

Reference:

Section 5.0, Table 5.3-3, page 11 of 11, Section 6.1, Figure 6.1-1

Preamble:

IGCAA wants to understand the cost implications of the Alternate Access program.

Request:

What has the cost of the Alternate Access program been since its inception? Please set out the revenue foregone for each year that the program has been in place — i.e. compare there the revenue that would have been received without the program assuming that the same gas flow pattern occurred, to the revenue received with the program.

Response:

The costs associated with the Alternate Access program have been minimal.

NGTL does not believe that the same gas flow pattern would have occurred without the Alternate Access program. However, based on this assumption, the following table indicates the additional IT-D revenue that would have been generated. As IT-D revenue serves to lower the Firm Transportation rate, without Alternate Access, the Firm Transportation rates would have been lower.

Year	1997 ¹	1998	1999	2000	2001	2002	2003 ²	2004 ^{3,2}	Total
Revenue (\$million)	1.5	2.4	1.3	4.4	11.6	46.6	66.8 <u>72.9</u>	69.9 <u>69.6</u>	204.6 <u>210.3</u>

1. Revenues are from May to December.

~~2. Revenues are actuals from January to September and forecasted from October to December.~~

~~3.2.~~ Revenues are forecasted.

IGCAA-NGTL-001.2

Reference:

Section 5.0, Table 5.3-3, page 11 of 11, Section 6.1, Figure 6.1-1

Preamble:

IGCAA wants to understand the cost implications of the Alternate Access program.

Request:

What is estimated cost of the Alternate Access program for 2003 and 2004?

Response:

Please refer to the response to IGCAA-NGTL-001.1.

Reference:

Section 5.0, Table 5.3-3, page 11 of 11, Section 6.1, Figure 6.1-1

Preamble:

IGCAA wants to understand the cost implications of the Alternate Access program.

Request:

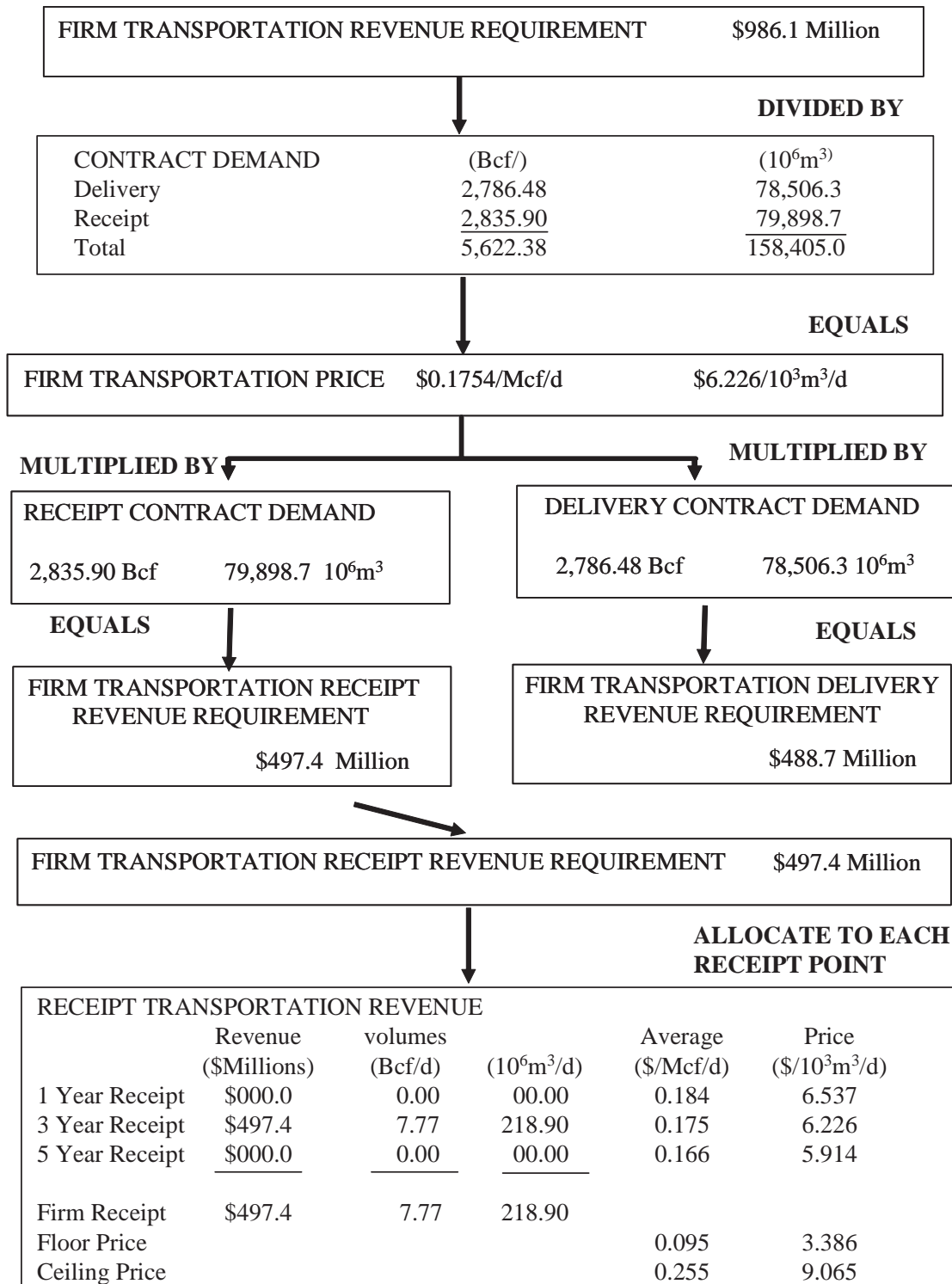
In Section 6.1, page 2 of 33, Figure 6.1-1, what would the revenues be without an adjustment to account for Alternate Access?

Response:

[As per the February 2004 Update, P](#)lease refer to the [revised](#) illustrative rate calculation that follows.

