

FIRM CAPACITY ON UPSTREAM TRANSPORTATION
SUPPLEMENTAL EVIDENCE

1. The purpose of this evidence is to provide additional information to the Board on the issue of matching firm deliveries behind the city gate with firm upstream transportation to protect the reliability of the distribution system under peak demand conditions and to further clarify the parameters that will be applied by the Company in implementing the tariff provision described at Exhibit C, Tab 1, Schedule 8, paragraph 3. The additional information pertains to system reliability issues, options that were considered and discarded, description of Ontario transportation services used by small and large volume users and an implementation plan.

2. EGD originally proposed wording for required revisions to the Rate Handbook arising from this issue, shown at Exhibit C, Tab 1, Schedule 4, Rate Handbook Part IV terms and Conditions – Direct Purchase Arrangements, Section B – Obligation to Deliver. We have subsequently revised this Rate Handbook wording to align with this updated evidence, as follows:

Unless otherwise authorized by the Company in writing, each Applicant taking service pursuant to an agent type Gas Delivery Agreement must meet its obligation to deliver gas to the Company on any given day by Firm Transportation for at least 90% of the Applicant's MDV. The Applicant must provide to the Company, by November 1 of each year that the Applicant is taking service, or such other date that the Company may reasonably require, sufficient proof of the Applicant's Firm Transportation arrangements.

3. EGD believes that the decline in firm transport to the franchise could pose a significant risk to distribution system reliability. This risk impacts all customers since a failure to deliver adequate supplies to the city gate could result in loss of system pressure and system outages could follow. Gas system outages would cause economic harm for customers and also expose customers to potential physical harm. A solution that increases firm upstream transport to the franchise and

Witnesses: M. Giridhar
K. Irani

reduces system reliability risk is warranted for the upcoming winter and for this reason is proposed for inclusion in EGD Rate Handbook, effective November 1, 2009. EGD is proposing to direct its efforts to increase firm transport to the franchise predominantly to the smaller volume customers who receive their supply and transport from agents/marketers/brokers. These customers already pay for firm upstream transport (albeit reflective of EGD's firm transport portfolio rather than their agents' transport arrangements) through their Board approved delivery charges.

4. EGD believes that the use of non firm services by firm large volume users also poses a distribution system reliability risk. As noted at Exhibit C, Tab 1, Schedule 8, paragraph 4, the Company proposes that the use of non firm upstream services to meet firm delivery obligations may provide cost savings to an individual shipper, while imposing the risk of reduced system reliability on all customers. However, given that these customers are significantly fewer in number than small volume customers and are amenable to curtailment in the event that they fail to deliver, EGD has a better ability to manage system reliability risks with this group of customers. EGD proposes to continue monitoring the level of firm transport arrangements to the franchise area and provide updates in the 2010 and 2011 rate change adjustment process. EGD may propose changes to its tariff, if warranted. These may include expanding the requirement to hold firm transport, or instituting a chargeable standby/back stopping service for large volume customers that may require an increase in EGD's firm transport capacity.

System Reliability Concerns

5. The Company has updated its original analysis of TCPL's Index of Customers for November 1, 2008. The Index of Customers identifies firm transportation deliveries

Witnesses: M. Giridhar
K. Irani

by customer to EGD's franchise. EGD's analysis for 2008 shows a reduction of firm deliveries by direct shippers to its franchise from approximately 64,000 GJ/d, or 12% of corresponding daily delivery obligations in 2007 to approximately 36,000 GJ/d, or 8% of daily delivery obligations in November 2008. TransCanada's Tariff language on Impaired Deliveries¹ addresses priority of service under constrained operating conditions and is attached as Appendix 1.

6. For the period January 13th to the 15th, 2009 demand for transportation service on the TransCanada Mainline exceeded available capacity. Shippers with Firm Service on TransCanada received their full contracted requirements. Shippers attempting to transport gas using IT or Diversion service, were in many cases, prorated or restricted. While all direct shipper gas was ultimately delivered to EGD, a portion of the supplies were only confirmed after the timely nomination window. EGD views such actual transportation capacity constraints as further highlighting risk to distribution system reliability from the extensive use of non firm upstream transport. Since time is of the essence in addressing supply shortfall situations, the fact that supply was ultimately made up within the gas day does not provide assurance that the necessary physical supply will always be available without firm upstream capacity commitments. In the instance above, if the shortfall had been significant, EGD would not have been able to wait until a subsequent intraday nomination window to put a supply make-up or customer curtailment plan into action.
7. EGD understands that shippers faced with the prospect of IT capacity restrictions met their delivery obligations on January 13, 14 and 15th through a combination of

¹ TransCanada Pipelines Limited Transportation Tariff General Terms and Conditions Section XV, Sheet No. 23, Effective date February 1, 2009.

short term firm transport (for a minimum of one week) and diversions off firm contracts held to downstream export points.

