IV of the *National Energy Board Act* for approval of proposed Firm Transportation-Short Notice Service (FT-SN) and Short Notice Balancing Service (SNB).

## **TRANSCANADA PIPELINES LIMITED**

### **SHORT NOTICE SERVICES APPLICATION**

May 2006

To: The Secretary  
National Energy Board  
444 Seventh Avenue S.W.  
Calgary, Alberta  
T2P 0X8

1. TransCanada PipeLines Limited (TransCanada or TCPL) hereby applies to the National Energy Board (Board or NEB) under Part IV of the *National Energy Board Act* (Act) for an order approving amendments to the tariff of TransCanada's mainline natural gas transmission system (Mainline) to implement two new services to meet the requirements of gas-fired electrical power generators.
2. In support of this application (Application), TransCanada provides and relies on the information contained in the Application, including the attached appendices, and any additional information that TCPL may file, as directed or permitted by the Board.
3. TransCanada is a federally incorporated Canadian corporation and a "company" as that term is defined in the Act.
4. TransCanada owns and operates the Mainline that extends from the Alberta border across Saskatchewan, Manitoba, and Ontario, through a portion of Québec, and connects to various downstream Canadian and international pipelines.
5. TransCanada proposes to establish a new Firm Transportation-Short Notice service (FT-SN) and a new Short Notice Balancing service (SNB), together referred to as the Short Notice Services, that are intended to meet the needs of gas-fired power generators for flexibility of operations and certainty of gas supply. Details of the proposed Short Notice Services and associated tariff changes are discussed in Appendix 1 to the Application: Written Evidence of TransCanada PipeLines Limited. Appendices 2 through 7 to the Application are new toll schedules and new *pro forma* contracts for the new services, a black-lined version of the General Terms and Conditions of TransCanada's Mainline Tariff showing amendments to implement the new services, and a black-lined version of the Mainline Transportation Access Procedures showing amendments to implement the new services. Appendix 8 addresses the requirements of the *National Energy Board Filing Manual*.
6. TransCanada believes the new FT-SN and SNB services will attract new long term contracts by providing power generators with flexibility that they seek but is not otherwise available.


**Relief Requested**

7. TransCanada requests an order of the Board:
- (a) approving the proposed FT-SN and SNB services, the related toll methodologies, and the associated tariff changes, to be effective upon approval; and
  - (b) granting such further and other relief as TransCanada may request or the Board may determine to be appropriate in the circumstances.

**Respectfully submitted.**

**Calgary, Alberta  
May 1, 2006**

**TransCanada PipeLines Limited**

Per:   
\_\_\_\_\_  
Céline Bélanger  
Vice President, Regulatory Services

Communications relating to this Application should be directed to:

Alex Harris  
Regulatory Project Manager  
TransCanada PipeLines Limited  
450 First Street S.W.  
Calgary, Alberta  
T2P 5H1  
Telephone: (403) 920-6201  
Telecopier: (403) 920-2347  
Email: alex\_harris@transcanada.com *and*  
transcanada\_mainline@transcanada.com

and C. Kemm Yates, Q.C.  
Stikeman Elliott LLP  
4300 Bankers Hall West  
888 Third Street S.W.  
Calgary, Alberta  
T2P 5C5  
Telephone: (403) 266-9070  
Telecopier: (403) 266-9034  
Email: kyates@stikeman.com

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# **NATIONAL ENERGY BOARD**

**IN THE MATTER OF** the *National Energy Board Act*, R.S.C. 1985, c. N-7, as amended, and the Regulations made thereunder; and

**IN THE MATTER OF** an Application by TransCanada PipeLines Limited pursuant to Part IV of the National Energy Board Act for approval of proposed Firm Transportation-Short Notice Service (FT-SN) and Short Notice Balancing Service (SNB).

## **TRANSCANADA PIPELINES LIMITED**

### **SHORT NOTICE SERVICES APPLICATION**

#### **APPENDIX 1**

#### **WRITTEN EVIDENCE**

#### **OF**

#### **TRANSCANADA PIPELINES LIMITED**

May 2006

1   **1.0   INTRODUCTION AND SUMMARY**

2   **Q1.   What is the purpose of the Short Notice Services Application?**

3   A1.   TransCanada PipeLines Limited (TransCanada or TCPL) is applying to the National  
4       Energy Board (NEB or Board) for approval of two new services that respond to desires of  
5       the natural gas market. The services, named Firm Transportation-Short Notice (FT-SN)  
6       and Short Notice Balancing (SNB), are designed to provide the greater flexibility and  
7       certainty that is required by a growing number of gas-fired electricity generators. These  
8       services will encourage long-term transportation contracts and enhance the  
9       competitiveness of TransCanada's Mainline.

10   **Q2.   Why is the Short Notice Services Application being made now?**

11   A2.   TransCanada recognizes that, as the owner and operator of the Mainline, it has primary  
12       responsibility to ensure that the pipeline remains adapted to a rapidly changing natural  
13       gas market.<sup>1</sup> It also recognizes that responsiveness to market signals is a critical element  
14       of the pursuit of economic efficiency that is a goal of regulation and the Board.<sup>2</sup>  
15       TransCanada is continuing its efforts to increase firm contracts and devise strategies to  
16       compete effectively for transportation volumes.

17       The Short Notice Services have been devised in the context of an initiative by the Ontario  
18       Government to replace coal-fired power generation with cleaner sources of energy and  
19       conservation.<sup>3</sup> A number of new gas-fired power generation projects have already been  
20       announced, with the first of the plants intended to be in service in late 2007. More  
21       projects are expected to be announced later this year. The new generators require  
22       certainty of gas transportation before constructing facilities. Project proponents will need

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<sup>1</sup> The Board recognized this responsibility in Reasons for Decision In the Matter of TransCanada PipeLines Limited, RH-3-2004, North Bay Junction Application", December 2004. (RH-3-2004 Decision), p. 36.

<sup>2</sup> RH-3-2004 Decision, p. 8.

<sup>3</sup> Ontario Ministry of Energy News Release, "McGuinty Government Unveils Bold Plan to Clean Up Ontario's Air," June 15, 2005.

1 to make gas transportation arrangements in the near future, and as pipeline shippers they  
2 need to know the terms and conditions of access to a pipeline in advance of negotiations.<sup>4</sup>

3 From TransCanada's perspective, timely approval of the Short Notice Services will allow  
4 the Mainline to compete with other service providers for the new power generation  
5 market.

6 **Q3. What will the FT-SN service do?**

7 A3. FT-SN will allow a shipper to match its gas transportation closely with changes in the  
8 real-time electricity market. It will do so by authorizing the FT-SN shipper to nominate  
9 for service at intervals as frequent as every 15 minutes (up to 96 nomination windows per  
10 day). The service is structured to ensure that the FT-SN shipper will have the ability to  
11 nominate up to its contracted quantity at various times throughout the day. TransCanada  
12 will ensure that capacity will be available to meet changes at each nomination window.  
13 TransCanada will provide the service by reserving capacity throughout the day to  
14 accommodate FT-SN nominations.

15 **Q4. What will the SNB service do?**

16 A4. SNB facilitates the effective operation of FT-SN by providing access to Mainline system  
17 flexibility for balancing purposes. TCPL will utilize Mainline compression and linepack  
18 to provide the flexibility as part of its response to the market need for variable  
19 consumption on short notice.

20 **Q5. Why can't existing services be used to meet the evolving requirements of power  
21 generators?**

22 A5. Current services, such as Firm Transportation (FT), are not ideally suited to meet large  
23 loads with hourly flows that can vary significantly and change on short notice. For  
24 example, an FT shipper may not be able to obtain authorization of intra-day nomination

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<sup>4</sup> RH-3-2004 Decision, p. 9.



1 increases. This is because the FT shipper is only assured full access to firm capacity at  
2 the first nomination window for the day, and capacity not nominated by FT shippers (and  
3 other firm services shippers) can be sold as discretionary services for the balance of that  
4 day. The nomination windows available for FT (four windows daily) may not offer  
5 sufficient flexibility to meet the evolving needs of the power generation market. Further,  
6 the maximum hourly rate of flow for FT may not be flexible enough for such a market.  
7 Ultimately, there may be an increased risk of incurring balancing fees using FT to meet  
8 the volatile power market.

9 **Q6. How were the Short Notice Services developed?**

10 A6. TransCanada analyzed the benefits and drawbacks of the options available to respond to  
11 the evolving needs of the power generation market. It then sought to employ  
12 collaboration, consultation and creativity in an effort to resolve issues relating to its  
13 response. During the process, there was an effective and timely exchange of information  
14 with various stakeholders including existing Mainline shippers, power generators, the  
15 Ontario Independent Electricity System Operator (IESO), and local distribution  
16 companies (LDCs). TransCanada created and developed potential services, presented  
17 proposals to stakeholders, sought consensus through discussion and consultation, and  
18 collaborated with others in an attempt to reach resolution outside the regulatory forum.

19 TransCanada is also participating in related Ontario Energy Board (OEB) proceedings,  
20 including the Natural Gas Electric Interface Review (NGEIR) generic proceeding. For  
21 the Board's information, Attachment A to this written evidence consists of the portion of  
22 the evidence filed by TransCanada in the NGEIR proceeding that are relevant to this  
23 Application.

1 **Q7. Please describe the nature and magnitude of the opportunity for TransCanada to**  
2 **serve the new power generating market through the Short Notice Services.**

3 A7. The Ontario Government is planning to replace 7500 MW of coal-fired electricity  
4 generation, starting in late 2007 with 2009 as the target for completion. A more detailed  
5 discussion of the Ontario Government initiative and the regulatory process that is  
6 underway in Ontario is provided in Attachment B to this written evidence, entitled  
7 “Background on Gas-Fired Electricity Generation in Ontario.”

8 It has recently been estimated that gas use by new gas-fired generators in Ontario would  
9 grow to about 164 PJ/year in a low gas-fired generation growth scenario to about  
10 320 PJ/year in a high growth scenario by 2012, with in-Ontario peak requirements  
11 ranging from a low of about 0.86 PJ/d to a high of about 1.35 PJ/d.<sup>5</sup> By serving these  
12 needs, TransCanada expects to attract new throughput to the Mainline, thereby providing  
13 a potentially significant benefit to Mainline shippers through reduced tolls.

14 TransCanada believes that the opportunity to capture incremental market demand will  
15 result in additional long-haul and/or short-haul contracts on the Mainline. Using 2006  
16 final tolls as a measure, a new long-haul FT-SN contract from Empress to a location near  
17 Toronto for 100,000 GJ/d to serve a 500 MW generation plant would generate  
18 incremental revenue of approximately \$37.5 million per year. The resulting incremental  
19 revenues translate into a reduction of approximately 2.25 ¢/GJ in the Eastern Zone toll,  
20 although the impact could be reduced by the need for facilities expansions or contracting  
21 for additional transportation service on systems such as that of Union Gas Limited  
22 (Union).

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<sup>5</sup> Ontario Energy Board, “Natural Gas Electricity Interface Review: A Report by Ontario Energy Board Staff,” EB-2005-0306, November 21, 2005, (NGEIR, Board Staff Report) p. 13.

1 **Q8. How is the balance of this evidence organized and presented?**

2 **A8.** Section 2 describes FT-SN in detail. Section 3 provides details of SNB. Section 4 is a  
3 brief summary of the evidence and conclusion. Attachment A consists of excerpts from  
4 the evidence filed by TransCanada in the OEB's NGEIR proceeding that pertain to the  
5 Short Notice Services proposed in this Application. Attachment B provides background  
6 on the growing use of natural gas-fired electricity generation in Ontario and on the OEB's  
7 NGEIR proceeding.

8 **2.0 FIRM TRANSPORTATION-SHORT NOTICE SERVICE (FT-SN)**

9 **Q9. Please summarize the FT-SN service.**

10 **A9.** FT-SN is a renewable, assignable firm service with a minimum one year contract term  
11 that permits intra-day nominations as frequently as at 15 minute intervals (up to 96  
12 nominations per day). A separate delivery area is required for each meter station and  
13 flow control is required at the point of delivery. The toll at 100% load factor is 110% of  
14 the 100% load factor FT toll.

15 **Q10. How does FT-SN differ from FT?**

16 **A10.** In comparison to FT, FT-SN offers shippers more flexibility, certainty that service will be  
17 available when needed, and lower exposure to balancing fees, since it allows shippers  
18 intra-day access to service on short notice at nomination windows as frequently as every  
19 fifteen minutes. TCPL reserves capacity for both FT-SN and FT shippers, but the  
20 difference lies in timing, since an FT shipper is only assured access to capacity in the first  
21 nomination window.

22 The service attributes of FT-SN and FT are compared in Table 2.1 below.

**Table 2.1 – Comparison of FT-SN and FT Service Attributes**

	<b>FT-SN</b>	<b>FT</b>
Intra-Day Reservation of Capacity by TCPL	Yes	No
Renewal Rights	Yes	Yes
Term	Minimum one year	Minimum one year
Toll at 100% Load Factor	Non-biddable 110% of the 100% load factor FT toll	Non-biddable 100% load factor FT toll
Diversions and Alternate Receipt Points (ARPs)	Available at four standard nomination windows	Available at four standard nomination windows
Firm Transportation-Risk Alleviation Mechanism (FT-RAM)*	Not available	Available
Assignments	Available	Available
Nomination requirements	GJ/hour	Daily quantity nominations (GJ/day)
Nomination Windows	Up to 96, 15 minutes prior to gas flow	Up to four
Maximum Hourly Entitlement	5% of (contract demand less diversions/ARPs)	5% of authorized daily quantity
Separate Distributor Delivery Area Required for each Meter Station	Yes	Only if Warranted
Flow Control Required at Point of Delivery	Yes	Only if Warranted

\*FT-RAM expires October 31, 2007.

1 **Q11. What are the needs of some gas-fired electricity generators that FT-SN is designed**  
2 **to address?**

3 A11. Some new gas-fired power generators in Ontario desire a closer alignment of the timing  
4 of the operations of the gas industry and the electricity industry. The gas industry  
5 conventionally operates on a day-ahead basis to plan operations and schedule  
6 transportation, whereas the power industry in Ontario operates on a real-time basis. In  
7 Ontario, generators submit offers to produce energy into the real-time wholesale

1 electricity market. Based on these offers, the IESO provides generators a pre-dispatch  
2 schedule on a day-ahead basis to give them a sense of their position in the next day's  
3 dispatch schedule. However, since there is currently no obligation on the market  
4 participant to submit offers/bids until two hours prior to the dispatch hour, not all  
5 offers/bids are in the day-ahead dispatch schedule. The IESO updates the pre-dispatch  
6 schedules each hour based on any revised offers it receives, and generators can  
7 continually revise or withdraw their hourly offers up until two hours before the real-time  
8 dispatch hour. When the dispatch hour arrives, the generators are dispatched on as little  
9 as five-minutes notice to meet real-time demand. From that point, the generator's output  
10 can be dispatched up or down depending on prevailing demand as well as prevailing bids  
11 and offers from other generators.<sup>6</sup>

12 The IESO pre-dispatch schedules are not physically or financially binding in any way,  
13 and even with the implementation of a Day Ahead Commitment Process in Summer 2006  
14 (which will effectively compel all market participants to submit offers and bids the day  
15 ahead), the market participants will still be able to revise their offers after the initial pre-  
16 dispatch schedule is released.<sup>7</sup> The pre-dispatch schedule is also based on forecast  
17 demand, which naturally may differ from actual demand. The result is that it may be  
18 difficult for some generators to purchase and schedule natural gas on a day-ahead basis,  
19 as may be required with FT since they may be uncertain when or if they will be  
20 dispatched on a given day. FT-SN is designed to facilitate closer alignment between the  
21 gas and power industries to better meet the range of needs of the developing power  
22 generation market.

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<sup>6</sup> Independent Electricity System Operator, "Market Rules for the Ontario Market," March 8, 2006, chapter 7, "System Operations and Physical Markets."

<sup>7</sup> Independent Electricity System Operator, "Guide to Day-Ahead Commitment Process: Marketplace Training," Revised. January 2006.

1 **Q12. What problems could be encountered if FT were used to serve the evolving power**  
2 **generation market?**

3 A12. Current services were not designed to meet large loads with hourly flows that can vary  
4 significantly and change on short notice. As a result, several problems could be  
5 encountered if FT was used to serve a peaking power generation market.

6 First, the FT shipper is only assured full access to firm capacity at the first nomination  
7 window for the day. At each nomination window, capacity not nominated by FT shippers  
8 (and shippers using other firm services) can be sold as discretionary services for the rest  
9 of that day, and intra-day nomination increases by FT shippers cannot negatively impact  
10 previously authorized nominations, even if they have a lower service priority than FT.  
11 Due to these limitations, there is risk the FT shipper's intra-day nomination increases  
12 may not be authorized. Please refer to Attachment A, Appendix 1A, Table A3 for  
13 nomination windows.

14 Second, the nomination windows available for FT may not offer enough flexibility to  
15 meet the needs of a peaking power generation market. FT has access to four standard  
16 nomination windows daily for three effective times, and these windows have nomination  
17 deadlines which range from 4 hours to 21 hours prior to the effective start time.  
18 However, a peaking power generator may be dispatched on notice considerably shorter  
19 than 4 hours and for different effective times.

20 Third, the maximum hourly rate of flow applicable to FT may not be flexible enough for  
21 a peaking power generation market. As set out in Section II (2) of the General Terms and  
22 Conditions (GT&C) of the Mainline Tariff, the maximum hourly rate of flow is 5% of the  
23 daily authorized quantity. Thus, if this daily authorized quantity is less than the full daily  
24 contract demand, then the FT shipper's hourly flexibility is correspondingly less than the  
25 5% of daily contract demand.

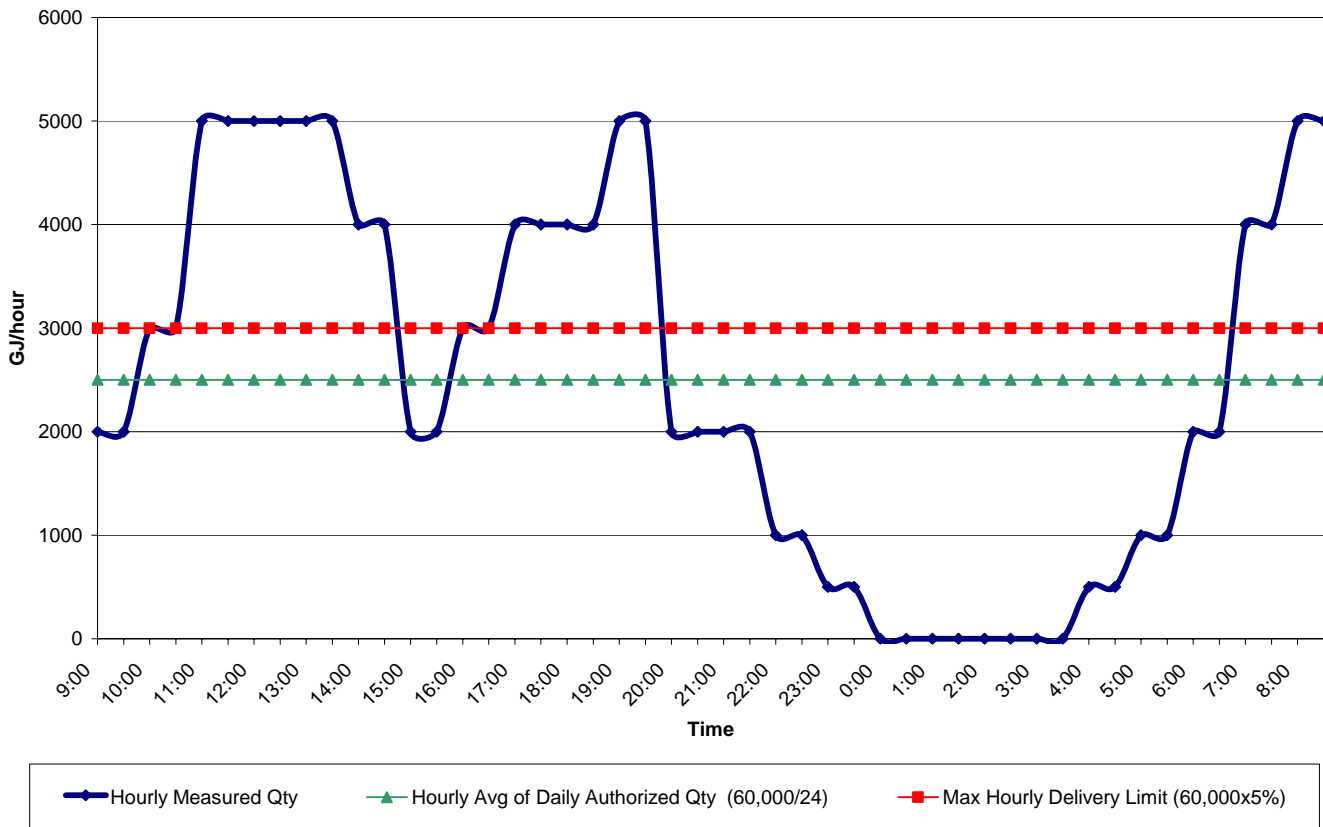
1 Fourth, there may be an increased risk of incurring balancing fees using FT to meet the  
2 needs of a peaking power generation market due to the three issues noted above. With  
3 these limitations of FT, the shipper's daily authorized quantities may differ considerably  
4 from the shipper's daily allocated quantities (which is the shipper's share of measured  
5 quantities). Balancing fees, which are described in Section XXII in the GT&C, apply if  
6 the difference between the shipper's daily authorized quantities and the shipper's daily  
7 allocated quantities are outside prescribed tolerances.

8 Figure 2.1 depicts a hypothetical example of a power generation market served using FT  
9 service. This power generator has a variable intra-day load profile this day, with a  
10 required peak hourly rate of flow of 5,000 GJ, and a daily demand of 60,000 GJ.

11 In order for the peak hourly rate of flow of 5,000 GJ not to exceed the uniform hourly  
12 flow provisions in the GT&C, the shipper would need an FT contract with a daily  
13 contract quantity of 100,000 GJ and would need to nominate 100,000 GJ for that gas day.  
14 Such nomination would be due the day prior to flow. However, if the shipper's daily  
15 allocated quantities were 60,000 GJ, then the shipper would be well outside prescribed  
16 tolerances and would be subject to balancing fees.

17 If the shipper is successful in nominating throughout the day to ensure the daily-  
18 authorized quantities align with the daily allocated quantities, the peak hourly deliveries  
19 would violate the provision in the GT&C which allows a maximum hourly rate of  
20 delivery of 5% of daily authorized quantity. In this example, the peak hourly rate of flow  
21 is 5,000 GJ, but 3,000 GJ (5% of 60,000 GJ) is the permitted maximum.

**Figure 2.1 – Hypothetical Example of a Power Generation Market Served by FT Over a Day**



1 **Q13. How does FT-SN better meet the requirements of the developing power generation**  
2 **market?**

3 A13. FT-SN provides access to contracted capacity throughout the day to ensure it is  
4 accessible within a gas day, at up to 96 nomination windows per day. The additional  
5 flexibility of FT-SN makes it possible for a shipper to make short-notice changes to its  
6 gas transportation requirements as needed to match real-time changes in the electricity  
7 market.



1 **Q14. Please explain.**

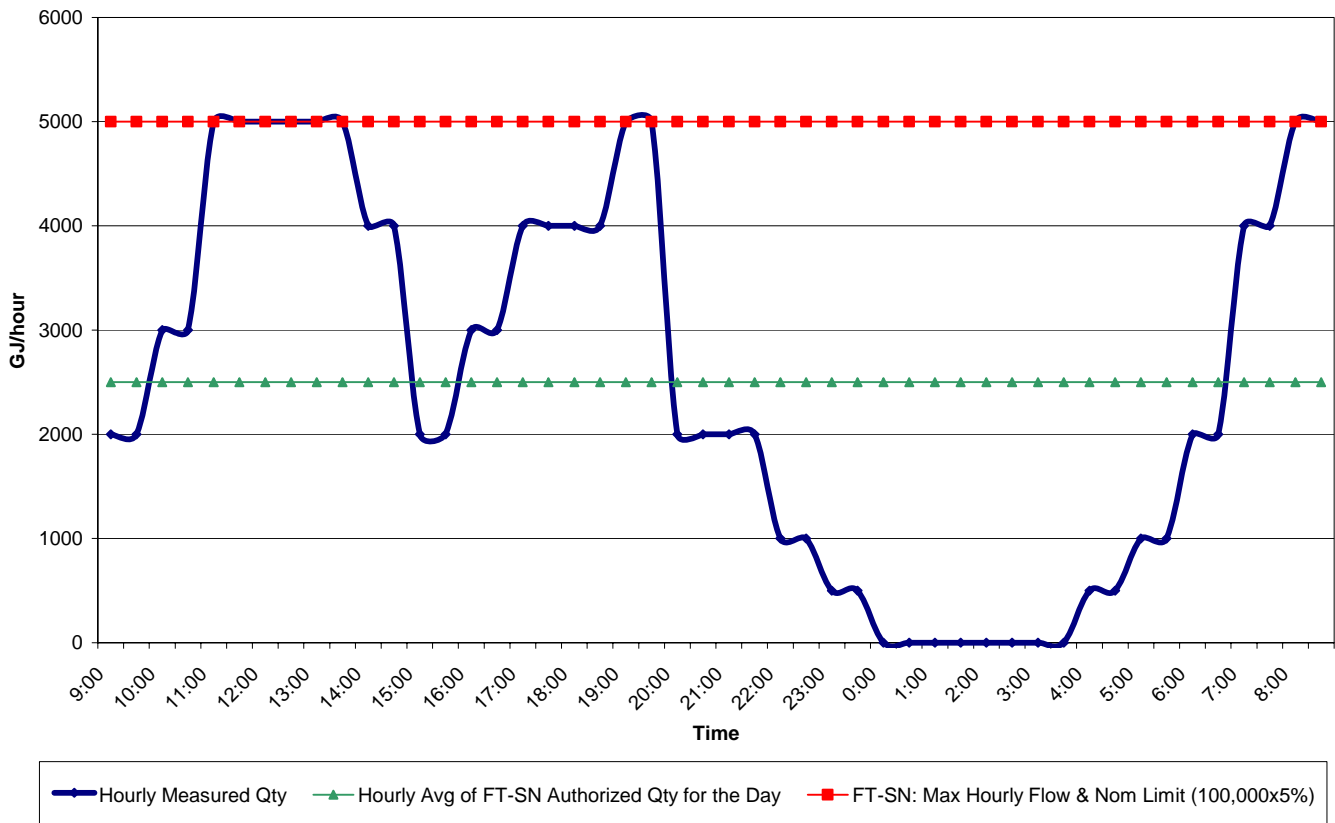
2 A14. First, an FT-SN shipper's entitlement to service is reserved by TransCanada to allow  
3 access to service at any of the available nomination windows during the day.

4 Second, for FT-SN, the peak hourly rate of flow is 5% of the daily contract quantity.  
5 This allows the FT-SN shipper to nominate and take this peak hourly rate of flow at any  
6 of the available nomination windows. This differs from FT, where the maximum hourly  
7 rate of flow is 5% of daily authorized quantity.

8 Third, FT-SN has up to 96 nomination windows available each day, and with 96  
9 nomination windows the nomination deadline would be 15 minutes before the effective  
10 time. This allows the FT-SN shipper significant opportunity to adjust its nominations to  
11 match the volatile load profile of the market.

12 Figure 2.2 depicts how these features of FT-SN can be used to serve the same market  
13 shown in Figure 2.1. In this example, the shipper would need an FT-SN contract with a  
14 daily contract quantity of 100,000 GJ to allow an hourly rate of flow of 5,000 GJ for  
15 nominations and deliveries. Using up to 96 nomination windows, the shipper has  
16 significant opportunity to align its end-of-day authorized quantities with the measured  
17 quantities and avoid balancing fees. In this example, the aggregate of the FT-SN  
18 authorized nominations for the day is 60,000 GJ, and the hourly average of this quantity  
19 is 2,500 GJ (60,000 GJ / 24).

**Figure 2.2 – Hypothetical Example of a Power Generation Market Served by FT-SN Over a Day**



1 **Q15. Why is TransCanada proposing FT-SN nominations at intervals up to every 15**  
 2 **minutes?**

3 A15. TransCanada understands that the Ontario electrical grid operates on a five minute  
 4 dispatch basis. However, five minutes' notice does not afford sufficient time to process a  
 5 nomination change, validate it against contracts, confirm with upstream and downstream  
 6 operators and take any action to adjust operations to meet the changing requirements. At  
 7 the same time, TransCanada's current gas nomination windows do not provide sufficient  
 8 flexibility to meet the expected short notice dispatch needs of the new power generation  
 9 market.

1 TransCanada proposes nomination windows up to every 15 minutes as part of its FT-SN  
2 service. This period represents the minimum timeframe within which TransCanada  
3 believes that a nomination can be processed and actions initiated by its Gas Control to  
4 ready the Mainline system to respond to changes in flows. Obviously, longer lead times  
5 would be preferred and would offer greater opportunity to adjust pipeline operations.  
6 However, 15 minutes' notice strikes an appropriate balance between the five minute  
7 IESO dispatch window and TransCanada's ability to process and initiate response to flow  
8 change requests.

9 From the perspective of the power plant operator, 15 minute nomination windows should  
10 enable it to nominate closely to actual take levels throughout the day and minimize  
11 exposure to imbalance fees on the Mainline.

12 **Q16. Why will FT-SN shippers be required to have separate delivery areas with flow**  
13 **control?**

14 A16. FT-SN shippers will be required to have a separate delivery area and flow control in  
15 order to ensure accurate control of flows at the delivery point specified in the FT-SN  
16 contract. The ability to control flows will allow TransCanada to protect its ability to  
17 make deliveries elsewhere on the Mainline. This is an important consideration for  
18 TransCanada's operation of the Mainline given the sizes and locations of some of the  
19 proposed power plants in Ontario as shown in Figure 1.1 in Attachment B.

20 Because of the need for flow control and location-specific nomination information to  
21 meet short notice demand, an FT-SN contract requires the creation of a separate  
22 distributor delivery area. Having a separate delivery area allows TransCanada to separate  
23 FT-SN deliveries from those of other end users such as LDCs that serve residential  
24 markets. To permit determination of the appropriate flow control, a delivery area that has  
25 been contracted for FT-SN service can only be used for the delivery of gas under FT-SN  
26 for the duration of the contract. This requirement is due to the difference in nominations  
27 between FT-SN service and other services. FT-SN service nominations will be flow-rate

1 nominations for the subsequent 15 minute period whereas nominations for other Mainline  
2 services are daily nominations which provide no information regarding flows over the  
3 subsequent 15 minute period. Mixing these different nomination types will make it  
4 impossible for TransCanada to determine the appropriate flow control limit to serve all of  
5 the services.

6 If FT-SN deliveries were made into a large multi-metered distributor delivery area, it  
7 would not be possible to effectively control flows to power generators with the accuracy  
8 that is required to protect TransCanada's ability to make deliveries off the Mainline  
9 elsewhere. A nomination change to a broad delivery area does not provide any indication  
10 as to which meter within the area will experience a change in consumption. For example,  
11 meters exist on four distinct segments of the Mainline system within the Enbridge Central  
12 Delivery Area (CDA). If a nomination for FT-SN increases flows to the Enbridge CDA,  
13 TransCanada would not know if the requirement was for the area around Toronto, in the  
14 Niagara area, or elsewhere in the CDA. Without more exact information about where the  
15 gas is required, TransCanada may not be able to meet the short notice delivery  
16 obligations to the power plant and/or delivery obligations elsewhere on the Mainline  
17 system.

18 **Q17. Please detail how shippers will nominate for FT-SN.**

19 A17. FT-SN shippers will be able to nominate in up to 96 nomination windows per day, at  
20 intervals as short as 15 minutes. These nominations will be placed as hourly flow rates,  
21 with a maximum rate of 5% of daily contract quantity in an hour. The aggregate of the  
22 nominations in a gas day cannot exceed the daily contract quantity of the FT-SN contract.  
23 Like other shippers, FT-SN shippers may be subject to balancing fees if the measured  
24 quantities are different from the authorized quantities at the end of the gas day.

1 **Q18. How will FT-SN shippers nominate for diversions and Alternate Receipt Points?**

2 A18. FT-SN shippers will only be able to nominate for diversions and ARPs at the nomination  
3 windows also available to FT shippers. Diversions and ARPs by FT-SN shippers have  
4 the same priority as diversions by FT shippers. This will ensure that FT-SN shippers  
5 have no advantage over FT shippers that may also want to nominate a diversion or ARP.  
6 If an FT-SN shipper chooses to divert or utilize an ARP, then the quantity of that  
7 shipper's  
8 FT-SN service entitlement would be reduced for the rest of the applicable gas day by the  
9 amount sought for diversion or use as an ARP. This will prevent the FT-SN shipper from  
10 having firm access to a greater quantity than contracted. The relinquished quantity of  
11 service entitlement frees capacity which TransCanada can sell as discretionary services.

12 The following example illustrates how a diversion or ARP could work. Assume a  
13 shipper has an FT-SN contract from Empress to a hypothetical Power CDA (PCDA) for  
14 100,000 GJ/d. This would allow it to move 5% of 100,000 GJ or a maximum of 5,000 GJ  
15 per hour up to its total contract demand. Suppose that for the May 15 gas day, the  
16 shipper elects to nominate a diversion for 75,000 GJ to deliver gas to Emerson and this  
17 nomination is authorized by TransCanada. On May 15, the shipper is entitled to deliver  
18 75,000 GJ to Emerson (and can make changes to this amount only on the same windows  
19 as those available to FT shippers), but only has entitlement to move 25,000 GJ to the  
20 PCDA. For the 25,000 GJ available to the PCDA on May 15, the shipper can nominate  
21 using its more frequent FT-SN nomination windows and the maximum amount that can  
22 be moved in any one hour is 5% of 25,000 GJ or 1,250 GJ. If the shipper has not  
23 nominated a diversion for May 16, then on May 16 the shipper can again use its more  
24 frequent FT-SN nomination windows to fully utilize its 100,000 GJ/d to the PCDA and  
25 therefore would again have an hourly maximum of 5,000 GJ.

1 **Q19. Could FT-SN serve other needs besides gas-fired generation?**

2 A19. Yes. Although FT-SN is primarily designed to address the needs of gas-fired generators,  
3 the service will be available to all Mainline shippers and could meet the needs of other  
4 customers as well. Any customer with a variable load profile, including industrial  
5 customers or distributors, may find value in the ability to access service on a firm basis  
6 and vary its consumption within the day as required.

7 **Q20. What differences are there in operating the Mainline to provide FT-SN compared to**  
8 **existing services?**

9 A20. FT-SN has more nomination windows than existing services, so the time for  
10 TransCanada to react to changes in scheduled gas flows may be reduced. However, the  
11 daily nominated quantities under existing firm services do not identify whether hourly  
12 flow will be 5% of the daily authorized quantity or some lesser amount at any point in  
13 time during the day. Because some power generators may require changes in  
14 consumption on short notice, additional FT-SN nomination windows will provide more  
15 timely and accurate information with which to operate the Mainline, in part because they  
16 will specify a flow rate. This allows TransCanada to take proactive steps to respond to  
17 changes in consumption rather than reacting after consumption levels, and therefore  
18 physical flows, have changed.

19 **Q21. Will Mainline design criteria be altered to accommodate FT-SN?**

20 A21. No.

21 **Q22. Please provide details of the toll for FT-SN.**

22 A22. FT-SN will have a demand and commodity charge equal to 110% of the demand and  
23 commodity tolls for FT. Other charges such as fuel, pressure and diversion charges will  
24 be assessed the same as for FT.

1 **Q23. How was the 10% premium for the FT-SN toll determined?**

2 A23. The 10% premium for FT-SN reflects the opportunity cost of potentially foregone  
3 discretionary revenues.

4 When FT shippers do not nominate for their full service entitlement, TransCanada can  
5 offer the capacity made available for sale as discretionary services such as Interruptible  
6 Transportation (IT), FT diversions, Storage Transportation Service overrun (STS  
7 overrun) and Parking and Loans service (PALS). Such sales generate discretionary  
8 revenues that are later credited to the gross revenue requirement when determining FT  
9 tolls. Specifically, in the calculation of tolls, forecast discretionary revenue is deducted  
10 from the gross revenue requirement to arrive at a net revenue requirement, which is then  
11 allocated to firm shippers. The result is that discretionary revenue reduces firm service  
12 tolls. Therefore, although FT shippers do not have access to capacity for subsequent  
13 windows if they do not nominate in the Timely window, they do benefit from the sale of  
14 the discretionary services that may prevent them from utilizing their service at a  
15 subsequent window. With FT-SN, however, TransCanada must keep the capacity  
16 available to provide the service 24 hours a day. A loss of potential discretionary revenue  
17 could result from the fact that capacity that is not required to serve FT-SN nominations  
18 cannot be sold as discretionary services.

19 TransCanada sought to quantify the potential discretionary revenue impact of FT-SN  
20 through an analysis of revenues from discretionary services from 2001 to 2005. First, the  
21 total annual revenue from the relevant services was calculated. Then, the totals were  
22 adjusted to account for Authorized Overrun Service (AOS), FT-Make Up and FT-RAM  
23 credits. The result is the revenue impact to the Mainline resulting from offering the  
24 discretionary services. The calculation of these net discretionary revenues for 2001 to  
25 2005 is shown in Table 2.2.

**Table 2.2 - Discretionary Revenue Evaluation (\$ Million)**

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Gross Revenue from IT, FT diversions/ARPs, STS overrun and PALS	101.2	726.1	177.8	136.9	258.8
Less FT-RAM/AOS/FT-Make-Up Credits	0.0	661.7	0.0	23.4	138.8
Net Discretionary Revenues	101.2	64.4	177.8	113.5	120.0

1 The potential percentage impacts on the Eastern Zone FT tolls for 2001 to 2005 are  
2 shown in Table 2.3.

**Table 2.3 - Discretionary Revenue Evaluation (Percentage Impact on Eastern Zone FT Toll)**

<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
5.0%	3.2%	9.4%	6.6%	7.5%

3 The information in Table 2.3 was considered in establishing the premium on the FT toll  
4 for FT-SN. A premium of 10% was chosen as a conservative measure of the net impact  
5 on discretionary revenue of FT-SN.

6 **Q24. How will FT-SN revenue be treated?**

7 A24. All revenues realized from FT-SN contracts will be credited against the Mainline gross  
8 revenue requirement as Non-Discretionary Miscellaneous Revenue.

9 **Q25. How will capacity for FT-SN be made available to shippers?**

10 A25. Mainline capacity will be made available to shippers as FT-SN through the Open Season  
11 process.



1 **Q26. Will Mainline facilities be built for FT-SN?**

2 A26. Yes. If there is insufficient capacity to meet a request for FT-SN, facilities will be built  
3 according to the provisions of the FT-SN Toll Schedule.

4 **Q27. What amendments will be required to the Mainline Tariff to implement FT-SN?**

5 A27. The Mainline Tariff will be amended to include a new FT-SN Toll Schedule  
6 (Appendix 2) and *pro forma* FT-SN contract (Appendix 3). Also, amendments to the  
7 GT&C and the Transportation Access Procedure (TAP) are required. The GT&C and  
8 TAP with changes required to implement FT-SN black-lined are included as Appendix 4  
9 and Appendix 5 respectively.

10 **3.0 SHORT NOTICE BALANCING SERVICE (SNB)**

11 **Q28. What is Short Notice Balancing Service?**

12 A28. SNB is a new firm service that will facilitate the effective operation of FT-SN by  
13 providing flexibility for balancing purposes. TransCanada will utilize Mainline  
14 compression and linepack to provide the flexibility as part of its response to the market  
15 need for variable consumption on short notice. The availability of SNB will enhance the  
16 flexibility provided to FT-SN shippers by providing access to an alternative source of  
17 supply or market and by enabling effective nominations at up to fifteen minute intervals  
18 even if upstream pipeline systems have less frequent nomination windows

19 The attributes of SNB service are summarized in Table 3.1.

**Table 3.1 - SNB Service Attributes**

Attribute	SNB
Availability of service	Must be linked to an FT-SN contract
Contract Quantity	Equals total size of SNB account Maximum equal to FT-SN contract demand
Intra-Day Reservation of Capacity by TransCanada	Yes
Renewal Rights	Yes
Term	Minimum one year
Toll	Individually assessed cost-based demand charge paid on total Contract Quantity
FT-RAM*	Not available
Assignments	Only with associated FT-SN contract
Nomination requirements	GJ/hour (same as FT-SN)
Maximum Hourly Entitlement	FT-SN hourly entitlement
Nomination windows	Up to 96 per day (same as FT-SN)

\* FT-RAM expires October 31, 2007.

