Exhibit No. 02-008

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July 7, 2005

Alberta Energy and Utilities Board
640 - 5th Avenue S.W.
Calgary, Alberta
T2P 3G4

By Electronic filing

Attention: **Lisa Kelly**
Application Officer

Dear Ms. Kelly:

Re: **NOVA Gas Transmission Ltd. (NGTL)**
2005 General Rate Application Phase 2 (Application)
EUB Application No. 1396409
Minor Amendments to the Application and
Information Request Responses filed June 24, 2005

NGTL has identified several typographical and other minor errors in the Application and Information Request (IR) Responses that require correction. The corrections are summarized in the attached table titled “Summary of Revisions to the Application and IR Responses”.

Also attached are revised, corrected sections of the Application and revised IR Responses which replace those sections and IR Responses that contained errors. NGTL has black-lined the revisions for ease of reference and labeled the affected pages with the revision date.

None of these minor corrections materially affect the substantive data, analysis, or conclusions presented in the Application or the IR Responses.

NGTL has preassigned Exhibit No. 02-008 to this letter, summary table and the replacement pages of the Application and IR Responses.

Yours truly,

NOVA Gas Transmission Ltd.
a wholly owned subsidiary of TransCanada PipeLines Limited

Original Signed By

Nadine E. Berge
Legal Counsel, Law
Gas Transmission

NOVA Gas Transmission Ltd.
2005 General Rate Application Phase 2
EUB Application No. 1396409
Summary of Revisions to the Application and IR Responses
July 7, 2005

Exhibit No.	Reference	Description of Revision
Exhibit 02-001	Application, Section 2.0, Page 42, Table 2.4.1-3.	Revision to include indirect FT-R revenue associated with Simmons facilities. Corrected wording to read "The direct revenue represents only the revenues…", and a correction from "2.7 million" to "2.1 million"
Exhibit 02-001	Application, Section 2.0, Page 45, lines 20 and 21.	Addition of "and indirect" and "FT-R" to the discussion of delivery services.
Exhibit 02-001	Application, Section 2.0, Page 47, Table 2.4.2-2.	Correction related to classification of one delivery meter station.
Exhibit 02-001	Application, Section 2.0, Page 48, line 6.	Revision from "1.2%" to "1.1%".
Exhibit 02-001	Application, Section 2.0, Page 50, Table 2.4.2-3.	Correction related to classification of one delivery meter station.
Exhibit 02-001	Application, Section 2.0, Page 51, Table 2.4.2-4.	Correction related to classification of one delivery meter station.
Exhibit 02-001	Application, Section 2.0, Page 45, line 24.	Revision from "$31.11" to "$30.54".
Exhibit 02-003	NGTL's Response to Information Request ATCO-NGTL-P1	Revised figures in Table 2, to reflect deduction of FT-P metering revenue from primary service metering revenues.
Exhibit 02-006-001	Attachment to NGTL's Response to Information Request BR-NGTL-006(g).	Correction to table title from "2.2-1" to "2.3-1".
Exhibit 02-006-001	Attachment to NGTL's Response to Information Request BR-NGTL-007(d).	Revision from "51.6%" to "55.6%".
Exhibit 02-006-001	Attachment to NGTL's Response to Information Request BR-NGTL-008, Page 2 of 2.	Revised figures to reflect deduction of FT-P metering revenue from primary service metering revenues.
Exhibit 02-006-001	NGTL's Response to Information Request BR-NGTL-013.	Revision to last sentence in Price Discovery section in table to read as follows "*Information on these transactions is readily available on various exchange services (e.g. NGX).*"
Exhibit 02-006-001	NGTL's Response to Information Request BR-NGTL-015(b).	Deletion of word "In".
Exhibit 02-006-001	NGTL's Response to Information Request BR-NGTL-017(a).	Deletion of word "operating" so that sentence reads in part "… illustrate that NGTL's costs for…"

Exhibit No.	Reference	Description of Revision
Exhibit 02-006-002	Attachments 2 and 4 to NGTL's Response to Information Request AP-NGTL-010(a), and Attachments 2, 4, 6 and 8 To AP-NGTL-010(b).	Table titles expanded for clarity.
Exhibit 02-006-002	NGTL's Response to Information Request AP-NGTL-011, Pages 1 through 4.	First three tables in response updated to indicate that the FT-P metering revenue has been included with the Primary Service Metering Revenue, and the addition of a table showing rates including the metering component.
Exhibit 02-006-002	NGTL's Response to Information Request AP-NGTL-030(e).	Revised to more fully explain the response provided.
Exhibit 02-006-004	NGTL's Response to Information Request CCA-NGTL-004(b) and (d).	Correction from "$2.7 million" to "$2.1 million".
Exhibit 02-006-006	NGTL's Response to Information Request EnCana-NGTL-011(b).	Correction from "$2.7 million" to "$2.1 million".
Exhibit 02-006-007	NGTL's Response to Information Request IGCAA-NGTL-006(c), Page 3 or 3.	Corrected typographical error in Inventory Account row, and addition of "or partial" to Assignments row.
Exhibit 02-006-009	NGTL's Response to Information Request WEG-NGTL-008(b).	Deletion of previous response provided in (b), and replacement of "Please refer to the response to (a)."
Exhibit 02-006-009	NGTL's Response to Information Request WEG-NGTL-027(b).	Correction from ".0007¢/GJ" to "0.07¢/GJ".

2.0 RATE DESIGN

2.1 INTRODUCTION

Q1. What is the purpose of the evidence in this section?

A1. In this section NGTL responds to certain Board directives in Decision 2004-097.[1] Specifically, NGTL provides a Cost of Service (COS) study in which it uses the existing cost allocation methodology, a COS study in which it evaluates several alternative approaches to cost allocation, an updated Distance of Haul (DOH) study, and an updated Cost of Haul (COH) study. NGTL specifically addresses, as part of its evaluation of cost allocation methodologies, an allocation of transmission costs to intra-Alberta delivery service.

In addition, NGTL provides information and analysis of intra-Alberta delivery service accountability measures and presents and discusses the merits of potential alternative measures.

Q2. How is the evidence in this section organized?

A2. NGTL has organized the evidence in this section as follows:

Sub-section 2.2: presentation and discussion of the results of its COS studies, the 2004 DOH study and the 2004 COH study;

Sub-section 2.3: assessment of the existing rate design against generally accepted rate design criteria;

Sub-section 2.4: presentation and discussion of the results of its analysis of existing intra-Alberta delivery service accountability and potential alternative measures; and

Sub-section 2.5: summary of the evidence in Section 2 and the conclusions to be drawn from it.

[1] EUB Decision 2004-097, pages 31 and 32.

Q3. Has NGTL sought external advice to assist it with the preparation of this Application?

A3. Yes. NGTL retained Dr. Stephen Gaske of Zinder Companies Inc. to provide expert advice on cost allocation and rate design matters applicable to the Alberta System.

Specifically NGTL asked Dr. Gaske to:

- describe the concepts and principles that are important for analyzing NGTL's costs of providing services;
- evaluate from an economic and ratemaking perspective the reasonableness of each of the cost allocation and rate design methodologies examined by NGTL;
- review NGTL's existing accountability provisions for intra-Alberta delivery points and render an opinion as to whether these are reasonable and appropriate; and
- review the role of competition in determining a reasonable rate structure for NGTL's Alberta System.

Dr. Gaske has provided written testimony which appears as Appendix 2D.

2.2 COST ALLOCATION

Q4. What is the purpose of the evidence in this sub-section?

A4. The purpose of this evidence is two-fold: to present and discuss the results of the various cost allocation methodologies and to recommend an appropriate approach to be used for the Alberta System for 2005. NGTL has organized the evidence in this sub-section as follows:

Sub-section 2.2.1: examination of appropriate cost allocation methodologies for the Alberta System, including a review of its 2004 DOH and 2004 COH studies; and

Sub-section 2.2.2: discussion, analysis and comparison of the existing cost allocation methodology and six alternatives.

2.2.1 Appropriate Cost Allocation for the Alberta System

Q5. What are the objectives of a COS study?

A5. Under ideal circumstances, a COS study will identify the major cost relationships between the various services provided by a utility. All of the utility's costs are then assigned to the utility's services or otherwise allocated using appropriate allocation methodologies.

The Board has considered the purpose and structure of a cost of service study in various decisions. Recently, it stated in Decision 2004-079:

> The primary tool utilized in determining an appropriate cost allocation is a Cost of Service Study (COSS). A COSS will ordinarily analyze the costs incurred in providing regulated services, categorize or functionalize these costs and then determine an appropriate set of methodologies for the allocation of these costs.[2]

[2] Alberta Energy and Utilities Board Decision 2004-079, ATCO Pipelines General Rate Application Phase II, (September 27, 2004) (EUB Decision 2004-079), page 5.

In relation to the Alberta System specifically, the Board stated in Decision 2003-051:

> The COS analysis will undoubtedly assist NGTL, parties and the Board in the review of cost accountability and cost allocation, and provide information that should assist in review of competitive issues and rate design.[3]

Q6. Can all costs be directly assigned to services on a one-to-one basis?

A6. Ideally there would be a one-to-one relationship between each service and its underlying cost structure. However, the ability to segregate costs on a one-to-one basis is dependent on the nature of the pipeline system in question.

In the case of the Alberta System, it is not possible to directly assign costs to specific services because the nature of the System is such that the majority of its costs are joint or common costs (i.e., costs associated with facilities that are used to provide multiple services). Therefore, appropriate methodologies must be used to allocate costs to the various services provided by NGTL.

Cost allocations must reflect underlying cost relationships that have been demonstrated to be valid (e.g., unit transmission costs increase with distance, all other factors being held constant). Cost allocation methodologies must also be meaningful and acceptable to stakeholders, and must generally evolve in a way that reflects current public policy and market realities.

Q7. Has NGTL conducted a recent COS study?

A7. Yes. NGTL conducted a COS study based on its existing allocation methodology and the most current data then available (2004 COS Study). A copy of the 2004 COS Study is provided in Appendix 2A.

NGTL also conducted a second COS Study using the same data, but utilizing alternative cost allocation methodologies (Alternative Methodologies COS Study). A copy of the Alternative Methodologies COS Study is provided in Appendix 2B.

[3] EUB Decision 2003-051, page 27.

NGTL discusses the results of the 2004 COS Study and the Alternative Methodologies COS Study in sub-section 2.2.2.

Q8. What are the major cost components of the Alberta System revenue requirement?

A8. The Alberta System's primary function is the transmission of gas, which is a capital intensive activity. The majority of the Alberta System revenue requirement consequently consists of capital-related costs that can be directly assigned to the individual assets for metering, compression, or pipes. These categories collectively accounted for approximately 88% of the Alberta System's net book value (NBV) as of December 31, 2003. Metering, compression and pipe individually accounted for 8%, 21% and 71% respectively of this 88%. General plant and working capital accounted for the remaining 12% of the NBV.

For 2003, the direct costs were assigned as follows: 4.7% to metering, 15.0% to compression and 53.8% to pipe, collectively representing 73.5% of NGTL's total costs. The remaining 26.5% were non-direct costs related to General Plant and Working Capital, and General and Administration (G&A).

Q9. What are the major functions of the Alberta System?

A9. The Alberta System provides two major functions:

1. Transmission, which uses compression and pipes to transport gas, and is the primary function; and

2. Metering, which involves custody transfer gas measurement and related transactional functions (e.g., scheduling) being performed at each point on and from the System.

Q10. Has NGTL allocated costs to these functions in the 2004 COS Study, using the existing cost allocation methodology?

A10. Yes. NGTL followed a two step functionalization process in conducting the 2004 COS Study.

The first step was an assignment of the direct pipeline asset costs to the metering and transmission functions. Pipeline asset costs include depreciation, operating return, income and capital taxes, transportation-by-others (TBO), and municipal taxes. As transmission consists of compression and pipe, costs are first assigned to these components and aggregated into transmission by allocating compression costs to individual pipe assets using the power required to move gas through each piece of pipe, under standard operating conditions.

The second step was an allocation of the non-direct costs to the metering and transmission functions. Similar to the allocation process for pipeline asset costs, non-direct costs are allocated to compression and pipe and then aggregated into transmission by allocating compression costs to individual pipe assets using the power required to move gas through each piece of pipe, under standard operating conditions. All general plant costs are allocated to compression, pipe and metering by NBV. All working capital accounts, with the exception of line pack, which is allocated exclusively to pipes, are also allocated by NBV. Similarly, G&A costs, with the exception of maintenance costs, are allocated by NBV. Maintenance costs are allocated based on the historical splits of:

- 50% to compression;
- 35% to metering; and
- 15% to pipes.

Q11. Does NGTL provide separate metering and transmission services?

A11. No. NGTL provides transportation service which is segmented into two primary components: receipt and delivery. Rates for services within each of these components have either a metering and a transmission component or just a metering component. However, both receipt and delivery services are required in order to obtain a full path transportation service.

Receipt services, which consist of Firm Transportation-Receipt (FT-R), Firm Transportation-Receipt Non-Renewable (FT-RN) and Interruptible-Receipt (IT-R), provide shippers with the ability to deliver natural gas to the Alberta System at receipt points. FT-R is the primary Alberta System receipt service and accounts for approximately 75% of the Alberta System receipt revenue.

Delivery services are divided into export and intra-Alberta delivery services. Export delivery services consist of Firm Transportation-Delivery (FT-D), Firm Transportation-Delivery Winter (FT-DW), Short Term Firm Transportation-Delivery (STFT), and Interruptible-Delivery (IT-D). These services provide shippers with the ability to remove natural gas from the Alberta System at export delivery points. FT-D is the primary Alberta System export delivery service and accounts for approximately 85% of the Alberta System delivery revenue. Firm Transportation-Alberta (FT-A) is the primary intra-Alberta delivery service.

A combined receipt and delivery service, Firm Transportation-Alberta Points to Point (FT-P), is also available for intra-Alberta markets.

NGTL essentially provides transportation to two markets: ex-Alberta and intra-Alberta. Transportation to ex-Alberta markets is provided through the combination of receipt and export delivery services, with the main combination being FT-R and FT-D. Transportation to intra-Alberta markets is provided through the combination of receipt and intra-Alberta delivery services, with the main combination being FT-R and FT-A, and through FT-P service. The transportation to either market consists of a metering component to receive gas on to the system, a transmission component to move gas through the system, and a metering component to deliver gas from the system.

Q12. Please provide an overview of the Alberta System receipt and delivery services.

A12. As previously mentioned, NGTL provides services that are segmented into two primary components: receipt and delivery.

Receipt Services:

- FT-R is the primary receipt service. It is a demand service with a minimum initial contract term of three years, after which it can be renewed for a minimum term of one year. For terms less than three years, there is a 5% rate premium and for terms of five years or greater there is a 5% rate discount. Each receipt point has an individual rate that consists of a metering component and a transmission component. The transmission component is determined in accordance with the distance-diameter pricing methodology first approved by the Board in Decision 2000-6.[4] Individual receipt rates can vary by ± 8 cents/Mcf from the system average receipt rate.

- FT-RN is a demand service with a term of one year or less, no renewal rights and a rate equal to 110% of the FT-R rate for the respective receipt point.

- IT-R is an interruptible service and is priced at 115% of the FT-R rate for the respective receipt point.

Delivery Services:

- FT-D is the primary export delivery service. It is a demand service with a minimum initial contract term of one year, after which it can be renewed for a minimum term of one year. All export delivery points have the same rate that consists of a metering and transmission component.

- FT-DW is a demand service with an initial term of four years. Every two years the term can be extended to four years with the consent of NGTL. A maximum contract demand quantity of 35 MMcf/d is available between Empress and McNeill and a maximum contract demand quantity of 35 MMcf/d is available between A/BC and Alberta-Montana. FT-DW is not available at the other export delivery points. FT-DW is priced at 175% of the FT-D rate.

[4] Alberta Energy and Utilities Board Decision 2000-6, NOVA Gas Transmission Ltd., 1999 Products and Pricing, (February 4, 2000) (EUB Decision 2000-6).

- STFT is a non-renewable demand service available for terms of one, three, and five months during the winter season. NGTL determines the amount of capacity available for STFT based on operational and ambient conditions. STFT is a biddable service with a minimum price of 135% of the FT-D rate.

- IT-D is an interruptible service and is priced at 110% of the FT-D rate.

- FT-A is the primary intra-Alberta delivery service. It is a commodity service with a minimum term of one year, which can be renewed for a minimum term of one year. All intra-Alberta delivery points currently have the same rate, which consists of a metering component.

In 2003, FT-P service was implemented. This service provides shippers with the ability to deliver gas on the Alberta System at receipt points and remove it from the Alberta System at an intra-Alberta delivery point. It is an alternative transportation option to a combination of FT-R and FT-A services for intra-Alberta markets. It is a demand service with a minimum initial contract term of one year, after which it can be renewed for a minimum term of one year. For terms less than three years, there is a 5% rate premium and for terms of five years or greater, there is a 5% rate discount. Each FT-P contract has an individual rate that consists of a metering component to receive gas on the System, a metering component to deliver gas off the System, and a transmission component to move gas between the receipt and delivery points. The transmission component is based on the maximum distance between the receipt points and the delivery point identified on the schedule of service. The charge for the average transmission component for FT-P service is set to equal the charge for the average transmission component of FT-R service. Similar to FT-R service, where individual rates can vary by ± 8 cents/Mcf from the average FT-R rate, individual FT-P rates can vary by ± 8 cents/Mcf from the average FT-P rate.

Q13. Is the separation of receipt and delivery services on the Alberta System a significant fact?

A13. Yes. Separate receipt and delivery contracts create service flexibility and simplicity that customers value. This separation of receipt and delivery services allows for the "pooling" of gas on the Alberta System and contributes to the natural gas trading and marketing activities that occur via NOVA Inventory Transfer (NIT). It is important to note that this separation is not made based on any physical definition of receipt or delivery facilities or any physical location on the Alberta System.

Q14. What is the significance of the NIT pool?