2004 Illustrative Rate Calculation – Without Alternate Access

TOTAL REVENUE REQUIREMENT		\$1,355.8 Million	
		↓	
		MINUS	
NON TRANSPORTATION REVENUE		\$Million	
FCS		\$	5.4
OS		\$	1.1
CO ₂		\$	15.8
Total		\$	22.3
		↓	
		EQUALS	
TRANSPORTATION REVENUE REQUIREMENT		\$1,333.5 Million	
		↓	
		MINUS	
LRS REVENUE*	(Bcf/d)	(10 ⁶ m ³ /d)	\$Million
LRS-1	0.66	18.67	\$43.3
LRS-2	0.04	1.05	\$ 0.8
LRS-3	0.05	1.41	\$ 3.2
Total	0.75	21.13	\$47.3
*Revenues adjusted to account for NGTL's contribution.			
		↓	
		MINUS	
OTHER TRANSPORTATION REVENUE			
	(Bcf/d)	(10 ⁶ m ³ /d)	\$Million
IT-D*	1.73	48.83	\$122.1
STFT	0.00	0.00	\$ 0.0
IT-R	2.22	62.69	\$ 150.3
FT-P	0.33	9.24	\$ 20.2
FT-RN	0.03	0.72	\$ 1.1
FT-A	0.96	26.96	\$ 6.4
Total	5.27	148.44	\$ 300.1
*Revenues adjusted to account for Alternate Access.			
		↓	
		EQUALS	
FIRM TRANSPORTATION REVENUE REQUIREMENT		\$986.1 Million	

2004 Illustrative Rate Calculation – Without Alternate Access cont.

IGCAA-NGTL-002.1

Reference:

Appendix 4 & 5, Sub-section 10.6 – Definition of Mainline and Lateral Facilities

Preamble:

IGCAA is seeking to understand the implications of the lateral/mainline definition as it pertains to the rate design and to the cost of service study.

Request:

On page 4 of Sub-section 10.6, Lines 12 to 15 it states, “ Similarly 33% of the delivery stations were interconnections to other pipelines systems such as ATCO Pipelines or had multiple users downstream of the station.” Please specify the delivery stations referred to in this statement.

Response:

The delivery stations are:

Unit Number	Unit Name	Unit Number	Unit Name	Unit Number	Unit Name
3413	ATMORE B SALES	3616	GAS CITY SALES	3454	PENHOLD N SALES
3489	ATUSIS CREEK SL	3424	GRANDE CENTRE S	3073	PRIDDIS SALES
3446	BITTERN LAKE SL	3055	GRANDE PRAIR SL	3610	RANFURLY SALES
3468	BLEAK LAKE SLS	3100	HEART RIVER SLS	3438	REDWATER 'B' SL
3471	BLUE RIDGE E SL	3611	HERMIT LAKE SLS	3406	REDWATER SALES
3060	CARROT CREEK SL	5007	HOUSE RIVER	3405	RIM-WEST SALES
3496	CHIPEWYAN RIVER	3419	INLAND SALES	3448	ROSS CREEK SLS
3052	COLEMAN SALES	3491	JOFFRE SLS #2	3481	SAWRIDGE SALES
3458	COUSINS B SALES	3492	JOFFRE SLS #3	3439	SHEERNESS SALES
3418	COUSINS C SALES	3476	LAC LA BICHE SL	3422	THORHILD SALES
3085	DEEP VLLY CR SL	3058	LUNDBRECK-COWLE	3115	USONA SALES
3062	E. CALGARY B SL	3120	MILDRED LK SLS	3639	VEGREVILLE SALE
3632	EAST CALGARY SA	3411	MONARCH N. B SL	3410	VIKING SALES
3112	FALHER SALES	3462	NIPISI SALES	3427	WESTLOCK SALES
3304	FORESTBURG SLS	3368	NOEL LAKE SALES	3425	WOOD RVR SALES
3490	GAETZ LAKE SLS	3061	PEMBINA SALES		

IGCAA-NGTL-002.2

Reference:

Appendix 4 & 5, Sub-section 10.6 – Definition of Mainline and Lateral Facilities

Preamble:

IGCAA is seeking to understand the implications of the lateral/mainline definition as it pertains to the rate design and to the cost of service study.

Request:

On lines 17 & 18 it is stated “As 70% of the receipt stations and 51% of the delivery stations are connected via pipe with a diameter of less than 12 inches these pipes would be considered laterals.” Please provide the total length of pipe referred to in this statement that are (a) connected to the receipt stations referred to in this statement, and (b) are connected to the delivery stations.

Response:

To determine these percentages NGTL examined the first section of pipe connected to each meter station. For receipt stations the length associated with such pipe is approximately 1,800 km and for delivery stations the length associated with such pipe is approximately 22 km.

IGCAA-NGTL-002.3

Reference:

Appendix 4 & 5, Sub-section 10.6 – Definition of Mainline and Lateral Facilities

Preamble:

IGCAA is seeking to understand the implications of the lateral/mainline definition as it pertains to the rate design and to the cost of service study.

Request:

On lines 20 through 22 it is stated “As 99% of all pipe with a diameter of less than 12 inches is located within 20 km of the upstream receipt station or downstream delivery station these pipes would be considered laterals”. Please provide the total length of pipe that is (a) connected to upstream receipt stations and (b) connected to downstream delivery stations that would be considered laterals as per this statement.

Response:

NGTL cannot provide this breakdown. Some pipe would be within 20 km of both receipt and delivery stations whereas some would be within 20 km of only receipt or 20 km of only delivery. In calculating this percentage NGTL eliminated all pipe that was within 20 km of either a delivery or receipt station. This left only pipe that was not within 20 km of either receipt or delivery stations. The length of this pipe represented approximately 1% of the length of all pipe with a diameter of 12 inches or less. Therefore 99% of the pipe with a diameter of 12 inches or less was within 20 km of either a receipt or delivery station.

IGCAA-NGTL-002.4

Reference:

Appendix 4 & 5, Sub-section 10.6 – Definition of Mainline and Lateral Facilities

Preamble:

IGCAA is seeking to understand the implications of the lateral/mainline definition as it pertains to the rate design and to the cost of service study.

Request:

If the definition contained in sub-section 10.6 of mainline and lateral facilities had been used in the Cost of Service study what is the length of pipe that would have been considered mainline? Laterals? Please provide a table that compares the length of pipe that is considered mainline or laterals under (a) the functional mainline definition in Appendix 2, (b) the physical size mainline definition in Appendix 2 and (c) the mainline/lateral definition contained in sub-section 10.6 of Appendix 4 & 5.

Response:

The following table provides the length of pipe as of December 31, 2002 for four definitions of mainline and lateral:

Definition	Mainline (km)	Lateral (km)	Total (km)
Functional	11,151	11,546	22,697
Physical (24"+)	6,828	15,869	22,697
Physical (12" +)	14,623	8,074	22,697
Sub-section 10.6	14,740	7,957	22,697

IGCAA-NGTL-003.1

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

Please identify the non-regulated companies in which TCPL has an interest that are active in the Province of Alberta.

Response:

Please refer to the response to IGCAA-NGTL-003.2.

IGCAA-NGTL-003.2

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

Identify the nature of each non-regulated business in Alberta and the extent of interactions it has with NGTL.