1 **Q29. Why are current services not well suited to meeting the balancing needs of FT-SN**  
2 **shippers?**

3 A29. The only balancing service currently available on the Mainline is PALS. PALS has the  
4 lowest priority of any service or service attribute and is provided at TransCanada's  
5 discretion based on its ability to provide the requested service. The toll for PALS is  
6 negotiated for distinct daily energy amounts. FT-SN shippers could not rely on PALS as  
7 a balancing service, since they would not know in advance with certainty that they would  
8 have access to the service or what such access would cost.

9 In contrast, SNB service is provided on a firm basis, available whenever the shipper  
10 requires it, over the term of the SNB contract. SNB tolls will not be negotiable and will  
11 be more certain than PALS tolls since SNB tolls will be set annually based on the  
12 methodology described below which accounts for the parameters of each specific SNB  
13 contract.

1 **Q30. How does SNB service work?**

2 A30. SNB is a balancing service that TransCanada will provide by using Mainline compression  
3 and linepack. An SNB account will be used to implement the service. The shipper will  
4 nominate for supply out of the SNB account or nominate gas into the SNB account as  
5 part of its FT-SN nominations, to ensure nominated receipts equal nominated deliveries.  
6 A nomination from the account reduces the account balance and has the physical effect of  
7 drafting the Mainline system linepack. A nomination into the account increases the  
8 balance and physically packs the system.

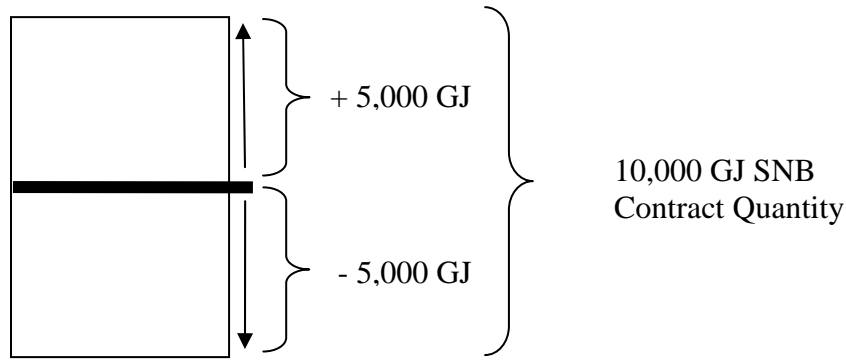
9 **Q31. How is the SNB contract quantity defined?**

10 A31. A shipper can request an SNB contract with a contract demand up to the contract demand  
11 of its FT-SN contract. This is a reasonable amount of flexibility, since it will allow an  
12 FT-SN shipper to use SNB for its intended purpose for up to one full gas day.

13 The SNB contract quantity will be the full range of flexibility provided by an SNB  
14 account and will be limited to half of the contract quantity above a zero SNB account  
15 balance and half of the contract quantity below a zero SNB account balance. Therefore,  
16 the SNB contract quantity is the total amount of gas a shipper could withdraw from the  
17 system if it had first maximized its SNB account balance. The contract quantity is  
18 defined this way because it is this full range of flexibility that drives the facilities  
19 requirement for an SNB contract.

20 For example, consider a shipper with a 10,000 GJ SNB contract quantity. This shipper  
21 could have a positive account balance as high as half of its SNB contract quantity, or  
22 5,000 GJ. It could also have a negative account balance as low as -5,000 GJ, as shown in  
23 Figure 3.1 below. This shipper would have the ability to first fill the account to 5,000 GJ,  
24 and then withdraw 10,000 GJ, resulting in a final account balance of -5,000 GJ.

**Figure 3.1 - Access to Balancing Flexibility Provided by a 10,000 GJ SNB Contract Quantity**



1 **Q32. What are the limitations on the use of SNB?**

2 A32. There are two key limitations on how an SNB shipper can access the flexibility offered  
3 by TransCanada through this service. First, a shipper can have an account balance of  
4 +/- 50% of the SNB contract demand, as described above. Nominations that would result  
5 in a greater account balance will not be authorized.

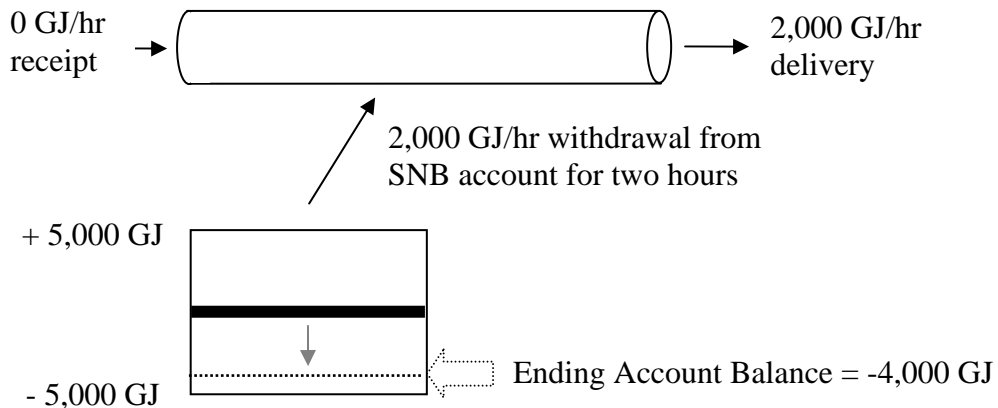
6 The second constraint on the use of SNB is on the rate at which a shipper can deposit to  
7 or withdraw from its account. This maximum rate is determined by the service  
8 entitlement of the FT-SN contract that accompanies an SNB contract. A shipper cannot  
9 withdraw from, or deposit to, its SNB account at a greater hourly flow rate than the  
10 hourly entitlement of the accompanying FT-SN contract, which is 5% of the FT-SN  
11 contract demand in an hour. For example, a shipper that has an FT-SN contract for  
12 100,000 GJ/d can move up to 5,000 GJ/hr (5% of 100,000 GJ) in or out of its SNB  
13 account. If this shipper has an SNB contract for 10,000 GJ and starts with a balance of  
14 zero, the shipper can access 5,000 GJ of supply from the SNB account in one hour. If a  
15 shipper with 50,000 GJ/d of FT-SN (therefore 2,500 GJ/hr of service entitlement) had the  
16 same SNB contract of 10,000 GJ, it could access 2,500 GJ for two hours (2,500 GJ x 2  
17 hours = 5,000 GJ).

1 **Q33. Please provide examples of how a shipper would use SNB.**

2 A33. Consider a hypothetical shipper that holds an FT-SN contract for 100,000 GJ/d and  
3 therefore an entitlement to transport up to 5,000 GJ per hour. In the simplified examples  
4 below the shipper has contracted for SNB, with an SNB contract quantity of 10,000 GJ.

5 Suppose this shipper starts the day with the SNB account balance at zero and had not  
6 initially nominated for any transportation on the Mainline or the upstream pipeline  
7 system. The shipper then decides it wants to transport 2,000 GJ/hr, even though the  
8 effective time of the upstream service operator's next nomination window is two hours  
9 away. In this instance the shipper nominates a receipt from the SNB account for  
10 2,000 GJ/hr using its FT-SN contract and delivers the gas to its delivery point. If it were  
11 to operate this way for two hours, it would have an SNB account balance of -4,000 GJ at  
12 the end of two hours. The flow over these two hours and the ending balance are shown in  
13 Figure 3.2 below.

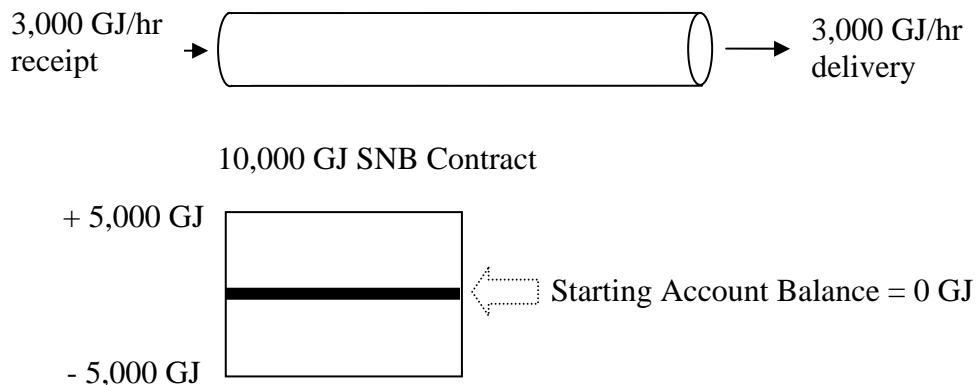
**Figure 3.2 - FT-SN Shipper with Receipt from SNB Account**



14 SNB can also be used to change flow rates in the case where supply has already been  
15 scheduled from an upstream pipeline. Suppose the same FT-SN shipper chose to  
16 nominate a receipt on an upstream pipeline that had an hourly flow rate of 3,000 GJ and

1 made an FT-SN nomination to delivery at that rate to its power plant. Suppose also that  
2 this shipper's SNB account balance again starts at 0 GJ. This is depicted in Figure 3.3  
3 below.

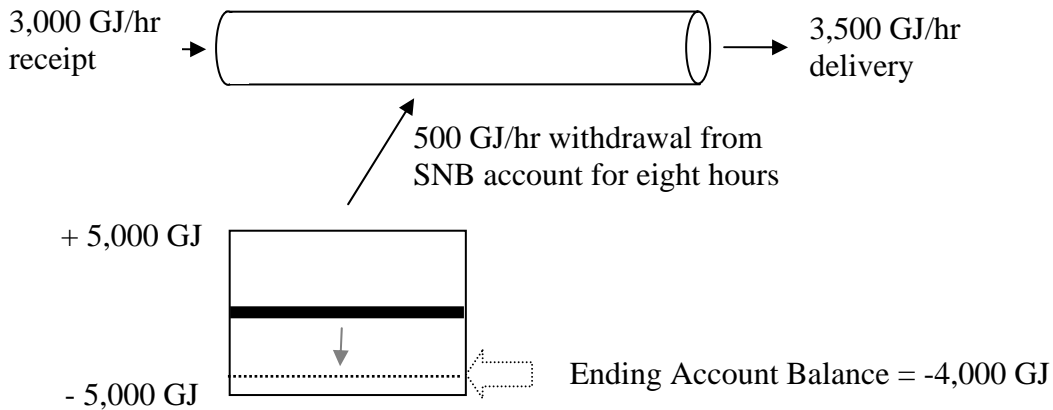
**Figure 3.3 - FT-SN Shipper Making Scheduled Deliveries Before Using SNB**



4 After establishing the condition shown in Figure 3.3, suppose the shipper is then re-  
5 dispatched by the IESO just after the last nomination window of the upstream pipeline,  
6 and now requires an additional 500 GJ/hour of supply. This shipper can then nominate to  
7 withdraw 500 GJ/hour out of its SNB account to meet the additional demand. Through  
8 an FT-SN nomination, the shipper nominates a 3,500 GJ/hour delivery, with 3,000  
9 GJ/hour coming from an upstream pipeline and 500 GJ/hour coming from the SNB  
10 account. If this continues for eight hours, 4,000 GJ would be withdrawn from the SNB  
11 account (500 GJ/hour x 8 hours) which results in an ending SNB account balance of  
12 -4,000 GJ.

1 Figure 3.4 below depicts the new flow and the ending SNB account balance.

**Figure 3.4 - FT-SN Shipper with Increased Delivery using SNB**

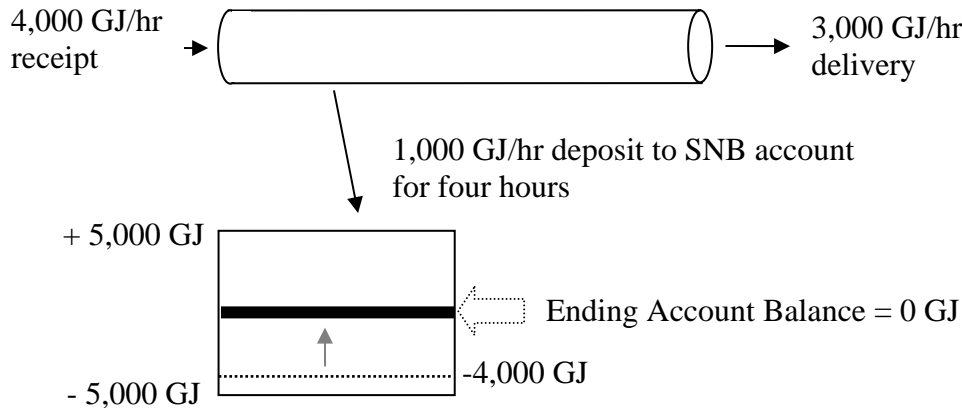


2 After this eight hour period, the shipper may elect to continue to withdraw from its SNB  
 3 account. It may also choose to nominate additional receipts from the upstream supplier  
 4 to replenish its SNB account as described below.

5 **Q34. How would this shipper replenish the drafted SNB account?**

6 A34. Shippers would nominate into their SNB account as a part of an FT-SN nomination. The  
 7 amount nominated to deposit into the SNB account is limited in the same way as  
 8 withdrawals such that the FT-SN nomination cannot exceed 5% of the FT-SN contract  
 9 demand in an hour. In the last example above, if the power plant no longer required the  
 10 additional 500 GJ/hr, it could reduce its nomination to the plant by 500 GJ and nominate  
 11 an additional amount of gas from the upstream pipeline system to deliver into the SNB  
 12 account. For example, at the next nomination window offered by the upstream system  
 13 the shipper could nominate for an additional 1,000 GJ/hr for delivery into the SNB  
 14 account over the next four hours, bringing the SNB account balance back to zero  
 15 (1,000 GJ x 4 hours = 4,000 GJ). This flow and the ending SNB account balance are  
 16 shown in Figure 3.5 below.

**Figure 3.5 - FT-SN Shipper Replenishing SNB Account**



1 **Q35. What will the toll be for SNB?**

2 A35. SNB tolls will be a demand charge per GJ of SNB contract quantity. A particular SNB  
3 toll will reflect the costs to provide the SNB service, based on the parameters of the  
4 contract, such as contract quantity, hourly entitlement, receipt location and delivery  
5 location. These parameters will then be use to calculate the cost to provide the particular  
6 SNB service. This cost and the SNB toll will be calculated using the methodology  
7 described below.

8 **Q36. How will the toll for SNB service be determined?**

9 A36. The toll methodology for SNB will be cost based. The toll will be established by  
10 determining costs to provide service on the Mainline integrated system, which consists of  
11 facilities owned and operated by TransCanada and contractual entitlements to transport  
12 natural gas on pipeline systems owned by others (referred to as Transportation by Others  
13 or TBO), and allocating these costs across the SNB contract quantity. Each particular  
14 SNB toll will be based on the Annual Owning and Operating Cost (AOOC) of the  
15 facilities and/or TBO costs associated with providing the SNB service and a general and



1 administrative (G&A) charge to recover the administration of the service. The monthly  
2 demand charge will be the sum of these two components as follows:

3 
$$\text{SNB Monthly Demand Toll} = (\text{AOOC}/\text{SNB Contract Quantity}/12) + (\text{G\&A charge per month})$$

4 **Q37. What is the AOOC?**

5 A37. The AOOC is the fixed operating and maintenance expense, depreciation, return and  
6 taxes for facilities used in providing service as well as TBO costs required to serve the  
7 particular SNB contract. The costs will be adjusted annually to reflect changes to inputs  
8 such as rates charged for TBO, net book value of facilities, current depreciation rates, tax  
9 rates and cost of capital rates.

10 **Q38. How will the facilities and/or TBO associated with an SNB service be determined?**

11 A38. New design parameters have been developed for this service. TransCanada uses a  
12 steady-state hydraulic analysis to design the system for firm transportation service and is  
13 proposing to use the same approach for FT-SN. However, SNB service is not a  
14 transportation service, it is a service that provides flexibility with respect to the supply or  
15 delivery of gas associated with an FT-SN contract which may cause the operation of the  
16 system to vary with time. This requires that the hydraulic analysis for the SNB service be  
17 a transient analysis. The initial conditions for the transient analysis are steady-state  
18 conditions based on peak day flows, with the exception of the companion FT-SN service  
19 which is initially set to zero flow. A single loss of critical unit based on the single unit  
20 that has the greatest impact to the linepack in the area of the FT-SN delivery is assumed  
21 and compressor discharge pressures are set based on operational practices. It is also  
22 assumed that the SNB account is initially in a maximum positive state. At time zero the  
23 FT-SN delivery will start at the maximum rate, 5% of the daily quantity per hour, with  
24 TransCanada supplying the gas under the SNB service. These flows will continue for the  
25 length of time required to move the SNB account from a maximum positive position to a  
26 maximum negative position. At that time the supply point for the FT-SN contract will

1 start to flow at the maximum rate, 5% of the daily quantity per hour, so that TransCanada  
2 is no longer supplying the gas under the SNB service. These flows will continue until the  
3 delivery has been flowing for 20 hours, which is the total daily entitlement, and the  
4 delivery flow is reduced to zero while the supply flow remains unchanged resulting in a  
5 need for TransCanada to provide a delivery for that gas under the SNB service. These  
6 flows will continue for the length of time required to move the SNB account from a  
7 maximum negative position to a maximum positive position. At this time the FT-SN  
8 receipt is also set to zero flow and the system is operating with system receipts and  
9 deliveries in balance. The assumptions underlying this transient scenario are conservative  
10 and will identify all of the facilities and/or TBO that TransCanada requires to provide  
11 SNB service on a firm basis.

12 To determine the facilities set and/or services required for an SNB service, two scenarios  
13 will be analyzed. The first scenario will be the steady-state hydraulic assessment of the  
14 requirements in the proposed area without the SNB contract included. The second  
15 scenario will include the proposed SNB contract and will be a transient hydraulic analysis  
16 as described above. The difference in requirements between the two scenarios is deemed  
17 to be the facilities and/or services associated with providing the SNB service. In the  
18 situation where facility additions are required, the capital cost of the facilities will be  
19 used in determining the toll and the service will not commence until the facilities are in-  
20 service. In the situation where existing facilities are used for the purposes of providing  
21 SNB service, the net book value of the identified facilities will be used in determining the  
22 toll.

23 **Q39. How will the G&A charge be determined?**

24 A39. Currently, the Fixed Energy Charge recovers expenses for Operations, Maintenance and  
25 Administration, metering facilities, NEB cost recovery and regulatory proceedings. The  
26 G&A charge is derived by taking the Mainline's Fixed Energy Charge for the test year in  
27 question and removing the AOOC portion of metering facility costs associated with the

1 Fixed Energy Charge. On the basis of 2006 final tolls, the G&A charge would equal the  
2 Fixed Energy Charge (3.02 ¢/GJ/d) less the AOOO portion of metering facility costs  
3 (0.46 ¢/GJ/d) to equal 2.56 ¢/GJ/d.

4 **Q40. Please provide some examples of SNB toll calculations.**

5 A40. Three examples are provided below to illustrate the calculation of SNB tolls in different  
6 circumstances. In the first example, a shipper requests a 14,000 GJ SNB contract with an  
7 hourly entitlement to service of 7,000 GJ/hr (5% of a related 140,000 GJ FT-SN  
8 contract). The request is made for the service over a short-haul distance, with receipt at  
9 Parkway and delivery to a hypothetical PCDA near the Greater Toronto Area. In this  
10 example, no new facilities are required to provide the service. TransCanada has  
11 calculated that a portion of one loop facility is required to provide the requested SNB  
12 contract and estimated that portion to be 31% of loop capability, so 31% of the net book  
13 value (NBV) of the identified facility would be deemed to be associated with the SNB  
14 contact for tolling purposes. For the loop in this example, this NBV is \$1.2 million. This  
15 results in a toll of 7.18 cents/GJ/d (assuming the current depreciation, tax and cost of  
16 capital rates), as shown in Table 3.2.

**Table 3.2 - Example SNB Toll Calculation for Parkway to PCDA  
With Existing Facilities**

Annual Owning and Operating Costs	
Depreciation (\$000)	74.0
Incomes Taxes (\$000)	62.0
Return (\$000)	100.0
Operating Costs (\$000)	<u>0.2</u>
Total (\$000)	236.2
AOOC Charge (¢/GJ/d)	4.62
G&A Charge (¢/GJ/d)	<u>2.56</u>
SNB Toll (¢/GJ/d)	7.18

1           If new facilities were required for the same request, the toll would be greater. To provide  
2           this service without the use of existing facilities, five km of pipe would need to be  
3           constructed, at a cost of \$12 million. This results in an SNB toll of 31.93 ¢/GJ/d, as  
4           shown in Table 3.3 below.

**Table 3.3 - Example SNB Toll Calculation for Parkway to PCDA  
With New Facilities**

Annual Owning and Operating Costs	
Depreciation (\$000)	338.0
Incomes Taxes (\$000)	139.0
Return (\$000)	1,014.0
Operating Costs (\$000)	<u>10.0</u>
Total (\$000)	1,501.0
AOOC Charge (¢/GJ/d)	29.37
G&A Charge (¢/GJ/d)	<u>2.56</u>
SNB Toll (¢/GJ/d)	31.93

5           If the same request were made except for the receipt point being Empress, it is unlikely  
6           that any additional facilities above and beyond those available for FT-SN service, would  
7           be required to provide the service. This is because the facilities that are available to  
8           provide the FT-SN service from Empress to the PCDA are also available for  
9           TransCanada to access system flexibility anywhere between Empress and the PCDA. In  
10          this case TransCanada has more operational flexibility than in the case of the short-haul  
11          FT-SN from Parkway to PCDA. It is expected that most SNB contracts associated with a  
12          long-haul FT-SN contract will have no facilities required to provide the SNB service. As  
13          such, the SNB toll would equal the G&A charge, as shown in Table 3.4 below.

**Table 3.4 - Example SNB Toll Calculation for Empress to PCDA**

Annual Owning and Operating Costs	
Depreciation (\$000)	0.0
Incomes Taxes (\$000)	0.0
Return (\$000)	0.0
Operating Costs (\$000)	<u>0.0</u>
Total (\$000)	0.0
AOOC Charge (¢/GJ/d)	0.00
G&A Charge (¢/GJ/d)	<u>2.56</u>
SNB Toll (¢/GJ/d)	2.56

1 **Q41. How will SNB revenue be treated?**

2 A41. Like FT-SN revenue, SNB revenue will be applied as a credit to the Mainline gross  
3 revenue requirement as Non-Discretionary Miscellaneous Revenue.

4 **Q42. Will the introduction of SNB require a change to the operation of the Mainline?**

5 A42. Depending on the size and location of the service contract, TransCanada may have to  
6 increase its monitoring and control of the area operation to manage potential swings in  
7 linepack caused by the use of the SNB service.

8 **Q43. How will shippers gain access to SNB?**

9 A43. Shippers will access SNB by contracting through an Existing Capacity or New Capacity  
10 Open Season and must hold an FT-SN contract in order to be eligible for an SNB  
11 contract. Because SNB contract requests may not impact an equal amount of  
12 transportation capacity into an area, those requests will be adjusted to account for the  
13 total impact to available capacity in the evaluation procedure as outlined in the TAP. If  
14 an SNB request is submitted into an Existing Capacity Open Season, TransCanada will  
15 inform shippers that a bid has been submitted and will then have up to ten days to award  
16 capacity based on all bids in the Open Season. The additional time to allocate capacity is

1 necessary when SNB bids are made in order to allow TransCanada time to fully analyze  
2 SNB facility set requirements and determine available capacity for all bids. SNB cannot  
3 be offered through the Daily Open Season process because TransCanada is required to  
4 respond within the day to requests and it is not feasible to respond to SNB requests within  
5 that timeframe.

6 **Q44. Will Mainline facilities be built for SNB?**

7 A44. Yes. If there is insufficient capacity to meet a request for SNB, facilities will be built  
8 according to the provisions of the SNB Toll Schedule.

9 **Q45. What changes will be required to the Mainline Tariff as a result of adding SNB?**

10 A45. The Mainline Tariff will be amended to include a new SNB Toll Schedule (Appendix 6),  
11 a new *pro forma* SNB contract (Appendix 7) and changes to the GT&C (Appendix 4) and  
12 TAP (Appendix 5).

13 **4.0 CONCLUSION**

14 **Q46. Please summarize this evidence.**

15 A46. As a new service, FT-SN will be responsive to the desires of gas-fired electricity  
16 generators operating in the developing power market. SNB will make FT-SN more  
17 functional by providing access to an alternative source of supply or market, and by  
18 allowing nominations under an FT-SN contract even if a connecting service provider  
19 does not offer a nomination window at that time. Together the Short Notice Services will  
20 help the Mainline serve the growing market for natural gas for electricity generation,  
21 thereby attracting new firm shippers and reducing tolls.

22 **Q47. Does this conclude TransCanada's written evidence?**

23 A47. Yes.

**NATIONAL ENERGY BOARD**

**IN THE MATTER OF** the *National Energy Board Act*, R.S.C. 1985, c. N-7, as amended, and the Regulations made thereunder; and

**IN THE MATTER OF** an Application by TransCanada PipeLines Limited pursuant to Part IV of the National Energy Board Act for approval of proposed Firm Transportation-Short Notice Service (FT-SN) and Short Notice Balancing Service (SNB).

**TRANSCANADA PIPELINES LIMITED**

**SHORT NOTICE SERVICES APPLICATION**

**ATTACHMENT A**

**TO**

**APPENDIX 1**

**WRITTEN EVIDENCE**

**OF**

**TRANSCANADA PIPELINES LIMITED**

**EXCERPTS FROM THE EVIDENCE OF TRANSCANADA IN THE  
ONTARIO ENERGY BOARD'S NATURAL GAS ELECTRICITY  
INTERFACE REVIEW PROCEEDING**

May 2006

1    **2.0    NGEIR ISSUE I – SERVICES FOR GAS-FIRED POWER GENERATORS**

2    **Q1.    How is this section of TransCanada’s evidence organized?**

3    **A1.**    Section 2.1 provides TransCanada’s understanding of the needs of proposed new  
4    gas-fired power generation facilities in Ontario. Section 2.2 presents two  
5    proposed new services by TransCanada, Firm Transportation Short Notice service  
6    (FT-SN) and Short Notice Balancing service (SNB), which are designed to  
7    provide the greater service flexibility and certainty that is required by a growing  
8    number of gas-fired electricity generators. Lastly, Section 2.3 summarizes  
9    TransCanada’s evidence on Issue I. In addition, Appendix IA provides  
10    background information on TransCanada’s existing Mainline services and  
11    flexibility features and Appendix IB contains a copy of TransCanada’s application  
12    to the National Energy Board for approval of the new FT-SN and SNB services.

13    **2.1    REQUIREMENTS OF NEW GAS-FIRED POWER GENERATION**  
14    **FACILITIES**

15    **Q2.    What is TransCanada’s understanding of the requirements of new gas-fired**  
16    **power generation facilities planned for Ontario?**

17    **A2.**    The Ontario Government is planning to replace 7,500 MW of existing coal-fired  
18    electricity generation over the next few years. The bulk of the replacement  
19    generation capacity is likely to be gas-fired, with much of that new generation  
20    capacity located in or near the Greater Toronto Area (GTA).

21    TransCanada also understands that some of the new facilities may demonstrate  
22    significant fluctuations in gas consumption from day-to-day and within the day  
23    based on five minute dispatch notifications from the Ontario Independent  
24    Electricity System Operator (IESO). A five minute dispatch notification reflects  
25    the physical requirement to balance electrical supply to electrical demand on a  
26    real-time basis. It also reflects the ability of each power facility to price-bid on a



1 short-term basis to meet real-time changes in electricity demand. Whether a plant  
2 gets dispatched for any five minute period depends on total electricity demand,  
3 availability of electricity supply from other generation facilities and the price of  
4 incremental electricity supply from each generation facility.

5 **Q3. Will the operating patterns of some proposed gas-fired generation facilities**  
6 **differ from existing gas markets served by TransCanada through its**  
7 **Mainline?**

8 **A3.** Yes, the operating patterns of some proposed facilities are likely to be  
9 significantly different. Natural gas consumption for industrial processes,  
10 cogeneration facilities and base-load power generation plants tends to be stable  
11 from day-to-day and within the day. Residential and commercial gas  
12 requirements fluctuate both within the day and seasonally, but such fluctuations  
13 tend to be predictable based on temperature, wind and time-of-day. The proposed  
14 new power generation facilities are likely to exhibit far greater fluctuations and  
15 unpredictability in consumption patterns, both within the day and from day-to-  
16 day.

17 **Q4. Why can't TransCanada's existing services be used to meet the evolving**  
18 **requirements of power generators?**

19 **A4.** Current services, such as Firm Transportation (FT), are not ideally suited to meet  
20 large loads with hourly flows that can vary significantly and change on short  
21 notice. For example, an FT shipper may not be able to obtain authorization of  
22 intra-day nomination increases. The FT shipper is only assured full access to firm  
23 capacity at the first nomination window for the day, and capacity not nominated  
24 by FT shippers (and shippers using other firm services) can be sold as  
25 discretionary services for the balance of that day. The nomination windows  
26 available for FT service (four windows daily) may not offer sufficient flexibility

1 to meet the evolving needs of the power generation market. Further, the  
2 maximum hourly rate of flow for FT service may not be flexible enough for such  
3 a market. Ultimately, there may be an increased risk of incurring balancing fees  
4 using FT service to meet the volatile power market.

5 **Q5. Are new services required to meet the evolving needs of gas-fired electricity**  
6 **generators?**

7 **A5.** Yes. TransCanada believes that development of new services, specifically  
8 tailored to meet the attributes of a growing number of gas-fired electricity  
9 generators, will provide additional service options for customers and better  
10 address the overall needs of this important new market.

## 11 **2.2 PROPOSED NEW SERVICES FOR GAS-FIRED POWER GENERATORS**

12 **Q6. What new services aimed at meeting the needs of gas power generators is**  
13 **TransCanada proposing?**

14 **A6.** TransCanada has developed two new services aimed at meeting the needs of gas-  
15 fired power generators. The first proposed new service for this market is called  
16 Firm Transportation Short Notice service (FT-SN), and the second is Short Notice  
17 Balancing service (SNB).

18 **Q7. What will the FT-SN service do?**

19 **A7.** FT-SN will allow a shipper to match its gas transportation closely with changes in  
20 the real-time electricity market. It will do so by authorizing the FT-SN shipper to  
21 nominate for service at intervals as frequent as every 15 minutes (up to 96  
22 nomination windows per day). The service is structured to ensure that the FT-SN  
23 shipper will have the ability to nominate up to its contracted quantity at various  
24 times throughout the day. TransCanada will ensure that capacity will be available  
25 to meet changes at each nomination window. TransCanada will provide the

1 service by reserving capacity throughout the day to accommodate FT-SN  
2 nominations.

3 **Q8. What will the SNB service do?**

4 **A8.** SNB facilitates the effective operation of FT-SN by providing access to Mainline  
5 system flexibility for balancing purposes. TCPL will utilize Mainline  
6 compression and linepack to provide the flexibility as part of its response to the  
7 market need for variable consumption on short notice.

8 **Q9. What are the attributes of the FT-SN service?**

9 **A9.** The key attributes are:

- 10 1. firm access to service at each nomination window;
- 11 2. more frequent nomination windows;
- 12 3. flow rate nominations;
- 13 4. hourly flow limit based on daily contract quantity;
- 14 5. separate Distributor Delivery Areas; and
- 15 6. flow control.

16 Each of these attributes is discussed below.

17 Attribute 1: Firm access to service at each nomination window

18 TransCanada understands that some new gas-fired generation facilities will  
19 operate year-round and will not have alternative fuel capability. Consequently,  
20 firm gas supplies and firm gas transportation must be available to a facility, on  
21 short-notice, at all times during the year and at all times during the Gas Day.

1 Current firm transportation services do not meet this requirement. As noted in A9  
2 of Appendix IA, previously scheduled services cannot be “bumped” by increased  
3 nominations for FT service at intra-day windows. This means that the power  
4 plants with FT service cannot increase takes part-way through the Gas Day and be  
5 assured that transportation capacity will be available.

6 To address this need, TransCanada, under the proposed FT-SN service, will  
7 reserve capacity for contract holders throughout the Gas Day. The FT-SN service  
8 maximum hourly flow entitlement will be available at each and every nomination  
9 window.

10 Attribute 2: More frequent nomination windows

11 TransCanada understands that the Ontario electrical grid operates on a five minute  
12 dispatch basis. However, five minutes notice does not afford sufficient time to  
13 process a nomination change, validate it against contracts, confirm it with  
14 upstream and downstream operators and take any action to adjust operations to  
15 meet the changing requirements. At the same time, TransCanada’s current gas  
16 nomination windows<sup>1</sup> do not provide sufficient flexibility to meet the expected  
17 short notice dispatch needs of the new power generation market.

18 TransCanada proposes nomination windows up to every 15 minutes as part of its  
19 FT-SN service. This period represents the minimum timeframe within which  
20 TransCanada believes that a nomination can be processed and actions initiated by  
21 its Gas Control to ready the Mainline system to respond to changes in flows.  
22 Obviously, longer lead times would be preferred and would offer greater  
23 opportunity to adjust pipeline operations. However, 15 minutes’ notice strikes an

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<sup>1</sup> Please refer to Tables A3 and A4 in Appendix IA for additional details on TransCanada’s existing nomination windows.

1 appropriate balance between the five minute IESO dispatch window and  
2 TransCanada's ability to process and initiate response to flow change requests.

3 From the perspective of the power plant operator, 15 minute nomination windows  
4 should enable it to nominate closely to actual take levels throughout the day and  
5 minimize exposure to imbalance fees on the Mainline.

6 Attribute 3: Flow Rate Nominations

7 Current nominations on TransCanada's Mainline are daily quantities, which is the  
8 amount of gas to be transported and delivered over the Gas Day. Such  
9 nominations provide no information about the actual consumption or flow through  
10 the meter at any particular time during the day. Given the size of the loads for  
11 new power generation facilities and the likelihood of frequent changes in  
12 consumption, the existing daily approach to nominations do not provide sufficient  
13 information for TransCanada to be able to anticipate takes on a short-term basis  
14 (i.e., next 15 minutes) and adjust its operations to meet such requirements.

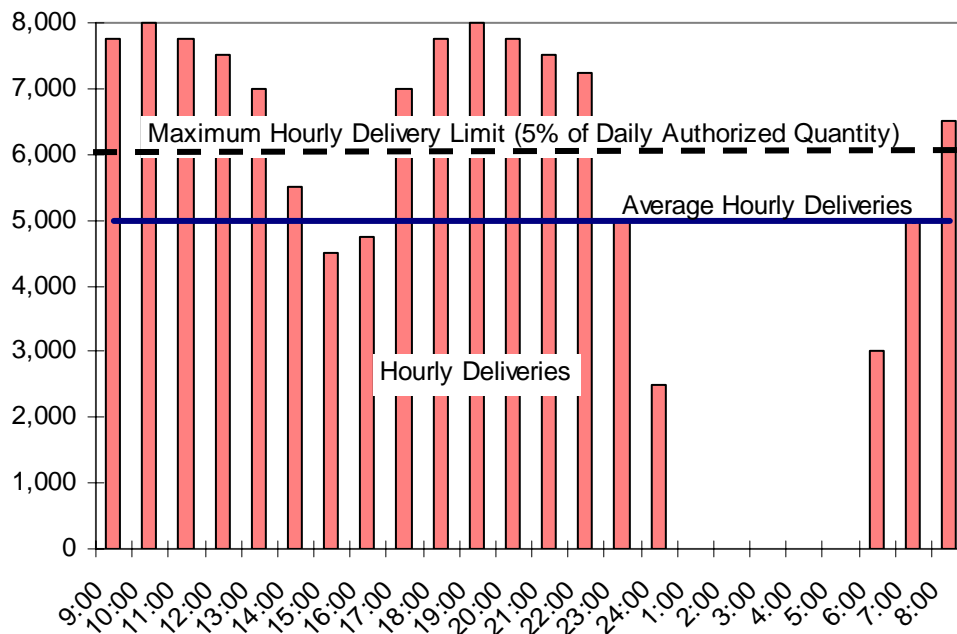
15 To address this issue, TransCanada is proposing that FT-SN service nominations  
16 not be a daily quantity, but rather be the expected flow rate.

17 Attribute 4: Hourly flow limit based on daily contract quantity

18 All shippers on the Mainline are currently limited to a maximum of 5% of their  
19 daily authorized quantity in any hour during the Gas Day. This limit allows  
20 shippers to move up to 120 % of their average hourly flow in any given hour.  
21 However, TransCanada understands that some new gas-fired generating facilities  
22 may want to operate in a manner that exceeds the 5% hourly flow limit. Figure  
23 2.1 illustrates these circumstances. In this example, the FT shipper holds a  
24 contract of 120,000 GJ/d and nominates its full 120,000 GJ/d entitlement, or an  
25 average of 5,000 GJ/hour. However, the actual hourly operating pattern may be

1 as shown in Figure 2.1, with several hours of high takes during the day, followed  
 2 by several hours of zero gas consumption at night. This operating pattern exceeds  
 3 the 5 % hourly limit (5 % of daily authorized quantity = 5 % of 120,000 GJ/d =  
 4 6,000 GJ/hour) during several hours. Contracting for additional FT service would  
 5 not change this situation, since the 5 % limit is based on daily authorized quantity  
 6 and is not based on daily contracted quantity.

**FIGURE 2.1: EXAMPLE OF HOURLY FLOW IN VIOLATION OF FT SERVICE MAXIMUM HOURLY FLOW ENTITLEMENT (GJ/HOUR)**  
**Daily Authorized Quantity = 120,000 GJ**



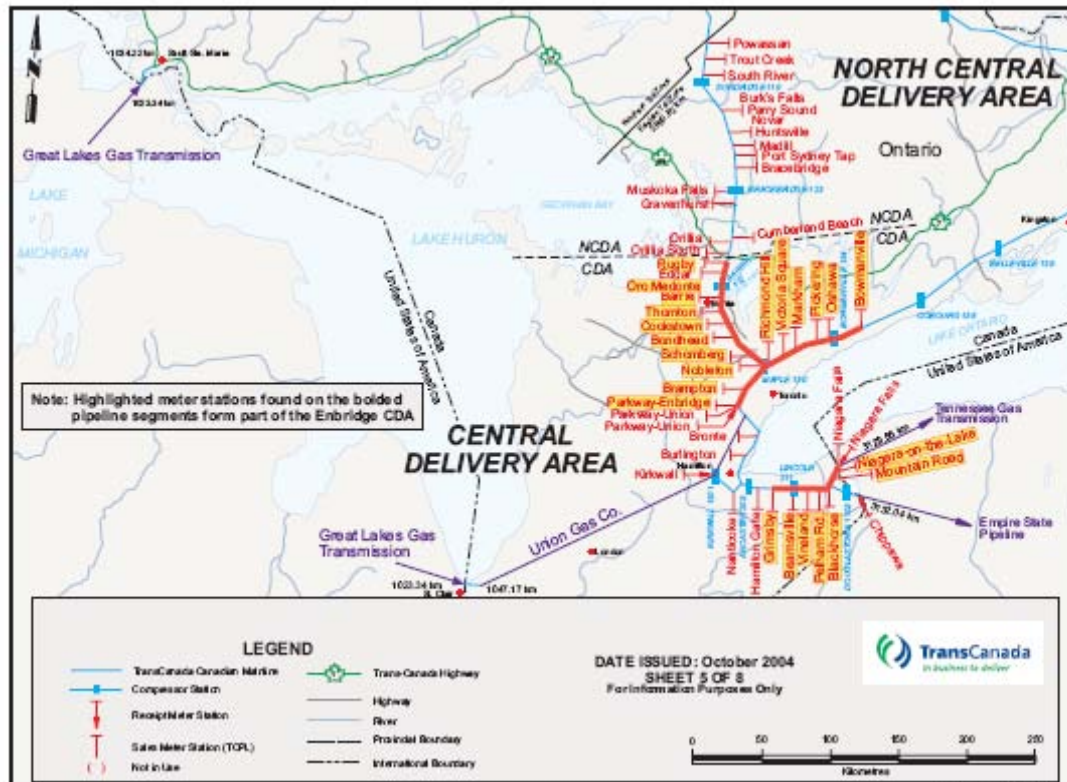
7 To address this issue, TransCanada is proposing that FT-SN service be limited to  
 8 5% of Daily Contract Demand, instead of 5% of Daily Authorized Quantity. This  
 9 means that a shipper can obtain additional hourly flow rights by contracting for  
 10 additional service.

1           Attribute 5: Separate Distributor Delivery Area

2           TransCanada understands that some of the new power generation facilities may be  
3           located in the Mainline's Enbridge Central Delivery Area (Enbridge CDA). As  
4           shown in Figure 2.2, the Enbridge CDA spans four very distinct parts of the  
5           Mainline: the Montreal Line from the Maple compressor station to Bowmanville,  
6           the Barrie line from the Rugby meter station south to the Maple compressor  
7           station, the Parkway to Maple Segment and the Niagara Region.