A14. The Alberta gas market and its liquidity is influenced significantly by the single NIT pool. The NIT pool is one of the largest and most efficient markets in North America, with a physical natural gas flow of approximately 11 Bcf/d and commercial transactions in excess of 35 Bcf/d. This level of commerce provides a robust opportunity for price discovery, which ensures the establishment of pool prices for both spot and forward transactions. This pool includes supply from over 900 individual receipt points and provides delivery to over 100 intra-Alberta delivery points, as well as to six ex-Alberta pipelines that supply markets across North America. Over 200 customers have direct access to the NIT pool via NGTL accounts and numerous others can access the market via third party services. This broad accessibility maximizes the amount of gas available, places all suppliers on the same footing with the opportunity to find buyers, and places all buyers on the same footing with the opportunity to find supply.

NGTL's rate design, terms and conditions of service, and business procedures are integral to the operation of NIT, which is greatly valued by NGTL's customers.

Q15. How should metering costs be allocated to services?

A15. Metering is a function required by all transportation services available on the Alberta System. Gas is metered when it is received on the System and gas is metered when it is delivered from the System. As such, the metering function is included in the rates charged for all services, other than Interruptible Transportation-Storage (IT-S) and Firm

Transportation-Extraction (FT-X). NGTL determines the metering cost for each service on the basis of the overall system-average metering cost. This approach was extensively reviewed in NGTL's 2004 GRA Phase 2 proceeding, was generally accepted by NGTL's stakeholders, and was ultimately accepted by the Board as a reasonable approach.[5] Therefore, NGTL has not re-examined metering cost allocation in this Application.

Q16. Why is there no metering function included in the IT-S or FT-X services?

A16. These services provide broad industry benefits. Therefore, it could be argued that costs associated with them are appropriately recovered through other transportation services.

NGTL also understands through consultation with customers and the extensive review in NGTL's 2004 Phase 2 proceeding, that the majority of customers are not in favour of explicit rates for IT-S or FT-X services at this time. Consequently, NGTL does not allocate metering costs to these services under its existing cost allocation methodology.

Q17. How should transmission costs be allocated to services?

A17. Ideally, each service should have a transmission component that reflects its share of the transmission function. However, as previously mentioned, NGTL divides its services into receipt, which allows gas on the System, and delivery, which allows gas off the System, without having any physical demarcation between receipt and delivery service upon which the assignment of transmission costs between the two services can be based. In addition, the Alberta System is a highly integrated system, with the majority of its transmission costs being joint or common costs, so it is not possible to determine the actual costs of providing particular services. Consequently, it is appropriate to aggregate the transmission costs of facilities and utilize cost allocation methodologies to determine service rates.

Q18. What methodologies has NGTL used to allocate transmission costs to services?

A18. NGTL has historically used a distance of haul methodology to validate that the 50/50 split of transmission costs on a unit basis to receipt and delivery services is reasonable.

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[5] EUB Decision 2004-097, page 18.

NGTL provided a 2003 DOH Study as part of its 2004 GRA Phase 2 Application. NGTL also provided as part of its 2004 GRA Phase 2 Application a COH study for comparison purposes.

Q19. Has NGTL updated its 2003 DOH study?

A19. Yes. NGTL completed a 2004 DOH Study based on the revised DOH methodology approved by the EUB in Decision 2004-097. A copy of the 2004 DOH Study is provided in Appendix 2A. The Study was conducted in late 2004, as part of NGTL's preparation of this Application. It is therefore based on 2003 data, which was the most current data available at that time.

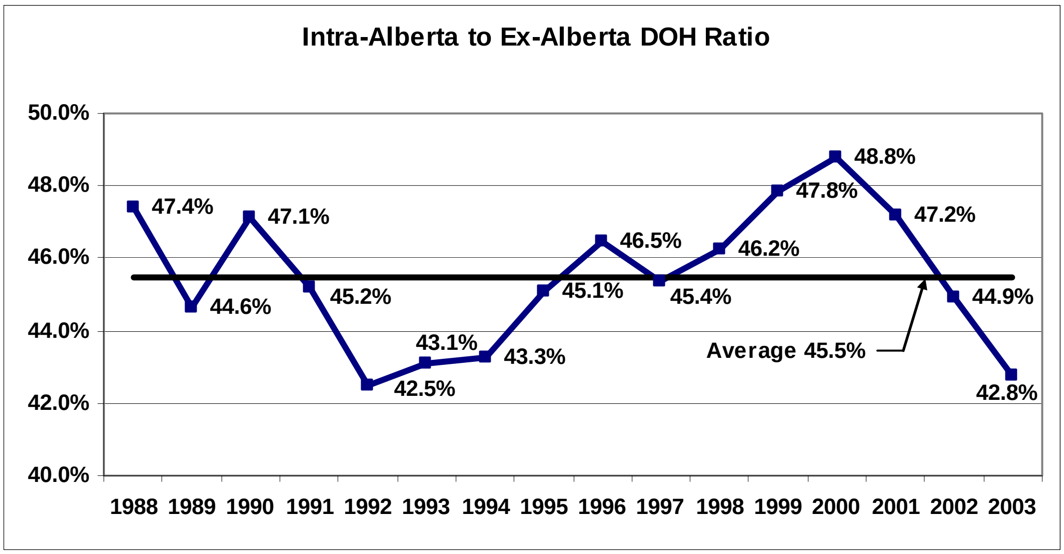
The average 2003 DOH was: 239 km for intra-Alberta deliveries; 559 km for ex-Alberta deliveries; and 517 km for all deliveries (intra-Alberta and ex-Alberta).

Thus, the average intra-Alberta DOH was 42.8% of the average DOH for ex-Alberta deliveries in 2003.

Q20. How does this result compare to the results of previous years' DOH studies?

A20. Figure 2.2.1-1 shows the annual DOH results from 1988 to 2003.

Figure 2.2.1-1



The average intra-Alberta to ex-Alberta ratio has ranged from a low of 42.5% in 1992 to a high of 48.8% in 2000. The 16-year average is 45.5%.

Q21. Has NGTL forecast the DOH for 2004 or 2005?

A21. No. NGTL's DOH studies examine historical data. NGTL does not have a model to forecast DOH. The DOH will depend on the actual volumes received at 900 + receipt stations and the actual volumes delivered to 100 + delivery stations, as well as the actual pipe connectivity and hydraulics used to transport gas between the various receipt and delivery points. Currently, NGTL cannot forecast these factors without making significant simplifying assumptions that may then generate unreliable results.

Q22. Has NGTL updated its COH study as directed by the Board in Decision 2004-097?

A22. Yes. NGTL updated its COH study using 2003 data. As earlier explained, this was the most current data available when NGTL conducted the study in late 2004. Any acquisitions, expansions and extensions that were added to the Alberta System since December 31, 2003 are therefore not included in the 2004 COH Study. The updated 2004 COH Study is included in Appendix 2C and contains a comprehensive description of the methodology employed.

Q23. Did NGTL include the Simmons Pipeline assets acquired in 2004 in its 2004 COH Study?

A23. No. The 2004 COH Study is an historical examination of the Alberta System for 2003. As the Simmons Pipeline facilities were not part of the Alberta System until late 2004, these facilities were not included in the 2004 COH Study. However, due to the relatively small distance of pipe and small volumes relative to the existing intra-Alberta deliveries, NGTL believes that these assets will not have a material effect on the 2004 COH. NGTL has included additional analysis on the Simmons Pipeline facilities in Section 2.4 of the Application.

Q24. What are the results of the 2004 COH Study?

A24. The results indicate that the average cost of haul in 2003 was 673 for intra-Alberta deliveries and 936 for ex-Alberta deliveries.

The average intra-Alberta COH is 71.9% of the average COH for ex-Alberta deliveries. This is a 6.0% increase from the 2002 COH ratio.

Q25. How does the 2004 COH Study compare to the 2004 DOH Study?

A25. The COH Study is similar to the DOH Study except that it also takes into account economies of scale of the facilities that are used to transport gas. For the COH analysis, facility costs have been accounted-for by applying a relative cost index against each pipe diameter. Thus, the COH study provides a measure of both the distance the gas travels, as well as the costs associated with the facilities used to provide the transportation.

The intra-Alberta COH to ex-Alberta COH ratio is higher than the intra-Alberta DOH to ex-Alberta DOH ratio because, on average, intra-Alberta deliveries utilize a higher percentage of smaller diameter pipe than ex-Alberta deliveries. The change in the COH ratio from 2002 to 2003 is also greater than the relative change in the DOH ratio from 2002 to 2003, which was only 4.9%.

Q26. Has NGTL examined any allocation of transmission costs based on COH in this Application?

A26. No. However, in its 2004 GRA Phase 2 (Section 2.5.2-3), NGTL presented and discussed five COS alternatives based on its 2003 DOH study and five alternatives based on its 2003 COH study.

The first DOH alternative was the DOH methodology that is currently used. It was called the revised DOH methodology because NGTL had revised the process it previously used to calculate the DOH for the delivery points. This methodology allocates transmission costs between receipt and delivery such that:

a) the transmission component of the average FT-R rate is set equal to the transmission component of the FT-D rate; and

b) the average transmission component of the service rates (FT-R + FT-D) required to deliver gas to an export market is twice the average transmission component of the service rates (FT-R + FT-A) to deliver gas to an intra-Alberta market. This split between ex- and intra-Alberta markets is based on the DOH study that shows that on average the distance gas travels to an export market is approximately twice the distance gas travels to an intra-Alberta market.

The second, third and fourth DOH alternatives segmented the Alberta System into mainline and lateral components and used the DOH methodology to allocate mainline costs between receipt and delivery. The only difference between these alternatives was the definition of mainline facilities.

The fifth DOH alternative changed the methodology used to determine the DOH ratio between export and intra markets by excluding extraction stations from the calculation and then used this DOH ratio to set the average transmission component of the service rates (FT-R + FT-D) required to deliver gas to an export market in relation to the average transmission component of the service rates (FT-R + FT-A) required to deliver gas to an intra-Alberta market.

The first of the five COH alternatives used the COH ratio between ex-Alberta and intra-Alberta to set the transmission component of the service rates (FT-R + FT-D) required to deliver gas to an export market in relation to the average transmission component of the service rates (FT-R + FT-A) required to deliver gas to an intra-Alberta market.

The second, third and fourth COH alternatives segmented the Alberta System into mainline and lateral components and used the COH methodology to allocate mainline costs between receipt and delivery. The only difference between these alternatives was the definition of mainline facilities.

The last COH alternative changed the methodology used to determine the COH ratio between export and intra markets by excluding extraction stations from the calculation and then used this COH ratio to set the average transmission component of the service rates (FT-R + FT-D) required to deliver gas to an export market in relation to the transmission component of the service rates (FT-R + FT-A) required to deliver gas to an intra market.

The changes in service rates resulting from the application of these various DOH and COH alternatives was provided in Table 2.5.3-2 of the 2004 GRA Phase 2. That table is reproduced here as Table 2.2.1-1.

Table 2.2.1-1
Change in Illustrative 2004 Rates Resulting from Application of Cost Allocation Using the DOH and COH Methodologies to Rates Determination
(cents/Mcf/day)

Using DOH	**Revised Methodology**	**Alternative 1a) Functional Mainline Definition**	**Alternative 1b) Physical Mainline Definition (>= 24")**	**Alternative 1c) Physical Mainline Definition (>= 12")**	**Alternative 2 Excluding Extraction**
Receipt (FT-R)[1]	0.0	0.2	3.1	(0.1)	(11.6)
Border delivery (FT-D)[1]	0.0	(0.2)	(3.1)	1.0	11.6
Total Ex-Alberta Rate[2]	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Intra delivery (FT-A)	0.0	0.0	0.0	0.0	0.0
Total Intra-Alberta Rate[3]	**0.0**	**0.2**	**3.1**	**(0.1)**	**(11.6)**
Using COH					
Receipt (FT-R)[1]	6.4	1.3	3.6	4.4	1.4
Border delivery (FT-D)[1]	(6.4)	(1.3)	(3.6)	(4.4)	(1.4)
Total Ex-Alberta Rate[2]	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Intra delivery (FT-A)	0.0	0.0	0.0	0.0	0.0
Total Intra-Alberta Rate[3]	**6.4**	**1.3**	**3.6**	**4.4**	**1.4**

Notes:
[1] FT-R and FT-D rates quoted include the metering charge.
[2] Total ex-Alberta rate is the sum of the FT-R and FT-D rates.
[3] Total intra-Alberta rate is the sum of the FT-R and FT-A rates.
Totals may not add due to rounding.

The Revised Methodology (Column 2) was found appropriate by the Board in Decision 2004-097 and is now NGTL's existing methodology. As is evident from Table 2.2.1-1, all of these methodologies result in a reallocation of costs between receipt and delivery services. Depending on the alternative selected, the average FT-R rate could vary from -11.6 cents/Mcf to +6.4 cents/Mcf and the FT-D rate could vary from -6.4 cents/Mcf to +11.6 cents/Mcf, each compared to the rate calculated using the revised methodology. Although the numbers would be different based on 2005 data, the relative changes would be similar.

The COH methodology has some merit for use in allocation of transmission costs to services because it takes into account economies of scale as well as distance. However, the yearly variability associated with use of the COH methodology appears to be greater than that which results from use of the DOH methodology. This could result in greater rate volatility.

Further, consideration needs to be given to how the benefits associated with the economies of scale inherent to the Alberta System are shared by the customer base. Due to the highly integrated nature of the Alberta System, cost allocation based only on a COH methodology may not provide an appropriate sharing of the benefits of economies of scale. This concern was noted by the Board in Decision 2004-097:

> However, the Board is concerned that utilization of the COH methodology may not appropriately allocate the benefits of the economies of scale of the NGTL System to all customers.[6]

Finally, the majority of NGTL's customers and interested parties continue to support the use of the DOH for the purpose of allocating transmission costs between receipt and delivery services. The Board acknowledged this support in Decision 2004-097:

> The majority of NGTL shippers continue to support NGTL's DOH methodology, with only ATCO recommending the utilization of NGTL's COH methodology. The Board therefore considers it appropriate to use the DOH study as a primary rate design methodology at this time, with the COH study acting as an

[6] EUB Decision 2004-097, page 10.

alternative mechanism for comparison purposes, as well as a proxy for costs for receipt point specific rates.[7]

As a result, NGTL does not examine any allocations of transmission costs based on a COH methodology in this Application.

Q27. Did NGTL examine cost allocation methodologies other than DOH and COH?

A27. No. There are numerous other cost allocation methodologies that could be applied. One alternative NGTL believes may have merit for future consideration is to functionalize receipt services into mainline and lateral components. Under such an approach, the rates would be based on a more detailed segregation of costs than the existing methodologies.

Another alternative would be to calculate export point specific delivery prices using an analogous methodology to the existing receipt point specific pricing algorithm. With this methodology, the individual export point delivery rates would be based on a more detailed segregation of costs than the existing flat rate approach. However, NGTL has not developed these concepts in sufficient detail to properly evaluate them further in this Application.

Q28. Did NGTL examine methodologies that allocate costs to customer classes?

A28. No. Methodologies that would allocate costs to customer classes are not appropriate or applicable to the Alberta System. NGTL does not have customer classes that can be solely distinguished by the type of service that they use. All customers groups can and do contract for different service categories. Producers, marketers, end-users and utilities all utilize various combinations of receipt, export delivery, and intra-Alberta delivery services. This structure is substantially different from that of local distribution companies, where service design based on customer segmentation is typical.

Dr. Gaske also considers these issues in his testimony and reaches comparable conclusions.

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[7] Ibid.

2.2.2 Cost of Service Analysis

Q29. Is the 2004 COS Study, identical to the 2003 COS Study provided in NGTL's 2004 GRA?

A29. No. In addition to updating the COS Study to incorporate 2003 cost information, NGTL made several changes to simplify the cost allocation and to make the Study more comprehensive. First, NGTL simplified the methodologies for allocating non-direct costs by using net book value in most instances. Secondly, the 2004 DOH Study was incorporated as part of the 2004 COS Study. Finally, the 2004 COS Study was expanded to include the allocation of costs to all tariff services for the test year.

Q30. Please describe the cost allocation methodology used in the 2004 COS Study and contrast it to the six alternatives examined in the Alternative Methodologies COS Study.

A30. The existing methodology, which is fully described in the 2004 COS Study allocates transmission costs based on a 2:1 relationship between export and intra-Alberta markets and accounts for the transmission costs associated with deliveries to intra-Alberta markets in the FT-R rate. This split between ex-Alberta and intra-Alberta markets is validated by the 2004 DOH Study, which shows that the average distance gas travels to the export market is approximately twice the average distance gas travels to the intra-Alberta market. As all services except IT-S and FT-X include a system average metering component, this methodology produces an average FT-R rate that is equal to the FT-D rate.

In addition to the existing methodology, NGTL has examined six alternative cost allocation methodologies in the Alternative Methodologies COS Study. NGTL selected these six alternatives because it believes they represent a reasonable range of alternatives that respond to the Board's directives in Decision 2004-097 that NGTL consider alternative cost allocation methodologies. NGTL also believes that these alternatives provide a basis against which parties can assess the reasonableness of NGTL's existing rate design.

The first set of these alternatives (1 to 3) retains the key feature of a DOH-based split of transmission costs between intra-Alberta and ex-Alberta, while varying the amount of transmission costs specifically allocated to the FT-A service.

Alternatives 1 to 3 are similar to the existing methodology in that they incorporate a system average metering component in all services other than IT-S and FT-X. They are all different from the existing methodology in that the relationship of transmission costs between export and intra-Alberta markets has been changed from 2:1 to 2.2:1, reflecting the long term average DOH which yields an intra-Alberta to ex-Alberta DOH ratio of 45.5%. They differ amongst themselves with respect to the direct transmission charge incorporated into the FT-A rate. The direct transmission charge should be based on the costs to provide that service. Therefore, transmission costs associated with services other than intra-Alberta delivery should be excluded from the FT-A rate. As a result, NGTL excluded the cost for transmission facilities more directly associated with export, storage, and extraction from the FT-A rate in each of these alternatives. This left the facilities that are only associated with receipt and intra-Alberta delivery services. A breakdown of these costs is provided in sub-section 2.4.2. As these facilities are equally associated with receipt services as intra-Alberta delivery services, some of the costs should be accounted for in the rates of receipt services. NGTL presents two alternatives, one with inclusion of only NGTL facilities and the other with those same NGTL facilities plus costs associated with intra-Alberta TBO agreements. To recognize the balance between receipt and delivery, NGTL has allocated 50% of the costs associated with these facilities to receipt services, and included the remaining 50% of the costs associated with these facilities in the FT-A rate.