Response:

The following table lists the non-regulated companies that are registered in Alberta and are active, in which TCPL has an interest. The table also describes the extent of their interactions with NGTL:

Subsidiary	Nature of Non-Regulated Business	Interaction with NGTL
701671 Alberta Ltd	Holds interest in TransCanada Energy Ltd.	Nil
779540 Alberta Ltd.	Holding company of 100% interest in TransCanada OSP Holdings Ltd.	Nil
790821 Alberta Ltd.	Trustee of The TransCanada NWELP Trust.	Nil
416440 Alberta Ltd.	Investment company.	Nil
ASTC Power Partnership	To own and administer the Sundance B Power Purchase Arrangements and market the power to be purchased from TransAlta Utilities Corporation thereunder.	Nil

IGCAA-NGTL-003.2

CrossAlta Gas Storage & Services Ltd.	Gas Storage Facilities.	NGTL FCS contract holder.
Foothills Alaska Limited Partnership	To participate in the Alaska North Slope (ANS) Gas Project and any activities related and ancillary thereto.	Nil
FPL Resource Holdings (Alta.) Ltd.	Investment company	Nil
FPL Resource Holdings (North B.C.) Ltd.	Investment company	Nil
FPL Resource Holdings Ltd.	Investment company	Nil
FPL Resources Holdings (South Yukon) Ltd.	Investment company	Nil
Novagas Canada Ltd.	To develop business opportunities in the natural gas services sector	Nil
Novagas Canada Limited Partnership	Natural gas and natural liquids gathering, processing, transportation, extraction, storage, fractionation and marketing.	Nil
Signal Managed Futures Fund Limited Partnership	Formed for the purpose of creating a pool of investment capital to be invested in accordance with the investment objectives and strategies set forth in Schedule "A" to the Limited Partnership Agreement	Nil
TC Power (Castleton) Ltd.	Sole member of TransCanada Power (Castleton) LLC a Delaware Limited Liability Company	Nil
TCPL CentrOriente Ltd.	Holding corporation. Currently holds 2.5% interest in TransGas de Occidente S.A.	Nil
TCPL International Investments Inc.	Holding Corporation.	Nil
The Saddlebrook Partnership	Ownership and operation of an industrial park	Nil
TransCanada Gas Liquids Ltd.	Processing and marketing of natural gas liquids.	Nil
TransCanada International Business Development Ltd.	To provide investment advice to TransCanada PipeLines Limited	Nil

IGCAA-NGTL-003.2

TransCanada Calibrations Ltd.	Conducts business related to service and maintenance of gas measurement instrumentation, including the calibration and certification of gas measurement meters	Provides calibration and verification of ultrasonic meters and turbine meters.
TransCanada PipeLines Colombia Limited	The corporation holds a 4.8% interest in TransCanada International (Colombia) S.A. [formerly: Proyectos Energeticos S.A.], a Colombian company, which is in liquidation	Nil
TransCanada Pipeline Ventures Ltd.	The acquisition, maintenance and transportation of hydrocarbons; pipeline operations; energy services; etc.	Provides TBO Service.
TransCanada Pipeline Ventures Limited Partnership	The acquisition, transportation, storage and marketing of hydrocarbons; generation, operation and marketing of electricity; energy info; communication services	Nil
TransCanada Turbines Ltd.	Joint venture company to repair and overhaul gas turbines	Provides maintenance and overhaul services on rotating equipment.

IGCAA-NGTL-003.3

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

Please identify the current officers and Directors of the TransCanada Pipeline Ventures Limited Partnership and of NGTL.

Response:

Please refer to Attachment IGCAA-NGTL-003.3

TransCanada Pipeline Ventures Ltd.

Directors

Paul F. MacGregor	Director
Dennis J. McConaghy	Director
Jeff R. Rush	Director
Ronald J. Turner (TCPL)	Director
Donald M. Wishart	Director

Officers

Kristine Delkus	Vice-President
Rhonda E.S. Grant	Corporate Secretary
Jeff R. Rush	President

NOVA Gas Transmission Ltd.**Directors**

Albrecht W.A. Bellstedt	Director
Russell K. Girling	Director
Harold N. Kvisle	Director
Dennis J. McConaghy	Director
Ronald J. Turner	Director

Officers

Albrecht W.A. Bellstedt	Executive Vice-President
Ronald L. Cook	Vice-President, Taxation
Max Feldman	Senior Vice-President, Cust Sales & Serv
Russell K. Girling	Chief Financial Officer
Russell K. Girling	Executive Vice-President
Rhondda E.S. Grant	Corporate Secretary
Rhondda E.S. Grant	Vice-President
Harold N. Kvisle	Chief Executive Officer
Brian McConaghy	Vice-President, Health, Safety and Environment
Dennis J. McConaghy	Executive Vice-President
Alexander J. Pochmursky	Vice-President, Procurement

NOVA Gas Transmission Ltd.

Alexander J. Pourbaix	Executive Vice-President
Sarah E. Raiss	Executive Vice-President
Murray J. Samuel	Vice-President, Operations & Engineering Law
Steven C. Schock	Senior Vice-President, Engineering & Technical Services
Ronald J. Turner (TCPL)	President
Donald M. Wishart	Senior Vice-President, Operations

IGCAA-NGTL-003.4

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

Please identify any changes in the officers and Directors of TransCanada Pipeline Ventures Limited Partnership and of NGTL that occurred in 2001, 2002 and 2003.

Response:

Please refer to Attachment IGCAA-NGTL-003.4

Directors / Officers Report

From 1/1/2001 Through 12/31/2001

NOVA Gas Transmission Ltd.

Directors

Albrecht W.A. Bellstedt	Director	Effective
Russell K. Girling	Director	3/31/1999
Harold N. Kvisle	Director	8/1/1999
Dennis J. McConaghy	Director	12/12/2000
Valentin Mirosh	Director	12/31/2001
Ronald J. Turner	Director	10/22/1999
		10/22/1999

Officers

Douglas D. Baldwin	Chairman	Effective
Steven D. Becker	Senior Vice-President, Market Development	11/15/1999
Carla L. Campbell	Vice-President, Human Resources, Consulting Services	9/21/1999
Max Feldman	Senior Vice-President, Cust Sales & Serv	11/30/2000
Rhondda E.S. Grant	Corporate Secretary	9/21/1999
Rhondda E.S. Grant	Vice-President	7/3/1998
Paul F. MacGregor	Vice-President	12/12/2000
Brian McConaghy	Vice-President, Health, Safety and Environment	9/21/1999
Brian C. McNulty	Vice-President, Law	11/30/2000
Anthony M. Palmer	Vice-President, Transmission Planning	9/21/1999
		11/30/2000

Directors / Officers Report

From 1/1/2001 Through 12/31/2001

NOVA Gas Transmission Ltd.