8           Under the current Delivery Area mechanism, shippers nominate to the Enbridge  
9           CDA as a whole, rather than to a specific meter station within the Enbridge CDA.  
10          This approach does not provide TransCanada with any information as to the exact  
11          location where a change in consumption may occur. This lack of information  
12          becomes critical in terms of responding to large flow changes at power generation  
13          facilities on short notice when such plants are in close proximity to significant  
14          residential and commercial heating loads.

**Figure 2.2**  
**Map of the Enbridge CDA**



1 To address this issue, TransCanada is proposing that customers of FT-SN service  
 2 would contract to a specific location that is distinct from any other meter and  
 3 distinct from any existing Delivery Area. This requirement will ensure that  
 4 TransCanada knows the exact location of a nominated FT-SN flow change and  
 5 can adjust its system operations accordingly to meet the change in flows.

6 This approach is not a new one. The Nipigon Power, Calstock Power and Tunis  
 7 Power facilities in Northern Ontario have all been established as separate  
 8 Delivery Areas, with single meter stations within each Delivery Area.

9 Attribute 6: Flow Control



1 In order to protect the Mainline system from unauthorized takes in excess of a  
2 nominated flow rate, TransCanada will require that FT-SN service delivery  
3 locations have flow control valves that can be remotely operated by  
4 TransCanada's Gas Control. The large flow rates expected with these facilities,  
5 given their proximity to large residential/commercial heating markets, makes  
6 control of excess takes essential, particularly in the winter when heating  
7 requirements are peaking.

8 To determine the appropriate flow limits for the flow control valves, TransCanada  
9 cannot deliver FT-SN service to a meter station or Delivery Area with other types  
10 of Mainline services. This is due to the difference in nominations between FT-SN  
11 service and other services. FT-SN service nominations will be flow-rate  
12 nominations for the subsequent 15 minute period whereas nominations for other  
13 Mainline services are daily nominations which provide no information regarding  
14 flows over the subsequent 15 minute period. Mixing these different nomination  
15 types will make it impossible for TransCanada to determine the appropriate flow  
16 control limit to serve all of the services. For this reason, TransCanada will be  
17 unable to deliver other Mainline services at the same location used for FT-SN  
18 service.

19 **Q10. What is the SNB service?**

20 **A10.** SNB service is a proposed, cost-based, firm service that will facilitate the  
21 effective operation of FT-SN service by providing flexibility for balancing  
22 purposes. TransCanada will utilize Mainline compression and linepack to provide  
23 the flexibility as part of its response to the market need for variable consumption  
24 on short notice. The availability of SNB service will enhance the flexibility  
25 provided to FT-SN shippers by providing access to an alternative source of supply  
26 or market and by enabling effective nominations at up to fifteen minute intervals  
27 even if upstream pipeline systems have less frequent nomination windows.

1 The attributes of SNB service are summarized in Table 3.1.

**Table 2.1 - SNB Service Attributes**

<b>Attribute</b>	<b>Availability</b>
Availability of service	Must be linked to an FT-SN contract
Contract Quantity	Equals total size of SNB account Maximum equal to FT-SN contract demand
Intra-Day Reservation of Capacity by TransCanada	Yes
Renewal Rights	Yes
Term	Minimum one year
Toll	Individually assessed cost-based demand charge paid on total Contract Quantity
FT-Risk Alleviation Mechanism*	Not available
Assignments	Only with associated FT-SN contract
Nomination requirements	GJ/hour (same as FT-SN)
Maximum Hourly Entitlement	FT-SN hourly entitlement
Nomination windows	Up to 96 per day (same as FT-SN)

\*FT-RAM expires on October 31, 2007.

2 **Q11. How will SNB service work?**

3 **A11.** SNB service is a balancing service that TransCanada will provide by using  
 4 Mainline compression and linepack. An SNB account will be used to implement  
 5 the service. The shipper will nominate for supply out of the SNB account or  
 6 nominate gas into the SNB account as part of its FT-SN nomination, to ensure  
 7 nominated receipts equal nominated deliveries. A nomination from the account  
 8 reduces the account balance and has the physical effect of drafting the Mainline  
 9 system linepack. A nomination into the account increases the balance and  
 10 physically packs the system. A complete description of the attributes and  
 11 operation of SNB service are included in Attachment IB.<sup>2</sup>

<sup>2</sup> Refer to Section 3.0 of TransCanada's Written Evidence section of TransCanada's Application to the NEB for approval of FT-SN and SNB services.

1    **2.3    SUMMARY OF TRANSCANADA’S EVIDENCE ON ISSUE I**

2    **Q12.    Please summarize TransCanada’s evidence on Issue I.**

3    **A12.** New gas-fired generation facilities will likely be constructed in or near the GTA  
4       in the near future. TransCanada understands that the operating characteristics and  
5       gas transportation requirements of these facilities may be significantly different  
6       from those of existing markets. These facilities are likely to run year-round and  
7       will not be equipped to burn alternative fuels when natural gas is unavailable.

8       TransCanada is proposing two new services: FT-SN and SNB. FT-SN will be  
9       responsive to the requirements of gas-fired electricity generators operating in the  
10      developing power market. SNB will make FT-SN more functional by providing  
11      access to an alternative source of supply, and by allowing nominations under an  
12      FT-SN contract even if a connecting service provider does not offer a nomination  
13      window at that time. Together these new services will help the Mainline serve the  
14      growing market for natural gas for electricity generation, thereby attracting new  
15      firm shippers and reducing tolls.

16   **Q13.    Does this conclude TransCanada’s written evidence on Issue I?**

17   **A13.** Yes.

1 **A1. INTRODUCTION**

2 **Q1. What information is contained in this Appendix?**

3 **A1.** Section 2 provides information on TransCanada's existing Mainline suite of  
4 services and flexibility features. Section 3 describes how Mainline services are  
5 used in meeting the requirements of existing gas markets in Ontario.

6 **Q2. Why is TransCanada providing this information?**

7 **A2.** This information to provides an overview of the existing suite of services on the  
8 Mainline to facilitate a better understanding of, and to provide context for,  
9 TransCanada's proposed new transportation services, FT-SN and SNB.

10 **A2. EXISTING MAINLINE SERVICES**

11 **Q3. What transportation services are currently available on the Mainline?**

12 **A3.** Four primary transportation services are available. These services are listed in  
13 Table A1.

**Table A1: Primary Transportation Services on the Mainline**

<b>Attributes</b>	<b>Firm Transportation (FT)</b>	<b>Storage Transportation Service (STS)</b>	<b>Short Term Firm Transportation (STFT)</b>	<b>Interruptible Transportation (IT)</b>
Priority	Firm	Firm; from market to storage in summer; from storage to market in winter	Firm	Interruptible
Term	Minimum 12 months	Minimum 12 months	7 to 364 days	1 day
Access	Open season. Shipper bids term of service.	Opens season. Shipper bids term of service.	Open season. Shipper bids price and term.	Daily auction. Shipper bids price.
Will TCPL build to provide service?	Yes. Must be supported by long term contracts.	Yes. Must be supported by long term contracts.	No.	No.
Toll Type	Monthly demand and commodity	Monthly demand and commodity	Daily demand	Commodity
Toll	Distance based; as approved by NEB.	Distance based; as approved by NEB.	Auction; Floor price equals 100% load factor FT toll.	Auction; Floor price equals 1.1 times the 100% load factor FT toll.
Renewal Rights	Yes. Renewal for 1 year upon 6 months prior notice.	Yes. Renewal for 1 year upon 6 months prior notice.	No.	No.
Other Conditions		Linked to long-haul FT contract.		

1 Six additional transportation services are also available on the Mainline. These  
2 services are:

- 3 • Firm Backhaul Transportation (FBT);
- 4 • Interruptible Backhaul Transportation (IBT);
- 5 • Firm Service Tendered (FST);
- 6 • Storage Transportation Linked (STS-L);
- 7 • Firm Transportation Non-Renewable (FT-NR); and
- 8 • Long Term Winter Firm Service (LTWFS).

9 **Q4. What flexibility features are provided to shippers on the Mainline?**

10 **A4.** The flexibility features offered with the primary transportation services are  
11 summarized in Table A2.

**Table A2: Flexibility Features**

<b>Service Features</b>	<b>Firm Transportation (FT)</b>	<b>Storage Transportation Service (STS)</b>	<b>Short Term Firm Transportation (STFT)</b>	<b>Interruptible Transportation (IT)</b>
Daily Nomination Windows	4 (NAESB*)	8 (4 NAESB* windows plus 4 additional STS windows)	4 (NAESB*)	4 (NAESB*)
Assignments	Yes	No	No	No
Diversions to alternate Delivery Points	Yes. Secondary priority.	No	No	No
Alternate Receipt Point (ARP)	Yes. Secondary priority.	No	No	No
Risk Alleviation Mechanism (FT-RAM)**	Yes. Credits to IT invoices for unutilized FT entitlements (long-haul or 'linked' short-haul FT contracts only).	No	No	No
Great Lakes Capacity Release (CR)	Yes, subject to capacity.	No	No	No
Enhanced Great Lakes Capacity Release (ECR)	Yes, subject to capacity.	No	No	No

\* NAESB is the North American Energy Standards Board.

\*\* FT-RAM expires October 31, 2007.

- 1 **Q5. How are these transportation services and flexibility features used by**
- 2 **Mainline shippers?**
- 3 **A5. Firm Transportation (FT) Service:**

1 FT service provides firm transportation service year-round with the right of  
2 renewal for a minimum one-year term upon six months prior notice. This service  
3 is useful to shippers that require assured transportation service each day on a long  
4 term basis.

5 Given that capacity is reserved year-round for FT shippers, there is a demand  
6 charge (or capacity reservation charge) that is payable regardless of the quantity  
7 of gas actually transported. In addition, FT shippers must pay a commodity  
8 charge for each unit of gas transported to cover variable costs incurred.

9 TransCanada provides FT shippers with a number of flexibility features that  
10 enables them to mitigate the risk of unutilized demand charges and capture other  
11 market opportunities that arise. Diversion and Alternate Receipt Point (ARP)  
12 features allow shippers to access gas at alternate receipt points and deliver to  
13 alternate markets on a secondary firm basis. Enhanced Capacity Release (ECR)  
14 and Capacity Release (CR) provide FT shippers access to markets and storage  
15 locations on the Great Lakes Gas Transmission System. Assignments enable  
16 shippers to temporarily or permanently assign all or part of their contract rights to  
17 a third party. Firm Transportation - Risk Alleviation Mechanism (FT-RAM)  
18 provides shippers with dollar credits towards their Interruptible Transportation  
19 (IT) service invoice to the extent that they do not fully utilize their full FT service  
20 contract entitlements during the month.

21 **Storage Transportation Service (STS):**

22 STS provides for firm service from market to storage in summer and firm service  
23 from storage to market in winter. STS is only available to shippers that hold a  
24 long-haul FT Service contract to the same market.

25 STS serves two main purposes. First, it enables customers with seasonal  
26 variations in consumption to maintain high utilization rates and low unit costs on



1           their long-haul FT contract. In summer, when heating markets are low, gas is  
2           delivered to storage on a firm basis. In winter, when heating markets are high,  
3           STS is used to deliver gas from storage to market on a firm basis. In combination  
4           with storage, STS enables shippers to meet winter peaking markets while  
5           maintaining high utilization on their long-haul FT contract and low unit  
6           transportation costs.

7           The second use of STS is for daily load balancing. Shippers on the Mainline are  
8           required to balance nominated deliveries to actual metered deliveries on a daily  
9           basis. STS is ideally suited to meet this requirement through the provision of four  
10          additional nomination windows over the standard four NAESB windows, as well  
11          as the ability to adjust deliveries to or from storage at each nomination window.

12          Similar to FT Service, STS has a fixed demand charge for capacity reservation  
13          plus a commodity toll for each unit of gas actually transported. However, STS is  
14          not afforded the same number of flexibility features as FT service. In part, there  
15          is reduced flexibility because STS tends to be a short-haul service (between  
16          storage and market) so that the demand charge exposures are lower than those for  
17          FT service. Additionally, STS is designed and tolled to serve a particular market  
18          and must be linked to specific FT service contracts that deliver to that market. As  
19          such, alternate receipt and delivery point rights and assignment rights would not  
20          be appropriate for STS.

21          Short Term Firm Transportation (STFT) Service:

22          STFT is used by shippers to meet shorter-term, firm transportation requirements.  
23          Access to STFT cannot be assured since TransCanada will not build facilities for  
24          STFT and prospective shippers must compete for available capacity through a  
25          price-bid auction process. Further, there are no renewal rights for STFT, making  
26          the service unsuitable for meeting longer-term firm requirements. STFT also does

1 not have the same flexibility features as FT service since the term of service is  
2 shorter and demand charge risks are correspondingly lower.

3 **Interruptible Transportation (IT) Service:**

4 IT Service is a daily transportation service that is accessed through a price-bid  
5 auction at each of the four nomination windows during the gas day, subject to the  
6 availability of unutilized firm services capacity. As such, IT Service may not be  
7 suitable in meeting firm market requirements, unless supplemented by storage or  
8 backstopping services. Given the short term nature of the service, there is  
9 minimal cost risk to the shipper. Therefore, no flexibility features are offered  
10 with IT service.

11 **Q6. Does TransCanada provide a balancing service on the Mainline?**

12 **A6.** Yes. TransCanada currently provides Parking and Loan Service (PALS) at all  
13 locations on the Mainline. PALS allow a shipper to store or borrow natural gas  
14 for any term anywhere on the Mainline, subject to availability. PALS has the  
15 lowest priority of any service or service attribute and is provided at  
16 TransCanada's discretion based on its ability to provide the requested service.  
17 The toll for PALS is negotiated for distinct daily energy amounts.

18 **Q7. Does TransCanada provide any flexibility features, other than those**  
19 **summarized in Table A2?**

20 **A7.** Yes. TransCanada provides shippers the following additional flexibility features.

21 Title Transfers:

22 Title transfers are available to all shippers at all locations on the Mainline system  
23 and provide a simple means for shippers to manage their gas purchases and sales  
24 transactions. TransCanada does not charge a fee for title transfers.

1        Daily Balancing Flexibility:

2        Each shipper is afforded a free tolerance zone for variances between its authorized  
3        delivery nomination and its actual measured deliveries. The daily free tolerance  
4        is equal to +/- 2 % of the shipper's authorized delivery nomination. The  
5        cumulative free tolerance is equal to +/- 4 % of the shipper's authorized delivery  
6        nomination. Fees are charged for drafts or packs in excess of these limits.

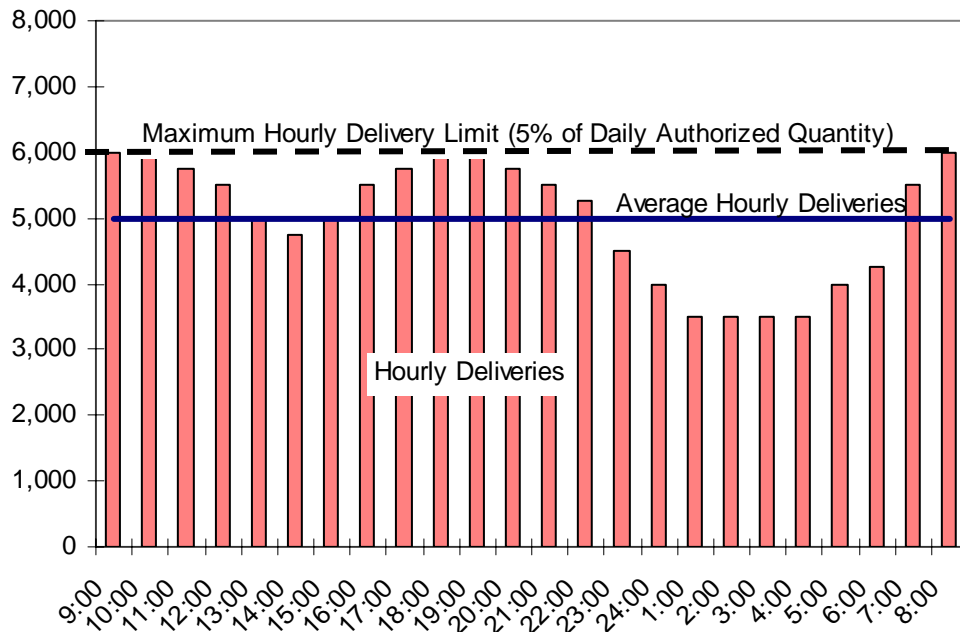
7        Hourly Take Flexibility:

8        A shipper can take up to 5 % of its daily authorized quantity in any hour during  
9        the Gas Day. This enables a shipper to take up to 120% of its average hourly  
10       consumption in any given hour.

11       Figure A1 illustrates the hourly delivery flexibility afforded to Mainline shippers.  
12       In this example, the shipper has an authorized daily quantity of 120,000 GJ and  
13       the average hourly flow rate over the day is 5,000 GJ/hour (i.e., 120,000  
14       GJ/24 hours = 5,000 GJ/hour). Pursuant to the Mainline Tariff, the shipper could  
15       deliver in any hour up to 5 % of its authorized daily quantity, or 6,000 GJ/hour  
16       (i.e., 120,000 GJ x 5 % = 6,000 GJ). This maximum hourly limit of 6,000  
17       GJ/hour is 20 % higher than the shipper's average hourly nomination of  
18       5,000 GJ/hour.

**FIGURE A1: EXAMPLE OF HOURLY FLOW IN COMPLIANCE WITH FT SERVICE MAXIMUM HOURLY FLOW ENTITLEMENT (GJ/HOUR)**

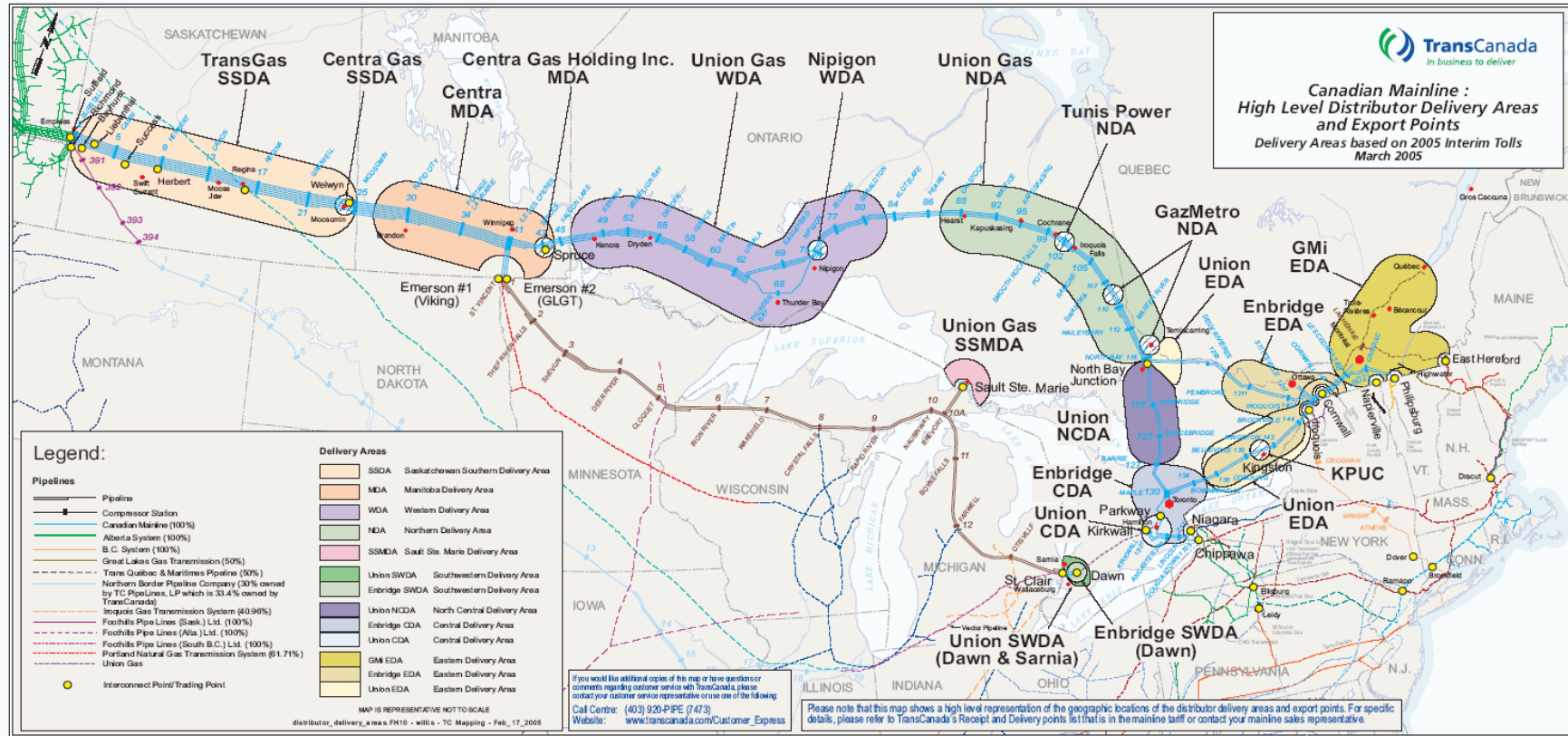
Daily Authorized Quantity = 120,000 GJ



1 Delivery Area Flexibility:

2 TransCanada delivers gas to domestic customers at 244 existing meter stations on  
 3 the Mainline. For purposes of contracting and daily processes (nominations and  
 4 allocations), these meter stations are grouped geographically and by  
 5 interconnecting operator into 20 Distributor Delivery Areas, as shown in  
 6 Figure A2.

**Figure A2: Delivery Areas on TransCanada's Mainline System**



1 Customers such as local distribution companies (LDCs) that have a requirement  
 2 for gas at multiple meter stations within a single Distributor Delivery Area need  
 3 only hold one transportation contract and submit one nomination in order to  
 4 schedule gas deliveries to meet their total requirement at all of the meter stations  
 5 within that Distributor Delivery Area. This enables these customers to offset  
 6 increasing demand at some meters by lowering demands at other meters. In such  
 7 situations, if net demand in the Delivery Area has not changed, the customer does  
 8 not need to change its single nomination.

9 **Q8. What nomination flexibility does TransCanada offer shippers?**

10 **A8.** The majority of natural gas pipelines in North America have adopted the timelines  
 11 established by the North American Energy Standards Board (NAESB) for  
 12 nominations, scheduling and confirmations to ensure grid-wide alignment of  
 13 supply, transportation and deliveries. The standard Gas Day is 09:00-09:00  
 14 Central Clock Time (CCT). There are four NAESB nomination windows with  
 15 three effective times as set out in Table A3.

**Table A3: NAESB Timelines (CCT)**

<b>Nomination Window</b>	<b>Nomination Deadline</b>	<b>Effective Time</b>
Timely	11:30 – Day 1	09:00 – Day 2
Evening	18:00 – Day 1	09:00 – Day 2
Intra-Day 1	10:00 – Day 2	17:00 – Day 2
Intra-Day 2	17:00 – Day 2	21:00 – Day 2

16 TransCanada uses the established NAESB timelines for Mainline services with  
 17 one minor exception; it provides an extra half-hour for shippers to submit their  
 18 Timely nominations (i.e., TransCanada’s deadline for the Timely window is 12:00  
 19 CCT instead of the NAESB 11:30 CCT deadline).

1 TransCanada also provides an additional four nomination windows for STS  
 2 shippers as shown in bold in Table A4. As discussed previously, STS provides  
 3 flexibility for shippers in delivering gas to storage and/or market depending on  
 4 market requirements. This access to storage, combined with additional  
 5 nomination windows, makes STS an excellent service for shippers to balance  
 6 supply to consumption levels throughout the Gas Day.

**Table A4: TransCanada’s Timelines (CCT)**

<b>Nomination Window</b>	<b>Nomination Deadline</b>	<b>Effective Time</b>
Timely	12:00 – Gas Day 1	09:00 – Gas Day 2
Evening	18:00 – Gas Day 1	09:00 – Gas Day 2
<b>STS-11:00</b>	<b>09:00 – Gas Day 2</b>	<b>11:00 – Gas Day 2</b>
Intra-Day 1	10:00 – Gas Day 2	17:00 – Gas Day 2
<b>STS-17:00</b>	<b>15:00 – Gas Day 2</b>	<b>17:00 – Gas Day 2</b>
Intra-Day 2	17:00 – Gas Day 2	21:00 – Gas Day 2
<b>STS-01:00</b>	<b>23:00 – Gas Day 2</b>	<b>01:00 – Gas Day 2</b>
<b>STS-05:00</b>	<b>03:00 – Gas Day 2</b>	<b>05:00 – Gas Day 2</b>

7 **Q9. How does TransCanada allocate capacity to nominations?**

8 **A9.** Starting with the day-ahead timely nomination window, capacity is allocated to  
 9 services based on their service priority. The priorities are generally as follows,  
 10 from highest to lowest:<sup>1</sup>

---

<sup>1</sup> The listing is a simplification of the service priority rules. Section XV of the General Terms and Conditions of TransCanada’s Mainline Tariff and Section 4 of the PALS Toll Schedule provide a complete description of service priorities.

- 1 1. Firm Services (FT, STS in season, FST, LTWFS, STFT);
- 2 2. FT Diversions and ARP;
- 3 3. Interruptible (based on price bid); and
- 4 4. PALS.

5 Any capacity not utilized by a firm shipper is made available to lower priority  
6 diversion, interruptible and PALS services. At subsequent nomination windows  
7 (e.g., Evening, Intra-day 1 and Intra-day 2), no previously scheduled nomination  
8 can be bumped by new nominations, regardless of service priority. In other  
9 words, IT Service nominations that are authorized in the Timely Window cannot  
10 be bumped to make room for an increased FT Service nomination at an intra-day  
11 Window. As such, TransCanada is characterized as a “no-bump” pipeline. This  
12 means that capacity for firm service is only assured at the Timely Window. A  
13 firm shipper that attempts to increase its firm service nomination at an intra-day  
14 window is not assured capacity or service.

15 All nominations are for a “Daily Quantity” or the quantity of gas to be delivered  
16 over the course of the entire Gas Day. The nomination does not provide any  
17 indication of actual flow rate at any particular time during the Gas Day.

### **A3. USE OF EXISTING MAINLINE SERVICES IN MEETING CURRENT NATURAL GAS MARKETS IN ONTARIO**

18 **Q10. How do shippers use TransCanada’s Mainline services to meet natural gas**  
19 **requirements in Ontario?**

20 **A10.** TransCanada delivered over 1.3 billion GJ of natural gas to Delivery Areas in  
21 Ontario in 2005. This equates to over 3.6 million GJs of natural gas per day on  
22 average. A breakdown of deliveries by service class is provided in Table A5.



**Table A5: 2005 Mainline Deliveries to Ontario by Service Class**

Service Class	Annual Total (GJ)	Average Daily (GJ/d)	Percent of Total
FT <sup>1</sup>	605,218,401	1,658,133	44.9%
FT Injections <sup>2</sup>	74,827,937	205,008	5.6%
STS <sup>3</sup>	60,777,384	166,513	4.5%
STFT	168,388,770	461,339	12.5%
FT Diversion	189,765,943	519,907	14.1%
IT <sup>4</sup>	<u>248,886,298</u>	<u>681,880</u>	<u>18.5%</u>
<b>Total</b>	<b>1,347,864,733</b>	<b>3,692,780</b>	<b>100.0%</b>

<sup>1</sup>FT includes ECR;

<sup>2</sup>FT Injections include FT Injection Overrun;

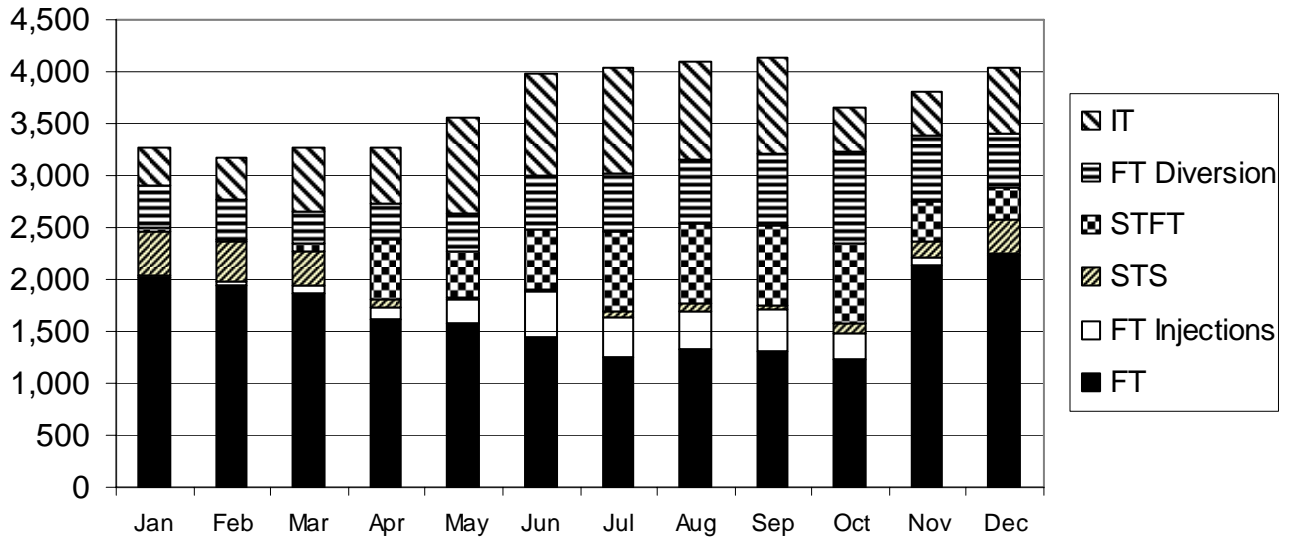
<sup>3</sup>STS includes STS Overrun;

<sup>4</sup>IT includes IT Backhaul.

1           Approximately 50% of deliveries to Ontario were made under FT and FT  
 2           injections services contracts in 2005. Over 30% of deliveries to Ontario were  
 3           made under non-firm, discretionary services (FT Diversions and IT), with over  
 4           12% delivered using discretionary STFT Service.

5           Figure A3 provides the breakdown of deliveries to Ontario locations by month  
 6           and service class. It illustrates that FT service is supplemented by STS  
 7           withdrawals from storage in winter. In summer, there is greater use of  
 8           discretionary services, particularly STFT and FT Diversions. There is substantial  
 9           use of IT service throughout the year.

**Figure A3: Average Daily Deliveries to Ontario  
(Thousand GJ/day)**



1 Table A6 sets out Mainline deliveries to Ontario in 2005 broken out by long-  
 2 haul service from western Canada locations and short-haul service from eastern  
 3 Canada receipt locations.

**Table A6: 2005 TransCanada Deliveries to Ontario by Receipt Location**

<b>Receipt Location</b>	<b>Annual Total (GJ)</b>	<b>Average Daily (GJ/d)</b>	<b>Percent of Total</b>
Long-Haul from western locations	920,724,864	2,522,534	68.3%
Short-Haul from eastern locations*	<u>427,139,869</u>	<u>1,170,246</u>	<u>31.7%</u>
<b>Total</b>	<b>1,347,864,733</b>	<b>3,692,780</b>	<b>100.0%</b>

\* Eastern locations include the receipt points of St. Clair, Dawn and Parkway located in Ontario.

- 1 **Q11. How many Mainline meters and delivery areas are located in Ontario?**
- 2 **A11.** TransCanada delivers gas to customers in Ontario at 159 individual meter
- 3 stations. These have been grouped into 14 Distributor Delivery Areas, which are
- 4 listed in Table A7 below, and illustrated earlier in Figure A2.

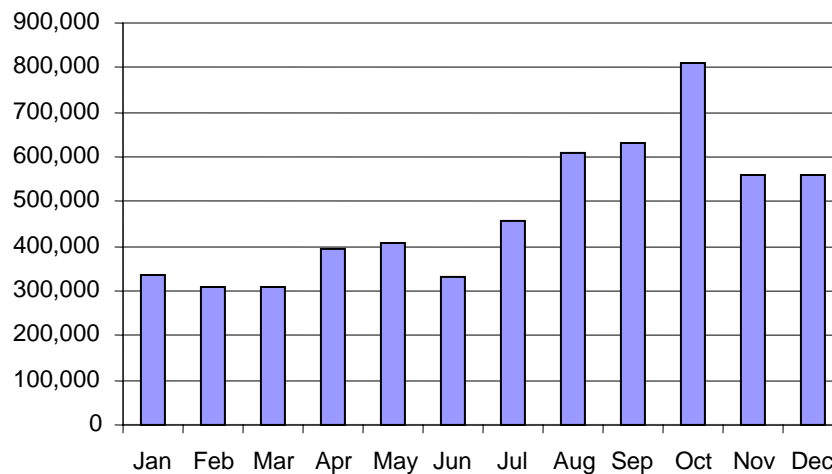
**Table A7: Distributor Delivery Areas in Ontario**

<b>Distributor Delivery Area</b>	<b>Number of Meter Stations</b>
Union Western Delivery Area (Union WDA)	15
Nipigon Power Western Delivery Area (Nipigon WDA)	1
Calstock Power Northern Delivery Area (Calstock NDA)	1
Union Northern Delivery Area (Union NDA)	37
Tunis Power Northern Delivery Area (Tunis NDA)	1
Union Sault Sainte Marie Delivery Area (Union SSMDA)	2
Enbridge Southwestern Delivery Area (Enbridge SWDA)	1
Union Southwestern Delivery Area (Union SWDA)	2
Union North Central Delivery Area (Union NCDA)	16
Enbridge Central Delivery Area (Enbridge CDA)	23
Union Central Delivery Area (Union CDA)	5
Union Eastern Delivery Area (Union EDA)	39
Enbridge Eastern Delivery Area (Enbridge EDA)	15
Kingston PUC Eastern Delivery Area (Kingston EDA)	1

1 **Q12. To what extent do Mainline shippers with FT service to Ontario take**  
 2 **advantage of FT Diversions?**

3 **A12.** In 2005, an average of 478,465 GJ/d was diverted to alternate delivery points  
 4 under FT service contracts with primary delivery points in Ontario. The monthly  
 5 usage of Diversions is provided in Figure A4.

**Figure A4: 2005 Average Daily Diversions to Alternate Delivery Points Using FT Service Contracts with Primary Delivery Points in Ontario (GJ/d)**



1 **Q13. Do shippers with FT service contracts to Ontario distributor delivery areas**  
2 **take advantage of FT-RAM?**

3 **A13.** It is not possible to determine usage of FT-RAM under individual FT service  
4 contracts since FT-RAM credits are accumulated and used at a shipper level.  
5 However, there has been substantial usage of FT-RAM by FT service shippers on  
6 the Mainline system as a whole. In 2005, approximately \$140 million in  
7 FT-RAM credits was applied to reduce the IT invoices of FT service shippers.

8 **Q14. To what extent do shippers with FT service contracts to Ontario Distributor**  
9 **Delivery Areas take advantage of assignments?**

10 **A14.** In 2005, shippers with FT service contracts to Distributor Delivery Areas in  
11 Ontario transferred some or all of their FT service contract rights to other shippers  
12 through 1,517 assignments.

1 **Q15. To what extent did shippers draft or pack gas on a daily basis at Distributor**  
2 **Delivery Areas in Ontario in 2005?**

3 **A15.** As noted earlier, shippers are afforded a 2 % daily and 4 % cumulative free  
4 tolerance for variances between nominated and measured quantities at each  
5 delivery point. A balancing fee is charged for variances in excess of these free  
6 tolerances. In 2005, approximately \$1.5 million in balancing fees was charged for  
7 drafts and packs at Delivery Areas in Ontario.

8 **Q16. Do shippers utilize Title Transfers at Mainline locations in Ontario?**

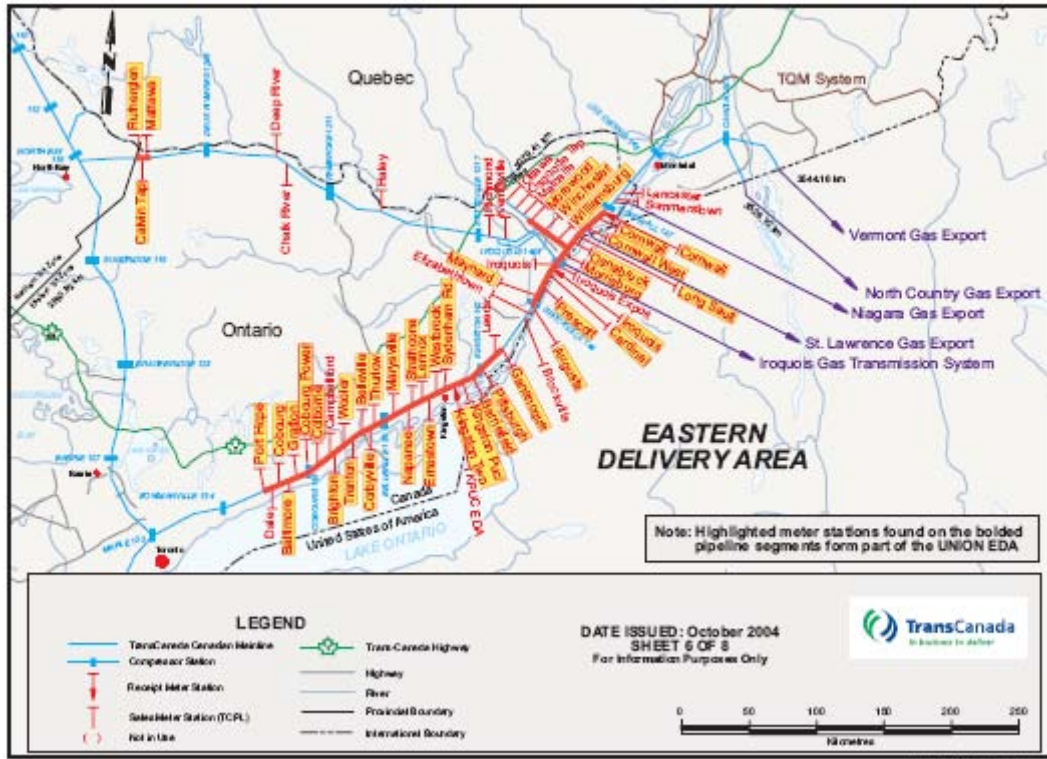
9 **A16.** Yes. In 2005, there was an average of 470,000 GJ/d traded in Ontario through  
10 TransCanada's free title transfer service.

11 **Q17. DPlease explain how shippers utilize Mainline services to serve existing**  
12 **markets in Ontario, including gas-fired power generation markets?**

13 **A17.** An illustrative example using the Union Gas Eastern Delivery Area (Union EDA)  
14 can be used to explain how shippers utilize Mainline services to meet Ontario  
15 market requirements.

16 The Union EDA is comprised of 39 individual meter stations in eastern Ontario,  
17 as shown in Figure A5.

**Figure A5: Union Eastern Delivery Area\***



1 The Union EDA includes two cogeneration facilities, Kingston and Cardinal, as  
 2 well as Lennox, which is the largest gas-fired generation facility in Ontario.  
 3 Details on these power generation facilities are provided below.

4 Kingston Cogen Limited Partnership (Kingston Cogen):

- 5 - 110 MW gas fired cogeneration facility
- 6 - provides steam to Celanese
- 7 - located in Bath, Ontario
- 8 - supplied through TransCanada’s Ernestown meter station

9 Cardinal Power of Canada Limited Partnership (Cardinal):

- 10 - 156 MW combined cycle gas fired cogeneration facility
- 11 - steam supplied to Canada Starch

- 1 - located in Cardinal, Ontario  
2 - supplied through TransCanada's Cardinal meter station  
3 Lennox:  
4 - 2,140 MW  
5 - until 1998, Lennox ran solely on residual fuel oil  
6 - in 1998 the facility was converted to dual fuel  
7 - in 2001, 80% of Lennox electricity was generated using natural gas;  
8 20% using residual fuel oil  
9 - located near Kingston  
10 - supplied through TransCanada's Lennox meter station

11 **Q18. How much gas did TransCanada deliver to the Union EDA in 2005?**

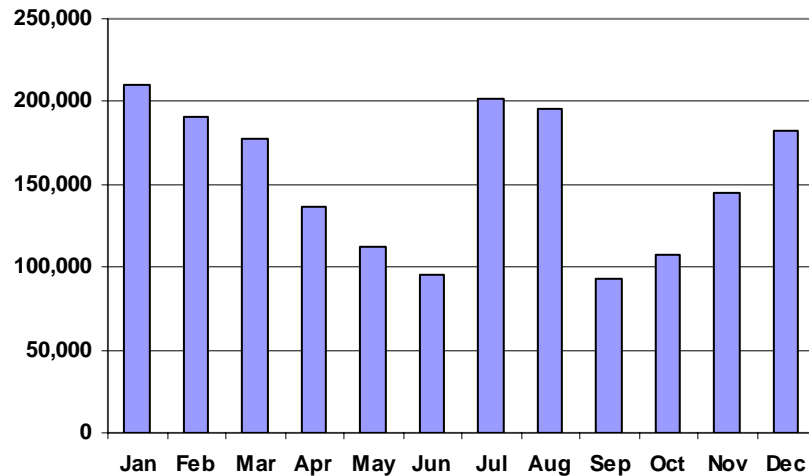
12 **A18.** In 2005, TransCanada delivered approximately 61 million GJ to the Union EDA,  
13 at an average daily rate of 168,000 GJ.