Table 2.2.2-1 summarizes the differences in allocation methodologies between Alternatives 1 through 3.

Table 2.2.2-1
Comparison of Alternatives 1 to 3

	Alternative		
Cost Allocation	**1**	**2**	**3**
Intra-Alberta/Ex-Alberta DOH Ratio	45.5%	45.5%	45.5%
Percent of the COS for transmission facilities not associated with export, storage, or extraction included in the FT-A rate	0%	50%	50%
Percent of the cost for the Ventures, ATCO and Kearl Lake TBOs included in the FT-A rate	0%	0%	50%

The second set of these alternatives (4 to 6) retain the DOH basis, but without a split between intra-Alberta and ex-Alberta being a prerequisite step in the determination of rates. Instead, an allocation of costs to services based on volume and distance is employed, with the variation in these alternatives being in the selection of services which are considered primary. In Alternatives 4, 5 and 6, NGTL specifically allocates the revenue requirement to each primary service based on that service's share of the total volume x distance units of all primary services. These alternatives were developed consistent with the response to an undertaking given to the Board in the 2004 GRA proceeding,[8] and do not rely on the traditional NGTL approach of a split between intra and ex-Alberta based on DOH. In this undertaking NGTL was requested to allocate transmission costs based on a DOH-volume (or volume-distance) index prepared by the Board using NGTL's DOH study and forecast volumes.[9] The main difference between each alternative is which services are considered primary. Table 2.2.2-2 summarizes these alternatives.

[8] Response to undertaking at transcript reference 4T610, Exhibit 040-25, NOVA Gas Transmission Ltd., 2004 GRA Phase 2 proceeding.
[9] Exhibit 040-14, NOVA Gas Transmission Ltd., 2004 GRA Phase 2 proceeding.

Table 2.2.2-2
Comparison of Alternatives 4 to 6

Alternative	Primary Services	Secondary Services
4	FT-R; FT-D; FT-A	FT-RN; IT-R; FT-P FT-DW; STFT; IT-D FCS
5	FT-R; FT-D; FT-P	FT-RN; IT-R FT-DW; STFT; IT-D
6	FT-R; FT-D; FT-A; FT-P; FT-X; IT-S	FT-RN; IT-R FT-DW; STFT; IT-D FCS

In Alternative 5 the FT-A service has been eliminated. Without an FT-A service there is no requirement to allocate a transmission component to it. Instead, intra-Alberta service would be provided through FT-P service. A detailed description and explanation of the allocation of the revenue requirement to tariff services for each alternative analyzed, along with illustrative rate calculations and a table of illustrative rates, has been included in Appendix 2B. In addition, Tables 2.2.2-3 to 2.2.2-5 summarize the results for the alternatives.

Q31. Please summarize the results of NGTL's analysis of the cost allocation methodologies considered in the Alternative Methodologies COS Study.

A31. Table 2.2.2-3 shows illustrative rates and key ratios that result from the application of the existing cost allocation methodology and the six alternatives which NGTL examined. Table 2.2.2-4 shows the difference between the rates generated by the existing methodology and the alternatives. Table 2.2.2-5 shows the same data shown in Table 2.2.2-4, but on a percentage basis.

Table 2.2.2-3
Illustrative Rates and Ratios from Application of Existing and Alternative COS Methodologies
(cents/Mcf)

		Alternative					
Rate/Ratio	Existing	1	2	3	4	5	6
Average FT-R	15.51	14.37	13.94	12.88	14.71	14.75	13.97
FT-D	15.51	16.93	17.41	18.61	**16.48**	**16.28**	**15.42**
FT-A	1.42	1.42	1.87	3.00	1.34	n/a	3.37
Average FT-P	15.89	14.75	14.32	13.25	15.09	5.63	6.11
FT-X	-	-	-	-	-	-	14.88
IT-S	-	-	-	-	-	-	3.13
Intra Rate	16.93	15.79	15.81	15.88	16.05	5.63	17.34
Export Rate	31.02	31.30	31.35	31.49	**31.19**	**31.03**	**29.39**
Intra/Ex Ratio	54.6%	50.4%	50.4%	50.4%	**51.5%**	18.1%	**59.0%**
Intra Transmission	14.09	12.95	12.97	13.04	13.21	2.79	14.50
Ex Transmission	28.18	28.46	28.51	28.65	**28.35**	**28.19**	**26.55**
Intra/Ex Ratio	50.0%	45.5%	45.5%	45.5%	**46.6%**	9.9%	**54.6%**
Receipt Rate	15.51	14.37	13.94	12.88	14.71	14.75	13.97
Export Rate	31.02	31.30	31.35	31.49	**31.19**	**31.03**	**29.39**
Receipt/Ex Ratio	50.0%	45.9%	44.5%	40.9%	**47.2%**	**47.5%**	**47.5%**

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Table 2.2.2-4
Change in Existing Illustrative Rates and Ratios from Application of Alternative COS Methodologies
(cents/Mcf)

		Alternative					
Rate/Ratio	Existing	1	2	3	4	5	6
Average FT-R	-	(1.14)	(1.57)	(2.63)	(0.80)	(0.76)	(1.54)
FT-D	-	1.42	1.90	3.10	**0.97**	**0.77**	**(0.09)**
FT-A	-	-	0.45	1.58	(0.08)	n/a	1.95
Average FT-P	-	(1.14)	(1.57)	(2.64)	(0.80)	(10.26)	(9.78)
FT-X	-	-	-	-	-	-	14.88
IT-S	-	-	-	-	-	-	3.13
Intra Rate	-	(1.14)	(1.12)	(1.05)	(0.88)	(11.30)	0.41
Export Rate	-	0.28	0.33	0.47	**0.17**	**0.01**	**(1.63)**
Intra/Ex Ratio (percentage points)	-	(4.13)	(4.15)	(4.15)	**(3.12)**	**(36.43)**	**4.42**
Intra Transmission	-	(1.14)	(1.12)	(1.05)	(0.88)	(11.30)	0.41
Ex Transmission	-	0.28	0.33	0.47	**0.17**	**0.01**	**(1.63)**
Intra/Ex Ratio (percentage points)	-	(4.50)	(4.51)	(4.49)	**(3.40)**	**(40.10)**	**4.61**
Receipt Rate	-	(1.14)	(1.57)	(2.63)	(0.80)	(0.76)	(1.54)
Export Rate	-	0.28	0.33	0.47	**0.17**	**0.01**	**(1.63)**
Receipt/Ex Ratio (percentage)	-	(4.09)	(5.53)	(9.10)	**(2.84)**	**(2.47)**	**(2.47)**

Table 2.2.2-5
Change in Existing Illustrative Rates and Ratios from Application of Alternative COS Methodologies

		Alternative					
Rate/Ratio	Existing	1	2	3	4	5	6
Average FT-R	0%	-7%	-10%	-17%	-5%	-5%	-10%
FT-D	0%	9%	12%	20%	**6%**	5%	-1%
FT-A	0%	0%	32%	111%	-6%	n/a	137%
Average FT-P	0%	-7%	-10%	-17%	-5%	-65%	-62%
FT-X	0%	0%	0%	0%	0%	0%	n/a
IT-S	0%	0%	0%	0%	0%	0%	n/a
Intra Rate	0%	-7%	-7%	-6%	-5%	-67%	2%
Export Rate	0%	1%	1%	2%	1%	0%	-5%
Intra/Ex Ratio	0%	-8%	-8%	-8%	-6%	-67%	8%
Intra Transmission	0%	-8%	-8%	-7%	-6%	-80%	3%
Ex Transmission	0%	1%	1%	2%	1%	0%	-6%
Intra/Ex Ratio	0%	-9%	-9%	-9%	-7%	-80%	9%
Receipt Rate	0%	-7%	-10%	-17%	-5%	-5%	-10%
Export Rate	0%	1%	1%	2%	1%	0%	-5%
Receipt/Ex Ratio	0%	-8%	-11%	-18%	-6%	-5%	-5%

The allocation of transmission costs for Alternatives 1 to 3 is 45.5% to the intra-Alberta FT-R/FT-A service combination and 54.5% to the ex-Alberta FT-R/FT-D service combination.

Alternative 1 illustrates the impact of changing only the intra-Alberta/ex-Alberta DOH ratio. Alternative 1 has no transmission component in the FT-A rate, produces an average FT-R rate that is approximately 7% lower than the existing methodology, and produces an FT-D rate that is approximately 9% higher than the existing methodology.

Alternative 2 recovers 50% of the transmission costs not associated with export, storage or extraction directly through an FT-A rate of 1.87 cents/Mcf. This results in average FT-R and FT-D rates that are approximately 10% lower and 12% higher respectively, from the existing methodology.

Alternative 3 recovers 50% of the transmission costs not associated with export, storage or extraction and 50% of the Ventures, ATCO and Kearl Lake TBO costs directly through an FT-A rate of 3.0 cents/Mcf. This alternative produces average FT-R and FT-D rates that are 17% lower and 20% higher respectively, than those under the existing methodology.

Alternative 4 considers FT-R, FT-D and FT-A to be primary services. This alternative produces an FT-A rate of 1.34 cents/Mcf and average FT-R and FT-D rates that are 5% lower and ~~7%~~6% higher respectively, than those under the existing methodology.

Alternative 5 considers FT-R, FT-D and FT-P to be primary services. In this alternative, it is assumed that FT-A service is not available and all intra-Alberta volumes are contracted under FT-P service. As FT-P service is classified as a primary service, the portion of the revenue requirement allocated to it is based on its relative share of volume x distance units. This results in a decrease to the average FT-P rate of 65% from the existing methodology. It also results in the average FT-R and FT-D rates being 5% lower and 5% higher respectively, than those under the existing methodology. Perhaps more importantly, without an FT-A service, intra-Alberta markets would not have access to NIT and the requirement for Facility Connection Service (FCS) Minimum Annual Volume (MAV) could be eliminated.

Alternative 6 allocates costs to all service categories. FT-X and IT-S services have been included as primary services with FT-R, FT-D, FT-A and FT-P services. This results in an FT-A rate of 3.37 cents/Mcf, which is within 2 cents/Mcf of the existing methodology, and average FT-P, FT-R and FT-D rates that are 62% lower, 10% lower and 1% lower respectively, than the existing methodology. However the major change under this alternative is the introduction of an FT-X rate of 14.88 cents/Mcf and an IT-S rate of 3.13 cents/Mcf, both of which are substantially higher than the existing methodology.

With the exception of Alternative 5, the relationship between the total intra-Alberta rate (FT-R + FT-A) and the total export rate (FT-R + FT-D) varies from 50.4% to ~~59.1%~~59.0% and the transmission component between the intra-Alberta rate and the export rate varies between 45.5% and ~~54.7%~~54.6%. The change for Alternative 5 is substantive because of the elimination of FT-A service. With this result, all intra-Alberta markets would have to be served with FT-P service, which would substantially lower the intra-Alberta rate.

Alternative 3 results in the greatest change between the receipt and export rate with the receipt rate being only 40.9% of the export rate. Alternative 3 also produces the largest rate changes overall, compared to the rates derived from the existing methodology, with the FT-A rate increasing by 111%, the FT-D rate increasing by 20%, and the average FT-R and FT-P rates decreasing by 17%.

Q32. What is NGTL's assessment of these results?

A32. All of these alternatives result in a reallocation of costs amongst receipt, export delivery and intra-Alberta delivery services.

By using the long term average DOH to allocate transmission costs, Alternative 1 allocates a greater share of the costs to transport gas to export markets to the delivery services and a lower share to the receipt services. This would have distributional effects on existing customers. This alternative may be a more precisely calculated allocation than the current methodology, but it would increase rate uncertainty since the long term average DOH will vary annually.

By allocating a portion of the intra-Alberta transmission costs directly to the FT-A rate in Alternative 2, an even greater share of the costs to transport gas to the export markets has been allocated to delivery services. Alternative 2 also results in a greater share of the costs to transport gas to intra-Alberta markets being allocated to the delivery services. Again, this will have distributional effects on an even greater number of existing customers than Alternative 1.

Alternative 3 results in a significant reallocation of costs to the delivery services. The illustrative FT-D rate of 18.61 cents/Mcf is greater than any historical FT-D rate. This result could lead to border bypass. This raises the prospect of a greater use of load retention services and/or an adjustment to the floor and ceiling receipt rates. Similarly, the direct increase of 111% to the FT-A rate is substantial, and may provide incentive for intra-Alberta bypass. This alternative would also have distributional effects similar to Alternatives 1 and 2, but of a greater magnitude.

Alternative 4 produces rates that are within 10% of the illustrative rates derived from the existing methodology for all services. Thus this alternative will have the least distributional impact on existing customers. The FT-A rate under this alternative includes a direct transmission component, however it is a negative amount. This results from the fact that FT-P and FCS services generate sufficient revenue to reduce the share of intra-Alberta delivery costs to be collected by FT-A to be less than the metering costs.

Alternative 5 produces the most precisely measured allocation of transmission costs to the intra-Alberta delivery service. This results from eliminating the FT-A service and requiring intra-Alberta delivery services to be provided only by FT-P service. As the FT-P service is a full path service based on the distance between the receipt points and the delivery point, a better determination of actual costs can be made. However, adopting this approach would require removal of all intra-Alberta deliveries from NIT.

Alternative 6 is the only methodology that allocates costs to all service categories. However, by including FT-P as a primary service, it greatly reduces the amount of revenue that this service would be required to generate, resulting in a significantly lower rate. This would better align the FT-P rate structure with FT-A (the other intra-Alberta delivery service) but skew the rate structure from FT-R (the other intra-Alberta receipt service). Alternative 6 introduces significant rates for FT-X and IT-S services, which most stakeholders and NGTL believe are not appropriate at this time.

The existing methodology allocates all transmission costs for service to intra-Alberta markets to the receipt services. This results in the receipt shipper directly paying for all intra-Alberta transmission costs and the delivery shipper having no direct share. However, in the end, when the delivery shipper purchases gas, the appropriate transmission costs will be indirectly accounted for by the delivery shipper. The same concept applies to the service for export markets. Here the delivery shipper accounts for half of the transmission costs directly through its delivery service and half of the transmission costs indirectly when the gas is purchased from the receipt shipper. Obviously, maintaining this methodology would have no distributional impacts.

Q33. What does NGTL conclude regarding the appropriateness of the various cost allocation methodologies examined?

A33. It is evident that under all cost allocation methodologies examined here, including the existing methodology, costs are fully allocated insofar as the methodologies would result in rates that facilitate collection of the entire revenue requirement. Costs are also categorized and functionalized in a manner that reflects the integrated nature of the Alberta System. The analysis also provides further information as a basis for considering rate design issues, including competition and public policy objectives. Consequently, the basic objectives of a cost of service study have been met.

It is also evident that any change in cost allocation methodology would alter the rates paid by customers. Several of the alternatives, if adopted, would have significant distributional effects on Alberta System customers.

In summary, while NGTL considers all of the alternatives to have some merit, no one methodology is clearly superior to the others. However, unlike the alternatives, the existing methodology and its impacts are well understood and acceptable to the majority of NGTL’s stakeholders. Accordingly, NGTL believes there is no compelling reason to prefer one of the alternatives over another, or to otherwise deviate from the existing cost allocation methodology for 2005.

2.3 RATE DESIGN

Q34. What is the purpose of the evidence in this sub-section?

A34. The purpose of this evidence is to assess the NGTL rate design against generally accepted rate design criteria. As part of this assessment NGTL also responds to the Board's consideration of an appropriate intra-Alberta rate.

Q35. Please provide an overview of the existing rate design methodology for the Alberta System.

A35. A detailed description of the Alberta System cost allocation and rate design methodology is provided in NGTL's 2004 COS Study. The 2004 COS Study encompasses both cost allocation and rate design as these are the components of a highly integrated and iterative process to which there is no clearly identifiable starting point. For example, it is not possible to identify costs for particular services until particular services are identified, nor is it possible to structure rates that are cost reflective without understanding the underlying cost structures. However, the end point is very clearly defined with the determination of final rates for each service offered which is considered a rate design activity. As a result the last section (Section 7) of the COS study provides a detailed description of the process used to determine the final rates.

The existing rate design methodology fully allocates the revenue requirement to all tariff services using the cost allocations developed in the COS study. In essence, the rate design methodology ensures that the following cost relationships are maintained:

a) the average transmission component of the service rate (FT-R + FT-D) required to deliver gas to the export market is twice the average transmission component of the service (FT-R + FT-A) rate to deliver gas to the intra-Alberta market.

b) the transmission component of the average FT-R rate is equal to the transmission component of the FT-D rate; and

c) The rate for every service, except FT-X and IT-S services, includes a metering component to account for metering costs.

The rate design also maintains the relationships between the primary services and their associated secondary services.

Figure 5.1-1 in Section 5 of this Application provides an overview of the rate calculation process for 2005.

Q36. What changes were introduced to the NGTL rate design in 2003?

A36. Upon receiving Board Decision 2003-051, NGTL implemented several significant changes to its rates and services. These included:

- the introduction of a new FT-P service for intra-Alberta transportation;
- an explicit toll for FT-A service;
- an increased MAV threshold to increase accountability for facilities associated with intra-Alberta delivery, extraction, and storage points; and
- the introduction of a new extension annual volume (EAV) obligation for mainline extensions associated with intra-Alberta deliveries.

FT-P service provides an intra-Alberta transportation service for customers with a rate that reflects the costs required to provide the service and the attributes associated with it. As the rate for the FT-P service is based on the full path cost of providing service from specific receipt points to a specific delivery point, users of this service are accountable for the costs associated with the transportation of their gas.