Gary G. Penrose	Vice-President, Taxation	5/9/2000
Alexander J. Pochmursky	Vice-President, Procurement	11/30/2000
Wendy M. Richardson	Vice-President, Shared Services	11/30/2000
Murray J. Samuel	Vice-President, Operations & Engineering Law	11/15/2001
Steven C. Schock	Senior Vice-President, Engineering & Technical Services	11/30/2000
Ronald J. Turner (TCPL)	President	12/12/2000
Donald R. Wishart	Senior Vice-President, Operations	9/21/1999

Directors / Officers Report

From 1/1/2002 Through 12/31/2002

NOVA Gas Transmission Ltd.

Directors

	Effective
Albrecht W.A. Bellstedt	3/31/1999
Russell K. Girling	8/1/1999
Harold N. Kvisle	12/12/2000
Dennis J. McConaghy	12/31/2001
Ronald J. Turner	10/22/1999

Officers

	Effective
Albrecht W.A. Bellstedt	4/22/2002
Ronald L. Cook	4/15/2002
Max Feldman	9/21/1999
Russell K. Girling	4/22/2002
Russell K. Girling	4/22/2002
Rhondda E.S. Grant	7/3/1998
Rhondda E.S. Grant	12/12/2000
Harold N. Kvisle	4/22/2002
Brian McConaghy	11/30/2000
Dennis J. McConaghy	4/22/2002
Gary G. Penrose	5/9/2000

Directors / Officers Report

From 1/1/2002 Through 12/31/2002

NOVA Gas Transmission Ltd.

Alexander J. Pochmursky	Vice-President, Procurement	11/30/2000
Alexander J. Pourbaix	Executive Vice-President	4/22/2002
Sarah E. Raiss	Executive Vice-President	4/22/2002
Murray J. Samuel	Vice-President, Operations & Engineering Law	11/15/2001
Steven C. Schock	Senior Vice-President, Engineering & Technical Services	11/30/2000
Ronald J. Turner (TCPL)	President	12/12/2000
Donald R. Wishart	Senior Vice-President, Operations	9/21/1999

NOVA Gas Transmission Ltd.**Officers**

Albrecht W.A. Bellstedt	Executive Vice-President
Ronald L. Cook	Vice-President, Taxation
Max Feldman	Senior Vice-President, Cust Sales & Serv
Russell K. Girling	Chief Financial Officer
Russell K. Girling	Executive Vice-President
Rhondda E.S. Grant	Corporate Secretary
Rhondda E.S. Grant	Vice-President
Harold N. Kvisle	Chief Executive Officer
Brian McConaghy	Vice-President, Health, Safety and Environment
Dennis J. McConaghy	Executive Vice-President
Alexander J. Pochmursky	Vice-President, Procurement
Alexander J. Pourbaix	Executive Vice-President
Sarah E. Raiss	Executive Vice-President
Murray J. Samuel	Vice-President, Operations & Engineering Law
Steven C. Schock	Senior Vice-President, Engineering & Technical Services
Ronald J. Turner (TCPL)	President
Donald M. Wishart	Senior Vice-President, Operations

Directors / Officers Report

From 1/1/2001 Through 12/31/2001

TransCanada Pipeline Ventures Ltd.

Directors

	Effective
Stephen M.V. Clark	12/12/2000
Paul F. MacGregor	9/21/1999
Dennis J. McConaghy	12/12/2000
Jeff R. Rush	8/20/2001
Ronald J. Turner (TCPL)	12/12/2000
Donald M. Wishart	3/1/2001

Officers

	Effective
Stephen M.V. Clark	12/12/2000
Kristine Delkus	12/12/2000
Rhonda B.S. Grant	9/21/1999
Jeff R. Rush	8/20/2001

Directors / Officers Report

From 1/1/2002 Through 12/31/2002

TransCanada Pipeline Ventures Ltd.

Directors

		Effective
Paul F. MacGregor	Director	9/21/1999
Dennis J. McConaghy	Director	12/12/2000
Jeff R. Rush	Director	8/20/2001
Ronald J. Turner (TCPL)	Director	12/12/2000
Donald M. Wishart	Director	3/1/2001

Officers

Kristine Delkus	Vice-President	Effective 12/12/2000
Rhondra E.S. Grant	Corporate Secretary	9/21/1999
Jeff R. Rush	President	8/20/2001

Directors / Officers Report

As of 11/15/2003

TransCanada Pipeline Ventures Ltd.

Directors

Paul F. MacGregor	Director
Dennis J. McConaghy	Director
Jeff R. Rush	Director
Ronald J. Turner (TCPL)	Director
Donald M. Wishart	Director

Officers

Kristine Delkus	Vice-President
Rhonda E.S. Grant	Corporate Secretary
Jeff R. Rush	President

IGCAA-NGTL-003.5

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

How many people are directly employed or are working full time for TransCanada Ventures Limited Partnership?

Response:

TransCanada Pipeline Ventures Limited Partnership has no direct employees. TCPL employees provide service to Ventures. Presently, no TCPL employees work full time on Ventures business.

IGCAA-NGTL-003.6

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

How many TCPL employees work for TransCanada Ventures Limited Partnership on a full time basis? Part time basis?

Response:

Presently, no TCPL employees work for TransCanada Pipeline Ventures Limited Partnership on a full-time basis. NGTL is unable to identify the number of TCPL employees that work for Ventures on a part-time basis because, under the TCPL Operating Cost Allocation Policy, allocations related to Ventures are included within a larger business unit rather than being identified separately.

IGCAA-NGTL-003.7

Reference:

Section 9.0 – Code of Conduct

Preamble:

IGCAA is seeking to understand how the Code of Conduct will protect the interests of NGTL customers.

Request:

Are there any TCPL employees who have provided services to both NGTL and to TransCanada Ventures Limited Partnership in the past year? If so, how many?

Response:

Yes. NGTL is aware of TCPL employees who have provided service to both NGTL and to Ventures in the past year but is unable to identify how many. Please refer to the response to IGCAA-NGTL-003.6.

IGCAA-NGTL-004.1

Reference:

Section 2.1, Schedule 2.1.1, Sheet 1 of 1, Appendix A, Cost of Service Study,
pages 18 to 25

Preamble:

IGCAA is trying to understand the implications of the cost of service study.

Request:

Is the 2002 Grand Total Cost Number in Table 1 on page 18 of the Cost of Serve Study, \$1,343.8 million, comparable to the \$1,347 million number on line 14 of Schedule 2.1.1 in Section 2.1 of the application, with the difference between these numbers due to the explanation contained in the asterisked comment at the bottom of Table 1 in the Cost of Service study?

Response:

Yes.

IGCAA-NGTL-004.2

Reference:

Section 2.1, Schedule 2.1.1, Sheet 1 of 1, Appendix A, Cost of Service Study,
pages 18 to 25

Preamble:

IGCAA is trying to understand the implications of the cost of service study.