14 **Q19. Are there seasonal variations in gas consumption in the Union EDA?**

15 **A19.** Yes. The Union EDA has historically demonstrated both a winter peak for  
16 residential and commercial heating requirements and a summer peak in supply to  
17 the Lennox facility. This pattern is illustrated in Figure A6.



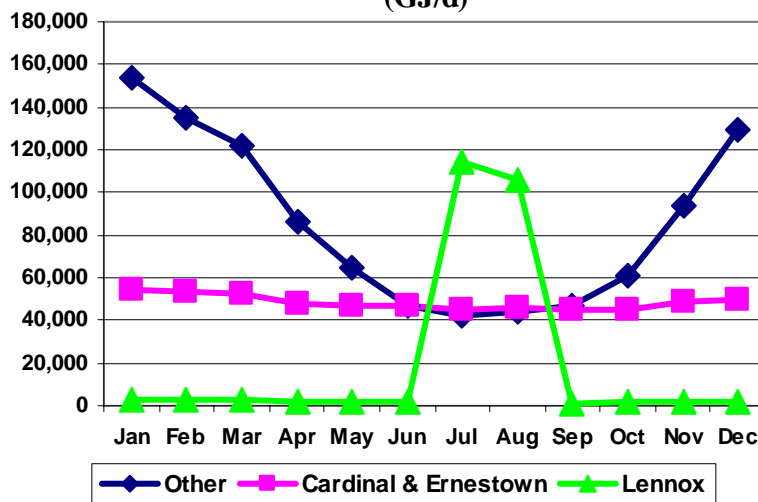
**Figure A6: 2005 Average Daily Metered Deliveries to the Union EDA (GJ/d)**



1 **Q20. Can TransCanada provide a breakdown of total consumption in the**  
2 **Union EDA by market segment?**

3 **A20.** Yes. An analysis of meter station flows in 2005 provides a strong indication of  
4 market segment consumption. Figure A7 shows 2005 monthly consumption data  
5 for the Lennox meter station, the two meter stations serving Cardinal and  
6 Kingston Cogen (i.e., the Cardinal and Ernestown meter stations), and all other  
7 remaining meter stations in the Union-EDA, which are serving a typical mixed  
8 market.

**Figure A7: 2005 Average Daily Metered Deliveries to the Union EDA by Market Segment (GJ/d)**



1 As illustrated in Figure A7, very little gas flowed through the Lennox meter  
 2 station except during the July and August peak air conditioning season. In July  
 3 and August, an average in excess of 100,000 GJ/d was delivered.

4 Gas flowed through the meter stations for Cardinal and Kingston Cogen on a  
 5 relatively steady basis throughout the year, with approximately 48,000 GJ/d  
 6 delivered.

7 The remaining 36 meter stations in the Union EDA demonstrated a typical mixed  
 8 residential, commercial and industrial consumption pattern with significant winter  
 9 heating peaks up to 154,000 GJ/d and a summer base load of just over  
 10 40,000 GJ/d.

11 **Q21. How have shippers contracted for Mainline transportation services to meet**  
 12 **gas demands in the Union EDA?**

13 **A21.** In January 2006, a total of 227,000 GJ/d of firm service was contracted for  
 14 delivery to the Union EDA, as shown in Table A8. This total comprises 158,000

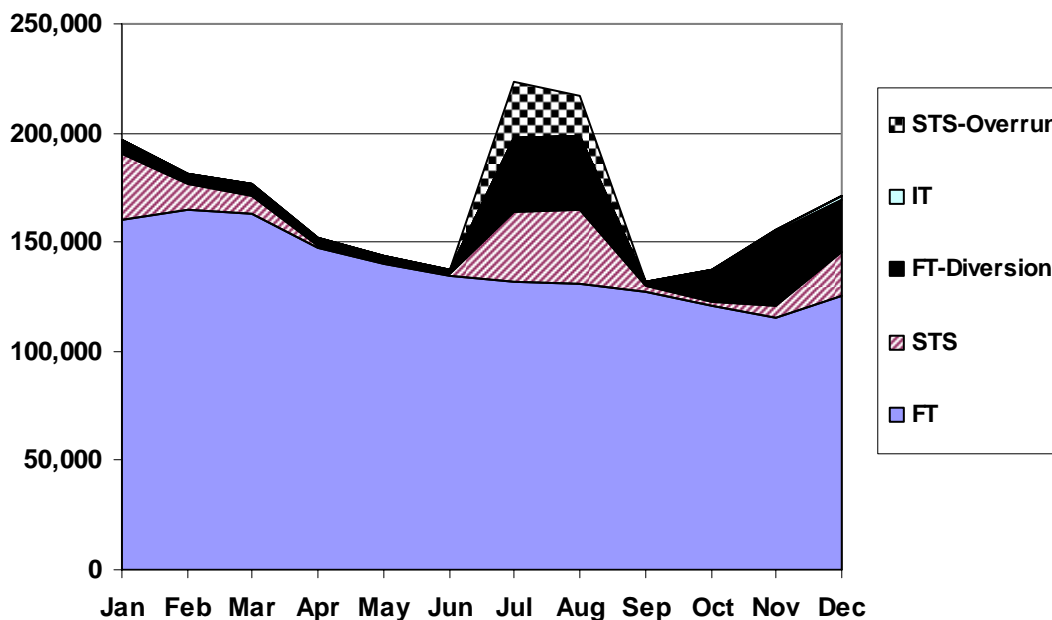
1 GJ/d of annual FT Service (mostly long-haul FT) and 69,000 GJ/d of firm winter  
 2 season STS from storage (Parkway) to the market.

**Table A8: Long-Term Firm Contracts to the Union EDA  
 (As of January 27, 2006)**

<b>Shipper</b>	<b>Type</b>	<b>Receipt Point</b>	<b>Daily Quantity (GJ/d)</b>
Domtar Inc.	FT	Empress	2,825
Husky Energy (Cardinal Cogen)	FT	Empress	33,563
IKO Industries	FT	Empress	762
Kingston Cogen	FT	Empress	21,045
Nitrochem Corp.	FT	Empress	1,885
OPG (Lennox)	FT	Empress	10,666
Union Gas	FT	Empress	52,481
Union Gas	FT	Empress	4,985
Union Gas	FT	Empress	5,709
Union Gas	FT	Empress	13,320
Union Gas	FT	Empress	3,616
Union Gas	FT	Empress	5,878
Canada Starch	FT	Dawn	1,020
Canada Starch	FT	Dawn	490
Union Gas	STS	Parkway	<u>68,520</u>
<b>TOTAL</b>			<b>226,765</b>

3 Actual deliveries to the Union EDA in 2005 by class of service are shown in  
 4 Figure A8.

**Figure A8: Union-EDA - 2005 Average Daily Deliveries  
by Contract Type (GJ/d)**

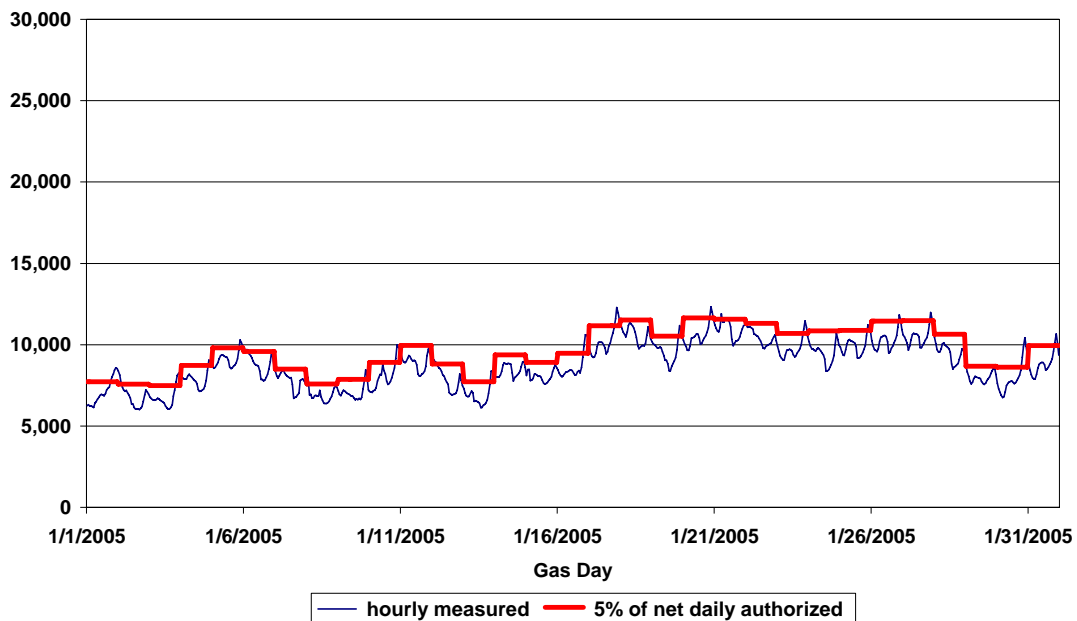


1 As illustrated in Figure A8, the FT service contracts to the Union EDA operated  
 2 at an average level of 138,000 GJ/d over the course of 2005. To meet winter  
 3 peaks, FT service was supplemented by STS and a small amount of non-firm  
 4 Diversion transportation. In summer, the higher demands associated with Lennox  
 5 were met through FT service, STS (non-firm in summer), Diversions, and STS-  
 6 Overrun (lowest priority transportation service). There was very little IT service  
 7 to Union EDA in 2005.

8 **Q22. How did consumption in the Union EDA vary over the course of the day**  
 9 **during 2005?**

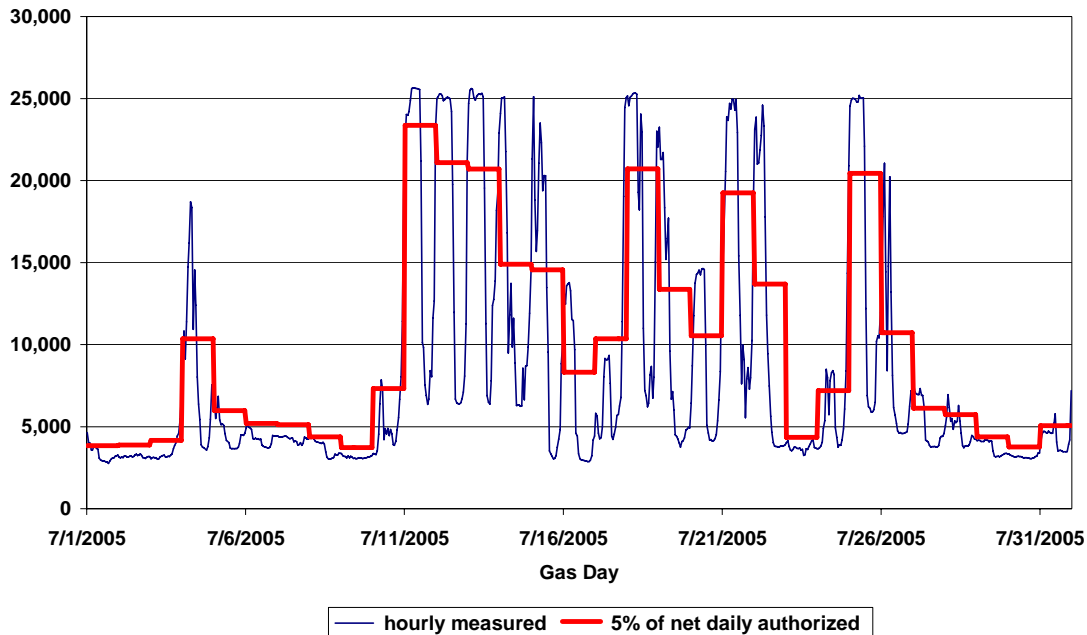
10 **A22.** Hourly takes in the Union EDA in January 2005 are shown in Figure A9. Hourly  
 11 takes varied by approximately 7,000 GJ/hour, from a low of approximately 6,000  
 12 GJ/hour to a peak near 13,000 GJ/hour.

**Figure A9: Union EDA Hourly Measured vs  
5% of Daily Net Authorized Quantities  
January 2005 (GJ/hour)**



1 Hourly fluctuations in consumption are more significant in summer, as shown in  
 2 Figure A10. In July 2005, hourly consumption varied from a low of  
 3 approximately 4,000 GJ/hour to a peak of 26,000 GJ/hour. Swings of  
 4 20,000 GJ/hour over the course of a single day were not uncommon.

**Figure A10: Union EDA Hourly Measured vs  
5% of Net Daily Authorized Quantities  
July 2005 (GJ/hour)**



1 **Q23. Have deliveries to the Union EDA exceeded the 5% hourly limit?**

2 **A23.** Yes. As TransCanada explained previously in Section 2 of this appendix, a  
 3 shipper may not, without TransCanada's consent, take delivery of gas at an hourly  
 4 rate of flow in excess of 5 %of the daily authorized nomination. Figure A10  
 5 shows that actual hourly takes far exceeded the 5 %hourly limit on many  
 6 occasions during July 2005. To date, TransCanada has been able to accommodate  
 7 these high hourly flow rates since there is often unutilized capacity in that part of  
 8 the Mainline system in the summer.

1 **Q24. What conclusions can be drawn from the information presented for the**  
2 **Union EDA, about shippers' use of TransCanada's existing services and meet**  
3 **market requirements?**

4 **A24.** The three distinct market segments in the Union EDA – (cogeneration; typical  
5 mixed residential, commercial and industrial markets; and Lennox) – have unique  
6 needs that are met by TransCanada's portfolio of services. Each segment is  
7 discussed below.

8 Cogeneration:

9 From a transportation cost perspective, markets that take at a relatively uniform  
10 level, such as the Cardinal and Kingston cogeneration facilities, are ideal. The  
11 shipper can hold a long-haul FT service contract and operate the contract at close  
12 to 100% load factor. This means that associated pipeline facilities are utilized, at  
13 high levels fixed monthly demand charges are spread over a large volume, and  
14 unit transportation costs are minimized.

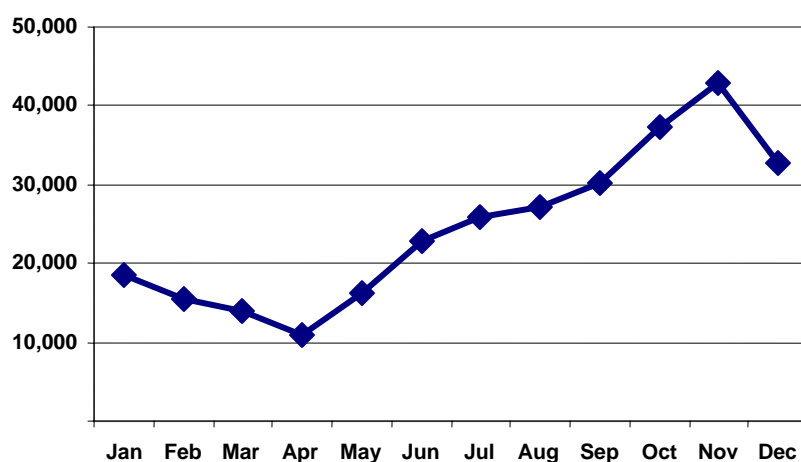
15 Typical Mixed Residential, Commercial and Industrial Markets:

16 At the other end of the spectrum, residential/commercial winter peaking markets,  
17 such as those in the Union EDA, can be expensive to serve from a transportation  
18 cost perspective. Pipeline facilities must be constructed to meet peak winter day  
19 requirements even though flows may only hit that peak level a few days per year.  
20 Absent any other factors, utilization levels for firm contracts serving these  
21 markets would be low and unit transportation costs would be high.

22 To assist shippers in avoiding low FT contract utilization and high unit  
23 transportation costs, TransCanada offers FT service shippers a number of  
24 flexibility features. To the extent that long-haul or 'linked' short-haul FT  
25 contracts are not fully used, shippers are provided with FT-RAM credits towards

1 the cost of IT service anywhere on the Mainline system at any time during the  
 2 month. FT shippers also have the ability to use diversion flexibility to access  
 3 other delivery points on the system in order to increase contract utilization. In  
 4 2005, an average of approximately 25,000 GJ/d was diverted from the  
 5 Union EDA to other markets as shown in Figure A11.

**Figure A11: Average Daily Diversions from the Union EDA (GJ/d)**



6 Union has also taken advantage of the Mainline's STS which is specifically  
 7 designed to meet seasonal and daily fluctuations in takes on a cost-effective basis.  
 8 As shown in Table A8, Union holds approximately 86,000 GJ/d of long-haul FT  
 9 service to the EDA, along with 69,000 thousand GJ/d of STS from Parkway to the  
 10 Union EDA. In summer, when market demand is typically low, STS affords  
 11 Union the ability to deliver excess gas under its long-haul FT service contracts on  
 12 a firm basis to Dawn or Parkway for storage injection. In winter when heating  
 13 loads peak, deliveries are made to the Union EDA on a firm basis under long-haul  
 14 FT contracts that are supplemented by 69,000 GJ/d of firm STS from Parkway. In  
 15 combination with storage, STS affords Union the ability to maintain very high  
 16 utilization rates and low unit costs on its long haul FT service contracts.



1 STS also assists Union in meeting hourly fluctuations in demand. STS has a total  
2 of eight nomination windows each day. At each window Union may nominate to  
3 adjust deliveries to or from storage to meet changes in consumption. This has  
4 enabled Union to generally operate within the free imbalance tolerance zone.

5 Lennox:

6 The combination of a summer load for power generation with a winter heating  
7 load is ideal in terms of maximizing annual use of transportation capacity and  
8 minimizing unit transportation costs. Because core market heating loads  
9 generally do not exist in the summer, there may be unutilized FT Service contract  
10 rights available in the summer that can be used to meet demands at Lennox.  
11 Given that FT Service demand charges are sunk (i.e., demand charges must be  
12 paid in full each month regardless of contract utilization), increased use of these  
13 contracts results in only a relatively small commodity charge.

14 Availability of unutilized capacity in summer also means that Lennox can  
15 frequently be served using non-firm transportation services such as FT Diversions  
16 and STS Overrun. These service features are charged on an “as-used” basis.

17 In addition, the availability of excess capacity in summer is essential in obtaining  
18 increased nominations at intra-day windows. As noted earlier, even FT service  
19 nomination increases cannot be assured at intra-day windows due to the  
20 “no-bump” rule. However, unutilized capacity is often available in the summer to  
21 the Union EDA, which increases the likelihood that capacity will be available for  
22 increased nominations at intra-day windows.

23 It is important to note that Lennox also has the capability to switch to fuel oil.  
24 This means that Lennox can use non-firm gas transportation service to the extent  
25 that it is available and simply switch to fuel oil if gas transportation is unavailable  
26 or interrupted. By doing so, Lennox avoids the high unit transportation costs that

---

1           would result from low annual usage of an FT service contract with fixed monthly  
2           demand charges.

3           TransCanada's Delivery Area approach may also help to facilitate the  
4           optimization of transportation service to the various market segments in the  
5           Union EDA. Under the Delivery Area approach, shippers do not need to contract  
6           for service to a particular meter within the Union EDA. Rather, they contract to  
7           the Delivery Area as a whole, which gives them access to all 39 meters within the  
8           Union EDA. This means that contracts intended to meet winter peaking loads in  
9           Ottawa, Cornwall and other locations in the Union EDA may, subject to capacity  
10          availability, be redirected to the Lennox meter station in summer.

**NATIONAL ENERGY BOARD**

**IN THE MATTER OF** the *National Energy Board Act*,  
R.S.C. 1985, c. N-7, as amended, and the Regulations made  
thereunder; and

**IN THE MATTER OF** an Application by TransCanada  
PipeLines Limited pursuant to Part IV of the National Energy  
Board Act for approval of proposed Firm Transportation-Short  
Notice Service (FT-SN) and Short Notice Balancing Service  
(SNB).

**TRANSCANADA PIPELINES LIMITED**

**SHORT NOTICE SERVICES APPLICATION**

**ATTACHMENT B**

**TO**

**APPENDIX 1**

**WRITTEN EVIDENCE**

**OF**

**TRANSCANADA PIPELINES LIMITED**

**BACKGROUND ON GAS-FIRED ELECTRICITY GENERATION IN ONTARIO**

May 2006

1 **1.0 BACKGROUND ON GAS-FIRED ELECTRICITY GENERATION IN**  
2 **ONTARIO**

3 **Q1. Please describe what is addressed in this Attachment B to the Written Evidence**  
4 **of TransCanada PipeLines Limited which is Appendix 1 to the Short Notice**  
5 **Services Application.**

6 A1. The proposed Short Notice Services have been developed by TransCanada as a  
7 response to the market requirements of gas-fired electrical power generation projects  
8 that are being proposed in the context of the Ontario Government initiative to replace  
9 coal-fired generation with cleaner sources of energy and conservation. This  
10 Attachment B provides detail about the Ontario government initiative and the  
11 regulatory process that is under way in that province.

12 **Q2. Why is the amount of gas demanded for electricity generation expected to grow**  
13 **in Ontario?**

14 A2. The Ontario Government is planning to replace 7,500 MW of coal-fired electricity  
15 generation starting in late 2007 with 2009 as a target for completion. This is to be  
16 achieved through the procurement of cleaner sources of energy, demand side  
17 management, and transmission upgrades.<sup>1</sup> In 2004 the Ontario Ministry of Energy  
18 issued a Request for Proposals (RFP) for 2,500 MW of cleaner electricity or demand  
19 side measures.<sup>2</sup> Six projects were selected, five of which were gas-fired generation  
20 projects: two combined cycle gas-fired generation projects in the Sarnia area for a  
21 total of 1,575 MW, two 280 MW gas-fired generation projects for the Greater  
22 Toronto Area (GTA) for a total of 560 MW, and a 90 MW cogeneration project in  
23 Mississauga.<sup>3</sup> One of the 280 MW projects was subsequently withdrawn by the  
24 project sponsor. The 90 MW cogeneration facility is now in service. The remaining

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<sup>1</sup> Ontario Ministry of Energy, "McGuinty Government Unveils Bold Plan to Clean Up Ontario's Air," News Release, June 15, 2005.

<sup>2</sup> Ontario Ministry of Energy, "Request for Proposals for 2,500 MW of New Clean Generation and Demand Side Projects," September 13, 2004.

<sup>3</sup> Ontario Ministry of Energy, "McGuinty Government Boosting Electricity Supply," News Release, April 13, 2005 and "McGuinty Government Give Green Light to Two New Gas Plants," News Release, May 30, 2005.

1 three projects are expected to come on-stream late in 2007 and they must be able to  
2 generate electricity on short-notice when dispatched by the IESO.<sup>4</sup>

3 On October 28, 2005, the Ontario Power Authority (OPA) made the following  
4 announcement regarding the procurement of additional gas-fired generation for  
5 Ontario: it would issue a Request for Qualifications (RFQ) for an additional 1,000  
6 MW of generation for the western section of the GTA; it would issue an RFP for  
7 1,000 MW of combined heat and power projects across Ontario; and it would begin  
8 negotiations with the Goreway Station Project for the construction of a 900 MW gas-  
9 fired facility in the western GTA.<sup>5</sup>

10 Since the October 28, 2005 announcement, the OPA has moved forward on a number  
11 of these initiatives: the OPA fulfilled its directive with regard to the Goreway Station  
12 Project, and subsequently financing closed on an 880 MW plant.<sup>6</sup> Following the  
13 close of the RFQ for the western GTA, the OPA announced that it would issue an  
14 RFP for 600 MW of gas-fired generation in the western GTA at the end of April 2006  
15 (down from the 1,000 MW originally contemplated), with the possibility of an  
16 additional 400 MW being procured in that area in the future;<sup>7</sup> and on April 12, 2006  
17 the OPA issued the final version of the combined heat and power RFP. In addition to  
18 these initiatives, on February 10, 2006 the OPA announced that it had been directed  
19 by the Ontario Ministry of Energy to move forward with the Portlands Energy Centre  
20 for 550 MW of gas-fired generation for downtown Toronto.<sup>8</sup>

21 All of the announced projects and plans to procure energy add up to 5,375 MW of  
22 new gas-fired generation capacity. Using a rule of thumb that 20,000 GJ/d is required  
23 for 100 MW of generation, this translates into an approximate combined peak

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<sup>4</sup> The RFP specified dispatch by the Independent Market Operator (IMO), which has since been renamed IESO.

<sup>5</sup> Ontario Power Authority, "Ontario Power Authority to procure 3,000 MW for Ontario Grid," News release, October 28, 2005.

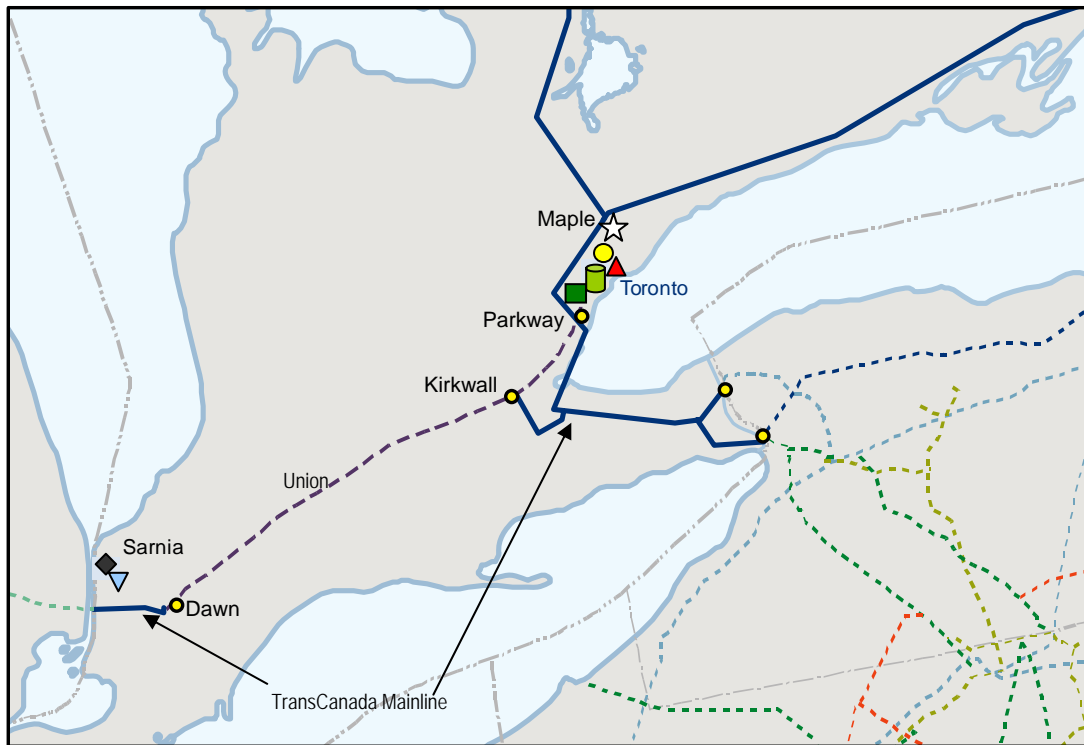
<sup>6</sup> The Blackstone Group, "Sithe Global Power LLC, 80% owned by the Blackstone Group closes financing of Goreway Station, an 880 MW power generating facility in Brampton, Ontario," News Release, February 2, 2006.

<sup>7</sup> Ontario Power Authority, Letter to Stakeholders regarding the procurement for new generation in the Greater Toronto Area west of Toronto, April 7, 2006.

<sup>8</sup> Ontario Ministry of Energy, "Ontario Government Announces balanced Energy Plan for Toronto," News Release, February 10, 2006.

1 demand of 1.08 PJ/d. Figure 1.1 is a map showing the general location, MW output  
2 and approximate peak gas demand of the plants described above. It does not show  
3 the announced RFP for 1,000 MW mentioned above, which may also result in  
4 additional gas-fired generation in the area shown.

**Figure 1.1 - New Gas-Fired Generation in Ontario**



Greater Toronto Area

- ▲ Greater Toronto Airport Authority, 90 MW Co-generation, approximately 20 TJ/d peak demand, currently in-service
- Greenfield South, 280 MW, approximately 50 TJ/d peak demand, in-service 2009
- ☆ Portlands Energy Center (in negotiations), 550 MW, approximately 110 TJ/d peak demand
- Goreway Station, 880 MW, approximately 170 TJ/d peak demand, in-service 2007/2008
- GTA West RFP, 1000 MW, approximately 200 TJ/d peak demand, in service date to be determined

Sarnia Area

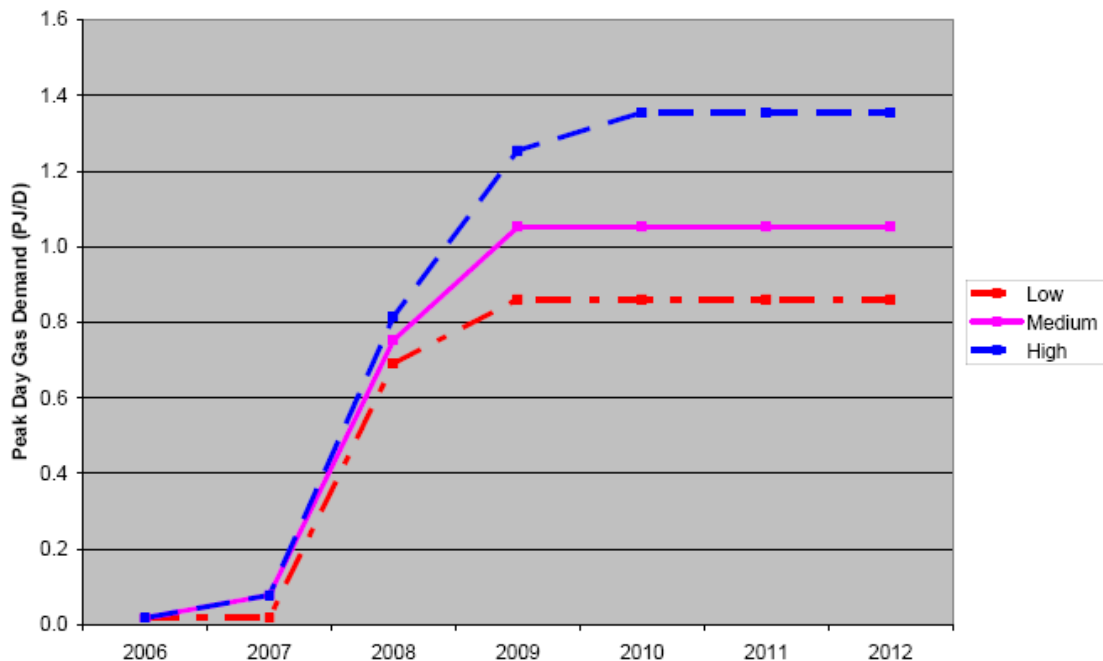
- ◆ Greenfield Energy Centre, 1005 MW, approximately 200 TJ/d peak demand, in service 2007/2008
- ▽ St. Clair Power, 570 MW, approximately 110 TJ/d peak demand, in-service 2007/2008

1 **Q3. What impact will new gas-fired generation projects required to replace coal-**  
2 **fired generation have on the demand for natural gas in Ontario?**

3 A3. As noted previously, gas use by new gas-fired generators in Ontario is forecast to  
4 grow to about 164 PJ/year in a low gas-fired generation growth scenario to about  
5 320 PJ/year in a high growth scenario by 2012, with in-Ontario peak requirements  
6 ranging from a low of about 0.86 PJ/d to a high of about 1.35 PJ/d. This demand  
7 growth is expected to start when the first new gas-fired generation plants come on-  
8 stream in late 2007, as shown below in Figure 1.2.

**Figure 1.2**

Approximate New Gas Fired Generation In Ontario Peak Day Requirements (PJ/D)



Source: Ontario Energy Board, "Natural Gas Electricity Interface Review: A Report by Ontario Energy Board Staff," EB-2005-0306, November 21, 2005, p. 14.

9 **Q4. Are there currently any gas-fired power generators in Ontario?**

10 A4. Yes, the largest is the Ontario Power Generator's (OPG) Lennox plant, near  
11 Kingston, with a capacity of 2,140 MW. This plant, which is in the Eastern Delivery  
12 Area of the franchise area of Union Gas Limited (Union), is used to meet peak  
13 requirements in the summer air conditioning season. It has the ability to operate on

1 gas or on heavy fuel oil, so it is not dependent solely on natural gas. There are 19  
2 smaller gas-fired generators in Ontario which bring Ontario's gas-fired generation  
3 capacity to 4,774 MW.<sup>9</sup>

4 **Q5. What steps are being taken by the Ontario Energy Board (OEB) with regard to**  
5 **the increase in gas-fired electricity generation?**

6 A5. As Ontario may be relying more heavily on gas-fired electricity generation, the OEB  
7 launched its Natural Gas Electric Interface Review (NGEIR) on June 10, 2005. The  
8 objectives of the NGEIR are to evaluate demand, assess the need for additional  
9 infrastructure and services to meet these demands, and identify issues associated with  
10 recovering the costs of additional infrastructure and services.<sup>10</sup>

11 On December 29, 2005 the OEB on its own motion commenced a generic hearing to  
12 address “whether it should order new rates for the provision of natural gas,  
13 transmission, distribution and storage services to gas-fired generators (and other  
14 eligible customers)” and to assess related questions regarding the regulation of  
15 storage (referred to hereafter as the NGEIR generic hearing).<sup>11</sup> In its notice of  
16 proceeding, the OEB directed Enbridge Gas Distribution Inc. (Enbridge) and Union  
17 to file proposed tariffs including:

- 18 a) More frequent nomination windows for distribution, storage and  
19 transportation that correspond with the nominations of upstream  
20 pipelines that connect to the Ontario gas system.
- 21 b) Firm high deliverability service from storage with customer options  
22 for 1.2%, 5% and 10% deliverability.
- 23 c) Gas storage and distribution offered as discrete services.

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<sup>9</sup> NGEIR, Board Staff Report, pp. 8-9.

<sup>10</sup> Ontario Energy Board, “Follow Up to the Natural Gas Forum – Natural Gas Electricity Interface Review,” EB-2005-0306, Letter, June 10, 2005.

<sup>11</sup> Ontario Energy Board, “Notice of Proceeding on Natural Gas Electricity Interface Issues and Determination to Refrain from Regulating Rates Charged for the Storage of Gas”, EB-2005-0551 (OEB, Notice of Proceeding, EB-2005-0551), December 29, 2005, p. 1.



- 1           d) Inter-franchise movement of gas (i.e., the ability to access services  
2           across Ontario, whether to a customer's own account or as a sale to a  
3           third party).
- 4           e) Redirection of gas to a different delivery point on short notice (i.e.,  
5           the ability to redirect or acquire gas on short notice to a different  
6           delivery point).
- 7           f) The ability to transfer the title of gas in storage (i.e., the title transfer  
8           in gas storage is treated as an administrative matter instead of a  
9           physical withdrawal or injection of gas).<sup>12</sup>

10           Regarding item b), storage deliverability refers to the amount of gas that can be  
11           withdrawn from storage in a day, here expressed as a percentage of contracted storage  
12           capacity.<sup>13</sup>

13           The OEB also invited other service providers such as TransCanada to file evidence on  
14           how they may provide these services "either as a complement or as an alternative to  
15           the services provided by Union and Enbridge" by May 1, 2006.<sup>14</sup>

16           Enbridge and Union filed evidence in the NGEIR generic hearing on March 20, 2006.  
17           On May 1, 2006, TransCanada filed evidence which provides information regarding  
18           its existing services, the services proposed in this Application, and its role in this  
19           growing market. Technical conferences were held on April 5 and 6, 2006 and are  
20           scheduled for May 16 and 19, 2006. A settlement conference is to be held on May  
21           29, 30 and 31, 2006. The settlement proposal is to be filed June 8, 2006. An oral  
22           hearing is scheduled to commence on June 12, 2006 with the OEB's consideration  
23           and determination of any settlement proposal and will, if necessary, continue until  
24           July 14, 2006.<sup>15</sup>

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<sup>12</sup> OEB, Notice of Proceeding, EB-2005-0551, pp. 3-4.

<sup>13</sup> See NGEIR, Board Staff Report, pp. 17-18.

<sup>14</sup> OEB, Notice of Proceeding, EB-2005-0551, p. 4.

<sup>15</sup> Ontario Energy Board, "Procedural Order No. 2," EB-2005-0551, February 28, 2006, pp. 2-4 and e-mail to EB-2005-0551 Participants, April 21, 2006.

1 **Q6. What services aimed at power generators do Enbridge and Union propose in**  
2 **their evidence in the NGEIR generic hearing?**

3 A6. Enbridge and Union propose a number of new services and service changes.

4 For its in-franchise customers, Union is proposing to restructure its T1 rate in a way  
5 that will lower rates to large customers such as gas-fired power generators. For ex-  
6 franchise customers, Union is proposing four new services that it plans to offer and  
7 operate under the C1 and M12 rate schedules. These include F24-T, a service with  
8 ten nomination windows with reserved capacity that provides access to firm  
9 contracted transportation capacity between Dawn and Parkway throughout the day.  
10 Union is also proposing an Upstream Pipeline Balancing Service (UPBS) that will  
11 permit customers to deliver gas to Dawn based on their daily requirement using the  
12 industry standard uniform hourly flow rate, and to have Union re-deliver the same  
13 daily quantities to Parkway at variable hourly flow. To facilitate power customers'  
14 ability to start up on a firm basis on short notice, Union is proposing a Downstream  
15 Pipeline Balancing Service (DPBS), which Union states will provide alignment with  
16 TransCanada's proposed FT-SN service. UPBS and DPBS provide balancing to  
17 adjust for differences between the nomination windows of interconnecting systems  
18 and are, in this respect, similar to TransCanada's proposed SNB. Finally, Union is  
19 proposing F24-S under the C1 rate schedule, which provides all day firm access to  
20 storage at the same ten nomination windows that are accessible under F24-T.<sup>16</sup>

21 Enbridge is proposing to expand the scope of its Rate 125 – Extra Large Firm  
22 Transportation Service (Rate 125) and a new Rate 316 – High Deliverability Gas  
23 Storage Service (Customer Arranged Transport) (Rate 316). Rate 125 provides  
24 unbundled distribution service from Enbridge's city gate to the customer's premise  
25 for Enbridge's in-franchise customers. Enbridge describes Rate 316 as a highly

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<sup>16</sup> Union Gas Limited, "Prefiled Evidence of Union Gas Limited, Natural Gas Electricity Interface Review, Power Services Evidence," EB-2005-0551, March 20, 2006, Tab 1, pp 1-7.

1 flexible, high-deliverability natural gas storage service that is available to both in-  
2 franchise and ex-franchise customers.<sup>17</sup>

3 **Q7. Does that conclude TransCanada's description of the developments in the**  
4 **Ontario power generation market?**

5 A7. Yes.

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<sup>17</sup> Enbridge Gas Distribution Inc., "Natural Gas Electricity Interface Review Issues and Storage Regulation, Evidence of Enbridge Gas Distribution Inc.," EB-2005-0551, March 20, 2006, Exhibit A, Tab 1, Schedule 1.

**Appendix 2**

**FT-SN Toll Schedule**

**FIRM TRANSPORTATION SHORT NOTICE SERVICE**

**FT-SN TOLL SCHEDULE**

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5. DEMAND CHARGE ADJUSTMENTS .....	4
6. ALTERNATE RECEIPT AND DIVERSION OF GAS .....	4
7. ASSIGNMENT .....	7
8. RENEWAL RIGHTS .....	8
9. TEMPORARY RECEIPT AND/OR DELIVERY POINT .....	9
10. MISCELLANEOUS PROVISIONS .....	12

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FT-SN TOLL SCHEDULE

**1. AVAILABILITY**

1.1 Any Shipper shall be eligible to receive service pursuant to this Toll Schedule provided that:

- (a) Shipper has entered into a Firm Transportation Short Notice (FT-SN) Service Contract (the "Contract") with TransCanada having a minimum term of 1 year; or has obtained an Order of the NEB, pursuant to sub-section 71(2) of the National Energy Board Act as amended from time to time ("71(2) Order"), requiring TransCanada to transport gas for Shipper subject to the provisions of this Toll Schedule and to the terms and conditions contained in the 71(2) Order; and
- (b) Shipper has pipeline facilities interconnecting with TransCanada's facilities at the delivery point specified in the Contract, or has provided TransCanada with adequate assurances that arrangements have been made to have an authorized gas distribution or transmission company act as Shipper's agent in receiving from TransCanada the gas to be delivered pursuant to this Toll Schedule;
- (c) the delivery point specified in the Contract has flow control facilities that are operated by TransCanada;
- (d) the delivery point specified in the Contract is in a distributor delivery area or is an export delivery point that is available only for transportation service pursuant to the FT-SN Toll Schedule; and
- (e) Shipper has provided TransCanada with financial assurances as required by TransCanada pursuant to Section XXIII of the General Terms and Conditions referred to in Section 11 hereof.