In effect, FT-P service represents a combination of FT-R service and FT-A service. Therefore, the FT-P rate is similar to the combined FT-R and FT-A rates. Specifically, the FT-P rate includes the receipt metering and transmission components of costs, which is similar to the FT-R rate, and the intra-Alberta metering costs, which is similar to the FT-A rate.

FT-A service, in conjunction with FT-R service, provides the alternative for receipt, transmission and delivery to intra-Alberta markets. Metering costs that had previously been recovered via other transportation services were now recovered directly from the customer that holds the FT-A contract. FT-A service does not have a transmission component associated with its rate due to the integrated nature of the Alberta System. Transmission costs for shared facilities (e.g., the facilities used for multiple services such as both receipt and intra-Alberta delivery) are included in the FT-R rate. By virtue of this component of the FT-R rate, which must be incurred to effect an FT-A delivery, a transmission charge is in fact associated with such delivery.

The change to the MAV and the introduction of the EAV provide increased customer cost accountability for intra-Alberta deliveries.

Q37. What criteria are used in the assessment of the appropriateness of the rate change?

A37. The following criteria espoused by Professor Bonbright [10] have been commonly used for structuring rates:

1. The related, “practical” attributes of simplicity, understandability, public acceptability, and feasibility of application.

2. Freedom from controversies as to proper interpretations.

3. Effectiveness in yielding total revenue requirements under the fair-return standard.

4. Revenue stability from year to year.

5. Stability of the rates themselves, with a minimum of unexpected changes seriously adverse to existing customers.

6. Fairness of the specific rates in the apportionment of total costs of service among the different consumers.

7. Avoidance of “undue discrimination” in rate relationships.

8. Efficiency of the rate classes and rate blocks in discouraging wasteful use of service while promoting all justified types and amount of use.

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[10] James C. Bonbright, Principles of Public Utility Rates, 1961, page 291.

Q38. What relative weighting should be given to each of these criteria in assessing a rate design?

A38. It is difficult to ascribe a specific weighting to each of these criteria. NGTL believes that a rate design must evolve to meet the changing dynamics of the marketplace and reflect, at any given time, a balance of interests among stakeholders. As such, the relative importance of criteria may change over time.

The Board recognized in Decision U96055 that the weight to be assigned to these criteria will reflect a balance of interests. It stated:

> …the basic attributes of an appropriate rate design include simplicity, understandability and public acceptability; freedom from controversy; effectiveness in achieving revenue sufficiency and providing revenue and rate stability; fairness in apportionment of costs and avoidance of undue discrimination; and the encouragement of efficiency. The weight to be given to each of these characteristics will depend largely on the desired balance between various goals, objectives and interests.[11] [Emphasis added]

The various goals, objectives and interests of stakeholders were considered in the consultations that led to past settlements that form the basis of NGTL's existing rate design. As such, an appropriate balance was struck between these criteria at the time.

Q39. Has NGTL assessed the existing rate design and the alternatives against these criteria?

A39. No. However, Dr. Gaske has conducted such an assessment at NGTL's request. It is Dr. Gaske's view that the existing rate design satisfies these criteria. He also concludes that implementation of any alternative would ultimately be determined by weighing the importance of various principles such as stability, the distributional impacts on customers and competitive considerations. NGTL agrees with Dr. Gaske's views.

[11] Alberta Energy and Utilities Board Decision U96055, NOVA Gas Transmission Ltd. 1995 General Rate Application Phase II (January 12, 1995), pages 35 and 36.

Q40. Is the existing rate design still appropriate for 2005?

A40. Yes. NGTL believes that the existing rate design remains appropriate for 2005.

It is a reasonable design for the Alberta System based on sound allocation methodologies and satisfies generally accepted rate design criteria.

Further, NGTL understands that the majority of its stakeholders continue to support the existing rate design for 2005. This design reflects a significant collaborative effort among NGTL's diverse stakeholders and required compromise of competing interests.

Q41. Is the NGTL rate design expected to remain as it is for the foreseeable future?

A41. The NGTL rate design will continue to evolve as a function of changes in the business environment. NGTL expects to have ongoing discussions with stakeholders through its collaborative process and to bring forward changes for Board approval from time to time.

Q42. Is there any other consideration for the current review of the NGTL rate design?

A42. Yes. In Decision 2004-097 the Board suggested that an intra-Alberta toll of approximately 4 cents/Mcf might be reasonable. Specifically, the Board stated:

> With respect to the current record, the proposals for transmission costs to be included in the FT-A rate range from zero (NGTL) to 8 cents/Mcf (ATCO). The Board considers that the addition to the FT-A toll of an amount that is close to the midpoint between these two proposals may represent a reasonable approximation of intra-Alberta transmission costs, with this charge to be possibly further refined by reference to more detailed COS information in future.[12]

NGTL submits that the detailed COS information presented in this Application does not support such an outcome. Moreover, setting aside the inappropriateness of the 8 cents/Mcf recommended by ATCO Pipelines, such an approach would not be fair and equitable to intra-Alberta shippers without a corresponding offset to the FT-R rate. An offset to the FT-R rate could be incorporated in a manner similar to Alternatives 2 and 3

[12] EUB Decision 2004-097, page 19.

of the Alternative Methodologies COS Study, discussed in Section 2.2.2. The midpoint of ATCO Pipelines' 2004 proposal of 8 cents/Mcf and NGTL's existing FT-A transmission component of 0 cents/Mcf is 4 cents/Mcf. This amount, combined with the metering component of 1.4 cents/Mcf, results in a total FT-A rate of 5.4 cents/Mcf. In order to maintain the transmission split between the export and intra-Alberta markets, the average FT-R rate would need to be set at 10.6 cents/Mcf and the FT-D rate would need to be set at 21.2 cents/Mcf. This would lead to the same problems NGTL described for Alternative 3, but to an even greater degree. An export delivery rate of 21.2 cents/Mcf would be substantially greater than any historical FT-D rate. This could lead to border bypass, require NGTL to adjust receipt floor and ceiling levels, and/or require NGTL to implement additional LRS type services to retain load. Similarly, a direct FT-A delivery rate of this magnitude would provide greater incentive for intra-Alberta bypass or for dually connected receipt producers to choose other service providers such as ATCO Pipelines.

Q43. How does maintaining the existing rate design impact NGTL's competitive position relative to ATCO Pipelines?

A43. Continuation of the existing rate design maintains the competitive landscape that has allowed ATCO Pipelines to increase its share of receipts at the expense of NGTL and excluded NGTL from delivering to intra-Alberta markets it had historically served indirectly. These outcomes are illustrated by Figures 2.3-1 to 2.3-3.

Figure 2.3-1 shows that ATCO Pipelines has dramatically increased its producer receipts.

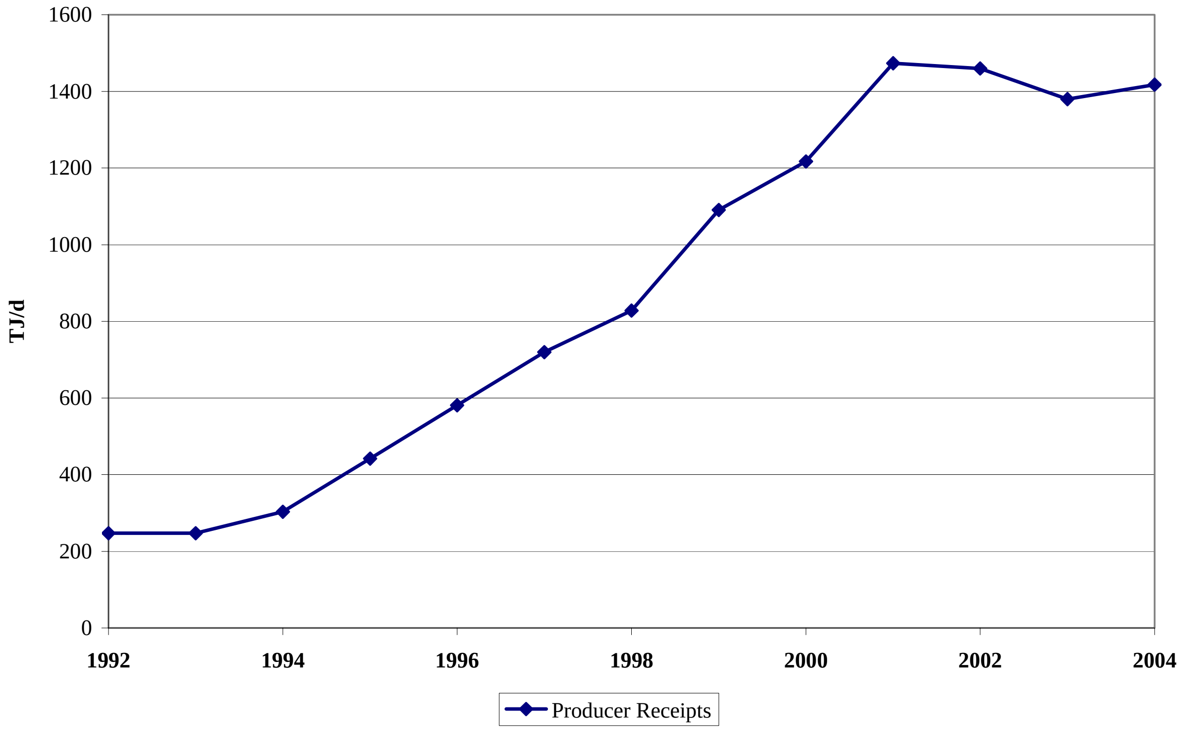
Figure 2.3-2 indicates that since 1999 significant receipt volumes at the stations dually connected to the Alberta System and the ATCO Pipelines system that originally entered the Alberta System have been offloaded to the ATCO Pipelines system.

Figure 2.3-3 shows the drop in deliveries made from the Alberta System to ATCO Pipelines during the same time frame. The decrease in deliveries to ATCO Pipelines is similar to the decrease in receipts onto the Alberta System in Figure 2.3-2.

In summary, ATCO Pipelines has offloaded receipts from the dually connected stations, reducing the deliveries historically made from the Alberta System to ATCO Pipelines, which has eliminated both the receipt and delivery revenues that NGTL previously collected on these volumes for its role in the transportation chain serving these intra-Alberta markets.

Figure 2.3-1

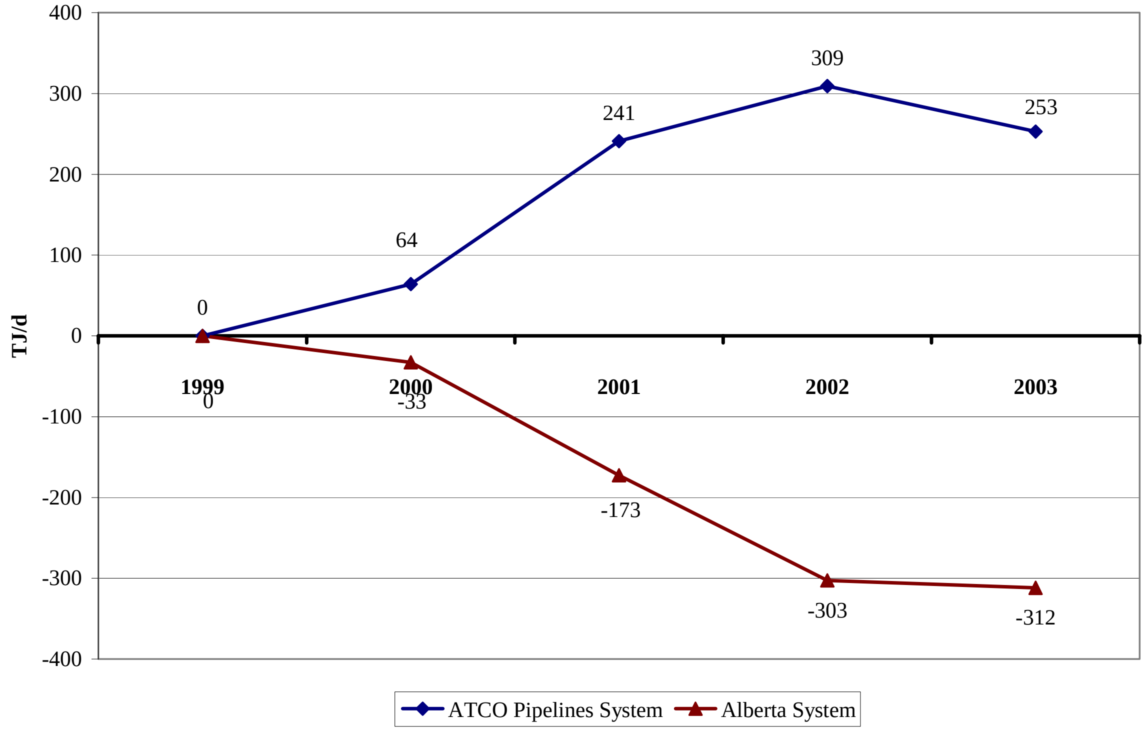
ATCO Pipelines System Receipts



Source:
NUL 1993 GRA Phase 1, Schedule 4.50 Revised; CWNG 1992 GRA Phase 1, Sections 5.3 and 5.4; CWNG 1998 GRA Phase 1, Section 7, Schedule 5.30; ATCO Website; ATCO Pipelines 2004 GRA Phase 1, Responses to Information requests AUMA-EDM-AP-7(a) and (b); and ATCO Pipelines 2004 GRA Phase 2, Exhibit 035-16. For years that throughput information was not available from the listed sources, NGTL estimated the throughput by allocating the change between known prior and later years equally amongst the years for which information was not available.

Figure 2.3-2

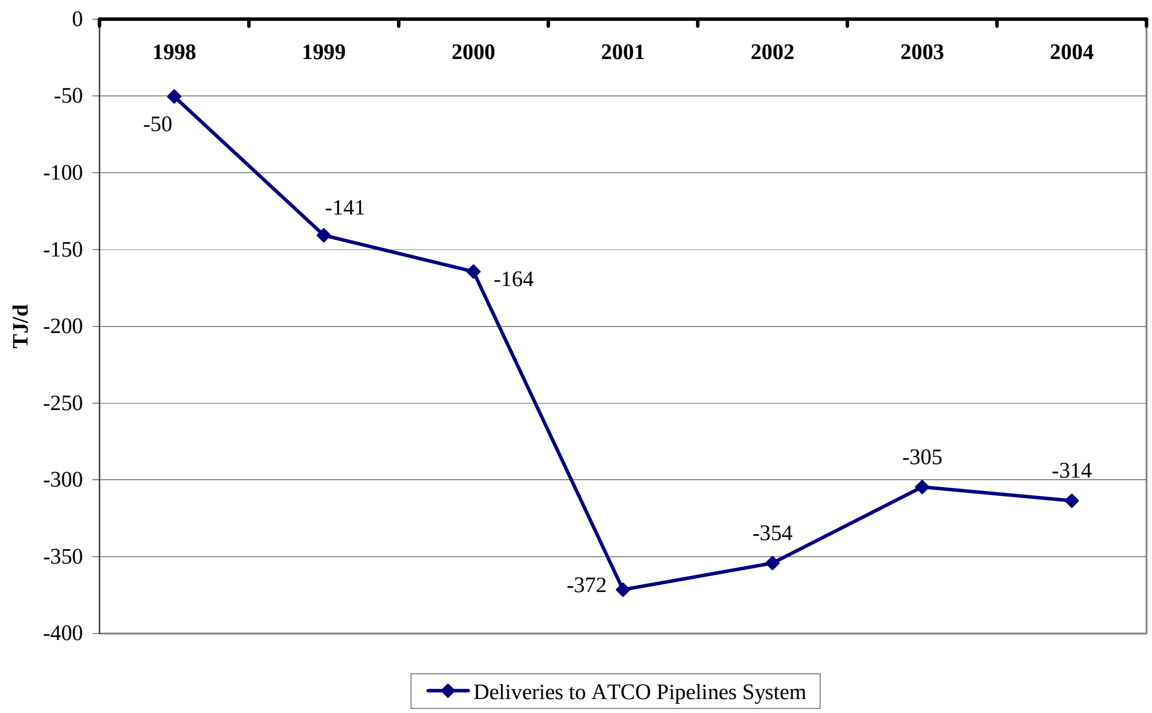
Change in Throughput at Dually Connected Stations from 1999 Levels



Source:
ATCO Pipelines 2004 GRA - Phase 1, responses to Information Requests CAL-AP-15(b) and (c). ATCO did not provide information prior to 1999.

Figure 2.3-3

Change in Deliveries from the Alberta System to ATCO Pipelines System from 1997 Levels



2.4 INTRA-ALBERTA DELIVERY SERVICE ACCOUNTABILITY

Q44. What is the purpose of the evidence in this section?

A44. In this section, NGTL discusses the existing provisions governing intra-Alberta delivery service accountability and a range of potential alternatives. NGTL provides this information in part in response to statements the Board made in Decision 2004-097. Specifically, the Board stated:

> However, the Board considers that these [accountability provisions] cannot be considered in isolation from NGTL's rate design, including the FT-A, FT-R and FT-P tariffs.
>
> …
>
> However, the Board would anticipate a possible further review of the cost accountability issue in future if the anticipated improvements in cost transparency and a more cost accountable FT-A toll are not satisfactorily addressed in the 2005 Phase II proceeding.[13]

NGTL also discusses existing intra-Alberta delivery service accountability and a number of alternatives in recognition of the relationship between tolls and contractual provisions and to provide further perspective for the Board's and other parties' consideration of the appropriateness of the overall rate design.

NGTL also presents in this section information on the costs and revenues associated with the facilities it acquired in 2004 from Simmons. Given that NGTL was not able to include these facilities in the 2004 COH Study, it provides this information as an alternative demonstration that the revenues associated with these facilities exceed the costs.

[13] EUB Decision 2004-097, page 24.

Q45. How is the evidence organized?

A45. NGTL has organized this sub-section as follows:

Sub-section 2.4.1: presentation and discussion of the Simmons facilities acquisition and the revenues and costs associated with these facilities.