Request:

If lateral costs as defined in the cost of service study were subject to a separate cost recovery mechanism, what would the impact on the NGTL revenue requirement (a) in the functional mainline definition is used and (b) if the physical size mainline definition were used? Please identify the changes to the line items that would occur to Schedule 2.1.1 in Section 2.1 of the Application.

Response:

There would be no change in NGTL's revenue requirement. The change would be in how NGTL recovered the revenue requirement in the rates of its various services.

Reference:

Application section 5, Table 5.2-1, page 4 of 11.

Preamble:

NGTL sets out its forecast for firm transportation receipts as projecting significant decline in new firm transportation with non-renewals being relatively stable.

Request:

Provide NGTL's explanation for the loss of over 2 bcf/d in firm receipt contract demand. Break this down as between production declines, loss of demand to other transportation service providers (e.g., Alliance and ATCO Pipelines) and shifts toward interruptible transportation.

Response:

NGTL bases its forecast of future firm contract demand (receipt and delivery) on current firm contract demand, recent trends in contracting behaviour including contract utilization, new contracts pending, and the future contract expiry profile.

The Alberta System throughput, as shown in Table 5.3-1, is forecast to decline approximately ~~214~~303 Bcf (~~0.60~~0.8 Bcf/d, or ~~57~~57%) from 2002 to 2004. The decline in throughput is attributed to a combination of production declines and loss of demand to other service providers. Approximately two-thirds of this decline in throughput is attributable to overall production declines and one-third is attributable to loss of system throughput to other service providers. During this same period, intra-Alberta Deliveries are forecast to increase approximately ~~181~~180 Bcf. The net effect on Export Delivery Point volumes is a reduction in flow of approximately ~~387~~473 Bcf.

The amount by which the decline in the aggregate Firm Transportation Export Delivery Point Contract Demand exceeds the decline in Alberta System throughput is attributable to higher firm contract utilization and an increasing reliance on interruptible service. As noted above, Export Delivery Point throughput is expected to decline more than Alberta System throughput due to increasing intra-Alberta Deliveries.

IGCAA-NGTL-005

REVISED February 2004

The amount by which decline in the aggregate Firm Transportation Receipt Point Contract Demand exceeds the decline in Alberta System throughput is attributable to higher firm contract utilization, and an increasing reliance on interruptible service.

Individual receipt and delivery point contracts may increase, decrease, or stay the same between 2002 and 2004. For instance, the forecast for contracts at Alberta/BC increases by ~~0.1~~20.26 Bcf/d between 2002 and 2004 while the forecast for contracts at Empress and McNeill declines by a combined 1.4 Bcf/d. Even if all of the forecast firm transportation Export Delivery Point contract increase at Alberta/BC were attributed to Alternate Access, this would account for less than ~~10~~20% of the forecast decrease at Empress/McNeill. NGTL does not know why customers choose to contract at particular points on the Alberta System, and not at others.

Due to the fact that contract utilization is not 100%, there is not a one to one relationship between decline in throughput and decline in Firm Transportation Contract Demand (receipt or delivery). NGTL cannot break down changes in contract demand into the requested categories with reasonable certainty.

IGCAA-NGTL-006.1

Reference:

Application section 5.2.2, page 6 of 11, Table 5.2-3.

Preamble:

NGTL is forecasting a decline in firm transportation export delivery demand of over 1.2 bcf/d. IGCAA would like to know the reason for this decline.

Request:

Break this decline down by production declines, increases in intra-Alberta consumption, loss of market to other transportation service provider companies (e.g., Alliance Pipelines) and shifts to interruptible transportation.

Response:

Please refer to the response to IGCAA-NGTL-005.

IGCAA-NGTL-006.2

Reference:

Application section 5.2.2, page 6 of 11, Table 5.2-3.

Preamble:

NGTL is forecasting a decline in firm transportation export delivery demand of over 1.2 bcf/d. IGCAA would like to know the reason for this decline.

Request:

Explain why export firm transportation delivery at Empress and McNeil is declining significantly while demand at Alberta/BC is increasing. In this explanation indicate whether Alternate Access has anything to do with this shift.

Response:

Please refer to the response to IGCAA-NGTL-005.

IGCAA-NGTL-007.1

[REVISED February 2004](#)**Reference:**

Application section 5.3.2, Table 5.3-1.

Preamble:

There appear to be some significant errors in this table that may be attributable to providing annual figures instead of daily figures.

Request:

Please correct any errors in this table by providing both a table for annual system throughput as well as daily system throughput.

Response:

~~A corrected Table 5.3-1 has been provided in the response to CAPP-NGTL-034(b). Daily average throughput is provided in the table below.~~ The 2004 Alberta System throughput forecast has been revised to include more recent information in the February 2004 Update. NGTL provides the updated throughput forecast expressed as daily numbers below.

Revised Table 5.3-1¹
Alberta System Throughput Forecast (Daily)

Delivery Point	2002 Actual		2003 Actual		2004 Forecast	
	MMcf/d	10 ⁶ m ³ /d	MMcf/d	10 ⁶ m ³ /d	MMcf/d	10 ⁶ m ³ /d
Empress	5,734	<u>161.6</u>	<u>5,170</u>	<u>145.7</u>	<u>4,780</u>	<u>134.7</u>
McNeill	2,134	<u>60.1</u>	<u>2,129</u>	<u>60.0</u>	<u>2,025</u>	<u>57.1</u>
Alberta/B.C.	2,116	<u>59.6</u>	<u>1,845</u>	<u>52.0</u>	<u>1,920</u>	<u>54.1</u>
Other Borders	74	<u>2.1</u>	<u>17</u>	<u>0.5</u>	<u>39</u>	<u>1.1</u>
Subtotal Borders	10,059	<u>283.4</u>	<u>9,162</u>	<u>258.1</u>	<u>8,765</u>	<u>246.9</u>
Intra-Alberta	1,301	<u>36.6</u>	<u>1,477</u>	<u>41.6</u>	<u>1,796</u>	<u>50.6</u>
Total System (excl. Fuel)	11,360	<u>320.0</u>	<u>10,638</u>	<u>299.7</u>	<u>10,560</u>	<u>297.5</u>
Fuel	121	<u>3.4</u>	<u>93</u>	<u>2.6</u>	<u>90</u>	<u>2.5</u>
Total System (incl. Fuel)	11,481	<u>323.5</u>	<u>10,732</u>	<u>302.4</u>	<u>10,650</u>	<u>300.1</u>

1. Numbers may not add due to rounding.

IGCAA-NGTL-007.2

Reference:

Application section 5.3.2, Table 5.3-1.

Preamble:

There appear to be some significant errors in this table that may be attributable to providing annual figures instead of daily figures.