**1.2 Facilities Construction Policy**

In order to provide service pursuant to this Toll Schedule, TransCanada utilizes capacity available from its own gas transmission system and from its firm transportation service entitlement on the Great Lakes Gas Transmission Company system, the Union Gas Limited system, and the Trans Québec & Maritimes Pipeline Inc. system (the "Combined Capacity"). If a request for service pursuant to this Toll Schedule (the "Requested Service") requires an increase to the Combined Capacity, TransCanada is prepared to

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FT-SN TOLL SCHEDULE

use all reasonable efforts to enable it to increase the Combined Capacity to the extent necessary provided that:

- (a) there is reasonable expectation of a long term requirement for the increase in the Combined Capacity;
- (b) the NEB approves the additional facilities and/or transportation services necessary to increase the Combined Capacity; and
- (c) the availability provisions of sub-section 1.1 hereof are satisfied with respect to the Requested Service.

**2. APPLICABILITY AND CHARACTER OF SERVICE**

2.1 On each Day during the term of the Contract, Shipper shall be entitled to request service for a quantity of gas equal to or less than the Contract Demand less any quantity of gas nominated for such Day for a Diversion and/or Alternate Receipt (Shipper's "Reservation Entitlement") hereunder. Nominations for service shall be made pursuant to Section XXII of the General Terms & Conditions. Service hereunder shall not be subject to curtailment or interruption except as provided in Section XI and Section XIV of the General Terms and Conditions; provided however, that if Shipper fails to provide on an ongoing and timely basis to TransCanada satisfactory evidence of its right to remove from the province of production all or any part of the quantities of gas to be transported by TransCanada under the Contract, Shipper shall be in default hereunder (the "Default") to the extent of the daily quantity not authorized for removal from the province of production as aforesaid (the "Default Quantity"), and TransCanada shall be entitled to immediately suspend service for a quantity up to, and including, the Default Quantity until such time as Shipper remedies the Default. TransCanada shall terminate any such suspension and resume service as to that part of the Default Quantity in respect of which the Default has been remedied.

2.2 Shipper shall not, without TransCanada's consent, deliver gas to the receipt point or receive gas from the delivery point, each as specified in the Contract, at an hourly rate of flow in excess of five percent (5%) of Reservation Entitlement.

**3. MONTHLY BILL**

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FT-SN TOLL SCHEDULE

3.1 The monthly bill payable to TransCanada for service hereunder shall include the demand charge and the commodity charge in effect during the billing month for transportation service and, where applicable, for delivery pressure service and shall be calculated by applying, as follows, the applicable tolls as approved by the NEB (as set forth in the List of Tolls referred to in Section 10 hereof):

(a) **Transportation Service**

(i) Demand Charge

For each month, the demand charge for transportation service shall be equal to the applicable monthly FT-SN Demand Toll multiplied by Shipper's Contract Demand. If Shipper's Contract Demand changes during a month, then a weighted average daily Contract Demand shall be determined for such month and shall be used to calculate the demand charge for such month. The said demand charge is payable by Shipper notwithstanding any failure by Shipper during such month, for any reason whatsoever including force majeure or a Default by Shipper under sub-section 2.1 hereof, to deliver quantities of gas authorized to TransCanada at the receipt point.

(ii) Commodity Charge

For each month the commodity charge for transportation service shall be equal to the applicable Commodity Toll multiplied by Shipper's Authorized Quantities for transportation service between each authorized receipt point and delivery point or area.

(b) **Delivery Pressure Service**

For each month, the demand charge for delivery pressure service at each delivery point at which a toll for delivery pressure has been set shall be equal to the applicable Delivery Pressure Monthly Demand Toll multiplied by Shipper's Contract Demand in effect at each such delivery point. If Shipper's Contract Demand changes during a month, then a weighted average daily Contract Demand shall be determined for such month and shall be used to calculate the demand charge for such month. The said demand charge is payable by Shipper notwithstanding any failure by Shipper during such month, for any reason



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FT-SN TOLL SCHEDULE

whatsoever including force majeure or a Default by Shipper under sub-section 2.1 hereof, to deliver quantities of gas authorized to TransCanada at the receipt point.

(c) **Fuel**

For each month, a Shipper shall provide, on a daily basis, a quantity of fuel in accordance with Section IV (1)(a) of the General Terms and Conditions.

**4. MINIMUM BILL**

4.1 The minimum monthly bill for service hereunder shall be the demand charges determined in sub-section 3.1 (a) (i) and (if applicable) 3.1 (b) hereof, after giving effect to any adjustment pursuant to Section 5 hereof.

**5. DEMAND CHARGE ADJUSTMENTS**

5.1 If during any Day, TransCanada fails to deliver the quantity of gas requested by Shipper up to the Contract Demand, for any reason related solely to TransCanada's operations, including an event of force majeure occurring on any of the pipeline systems of TransCanada, Great Lakes Gas Transmission Company ("GLGT"), Union Gas Limited ("Union") and Trans Québec & Maritimes Pipeline Inc. ("TQM"), then the monthly demand charge shall be reduced by an amount equal to the applicable Daily Demand Toll multiplied by the difference between the quantity of Reservation Entitlement that Shipper would otherwise have, and the Reservation Entitlement for such Day. If TransCanada refuses to accept deliveries of Shipper's gas or curtails receipts from or deliveries to Shipper pursuant to Paragraph 8 (Energy Imbalance Recovery) of Section XXII of the General Terms and Conditions, then there shall be no corresponding reduction in the monthly demand charge to Shipper. Notwithstanding the foregoing, if the quantity of gas which TransCanada fails to deliver is the subject of an accepted nomination for a Diversion and/or an Alternate Receipt, then TransCanada shall only be obligated to reduce the monthly demand charge if such Diversion is a Diversion and/or such Alternate Receipt is of the nature described in sub-Section 1(h)(ii) or 2(h)(ii) in Section XV of the General Terms and Conditions and in all other cases there shall be no reduction in the monthly demand charge.

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FT-SN TOLL SCHEDULE

**6. ALTERNATE RECEIPT AND DIVERSION OF GAS**

- 6.1 (a) Subject to the provisions herein, Shipper shall have the right to nominate an Alternate Receipt and/or Diversion under Shipper's Contract in the manner provided herein.
- (b) The aggregate of all nominations for delivery under this toll schedule shall not exceed the Contract Demand under Shippers Contract.
- (c) Shipper shall not be entitled to nominate a Diversion to a delivery point or delivery area which is upstream of the receipt point specified in Shipper's Contract or upstream of the Alternate Receipt point.
- (d) Shipper shall not be entitled to nominate an Alternate Receipt from a receipt point that is upstream of the receipt point specified in Shippers Contract or is downstream of the delivery point or delivery area specified in Shippers Contract.
- (e) For the purpose of Section XVI of the General Terms and Conditions, Alternate Receipts and Diversions shall be equivalent to service under an STS Contract.
- 6.2 Any nomination by Shipper for an Alternate Receipt and/or a Diversion under Shipper's Contract must be received by TransCanada's Gas Control Department in Calgary at the time specified pursuant to Section XXII of the General Terms and Conditions.
- 6.3 TransCanada shall have the right to not accept a nomination made pursuant to Sub-section 6.2 hereof or to accept only a portion of the quantities so nominated if the Alternate Receipt and/or Diversion requested would negatively impact TransCanada's ability to provide those transportation services which, pursuant to Section XV of the General Terms and Conditions, have a priority of service which is higher than that of the Alternate Receipt and/or Diversion nominated by Shipper or if such Alternate Receipt and/or Diversion would otherwise be immediately curtailed pursuant to sub-section 1(e) or 2(e) of Section XV of the General Terms and Conditions. TransCanada shall have the right to curtail Alternate Receipts and/or Diversions in accordance with Section XV of the General Terms and Conditions.

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FT-SN TOLL SCHEDULE**6.4 Alternate Receipts and Diversions Return Home**

In the event that TransCanada does not accept a nomination for an Alternate Receipt and/or Diversion pursuant to sub-sections 6.2, and 6.3 hereof, or accepts only a portion of the quantity so nominated, then TransCanada shall exercise reasonable efforts to allow Shipper to renominate to the receipt point and/or delivery point specified in Shipper's Contract. TransCanada shall have the right to reject any such renomination, or to accept only a portion of the quantity so renominated, if the renomination would negatively impact any other authorized transportation service. In any event, Shipper shall pay the Daily Demand Toll based on the receipt point and delivery point or area specified in Shipper's Contract for the entire quantity set out in an Alternate Receipt and/or Diversion nomination which was rejected by TransCanada pursuant to sub-section 6.3 hereof.

- (a) In addition to the charges payable pursuant to Section 3.1(a) and (b) above, Shipper shall pay TransCanada for all Alternate Receipts and Diversions, a charge equal to the aggregate of:
- (i) the product obtained by multiplying the amount, if any, by which the Daily Demand Toll, applicable from the Alternate Receipt point to the delivery point or area specified in Shipper's Contract, exceeds the applicable Daily Demand Toll from the receipt point to the delivery point or area which are specified in Shipper's Contract by Shippers Authorized Quantity, and
  - (ii) the product obtained by multiplying the amount, if any, by which the Daily Demand Toll, applicable from the receipt point specified in the Shipper's Contract to the Diversion point, exceeds the applicable Daily Demand Toll from the receipt point to the delivery point or area which are specified in the Shipper's Contract, by Shippers Authorized Quantity.
- (b) If the gas is diverted hereunder to a delivery point at which a delivery pressure charge has been approved by the NEB and no delivery pressure charge exists for the delivery point specified in Shipper's Contract, then Shipper shall pay TransCanada, in addition to the charges provided above, an amount equal to the

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FT-SN TOLL SCHEDULE

applicable Delivery Pressure Toll multiplied by Shipper's total Diversion quantity at such delivery point for such month (a "Point Diversion Delivery Pressure Charge"). If a delivery pressure charge exists at the delivery point specified in Shipper's Contract, then Shipper shall pay TransCanada, in addition to the delivery pressure charge described in Section 3.1(b) above, an amount (a "Point Diversion Delivery Charge") equal to the product obtained by multiplying Shipper's total Diversion quantity at the delivery point which is the subject of the Diversion multiplied by that amount, if any, by which the Delivery Pressure Toll at the delivery point which is the subject of the Diversion exceeds the delivery pressure toll at the delivery point specified in Shipper's Contract.

The total delivery pressure charge for Diversion quantities shall be the sum of the Point Diversion Delivery Pressure Charges at all applicable delivery points plus the delivery pressure charge, if any, payable pursuant to sub-section 3.1(b) above.

**7. ASSIGNMENT**

7.1 Any company which shall succeed by purchase, merger or consolidation to the properties, substantially or in entirety, of Shipper or of TransCanada, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under any Contract into which this Toll Schedule is incorporated and any related contracts. Further, either Shipper or TransCanada may, without relieving itself of its obligations under any Contract into which this Toll Schedule is incorporated (unless consented to by the other party which consent shall not be unreasonably withheld), assign any of its rights and obligations thereunder to another party. Nothing herein shall in any way prevent either party to such Contract from pledging or mortgaging its rights thereunder as security for its indebtedness. Such Contract shall be binding upon and shall inure to the benefit of the respective successors and assigns of the parties thereto. No assignment hereunder in respect of a service which has already resulted in a reduction of the affected distributor's Contract Demand shall entitle such distributor to any further reduction in its Contract Demand.

7.2 Assignments at a discount negotiated between assignors and assignees are permitted, provided that the approved toll continues to be paid to TransCanada.

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FT-SN TOLL SCHEDULE

- 7.3 Prior to the effective date of any assignment of any Contract subject to sub-section XXIII(3)(b) of the General Terms and Conditions of TransCanada's Tariff, assignee shall as requested by TransCanada, execute an assignment of any related Financial Assurances Agreements (as defined in sub-section 4.4(c)(ii) of the Transportation Access Procedure) or execute a new Financial Assurances Agreement.
- 7.4 Save as herein provided, assignments of any Contracts into which this Toll Schedule is incorporated are expressly prohibited.

**8. RENEWAL RIGHTS**

- 8.1 Pursuant to any Contract into which this FT-SN Toll Schedule is incorporated and which Contract has been determined by TransCanada to be serving a long term market, and subject to the following conditions, Shipper shall have the option (the "Renewal Option") of extending the existing term (the "Existing Term") of the Contract for a period of no less than one (1) year (the "Renewal Term") and revising the Contract Demand to a level no greater than the Contract Demand set out in the Contract (the "Renewal OD") provided that the following conditions are met:
- (a) TransCanada receives written notice from Shipper of Shipper's election to exercise the Renewal Option which sets out the term and Contract Demand of such renewal (the "Renewal Provisions") no less than six (6) months before the termination date which would otherwise prevail under the Contract; and
  - (b) Shipper supplies TransCanada at the time of such notice with evidence satisfactory to TransCanada that Shipper will meet the availability provisions of the FT-SN Toll Schedule in respect of the Renewal Provisions prior to the commencement of the Renewal Term.

TransCanada may accept late notice of Shipper's election to exercise the Renewal Option if TransCanada, in its sole discretion, determines that TransCanada will have the required capacity available after providing capacity for all of TransCanada's obligations pursuant to prior outstanding requests from Shipper and/or others, that such renewal will not adversely impact TransCanada's system operations and that all of the costs for providing this service will be covered by TransCanada's tolls. Contracts may be revised as of

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FT-SN TOLL SCHEDULE

the effective renewal date to adhere to the then current Pro Forma Firm Transportation Service Contract.

Shipper may exercise the Renewal Option more than one time provided that the conditions found in this sub-section 8.1 and 8.2 hereof are met upon each and every exercise of the Renewal Option.

8.2 Provided TransCanada has either received timely notice as provided in sub-section 8.1(a) above from Shipper of Shipper's election to exercise the Renewal Option, or accepted late notice from Shipper of his election to exercise the Renewal Option, and provided that Shipper has met the availability provisions of the FT-SN Toll Schedule in respect of the Renewal Provisions, the Contract shall be amended as follows:

- (a) the Contract Demand set out in the Contract shall be revised to the level specified in the Renewal Provisions, effective as of the commencement of the Renewal Term; and
- (b) the term of the Contract shall be extended to that specified in the Renewal Provisions, effective as of the expiry of the Existing Term.

8.3 All renewals shall be stated in GJ.

**9. TEMPORARY RECEIPT AND/OR DELIVERY POINT**

9.1 Upon receipt of a written request from Shipper, TransCanada may, in its sole discretion, allow Shipper to temporarily change the receipt and/or delivery point under a Contract. Such a temporary change in receipt and/or delivery point, once authorized by TransCanada, shall apply for a minimum duration of 3 months and shall not exceed the remaining term of the Contract.

9.2 Shipper's limited entitlement to obtain temporary receipt and/or delivery point may apply to the full Contract Demand specified in the Contract, or any portion thereof.

9.3 For transportation service from a temporary receipt point and/or to a temporary delivery point, Shipper shall pay the following:

## Transportation Tariff

## TransCanada PipeLines Limited

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### FT-SN TOLL SCHEDULE

- (a) the greater of the Monthly FT-SN Demand Toll payable for transportation from the original receipt point to the original delivery point specified in the Contract, and the FT-SN Demand Toll which applies:
    - (i) from the original receipt point to the temporary delivery point;
    - (ii) from the temporary receipt point to the original delivery point; or
    - (iii) from the temporary receipt point to the temporary delivery point;as the case may be;
  - (b) the applicable FT-SN Commodity Toll for the quantity of gas delivered after giving effect to the temporary receipt and/or delivery point; and
  - (c) the greater of the Delivery Pressure Monthly Demand Toll applicable to the original delivery point specified in the Contract and the Delivery Pressure Monthly Demand Toll which applies to the temporary delivery point, plus any fuel related to the delivery pressure.
- 9.4 The demand charges set out in subsections 9.3 a) and c) above are payable by Shipper notwithstanding any failure by Shipper during such month, for any reason whatsoever, including force majeure or a Default by Shipper under sub-section 2.1 hereof, to deliver Shipper's Receipt Gas to TransCanada at the temporary receipt point.
- 9.5 Shipper shall pay for or provide, on a daily basis, a quantity of fuel based on the applicable monthly fuel ratio established by TransCanada for transportation for the quantity of gas delivered after giving effect to the temporary receipt and/or delivery point.
- 9.6 Upon acceptance by TransCanada of Shipper's request for a temporary receipt or delivery point, transportation service hereunder shall be firm in accordance with sub-section 2.1 of this FT-SN Toll Schedule.

## 10. MISCELLANEOUS PROVISIONS

- 10.1 The General Terms and Conditions and the List of Tolls of TransCanada's Transportation Tariff, as amended from time to time, are applicable to this Toll Schedule and are hereby

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FT-SN TOLL SCHEDULE

- made a part hereof. If there is any conflict between the provisions of this Toll Schedule and the General Terms and Conditions, the provisions of this Toll Schedule shall prevail.
- 10.2 This Toll Schedule, the List of Tolls and the General Terms and Conditions are subject to the provisions of the National Energy Board Act or any other legislation passed in amendment thereof or substitution therefor.
- 10.3 This Toll Schedule together with the provisions of the General Terms and Conditions supercedes and replaces all previous Toll Schedules applicable to the Contract.



**Appendix 3**

**FT-SN Contract**

**FIRM TRANSPORTATION SHORT NOTICE SERVICE CONTRACT**

THIS FIRM TRANSPORTATION SHORT NOTICE SERVICE CONTRACT, made as of the  
\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

BETWEEN:

TRANSCANADA PIPELINES LIMITED  
a Canadian corporation  
("TransCanada")

OF THE FIRST PART

and

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

("Shipper")

OF THE SECOND PART

WITNESSES THAT:

WHEREAS TransCanada owns and operates a natural gas pipeline system extending from a point near the Alberta/Saskatchewan border where TransCanada's facilities interconnect with the facilities of NOVA Corporation of Alberta easterly to the Province of Quebec with branch lines extending to various points on the Canada/United States of America International Border; and

WHEREAS Shipper has satisfied in full, or TransCanada has waived, each of the conditions precedent set out in sub-sections 1.1 (b), (c), (d) and (e) of TransCanada's Firm Transportation Short Notice Service Toll Schedule referred to in sub-section 7.1 hereof (the "FT-SN Toll Schedule"); and

WHEREAS Shipper has requested and TransCanada has agreed to transport quantities of gas, that are delivered by Shipper or Shipper's agent to TransCanada at the Receipt Point referred to in sub-section 3.2 hereof (the "Receipt Point"), to the Delivery Point referred to in sub-section 3.1 hereof (the "Delivery Point") pursuant to the terms and conditions of this Contract; and

**(Insert A)**

WHEREAS the quantities of gas delivered hereunder by Shipper or Shipper's agent to TransCanada are to be removed from the province of production of such gas by Shipper and/or Shipper's suppliers and/or its (their) designated agent(s) pursuant to valid and subsisting permits and/or such other authorizations in respect thereof.

NOW THEREFORE THIS CONTRACT WITNESSES THAT, in consideration of the covenants and agreement herein contained, the parties hereto covenant and agree as follows:

**ARTICLE I - COMMENCEMENT OF SERVICE**

**(Insert B)**

**ARTICLE II - GAS TO BE TRANSPORTED**

2.1 Subject to the provisions of this Contract, the FT-SN Toll Schedule, the List of Tolls, and the General Terms and Conditions referred to in sub-section 7.1 hereof, TransCanada shall provide transportation service hereunder for Shipper in respect of a quantity of gas which, in any one day from the Date of Commencement until the \_\_\_ day of \_\_\_\_\_, \_\_\_\_, shall not exceed \_\_\_\_\_ GJ (the "Contract Demand").

**ARTICLE III - DELIVERY POINT AND RECEIPT POINT**

3.1 The Delivery Point hereunder is the point specified as such in Exhibit "1" which is attached hereto and made a part hereof.

3.2 The Receipt Point hereunder is the point specified as such in Exhibit "1" hereof.

**ARTICLE IV - TOLLS**

4.1 Shipper shall pay for all transportation service hereunder from the Date of Commencement in accordance with TransCanada's FT-SN Toll Schedule, List of Tolls, and General Terms and Conditions set out in TransCanada's Transportation Tariff as the same may be amended or approved from time to time by the National Energy Board ("NEB").

**Transportation Tariff**

**TransCanada PipeLines Limited**

FT-SN CONTRACT

**ARTICLE V - TERM OF CONTRACT**

5.1 This Contract shall be effective from the date hereof and shall continue until the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**ARTICLE VI - NOTICES**

6.1 Any notice, request, demand, statement or bill (for the purpose of this paragraph, collectively referred to as "Notice") to or upon the respective parties hereto shall be in writing and shall be directed as follows:

**IN THE CASE OF TRANSCANADA:** TransCanada PipeLines Limited

- (i) mailing address: P.O. Box 1000  
Station M  
Calgary, Alberta  
T2P 4K5
- (ii) delivery address: TransCanada Tower  
450 – 1<sup>st</sup> Street S.W.  
Calgary, Alberta  
T2P 5H1  
  
Attention: Director, Customer Service  
Telecopy: \_\_\_\_\_
- (iii) nominations: Attention: Manager, Nominations & Allocations  
Telecopy: \_\_\_\_\_
- (iv) bills: Attention: Manager, Contracts & Billing  
Telecopy: \_\_\_\_\_
- (v) other matters: Attention: Director, Customer Service  
Telecopy: \_\_\_\_\_

**IN THE CASE OF SHIPPER:**

- (i) mailing address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- (ii) delivery address: \_\_\_\_\_  
\_\_\_\_\_
- (iii) nominations: Attention: \_\_\_\_\_  
Telecopy: \_\_\_\_\_
- (iv) bills: Attention: \_\_\_\_\_  
Telecopy: \_\_\_\_\_  
E-mail address: \_\_\_\_\_
- (v) other matters: Attention: \_\_\_\_\_

Telecopy: \_\_\_\_\_

Notice may be given by telecopier or other telecommunication device and any such Notice shall be deemed to be given four (4) hours after transmission. Notice may also be given by personal delivery or by courier and any such Notice shall be deemed to be given at the time of delivery. Any Notice may also be given by prepaid mail and any such Notice shall be deemed to be given four (4) days after mailing, Saturdays, Sundays and statutory holidays excepted. In the event regular mail service, courier service, telecopier or other telecommunication service shall be interrupted by a cause beyond the control of the parties hereto, then the party sending the Notice shall utilize any service that has not been so interrupted to deliver such Notice. Each party shall provide Notice to the other of any change of address for the purposes hereof. Any Notice may also be given by telephone followed immediately by personal delivery, courier, prepaid mail, telecopier or other telecommunication, and any Notice so given shall be deemed to be given as of the date and time of the telephone notice.

#### **ARTICLE VII - MISCELLANEOUS PROVISIONS**

7.1 The FT-SN Toll Schedule, the List of Tolls, and the General Terms and Conditions set out in TransCanada's Transportation Tariff as amended or approved from time to time by the NEB are all by reference made a part of this Contract and operations hereunder shall, in addition to the terms and conditions of this Contract, be subject to the provisions thereof. TransCanada shall notify Shipper at any time that TransCanada files with the NEB revisions to the FT-SN Toll Schedule, the List of Tolls, and/or the General Terms and Conditions (the "Revisions") and shall provide Shipper with a copy of the Revisions.

7.2 The headings used throughout this Contract, the FT-SN Toll Schedule, the List of Tolls, and the General Terms and Conditions are inserted for convenience of reference only and are not to be considered or taken into account in construing the terms or provisions thereof nor to be deemed in any way to qualify, modify or explain the effect of any such provisions or terms.

7.3 This Contract shall be construed and applied, and be subject to the laws of the Province of Alberta, and, when applicable, the laws of Canada, and shall be subject to the rules, regulations and orders of any regulatory or legislative authority having jurisdiction.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the date first above written.

TRANSCANADA PIPELINES LIMITED

.....

Per \_\_\_\_\_ per \_\_\_\_\_

per \_\_\_\_\_ per \_\_\_\_\_

**Transportation Tariff**

**TransCanada PipeLines Limited**

FT-SN CONTRACT

**EXHIBIT "1"**

This is EXHIBIT "1" to the FIRM TRANSPORTATION SHORT NOTICE SERVICE CONTRACT made as of the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_ between TRANSCANADA PIPELINES LIMITED ("TransCanada") and \_\_\_\_\_ ("Shipper")

The Delivery Point hereunder is the point of interconnection between the pipeline facilities of TransCanada and \_\_\_\_\_ which is located at:

The Receipt Point hereunder is the point of interconnection between the pipeline facilities of TransCanada and \_\_\_\_\_ which is located at:

**DIFFERENT CONTRACT VERSIONS**

**I For a Firm Transportation Short Notice Service Contract Executed Following Completion of a Precedent Agreement:**

**Insert A**

WHEREAS the parties hereto have heretofore entered into an agreement dated as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, (the "Precedent Agreement") which bound them, subject to the fulfillment or waiver of the conditions precedent therein set forth, to enter into a Contract substantially upon the terms and conditions hereinafter described; and

WHEREAS the conditions precedent of the Precedent Agreement have been satisfied or waived; and

**Insert B**

1.1 TransCanada shall use reasonable efforts to have the additional facilities (and/or obtain such transportation arrangements on other gas transmission systems) as may be required to effect the transportation of the gas hereunder (the "Necessary Capacity") in place by the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, or as soon as possible thereafter. TransCanada's ability to provide service by the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, will be subject to, inter alia,

(a) the timing of receipt by Shipper and TransCanada of the authorizations referred to in paragraphs 1 and 2 of the Precedent Agreement which are required prior to the commencement of construction of TransCanada's facilities and the timing of the commencement of the services required by TransCanada (if any) on the systems of Great Lakes Gas Transmission Limited Partnership, Union Gas Limited, and Trans Quebec Maritime Pipelines Inc.; and

(b) the lead time required for the acquisition, construction and installation of those facilities required by TransCanada.

TransCanada shall use reasonable efforts to provide Shipper with ten (10) days advance Notice of the anticipated availability of the Necessary Capacity (the "Advance Notice"). TransCanada shall give Shipper Notice of the actual date of availability of the Necessary Capacity ("TransCanada's Notice"), and service hereunder shall not commence prior to the actual date of availability of the Necessary Capacity.



**Transportation Tariff**

**TransCanada PipeLines Limited**

FT-SN CONTRACT

1.2 The date of commencement of service hereunder (the "Date of Commencement") shall be the earlier of:

- (a) the date for which Shipper first nominates and TransCanada authorizes service hereunder; or
- (b) the tenth (10th) day following the day on which Shipper received TransCanada's Notice;

PROVIDED that Shipper shall not be obligated to a Date of Commencement which is earlier than the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, unless mutually agreed upon by both parties.

**II Firm Transportation Short Notice Service Contract Requiring Displacement of a Firm Transportation Short Notice Service Contract:**

**Insert A**

(nothing)

**Insert B**

1.1 As TransCanada does not otherwise have sufficient pipeline capacity on its system to offer this service, another shipper who has (a) long term Firm Transportation Short Notice Service contract(s) for the purpose of delivering gas to the same Delivery Point (the "Other Contract") must agree to reductions in the Contract Demand under the Other Contract equal to the Contract Demand hereunder effective as of the Date of Commencement.

1.2 The date of commencement of service hereunder (the "Date of Commencement") shall be the date for which Shipper first nominates, and TransCanada authorizes deliveries hereunder, pursuant to the provisions of this Contract.

1.3 Notwithstanding sub-section 5.1 hereof, if the Date of Commencement has not occurred on or before the \_\_\_ day of \_\_\_\_\_, 20\_\_, then either party may at any time thereafter, provided that service shall not have commenced hereunder, terminate this Contract forthwith by Notice to the other party.

**III Firm Transportation Short Notice Service Contract Not Following a Precedent Agreement and Not Requiring Displacement of a Firm Transportation Service Contract:**

**Insert A**

(nothing)

**Insert B**

1.1 The date of commencement of service hereunder (the "Date of Commencement") shall be the \_\_\_ day of \_\_\_\_\_, 20\_\_.

## **Appendix 4**

### **General Terms & Conditions**

## GENERAL TERMS AND CONDITIONS

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GENERAL TERMS and CONDITIONS

**I DEFINITIONS**

Except where the context expressly states another meaning, the following terms, when used in these General Terms and Conditions, in any ~~transportation service c~~Contract and in any Toll Schedule into which these General Terms and Conditions are incorporated, shall be construed to have the following meanings:

- "Alternate Receipt" shall mean the receipt of quantities of gas at a receipt point not specified in Shipper's FT, [FT-SN](#) or FT-NR Contract.
- "Banking Day" shall mean any day that the Royal Bank of Canada, Main Branch, Calgary, Canada or other financial institutions agreed to by TransCanada for payment pursuant to Section XI herein, conducts business.
- "Contract" shall mean a transportation service contract [or a contract pursuant to the SNB Toll Schedule](#) and shall also mean an Order of the NEB pursuant to Section 71(2) of the National Energy Board Act, as amended from time to time requiring TransCanada to provide transportation service.
- "Contract Demand" shall mean:
  - (i) with respect to transportation service contracts entered into prior to November 1, 1998, the contract demand, maximum daily quantity, annual contract quantity or maximum quantity as stated in a transportation service contract, converted to GJ by multiplying such contract demand, maximum daily quantity, annual contract quantity or maximum quantity by GHV-97 for the relevant delivery point as more particularly set out in the HV-97 Schedule attached to these General Terms and Conditions subject to variance pursuant to a Shipper election to restate its contract demand within the range from 99% of GHV-97 to 101% of GHV-97, which was received by TransCanada on or before February 13, 1998; and,
  - (ii) with respect to transportation service contracts entered into on or after November 1, 1998, that quantity of gas expressed in GJ specified in Shipper's transportation service contract as Shipper's daily or seasonal entitlement, as the case may be, to transportation capacity.

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GENERAL TERMS and CONDITIONS

- "Contract Year" shall mean a period of 12 consecutive months beginning on a first day of November.
- "Cubic Metre" or "m<sup>3</sup>" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of fifteen degrees (15°) Celsius, and at a pressure of 101.325 kilopascals absolute.
- "Daily Contract Injection Quantity" shall, for the purposes of the STS-L Contracts, mean the quantity of gas specified in the STS-L Contract for delivery from the Market Point to the Storage Injection Point(s).
- "Daily Contract Withdrawal Quantity" shall, for the purposes of the STS-L Contracts, mean 75% of the Daily Contract Injection Quantity, for delivery from the Storage Withdrawal Point to the Market Point.
- "Daily Diversion Quantity" shall have the meaning ascribed in sub-Section 3.1(e)(i) of the STS Toll Schedule.
- "Daily Excess Withdrawal Quantity" shall be as defined in sub-Section 3.1(e) of the STS Toll Schedule for STS Contracts and sub-Section 3.1(c) of the STS-L Toll Schedule for STS-L Contracts.
- "Daily Injection Quantity" shall be as defined in sub-Section 2.2(a) of the STS Toll Schedule for STS Contracts or STS-L Toll Schedule for STS-L Contracts.
- "Daily IT Quantity" shall be as defined in sub-Section 3.1(e) of the STS Toll Schedule for STS Contracts and in sub-Section 3.1(e) of the STS-L Toll Schedule for STS-L Contracts.
- "Daily Operational Injection Quantity" shall, for the purposes of STS-L Contracts, mean the least of the aggregate of the Contract Demand(s) of the Linked FT Contract(s) and the Daily Contract Injection Quantity from the Market Point to the Storage Injection Point(s).
- "Daily STFT Quantity" shall be as defined in sub-Section 3.1 (e) of the STS Toll Schedule for STS Contracts and in sub-Section 3.1(e) of the STS-L Toll Schedule for STS-L Contracts.
- "Daily Withdrawal Quantity" shall be as defined in sub-Section 2.2(b) of the STS Toll Schedule for STS Contracts and sub-Section 2.2(b) STS-L Toll Schedule for STS-L Contracts.

GENERAL TERMS and CONDITIONS

- "Daily Demand Toll" shall mean the toll determined by multiplying the Monthly Demand Toll for transportation service, as approved by the NEB (as set forth in the List of Tolls referred to in Section III hereof), by twelve (12) and dividing the result by three hundred and sixty-five (365).
- "Day" shall mean a period of 24 consecutive hours, beginning and ending at 09:00 hours Central Clock Time, or at such other time as may be mutually agreed upon by Shipper and TransCanada. The reference date for any day shall be the calendar date upon which the 24 hour period shall commence.
- "Delivery Pressure Daily Demand Toll" shall mean the toll determined by multiplying the Delivery Pressure Monthly Demand Toll, as approved by the NEB (as set forth in the List of Tolls referred to in Section III hereof), by twelve (12) and dividing the result by three hundred and sixty-five (365).
- "Diversion" shall mean the delivery of quantities of gas at a delivery point and/or delivery area not specified in Shipper's FT, [FT-SN](#), FT-NR, FST or LT-WFS Contract.
- "EDI" means Electronic Data Interchange being the direct computer-to-computer transfer of information using ANSI ASC X12 protocol and a specific definition assigned by TransCanada under standards agreed to by a consensus of the natural gas industry (through standard-setting committees).
- "EDI format" shall mean a file format compliant with the ANSI ASC X12 protocol used for EDI and according to the specific definition assigned by TransCanada under standards agreed to by a consensus of the natural gas industry (through standard-setting committees).
- "Financial Assurance" shall have the meaning attributed to it in sub-Section XXIII(1) hereof.
- "Fuel Quantity" shall mean the quantity of gas expressed in gigajoules which is to be used by TransCanada as fuel for transporting Shipper's Authorized Quantity.
- "GJ" shall mean gigajoule being 1,000,000,000 joules and include the plural as the context requires.

GENERAL TERMS and CONDITIONS

- "GHV-97" shall mean the gross heating value for each delivery point as set out in the HV-97 Schedule attached to these general terms and conditions as adjusted in accordance with any Shipper election given to TransCanada prior to February 13, 1998.
- "GHV" shall mean gross heating value.
- "Gas" shall mean: (i) any hydrocarbons or mixture of hydrocarbons that, at a temperature of 15° C and a pressure of 101.325 kPa, is in a gaseous state, or (ii) any substance designated as a gas product by regulations made under section 130 of the National Energy Board Act.
- "Gross Heating Value" shall mean the total joules expressed in megajoules per cubic metre (MJ/m<sup>3</sup>) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion to be at standard temperature and all water formed by combustion reaction to be condensed to the liquid state.
- "Joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force.
- "Linked FT Contract" shall mean the FT Contract(s) identified in Exhibit "B" of Shipper's STS-L Contract and such FT Contract shall satisfy the following:
  - i. the delivery point shall be the same as the Market Point specified in Exhibit "A" of Shippers STS-L Contract;
  - ii. is not identified in any other STS Contract or any Exhibit "B" of any other STS-L Contract;
  - iii. has a minimum Linked Term of 1 month, and shall commence on the first day of a month and shall end on the last day of a month;
  - iv. has a receipt point that is Empress or in the province of Saskatchewan.
- "Linked Term" shall have the meaning ascribed in Exhibit "B" of the STS-L Toll Schedule
- "Market Point" shall have the meaning ascribed in Exhibit "A" of the STS Contract or STS-L Contract as the case may be.



## Transportation Tariff

## TransCanada PipeLines Limited

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### GENERAL TERMS and CONDITIONS

- "Month" shall mean the period beginning on the first day of the calendar month and ending at the beginning of the first day of the next succeeding calendar month.
- "CCT" shall mean Central Clock Time, representing the time in effect in the Central Time Zone of Canada at the time a transaction occurs, regardless of whether that time may be Standard Time or Daylight Savings Time as those terms are commonly known and understood.
- "NEB" shall mean the National Energy Board or any regulatory or government authority hereafter having a similar jurisdiction in substitution therefor.
- "Shipper" shall mean a customer of transportation service.
- "Shipper's Authorized Quantity" shall be as defined in subsection 1 of Section XXII.
- "Storage Injection Point" shall have the meaning ascribed in Exhibit "A" of the STS Contract or the STS-L Contract as the case may be.
- "Storage Withdrawal Point" shall have the meaning ascribed in Exhibit "A" of the STS Contract or the STS-L Contract as the case may be.
- "Subsidiary" shall mean a company in which 50% or more of the issued share capital (having full voting rights under all circumstances) is owned or controlled directly or indirectly by another company, by one or more subsidiaries of such other company, or by such other company and one or more of its subsidiaries.
- "Title Transfer" shall mean the transfer of title to gas between two (2) Shippers at a Title Transfer Point.
- "Title Transfer Point" shall be those points and areas where the quantity of gas allocated to each Shipper is established each day and is not subject to reallocation.
- "TransCanada" shall mean "TransCanada PipeLines Limited" and its successors.
- "Transportation Service Contract" shall mean "Firm Transportation Service Contract", "FT Contract", "[Firm Transportation Short Notice Contract](#)", "[FT-SN Contract](#)", "Non Renewable Firm Transportation Contract", "FT-NR Contract", "Interruptible Service Transportation Contract", "IT Contract", "Interruptible Backhaul Service Contract", "IT Backhaul Contract", "Storage

GENERAL TERMS and CONDITIONS

Transportation Service Contract", "STS Contract", "STS-L Contract", "Short Term Firm Transportation Service Contract", "STFT Contract, "Firm Service Tendered Contract, "FST Contract", "Enhanced Capacity Release Service Contract", "ECR Contract", "Long-Term Firm Service Contract", "LT-WFS Contract", Firm Backhaul Transportation Service Contract" and "FBT Contract".

- "Year" shall mean a period of 365 consecutive days; PROVIDED HOWEVER, that any such year which contains a date of February 29 shall consist of 366 consecutive days.

## II APPLICABILITY AND CHARACTER OF SERVICE

1. (a) Subject to the provisions of the applicable Toll Schedule and these General Terms and Conditions, on each day for which service is requested by Shipper, and authorized by TransCanada pursuant to Section XXII hereof, Shipper shall deliver and TransCanada shall receive, at the receipt point set out in Shipper's Contract (the "receipt point"), the Shipper's Authorized Quantity and TransCanada shall transport for Shipper and Shipper shall receive, at the delivery point set out in Shipper's Contract (the "delivery point"), a quantity of gas equal thereto; PROVIDED HOWEVER, that under no circumstances shall TransCanada be obligated to deliver to Shipper in any one day, at the delivery point, a quantity of gas in excess of the Contract Demand.  
  
(b) If on any day Shipper fails to accept all or any portion of the gas delivered at the delivery point by TransCanada pursuant to the applicable Toll Schedule, TransCanada shall have the right to curtail further receipts of gas from Shipper at the receipt point in a quantity equal to that which Shipper failed to accept from TransCanada. If on any day Shipper requests service hereunder but fails, for whatever reason, to deliver gas to TransCanada at the receipt point, then TransCanada shall have the right to curtail further deliveries of gas to Shipper at the delivery point in a quantity equal to that which Shipper failed to deliver to TransCanada.
2. Shipper's Authorized Quantity shall, where applicable, be delivered on such day by Shipper to TransCanada at the receipt point or taken on such day by Shipper from TransCanada at the delivery point, as the case may be, at hourly rates of flow as nearly constant as possible; PROVIDED HOWEVER, that Shipper may not, without TransCanada's consent, take delivery of

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GENERAL TERMS and CONDITIONS

such gas at the delivery point at an hourly rate of flow in excess of five percent (5%) of such authorized quantity.

3. Departures from scheduled daily deliveries due to the inability of TransCanada or Shipper to maintain precise control shall be kept to the minimum permitted by operating conditions.
4. From the time gas is delivered into the possession of TransCanada at the receipt point TransCanada shall have the unqualified right to commingle such gas with other gas in TransCanada's pipeline system.