Sub-section 2.4.2: discussion of current accountability associated with intra-Alberta delivery services; and

Sub-section 2.4.3: presentation and discussion of alternatives to the existing provisions for intra-Alberta delivery service accountability.

2.4.1 Simmons Facility Analysis

Q46. Did NGTL include the facilities it acquired from Simmons in its 2004 COH study?

A46. No. The 2004 COH Study is an historical examination using 2003 data. Because the Simmons facilities were not included as part of the Alberta System until the fourth quarter of 2004, NGTL was unable to include these facilities in the 2004 COH Study.

Q47. Has NGTL otherwise examined the direct costs and revenues of the facilities acquired from Simmons?

A47. Yes. NGTL has analyzed the direct revenues and costs associated with these facilities. The results of this analysis demonstrate that the direct incremental revenue from the Simmons facilities exceeds the cost of service of the facilities. Consequently, the acquisition benefits all Alberta System customers.

Q48. Please summarize the results of NGTL's analysis.

A48. The results of the analysis are shown in Tables 2.4.1-1 through 2.4.1-3.

Table 2.4.1-1
Analysis of Simmons Facilities
Net Book Value of Simmons Facilities and the Alberta System
($ million)

	Simmons	Alberta System	Simmons % of Alberta System
Compression	3.2	893	0.4%
Metering	0.6	345	0.2%
Pipes	16.6	3,067	0.5%
Total Pipeline Assets	**20.4**	**4,305**	**0.5%**

The net book value of the Simmons facilities are as of December 31, 2004 whereas the net book value of the Alberta System is as of December 31, 2003. The Simmons facilities represent only 0.5 percent of the Alberta System.

Table 2.4.1-2
Analysis of Simmons Facilities
Detailed Cost of Service
($ million)

	Compression	Pipe	Metering	Total Simmons
Direct Costs				
Operating Return	0.28	1.49	0.06	1.83
Depreciation	0.04	0.24	0.01	0.28
Municipal Tax	0.04	0.78	0.01	0.83
Income Tax	0.12	0.62	0.02	0.76
Total Direct Costs	**0.47**	**3.12**	**0.09**	**3.69**
Non-direct Costs				
General Operating Assets	0.01	0.06	0.00	0.07
Calgary Offices	0.01	0.04	0.00	0.05
Field/Service Centers, Vehicles	0.02	0.09	0.00	0.12
Information Technology	0.02	0.12	0.00	0.15
General plant total	**0.06**	**0.31**	**0.01**	**0.39**
Cash Working Capital	0.01	0.06	0.00	0.08
Material & Supplies Inventory	0.00	0.01	0.00	0.01
Line pack Gas	0.00	0.01	0.00	0.01
Unamortized Debt Issue Costs	0.00	0.01	0.00	0.01
Working capital total	**0.02**	**0.10**	**0.00**	**0.12**
Maintenance	0.20	0.29	0.59	1.08
Other Departments	0.04	0.22	0.01	0.28
General Expenses	0.04	0.22	0.01	0.27
Other Expenses	0.02	0.10	0.00	0.12
G&A total	**0.31**	**0.83**	**0.61**	**1.74**
Total non-direct Costs	**0.38**	**1.24**	**0.62**	**2.24**
Total Direct and Non-direct Costs	**0.86**	**4.36**	**0.72**	**5.93**

Note:
Allocated amounts less than $100,000 appear as 0.00 due to rounding.

All direct costs have been annualized based on December 2004 results. The non-direct costs have also been annualized and allocated to the Simmons assets based on their 2003 relationship to the NBV of Alberta System assets applied to the NBV of the Simmons facilities. This provides an annual estimate for the Simmons facilities.

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Table 2.4.1-3
Analysis of Simmons Facilities
Revenues and Costs
($ million)

	Direct	Non-direct	Total
Cost of Service Analysis:			
Pipe	3.12	1.24	4.36
Meter Stations	0.09	0.62	0.72
Compressor Stations	0.47	0.38	0.86
TOTAL SIMMONS COSTS	**3.69**	**2.24**	**5.93**
Revenue:			
CO_2	0.02	0.00	0.02
FT-A	0.41	0.00	0.41
FT-R	2.58	~~0.00~~ 2.10	~~2.58~~ 4.68
IT-R	0.99	0.00	0.99
FT-P	7.62	0.00	7.62
TOTAL REVENUE:	**11.62**	**~~0.00~~ 2.10**	**~~11.62~~ 13.72**

The cost of service numbers are from Table 2.4.1-2. The revenue numbers have been annualized based on the actual results for the month of December 2004. ~~They~~ The direct revenue represents only the revenues that are directly associated with meter stations connected to Simmons pipe. In addition to this direct revenue there is an additional ~~$2.7~~ $2.1 million of indirect FT-R revenue associated with the FT-A service.

2.4.2 Current Intra-Alberta Delivery Service Accountability Provisions

Q49. What are the current accountability provisions associated with intra-Alberta delivery services?

A49. Accountability for the costs of intra-Alberta delivery services is provided through the FT-P service, the FT-A service and the FCS.

The rate for FT-P service is comprised of three components: metering gas on the system; metering gas off the system; and the transmission between the receipt meter stations and the delivery meter station. Thus, the FT-P rate directly accounts for the entire service cost.

The rate for FT-A service accounts for the metering costs to deliver gas from the Alberta System. It does not account for costs associated with metering gas on the System or for any transmission costs. The costs to meter gas on the System, as well as transmission costs associated with deliveries to intra-Alberta markets, are directly accounted for in the FT-R rate. FT-A service shippers indirectly account for these costs when they purchase the gas to be delivered by their FT-A service because the FT-R rate is one of the costs that will be recovered by the seller in the price received for the sale of gas to the FT-A shipper.

As the FT-A service has a commodity rate, its associated accountability is only effective if the service is used. As a result, the FCS was developed specifically to provide accountability for intra-Alberta delivery facilities. These are primarily metering facilities. However, some FCS contracts also include a lateral component for intra-Alberta facilities that were constructed before NGTL exited the lateral business in 2000.

Each year NGTL calculates the Annual Cost of Service (ACS), which includes Operating Costs, Maintenance Costs, Municipal Taxes, Depreciation, Income Taxes and Return on Rate Base, for each FCS contract. NGTL then calculates a MAV for each FCS contract, based on the respective ACS, to establish a threshold level that is used to determine if such metering facilities have been sufficiently utilized to recover costs. If, at the end of the year, the MAV or greater has been delivered to the intra-Alberta delivery metering facilities, then the threshold level has been met and the facilities are deemed to have been sufficiently utilized. As a result, sufficient revenue will have been generated directly through FT-A and FT-P services, and indirectly through receipt services, to recover the costs associated with the metering facilities. In this instance, the FCS Charge would be zero. If no volumes were delivered through the metering facilities, the FCS Charge would be equivalent to the ACS as no revenue would have been generated. For volumes of natural gas delivered through the metering facilities between zero and the MAV, the FCS Charge would be the portion of the ACS that was not recovered through the FT-A, FT-P or receipt services. For example, if 75% of the MAV was delivered, the FCS charge would be equivalent to 25% of the ACS.

NGTL made significant changes to the MAV in October 2003 that have resulted in a dramatic increase in FCS revenue. Table 2.4.2-1 shows the FCS-MAV revenue for the years 2002 to 2004. 2004 is the first year to include the full effect of the 2003 modifications to the MAV.

Table 2.4.2-1
FCS-MAV Revenue from 2002 to 2004

	Year		
	2002	**2003**	**2004**
FCS-MAV revenue ($000)	1,798	3,782	4,868
Revenue change from 2002 ($000)	n/a	1,984	3,070
Revenue change from 2002 (%)	n/a	110%	171%

This table shows that the 2004 MAV revenue is 171% greater than in 2002.

In October 2003, the FCS was also modified to incorporate EAV accountability for intra-Alberta delivery extensions. EAV accountability is structured similarly to MAV accountability. If a minimum annual volume is not moved through the facilities the customer holding the EAV will receive a direct charge. However, unlike the MAV, the EAV requirement is not calculated every year and is not based on the annual cost of the associated facilities. Instead, the minimum EAV is based on the volume criteria established under NGTL's Guidelines for New Facilities used to determine mainline extension facilities, and the minimum term is three years. This approach is consistent with customer commitments for mainline receipt extension facilities, where the minimum volume requirement is 100 MMcf/d and a minimum three year secondary term is required.

Q50. Has NGTL recently examined the appropriateness of these accountability provisions?

A50. Yes. NGTL provided analysis in its 2004 GRA Phase 2, Sections 2.6 and 2.7, on all meter stations and all transmission facilities not associated with the major export delivery stations. In this Application, NGTL provides an update to a subset of these facilities, comprised of intra-Alberta delivery meter stations and the transmission facilities not associated with all export points, storage points or extraction points based on the most recent information available.

Q51. Why is NGTL only providing analysis for this subset of facilities?

A51. These metering facilities are directly associated with intra-Alberta delivery services. These transmission facilities are associated with receipt and intra-Alberta delivery services as, with the exception of FT-P service, both receipt and delivery services are required to transport gas on the Alberta System. However, consistent with its approach in its 2004 GRA Phase 2, NGTL has not allocated any of the costs associated with these facilities to receipt services to demonstrate that a level of accountability greater than what is required, is provided.

Q52. What analysis was performed?

A52. NGTL considered revenues and costs directly associated with this subset of facilities, to assess whether the existing accountability ensures that revenues cover costs.

For delivery services, NGTL used the 2005 forecast of direct and indirect intra-Alberta revenues (FT-P, FT-A, FCS and FT-R).

For meter stations costs, NGTL identified all intra-Alberta delivery meter stations and extracted their related costs from the first and second steps of the functionalization process of the COS Study as described in Section 2.1 of this Application.

For transmission costs, NGTL identified all pipe sections not associated with export deliveries, extraction or storage. This was accomplished by identifying the pipe upstream of the stations identified as intra-Alberta delivery that were not included in the algorithms utilized to calculate receipt point specific rates. Next, the costs related to these pipe sections were extracted from the first and second steps of the functionalization process of the 2004 COS Study as described in Section 2.1 of this Application. Thus, all direct and non-direct costs for the transmission (pipe plus compression) facilities were included.

In addition, NGTL conducted cost of service analysis for the relevant acquired Simmons facilities. These facilities were identified in the same manner as described above. However, the related costs were not contained in the 2004 COS Study as the Simmons facilities were not part of the Alberta System in 2003. As a result, NGTL performed a separate analysis to determine the costs related to the Simmons facilities. The methodology for calculating direct costs was performed as described in the 2004 COS Study but for only the month of December, 2004 and then annualized. However, all non-direct costs were allocated based on their 2003 relationship to NBV applied to the NBV of the Simmons facilities.

Q53. Please summarize the results of the analysis performed for intra-Alberta delivery services.

A53. The results of the analysis are shown in Tables 2.4.2-2 through 2.4.2-4.

Table 2.4.2-2
Delivery Facilities not Associated with Export, Storage, or Extraction
Summary of Assets and Costs
($ million)

	NBV of Assets	% of Total Assets	Total Direct and Non-Direct Costs	% of Total Asset Cost
Pipes	6.2	0.1%	2.5	0.2%
Meter Stations	~~44.4~~ 41.6	~~0.9%~~ 0.8%	~~14.9~~ 14.4	1.1%
Assets not Associated with Borders, Extraction or Storage	~~50.6~~ 47.8	1.0%	~~17.5~~ 16.9	1.3%
Total Assets	4,895		1,299	
Simmons Pipe not Associated with Borders, Extraction or Storage	6.1	0.1%	2.1	0.2%
Pipes Including Simmons	12.3	0.3%	4.6	0.4%
Pipes & Meter Stations including Simmons	~~56.8~~ 53.9	~~1.2%~~ 1.1%	~~19.6~~ 19.0	1.5%

The first four rows of table 2.4.2-2 are derived from NGTL's 2004 COS Study. The data show that the NBV of pipe not associated with export, storage or extraction points is approximately 0.1% of the total Alberta System NBV and the NBV of all assets not associated with export, storage and extraction points represents approximately 1.0% of the total Alberta System NBV. In terms of cost, the total direct and non-direct costs of pipe not associated with export, storage or extraction points is approximately 0.2% of the total Alberta System asset cost, and the cost of all assets not associated with export, storage and extraction points represents approximately 1.3% of the total Alberta System asset cost.

The fifth row identifies the Simmons facilities that would be included in this category had they been part of the Alberta System in 2003 (approximately 30% of the total Simmons facilities). The last two rows recalculate the value and costs of the facilities not associated with export, storage or extraction, including the value and costs of the Simmons facilities. Including the Simmons facilities, the NBV of pipe not associated with export, storage or extraction points increases to approximately 0.3% of the total Alberta System NBV and the NBV of all assets not associated with export, storage and extraction points increases to approximately ~~1.2%~~ 1.1% of the total Alberta System NBV. In terms of costs, including the Simmons facilities increases the total direct and non-direct costs of pipe not associated with export, storage or extraction points to approximately 0.4% of the total Alberta System cost, and the cost of all assets not associated with export, storage and extraction points is increased to approximately 1.5% of the total Alberta System cost.

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Table 2.4.2-3
Delivery Facilities not Associated with Export, Storage, or Extraction
Detailed Cost of Service
($ million)

	Pipes	Meter Stations	Total Pipes & Meter Stations	*Simmons Pipe	*Total Pipes Including Simmons	*Total Pipes & Meter Stations
Direct Costs						
Operating Return	0.60	~~4.28~~ 4.01	~~4.87~~ 4.60	0.55	1.15	~~5.43~~ 5.15
Depreciation	0.39	~~1.76~~ 1.58	~~2.15~~ 1.97	0.09	0.48	~~2.24~~ 2.06
Municipal Tax	0.13	~~0.26~~ 0.24	~~0.38~~ 0.37	0.29	0.42	~~0.67~~ 0.66
Income Tax	0.23	~~1.62~~ 1.52	~~1.85~~ 1.75	0.23	0.45	~~2.08~~ 1.97
Total Direct Costs	**1.34**	**~~7.92~~ 7.35**	**~~9.26~~ 8.69**	**1.16**	**2.49**	**~~10.41~~ 9.84**
Non-direct Costs						
General Operating Assets	0.06	0.15	0.21	0.02	0.08	0.23
Calgary Offices	0.04	0.11	0.15	0.01	0.05	0.17
Field/Service Centers, Vehicles	0.10	0.25	0.35	0.03	0.13	0.38
Information Technology	0.12	0.33	0.45	0.04	0.16	0.49
General plant total	**0.32**	**0.84**	**1.17**	**0.10**	**0.42**	**1.26**
Cash Working Capital	0.07	0.17	0.24	0.02	0.09	0.26
Material & Supplies Inventory	0.01	0.03	0.04	0.00	0.01	0.04
Linepack Gas	0.01	-	0.01	0.00	0.02	0.02
Unamortized Debt Issue Costs	0.01	0.03	0.04	0.00	0.01	0.04
Working capital total	**0.10**	**0.23**	**0.33**	**0.03**	**0.13**	**0.36**
Maintenance	0.08	4.47	4.55	0.09	0.17	4.64
Other Departments	0.23	0.60	0.83	0.07	0.30	0.90
General Expenses	0.22	0.59	0.81	0.07	0.29	0.88
Other Expenses	0.10	0.26	0.36	0.03	0.13	0.39
G&A total	**0.63**	**5.92**	**6.56**	**0.26**	**0.89**	**6.82**
Total non-direct Costs	**1.06**	**7.00**	**8.06**	**0.39**	**1.44**	**8.44**
Allocated Compression Costs	**0.14**	**-**	**0.14**	**0.56**	**0.71**	**0.71**
Total Direct & Non-direct Costs	**2.54**	**~~14.92~~ 14.35**	**~~17.46~~ 16.89**	**2.10**	**4.64**	**~~19.56~~ 18.99**

Notes:

1. Allocated amounts less than $100,000 show up here as 0.0 due to rounding.
2. A dash ("-") means the cost item is not applicable to the function.
3. Includes only pipe not associated with borders, extraction or storage.

* Not part of the 2003 COS Study

Table 2.4.2-3 details the annual cost of service associated with these facilities. Based on 2003 information, the existing Alberta System delivery facilities not associated with export, storage, or extraction had an annual cost of service of ~~$17.46~~ $16.89 million. Including the annualized cost of service estimate for the Simmons facilities of $2.10 million (based on December 2004), the total cost of service increases to ~~$19.56~~ $18.99 million.

Table 2.4.2-4
Delivery Facilities not Associated with Export, Storage, or Extraction
Revenues and Costs
($ million)

	Direct	Non-direct	Total
Cost of Service Analysis:			
Pipe	1.34	1.20	2.54
Metering	~~7.92~~ 7.35	7.00	~~14.92~~ 14.35
Simmons Related Costs	1.16	0.95	2.10
TOTAL COSTS	**~~10.41~~ 9.84**	**9.15**	**~~19.56~~ 18.99**
2005 Forecast Revenue:			
FCS Charges	4.94	-	4.94
FT-A	5.32	58.08	~~5.32~~ 63.4
FT-P[1]	22.09	-	22.09
TOTAL REVENUE:~~[2]~~	**32.35**	**~~0.00~~ 58.08**	**~~32.35~~ 90.43**

Notes:

[1] FT-P service direct revenue is based on 100% of the FT-P rate which includes a component for the receipt metering costs and the delivery metering costs, each of which ~~is~~ are $2.0 million.

~~[2] Total Revenue does not include the indirect receipt revenue attributed to the FT-A delivery volumes of 1.03 Bcf/d multiplied by the average FT-R rate of 15.51¢/Mcf = $58.1 million.~~

Table 2.4.2-4 includes the costs as per Table 2.4.2-3 and adds the forecasted revenue for the services associated with these facilities. ~~Only the direct revenue associated with these facilities has been included.~~ In addition to the $32 million in direct revenue there is an additional $58 million in indirect receipt revenue associated with the FT-A service. The direct revenue is 65% greater than the cost of the facilities.