8. The option of firming up transport on a short term basis, sometimes for no more than one week, based on forecast weather or known operating constraints may not work because the availability of short term firm transportation during a constraint is far less assured than firm transport that is held year round and is renewable.
9. Secondly, EGD understands from TCPL that on its Mainline system, the classification of a diversion request as upstream or downstream of a firm delivery location is not necessarily constant and may vary depending on the location of system bottlenecks. Thus, diversion from a given export point, i.e., Niagara or Iroquois may be viewed as firm or interruptible depending on system operating conditions. Also, assuming that an upstream diversion is possible, a supplier or agent's ability to divert supply may be limited because in some downstream jurisdictions, utilities have the right of recalling firm capacity released to agent/suppliers based on demand or operating conditions. Finally, despite the best intentions, there is no guarantee that a shipper would be able to bear the financial consequences of diverting gas from one firm location to another, particularly if the penalties for failure to deliver at the primary delivery location are steep. To the extent that regulators in other downstream jurisdictions in Eastern Canada and US impose firm transport requirements, recallable rights for utilities and stiff penalties for non deliveries, the risk to distribution system reliability from non firm transport to the EGD franchise area could increase.
10. For the reasons above, EGD believes that the strategy of using IT, diversions and short term firm transport by direct shippers does not provide EGD with assurance

Witnesses: M. Giridhar
K. Irani

that firm delivery obligations will be met by direct shippers under peak demand and or constrained pipeline operating conditions.

11. A gas system outage resulting from a supply shortfall requires the execution of an elaborate and lengthy system restoration plan. First, a physical isolation of the affected portion will be required, followed by a manual shut-down of all the meters in the area to prevent unsafe conditions for customers and to permit the system to be re-pressurized. Once system pressure is restored, service must be restored to each customer. This involves an inspection and relight of the pilot lights of all gas equipment in probable low temperature conditions and high customer demand. The direct cost for the utility is significant because of the number of trips to each customer's premise and the tasks involved in restoring service to the customer. For example, an outage effecting 100,000 customers or approximately 5% of all of the Company's customers could have a restoration cost of \$12 million, to cover the two trips and associated tasks at \$120 per customer location. The economic cost to customers is likely far more than the costs to the utility taking into consideration loss of business, damages to inventory and equipment and so on. For residential customers, the costs would include the damage of freezing and the potential need for customer relocation.
12. In extreme situations, EGD's ability to institute curtailment in a timely manner could affect TransCanada's ability to meet firm downstream obligations.

Options Considered and Discarded

13. As noted in Exhibit C, Tab 1, Schedule 9, pages 8 to 11, most US jurisdictions which permit direct purchase arrangements for small volume customers require a mandatory assignment of LDC held transport to their agents/marketers, frequently

Witnesses: M. Giridhar
K. Irani

with recallable rights. Appendix 2 includes representative tariff language from a US LDC².

14. While EGD agrees that such requirements may provide the greatest assurance that firm delivery obligations are met, EGD is not proposing mandatory assignment at this time. Mandatory assignment and vertical slice methodology for upstream transport would require significant changes to EGD's systems and operating processes and to contracting practices for EGD's direct purchase customers. Such a methodology, even if deemed warranted would not be implementable in the timeframe proposed.
15. EGD also considered whether its current approach of levying a penalty of 150% of the price of gas for failure to deliver could be strengthened to eliminate system reliability risk. Since penalties are event based, and the economic decision to hold firm transport to avoid penalty is based on probabilities, EGD does not believe that a penalty can be designed to be as effective as actually requiring a customer/agent to hold firm transport to the franchise. In fact, the only potentially effective penalty would be the requirement to pay the equivalent of the firm transport charge. Thus, it is preferable for customers to work in the market to obtain firm rights as needed to satisfy the reliability concerns of the system.
16. Finally, EGD also considered whether it should design a firm standby service that would be mandatory for direct shippers to take. Such a solution may be necessary if EGD is made aware that that there are significant barriers to holding firm transport for a subset or all direct purchase customers due to contracting or financial risk

² Connecticut Natural Gas Corporation Rate CR (capacity release service) Effective 11/1/07 Supersedes: 11/1/06
Page 83

Witnesses: M. Giridhar
K. Irani

reasons. EGD believes that this is not true of all direct purchase arrangements and is willing to consider such a service in a subsequent proceeding based on a needs assessment.

Review of Ontario Transportation Service ("OTS")

17. Direct Purchase bundled customers who contract for Ontario Transportation service with EGD have the following transportation and billing options:

- a) OTS arrangement (predominantly large volume), whereby the customer enters into transportation arrangements with TCPL, supply and transport with third parties, or take a temporary assignment from EGD; and
- b) OTS-ABC arrangement (predominantly small volume), whereby an energy marketer pools customers together and signs a GDAR Service Agreement with EGD. The agent may enter into a transportation arrangement with TCPL, supply and transport with third parties, or take a temporary assignment from EGD. EGD remits the gas supply charge that appears on the customer's bill to the energy marketer based on the contracted price between the energy marketer and the customer. EGD also remits the equivalent of TCPL long haul FT tolls to the marketer for the deliveries underpinning the arrangement.