### III TOLLS

1. The tolls applicable to service provided under any Contract into which these General Terms and Conditions are incorporated shall be determined:
  - (i) in the case of all transportation services, except Storage Transportation Service ("STS") and "Storage Transportation Service-Linked" (STS-L), where the receipt point is located at the Alberta/Saskatchewan border or where the receipt and delivery points are located in different provinces, on the basis of the Canadian Toll Zone in which the delivery point is located for gas which is delivered for consumption in Canada under a Contract in which the principal delivery point(s) specified therein do not include any export delivery points for gas destined for export to the United States; or
  - (ii) as fixed and approved by the NEB, on the basis of the receipt and delivery points for delivery of gas destined for export to the United States; or
  - (iii) in the case of STS and STS-L contracts and contracts providing receipt and delivery points within one province of Canada, as fixed and approved by the NEB, on the basis of the receipt point and delivery points set out therein.

If gas intended for consumption in Canada is delivered hereunder at more than one delivery point within a Canadian Toll Zone, the appropriate toll shall be applied as though such delivery points were one point and as if the gas delivered was measured by one meter; or-

- (iv) in the case of service pursuant to the SNB Toll Schedule using a methodology approved by the NEB.

GENERAL TERMS and CONDITIONS

2. The tolls applicable to services provided pursuant to the Toll Schedules of TransCanada's Transportation Tariff are set out in the List of Tolls of TransCanada's Transportation Tariff as same may be amended from time to time upon approval of the NEB.

**IV SHIPPER PROVISION OF FUEL REQUIREMENTS**

**1. Daily Operations**

- (a) For each and every day in respect of which Shipper's Authorized Quantity is accepted by TransCanada for transportation, Shipper shall, in addition to Shipper's Authorized Quantity, nominate, pursuant to the provisions of Section 2 hereof, and make available to TransCanada at any receipt point specified in the contract and/or Alternate Receipt point for FT or FT-NR Contracts the Fuel Quantity ("Qf"), which quantity shall be determined as follows:

$$Q_f = Q_d \times FR\% / 100 + \sum (Q_{d_i} \times fr_i\% / 100)$$

where FR% is the applicable monthly fuel ratio respecting transportation service from the nominated receipt point to the nominated delivery point and  $fr_i\%$  is the applicable monthly fuel ratio for delivery pressure in excess of a gauge pressure of 4000 kilopascals at delivery point "i", both as set out in TransCanada's notice to Shipper delivered pursuant to Section 2 hereof,  $Q_d$  is the Shipper's Authorized Quantity, and  $Q_{d_i}$  is the quantity to be delivered at delivery point "i", for which point a toll for delivery pressure services has been approved by the NEB (as set forth in the List of Tolls referred to in Section III hereof); and where  $\sum (Q_{d_i} \times fr_i\% / 100)$  represents the sum of the fuel quantities required for delivery pressure in excess of a gauge pressure of 4000 kilopascals at all points applicable to Shipper's Authorized Quantity.

- (b) TransCanada shall not be required to accept or deliver gas on any day if the appropriate Fuel Quantity has not been nominated by Shipper, or if TransCanada is unable to confirm that a quantity of gas equal to Shipper's Authorized Quantity plus the appropriate Fuel Quantity will, in fact, be made available on such day.

**2. Nominations and Authorizations**

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Concurrent with nominating for transportation service for a given day, pursuant to Section XXII hereof, Shipper shall also nominate the Fuel Quantity to be made available to TransCanada on such day (the "fuel tender"). In the event TransCanada is not prepared to authorize Shipper's nomination or if TransCanada determines that Shipper's fuel tender is incorrect, TransCanada shall, by 14:00 hours CCT of the day immediately preceding the day for which service has been requested, advise Shipper to revise its fuel tender, and Shipper shall nominate such revised fuel tender by 15:00 hours CCT on such day. All fuel tenders shall be stated to the nearest one (1) GJ.

Shipper's fuel tender shall be determined by Shipper pursuant to the formula set out in sub-section 1(a) hereof. On or before the twenty-fifth day of each month, TransCanada shall provide Shipper with written notice of the monthly fuel ratio to be applied during the next succeeding month. In the absence of any notice as aforesaid Shipper shall determine the fuel tender on the basis of the fuel ratio used in the immediately preceding month.

**V QUALITY**

1. The gas to be delivered hereunder shall be natural gas; provided however, that helium, natural gasoline, butane, propane and any other hydrocarbons except methane may be removed prior to delivery. TransCanada may subject, or permit the subjection of the natural gas to compression, cooling, cleaning and other processes.
2. **Heating Value:** The minimum gross heating value of the gas to be received and delivered by TransCanada shall be 36.00 MJ/m<sup>3</sup>. TransCanada shall have the right to refuse to accept Shipper's gas as long as the gross heating value of such gas remains below 36.00 MJ/m<sup>3</sup>. In the event that the gross heating value of the gas to be delivered by TransCanada in any month, when determined as provided in sub-section 2 of Section VI hereof, falls below 36.00 MJ/m<sup>3</sup>, Shipper shall have the option to refuse to accept said gas so long as the gross heating value remains below 36.00 MJ/m<sup>3</sup>.
3. **Freedom from Objectionable Matter:** The gas to be received by TransCanada from Shipper and to be delivered by TransCanada hereunder:
  - (a) Shall be commercially free (at prevailing pressure and temperature in TransCanada's pipeline) from sand, dust, gums, oils, hydrocarbons liquefiable at temperatures in excess of minus ten degrees (-10°) Celsius at five thousand five hundred (5500) kPa absolute,

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impurities, other objectionable substances which may become separated from the gas, and other solids or liquids which will render it unmerchantable or cause injury to or interference with proper operations of the lines, regulators, meters or other appliances through which it flows; and shall not contain any substance not contained in the gas at the time the same was produced other than traces of those materials and chemicals necessary for the transportation and delivery of the gas and which do not cause it to fail to meet any of the quality specifications herein set forth.

- (b) Shall contain no more than twenty-three (23) milligrams of hydrogen sulphide per cubic metre nor more than one hundred and fifteen (115) milligrams of total sulphur per cubic metre of gas as determined by standard methods of testing.
  - (c) Shall not contain more than two per cent (2%) by volume of carbon dioxide.
  - (d) Shall have been dehydrated, if necessary, for removal of water present therein in a vapour state, and in no event contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas.
  - (e) Shall not exceed a temperature of fifty degrees (50°) Celsius.
  - (f) Shall be as free of oxygen as practicable and shall not in any event contain more than four tenths of one percent (0.4%) by volume of oxygen.
4. **Failure to Conform to Specifications Re Objectionable Matter:** If the gas being received by TransCanada from Shipper or transported by TransCanada to Shipper fails at any time to conform to any of the specifications set forth in sub-Section 3 of this Section, then the party receiving such gas (the "First Party") shall notify the party delivering such gas (the "Second Party") of such deficiency and thereupon the First Party may at the First Party's option refuse to accept delivery pending correction by the Second Party. Upon the Second Party's failure promptly to remedy any deficiency in quality as specified in sub-Section 3 of this Section, the First Party may accept delivery of such gas and may make changes necessary to bring such gas into conformity with such specifications, and the Second Party shall reimburse the First Party for any reasonable expense incurred by the First Party in effecting such changes.

## VI MEASUREMENTS

1. **Unit of Volume and Unit of Quantity:** The unit of volume for the purpose of reporting shall be one thousand (1000) cubic metres ( $10^3 \text{ m}^3$ ) of gas and the unit of quantity shall be GJ.

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GENERAL TERMS and CONDITIONS

2. **Determination of Volume and Gross Heating Value:** The volume and the gross heating value of the gas received by TransCanada from Shipper and delivered to Shipper shall be determined as follows:
- (a) The gas volumes shall be computed in accordance with the methodology prescribed in the Electricity and Gas Inspection Act (Canada) (R.S.C. 1985, c.E-4) as amended from time to time including all regulations and specifications promulgated pursuant to such Act (collectively, the "Electricity and Gas Inspection Act").
  - (b) For the purpose of measurement of gas received into and delivered from the TransCanada system, the parties agree that the average absolute atmospheric (barometric) pressure at such points shall be assumed to be constant during the term thereof, regardless of variations in actual barometric pressure from time to time, and shall be calculated based on the elevation of the measurement point. The formula used to calculate the atmospheric pressure shall be in accordance with the methodology prescribed in the Electricity and Gas Inspection Act (Canada) (R.S.C. 1985, c.E-4) amended from time to time including all regulations and specifications promulgated pursuant to such Act.
  - (c) The determination of the gross heating value of the gas received or delivered shall be performed in a manner approved under the Electricity and Gas Inspection Act or, if such specification is not set out in such Act, in accordance with industry accepted standards, and, in any event, in such manner as to ensure that the gross heating values so determined are representative of the gas received or delivered at the receipt or delivery point.
  - (d) The determination of the relative density of the gas received or delivered shall be performed in a manner approved under the Electricity and Gas Inspection Act or, if such specification is not set out in such Act, in accordance with industry accepted standards, and, in any event, in such manner as to ensure that the relative densities so determined are representative of the gas received or delivered at the receipt or delivery point.

**VII DELIVERY POINT**

1. For the purpose of Section VIII hereunder, unless otherwise specified in the Contract, the delivery point or points for all gas to be delivered by TransCanada to Shipper pursuant to any Contract

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GENERAL TERMS and CONDITIONS

into which these General Terms and Conditions are incorporated shall be on the outlet side of TransCanada's measuring stations located at or near the point or points of connection with the facilities of Shipper or Shipper's agent in receiving the gas, as specified in the Contract.

2. If the total quantity of gas delivered at any delivery point is less than 3750 GJ during any contract year, then Shipper shall pay TransCanada at the end of such contract year, in addition to any amounts otherwise payable, an amount equal to:

$$\frac{(3750 \text{ GJ minus "X"}) \text{ times "Y"}}{3750 \text{ GJ}}$$

Where "X" is the total quantity (expressed in GJ) actually delivered by TransCanada to all Shippers at such delivery point during such contract year; and

Where "Y" is 18% of TransCanada's actual original costs of installation of the delivery facilities at such delivery point.

## VIII POSSESSION OF GAS

TransCanada shall be deemed to be in control and possession of, and responsible for, all gas transported under the Contract from the time that such gas is received by it at the receipt point until such gas is delivered at the delivery point.

## IX MEASURING EQUIPMENT

1. All meters and measuring equipment for the determination of gross heating value and/or relative density shall be approved pursuant to, and installed and maintained in accordance with, the Electricity and Gas Inspection Act.

Notwithstanding the foregoing, all installation of equipment applying to or affecting deliveries of gas shall be made in such manner as to permit an accurate determination of the quantity of gas delivered and ready verification of the accuracy of measurement. Care shall be exercised by both parties in the installation, maintenance and operation of pressure regulating equipment so as to prevent any inaccuracy in the determination of the volume or quantity of gas delivered under the Contract.

- (a) **Measuring Station:** In accordance with the above, TransCanada will install, maintain and operate, or will cause to be installed, maintained and operated, at or near each delivery



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point, a measuring station equipped with a meter or meters and other necessary equipment for accurate measurement of the gas delivered under the Contract.

2. **Calibration and Test of Measuring Equipment:** The accuracy of measuring equipment shall be verified by TransCanada at reasonable intervals, and if requested, in the presence of representatives of Shipper, but TransCanada shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party shall notify the other that it desires a special test of any measuring equipment the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment is found to be in error by not more than the limits set out as follows:

- (a) 2% for measuring equipment utilized to determine volume,
- (b) 1% for any instrument utilized to determine relative density,
- (c) 0.5% for any instrument utilized to determine gross heating value.

If upon test, any measuring equipment is found to be in error by not more than the limits specified above, the previous readings of such equipment shall be considered accurate in computing deliveries or receipts of gas but such equipment shall be adjusted at once to register accurately.

If, for the period since the last preceding test, it is determined that:

- (a) any measuring equipment, except for those instruments specified in (b) and (c) below, shall be found to be inaccurate by an amount exceeding 2% at a recording corresponding to the average hourly rate of flow for such period, and/or
- (b) any instrument utilized to determine the relative density shall be found to be inaccurate by an amount exceeding 1%, and/or
- (c) any instrument utilized to determine the gross heating value shall be found to be inaccurate by an amount exceeding 0.5%, then the previous readings of measurement equipment and/or instruments utilized to determine the relative density or gross heating value, as the case may be, shall be corrected to zero error for any period which is known definitely but in any case where the period is not known or agreed upon such correction shall be for a period extending over 50% of the time elapsed since the date of the last test.

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Notwithstanding the foregoing, when TransCanada and Shipper mutually agree that a measurement instrument inaccuracy occurred at a definite point in time, a quantity correction shall be made even though said inaccuracy is less than the limits specified in (a), (b) and (c) above.

3. **Correction of Metering Errors: Failure of Meters:** In the event a meter is out of service, or registering inaccurately, the volume or quantity of gas delivered shall be determined by the most equitable method. Such methods shall include but not be limited to:
  - (a) mathematical calculations and comparisons including prevailing ratio with a parallel meter,
  - (b) the use of Shipper's check measuring equipment, and
  - (c) comparison to deliveries under similar conditions when the meter was registering accurately.
4. **Preservation of Metering Records:** TransCanada and Shipper shall each preserve for a period of at least six (6) years all test data, charts and other similar records. Microfilms of the original documents shall be considered true records.
5. **Check Measuring Equipment:** Shipper may install, maintain and operate at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of TransCanada's measuring equipment. Any pressure or volume control regulators installed by Shipper shall be operated so as not to interfere with TransCanada's measuring facilities.
6. **Rights of Parties:** The measuring equipment so installed by either party together with any building erected by it for such equipment, shall be and remain its property. However, TransCanada and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of the delivery of gas under the Contract. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten days after receipt thereof.

**X BILLING**

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GENERAL TERMS and CONDITIONS

1. **Monthly Billing Date:** For all contracts in effect prior to the effective date of the NEB's Decision in the RH-2-95 proceeding, TransCanada shall render bills on or before the tenth (10th) day of each month for all transportation services provided by TransCanada to the Canadian Toll Zones ("Domestic Service") and on or before the fifteenth (15th) day of each month for all transportation services provided by TransCanada to any Export Delivery Point ("Export Service"). For gas taken by Shipper in excess of the total daily quantity authorized by TransCanada, TransCanada shall also render bills for charges made pursuant to Section XXII on or before the tenth (10th) day of each month, in respect of Domestic Service, and on or before the fifteenth (15th) day of each month, in respect of Export Service.

For all Export Service Contracts coming into effect after the effective date of the NEB's Decision in the RH-2-95 proceeding, including the renewal of any Export Service Contracts which existed prior to such date, the billing date shall be the tenth (10th) day of each month.

2. **Information:** Shipper hereby undertakes to provide TransCanada with all the information and material required by TransCanada to calculate and verify the quantity of gas actually received by TransCanada from Shipper, and the quality specifications and components thereof.

If such information is not received by TransCanada in sufficient time prior to TransCanada rendering bills to Shipper pursuant to this Section X, such bills shall be calculated based on TransCanada's best estimate of the quantity and quality of gas actually received by TransCanada from Shipper. Any overcharges or undercharges resulting from any differences between the above estimates and the actual amounts shall be adjusted in the subsequent bill without any interest thereon.

## XI PAYMENTS

1. **Monthly Payment Date:** For all contracts in effect prior to the effective date of the NEB's Decision in the RH-2-95 proceeding, Shipper shall pay to TransCanada, at its address designated in the Contract, or shall pay to the Royal Bank of Canada, Main Branch, Calgary, Alberta, or at other institutions if agreed to by TransCanada for deposit to the account of TransCanada so that TransCanada shall receive payment from Shipper on or before the twentieth (20th) day of each month for Domestic Service, and by the twenty-fifth (25th) day of each month for Export Service (the "Payment Date") provided by TransCanada to Shipper pursuant to the applicable toll schedules and for any charges made pursuant to Section XXII

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herein during the preceding month and billed by TransCanada in a statement for such month according to the nominated and/or measured deliveries, computations, prices and tolls provided in the Contract. If the Payment Date is not a Banking Day, then payment must be received by TransCanada on Shipper's account or before the first (1st) Banking Day immediately prior to the Payment Date.

For all Export Service Contracts coming into effect after the effective date of the NEB's Decision in the RH-2-95 proceeding, including the renewal of any Export Service Contracts which existed prior to such date, the payment date shall be the twentieth (20th) day of each month; provided however, if the Payment Date is not a Banking Day, then payment must be received by TransCanada on Shipper's account on or before the first (1st) Banking Day immediately prior to the Payment Date.

2. **Remedies for Non-Payment: Notwithstanding Section XVII**, if Shipper fails to pay the full amount of any bill when payment is due, TransCanada may upon four (4) Banking Days written notice immediately suspend any or all service being or to be provided to Shipper provided however that such suspension shall not relieve Shipper from any obligation to pay any rate, toll, charge or other amount payable to TransCanada. If at any time during such suspension Shipper pays the full amount payable to TransCanada, TransCanada shall within two (2) Banking Days recommence such suspended service.

**Notwithstanding Section XVII** following suspension, TransCanada may, in addition to any other remedy that may be available to it, upon four (4) Banking Days written notice to Shipper immediately:

- (a) terminate any or all service being or to be provided to Shipper; and
- (b) declare any and all amounts payable now or in the future by Shipper to TransCanada for any and all service to be immediately due and payable as liquidated damages and not as a penalty.

In the event Shipper disputes any part of a bill, Shipper shall nevertheless pay to TransCanada the full amount of the bill when payment is due.

If Shipper fails to pay all of the amount of any bill as herein provided when such amount is due, interest on the unpaid portion of the bill accrues daily at a rate of interest equal to the prime rate

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- of interest of the Royal Bank of Canada as it may vary from time to time, plus one percent (1%) and the principle and accrued interest to date shall be payable and due immediately upon demand.
3. **Adjustment of Underpayment, Overpayment or Error in Billing:** If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such overcharge or undercharge, then within thirty (30) days after the final determination thereof, TransCanada shall refund the amount of any such overcharge with interest which is equal to the prime rate of interest of the Royal Bank of Canada as it may vary from time to time from the time such overcharge was paid to the date of refund, plus one percent (1%) in addition thereto. If such refund is made by a credit on an invoice from TransCanada to Shipper, then the date of the refund shall be the date upon which the invoice reflecting such credit was rendered to Shipper by TransCanada. Shipper shall pay the amount of any such undercharge, but without interest. Adjustments to the amount billed in any statement rendered by TransCanada shall be made within the following time frames:
- (a) Measurement data corrections shall be processed within six (6) months of the production month with a three (3) month rebuttal period.
  - (b) The time limitation for disputes of allocations shall be six (6) months from the date of the initial month-end allocation with a three (3) month rebuttal period.
  - (c) Prior period adjustment time limits shall be six (6) months from the date of the initial transportation invoice with a three (3) month rebuttal period, excluding government-required rate changes.
- These time limits shall not apply in the case of deliberate omission or misrepresentation or mutual mistake of fact. Parties' other statutory or contract rights shall not be otherwise diminished by these time limits.
4. **Time of Payment Extended if Bill Delayed:** If presentation of a bill to Shipper is delayed after the tenth (10th) or the fifteenth (15th) day of the month, as applicable for domestic or export service respectively, then the time of payment shall be extended accordingly unless Shipper is responsible for such delay.

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**XII DELIVERY PRESSURE**

Subject to the provisos set out in sub-Sections a) and b) below, TransCanada shall deliver gas to Shipper at TransCanada's line pressure at the delivery point or points designated in the Contract, but the minimum pressure at each delivery point shall be not less than a gauge pressure of 4000 kilopascals or such lesser pressure that is agreed to by the parties; provided, however, that:

- (a) the parties shall not be required in any Contract into which these General Terms and Conditions are incorporated, to agree to delivery pressures less than the minimum contractual pressure theretofore applicable at existing delivery point; and
- (b) if the deliveries to Shipper at a delivery point or an agreed upon grouping of delivery points, exceed five (5%) percent of the authorized daily average quantity at an hourly rate of flow without the prior consent of TransCanada, and the delivery pressure to Shipper falls below the delivery pressure agreed to in the Contract, despite reasonable preventative measures undertaken by TransCanada, then TransCanada shall, for the period of such excess deliveries, be relieved of its contractual obligation to such Shipper to deliver gas at such delivery point or area affected by the excess deliveries at the delivery pressure stipulated in the Contract.

If the receipt point or points under Shipper's Contract include that point on TransCanada's system which is immediately east of the Alberta/Saskatchewan border ("Empress"), then Shipper agrees to cause NOVA Corporation of Alberta (hereinafter called "NOVA") to design and construct sufficient facilities to allow Shipper's Authorized Quantity to be delivered to TransCanada at Empress at a gauge pressure of 4137 kPa or any greater pressure which may from time to time be specified by TransCanada for all gas to be delivered into TransCanada's system at Empress and to cause NOVA to deliver Shipper's Authorized Quantity to TransCanada at NOVA's line pressure provided that said pressure shall not be less than a gauge pressure of 3792 kPa.

For any receipt point downstream of Empress, Shipper shall do or cause others to do all that is required to allow Shipper's Authorized Quantity to be delivered to TransCanada at a pressure no less than that prevailing in TransCanada's pipeline at such receipt point at the time of delivery and no greater than the maximum allowable operating pressure of TransCanada's pipeline at such point.

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**XIII WARRANTY OF TITLE TO GAS**

Shipper warrants that it owns or controls, has the right to:

1. deliver or have delivered, the gas that is delivered to TransCanada under the Contract;
2. transfer the gas pursuant to Section XXIV of these General Terms and Conditions.

Shipper shall indemnify and hold harmless TransCanada against all claims, actions or damages arising from any adverse claims by third parties claiming an ownership or an interest in the gas delivered for transport to TransCanada under the Contract or transferred pursuant to Section XXIV of these General Terms and Conditions.

**XIV FORCE MAJEURE**

In the event of either Shipper or TransCanada being rendered unable, wholly or in part, by force majeure to perform or comply with any obligation or condition hereof or any obligation or condition in any Contract into which these General Terms and Conditions are incorporated, such party shall give notice and full particulars of such force majeure in writing or by telegraph to the other party as soon as possible after the occurrence of the cause relied on, and the obligations of the party giving such notice, other than obligations to make payments of money then due, so far as they are affected by such force majeure, shall be suspended during the continuance of any inability so caused but for no longer period, and such cause shall as far as possible be remedied with all reasonable dispatch. The term "force majeure" as used herein shall mean acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, the necessity for making repairs to or alterations of machinery or lines of pipe, freezing of wells or lines of pipe, temporary failure of TransCanada's gas supply, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority, civil or military, any act or omission (including failure to deliver gas) of a supplier of gas to, or a transporter of gas to or for, TransCanada which is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and any other similar causes not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.

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The settlement of strikes, lockouts or other labour disputes shall be entirely within the discretion of the party having the difficulty. Under no circumstances will lack of finances be construed to constitute force majeure.

If as a result of an occurrence of a force majeure on the pipeline system to which TransCanada is transporting Shipper's quantities, Shipper does not take delivery of the quantities of gas that Shipper would otherwise have taken and, subsequently, TransCanada is able to deliver excess quantities of gas over and above its obligations during the same contract year, including any deliveries pursuant to sub-Section 3 of Section XV of these General Terms and Conditions, then TransCanada will offer such excess quantities to such Shipper in an amount up to the quantities Shipper so failed to take, PROVIDED THAT, any excess quantities of gas will be limited to the excess quantities that Shipper is able to have delivered to TransCanada for delivery thereunder.

In the event of an occurrence of a force majeure, TransCanada shall curtail delivery of gas to Shipper in accordance with Section XV hereof, and with respect to FST Service Contracts:

- (a) TransCanada's obligation to deliver gas to Shipper during the particular season shall be reduced by the amount of the curtailment under such Contract pursuant to sub-Section 2(c) of Section XV and,
- (b) For purposes of subsection 2.5 of TransCanada's FST Toll Schedule no quantities curtailed under sub-Section 2 of Section XV shall be included in determining the accumulative deficiency in delivery.

**XV IMPAIRED DELIVERIES**

For the purposes of this Section XV, TransCanada's minimum obligation to deliver gas under a FST Contract in any season shall be deemed to be an obligation to deliver the Winter Capacity or the Summer Capacity as the case may be.

On each day TransCanada shall determine in respect of all Contracts:

- (i) the total quantities which all Shippers have requested to be delivered on that day, and
- (ii) its available system capacity, including the maximum transportation on TransCanada's behalf under agreements that it has with Great Lakes Gas Transmission Limited Partnership, Union Gas Limited and Trans Québec and Maritimes Pipeline Inc.



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If due to any cause whatsoever TransCanada is unable on any day to deliver the quantities of gas Shippers would have received if such disability did not exist, then TransCanada shall order curtailment by all Shippers affected thereby in the following manner to the extent necessary to remove the effect of the disability:

1. If TransCanada estimates that, notwithstanding its then inability to deliver, it nevertheless will be able to meet its total minimum obligations to deliver under all Contracts during the then current season, TransCanada shall order daily curtailment in the following order of priority:

- (a) First under any Shipper's Make-up provided pursuant to the FST Toll Schedule
- (b) Second under interruptible service provided pursuant to the IT and IT Backhaul Toll Schedules.

The toll for STS Overrun is the 100% Load Factor Toll. Therefore when STS Overrun is tolled at an equal or higher price than IT, then the priority of STS Overrun is higher; when the STS Overrun Toll is at a lower price than IT, then the priority of STS Overrun is lower.

- (c) Third under any gas storage program of TransCanada.

- (d) Fourth under:

Diversions made

A. under FST contracts which:

- (i) cause the flow of gas on a lateral or extension to exceed the capability of the lateral or extension, and/or:
- (ii) cause the actual flow of gas through a metering facility to exceed the capability of the metering facility, and/or
- (iii) cause the actual flow of gas on any segment of TransCanada's integrated pipeline system (including those notional segments comprised of TransCanada's maximum transportation entitlements under transportation agreements that it has with Great Lakes Gas Transmission, L.P., Union Gas Limited and Trans Québec and Maritimes Pipeline Inc.) to exceed the capability of the affected segment by an amount greater than that which would have occurred had the gas which

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is the subject of the Diversion been delivered at the delivery point(s) or delivery area specified in the FST Contract; and

B. to TransCanada's St. Clair export delivery point under FST Contracts.

(e) Fifth under:

Alternate Receipts made pursuant to FT, [FT-SN](#), or FT-NR Contracts or Diversions made pursuant to FT, [FT-SN](#), FT-NR or LT-WFS Contracts which:

A. cause the actual flow of gas on a lateral or extension to exceed the capability of the lateral or extension, and/or

B. cause the actual flow of gas through a metering facility to exceed the capability of the metering facility, and/or

C. cause the actual flow of gas on any segment of TransCanada's integrated pipeline system (including those notional segments comprised of TransCanada's maximum transportation entitlements under transportation agreements that it has with Great Lakes Gas Transmission, L.P., Union Gas Limited and Trans Québec and Maritimes Pipeline Inc.) to exceed the capability of the affected segment by an amount greater than that which would have occurred had the gas which is the subject of an Alternate Receipt and/or a Diversion, been received at the receipt point and delivered at the delivery point(s) or delivery area specified in the FT, [FT-SN](#), FT-NR or LT-WFS Contract. Solely for the purpose of making the aforesaid determination, TransCanada may, for certain quantities, treat the point of interconnection between TransCanada's system and the system of Union Gas Limited at Parkway as a delivery point specified in those FT, [FT-SN](#), FT-NR or LT-WFS Contracts which have delivery points on the segment of TransCanada's integrated system from Kirkwall to Niagara Falls.

(f) Sixth quantities to be delivered on a best efforts basis under STS and STS-L Contracts.

(g) Seventh except for Shipper's Make-up quantities curtailed pursuant to 1 (a) above, under any FST Contracts up to the total amount that TransCanada is entitled to curtail under

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such contracts during such day under the provisions thereof other than under this Section XV; PROVIDED HOWEVER, that subject to TransCanada's seasonal obligations if TransCanada's inability to deliver is due to an occurrence of a force majeure during the period May 1 to September 30, then TransCanada shall be entitled to completely interrupt deliveries under such contracts on such day during such period.

- (h) Eighth proportionately under:
- (i) FT, [FT-SN](#), FT-NR, FST, STFT, [SNB](#), STS, STS-L and LT-WFS Contracts (other than quantities to be delivered on a best efforts basis under STS and STS-L Contracts) in amounts proportional to the Operating Demand Quantities minus the quantities to be delivered pursuant to an Alternate Receipt or a Diversion of such Contracts.
  - (ii) Alternate Receipts made pursuant to FT [FT-SN](#), or FT-NR Contracts and/or Diversions made pursuant to FT, [FT-SN](#), FT-NR, FST, and LT-WFS Contracts not already curtailed pursuant to sub-Sections, (d) and (e) above, in amounts to be delivered pursuant to such Alternate Receipt and/or Diversion.

(For the purpose of this sub-Section, the Operating Demand Quantity shall be:

- (A) under FT Contracts, the Contract Demand;
- (B) [under FT-SN Contracts, the Contract Demand](#)
- ~~(C)~~ [\(C\)](#) under FT-NR Contracts, the Contract Demand;
- ~~(D)~~ [\(D\)](#) under LT - WFS Contracts, the LT - WFS Maximum Daily Quantity;
- ~~(E)~~ [\(E\)](#) under STS Contracts, the Daily Injection Quantity or the Daily Withdrawal Quantity, as the case may be;
- ~~(F)~~ [\(F\)](#) under STS-L Contracts, the Daily Contract Injection Quantity and the Daily Contract Withdrawal Quantity;
- ~~(G)~~ [\(G\)](#) under FST Contracts, fifty (50%) percent of the winter period average daily winter capacity, or TransCanada's estimate of Shipper's requirement, as the case may be;

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- ~~(G)~~ under STFT Contracts, the Contract Demand; ~~and~~
    - ~~(H)~~ under FBT Contracts, the Maximum Daily Quantity; ~~and~~
    - ~~(J)~~ under SNB Contracts, the Contract Quantity.
  - (iii) Any forward haul component of a FBT Contract, that are affected by the disability in proportion Operating Demand Quantities of such Contract.
  - (iv) Back haul components of an FBT Contract as required due to any lack of forward haul quantities to support the back haul quantities.
- 2. If TransCanada estimates that it will be unable to meet its total minimum obligations to deliver under all of its contracts during the then current season, TransCanada shall order seasonal curtailment in the following order of priority:
  - (a) First under any Shipper's Make-up pursuant to the FST Toll Schedule
  - (b) Second under interruptible service provided pursuant to the IT and IT Backhaul Toll Schedules.

The toll for STS Overrun is the 100% Load Factor Toll. Therefore when STS Overrun is tolled at an equal or higher price than IT, then the priority of STS Overrun is higher; when the STS Overrun Toll is at a lower price than IT, then the priority of STS Overrun is lower.
  - (c) Third under any gas storage program of TransCanada.
  - (d) Fourth under:

Diversions made:

    - (A) under FST Contracts which:
      - (I) cause the actual flow of gas on a lateral or extension to exceed the capability of the lateral or extension, and/or
      - (II) cause the actual flow of gas through a metering facility to exceed the capability of the metering facility, and/or

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(III) cause the actual flow of gas on any segment of TransCanada's integrated pipeline system (including those notional segments comprised of TransCanada's maximum transportation entitlements under transportation agreements that it has with Great Lakes Gas Transmission, L.P., Union Gas Limited and Trans Québec and Maritimes Pipeline Inc.) to exceed the capability of the affected segment by an amount greater than that which would have occurred had the gas which is the subject of the Diversion been delivered at the delivery point(s) or delivery area specified in the FST Contract; and

(B) to TransCanada's St. Clair export delivery point under FST Contracts.

(e) Fifth under:

Alternate Receipts made pursuant to FT, [FT-SN](#) or FT-NR Contracts or Diversions made pursuant to FT, [FT-SN](#), FT-NR or LT-WFS Contracts which:

(A) cause the actual flow of gas on a lateral or extension to exceed the capability of the lateral or extension, and/or

(B) cause the actual flow of gas through a metering facility to exceed the capability of the metering facility, and/or

(C) cause the actual flow of gas on any segment of TransCanada's integrated pipeline system (including those notional segments comprised of TransCanada's maximum transportation entitlements under transportation agreements that it has with Great Lakes Gas Transmission, L.P., Union Gas Limited and Trans Québec and Maritimes Pipeline Inc.) to exceed the capability of the affected segment by an amount greater than that which would have occurred had the gas which is the subject of an Alternate Receipt and/or a Diversion, been received at the receipt point and delivered at the delivery point or delivery area specified in the FT, [FT-SN](#), FT-NR or LT-WFS Contract.

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Solely for the purpose of making the aforesaid determination, TransCanada may, for certain quantities, treat the point of interconnection between TransCanada's system and the system of Union Gas Limited at Parkway as a delivery point specified in those FT, [FT-SN](#), FT-NR or LT-WFS Contracts which have delivery points on the segment of TransCanada's integrated system from Kirkwall to Niagara Falls.

- (f) Sixth Quantities to be delivered on a best efforts basis under STS and STS-L Contracts.
- (g) Seventh under FST Contracts up to the total amount that TransCanada is entitled to curtail under such contracts during such season under the provisions thereof other than under this Section XV.
- (h) Eighth proportionately under:
  - (i) FT, [FT-SN](#), FT-NR, FST, STFT, [SNB](#), STS, STS-L and LT-WFS Contracts (other than quantities to be delivered on a best efforts basis under STS and STS-L Contracts) once the curtailments made in (e) above have taken place, in amounts proportional to the Operating Demand Quantities or Maximum Daily Quantities, as the case may be, minus the quantities to be delivered pursuant to an Alternate Receipt and/or a Diversion of such Contracts,
  - (ii) Alternate Receipts made pursuant to FT, [FT-SN](#) or FT-NR Contracts and /or Diversions made pursuant to FT, [FT-SN](#), FT-NR, FST, or LT-WFS Contracts not already curtailed pursuant to sub-Sections (d) and (e) above, in amounts to be delivered pursuant to such Alternate Receipt and/or Diversion.
  - (iii) Any forward haul components of a FBT Contract, that are affected by the disability in proportion Operating Demand Quantities of such Contract.
  - (iv) Back haul components of an FBT Contract as required due to any lack of forward haul quantities to support the back haul quantities.

For this purpose the seasonal requirement shall be:

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- (i) under FST Contracts, the seasonal quantity of the applicable season, less the quantity curtailed pursuant to sub-Sections 2 (a), (d) and (e) above.
- (ii) under FT Contracts, [FT-SN Contracts](#), [SNB Contracts](#), FT-NR Contracts, STFT Contracts, STS Contracts, STS-L Contracts and FBT Contracts, TransCanada's estimate of Shipper's total seasonal requirements under each such Contract.
- (iii) under LT-WFS, the LT-WFS Maximum Daily Quantity, as the case may be, multiplied by the number of days in Shipper's Service Entitlement.

In curtailing deliveries under this sub-Section 2, TransCanada will endeavor to minimize its daily curtailments under its FT Contracts, [FT-SN Contracts](#), FT-NR Contracts, STFT Contracts, [SNB Contracts](#), LT-WFS Contracts, STS Contracts, STS-L Contracts and FBT Contracts in an attempt to meet Shipper's daily requirements for deliveries.

3. If TransCanada curtails deliveries of gas under any of its FT, [FT-SN](#), FT-NR, FST, STFT, [SNB](#), STS, STS-L Contract, LT- WFS or FBT Contracts pursuant to sub-Section 2 of this Section XV, and subsequent to such curtailment TransCanada is able to deliver excess quantities of gas in the same contract year over and above its obligations, then TransCanada will first offer such excess quantities of gas for delivery to those Shippers curtailed, in amounts up to and proportional to the quantities curtailed, PROVIDED THAT any excess quantities of gas will be limited to the excess quantities that Shipper is able to have delivered to TransCanada for delivery thereunder.

## XVI DETERMINATION OF DAILY DELIVERIES

1. A Shipper taking delivery of gas under contracts and/or toll schedules for more than one class of service in one delivery area or one Export Delivery Point shall be deemed on any day to have taken delivery of Shipper's Authorized Quantity under the applicable contract and/or toll schedule in accordance with such agreement as may exist between TransCanada and the downstream operator(s). Absent such agreement, shipper shall be deemed to have taken delivery of Shipper's Authorized Quantities sequentially as follows:
  - (a) IT Backhaul Contract Receipt Quantity
  - (b) FT Contract

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(c) [FT-SN Contract](#)

(d) FT-NR Contract

(~~e~~) STFT Contract

(~~e~~f) STS and STS-L Contracts

(~~f~~g) FBT Contract

(~~g~~h) LT- WFS Contract

(~~h~~i) firm portion of gas quantities under FST Contract

(~~i~~j) interruptible portion of gas quantities under FST Contract, except for any Shippers Make-up

(~~j~~k) IT and IT Backhaul Contracts, Delivery Quantity

(~~k~~l) Shippers Make-up under FST Contract

## XVII DEFAULT AND TERMINATION

Subject to the provisions of Section XI, Section XIV, Section XV and Section XXIII of these General Terms and Conditions, if either TransCanada or Shipper shall fail to perform any of the covenants or obligations imposed upon it under any Contract into which these General Terms and Conditions are incorporated, then in such event the other party may, at its option, terminate such Contract by proceeding as follows: the party not in default shall cause a written notice to be served on the party in default stating specifically the default under the Contract and declaring it to be the intention of the party giving the notice to terminate such Contract; thereupon the party in default shall have ten (10) days after the service of the aforesaid notice in which to remedy or remove the cause or causes stated in the default notice and if within the said ten (10) day period the party in default does so remove and remedy said cause or causes and fully indemnifies the party not in default for any and all consequences of such default, then such default notice shall be withdrawn and the Contract shall continue in full force and effect.

In the event that the party in default does not so remedy and remove the cause or causes or does not indemnify the party giving the default notice for any and all consequences of such default within the said period of ten (10) days, then, at the option of the party giving such default notice, the Contract shall terminate. Any termination of the Contract pursuant to the provisions of this Section shall be without prejudice to the right of TransCanada to collect any amounts then due to it for gas delivered or service provided prior to the date of termination, and shall be without prejudice to the right of Shipper to receive



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any gas which it has not received but the transportation of which has been paid prior to the date of termination, and without waiver of any other remedy to which the party not in default may be entitled for breaches of the Contract.

This Section shall not apply to any default and terminations pursuant to Section XI and Section XXIII.

**XVIII NON-WAIVER AND FUTURE DEFAULT**

No waiver by TransCanada or Shipper of any one or more defaults by the other in the performance of any provisions of the Contract shall operate or be construed as a waiver of any continuing or future default or defaults, whether of a like or different character.

**XIX OPERATING INFORMATION AND ESTIMATES**

Not less than twenty-five (25) months prior to the commencement of the fourth (4th) contract year and thereafter for each succeeding contract year Shipper shall furnish to TransCanada estimates expressed in GJ's of Shipper's daily, monthly and annual requirements for gas, and estimates of Shipper's maximum daily requirements for gas at each delivery point provided in any Contract into which these General Terms and Conditions are incorporated. Such estimates shall be for five (5) consecutive contract years in the future. TransCanada's obligation to deliver daily quantities of gas after the first contract year to each such delivery point shall be limited to those estimates last received in accordance with the provisions hereof.

**XX DELIVERY AREAS, TOLL ZONES AND EXPORT DELIVERY POINTS**

**1. Delivery Areas**

TransCanada's delivery areas for purposes of determining the Contract Demand applicable to the points of delivery of TransCanada's pipeline system are as follows:

Saskatchewan Southern Delivery Area or SSDA

extends from a point on TransCanada's main pipeline at the Alberta- Saskatchewan border near Empress, Alberta to a point on TransCanada's main pipeline at the Saskatchewan-Manitoba border.

Manitoba Delivery Area or MDA

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extends from a point on TransCanada's main pipeline at the Saskatchewan- Manitoba border to a point on TransCanada's pipeline at the Manitoba-Ontario border to a point on TransCanada's pipeline at the International Border near Emerson, Manitoba.

Western Delivery Area or WDA

extends from a point on TransCanada's pipeline at the Manitoba- Ontario border to a point on TransCanada's pipeline 24.99 kilometres east of TransCanada's Station 80 near Geraldton, Ontario.

Northern Delivery Area or NDA

extends from a point on TransCanada's pipeline 24.99 kilometres east of TransCanada's Station 80 near Geraldton, Ontario to a point on TransCanada's pipeline 23.09 kilometres south and east respectively of TransCanada's Station 116 near North Bay, Ontario.

Sault Ste. Marie Delivery Area or SSMDA

any point on TransCanada's Sault Ste. Marie pipeline.

North Central Delivery Area or NCDA

extends from a point on TransCanada's pipeline 23.09 kilometres south of TransCanada's Station 116 near North Bay Ontario, to a point on TransCanada's pipeline 0.50 kilometres south of TransCanada's Station 127 near Barrie Ontario, provided that points of delivery to the Enbridge Gas Distribution Inc. Gas within this area are deemed for the purposes of this Tariff to be in the Central Delivery Area.