In summary, because the direct revenue from services associated with these facilities exceeds the cost of service of these facilities, NGTL believes that the current accountability provisions are adequate.

Q54. Are the costs associated with all of these facilities accounted for by FCS agreements?

A54. No. All of the meter station costs are accounted for under FCS agreements. However, only 85% of the NBV of the identified pipeline facilities are accounted for under an FCS-MAV agreement. The remaining 15% of the NBV is for pipe that is still being used even though it was originally constructed to connect receipt stations that have since been retired. The accountability for these facilities was satisfied by the receipt service before the receipt stations were retired.

Q55. Does this analysis of revenues and costs for delivery facilities not associated with export, storage, or extraction include any TBO costs?

A55. No. As described in 2004 COS Study, Section 3, TBO costs are directly assigned to the transmission function. As a result, all TBO costs have been allocated to pipe between the receipt and export delivery stations and costs are recovered through rates for these services. This approach is consistent with the fact that TBO agreements are used to expand or extend mainline facilities used to transport receipt gas to delivery points.

In any event, even if TBO costs were included in this analysis, revenues would still exceed costs. The estimated cost for the Ventures, ATCO and Kearl Lake TBO arrangements for 2005 is $11.55 million. If this amount were included in the analysis, the total cost for the delivery facilities not associated with export, storage and extraction would increase to ~~$31.11~~ $30.54 million. This amount is still less than the direct revenue of $32 million, and substantially less than the combined direct and indirect revenue of $90 million.

Q56. Are any changes required in 2005 to the existing terms governing intra-Alberta service accountability?

A56. No. These provisions were significantly modified in 2003 to increase the accountability for intra-Alberta delivery facilities. As demonstrated by NGTL's analysis, the direct revenues associated with intra-Alberta delivery services exceed the cost of service of the associated facilities.

It could be argued that some of the costs related to these transmission facilities should more appropriately be attributed to receipt services, or some of the receipt revenue should be included in this analysis. If these things were done, the excess revenue generated over the cost of service would be further increased.

However, NGTL believes that on balance, these services and their associated accountability provisions are sufficient at this time.

Q57. Has Dr. Gaske assessed the reasonableness of the existing terms governing intra-Alberta service accountability?

A57. Yes. Dr. Gaske reviews the existing terms governing intra-Alberta service accountability and concludes that they are adequate.

Q58. Is the accountability for intra-Alberta service expected to stay the same for the foreseeable future?

A58. Accountability for services, along with rate design, will continue to evolve as a function of changes in the business environment. NGTL expects to have ongoing discussion with stakeholders through its collaborative process and to bring forward changes for Board approval from time to time.

2.4.3 Alternatives to Existing Intra-Alberta Delivery Services

Q59. Has NGTL examined alternatives to the existing provisions for intra-Alberta delivery service?

A59. Yes. NGTL has examined an alternative which would involve:

- making the FT-A service a demand service, similar in concept to the FT-D and FT-R services;
- introducing a new intra-Alberta interruptible delivery service (IT-A), similar in concept to the IT-D and IT-R services; and
- replacing the MAV component of the FCS for intra-Alberta delivery stations with primary term FT-A or FT-P service contracts similar to those used for FT-R service.

NGTL has also examined some options for the EAV component of the FCS.

Q60. Why has NGTL considered these alternatives?

A60. These alternatives have been considered in recognition of the relationship between rates and contractual provisions and to provide perspective for the Board's consideration of the overall rate design.

Q61. Please provide an overview of the current FT-A service.

A61. Under the current FT-A service, gas is delivered from the Alberta System at valid Alberta delivery points. A valid Alberta delivery point is defined as a delivery point within Alberta where gas that is not to be removed from the Province is delivered, and which has an associated FCS agreement at such delivery point. FT-A service is not available for volumes of natural gas delivered for extraction or storage or to individual residences, farms or gas co-ops. The rate for FT-A service is based on the system average cost to meter gas and it is charged only on actual deliveries (i.e., it is a commodity, not a demand, rate).

Q62. Please describe the modifications to FT-A service for this alternative.

A62. Table 2.4.3-1 provides an overview of the modifications and a comparison with the current service.

Table 2.4.3-1
Comparison of Attributes of the Current and the Modified FT-A Service

Service Attribute	**Current FT-A**	**Modified FT-A**
No. of Receipt Points	One per contract	One per contract
Contract Quantity	Not defined	Defined in contract
Type of Rate	Commodity	Demand
Rate	$0.50 / 10^3m^3/d	$15.21 / 10^3m^3/month
Term Differentiated Rates	No	Yes. Same as FT-R
Monthly Charges	Commodity x Rate	Demand x Rate + over-run
Over-run Rate	n/a	IT-A Rate
Initial Term (no Facilities)	Minimum one year	Minimum one year
Initial Term (Facilities)	Minimum one year	Primary Term
Renewal Term	Minimum one year in increments of one year terminates on Gas Year	Minimum one year in increments of one month
Renewal Notice	One year	One year
Capacity Release	Not allowed	Allowed
Transfers	Not allowed	Not allowed
Term Swaps	Not allowed	Not allowed
Title Transfers	Allowed	Allowed
Assignments	n/a	All or partial volumes
Priority	Same as FT-D	Same as FT-D
Accountability	FCS - MAV	Primary Term

The main difference between the existing and modified FT-A service would be to the type of rate and the accountability provisions. The alternative would establish FT-A as a demand service which requires a specified volume and a monthly demand rate, and would determine accountability based on a primary term calculation and a demand rate instead of the FCS-MAV calculation and a commodity rate.

Q63. Does NGTL currently offer an IT-A service?

A63. No. At this time FT-A service has a commodity rate structure so there is no need to have an independent interruptible service. However, if FT-A service was a demand service, it would be reasonable to introduce a complementary interruptible service. In such a case, intra-Alberta markets would have firm (FT-A) and interruptible (IT-A) services available, similar to the existing structure for export delivery services (FT-D and IT-D) and receipt services (FT-R and IT-R).

Q64. Please describe the IT-A service that would be associated with this alternative.

A64. IT-A would be an interruptible service for intra-Alberta markets structured in a similar manner to IT-D for export markets or IT-R for receipt points. Specifically, an IT-A service might have the following attributes:

- a daily commodity rate priced at 110% of the daily equivalent FT-A rate;
- a lower priority than firm services;
- the same priority as other interruptible services;
- only available if capacity exists on existing facilities (i.e., new facilities would not be constructed for this service);
- access to title transfers;
- blanket intra-Alberta delivery point access (i.e., available at all intra-Alberta delivery points with one contract); and
- in full force and effect until terminated by customer with at least one month notice.

Q65. Please describe the change to the MAV component of FCS that would be associated with this alternative.

A65. As previously mentioned, FCS-MAV contracts are required to provide appropriate accountability for intra-Alberta delivery facilities. If the FT-A service was to be changed from a commodity rate to a demand rate, then the customer accountability currently being provided by the FCS-MAV contracts for delivery stations associated with FT-A service could be replaced with direct FT-A service accountability. Similar to receipt meter station accountability for FT-R and FT-P services, the term of the FT-A contract would be set to account for the cost of the delivery meter stations, thus eliminating the need for a separate service. Specifically, the primary term of the FT-A contract would be set such that the cumulative present value revenue (CPVR) would be equal to or greater than the cumulative present value cost of service (CPVCOS). In calculating the primary term, partial years would be rounded up to the next whole year. The primary term could vary from one to 15 years. If a 15-year primary term was insufficient for the CPVR to equal or exceed the CPVCOS, then a surcharge would be charged.

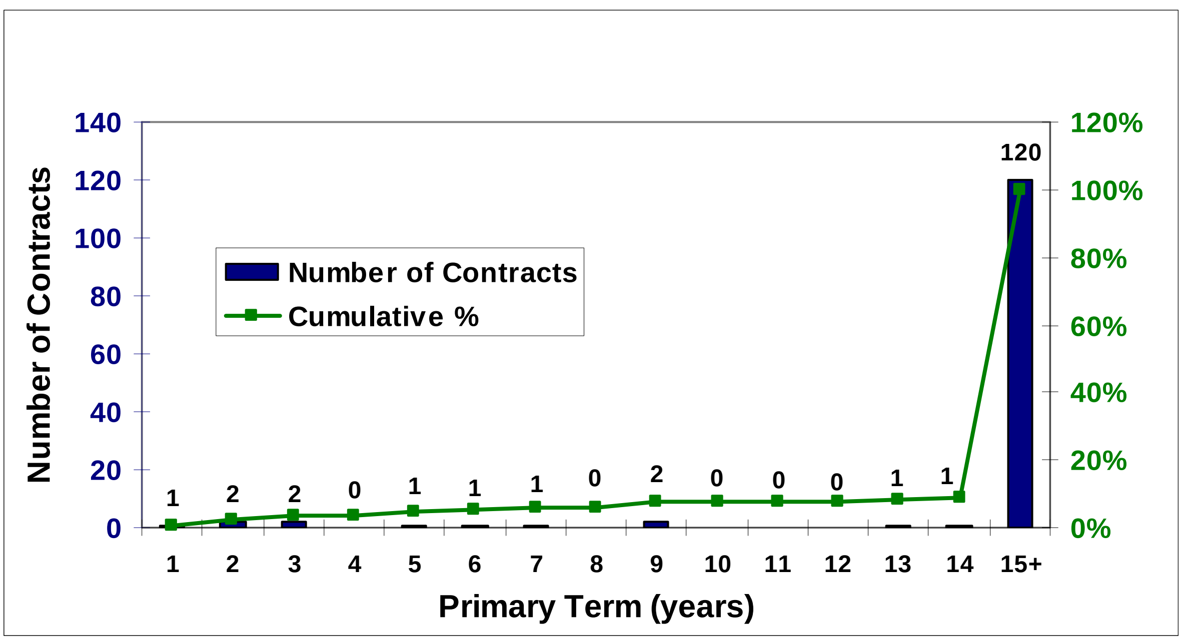
Q66. Would this modification to MAV apply to existing FCS contract holders?

A66. If the FT-A rate were to be changed to a demand rate, then NGTL suggests that existing contracts should be aligned with this modification.

Q67. Has NGTL analyzed the impact of such a modification on existing FCS holders?

A67. Yes. Figure 2.4.3-1 provides a histogram of the potential primary term for existing FCS contracts based on 2004 data.

Figure 2.4.3-1
Potential Primary Terms for Existing FCS Contracts



Based on 2004 data, the primary term would be 15 years or greater for most of the existing FCS contracts. Customers that hold contracts identified with a primary term of 15 years or more would be required to:

a) request the retirement of facilities and reimburse the NBV of the facilities including any associated retirement costs;

b) increase their contract volume to a higher level than what was transported in 2004;

c) make a cash payment to reduce the NBV of the facilities which would reduce the annual cost of service;

d) pay a surcharge to account for the shortfall in accountability not covered by the 15-year Primary Term; or

e) execute some combination of the above.

Q68. Does NGTL recommend implementation of this alternative?

A68. No. Although the alternative would provide better alignment with the accountability provisions for the suite of intra-Alberta transportation services available for export and receipt, NGTL believes that the existing accountability provisions are adequate and continue to meet the needs of industry.

Q69. Please describe the options for the EAV component of the FCS that NGTL has examined.

A69. NGTL examined the following options to the existing EAV component of the FCS:

1) basing the calculation of the EAV and the EAV component of the FCS charge on the ACS of the extension facilities, using the same methodology used to calculate the MAV and the MAV component of the FCS charge for storage facilities;

2) increasing the primary term of the FT-A contracts used to underpin all intra-Alberta delivery stations associated with the extension facilities by three years. This would cause the accountability for facilities upsteam of intra-Alberta delivery stations to be identical to the accountability for facilities downstream of receipt stations. This option would be valid only if the FT-A service rate was changed to have a demand rate;

3) increasing the primary term of the FT-A contracts used to underpin all intra-Alberta delivery stations associated with the extension facilities to a minimum of

ten years. This would cause the accountability for facilities upstream of intra-Alberta delivery stations to be identical to the accountability for facilities upstream of export delivery stations. This option would be valid only if the FT-A service rate was changed to a demand rate; or

4) requiring that FT-P contracts underpin extension facilities. The term of the FT-P contract would be set such that the CPVR would be equal to or greater than the CPVCOS. In calculating the primary term, partial years would be rounded up to the next whole year.

Q70. What is NGTL's assessment of the four options?

A70. Option 1 would base the facility accountability on the cost of the facilities. This would improve the relationship between the service charge and actual cost of service. It would also better align the accountability for intra-Alberta extensions with storage extensions.

Option 2 would add three years to the primary term commitment for new FT-A service. This is analogous to the three year secondary term required for all new receipt service. However, there would not be a direct relationship between the accountability provision and the cost of the facilities.

Option 3 would align the accountability for intra-Alberta delivery service with the existing accountability for export delivery service. However, as demonstrated in Figure 2.4.3-1, the majority of the intra-Alberta stations would already have a primary term in excess of ten years.

Option 4 would ensure that the cost of the facilities is directly accounted for by a service that would utilize such facilities. This would improve the relationship between the direct service charge and the actual cost of service. It would also align the accountability for intra-Alberta delivery extensions with the accountability for receipt meter stations. However, the intra-Alberta delivery extension accountability would be less similar to the receipt extension accountability than the current methodology. In addition, a delivery shipper would not be able to acquire supply at NIT, but would be required to purchase at individual receipt stations.

Q71. Does NGTL recommend implementing any of these options for the EAV component of the FCS?

A71. No. Options 2 and 3 are only applicable if the FT-A rate were to be changed to a demand rate and the MAV accountability was to be replaced by Primary Term accountability. As NGTL is not recommending implementing the FT-A and MAV changes, options 2 and 3 for the EAV are not realistic. Options 1 and 4 have merit as they would improve the relationship between the service charge associated with the facilities and the actual cost of the facilities. However, Option 4 could affect the buying and selling of gas in the gas commodity market.

2.5 SUMMARY AND CONCLUSIONS

Q72. Please summarize NGTL's evidence and its position on cost allocation and rate design for the Alberta System for 2005.

A72. NGTL believes it is appropriate to maintain its existing cost allocation methodology and the associated existing rate design for the Alberta System for 2005.

The NGTL rate design has evolved significantly in recent years to recognize and reflect industry and market developments and requirements. This evolution has included changes in cost allocation methodologies, such as NGTL's recent implementation of a direct metering component in all rates except those for IT-S and FT-X services. Other changes have included the implementation of receipt point specific pricing for firm receipt service, the introduction of FT-P service, an explicit toll for intra-Alberta delivery service, and the introduction of an EAV obligation for mainline extensions associated with intra-Alberta delivery service. Collectively, these recent evolutionary steps have improved cost allocation to Alberta System services and resulted in greater customer cost accountability for both existing and new intra-Alberta receipt and delivery services.

The recent evolutionary changes in NGTL's rate design have also recognized and been implemented within the unique and highly integrated nature of the Alberta System. The integration exists on physical, operational and commercial levels, and yields economies of scale that provide broad benefits to NGTL's customers. The Board has recognized these benefits and acknowledged that they should be appropriately allocated to all customers through NGTL's rate design.[14] However, the integrated nature of the Alberta System makes it impossible for NGTL to precisely determine the actual costs of providing particular services. Consequently, NGTL must aggregate the costs of facilities and utilize cost allocation methodologies to determine particular service rates.

NGTL has in this Application provided significant cost allocation and rate design information and analyses against which the Board and others can assess the merits of the existing rate design and potential changes to it. First, NGTL provided updated DOH and

[14] EUB Decision 2004-097, page 10.

COH studies based on the most recent data that were available. Second, NGTL provided a fully allocated COS study utilizing its existing cost allocation methodologies. Third, and perhaps most importantly, NGTL conducted a second COS study using six alternatives to the existing cost allocation methodologies.

Overall, NGTL's COS analyses demonstrate the reasonableness of the existing cost allocation methodologies and the resulting existing rate design. The design fully and appropriately allocates costs in a manner that generally reflects the integrated nature of the Alberta System, and satisfies the requirements of generally accepted rate design criteria.

NGTL acknowledges that each of the alternative allocation methodologies it evaluated has some merit. However, none of the alternatives would produce cost allocations or yield a rate design that is clearly superior to the existing design, based on all relevant factors. Adoption of any one of the alternatives would necessarily alter the relative costs of services. Several of the alternatives, if adopted, would result in significant distributional impacts on customers. Neither of these impacts is warranted at this time.

NGTL's analyses and conclusions are validated by Dr. Gaske's independent assessment.

NGTL also provided in the Application detailed analysis of the existing intra-Alberta cost accountability provisions and presented potential alternatives to them. Although certain of the alternatives have some merit, NGTL believes the existing accountability provisions continue to be adequate and will meet the overall needs of NGTL and industry for 2005.

Lastly, NGTL believes that its existing rate design and intra-Alberta accountability provisions remain acceptable to the majority of NGTL's customers and stakeholders for 2005. This rate design is the result of extensive consultation and significant collaborative efforts among NGTL's stakeholders, and consequently it represents a balance of interests based on acceptable compromises.

In conclusion, based on its analyses and for the reasons discussed in this Application, NGTL does not propose any changes for 2005 to its existing cost allocation methodology, rate design, or intra-Alberta delivery accountability provisions. NGTL believes that the existing methodologies and rate design remain appropriate and will result in 2005 final rates, tolls and charges for Alberta System services that are just and reasonable.

Q73. Does this conclude NGTL's evidence in this section?

A73. Yes.

ATCO-NGTL-P1 **REVISED July 7, 2005**

Reference:

Application, Section 2.0, Rate Design
Appendix 2B: COS Study - Alternative Allocation Methodologies
Tables: 2.2-1; 3.2-1; 4.2-1; 5.2-1; 6.2-1 and 7.2-1
Diagrams: 2.2-1; 3.2-1; 4.2-1; 5.2-1; 6.2-1 and 7.2-1

Request:

We are seeking NGTL's cooperation in providing some critical data for review in advance of the date set for IR responses from NGTL. Specifically:

(a) with respect to the captioned tables that provide the "Allocation of 2005 Revenue Requirement to Services" for each of Alternatives 1 through 6, we would appreciate receiving an Excel spreadsheet, with all cells active and with iteration capability where necessary, showing the complete derivation of the values shown in these tables; and

(b) with respect to the captioned diagrams that provide an "Illustrative Rate Calculation" for each of Alternatives 1 through 6, we would appreciate receiving these diagrams with the applicable numbers in each box or oval filled-in, excepting the two boxes that deal with receipt point specific rates.