Request:

Please provide an explanation of the declines in system throughput identifying what portions of the declines are attributable to production declines and what are attributable to the loss of system throughput to other service providers, identifying those service providers.

Response:

Please refer to the response to IGCAA-NGTL-005.

For a summary of recent competition for supply and markets experienced by the Alberta System, please refer to the response to CCA-NGTL-001.

IGCAA-NGTL-008.1

REVISED February 2004**Reference:**

Application section 5.3.3, Tables 5.3-2 and 5.3-3.

Preamble:

NGTL provides forecasts of receipt and delivery throughput by service. Further breakdown of information would be useful.

Request:

In order to provide a convenient comparison with earlier tables stated on the basis of daily throughput, please prepare these tables using daily throughput numbers.

Response:

NGTL made two errors in Table 5.3-2. The value for Net Receipts into Storage should be 27 Bcf and not 636 Bcf as originally stated in the Application. The value for Firm Transportation Receipts should be 2,579 Bcf and not 3,188 Bcf as originally stated in the Application. Consequently, the value for Total Services should be 4,003 Bcf and not 4,612 Bcf as stated in the Application. However, the value for Total Throughput does not change. NGTL provides a corrected version of Table 5.3-2.

**Table 5.3-2 (revised—Annual)
 2004 Receipt Throughput by Service**

Throughput Service Category	Bcf	10⁹ m³	Percent of Annual Throughput
Firm Transportation Receipts*	2,579	72.7	64.9%
Interruptible Transportation Receipts	1,064	30.0	26.8%
Other Transportation Services**	360	10.1	9.0%
Total Services	4,003	112.8	100.7%
Less Net Receipts into Storage	27	0.8	0.7%
Total Throughput	3,976	112.0	100%

* Includes fuel, FT-R and FT-RN

** Includes LRS, LRS-2, LRS-3 and FT-P

IGCAA-NGTL-008.1

REVISED February 2004

Tables 5.3-2 and 5.3-3 have been revised to incorporate more recent information based on the February 2004 Update. NGTL provides a copy of the revised Table 5.3-2, and a copy of the revised Table 5.3-3 below, expressed as daily throughput numbers.

**Revised Table 5.3-2 (revised - daily)
2004 Receipt Throughput by Service**

Throughput Service Category	MMcf/d	10 ⁶ m ³ /d	Percent of Annual Throughput
*Firm Transportation Receipts	<u>7,066 7,200</u>	<u>199.1 202.9</u>	<u>64.9% 67.6%</u>
Interruptible Transportation Receipts	<u>2,915 2,273</u>	<u>82.4 64.0</u>	<u>26.8% 21.4%</u>
**Other Transportation Services	<u>986 1,078</u>	<u>27.8 30.4</u>	<u>9.1% 10.1%</u>
Total Services	<u>10,967 10,551</u>	<u>309.0 297.3</u>	<u>100.7% 99.1%</u>
Less Net Receipts into <u>from</u> Storage	<u>74 99</u>	<u>2.1 2.8</u>	<u>0.7% 0.9%</u>
Total Throughput	<u>10,893 10,650</u>	<u>306.9 300.1</u>	100.0%

* Includes fuel, FT-R and FT-RN

** Includes LRS, LRS-2, LRS-3 and FT-P

Numbers may not add due to rounding

**Revised Table 5.3-3 (revised - daily)
2004 Delivery Throughput by Service**

Throughput Service Category	MMcf/d	10 ⁶ m ³ /d	Percent of Annual Throughput
Firm Transportation Deliveries	<u>8,049 8,104</u>	<u>226.8 228.3</u>	<u>73.9% 76.1%</u>
*Interruptible Transportation Deliveries	<u>954 660</u>	<u>26.8 18.6</u>	<u>8.7% 6.2%</u>
**Firm Transportation Alberta Deliveries	<u>1,797 1,796</u>	50.6	<u>16.5% 16.9%</u>
Total Delivery Services	<u>10,797 10,560</u>	<u>304.2 297.5</u>	<u>99.1% 99.2%</u>
NGTL Fuel	<u>96 90</u>	<u>2.7 2.5</u>	<u>0.9% 0.8%</u>
Total Throughput	<u>10,893 10,650</u>	<u>306.9 300.1</u>	100.0%

* Volumes are net of Alternate Access

** Includes volumes from FT-A, Extraction and Taps

Numbers may not add due to rounding

IGCAA-NGTL-008.2

REVISED February 2004**Reference:**

Application section 5.3.3, Tables 5.3-2 and 5.3-3.

Preamble:

NGTL provides forecasts of receipt and delivery throughput by service. Further breakdown of information would be useful.

Request:

For Table 5.3-2, under other transportation services, please provide a separate forecast for FT-P service.

Response:

Please refer to the response to ~~NGTL~~-IGCAA-NGTL-008.1.

NGTL provides a ~~corrected~~ copy of the revised Table 5.3.2 below, which also includes a forecast for FT-P service and has been revised based on the February 2004 Update.

**Revised Table 5.3-2 (revised – Annual)
 2004 Receipt Throughput by Service**

Throughput Service Category	Bcf	10 ⁹ m ³	Percent of Annual Throughput
Firm Transportation Receipts*	<u>2,579 2,628</u>	<u>72.7 74.0</u>	<u>64.9% 67.6%</u>
Interruptible Transportation Receipts	<u>1,064 830</u>	<u>30.0 23.4</u>	<u>26.8% 21.4%</u>
Other Transportation Services**	274	7.7	<u>6.9% 7.0%</u>
FT-P Service	<u>86 120</u>	<u>2.4 3.4</u>	<u>2.2% 3.1%</u>
Total Services	<u>4,003 3,851</u>	<u>112.8 108.5</u>	<u>100.7% 99.1%</u>
Less Net Receipts into from Storage	<u>27 36</u>	<u>0.8 1.0</u>	<u>0.7% 0.9%</u>
Total Throughput	<u>3,976 3,887</u>	<u>112.0 109.5</u>	100%

* Includes fuel, FT-R and FT-RN

** Includes LRS, LRS-2 and LRS-3

Numbers may not add due to rounding.

IGCAA-NGTL-008.3

[REVISED February 2004](#)**Reference:**

Application section 5.3.3, Tables 5.3-2 and 5.3-3.

Preamble:

NGTL provides forecasts of receipt and delivery throughput by service. Further breakdown of information would be useful.

Request:

For Table 5.3-3, please provide a breakdown of intra-Alberta service between FT-A and FT-X.