Central Delivery Area or CDA

extends from a point on TransCanada's pipeline 0.50 kilometres south of TransCanada's Station 127 near Barrie Ontario to a point on TransCanada's pipeline at the International Border near Niagara Falls, Ontario and to a point on TransCanada's pipeline 24.99 kilometres east of TransCanada's Station 134 near Bowmanville, Ontario.

Southwestern Delivery Area or SWDA

any point on TransCanada's St. Clair to Dawn pipeline.

Eastern Delivery Area or EDA

extends from a point on TransCanada's pipeline 24.99 kilometres east of TransCanada's Station 134 near Bowmanville, Ontario and from a point on TransCanada's North Bay

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Shortcut 23.09 kilometres east of TransCanada's Station 116 near North Bay, Ontario to a point on TransCanada's pipeline at the International Border near Philipsburg, Québec and to a point on the pipeline system of Trans Québec & Maritimes Pipeline Inc. near Québec City, Québec.

2. **Toll Zones**

TransCanada's toll zones for purposes of determining the toll applicable to any point of delivery on TransCanada's pipeline system are as follows:

Saskatchewan Zone or Zone S

includes all points in the Saskatchewan Southern Delivery Area.

Manitoba Zone or Zone M

includes all points in the Manitoba Delivery Area.

Western Zone or Zone W

includes all points in the Western Delivery Area.

Northern Zone or Zone N

includes all points in the Northern Delivery Area and the Sault Ste. Marie Delivery Area.

Eastern Zone or Zone E

includes all points in the North Central Delivery Area, the Central Delivery Area and the Eastern Delivery Area.

Southwest Zone or Zone SW

includes all points in the Southwestern Delivery Area.

**XXI INCORPORATION IN TOLL SCHEDULES AND CONTRACTS**

1. These General Terms and Conditions are incorporated in and are a part of all of TransCanada's Toll Schedules, Contracts and transportation service contracts.
2. These General Terms and Conditions are subject to the provisions of the National Energy Board Act or any other legislation passed in amendment thereto or substitution therefor.

**XXII NOMINATIONS AND UNAUTHORIZED QUANTITIES**

1. **Nominations**

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For service required on any day under each of Shipper's transportation contracts (for the purposes of this Section XXII the "said Contract"), Shipper shall provide TransCanada with a nomination of the quantity of gas, expressed in GJ, it desires TransCanada to deliver at the delivery point ("Shipper's nomination") or Title Transfer pursuant to Section XXIV of these General Terms and Conditions. Unless otherwise provided under the applicable Toll Schedule or as outlined under this section in the Schedule of Nomination Times below, such nominations are to be provided in writing or EDI format, or by other electronic means, so as to be received by TransCanada's Gas Control Department in Calgary on or before 12:00 hours CCT on the day immediately preceding the day for which service is requested. Subject to the provisions of the applicable toll schedules and Sections XIV and XV of these General Terms and Conditions, TransCanada shall determine whether or not all or any portion of Shipper's nomination will be accepted.

In the event TransCanada determines that it will not accept such nomination, TransCanada shall advise Shipper, (on or before 14:00 hours CCT on the day immediately preceding the day for which service is requested), of the reduced quantity of gas, (if any) (the "quantity available") that TransCanada is prepared to deliver under the said Contract. Forthwith after receiving such advice from TransCanada but no later than 1 hour after receiving such notice on such day, Shipper shall provide a revised nomination to TransCanada which shall be no greater than the quantity available. If such revised nomination is not provided within the time allowed as required above or such revised nomination is greater than the quantity available, then the revised nomination shall be deemed to be the quantity available. If the revised nomination (delivered within the time allowed as required above) is less than the quantity available, then such lesser amount shall be the revised nomination. That portion of a Shipper's nomination or revised nomination, which TransCanada shall accept for delivery shall be known as "Shipper's Authorized Quantity" which authorized quantity shall be limited, for firm services, to Shipper's Contract Demand and, for other services, to such quantity permitted by the provisions of the Contract.

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**Schedule of Nomination Times (CCT)**

Gas Day Time	Class of Service *	Effective 0900 Hours Next Gas Day
2:00	All Services	Faxed, EBB & EDI (EBB & EDI commencing on October 1, 1997)

Please refer to FST Toll Schedule for appropriate times.

\*\* Effective October 1, 1997 nominations for service must be received by TransCanada through its electronic bulletin board or EDI at the time specified pursuant to Section XXII of the General Terms and Conditions. TransCanada shall not accept nominations by fax unless TransCanada's electronic bulletin board and EDI systems are inoperative.

**2. Definitions in Section XXII**

In this Section XXII, the following terms shall be construed to have the following meanings:

- (a) "Total Allocated Quantity":
  - (i) for any receipt point, means the total quantity of gas which TransCanada determines has been received during any time period under all transportation service contracts with a Shipper; and
  - (ii) for any delivery point or delivery area, means the total quantity of gas which TransCanada determines has been delivered during any time period under all transportation service contracts with a Shipper.
  
- (b) "Total Authorized Quantity" or "TAQ" for any day:
  - (i) for any receipt point, means the sum of the Shipper's Authorized Quantities under all transportation service contracts at that receipt point.
  - (ii) for any delivery point or delivery area, means the sum of the Shipper's Authorized Quantities under all transportation service contracts at a delivery point or for that delivery area.

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- (c) "Daily Variance" for a Shipper at any receipt or delivery point or delivery area means the absolute difference between the Total Authorized Quantity and the Total Allocated Quantity.
- (d) "FT Daily Demand Charge" or "FTD" means the result when the Demand Toll for Canadian Firm Service to the Eastern Zone Toll, as set out in the List of Tolls, is multiplied by 12 and divided by 365.
- (e) "Average Authorized Quantity" or "AAQ" for a Shipper at any receipt or delivery point or delivery area means the average Total Authorized Quantity during the preceding 30 days.
- (f) "Cumulative Variance" is the absolute value accumulation of the daily differences between the Total Authorized Quantity and the Total Allocated Quantity for a Shipper at any delivery point, delivery area or receipt point.

**3. Emergency Operating Conditions**

(a) EOC Definition

"Emergency Operating Conditions" ("EOC") means that TransCanada determines, in the exercise of its reasonable judgement, that its ability to fulfill its obligations under firm contracts is at risk due, in whole or in part, to Shipper variances during periods of extreme weather changes, and/or supply, market, pipeline interruptions, and TransCanada issues an EOC notice pursuant to subsection 3(b).

(b) EOC Notices

If TransCanada determines an EOC exists, TransCanada shall issue notice to all Shippers via High Priority Bulletin on its electronic bulletin board setting out the following information related to the EOC:

- i) EOC effective time, and
- ii) anticipated duration of the EOC, and
- iii) delivery points and delivery areas where EOC is in effect

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In addition to such notice, TransCanada will use reasonable efforts to contact by phone those Shippers directly impacted by the EOC.

(c) EOC Effective Times

If TransCanada issues notice of EOC prior to 13:00 Central Clock Time (CCT), then the EOC takes effect on that day. If TransCanada issues notice of EOC after 13:00 CCT, then the EOC takes effect on the next day. The EOC will remain in effect until the operational condition has been remedied.

4. **Daily Balancing Fee**

On each day Shipper shall pay a "Daily Balancing Fee" equal to:

(Tier 1 Quantity times Tier 1 Fee); plus

(Tier 2 Quantity times Tier 2 Fee); plus

(Tier 3 Quantity times Tier 3 Fee); plus

(Tier 4 Quantity times Tier 4 Fee).

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Where:

(a) Tier 1, 2, 3, 4 Fees and Quantities are set out in the following Table:

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>	<b>Tier 4</b>
Minimum Quantity	Greater of: 2% of TAQ, or 2% of AAQ or 75 GJ	Greater of: 4% if TAQ, or 4% of AAQ, or 150 GJ	Greater of: 8% of TAQ, or 8% of AAQ, or 302 GJ	Greater of: 10% of TAQ, or 10% of AAQ, or 377 GJ
Maximum Quantity	Greater of: 4% of TAQ, or 4% of AAQ, or 150 GJ	Greater of: 8% of TAQ, or 8% of AAQ, or 302 GJ	Greater of: 10% of TAQ, or 10% of AAQ, or 377 GJ	∞ (Infinity)
Standard Fee	0.2 times FTD	0.5 times FTD	0.75 times FTD	1.0 times FTD
EOC Draft Fee	1.0 times Index	1.25 times Index	1.50 times Index	2.0 times Index
EOC Pack Fee	0	0	0	0

- (a) Quantity for each Tier equals that portion of the Daily Variance which is greater than the Minimum Quantity and less than the Maximum Quantity.
- (b) The applicable Fee for each Tier equals:
  - (i) Standard Fee for days and locations where EOC are not in effect,
  - (ii) EOC Draft Fee for days and locations where EOC are in effect and where Shipper's Total Authorized Quantity is less than Shipper's Total Allocated Quantity, and
  - (iii) EOC Pack Fee for days and locations where EOC are in effect and where Shipper's Total Authorized Quantity is greater than Shipper's Total Allocated Quantity.
- (c) No Daily Balancing Fee is payable on the portion of a Daily Variance which is less than 75 GJ.
- (d) The Daily Balancing Fee is added to the bill for the month in which the day is included.



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- (e) "Index" means the highest price of gas on the day among all receipt and delivery points on the TransCanada pipeline system as published by Platts Gas Daily or such other recognized industry publication.

#### 5. Cumulative Balancing Fee

On each day Shipper shall pay a "Cumulative Balancing Fee" equal to:

(Tier 1 Quantity times Tier 1 Fee); plus

(Tier 2 Quantity times Tier 2 Fee).

Where:

- (a) Tier 1, 2 Fees and Quantities are set out in the following Table:

	<b>Tier 1</b>	<b>Tier 2</b>
Minimum Quantity	Greater of: 4% of TAQ, or 4% of AAG, or 150 GJ	Greater of: 6% of TAQ, or 6% of AAQ, or 225 GJ
Maximum Quantity	Greater of: 6% of TAQ, or 6% of AAQ, or 225 GJ	∞ (Infinity)
Standard Fee	0.15 times FTD	0.25 times FTD
EOC Draft Fee	0.15 times FTD	0.25 times FTD
EOC Pack Fee	0	0

- (b) Quantity for each Tier equals that portion of the Cumulative Variance which is greater than the Minimum Quantity and less than the Maximum Quantity.
- (c) The applicable Fee for each Tier equals:
- (i) Standard Fee for days and locations where EOC are not in effect,

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- (ii) EOC Draft Fee for days and locations where EOC are in effect and where Shipper's accumulated Total Authorized Quantity is less than Shipper's accumulated Total Allocated Quantity, and
  - (iii) EOC Pack Fee for days and locations where EOC are in effect and where Shipper's accumulated Total Authorized Quantity is greater than Shipper's accumulated Total Allocated Quantity.
- (d) No Cumulative Balancing Fee is payable on the portion of an Absolute Cumulative Variance which is less than 150 GJ.
  - (e) The Cumulative Balancing Fee is added to the bill for the month in which the day is included.
  - (f) A Cumulative Balancing Fee is in addition to Daily Balancing Fees payable under subsection 4 of Section XXII, and an additional Cumulative Balancing Fee is payable on each day where there is an Absolute Cumulative Variance.

**6. Payback Provisions**

- (a) Shippers may reduce Cumulative Variances through nomination of "Payback Quantities" which shall be nominated and authorized in accordance with these General Terms and Conditions.

TransCanada is not obligated to provide additional transportation capacity to deliver Payback Quantities.

- (b) If, on any day, a Shipper nominates a Payback Quantity under sub-Section (d), and TransCanada is unable to deliver or receive a quantity ("Minimum Payback Quantity") equal to the lesser of:

- (i) Shipper's nominated Payback Quantities, or
- (ii) the greater of:
  - (a) two percent of the Total Authorized Quantity,
  - (b) two percent of the Average Authorized Quantity, and
  - (c) 75 GJ

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then Shipper is relieved from the Cumulative Balancing Fee by a quantity ("Payback Relief Quantity") equal to the difference between:

- (iii) the Minimum Payback Quantity, and
- (iv) The level of Payback Quantities which TransCanada was able to deliver or receive.

The relief from Cumulative Balancing Fees shall apply for each day until TransCanada delivers or receives the Payback Relief Quantity. No Payback Relief will be granted as a result of TransCanada not authorizing a transportation service.

- (c) If TransCanada determines, in its sole discretion, that its ability to meet firm obligations is at risk due to Shipper variances, and after curtailment of all discretionary transportation services that are hindering TransCanada's ability to meet its firm obligations, TransCanada may, without further notice, adjust Shipper's nominations for any day in order to reduce Shipper's Cumulative Variance to zero.

**7. Obligation to Balance Accounts**

Payments of balancing fees under this Section XXII do not give Shipper the right to receive or deliver unauthorized quantities, or incur Cumulative or Daily Variances, nor shall payment of the balancing fees be a substitute for other remedies available to TransCanada.

**8. Energy Imbalance Recovery**

- (a) Cumulative energy imbalances that result from energy in transit, accumulated fuel imbalances and imbalances held under other applicable accounts, shall be recovered in the following manner:
  - (i) on the 20th Day of each month, TransCanada shall advise Shipper in writing of all cumulative energy imbalances attributed to Shipper arising up to the end of the 19<sup>th</sup> Day of such month and carried forward or arising from previous months, provided however that such cumulative energy imbalances for export delivery points referred to in sub-section 8(b) shall be the amount by which the cumulative energy imbalance at such points exceed 50 GJ;

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- (ii) the cumulative energy imbalance reported to Shipper shall be aggregated at each applicable location from all of Shipper's Contracts, nomination groups and other applicable accounts;
- (iii) on or before the 3<sup>rd</sup> last Day of each month, Shipper may reduce the cumulative energy imbalances reported by TransCanada.
- (iv) The cumulative energy imbalance after giving effect to applicable offsetting transactions (the "Net Imbalance"), shall be determined on:
  - (A) the end of the 3<sup>rd</sup> last Day of such month if the cumulative energy imbalance is less than the cumulative energy imbalance on the 19<sup>th</sup> Day of such month; or
  - (B) the 19<sup>th</sup> Day of such month if the cumulative energy imbalance on the 3<sup>rd</sup> last Day of such month is greater than the energy balance on the 19<sup>th</sup> Day of such month.

The Net Imbalance shall be scheduled and recovered in equal amounts on each Day over the first 15 Days, or a lesser number of Days as mutually agreed to by Shipper and TransCanada, of next month (the "Recovery Period"). The amount of the Net Imbalance to be recovered each Day of the Recovery Period (the "Daily Imbalance Recovery") will be determined by TransCanada and verbally communicated to Shipper on the 2<sup>nd</sup> last Day of each month. Shipper shall nominate the Daily Imbalance Recovery on each Day of the Recovery Period as an "Imbalance Payback" under the Shipper account (nomination group) with the largest energy imbalance as determined by TransCanada based on the most recent monthly statements available.

- (vi) in nominating the Daily Imbalance Recovery, Shipper will ensure that all nominations remain in balance. Any nomination received from Shipper which does not include the required Daily Imbalance Recovery will, at TransCanada's sole discretion, be either rejected or forced to balance by TransCanada. TransCanada is authorized to curtail Shipper's gas supply and market, as necessary, to balance the nomination after accounting for the Daily Imbalance Recovery;
- (vii) where applicable, deliveries of the Daily Imbalance Recovery shall be the first deliveries made under the nomination on each Day of the Recovery Period; and

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- (viii) any imbalance shall be deemed to have occurred and shall be held at the primary receipt point specified in the transportation service agreement.
  
- (b) Cumulative energy imbalances at export delivery points that result from rounding when converting between energy units used for daily scheduling purposes shall be subject to the following:
  - (i) Each Day Shipper shall be entitled to an energy imbalance of up to 5 GJ provided however, Shipper's cumulative energy imbalance at any time shall not exceed 50 GJ;
  - (ii) Shipper may reduce its cumulative energy imbalance on any Day by up to 10 GJ provided however, such reduction shall not result in the cumulative energy imbalance moving from a positive imbalance to a negative imbalance, or from a negative imbalance to a positive imbalance.

**XXIII FINANCIAL ASSURANCES**

1. **Financial Assurance for Performance of Obligations:** TransCanada may request that Shipper (or any assignee) at any time from time to time prior to and during service, provide TransCanada with an irrevocable letter of credit or other assurance acceptable to TransCanada, in form and substance satisfactory to TransCanada and in an amount determined in accordance with **sub-Section XXIII(3) hereof** (the "Financial Assurance").
  
2. **Failure to Provide Financial Assurance:** TransCanada may withhold the provision of new service until TransCanada has received a requested Financial Assurance.

**Notwithstanding Section XVII**, if Shipper fails to provide a requested Financial Assurance to TransCanada within four (4) Banking Days of TransCanada's request, TransCanada may upon four (4) Banking Days written notice immediately suspend any or all service being or to be provided to Shipper provided however that any such suspension shall not relieve Shipper from any obligation to pay any rate, toll, charge or other amount payable to TransCanada. If at any time during such suspension Shipper provides such Financial Assurance to TransCanada, TransCanada shall within two (2) Banking Days recommence such suspended service.

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**Notwithstanding Section XVII**, if Shipper fails to provide such Financial Assurance during such suspension, TransCanada may, in addition to any other remedy that may be available to it, upon four (4) Banking Days written notice to shipper immediately:

- a) Terminate any or all service being or to be provided to Shipper; and
- b) Declare any and all amounts payable now or in the future by Shipper to TransCanada for any and all service to be immediately due and payable as liquidated damages and not as a penalty.

Any notice provided by TransCanada to Shipper to withhold, suspend or terminate service pursuant to **sub-Section XXIII(2) hereof** shall be filed concurrently with the NEB.

3. **Amount of Financial Assurance:** The maximum amount of Financial Assurance TransCanada may request from a Shipper (or assignee) shall be as determined by TransCanada an amount equal to:

- a) for the provision of all gas transportation and related services, other than such services referred to in **sub-Section XXIII(3)(b)**, the aggregate of all rates, tolls, charges or other amounts payable to TransCanada for a period of seventy (70) days. Provided however, the amount of the Financial Assurance for all rates, tolls and charges other than demand charges shall be based on the daily average of the actual charges billed for service for the preceding twelve (12) month period with the initial forecast to be provided by Shipper; and
- b) for the provision of any gas transportation and related services where TransCanada determines it must construct facilities and Shipper has executed the Financial Assurances Agreement defined in Section 4.4(c)(ii) of the Transportation Access Procedure, the aggregate of all rates, tolls, charges or other amounts payable to TransCanada for a period of seventy (70) days plus one (1) month for each remaining year of the term of such service, up to a maximum of twelve (12) months total.

Nothing in this Section XXIII shall limit Shipper's right to request the NEB to issue an order, under sub-section 71(2) of the National Energy Board Act, requiring TransCanada to receive, transport and deliver gas offered by Shipper for transmission, or to grant such other relief as Shipper may request under the circumstances, notwithstanding Shipper's default under this Section XXIII.

GENERAL TERMS and CONDITIONS

**XXIV TITLE TRANSFERS**

- a) Shippers may request and TransCanada shall authorize Title Transfers subject to the following: TransCanada receives a nomination satisfactory to TransCanada from each Shipper that is a party to a Title Transfer;
- b) If TransCanada determines at any time that any title transfer account of a Shipper is out of balance, TransCanada may, without notice to the title transfer account holder, curtail transfers up to such amounts as TransCanada deems necessary to bring all affected title transfer accounts into balance. In so doing, TransCanada shall have no liability whatsoever to Shipper or any third party claiming through Shipper for any claims, actions or damages of any nature arising out of or in any way related to such curtailment

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GENERAL TERMS and CONDITIONS

**HV-97 SCHEDULE**

<b>Area</b>	<b>Heating Value</b> MJ/m3
CHIPPAWA	37.77
CORNWALL	37.69
EMERSON 1	37.68
EMERSON 2	37.68
EMPRESS	37.73
IROQUOIS-EXP.	37.68
NAPIERVILLE	37.68
NIAGARA FALLS	37.75
PARKWAY ENBRIDGE	37.69
PARKWAY UNION	37.68
PHILIPSBURG	37.68
ST-LAZARE	37.69
SABREVOIS	37.69
SPRUCE	37.68
ST. CLAIR	37.72
NCDA, UNION GAS LIMITED	37.69
CDA, ENBRIDGE GAS DISTRIBUTION INC.	37.69
CDA, UNION GAS LIMITED	37.68
EDA, UNION GAS LIMITED	37.68
EDA, GAZ METROPOLITAIN & CO. L.P.	37.69
EDA, KINGSTON PUBLIC UTILITIES COMM	37.68
EDA, ENBRIDGE GAS DISTRIBUTION INC.	37.69
MDA, CENTRA GAS MANITOBA INC	37.68
MDA, CENTRA TRANSMISSION HOLDINGS	37.68
MDA, GLADSTONE AUSTIN	37.68
NDA, UNION GAS LIMITED	37.68
NDA, GAZ METROPOLITAIN & CO. L.P.	37.68
NDA, TRANSCANADA POWER, L.P.	37.68
SSDA, CENTRA GAS MANITOBA INC	37.67
SSDA, TRANSGAS LTD.	37.66
SMDA UNION GAS LIMITED.	37.71
SWDA, ENBRIDGE GAS DISTRIBUTION INC	37.68
SWDA, UNION GAS LIMITED	37.71
WDA, UNION GAS LIMITED	37.68
WDA, TRANSCANADA POWER, L.P.	37.67



## **Appendix 5**

### **Transportation Access Procedures**

**TRANSPORTATION ACCESS PROCEDURE**

**INDEX**

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**APPENDICES**

- A Existing or New Capacity Open Season Bid Form
- B Daily Open Season Bid Form

## Transportation Tariff

## TransCanada PipeLines Limited

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### TRANSPORTATION ACCESS PROCEDURE

#### 1. PURPOSE

1.1 The purpose of the Transportation Access Procedure contained herein (the "Procedure") is to set forth the process by which TransCanada shall administer requests for service to ensure fair and equitable treatment to all shippers seeking FT, [FT-SN](#), FT-NR, [SNB](#), STS-L and STS service (these shippers or other parties that submit either an Existing or New Capacity Bid Form ("Bid Form") in accordance with sub-Section 3.2 or sub-Section 4.2, or a signed Daily Open Season Bid Form in accordance with sub-Section 3.67, are hereinafter referred to as "Service Applicant") with TransCanada for the transportation of natural gas utilizing TransCanada's pipeline facilities and TransCanada's contractual entitlement on the pipeline systems of the Great Lakes Gas Transmission Limited Partnership, Union Gas Limited and Trans Quebec and Maritimes Pipeline Inc. (collectively, TransCanada's "System Capacity").

#### 2. APPLICABILITY

2.1 This Procedure is applicable to all requests for FT, [FT-SN](#), FT-NR, [SNB](#), STS-L and STS transportation services and to all requests for any increases to the Contract Demand under existing FT, [FT-SN](#), STS-L and STS Contracts [or Contract Quantity under existing SNB Contracts](#), provided however Section 4 shall not be applicable to any request for FT-NR transportation service.

#### 3. ACCESS TO EXISTING SYSTEM CAPACITY

##### 3.1 Posting of Existing Capacity

If at any time prior to or during an open season TransCanada determines it has sufficient excess existing System Capacity available, TransCanada may at any time, notify Service Applicants and prospective Service Applicants by notice on TransCanada's electronic bulletin board, and by fax or email (the "Notice") of:

- (a) all or a portion of such System Capacity on each segment of the TransCanada's System Capacity, each such segment being defined by reference to the receipt point and the export delivery point or delivery area applicable thereto (the

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TRANSPORTATION ACCESS PROCEDURE

“System Segment”); such System Capacity on each System Segment is hereinafter referred to as the “Posted Capacity”;

- (b) the Date of Commencement (as defined in the FT, [FT-SN](#), FT-NR, [SNB](#), STS-L, and STS Contracts) for such Posted Capacity, provided that TransCanada is not obligated to offer Date of Commencement two (2) or more years from the date of the notice;
- (c) the type of service available;
- (d) in the case of FT-NR the term the service will be available for; and
- (e) the date(s) the Existing Capacity Open Season as defined in sub-Section 3.2(a) will commence and end.

### 3.2 The Open Season

- (a) TransCanada shall hold an open season for the Posted Capacity (an “Existing Capacity Open Season”) commencing on or about May 5 in each calendar year (unless it has no Posted Capacity). The Existing Capacity Open Season shall be for a period of time determined by TransCanada which shall not be less than five (5) Banking Days after the commencement of such Existing Capacity Open Season. TransCanada may hold an additional Existing Capacity Open Season at any time it determines necessary. Service Applicant may during the Existing Capacity Open Season submit by fax or mail a Bid Form for all or a portion of the Posted Capacity for a minimum term of one (1) year. Bids with a term greater than 1 year shall be in full month increments. TransCanada must receive all Bid Forms before the end of such Existing Capacity Open Season.
- (b) Service Applicant shall submit a separate Bid Form for all or a portion of the capacity for each Posted Capacity. TransCanada shall accept a Bid Form for the purposes of evaluation and allocation in accordance with sub-Section 3.4 hereof for:
  - (i) capacity from a specified receipt point to a specified delivery point or area within the System Segment;

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Effective ~~Draft~~ Date: ~~January 29~~ [May 1](#), 2006

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- (ii) a different Date of Commencement;
  - (iii) a different type of service; ~~or~~
  - (iv) a Bid Form which is subject to the condition that another specified Bid Form(s) has been accepted; and/or-
  - (v) a Bid Form for service pursuant to the SNB Toll Schedule.
- (c) If TransCanada determines in its sole discretion that a Bid Form is incomplete or does not conform to the requirements herein, such Bid Form shall be rejected by TransCanada.
- (d) TransCanada shall advise Service Applicant whether or not its Bid Form has been rejected within two (2) Banking Days of its receipt.
- (e) Information on the Bid Forms will be kept confidential by TransCanada, however, TransCanada shall provide the information to the NEB if required or requested to do so by the NEB.
- (f) Within 2 Banking Days of the end of the Existing Capacity Open Season for each Bid Form, Shipper shall provide to TransCanada a deposit (the "Deposit") equal to the lesser of:
- (i) one (1) month demand charges for the maximum capacity setout on the Bid Form; or
  - (ii) \$10,000.
- (g) Notwithstanding sub-section 3.2 (e), if any of the Bid Forms received by TransCanada is for service pursuant to the SNB Toll Schedule, TransCanada shall notify all Service Applicants within 2 Banking Days following the end of the Existing Capacity Open Season.

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**3.3 Pricing of Posted Capacity**

The toll applicable to the Posted Capacity shall be the toll approved by the NEB and set forth in the List of Tolls in the TransCanada Tariff [or a toll determined by a methodology approved by the NEB.](#)

**3.4 Allocation of Posted Capacity**

(a) At the close of the Existing Capacity Open Season, TransCanada shall rank the submitted Bid Forms and TransCanada shall, subject to sub-Section 3.4(b), allocate the Posted Capacity among Service Applicants in the following descending priority:

(i) the demand toll multiplied by the Contract term for each Bid Form or combination of Bid Forms, with the bid(s) yielding the highest overall product having the highest priority;

[If a Bid Form is for service pursuant to the SNB Toll Schedule then the product of demand toll and Contract term will be adjusted by multiplying such product by the requested maximum capacity and dividing such amount by the actual impact on Posted Capacity as determined by TransCanada;](#)

(ii) the requested Date of Commencement, with the earliest requested Date of Commencement having the highest priority, provided that TransCanada will have no obligation to award any capacity to a Bid Form with a service to commence two or more years from the close of the Existing Capacity Open Season.

(b) If two (2) or more Bid Forms or combinations of Bid Forms have the same ranking, determined in sub-Sections 3.4(a) and the available Posted Capacity is not sufficient to provide service for the quantities requested in those Bid Forms or combination Bid Forms, then the available Posted Capacity shall be allocated (rounded to the nearest GJ) on a pro-rata basis based on the maximum capacity requested in each Bid Form.

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- (c) If the pro-rata share of remaining Posted Capacity allocated to a Bid Form pursuant to sub-Section 3.4(b) is less than the minimum capacity specified in such Bid Form, that Bid Form shall be deemed to be rejected by TransCanada and the remaining Posted Capacity shall be reallocated under sub-Section 3.4(b) excluding such Bid Form.
- (d) TransCanada shall allocate capacity to the Bid Forms with the highest rankings, until all the Bid Forms have been processed or until all available capacity has been allocated. If an offer of capacity is withdrawn, pursuant to sub-Section 3.5(d) then this capacity will be reallocated sequentially to the remaining Bid Forms according to the procedures in sub-Sections 3.4(a), (b), and (c).

**3.5 Notification to Shippers**

- (a) TransCanada will use reasonable efforts to notify, as soon as possible but in no event longer than two (2) Banking Days ~~of~~ after the close of the Existing Capacity Open Season, by telephone, fax or otherwise, all Service Applicants who have been allocated any Posted Capacity. Provided however if TransCanada receives a Bid Form for service pursuant to the SNB Toll Schedule, TransCanada shall be entitled to notify all service applicants within 10 Banking Days after the close of the Existing Capacity Open Season.
- (b) Service Applicant shall provide TransCanada with financial assurances as required by TransCanada pursuant to Section XXIII of the General Terms and Conditions of TransCanada's Tariff, within one (1) Banking Day from the time TransCanada sends notice to Service Applicant pursuant to subsection 3.5(a). Such assurances would cover the transportation agreement resulting from the successful bid, as well as all other transportation agreements between TransCanada and Service Applicant (including those provided in relation to existing capacity, and those which were used to backstop TransCanada capacity expansions.) TransCanada may, at any time in its sole discretion, waive the requirement for Service Applicant to provide financial assurances or extend the period for providing such financial assurances.

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- (c) Upon satisfaction of the financial assurances requirements in sub-Section 3.5(b), TransCanada shall forward to Service Applicant for execution a pro forma transportation service contract for the Posted Capacity allocated to the Service Applicant, or in the case of SNB a pro forma SNB service contract (the "Transportation Contract"). Service Applicant, within ten (10) Banking Days from the Day TransCanada sends the Transportation Contract to the Service Applicant, shall execute and return to TransCanada for execution by TransCanada, the Transportation Contract.
- (d) If Service Applicant does not execute and return to TransCanada the Transportation Contract within ten (10) Banking Days, or if Service Applicant fails ~~to~~ provide financial assurances as required in sub-Section 3.5 (b), the offer to the Service Applicant for the Posted Capacity allocated to the Service Applicant shall be withdrawn and TransCanada shall keep the Deposit. TransCanada may in its sole discretion extend the ten (10) Day period for which Service Applicant can execute the Transportation Contract. If the Transportation Contract is signed, then the Deposit will be credited by TransCanada to the bill(s) for the first month(s) of service or returned to the Shipper, if requested.
- (e) TransCanada will return the Deposit provided by an unsuccessful Service Applicant within five (5) banking days from the date the Transportation Contracts are executed for all Posted Capacity for that Existing Capacity Open Season.

**3.6 Daily Open Seasons**

- (a) If not all Posted Capacity is allocated pursuant to sub-Section 3.4 above, TransCanada will post all or a portion of the remaining Posted Capacity (the "Available Capacity") on its electronic bulletin board, and TransCanada will offer the Available Capacity for FT, FT-SN, FT-NR, SNB, STS-L or STS service in open seasons held on each normal business Day ("Daily Open Season") for TransCanada's head office (a "Business Day"). The Available Capacity on any System Segment to be posted will be determined as follows:



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<u>Remaining Posted Capacity at Close of Existing Capacity Open Season</u>	<u>Available Capacity for Daily Open Season</u>
Greater than or equal to 20,000 GJ/Day	50 percent of remaining Posted Capacity
10,000 to 20,000 GJ/Day	10,000 GJ/Day
Less than 10,000 GJ/Day	100 percent of remaining Posted Capacity

- (b) TransCanada shall post the Available Capacity on its electronic bulletin board by 11:00 hours CCT on each Day that a Daily Open Season is held. Capacity will be awarded according to bids received by 16:00 hours CCT.
- (c) TransCanada shall post on its electronic bulletin board a summary of all new operating FT, [FT-SN](#), FT-NR, [SNB](#), STS-L or STS Contracts entered into that reduce the Available Capacity, and an explanation of why other changes are made to the Available Capacity.
- (d) Service Applicants will bid in a Daily Open Season by submitting a signed Daily Open Season Bid Form, as well as any financial assurances required by TransCanada. All Daily Open Season Bid Forms once received by TransCanada shall be deemed to be irrevocable and cannot be withdrawn or amended by Service Applicant unless such Daily Open Season Bid Form is subject to the condition that another Daily Open Season Bid Form as set out in the Daily Open Season Bid Form has been accepted.
- (e) TransCanada shall not be obligated to accept any bid if the Service Applicant has not provided Financial Assurances requested by TransCanada on any other transportation agreements between TransCanada and that Service Applicant

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(including those provided from existing capacity, and those which were used to backstop TransCanada capacity expansions).

- (f) TransCanada is not obligated to offer Date of Commencement two (2) or more years from the date of the Daily Open Season.
- (g) TransCanada shall not be obligated to accept in any Daily Open Season any bid for service to start within 5 Banking Days of the date on which the bid is made.
- (h) The Daily Open Season bids will be evaluated according to the criteria for Existing Capacity Open Season bids as outlined in sub-Section 3.4.
- (i) If a Daily Open Season Bid Form is accepted by TransCanada, TransCanada shall provide a Transportation Contract to Service Applicant. Service Applicant shall then have 1 Banking Day to execute and return such Transportation Contract.
- (j) TransCanada will not hold a Daily Open Season under any of the following circumstances:
  - (i) on any Day other than a Business Day; or
  - (ii) if TransCanada has no Available Capacity to offer; or
  - (iii) if TransCanada has given notice that it will be holding either an Existing Capacity Open Season pursuant to sub-Section 3.2 hereof, or a New Capacity Open Season pursuant to sub-Section 4.1 hereof. No Daily Open Season would be held from the date of such notice until after the Existing Capacity Open Season, or the New Capacity Open Season, as the case may be, has concluded, and the requested capacity has been allocated, provided however TransCanada may continue to offer capacity in a Daily Open Season if TransCanada determines in its sole discretion such capacity does not reduce the capacity offered in the Existing Capacity Open Season and/or New Capacity Open Season; [or](#)

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(iv) if on a Day TransCanada receives a request for service pursuant to the SNB Toll Schedule during the Daily Open Season, TransCanada shall not hold another Daily Open Season until capacity has been allocated for all service requests received on such Day

- (jk) After all Available Capacity has been allocated in the Daily Open Season held pursuant to sub-Section 3.6, the portion of the remaining Posted Capacity not offered in the Daily Open Season shall be made available in the next Existing Capacity Open Season and/or New Capacity Open Season.

#### 4. ACCESS TO NEW SYSTEM CAPACITY

##### 4.1 The New Capacity Open Season

- (a) When TransCanada determines, in its sole discretion, that there is a reasonable expectation of a long term requirement for an expansion of TransCanada's System Capacity (the "New Capacity") and that it intends to prepare and to submit to the NEB an application pursuant to Part III of the National Energy Board Act for authorization to construct facilities or otherwise obtain additional System Capacity (the "Facilities Application"), TransCanada shall place a notice on its electronic bulletin board and otherwise notify potential Service Applicants by fax or email that it will hold an open season (the "New Capacity Open Season"). Such notice shall:
- (i) identify the minimum term of service required by TransCanada for bids in support of the Facilities Application (the "Minimum Term");
  - (ii) request that Service Applicants provide to TransCanada;
    - A. Bid Form(s) by the end of the New Capacity Open Season; and
    - B. By the date referred to in sub-Section 4.4(c)(i), all applicable supporting documentation set out in the National Energy Board's Filing Manual, determined by TransCanada to be necessary for

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submission to the NEB in support of TransCanada's Facilities Application pursuant to Part III of the NEB Act and which evidence supports the Service Applicant's need for transportation service in the timeframe contemplated in the Service Applicant's Bid Form;

- (iii) identify the expected date by which such additional capacity might first be offered for service (the "New Service Start Date");
- (iv) identify the dates on which the New Capacity Open Season will commence and end;
- (v) indicate the System Segments which are being offered; and
- (vi) identify any System Segments where TransCanada determines in its sole discretion that TransCanada may be limited as to the total capacity that may be made available and the time such capacity may be available.

#### 4.2 Bidding in the New Capacity Open Season

- (a) Service Applicant shall submit a separate Bid Form, and other documentation as described in sub-Section 4.1(a)(ii) for each separate request. TransCanada shall accept a Bid Form and documentation for the purposes of evaluation and allocation in accordance with sub-Section 4.3 hereof for:
  - (i) capacity from a specified receipt point to a specified delivery point or area within the System Segment; or
  - (ii) a different Date of Commencement; or
  - (iii) a different service; or
  - (iv) a Bid Form which is subject to the condition that another specified Bid Form(s) has been accepted.

Each Bid Form once received by TransCanada shall be irrevocable.

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- (b) TransCanada shall not be obligated to accept any bid if Service Applicant has not provided financial assurances requested by TransCanada on any other transportation agreements between TransCanada and Service Applicant .
- (c) Information on the Bid Forms and in the supporting documentation provided pursuant to sub-Section 4.4(c)(i) will be kept confidential. However, TransCanada shall provide the information to the NEB if required or requested to do so by the NEB, including as needed to support a Facilities Application. Any information submitted by a Service Applicant who has not been allocated capacity pursuant to sub-Section 4.3 shall be destroyed by TransCanada.
- (d) Within 2 Banking Days of the end of the New Capacity Open Season, for each Bid Form Shipper shall provide to TransCanada a deposit (the "New Capacity Deposit") equal to the lesser of:
  - (i) one (1) month demand charges for the maximum capacity set out on the Bid Form, calculated based on the tolls in place when the Bid Form was submitted; or
  - (ii) \$10,000.

**4.3 Allocation of Capacity**

- (a) At the close of the New Capacity Open Season TransCanada shall rank the accepted Bid Forms and TransCanada shall, subject to sub-Section 4.3(b), allocate the New Capacity among Service Applicants in the following descending priority:
  - (i) the demand toll in effect for the service at the time the New Capacity Open Season closes, multiplied by the Contract term for each Bid Form or combination of Bid Forms, with the bid(s) resulting in the highest overall total product having the highest priority;

[If a Bid Form is for service pursuant to the SNB Toll Schedule then the product of demand toll and Contract term will be adjusted by multiplying](#)

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[such product by the requested maximum capacity and dividing such amount by the actual impact on capacity as determined by TransCanada;](#)

- (ii) the requested Date of Commencement, with the earliest requested Date of Commencement having the highest priority, provided that such commencement date is not earlier than the New Service Start Date.
- (b) If two (2) or more Bid Forms or combinations of Bid Forms have the same ranking, as determined by the procedure set in sub-Section 4.3(a) and the Additional Capacity is not sufficient to provide service for the quantities requested in those Bid Forms or combination of Bid Forms, then the Additional Capacity shall be allocated (rounded to the nearest GJ) on a pro-rata basis based on the maximum capacity requested in each Bid Form.
- (c) If the pro-rata share of remaining Additional Capacity allocated to a Bid Form pursuant to sub-Section 4.3(b) is less than the minimum capacity specified in such Bid Form, that Bid Form shall be deemed to be rejected by TransCanada and the remaining Additional Capacity shall be reallocated under sub-Section 4.3(b) excluding such Bid Form.
- (d) TransCanada shall allocate capacity to the Bid Forms with the highest rankings until all the Bid Forms have been processed or until all Available Capacity has been allocated. If an offer of capacity is deemed to be withdrawn or rejected, pursuant to sub-Sections 4.4(c) or 4.5, then this capacity will be reallocated sequentially to the remaining Bid Forms according to the procedures in sub-Sections 4.3(a), (b), and (c).

**4.4 Notification to Shippers**

- (a) TransCanada will use reasonable efforts to notify, as soon as possible but in no event longer than fifteen (15) Banking Days of the close of the Open Season, by telephone, fax or otherwise, all Service Applicants who have been allocated any Additional Capacity (the "Successful Bidders").

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Effective ~~Draft~~ Date: ~~January 29~~ [May 1](#), 2006

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- (b) TransCanada shall return the New Capacity Deposit to each Service Applicant not offered any Additional Capacity.
- (c) TransCanada shall prepare and forward to each Successful Bidder:

- (i) a binding transportation service precedent agreement for the service requested pursuant to their Bid Form ("TransCanada's Offer"), which precedent agreement shall set forth the terms and conditions, including the conditions precedent, upon which the service is offered to Service Applicant (the "Precedent Agreement"). TransCanada's Offer shall be subject to the following condition:

The Successful Bidder has provided the supporting documentation, referred to in sub-Section 4.1(a)(ii), to TransCanada within 5 Banking Days (or such longer period agreed to by TransCanada) of receipt of the Precedent Agreement and such supporting documentation is complete, conforms to the requirements herein and is in a form satisfactory to TransCanada.