Response:

(a) Attached are six operative Excel spreadsheets which show the derivation of the revenue values shown in Tables 2.2-1, 3.2-1, 4.2-1, 5.2-1, 6.2-1 and 7.2-1 of Appendix 2B of the Application.

Each Excel spreadsheet contains the following tabs:

- LRS tab contains the derivation of the LRS revenue;
- IT-R tab contains the derivation of the IT-R revenue;
- FT-RN tab contains the derivation of the FT-RN revenue;
- FT-P tab contains the derivation of the FT-P revenue; and
- Summary tab contains the derivation of the revenues for all other transportation services.

Also attached for ease of reference are copies of the output of the spreadsheets.

As NGTL described in the Cost of Service Study in Appendix 2B of the Application, it uses an iterative process to determine the revenue for each service. The revenues forecast to be generated from the secondary services are a function of the primary service rates and the revenue forecast to be generated from the primary services is the total revenue requirement less the revenues that have been estimated to be collected from the secondary and other services. Each Excel spreadsheet illustrates the solution required to satisfy these two constraints, based on the forecast contract and throughput volumes for each service. The contract and throughput forecasts are from Section 4 of the Application.

(b) The following tables provide the requested values for the boxes and ovals shown in Diagrams 2.2-1, 3.2-1, 4.2-1, 5.2-1, 6.2-1, and 7.2-1 in Appendix 2B of the Application. Table 1 provides the data for alternatives 1 through 3, and Table 2 provides the data for alternatives 4 through 6.

Table 1

Box/Oval	**Diagram 2.2-1**	**Diagram 3.2-1**	**Diagram 4.2-1**
Oval 1	$114,741,982	$114,741,982	$114,741,982
Box 1a	22,137,781 Mcf/d	22,137,781 Mcf/d	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d	$0.0142 Mcf/d	$0.0142 Mcf/d
Oval 2	$0.0	$2.3 Million	$8.1 Million
Box 2a	0.0 Bcf/yr	513.7 Bcf/yr	513.7 Bcf/yr
Box 2b	$0.0	$0.0045 Mcf/d	$0.0158 Mcf/d
Oval 3	Intra/Ex DOH 45.5%	Intra/Ex DOH 45.5%	Intra/Ex DOH 45.5%
Box 4	$1,160 Million	$1,160 Million	$1,160 Million
Box 4a	$285.7 Million	$285.3 Million	$284.2 Million
Box 4b	$874.2 Million	$874.6 Million	$875.7 Million
Box 4d	n/a	n/a	n/a
Box 5	$419.6 Million	$407.2 Million	$376.1 Million
Box 5a	2,920.1 Bcf/yr	2,920.1 Bcf/yr	2,920.1 Bcf/yr
Box 5b	$0.1437 Mcf/d	$0.1394 Mcf/d	$0.1288 Mcf/d
Box 6	$454.6 Million	$467.4 Million	$499.6 Million
Box 6a	2,684.7 Bcf/yr	2,684.7 Bcf/yr	2,684.7 Bcf/yr
Box 6b	$0.1693 Mcf/d	$0.1741 Mcf/d	$0.1861 Mcf/d
Box 7	$5.3 Million	$7.0 Million	$11.2 Million
Box 7a	374.7 Bcf/yr	374.71 Bcf/yr	374.7 Bcf/yr
Box 7b	$0.0142 Mcf/d	$0.0187 Mcf/d	$0.0300 Mcf/d

Table 2

Box/Oval	Diagram 5.2-1	Diagram 6.2-1	Diagram 7.2-1
Box 1	$1,160.0 M	$1,160.0 M	$1,160.0 M
Oval 1	$114,741,982	$114,741,982	$114,741,982
Box 2	22,137,781 Mcf/d	22,137,781 Mcf/d	22,137,781 Mcf/d
Box 3	$0.0142 Mcf/d	$0.0142 Mcf/d	$0.0142 Mcf/d
Box 4	~~16.76~~ 16.38 Bcf/d	17.11 Bcf/d	20.92 Bcf/d
Box 5	$~~88.6~~ 84.9 M	$97.7 M	$110.4 M
Box 6	$~~64.8~~ 64.7 M	$64.8 M	$64.8 M
Box 7	$1,006.3 M	$997.5 M	$948.8 M
Box 8	Receipt: 52% Export Delivery: 47% Intra-AB Delivery: 1%	Receipt: 51% Export Delivery: 47% Intra-AB Delivery: 2%	Receipt: 49% Export Delivery: 45% Intra-AB Delivery: 1% Intra-AB FT-P: 0% Extraction Access: 2% Storage Access: 2%
Box 9	Receipt: $519.8 M Export Delivery: $473.4 M Intra-AB Delivery: $13.2 M	Receipt: $512.7 M Export Delivery: $466.9 M Intra-AB Delivery: $17.8 M	Receipt: $483.5 M Export Delivery: $440.3 M Intra-AB Delivery: $12.2 M Intra-AB FT-P: $4.5 M Extraction Access: $20.9 M Storage Access: $23.3 M
Box 10	FT-R RR: $388.2 M FT-D RR: $404.4 M FT-A RR: -$0.3 M	FT-R RR: $389.3 M FT-D RR: $398.9 M FT-P RR: $17.8 M	FT-R RR: $366.5 M FT-D RR: $375.8 M FT-A RR: $7.3 M FT-P RR: $4.5 M FT-X RR: $20.9 M IT-S RR: $23.3 M
Box 11	FT-R: 2,920.1 Bcf FT-D: 2,684.7 Bcf FT-A: 374.7 Bcf	FT-R: 2,920.1 Bcf FT-D: 2,684.7 Bcf FT-P: 638.6 Bcf	FT-R: 2,920.1 Bcf FT-D: 2,684.7 Bcf FT-A: 374.7 Bcf FT-P: 138.9 Bcf FT-X: 155.1 Bcf IT-S: 1,361.4 Bcf
Box 12	Ave. FT-R: 13.29 ¢/Mcf/d	Ave. FT-R: 13.33 ¢/Mcf/d	Ave. FT-R: 12.55 ¢/Mcf/d
Box 13	FT-D: 15.06 ¢/Mcf/d FT-A: -0.08 ¢/Mcf/d	FT-D: 14.86 ¢/Mcf/d Ave. FT-P: 2.79 ¢/Mcf/d	FT-D: 14.00 ¢/Mcf/d FT-A: 1.95 ¢/Mcf/d Ave. FT-P: 3.27 ¢/Mcf/d FT-X: 13.46 ¢/Mcf/d IT-S: 1.71 ¢/Mcf/d
Box 14	1.42 ¢/Mcf/d	1.42 ¢/Mcf/d	1.42 ¢/Mcf/d
Box 15	Ave. FT-R: 14.71 ¢/Mcf/d	Ave. FT-R: 14.75 ¢/Mcf/d	Ave. FT-R: 13.97 ¢/Mcf/d
Box 18	FT-D: 16.48 ¢/Mcf/d FT-A: 1.34 ¢/Mcf/d	FT-D: 16.28 ¢/Mcf/d Ave. FT-P: 5.63 ¢/Mcf/d	FT-D: 15.42 ¢/Mcf/d FT-A: 3.37 ¢/Mcf/d Ave. FT-P: 6.11 ¢/Mcf/d FT-X: 14.88 ¢/Mcf/d IT-S: 3.13 ¢/Mcf/d

Table ~~2.2-1~~ 2.3-1 - Revised
Allocation of 2005 Revenue Requirement to Services

Service	Service Type	Revenue ($millions)	Forecast Volume (10^6m^3)	Rates ($/$10^3m^3$)	Rates (¢/Mcf/d)
FT-R[1]	Demand	407.2	82,271	150.64	13.94
FT-D	Demand	467.4	75,640	188.10	17.41
FT-A	Commodity	7.0	10,557	0.66	1.87
FT-RN[2]	Demand	4.8	696	210.71	19.50
FT-P[2]	Demand	19.9	3,916	154.71	14.32
LRS[2]	Demand	43.3	6,733	195.87	18.13
LRS-2[3]	Demand	0.7	381	50,000/month	n/a
LRS-3[3]	Demand	3.3	515	192.37	17.81
STFT[2]	Demand	-	-	0.00	n/a
FT-DW[2]	Demand	-	-	0.00	n/a
IT-R[2]	Commodity	111.0	21,306	5.21	14.68
IT-D[5]	Commodity	72.9	10,715	6.80	19.16
FCS	n/a	4.9	n/a	n/a	n/a
CO_2[2]	n/a	15.4	n/a	n/a	n/a
PT[4]	n/a	0.9	n/a	n/a	n/a
Other Service	n/a	1.1	n/a	n/a	n/a
Total		**1,160.0**			

Notes:
1. Rate quoted is a volume weighted average for a three year contract term.
2. Rate quoted is volume weighted average.
3. Revenue quoted includes NGTL shareholder contribution.
4. New service only forecasted in 2005.
5. Forecast quantity is net of Alternate Access.

BR-NGTL-007 **REVISED July 7, 2005**

Reference:

Section 2.0 Rate Design Appendix 2B COS Study P 28 – 35 of 69 – Alternative 3

Preamble:

The Board requires clarification in regards to Alternative 3.

Request:

(a) Please confirm that the TBO and transmission costs "not associated with Borders, Extraction & Storage" that are not included in the 50% allocated to Intra-Delivery are allocated in the same manner as all other transmission costs.

(b) Please explain how NGTL determined that 50% of the TBO costs should be specifically related to Intra-Delivery Services.

(c) Please explain how the FT-R and FT-D rates were adjusted to maintain the 2.2-1 ratio.

(d) If the FT-R and FT-D rates were not adjusted to maintain the 2.2-1 ratio what would the rates be in this alternative?

(e) Please provide the diagrams 4.1-2 and 4.2-1 showing the dollars allocated at each step of the process.

(f) Please update Table 4.2-1 to clarify which Rates are per month, and which are demand or commodity based and provide an additional column showing cents/mcf.

(g) Please provide an additional alternative (Alternative 1a) showing details of the dollar amounts at each step and the resulting rates using 100% of the TBO costs with 0% "transmission costs not associated with Borders, Extraction & Storage".

(h) Please provide an additional alternative (Alternative 3a) showing details of the dollar amounts at each step and the resulting rates using 100% of the TBO costs with 50% "transmission costs not associated with Borders, Extraction & Storage".

Response:

(a) Confirmed.

(b) These TBO arrangements are required to provide transportation of receipt gas to specific intra-Alberta delivery points. The services used to provide this transportation are a combination of receipt services and intra-Alberta delivery services. As both types of services are required, the costs have been split equally between these two service categories.

(c) The adjustment for the FT-D and FT-R rates was made using the same equations and formulae as set out in the response to BR-NGTL-006(d).

(d) NGTL has interpreted the question as proposing elimination of the 45.5/54.5 split but retention of a transmission component in the FT-A rate. NGTL believes that this proposal would not be a reasonable cost allocation methodology. It would double count distance for intra-Alberta deliveries resulting in overstated rates for intra-Alberta shippers relative to ex-Alberta shippers. This is a fundamental change to the rate design and would result in an intra/ex transmission ratio of ~~51.6~~ 55.6%. With this caveat, the requested information is provided in the table below.

Illustrative Rates and Ratios
from Alternative 3 COS Methodology
No Adjustment to FT-R and FT-D Rates
(cents/Mcf)

Rate/Ratio	
Average FT-R	15.42
FT-D	15.42
FT-A	3.00
Average FT-P	15.80
FT-X	-
IT-S	-
Intra Rate	18.42
Export Rate	30.84
Intra/Ex Ratio	59.7%
Intra Transmission	15.58
Ex Transmission	28.00
Intra/Ex Ratio	55.6%
Receipt Rate	15.42
Export Rate	30.84
Receipt/Ex Ratio	50.0%

(e) Please refer to Attachment BR-NGTL-007(e).

(f) Please refer to Attachment BR-NGTL-007(f).

(g) Please refer to Attachment BR-NGTL-007(g).

(h) Please refer to Attachment BR-NGTL-007(h).

Diagram 5.1-1

Application of Cost Allocations to Rates Determination

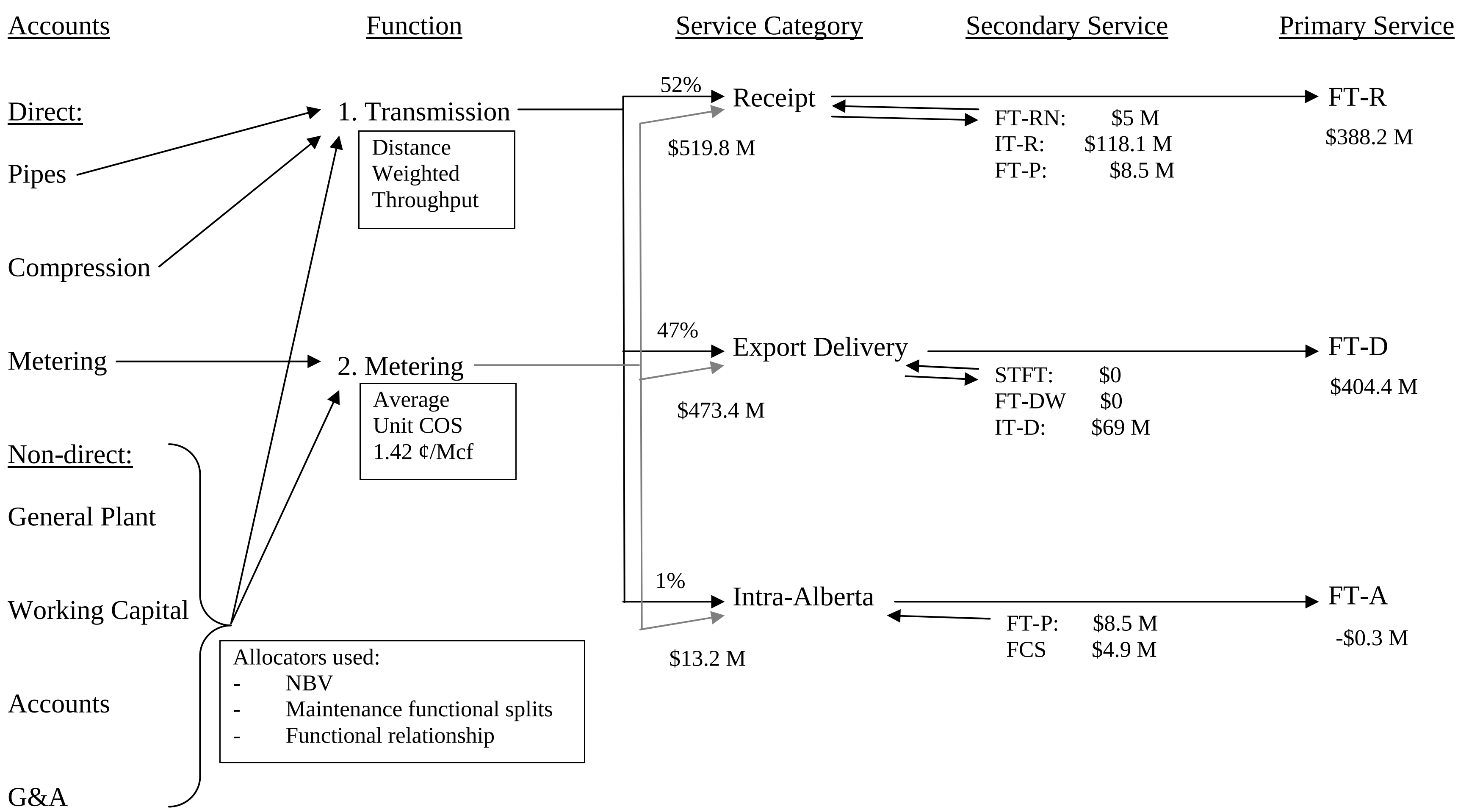


	Diagram 5.2-1
Box 1	$1,160.0 M
Oval 1	$114,741,982
Box 2	22,137,781 Mcf/d
Box 3	$0.0142 Mcf/d
Box 4	~~16.76~~ 16.38 Bcf/d
Box 5	$~~88.6~~ 84.9 M
Box 6	$~~64.8~~ 64.7 M
Box 7	$1,006.3 M
Box 8	Receipt: 52% Export Delivery: 47% Intra-AB Del.: 1%
Box 9	Receipt: $519.8 M Export Delivery: $473.4 M Intra-AB Del.: $13.2 M
Box 10	FT-R RR: $388.2 M = $519.8 M – $5 M - $118.1 M – $8.5 M FT-D RR: $404.4 M = $473.4 M – $0 M - $0 M - $69 M FT-A RR: -$0.3 M = $13.2 M - $4.9 M - $8.5 M
Box 11	FT-R: 2,920.1 Bcf FT-D: 2,684.7 Bcf FT-A: 374.7 Bcf
Box 12	Average FT-R: 13.29 ¢/Mcf/d
Box 13	FT-D: 15.06 ¢/Mcf/d FT-A: -0.08 ¢/Mcf/d
Box 14	1.42 ¢/Mcf/d
Box 15	Average FT-R: 14.71 ¢/Mcf/d
Box 18	FT-D: 16.48 ¢/Mcf/d FT-A: 1.34 ¢/Mcf/d

BR-NGTL-013 **REVISED July 7, 2005**

Reference:

Section 2.0 Rate Design Page 10 of 62 Q14 and Page 28-29

Preamble:

As explained in Decision 2004-097, the Board would like to better understand the potential impacts to NIT of changes in rate design methodology.

Request:

(a) Please elaborate on the "robust opportunity for price discovery" at NIT.