Response:

Table 5.3-3 is provided and includes a breakdown of intra-Alberta service between FT-A and FT-X. [The table reflects revisions made in the February 2004 Update.](#)

**[Revised](#) Table 5.3-3 ([revised](#) - Annual)
 2004 Delivery Throughput by Service**

Throughput Service Category	Bcf	10 ⁹ m ³	Percent of Annual Throughput
Firm Transportation Deliveries	2,938 2,958	82.8 83.3	73.9% 76.1%
Interruptible Transportation Deliveries*	347 241	9.7 6.8	8.7% 6.2%
Firm Transportation Alberta Deliveries	116 149	3.3 4.2	2.9% 3.8%
FT-X Deliveries	158 157	4.4	4.0% 4.1%
FT-A Deliveries	382 349	10.8 9.8	9.6% 9.0%
Total Delivery Services	3941 3,854	111.0 108.6	99.1% 99.2%
NGTL Fuel	35 33	1.0 0.9	0.9% 0.8%
Total Throughput	3,976 3,887	112.0 109.5	100%

* Volumes are net of Alternate Access
[Numbers may not add due to rounding.](#)

IGCAA-NGTL-009.1

Reference:

Application section 6, Table 6.2-1, page 4 of 33.

Preamble:

NGTL provides a forecast of FT-P service more information is required regarding this forecast.

Request:

How much the forecasted service relates to the Fort McMurray delivery service area?

Response:

Please refer to the response to ATCO-NGTL-056.

IGCAA-NGTL-009.2

Reference:

Application section 6, Table 6.2-1, page 4 of 33.

Preamble:

NGTL provides a forecast of FT-P service more information is required regarding this forecast.

Request:

Other than the Fort McMurray delivery service area, where is this FT-P service anticipated to be utilized?

Response:

NGTL anticipates FT-P service will be utilized in any area where there is a stable demand and sufficient supply within a reasonable distance to provide an economic benefit to the users of the service. At this time NGTL only has FT-P contracts for service in the Fort McMurray and Cold Lake areas.

IGCAA-NGTL-010

Reference:

Application section 6, September 2003 Cost of Service Study.

Preamble:

NGTL has filed a Cost of Service study with a Phase 1 General Rate Application.

Request:

Please provide NGTL's understanding of how the Cost of Service study it has filed is relevant to the Phase 1 proceeding generally and, in particular, any of the issues set out in the issues list for this proceeding.

Response:

Please refer to the response to FGA-NGTL-007.

IGCAA-NGTL-011.1

Reference:

Application section 8, question 5, page 5 of 10, lines 21 – 23.

Preamble:

NGTL indicates the oil sands project that the Fort McMurray north hub would be capable of supplying. NGTL notes that Albian sands is currently served by ATCO and notes that NGTL would be capable of supplying this load as well as incremental demand from the Jackpine project. In its Jackpine project application Shell discusses the various pipeline options for serving its new projects natural gas demand and indicates that it is undertaking a feasibility study to identify “the best technical and commercial option for pipeline infrastructure to service the Jackpine Mine.” This application suggests that no commercial arrangements have been made by Shell committing it to any specific service provider.

Request:

Has NGTL reviewed the Shell Jackpine Mine application and specifically section 7.4 of that application?

Response:

Yes.

IGCAA-NGTL-011.2

Reference:

Application section 8, question 5, page 5 of 10, lines 21 – 23.

Preamble:

NGTL indicates the oil sands project that the Fort McMurray north hub would be capable of supplying. NGTL notes that Albian sands is currently served by ATCO and notes that NGTL would be capable of supplying this load as well as incremental demand from the Jackpine project. In its Jackpine project application Shell discusses the various pipeline options for serving its new projects natural gas demand and indicates that it is undertaking a feasibility study to identify “the best technical and commercial option for pipeline infrastructure to service the Jackpine Mine.” This application suggests that no commercial arrangements have been made by Shell committing it to any specific service provider.

Request:

Does the ATCO Pipeline currently servicing the Albian Sands project have the capacity to serve the natural gas requirements of the Jackpine Mine project as set out in Shell’s application?

Response:

NGTL does not have the requested information. NGTL does not have access to the commercial information nor technical details associated with the ATCO Pipeline.

IGCAA-NGTL-011.3

Reference:

Application section 8, question 5, page 5 of 10, lines 21 – 23.

Preamble:

NGTL indicates the oil sands project that the Fort McMurray north hub would be capable of supplying. NGTL notes that Albian sands is currently served by ATCO and notes that NGTL would be capable of supplying this load as well as incremental demand from the Jackpine project. In its Jackpine project application Shell discusses the various pipeline options for serving its new projects natural gas demand and indicates that it is undertaking a feasibility study to identify “the best technical and commercial option for pipeline infrastructure to service the Jackpine Mine.” This application suggests that no commercial arrangements have been made by Shell committing it to any specific service provider.

Request:

Has NGTL had any discussions with Shell regarding the feasibility study it says it is conducting or any discussions generally regarding the provision of service by NGTL to the Jackpine Mine project?

Response:

Yes.

IGCAA-NGTL-011.4

Reference:

Application section 8, question 5, page 5 of 10, lines 21 – 23.

Preamble:

NGTL indicates the oil sands project that the Fort McMurray north hub would be capable of supplying. NGTL notes that Albian sands is currently served by ATCO and notes that NGTL would be capable of supplying this load as well as incremental demand from the Jackpine project. In its Jackpine project application Shell discusses the various pipeline options for serving its new projects natural gas demand and indicates that it is undertaking a feasibility study to identify “the best technical and commercial option for pipeline infrastructure to service the Jackpine Mine.” This application suggests that no commercial arrangements have been made by Shell committing it to any specific service provider.

Request:

Does NGTL believe that it can provide the Shell Jackpine project with the best technical and commercial option for natural gas pipeline infrastructure?

Response:

Shell has not requested regulated service from NGTL.

However, NGTL believes the Fort McMurray North Hub is a key market centre for developers in the area. NGTL has met with the developers and illustrated how NGTL can provide mainline transportation services to this rapidly growing industrial market. NGTL believes that it can provide operating efficiencies, economies of scale, and security of gas supply through its ability to provide regulated mainline service with its established infrastructure in Alberta.

As the Fort McMurray market grows, NGTL will continue to evaluate the technical options to provide delivery service into this developing market.

IGCAA-NGTL-011.5

Reference:

Application section 8, question 5, page 5 of 10, lines 21 – 23.

Preamble:

NGTL indicates the oil sands project that the Fort McMurray north hub would be capable of supplying. NGTL notes that Albian sands is currently served by ATCO and notes that NGTL would be capable of supplying this load as well as incremental demand from the Jackpine project. In its Jackpine project application Shell discusses the various pipeline options for serving its new projects natural gas demand and indicates that it is undertaking a feasibility study to identify “the best technical and commercial option for pipeline infrastructure to service the Jackpine Mine.” This application suggests that no commercial arrangements have been made by Shell committing it to any specific service provider.