18. The table below summarizes the transport arrangement and costs borne for upstream transport under OTS and OTS-ABC arrangements.

Witnesses: M. Giridhar
K. Irani

EGD OTS Bundled Customers
Profile and Billing Options
November 1, 2008

		<u>OTS</u>	<u>OTS-ABC</u>
1	Daily delivery (Gj/d)	~ 230,000	~270,000
2	Customers	~3,000	~442,000
3	Upstream transport arrangement	Mostly non-firm*	Mostly non-firm*
4	Upstream transport cost	Customer contracted rate**	Agent contracted rate**
5	Cost to customer/agent a) EGD charge to customer b) EGD remittance to agent c) Net cost to customer d) Net cost to agent <u>Notes:</u> * TCPL Index of Customers + FT assignments ** presumably less than FT toll (Brackets) denote credit payment	-Customer contracted rate	- wt. avg. cost of EGD FT -(TCPL FT Tolls) - (wt. avg. cost of EGD FT) - Agent contracted rate – TCPL FT tolls

19. The salient features of the two arrangements are shown in the table above.

20. Rows 1 and 2 show that OTS and OTS-ABC arrangements reflect a 45/55 split in volume and a 1/99 split in customer numbers. Small volume customers predominantly use OTS-ABC arrangements, while the largest customers predominantly use OTS arrangements. The implication of this is that a failure to deliver in an OTS arrangement allows EGD to at least partially direct curtailment measures to the customers causing the supply failure.

Witnesses: M. Giridhar
K. Irani

21. Row 3 indicates that both arrangements include some assignments of TCPL long haul capacity, some firm capacity with TCPL but are increasingly reliant on non firm transport.
22. Row 4 indicates that the cost of the upstream arrangement is borne by the customer in the case of OTS arrangements and agent/marketer in the case of OTS-ABC arrangement.
23. Row 5 shows that the net cost of transport for the OTS-ABC customer reflects EGD's weighted average cost of firm transport.
24. Based on the table EGD concludes that the risk to distribution system reliability is best addressed by requiring agents operating under OTS-ABC arrangements to procure firm transport on behalf of their customers. Small volume customers taking service under these arrangements currently pay for firm upstream transport under their OEB delivery charges.
25. The implementation of the new CIS system will alter the current arrangements in place for OTS-ABC customers. These customers will be billed the transportation rate as negotiated and contracted with their agent/marketer, as opposed to paying a unit charge based on the cost of EGD's firm transport portfolio. This amount will then be remitted to the agent in place of the TCPL long haul FT toll. This added functionality will provide the agent/marketer with the ability to recover the cost of its firm transport from its customers.

Witnesses: M. Giridhar
K. Irani

Implementation Plan

26. EGD proposes the following parameters for implementing its tariff provision:

- All OTS-ABC arrangements will be required to demonstrate firm transport arrangement equal to 90% of the mean daily volume obligation underpinning the arrangement annually on November 1. The 90% requirement allows the agent marketer to underpin most of their delivery obligation with firm transportation, while providing flexibility to deal with customer migration after contract renewal.

27. The agent /marketer will have the following options:

- a) Contract for firm transport independently and provide proof of transport with upstream pipeline. Proof shall constitute a pipeline contract # in their name to the franchise city gate.
- b) Request an assignment of EGD long haul TCPL capacity. EGD will then acquire the transport on their behalf.

28. The benefits of EGD's proposed implementation plan are the following:

- The proposal addresses EGD's system reliability concerns by increasing firm transport to the franchise by an estimated 200,000 GJ/d for the upcoming winter. As a result, the percentage of firm transport underpinning direct shipper delivery obligations will increase from 8% to 52%. Since direct purchase contracts do not all renew on November 1, 2009, to the extent that EGD feels that there may be a shortfall in firm transport to meet demand, EGD may seek to contract for some level of firm transport for subsequent temporary assignment prior to the winter of 2009/2010.

Witnesses: M. Giridhar
K. Irani

- The proposal directs the requirement to marketers and agents for small volume customers, as the number of these customers is large. Hence EGD has limited ability to take steps to maintain safety and reliability of the gas distribution system in case of non-delivery due to the use of non-firm transport by the customer's agent/marketer. These customers are most likely to be adversely impacted by the system reliability consequences of use of non firm transport.
- The proposal does not require large volume customers to contract for firm transport. To the extent that non firm transport arrangements by large volume customers result in system integrity issues, EGD will make every effort to direct curtailment to those customers who caused the supply failure.
- However, EGD realizes that given the amount of deliveries under OTS arrangements, its proposal does not entirely address system reliability risks arising from non firm transport to the franchise. EGD proposes to continue monitoring the level of firm transport arrangements to the franchise area and provide updates in the 2010 and 2011 rate change adjustment process. EGD may propose further modifications to its tariff provisions if warranted. These may include expanding the requirement to hold firm transport to OTS arrangements, or instituting a chargeable standby/back stopping service for large volume customers that may require an increase in EGD's firm transport capacity.