If TransCanada determines in its sole discretion that the condition is not satisfied, TransCanada shall notify in writing the Successful Bidder. The Successful Bidder shall have 5 Banking Days following receipt of such notification to satisfy the condition, or TransCanada's Offer shall be deemed to be withdrawn. TransCanada will have the option of allocating any capacity arising from withdrawn offers to any accepted Bid Forms that were not allocated capacity, pursuant to sub-Section 4.3.

- (ii) an agreement which sets forth the financial assurances which the Service Applicant will be required to provide to TransCanada prior to TransCanada's execution of the Transportation Contract for the service which is the subject of the Precedent Agreement (the "Financial Assurances Agreement").

Service Applicant may accept TransCanada's Offer by executing and returning the Precedent Agreement, and the Financial Assurances Agreement within thirty

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- (30) calendar Days of Service Applicant's receipt thereof (the "Return Period") and Service Applicant's service request (the "Accepted Bid") shall then be included in support of TransCanada's Facilities Application ("Service Applicant's Acceptance"). The Return Period may be extended at TransCanada's discretion, if so requested by Service Applicant.
- (d) Upon inclusion of an Accepted Bid in support of TransCanada's Facilities Application, Service Applicant shall then be obligated to provide to TransCanada any additional information that the NEB may require in accordance with NEB procedural orders and information requests in respect of TransCanada's Facilities Application.
- (e) Upon Service Applicant's Acceptance, if TransCanada provides service as set out in the Precedent Agreement (as it may be amended), the New Capacity Deposit will be credited to Service Applicant in the first month(s) bill(s) for service, or returned to Service Applicant if Service Applicant so requests. If TransCanada is unable to provide the service as set out in the Precedent Agreement the New Capacity Deposit will be returned to Service Applicant by TransCanada.

**4.5 Non-Acceptance of Offers**

- (a) If Service Applicant does not execute and return both the Precedent Agreement and Financial Assurances Agreement, and such other documents that TransCanada determines to be necessary within the Return Period, Service Applicant will have been deemed to have rejected TransCanada's offer (the "Rejected Offer"). In such case TransCanada will have no obligation to return the New Capacity Deposit provided by Service Applicant.
- (b) TransCanada will have the option of allocating any capacity arising from Rejected Offers to any accepted Bid Forms that were not allocated capacity, pursuant to sub-Section 4.3.



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TRANSPORTATION ACCESS PROCEDURE

4.6 **Inclusion of Existing Capacity**

(a) If TransCanada's determines in its sole discretion that prior to or during the New Capacity Open Season excess existing System Capacity is or becomes available, TransCanada shall:

(i) include such excess existing System Capacity in the New Capacity Open Season; or

(ii) change the New Capacity Open Season to include such excess existing System Capacity;

provided that such change is made no less than 5 Banking Days prior to the end of a New Capacity Open Season;

(b) If TransCanada includes such excess existing System Capacity in a New Capacity Open Season, Service Applicant can apply for service pursuant to Section 3 or Section 4; and

(c) If TransCanada includes such excess existing System Capacity in the New Capacity Open Season, TransCanada shall allocate such excess existing System Capacity to all Service Applicants for New Capacity and existing System Capacity pursuant to sub-section 3.4. If there remain Service Applicants for New Capacity whose requests were not satisfied, or only satisfied in part, such Service Applicants for New Capacity will be allocated New Capacity for such unsatisfied or partially satisfied requests pursuant to sub-section 4.3.

(d) If such excess existing System Capacity is allocated to New Capacity requests with Dates of Commencement in the future such System Capacity shall be made available to Shippers, firstly as service under the FT-NR Toll Schedule, and secondly as service under the STFT Toll Schedule, during the period commencing on the date such existing System Capacity is available or

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becomes available and ending on the Day immediately prior to the requested Date(s) of Commencement.

**5. MISCELLANEOUS PROVISIONS**

- a) This Procedure is subject to the provisions of the National Energy Board Act and any other legislation passed in amendment thereof or substitution therefore.
- b) Any upper cased term not defined herein shall have the meaning attributed thereto in the General Terms & Conditions of TransCanada's Tariff as amended from time to time.

**Transportation Tariff**

**TransCanada PipeLines Limited**

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TRANSPORTATION ACCESS PROCEDURE

**APPENDIX "A"**

**EXISTING OR NEW CAPACITY OPEN SEASON BID FORM**

System Segment: \_\_\_\_\_

The Delivery Point: \_\_\_\_\_ The Receipt Point: \_\_\_\_\_

Date of Commencement: \_\_\_\_\_

Service Termination Date: \_\_\_\_\_

Maximum Capacity: \_\_\_\_\_ GJ/Day Minimum Capacity: \_\_\_\_\_ GJ/Day

Type of Service Requested: FT\_\_\_ FT-SN\_\_\_ SNB\_\_\_ FT-NR\_\_\_ STS-L\_\_\_  
STS\_\_\_

Allocated Posted Capacity: \_\_\_\_\_ GJ's/Day

**Service Applicant Contact**

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

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Telecopy: \_\_\_\_\_

Is this Bid Form conditional upon another bid form(s)?

**Yes** \_\_\_ **No** \_\_\_ If **Yes**, the Bid Form(s), upon which this Bid Form is conditional must be attached. Indicate number of bid forms attached: \_\_\_\_\_.

The Bid Form shall be subject to the General Terms and Conditions, the applicable Toll Schedule and List of Tolls of TransCanada's Tariff.

Dated this \_\_\_\_\_ Day of \_\_\_\_\_, \_\_\_\_\_.

**Service Applicant:**

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

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

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

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

---

Effective ~~Draft~~ Date: January 29 May 1, 2006

**Transportation Tariff**

**TransCanada PipeLines Limited**

TRANSPORTATION ACCESS PROCEDURE

**APPENDIX "B"**

**DAILY CAPACITY OPEN SEASON BID FORM**

System Segment: \_\_\_\_\_

The Delivery Point: \_\_\_\_\_ The Receipt Point: \_\_\_\_\_

Date of Commencement: \_\_\_\_\_ Service Termination Date: \_\_\_\_\_

Maximum Capacity: \_\_\_\_\_ GJ/Day Minimum Capacity: \_\_\_\_\_ GJ/Day

Type of Service Requested: FT \_\_\_\_\_ FT-SN SNB FT-NR \_\_\_\_\_ STS-L \_\_\_\_\_  
STS \_\_\_\_\_

Allocated Posted Capacity: \_\_\_\_\_ GJ's/Day

**Service Applicant Contact**

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

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Telecopy: \_\_\_\_\_

Is this Bid Form conditional upon another bid form(s)?

**Yes** \_\_\_ **No** \_\_\_ If **Yes**, the Bid Form(s), upon which this Bid Form is conditional must be attached. Indicate number of bid forms attached: \_\_\_\_\_.

Service Applicant agrees that:

1. This Bid Form once received by TransCanada shall be irrevocable and cannot be withdrawn or amended by Service Applicant unless such Daily Open Season Bid Form is subject to the condition that another Daily Open Season Bid Form as set out in the Daily Open Season Bid Form has been accepted and shall be subject to the General Terms and Conditions, the applicable Toll Schedule and List of Tolls of TransCanada's Tariff; and
2. Service Applicant shall execute the Transportation Contract within 1 Banking Day from the Day TransCanada provides such Transportation Contract.

Dated this \_\_\_\_\_ Day of \_\_\_\_\_, \_\_\_\_\_.

Service Applicant:

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

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

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

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

Effective ~~Draft~~ Date: January 29 May 1, 2006

# Transportation Tariff

# TransCanada PipeLines Limited

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TRANSPORTATION ACCESS PROCEDURE

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

**Appendix 6**  
**SNB Toll Schedule**

**SHORT NOTICE BALANCING SERVICE  
(SNB) TOLL SCHEDULE**

**INDEX**

<b>Section</b>		<b>Sheet No.</b>
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3.	APPLICABILITY AND CHARACTER OF SERVICE .....	2
4.	MONTHLY BILL.....	3
5.	DEMAND CHARGE ADJUSTMENTS.....	3
6.	RENEWAL RIGHTS .....	3
7.	ASSIGNMENT .....	4
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**Transportation Tariff**

**TransCanada PipeLines Limited**

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SNB TOLL SCHEDULE

**1. DEFINITIONS**

1.1 For the purposes of this SNB Toll Schedule the following terms shall be defined as follows:

- (a) "Combined Capacity" shall mean capacity available from TransCanada's gas transmission system and TransCanada's firm transportation entitlement on the Great Lakes Gas Transmission Company system, the Union Gas Limited system, and the Trans Quebec & Maritimes Pipeline Inc. system;
- (b) "Contract" shall mean an SNB Contract;
- (c) "Contract Quantity" shall mean the quantity authorized by TransCanada pursuant to the Transportation Access Procedures of TransCanada's Transportation Tariff for service pursuant to this SNB Toll Schedule which shall not exceed the Contract Demand of the FT-SN Contract;
- (d) "Contract Term" shall mean the term of the Contract which shall not to be less than 1 year in length;
- (e) "Deposit" shall mean the quantity expressed in GJs nominated by Shipper as a credit to Shipper's SNB Account;
- (f) "FT-SN Contract" shall mean Shipper's executed Firm Transportation Short Notice Contract that is identified in Exhibit "A" of the Contract;
- (g) "Renewal Option" shall have the meaning attributed to it in sub-section 6.1 herein;
- (h) "Renewal Term" shall have the meaning attributed to it in sub-section 6.1 herein;
- (i) "SNB Account" shall mean the account that holds the cumulative balance of Withdrawals and Deposits beginning from the Date of Commencement specified in the Contract where the absolute value of the cumulative balance of the SNB Account shall not at any time exceed 50% of the Contract Quantity;
- (j) "SNB Demand Toll" shall mean the applicable monthly demand toll as approved by the NEB and as set forth in the List of Tolls referred to in Section 8 herein; and
- (k) "Withdrawal" shall mean the quantity expressed in GJs nominated by Shipper as a debit from Shipper's SNB Account;

**2. AVAILABILITY**

2.1 Any Shipper shall be eligible to receive service pursuant to this SNB Toll Schedule provided that:



- (a) there is only 1 FT-SN Contract identified in Exhibit "A" of the Contract and such FT-SN Contract is not identified in any other Contract; and
- (b) Shipper:
  - (i) has entered into a Contract with TransCanada or, has obtained a 71(2) Order requiring TransCanada to transport gas for Shipper subject to the provisions of this Toll Schedule and to the terms and conditions contained in the 71(2) Order;
  - (ii) has a Contract Term or Renewal Term equal to or less than the remaining term of the FT-SN Contract;
  - (iii) has pipeline facilities interconnecting with TransCanada's facilities at the receipt and delivery point specified in the Contract, or has provided TransCanada with adequate assurances that arrangements have been made to have an authorized gas distribution or transmission company act as Shipper's agent in delivering to or receiving from TransCanada the gas to be received or delivered pursuant to this Toll Schedule; and
  - (iv) has provided TransCanada with financial assurances as required by TransCanada pursuant to Section XXIII of the General Terms and Conditions referred to in Section 8 hereof.

## 2.2 **Facilities Construction Policy**

In order to provide service pursuant to this SNB Toll Schedule, TransCanada utilizes its Combined Capacity. If a request for service pursuant to this SNB Toll Schedule requires an increase to the Combined Capacity, TransCanada is prepared to use all reasonable efforts to enable it to increase the Combined Capacity to the extent provided that:

- (a) there is a reasonable expectation of a long term requirement for the increase in the Combined Capacity;
- (b) the NEB approves the additional facilities and/or services necessary to increase the Combined Capacity; and
- (c) the availability provisions of sub-section 2.1 herein are satisfied.

## 3. **APPLICABILITY AND CHARACTER OF SERVICE**

- 3.1 Shipper shall be entitled to nominate a Deposit from the FT-SN Contract to Shipper's SNB Account or a Withdrawal from Shipper's SNB Account to the FT-SN Contract.

**Transportation Tariff**

**TransCanada PipeLines Limited**

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SNB TOLL SCHEDULE

3.2 Shipper shall only be entitled to nominate a Deposit or a Withdrawal through a nomination pursuant to the FT-SN Contract and such nomination will be in accordance with Section XXII of the General Terms and Conditions.

**4. MONTHLY BILL**

4.1 The monthly bill payable to TransCanada for service pursuant to this SNB Toll Schedule shall be the demand charge and shall be equal to the applicable monthly SNB Demand Toll multiplied by Shipper's Contract Quantity. The demand charge is payable by Shipper notwithstanding any failure by Shipper during such month, for any reason whatsoever including Force Majeure, to deliver or receive quantities of gas authorized by TransCanada.

**5. DEMAND CHARGE ADJUSTMENTS**

5.1 If during any Day, TransCanada curtails the Contract Quantity for any reason related solely to TransCanada's operations, including an event of force majeure occurring on any of the pipeline systems of TransCanada's Combined Capacity, then the monthly demand charge shall be reduced by an amount equal to the Daily Demand Toll for service pursuant to this SNB Toll Schedule multiplied by the amount the Contract Quantity has been curtailed by TransCanada on such Day.

**6. RENEWAL RIGHTS**

6.1 If TransCanada determines in its sole discretion that the Contract is serving a long term market, Shipper shall have the option to renew (the "Renewal Option") the Contract for a renewal term (the "Renewal Term") of no less than 1 year, subject to the following conditions:

- (a) the Contract Quantity for the Renewal Term shall not be greater than, but may be less than, the Contract Quantity set out in the Contract;
- (b) TransCanada receives written notice from Shipper of Shipper's election to exercise the Renewal Option which specifies the Renewal Term and Contract Quantity no less than 6 months prior to the termination of the Contract; and
- (c) Shipper supplies TransCanada at the time of such notice with evidence satisfactory to TransCanada that Shipper will meet the availability provisions of Section 2 herein.

TransCanada may accept late notice of Shipper's election to exercise the Renewal Option if TransCanada, in its sole discretion, determines that TransCanada will have the required capacity available after providing capacity for all of TransCanada's obligations pursuant to prior outstanding requests from Shipper and/or others, that such renewal will not adversely impact TransCanada's system operations and that all of the costs for providing this service will be covered by

TransCanada's tolls. Contracts may be revised as of the effective renewal date to adhere to the then current pro forma Intra Day Balancing Service Contract.

Shipper may exercise the Renewal Option each year provided the conditions set out in sub-section 6.1 and 6.2 herein have been satisfied.

6.2 Provided TransCanada has either received timely notice as provided in sub-section 6.1(a) herein from Shipper of Shipper's election to exercise the Renewal Option, or accepted late notice from Shipper of its election to exercise the Renewal Option, and provided that Shipper has met the availability provisions of Section 2 herein, the Contract shall be amended as follows:

- (a) the Contract Quantity set out in the Contract shall be revised to the level specified in Shipper's written notice, effective as of the commencement of the Renewal Term; and
- (b) the term of the Contract shall be extended to that specified in Shipper's written notice, effective as of the commencement of the Renewal Term.

## **7. ASSIGNMENT**

7.1 Any company which shall succeed by purchase, merger or consolidation to the properties, substantially or in entirety, of Shipper or of TransCanada, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under any Contract into which this Toll Schedule is incorporated and any related contracts. Further, either Shipper or TransCanada may, without relieving itself of its obligations under any Contract into which this Toll Schedule is incorporated (unless consented to by the other party which consent shall not be unreasonably withheld), assign any of its rights and obligations thereunder to another party. Nothing herein shall in any way prevent either party to such Contract from pledging or mortgaging its rights thereunder as security for its indebtedness. Such Contract shall be binding upon and shall inure to the benefit of the respective successors and assigns of the parties thereto. No assignment hereunder in respect of a service which has already resulted in a reduction of the affected distributor's Contract Quantity shall entitle such distributor to any further reduction in its Contract Quantity.

7.2 Any assignment by Shipper is subject to the following conditions:

- (a) the assignment shall be for the remaining term of the Contract;
- (b) Shipper shall provide TransCanada with at least 60 days written notice of such assignment prior to the requested assignment date, which shall be the first day of a calendar month;
- (c) the FT-SN Contract has also been assigned to the same assignee as the Contract; and

- (d) assignee and assignor shall execute TransCanada's assignment agreement.
- 7.3 Assignments at a discount negotiated between assignors and assignees are permitted, provided that the approved toll continues to be paid to TransCanada.
- 7.4 Prior to the effective date of any assignment of any Contract subject to sub-section XXIII(3)(b) of the General Terms and Conditions of TransCanada's Tariff, assignee shall as requested by TransCanada, execute an assignment of any related Financial Assurances Agreements (as defined in Section 4.4(c)(ii) of the Transportation Access Procedure) or execute a new Financial Assurances Agreement.
- 7.5 Save as herein provided, assignments of any Contracts into which this Toll Schedule is incorporated are expressly prohibited.

**8. MISCELLANEOUS PROVISIONS**

- 8.1 The General Terms and Conditions and the List of Tolls of TransCanada's Transportation Tariff, as amended from time to time, are applicable to this Toll Schedule and are hereby made a part hereof. If there is any conflict between the provisions of this Toll Schedule and the General Terms and Conditions, the provisions of this Toll Schedule shall prevail.
- 8.2 This Toll Schedule, the List of Tolls and the General Terms and Conditions are subject to the provisions of the National Energy Board Act or any other legislation passed in amendment thereof or substitution therefore.
- 8.3 This Toll Schedule together with the provisions of the General Terms and Conditions supersedes and replaces all previous Toll Schedules applicable to the Contract.

**Appendix 7**  
**SNB Contract**

**SHORT NOTICE BALANCING SERVICE CONTRACT**

THIS SHORT NOTICE BALANCING SERVICE CONTRACT, made as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

BETWEEN:

TRANSCANADA PIPELINES LIMITED  
a Canadian corporation  
("TransCanada")

OF THE FIRST PART

and

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
("Shipper")

OF THE SECOND PART

WITNESSES THAT:

WHEREAS TransCanada owns and operates a natural gas pipeline system extending from a point near the Alberta/Saskatchewan border where TransCanada's facilities interconnect with the facilities of NOVA Gas Transmission Ltd. easterly to the Province of Quebec with branch lines extending to various points on the Canada/United States of America International Border; and

WHEREAS Shipper has satisfied in full, or TransCanada has waived, each of the conditions precedent set out in sub-section 2.1 of TransCanada's Short Notice Balancing Toll Schedule referred to in Section 6 hereof (the "SNB Toll Schedule"); and

WHEREAS Shipper has requested and TransCanada has agreed to receive quantities of gas, that are delivered by Shipper or Shipper's agent to TransCanada to Pack the SNB Account or Draft quantities of gas that are received by Shipper or Shipper's agent from the SNB Account hereof pursuant to the terms and conditions of this Contract; and

**(Insert A)**

WHEREAS the quantities of gas delivered hereunder by Shipper or Shipper's agent to TransCanada are to be removed from the province of production of such gas by Shipper and/or Shipper's suppliers and/or its (their) designated agent(s) pursuant to valid and subsisting permits and/or such other authorizations in respect thereof.

NOW THEREFORE THIS CONTRACT WITNESSES THAT, in consideration of the covenants and agreement herein contained, the parties hereto covenant and agree as follows:

**ARTICLE I - COMMENCEMENT OF SERVICE**

(Insert B)

**ARTICLE II - CONTRACT QUANTITY**

2.1 Subject to the provisions of this Contract, the SNB Toll Schedule, the List of Tolls, and the General Terms and Conditions referred to in Section 6.1 hereof, TransCanada shall provide service hereunder for Shipper in respect of a quantity of gas which, from the Date of Commencement until the \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, shall not exceed \_\_\_\_\_ GJ (the "Contract Quantity").

**ARTICLE III - TOLLS**

3.1 Shipper shall pay for all service hereunder from the Date of Commencement in accordance with TransCanada's SNB Toll Schedule, List of Tolls, and General Terms and Conditions set out in TransCanada's Transportation Tariff as the same may be amended or approved from time to time by the National Energy Board ("NEB").

**ARTICLE IV - TERM OF CONTRACT**

4.1 This Contract shall be effective from the date hereof and shall continue until the \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**ARTICLE V - NOTICES**

5.1 Any notice, request, demand, statement or bill (for the purpose of this paragraph, collectively referred to as "Notice") to or upon the respective parties hereto shall be in writing and shall be directed as follows:

**IN THE CASE OF TRANSCANADA:** TransCanada PipeLines Limited

(i) mailing address: P.O. Box 1000  
Station M  
Calgary, Alberta  
T2P 4K5

(ii) delivery address: TransCanada Tower  
450 – 1<sup>st</sup> Street S.W.  
Calgary, Alberta

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SNB CONTRACT

T2P 5H1

- (iii) nominations: Attention: Director, Customer Service  
Telecopy: \_\_\_\_\_
- (iv) bills: Attention: Manager, Nominations & Allocations  
Telecopy: \_\_\_\_\_
- (v) other matters: Attention: Director, Customer Service  
Telecopy: \_\_\_\_\_

**IN THE CASE OF SHIPPER:**

- (i) mailing address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- (ii) delivery address: \_\_\_\_\_  
\_\_\_\_\_

- (iii) nominations: Attention: \_\_\_\_\_  
Telecopy: \_\_\_\_\_
- (iv) bills: Attention: \_\_\_\_\_  
Telecopy: \_\_\_\_\_  
E-mail address: \_\_\_\_\_
- (v) other matters: Attention: \_\_\_\_\_  
Telecopy: \_\_\_\_\_

Notice may be given by telecopier or other telecommunication device and any such Notice shall be deemed to be given four (4) hours after transmission. Notice may also be given by personal delivery or by courier and any such Notice shall be deemed to be given at the time of delivery. Any Notice may also be given by prepaid mail and any such Notice shall be deemed to be given four (4) days after mailing, Saturdays, Sundays and statutory holidays excepted. In the event regular mail service, courier service, telecopier or other telecommunication service shall be interrupted by a cause beyond the control of the parties hereto, then the party sending the Notice shall utilize any service that has not been so interrupted to deliver such Notice. Each party shall provide Notice to the other of any change of address for the purposes hereof. Any Notice may also be given by telephone followed immediately by personal delivery, courier, prepaid mail, telecopier or other telecommunication, and any Notice so given shall be deemed to be given as of the date and time of the telephone notice.

**ARTICLE VI - MISCELLANEOUS PROVISIONS**



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SNB CONTRACT

6.1 The SNB Toll Schedule, the List of Tolls, and the General Terms and Conditions set out in TransCanada's Transportation Tariff as amended or approved from time to time by the NEB are all by reference made a part of this Contract and operations hereunder shall, in addition to the terms and conditions of this Contract, be subject to the provisions thereof. TransCanada shall notify Shipper at any time that TransCanada files with the NEB revisions to the SNB Toll Schedule, the List of Tolls, and/or the General Terms and Conditions (the "Revisions") and shall provide Shipper with a copy of the Revisions.

6.2 The headings used throughout this Contract, the SNB Toll Schedule, the List of Tolls, and the General Terms and Conditions are inserted for convenience of reference only and are not to be considered or taken into account in construing the terms or provisions thereof nor to be deemed in any way to qualify, modify or explain the effect of any such provisions or terms.

6.3 This Contract shall be construed and applied, and be subject to the laws of the Province of Alberta, and, when applicable, the laws of Canada, and shall be subject to the rules, regulations and orders of any regulatory or legislative authority having jurisdiction.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the date first above written.

TRANSCANADA PIPELINES LIMITED

per \_\_\_\_\_

per \_\_\_\_\_

.....

per \_\_\_\_\_

per \_\_\_\_\_

**EXHIBIT "A"**

This is EXHIBIT "A" to the SHORT NOTICE BALANCING SERVICE CONTRACT made as of the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_ between TRANSCANADA PIPELINES LIMITED ("TransCanada") and \_\_\_\_\_. ("Shipper")

This SNB Contract is linked to is the FT-SN Contract dated \_\_\_\_\_ between TransCanada and Shipper \_\_\_\_\_ and identified by the TransCanada contract identifier as \_\_\_\_\_

Such FT-SN Contract has a Contract Demand of \_\_\_\_\_ GJ/Day

The Delivery Point for such FT-SN Contract is the point of interconnection between the pipeline facilities of TransCanada and \_\_\_\_\_ which is located at:

The Receipt Point for such FT-SN Contract is the point of interconnection between the pipeline facilities of TransCanada and \_\_\_\_\_ which is located at:

**DIFFERENT CONTRACT VERSIONS**

**I For a Short Notice Balancing Service Contract Executed Following Completion of a Precedent Agreement:**

**Insert A**

WHEREAS the parties hereto have heretofore entered into an agreement dated as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, (the "Precedent Agreement") which bound them, subject to the fulfillment or waiver of the conditions precedent therein set forth, to enter into a Contract substantially upon the terms and conditions hereinafter described; and

WHEREAS the conditions precedent of the Precedent Agreement have been satisfied or waived; and

**Insert B**

1.1 TransCanada shall use reasonable efforts to have the additional facilities (and/or obtain such arrangements on other gas transmission systems) as may be required to effect the provision of service hereunder (the "Necessary Capacity") in place by the \_\_\_\_ day of \_\_\_\_\_, 20\_\_ or as soon as possible thereafter. TransCanada's ability to provide service by the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, will be subject to, inter alia,

(a) the timing of receipt by Shipper and TransCanada of the authorizations referred to in paragraphs 1 and 2 of the Precedent Agreement which are required prior to the commencement of construction of TransCanada's facilities and the timing of the commencement of the services required by TransCanada (if any) on the systems of Great Lakes Gas Transmission Limited Partnership and Union Gas Limited; and

(b) the lead time required for the acquisition, construction and installation of those facilities required by TransCanada.

TransCanada shall use reasonable efforts to provide Shipper with ten (10) days advance Notice of the anticipated availability of the Necessary Capacity (the "Advance Notice"). TransCanada shall give Shipper Notice of the actual date of availability of the Necessary Capacity ("TransCanada's Notice"), and service hereunder shall not commence prior to the actual date of availability of the Necessary Capacity.

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SNB CONTRACT

1.2 The date of commencement of service hereunder (the "Date of Commencement") shall be the earlier of:

- (a) the date for which Shipper first nominates and TransCanada authorizes service hereunder; or
- (b) the tenth (10th) day following the day on which Shipper received TransCanada's Notice;

PROVIDED that Shipper shall not be obligated to a Date of Commencement which is earlier than the \_\_\_\_ day of \_\_\_\_\_, 20\_\_., unless mutually agreed upon by both parties.

**II Short Notice Balancing Service Contract Not Following a Precedent Agreement:**

**Insert A**

(nothing)

**Insert B**

1.1 The date of commencement of service hereunder (the "Date of Commencement") shall be the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

## **Appendix 8**

### **Filing Manual Requirements**

### Chapter 3 – Common Information Requirements

Filing #	Filing Requirement	References if in Application	Explanation if not in Application
<b>3.1 Action Sought by Applicant</b>			
1.	Requirements of s.15 of the Rules.	Application	
<b>3.2 Application or Project Purpose</b>			
1.	Purpose of the proposed project.	Application, as well as Appendix 1, Section 1	
<b>3.3 Consultation</b>			
<b>3.3.1 Principles and Goals of Consultation</b>			
1.	The corporate policy or vision.		Not Applicable
2.	The principles and goals of consultation for the project.		Not Applicable
3.	A copy of the Aboriginal protocol and copies of policies and principles for collecting traditional use information, if available.		Not Applicable
<b>3.3.2 Design of Consultation Program</b>			
1.	The design of the consultation program and the factors that influenced the design.		Not Applicable
<b>3.3.3 Implementing a Consultation Program</b>			
1.	The outcomes of the consultation program for the project.		Not Applicable
<b>3.3.4 Justification of Consultation not Undertaken</b>			
2.	The application provides justification for why the applicant has determined that a consultation program is not required for the project.		Not Applicable
<b>3.4 Notification of Commercial Third Parties</b>			
1.	Confirm that third parties were notified.	Appendix 1, Section 1.0. This filing is being served on the RH-2-2004 Interested Parties, the Tolls Task Force, and the Mainline Customers.	

<b>Filing #</b>	<b>Filing Requirement</b>	<b>References if in Application</b>	<b>Explanation if not in Application</b>
2.	Details regarding the concerns of third parties.		Not Applicable, any discussions of the Tolls Task Force are confidential as per the Without Prejudice clause of the Tolls Task Force Procedures.
3.	List the self-identified interested third parties and confirm they have been notified.		Not Applicable
4.	If notification of third parties is considered unnecessary, an explanation to this effect.		Not Applicable

### Guide P – Tolls and Tariffs

Filing #	Filing Requirement	References if in Application	Explanation if not in Application
<b>P.1 Cost of Service</b>			
1.	Description of steps taken with parties to discuss issues and attempts to reach negotiated settlement.	Appendix 1, Section 1.0	
2.	<p>Summary schedule of total cost of service, with amounts for the base, current and test years and year-to-year changes for following cost components:</p> <ul style="list-style-type: none"> <li>• Operating, maintenance &amp; administrative</li> <li>• Transmission by others</li> <li>• Depreciation and amortization of plant</li> <li>• Income taxes</li> <li>• Taxes other than income taxes</li>   <li>• Miscellaneous revenues</li> <li>• Return on base rate</li> <li>• Deferred items</li> <li>• Other items</li> </ul>		Not applicable
3.	<p>Analysis of each cost component listed above, by major cost category, with explanations for significant year-to-year changes.</p> <p>Analysis of cases where costs result from an allocation between regulated and non-regulated business entities.</p> <p>Description of the method used to derive the exchange rates for foreign currencies.</p> <p>Details of transactions with affiliates and evidence of reasonableness</p>		Not applicable



Filing #	Filing Requirement	References if in Application	Explanation if not in Application
4.	Schedules to show derivation of monthly deferral account balances, including carrying charges and which amounts are actual and which are estimated.		Not applicable
5.	Schedule reconciling additions to plant accounts with additions to income tax CCA for base, current and test years.		Not applicable
6.	Schedule detailing changes in the deferred tax balance for base, current and test years.		Not applicable
<b>P.2 Rate Base</b>			
1.	Detailed schedules for rate base with assumptions and calculations for additions, retirements, cash working capital.		Not applicable
<b>P. 3 Financial Statements</b>			
1.	Current annual report to shareholders. Current corporate annual report of parent if applicable.		Not applicable
2.	Financial statements for base year plus explanation of major assumptions used to prepare statements.		Not applicable
<b>P. 4 Cost of Capital</b>			
1.	Establish the applicant's sources of capital invested in rate base, construction work in progress and gas plant under construction, and the justification for the cost rates which the applicant is seeking to include in its cost of service.		Not applicable
2.	A summary schedule for the current and test years, based on 13-point or 24-point averages, showing the applicant's projected outstanding common equity and rates of return thereon, projected outstanding balances and related projected weighted average cost for each other class of capital and derivation of the overall rates of return.		Not applicable

Filing #	Filing Requirement	References if in Application	Explanation if not in Application
3.	An analysis of the weighted average cost of debt capital for the test year showing the projected cost of each debt issue, including borrowings from financial institutions and a supporting schedule for each debt issue.		Not applicable
4.	For any unfunded debt: <ul style="list-style-type: none"> <li>• A description of the applicant's plans to finance it, including details of the timing, size and type of each issue</li> <li>• Evidence supporting the projected cost rate in the applicant's financing plan, the projected short-term debt rate and the spread implied in the applicant's projected unfunded debt rate.</li> </ul>		Not applicable
5.	Independent forecasts for the test year of yields on 10 and 30 year long-term Government of Canada bonds and Treasury Bills with a detailed discussion of the degree of reliance the applicant has placed on them in making its forecasts.		Not applicable
6.	Applicant's most recent bond rating reports issued by the Canadian Bond Rating Service, the Dominion Bond Rating Service, Standard and Poor's and Moody's for purposes of assessing the applicant's debt.		Not applicable
7.	An analysis of the weighted average cost of preferred share capital for the test year showing the projected cost of each issue and a supporting schedule for each issue.		Not applicable
8.	A detailed calculation of the 13-point or 24-point average amount of common equity projected for the test year.		Not applicable

Filing #	Filing Requirement	References if in Application	Explanation if not in Application
9.	A schedule in tabular form for each issue of common shares in the last five fiscal years.		Not applicable
10.	A schedule in tabular form with respect to common equity of the applicant for each of the last five fiscal years.		Not applicable
11.	Where an application is to establish or change capital structure, include a detailed discussion of business risks including market, supply, operating and physical and regulatory and political risks.		Not applicable
12.	<p>If a significant part of the applicant's capital is obtained from an affiliated company as defined in the Regulations, information with respect to the debt, preferred share and common share capital of that affiliated company, and</p> <ul style="list-style-type: none"> <li>• A copy of the latest prospectus issued by the affiliated company</li> <li>• A chart showing the relationship between the applicant and the affiliated company in terms of share ownership and financial obligations</li> <li>• Information in respect of the affiliated company as listed in requirement 10.</li> </ul>		Not applicable
13.	Where applicable, a thorough discussion of the extent to which the consolidated capital structure is relevant to the determination of a deemed capital structure for the Board-regulated operations of the pipeline, including supporting information.		Not applicable

Filing #	Filing Requirement	References if in Application	Explanation if not in Application
<b>P.5 Tolls and Tariffs</b>			
1.	Concise description of pipeline system & operations, including system map showing toll zones and delivery areas.	Attachment P.5-1 to Appendix 8.	
2.	Describe applied-for toll design, with rationale for any proposed changes.		Not applicable
3.	Comparative schedule of test year revenues for each class/type of service under existing and proposed tolls.		Not applicable
4.	Describe any tariff revisions with rationale for revisions and comparative schedules showing proposed changes to existing tariff sheets.	Tariff revisions explained in Appendix 1. Tariff revisions provided in Appendices 2 through 7.	

1 **PIPELINE SYSTEM AND OPERATIONS**

2 TransCanada began deliveries of natural gas to Eastern Canada on October 27, 1958. The high-  
3 pressure gas system extends from the Province of Alberta across the Provinces of Saskatchewan,  
4 Manitoba, and Ontario and through a portion of the Province of Quebec. TransCanada also  
5 transports natural gas from Canada into the United States of America.

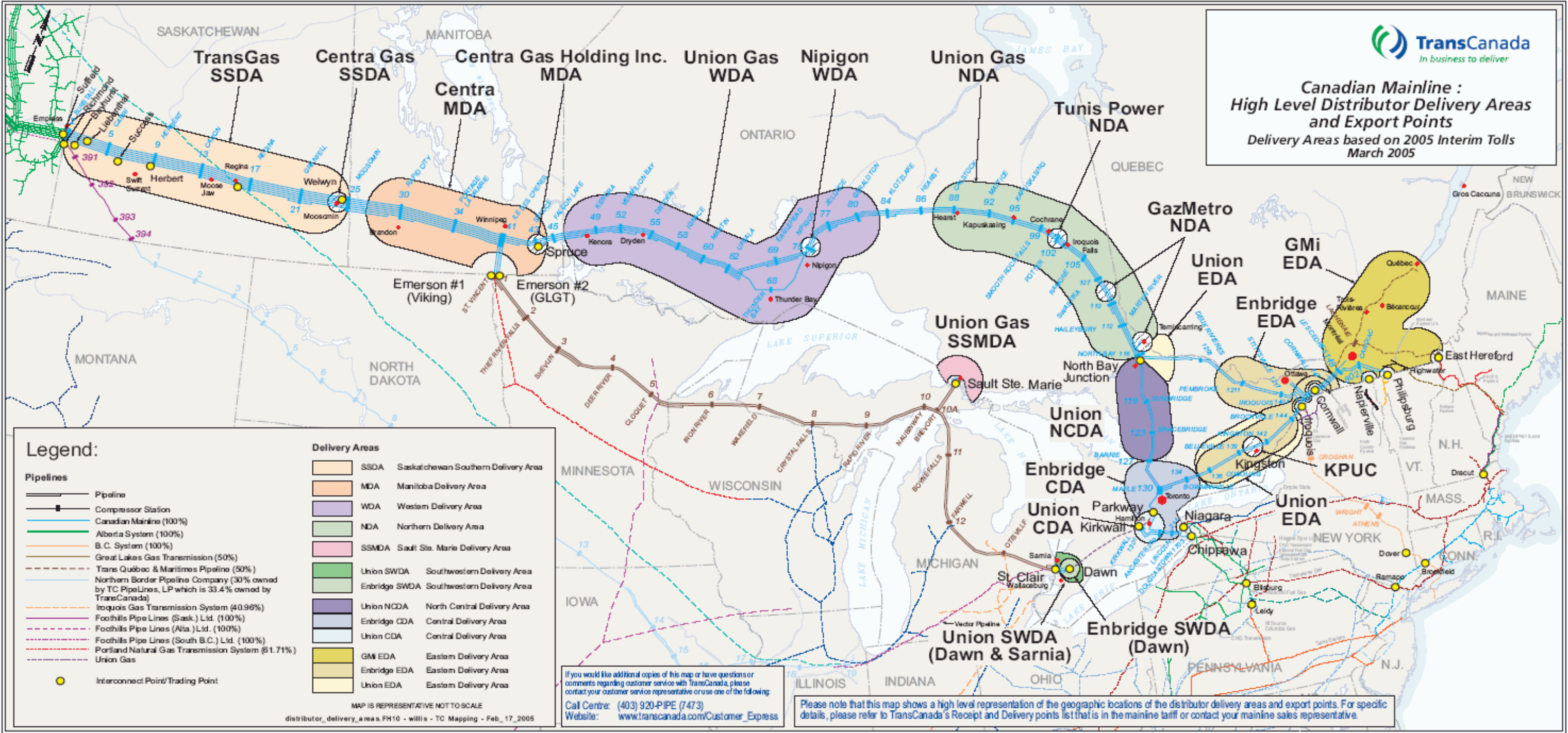
6 On December 31, 2005, the Mainline consisted of approximately 2,153 km of 1,219 mm O.D.  
7 pipe, 3,468 km of 1,067 mm O.D. pipe, 3,681 km of 914 mm O.D. pipe, 1,884 km of 864 mm  
8 O.D. pipe, 2,150 km of 762 mm O.D. pipe and 1,562 km of pipe of lesser diameters. In addition  
9 there are 2,321,400 kilowatts of compression installed at 54 compressor stations. The delivery  
10 capacity of the Mainline system can be expanded by the construction of loop line and/or by the  
11 installation of additional compression facilities.

12 TransCanada delivers gas along the route of the Mainline system to distributors at sales meter  
13 stations in the Provinces of Saskatchewan, Manitoba, Ontario, and Quebec and for export at  
14 various points on the international border.

15 A system map is provided below.



**Canadian Mainline :  
High Level Distributor Delivery Areas  
and Export Points**  
Delivery Areas based on 2005 Interim Tolls  
March 2005



**Legend:**

- Pipelines**
- Pipeline
  - Compressor Station
  - Canadian Mainline (100%)
  - Alberta System (100%)
  - B.C. System (100%)
  - Great Lakes Gas Transmission (50%)
  - Trans Québec & Maritimes Pipeline (50%)
  - Northern Border Pipeline Company (30% owned by TC PipeLines, LP which is 33.4% owned by TransCanada)
  - Iroquois Gas Transmission System (40.96%)
  - Foothills Pipe Lines (Sask.) Ltd. (100%)
  - Foothills Pipe Lines (Alta.) Ltd. (100%)
  - Foothills Pipe Lines (South B.C.) Ltd. (100%)
  - Portland Natural Gas Transmission System (81.71%)
  - Union Gas
- Interconnect Point/Trading Point

**Delivery Areas**

SSA	Saskatchewan Southern Delivery Area
MDA	Manitoba Delivery Area
WDA	Western Delivery Area
NDA	Northern Delivery Area
SSMDA	Sault Ste. Marie Delivery Area
Union SWDA	Southwestern Delivery Area
Enbridge SWDA	Southwestern Delivery Area
Union NCDA	North Central Delivery Area
Enbridge CDA	Central Delivery Area
Union CDA	Central Delivery Area
GM EDA	Eastern Delivery Area
Enbridge EDA	Eastern Delivery Area
Union EDA	Eastern Delivery Area

MAP IS REPRESENTATIVE NOT TO SCALE  
distributor\_delivery\_areas.FH10 - willis - TC Mapping - Feb\_17\_2005

If you would like additional copies of this map or have questions or comments regarding customer service with TransCanada, please contact your customer service representative or use one of the following:  
Call Centre: (403) 920-PIPE (7473)  
Website: [www.transcanada.com/Custom\\_Express](http://www.transcanada.com/Custom_Express)

Please note that this map shows a high level representation of the geographic locations of the distributor delivery areas and export points. For specific details, please refer to TransCanada's Receipt and Delivery points list that is in the mainline tariff or contact your mainline sales representative.