Request:

Please provide a detailed explanation and any conditions or qualifications NGTL’s assessment of its ability to provide the best technical and commercial option for the Shell Jackpine Mine project.

Response:

There are no conditions. NGTL has not received a request from Shell nor made any commitments. Please refer to IGCAA-NGTL-011.4.

IGCAA-NGTL-012.1

Reference:

Application section 8, page 8 of 9, question 7 Table 8.7-3.

Preamble:

NGTL provides a forecast of incremental receipt revenue associated with Simmons Pipeline purchase.

Request:

Is all receipt revenue estimated based on the FT-P toll? If not, provide a breakdown.

Response:

Yes.

IGCAA-NGTL-012.2

Reference:

Application section 8, page 8 of 9, question 7 Table 8.7-3.

Preamble:

NGTL provides a forecast of incremental receipt revenue associated with Simmons Pipeline purchase.

Request:

Of NGTL's 2004 FT-P revenue forecast, how much receipt revenue is forecasted from the Simmons Pipeline?

Response:

There is approximately \$2.5 million of FT-P revenue for the indigenous gas supply directly connected to the Simmons pipeline included in the FT-P forecast.

IGCAA-NGTL-013

Reference:

Application section 8, question 10, page 9 of 10, lines 4 and 5 and
Application section 2.7, lines 2 – 6.

Preamble:

In the first reference NGTL indicates that it is seeking Board approval for inclusion of Ventures TBO costs for 2004. The second reference suggests that NGTL is seeking approval of the Ventures TBO agreement.

Request:

Is NGTL seeking approval of only TBO costs for 2004 for the Ventures pipelines or for some longer term?

Response:

NGTL is seeking approval in the Application for inclusion of Ventures TBO costs in its 2004 revenue requirement.

IGCAA-NGTL-014.1

Reference:

Application section 2.7, page 2 of 13 and Application section 8, page 3 of 4 Table 8.8-1.

Preamble:

NGTL indicates that it is applying for recovery of \$6.1 million in TBO costs for the Venture contract and that the delivery point will be the Oil Sands Sales metre station located at 10-6-93-10 W4M. The summary of the contract with Venture indicates that there is also an alternative for a Mildred Lake delivery point for \$5.9 million.

Request:

Provide a map showing the Mildred Lake delivery point and the Oil Sands Sales metre station delivery point.

Response:

Please refer to the response to BR-NGTL-027(d).

IGCAA-NGTL-014.2

Reference:

Application section 2.7, page 2 of 13 and Application section 8, page 3 of 4 Table 8.8-1.

Preamble:

NGTL indicates that it is applying for recovery of \$6.1 million in TBO costs for the Venture contract and that the delivery point will be the Oil Sands Sales metre station located at 10-6-93-10 W4M. The summary of the contract with Venture indicates that there is also an alternative for a Mildred Lake delivery point for \$5.9 million.

Request:

Explain the differences in the TBO costs associated with the two delivery points under the Ventures agreement and what the differences are attributable to.

Response:

Ventures must transport the gas a longer distance to the Oil Sands Sales Meter Station compared to the Mildred Lake Sales Meter Station. This longer distance of haul accounts for the larger TBO cost.

IGCAA-NGTL-014.3

Reference:

Application section 2.7, page 2 of 13 and Application section 8, page 3 of 4 Table 8.8-1.

Preamble:

NGTL indicates that it is applying for recovery of \$6.1 million in TBO costs for the Venture contract and that the delivery point will be the Oil Sands Sales metre station located at 10-6-93-10 W4M. The summary of the contract with Venture indicates that there is also an alternative for a Mildred Lake delivery point for \$5.9 million.

Request:

Will the Simmons pipeline and the Ventures pipeline on which NGTL will now hold TBO capacity be effectively interconnected and if so, is such interconnection beneficial to NGTL's provision of service in the Fort McMurray area?

Response:

The Simmons and Ventures pipelines are connected. This interconnection is beneficial to providing service to the market because it increases the hydraulic efficiency to the area.

IGCAA-NGTL-015.1

Reference:

Application section 8, pages 5 and 6 of 6, Tables 8.10-1 and 8.10-2.

Preamble:

NGTL provides cost alternative information for the purchase of the Simmons and the Ventures TBO arrangement.

Request:

Please breakout the least cost alternative assessment for Simmons and Ventures TBO and, in the Simmons assessment add in the additional receipt revenue into the both the 5 and 10 year cases.

Response:

The two tables below display the least cost alternative assessment for the Simmons acquisition and the Ventures TBO with the additional receipt revenue from the Simmons Pipeline purchase included in the Simmons assessment. In the tables the Proposed Service Solution is represented by Case A, the Alternative Service Solution without Ventures is represented by Case B, and the Alternative Service Solution without Ventures TBO and Simmons Acquisition is represented by Case C. These three cases are described in detail in Sub-Section 8.10 of the Application.

Five Year Build-up of Facilities

	Relative CPVCOS Savings (\$ million)	Estimated Relative Simmons Receipt Revenue ¹ (\$ million)	Relative CPVCOS Plus Net Simmons Receipt Revenue Estimate (\$ million)
Ventures TBO Case B - Case A	2.6	0	2.6
Simmons Case C - Case B	70.3	10.7	81.0

¹ Assumes the shut-in of gas at the 938 wells identified by the Board.

IGCAA-NGTL-015.1

Ten Year² Build-up of Facilities

	Relative CPVCOS Savings (\$ million)	Estimated Relative Simmons Receipt Revenue ¹ (\$ million)	Relative CPVCOS Plus Net Simmons Receipt Revenue Estimate (\$ million)
Ventures TBO Case B - Case A	9.2	0	9.2
Simmons Case C - Case B	8.9	10.7	19.6

¹ Assumes the shut-in of gas at the 938 wells identified by the Board.

² A ten year build-up of facilities on to the Liege Header combined with a five year build-up of facilities off of the Liege Header.

IGCAA-NGTL-015.2

Reference:

Application section 8, pages 5 and 6 of 6, Tables 8.10-1 and 8.10-2.

Preamble:

NGTL provides cost alternative information for the purchase of the Simmons and the Ventures TBO arrangement.

Request:

What assumptions were made in the 10-year least cost alternative case? Specifically address the assumptions regarding northern gas and pipeline infrastructure required to provide service for such gas. Explain the sensitivity of the 10-year assessment to both supply and demand assumptions.

Response:

Please refer to the responses to BR-NGTL-028(a), BR-NGTL-032(b) and BR-NGTL-032(d). The 10-year assessment was a sensitivity analysis. Variations of this sensitivity analysis were not performed, since the economic results clearly confirmed that the Proposed Service Solution is the least cost alternative.