(b) Is this "robust opportunity for price discovery" what is described on page 28-29 where "transmission costs will be indirectly accounted for by the delivery shipper"?

(c) What was the impact on NIT when NGTL implemented receipt point specific pricing?

(d) What was the impact on NIT when NGTL implemented a metering charge for FT-A service?

(e) Does NGTL consider that if the rate for FT-A service included a transmission charge, that this "robust opportunity for price discovery" would fully account for any rate change?

Response:

(a) Three key characteristics define a successful market: price discovery, liquidity and efficiency. The following table defines each characteristic and shows how the existing NIT market displays these characteristics.

Successful Market Characteristics

Price Discovery	The market price of the commodity is readily established.
	Currently in Alberta, the price is established for natural gas by the transactions of all buyers and sellers transacting business through the NIT pool. Information on these transactions is readily available ~~real time~~ on various exchange services (e.g. NGX).
Liquidity	Sufficient numbers of buyers and sellers are always available to complete transactions at a fair market price and the transaction costs are low.
	NIT is a liquid market. There are sufficient buyers and sellers of gas at any point in time to ensure all buy/sell transactions can occur. Approximately four times the physical gas is traded at NIT on a daily basis.
Efficiency	The market price reflects fair market value because information about the market is widely available, all relevant and available information is reflected in the price, there is no substantial cost or impediment to transacting a buy or sell, and there are a large number of knowledgeable buyers and sellers.
	Information regarding the NIT market is widely available and thus is reflected in the price. There are no transaction costs, and the transaction process is simple and flexible. There are many knowledgeable market participants.

(b) Partially. As described in the table in the response to (a), price discovery has to do with being able to readily establish a market price for the commodity. This is more related to having information readily available on buy/sell transactions than on the factors that influence the price of the commodity. The statement referenced on Page 28 of Section 2.0 of the Application is better aligned with the concept of efficiency of the market as the receipt transportation costs are one factor that could influence the commodity price and be taken into consideration by both buyers and sellers. Please also refer to the response to AP-NGTL-033(a).

(c) There was no discernible effect that NGTL observed.

(d) There was no discernible effect that NGTL observed.

(e) The response to this question depends on the specific changes implemented and how they interrelate with the rest of the rate structure. If the change caused shippers to remove gas from the NIT market, the effect could be a reduction in the number of buyers and sellers in the market and a reduction in the number of market transactions. This in turn could reduce market liquidity and the robustness of price discovery. Similarly the price of gas within the NIT market may or may not be affected depending on the specific changes implemented.

BR-NGTL-015 **REVISED July 7, 2005**

Reference:

Section 2.0 Rate Design Page 17 of 62

Preamble:

The Board wishes to better understand the impact of the COH methodology.

Request:

(a) For the COH methodology please describe how the methodology accomplishes the following:

> "consideration needs to be given to how the benefits associated with the economies of scale inherent to the Alberta System are shared by the customer base".

(b) Has NGTL considered these benefits and sharing?

(c) If so, please explain what was considered and how the benefits would be shared by the customer base.

(d) If not, please explain why not.

Response:

(a) If the revenue requirement was allocated to the intra-Alberta and ex-Alberta markets based on the relationship identified in the COH study then, by design, less consideration would have been given to how the benefits associated with the economies of scale inherent to the Alberta System are shared by intra-Alberta and ex-Alberta customers than is given in the existing design. This methodology would charge users of intra-Alberta services rates that reflected a greater percentage of smaller diameter, higher unit cost pipe than the current methodology. As economies of scale result from larger diameter pipe, users of intra-Alberta services would receive less benefit due to economies of scale than currently provided. In addition, because economies of scale mean that each group of customers has a lower marginal cost than either group could achieve in the absence of the other group, it is appropriate to share these cost related benefits.

(b) Yes. ~~In~~ Under the existing rate design, deliveries to intra-Alberta markets pay one-half of the transmission rate of deliveries to export markets. As this methodology does not use pipe diameter to establish the rates, the benefits of larger pipe diameter are shared between both intra- Alberta and export markets. Similarly, each of the six alternatives included in the Application use DOH to determine the rates for intra-Alberta and ex-Alberta services. Again, as pipe diameter is not used in establishing the rates, the benefits of larger pipe diameter are shared between both intra-Alberta and export markets.

For receipt point pricing, diameter is included in the determination of individual prices. However, a floor price is set to reduce the benefit available due to higher diameter pipe and shorter distances, and a ceiling price is set to minimize the effect of smaller diameter pipe and longer distances. This approach provides a sharing of the benefits associated with economies of scale within receipt services.

(c) Please refer to the response to BR-NGTL-015(b).

(d) Not applicable.

BR-NGTL-017(a) to (c) **REVISED July 7, 2005**

Reference:

Section 2.0 Rate Design P41-42, Simmons Facility Analysis

Preamble:

The Board wishes to better understand the forecast of costs for Simmons Pipeline.

Request:

(a) Please provide TBO amounts paid to Simmons Pipeline for the last 10 years.

(b) Please provide the volumes shipped on the Simmons Pipeline for the last 10 years.

(c) Please provide a summary of the pricing provisions for the Simmons Pipeline TBO contract.

Response:

(a) The costs of historical TBO arrangements with Simmons have no relationship to or bearing on the analysis presented in the referenced section of the Application. The purpose of the analysis was only to illustrate that NGTL's ~~operating~~ costs for these facilities were recovered through associated service revenues. This analysis was included in the Application only as a means to respond to the Board's directive to include the facilities purchased from Simmons in the updated COH study, something that is not possible for calendar year 2003.

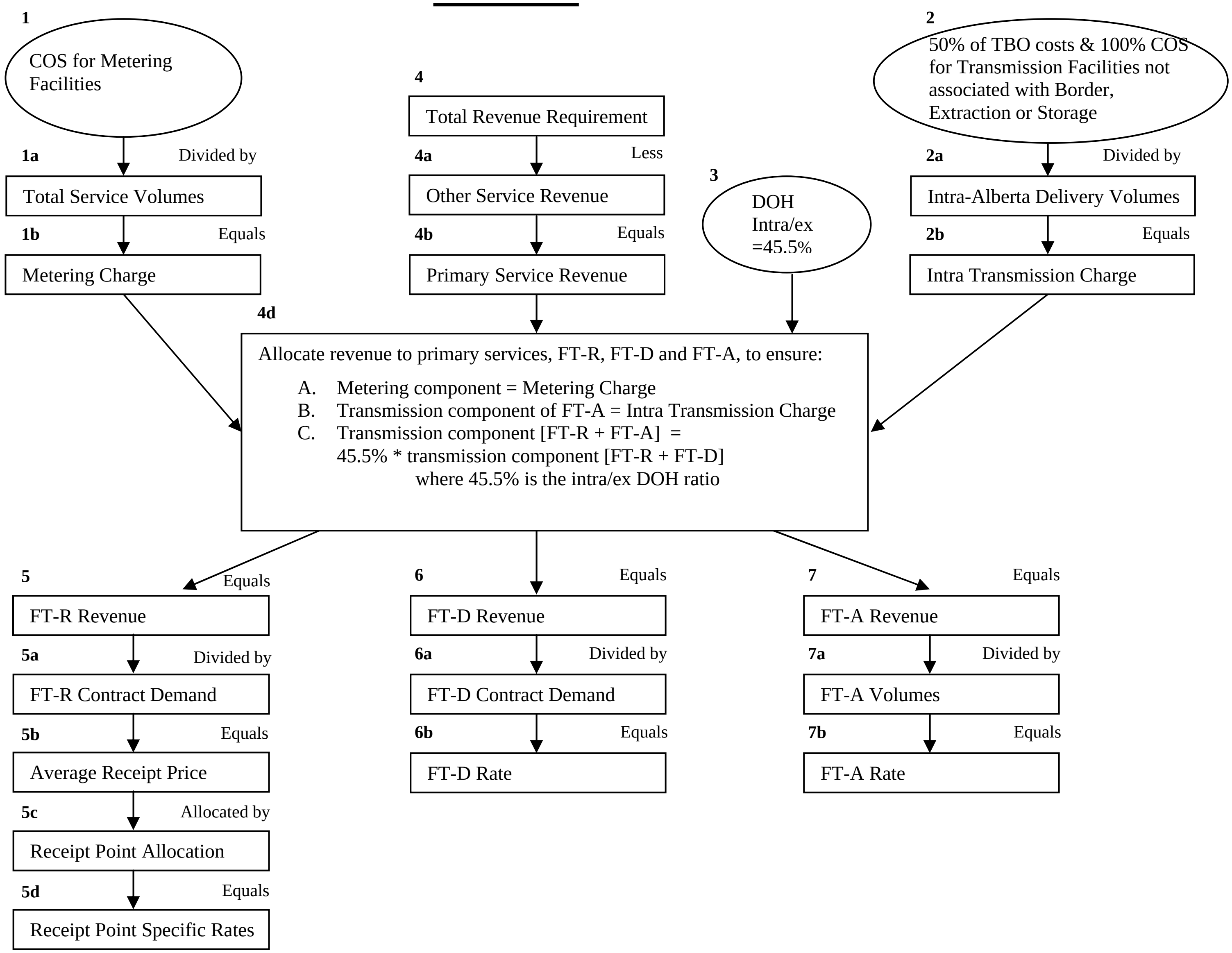
With this caveat, the historical TBO costs are provided in the table below.

Year	Bcf/yr	Amount Paid ($M)
1995	57	6.9
1996	47	5.5
1997	37	4.6
1998	41	4.9
1999	35	4.1
2000	29	3.4
2001	22	3.0
2002	-	-
2003	7	0.2
2004	10	0.3

(b) Please refer to the response to (a).

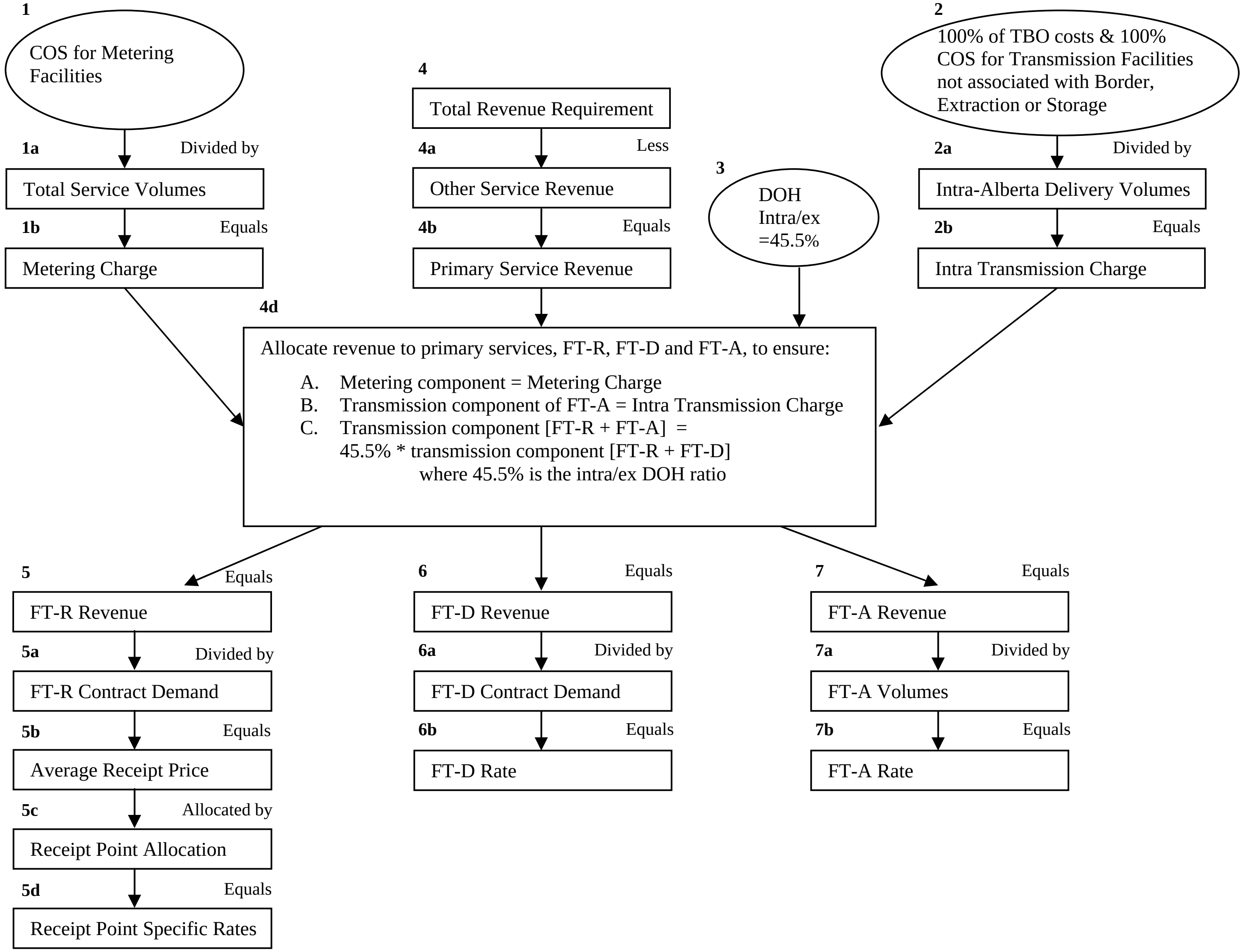
(c) Please refer to the response to (a).

Diagram Alternative ATCO 10a-1 Illustrative Rate Calculation



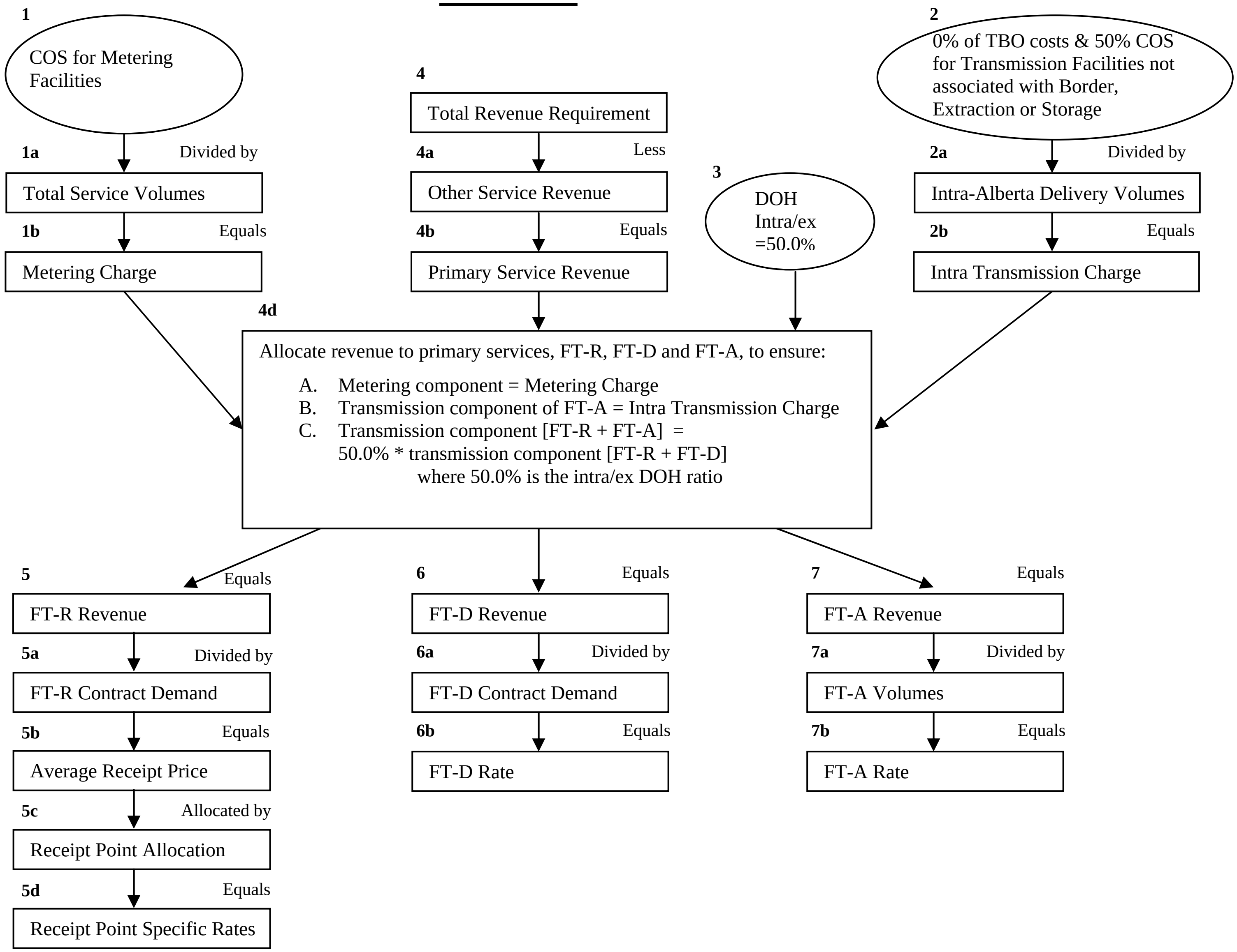
Box/Oval	**Diagram Alternative ~~1~~ATCO-10a-1**
Oval 1	$114,741,982
Box 1a	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d
Oval 2	$10.4 Million
Box 2a	513.7 Bcf/yr
Box 2b	$0.0203 Mcf/d
Oval 3	Intra/Ex DOH 45.5%
Box 4	$1,160 Million
Box 4a	$283.7 Million
Box 4b	$876.2 Million
Box 4d	n/a
Box 5	$363.6 Million
Box 5a	2,920.1 Bcf/yr
Box 5b	$0.1245 Mcf/d
Box 6	$512.6 Million
Box 6a	2,684.7 Bcf/yr
Box 6b	$0.1909 Mcf/d
Box 7	$12.9 Million
Box 7a	374.71 Bcf/yr
Box 7b	$0.0345 Mcf/d

Diagram Alternative ~~2~~ ATCO 10a-2 Illustrative Rate Calculation



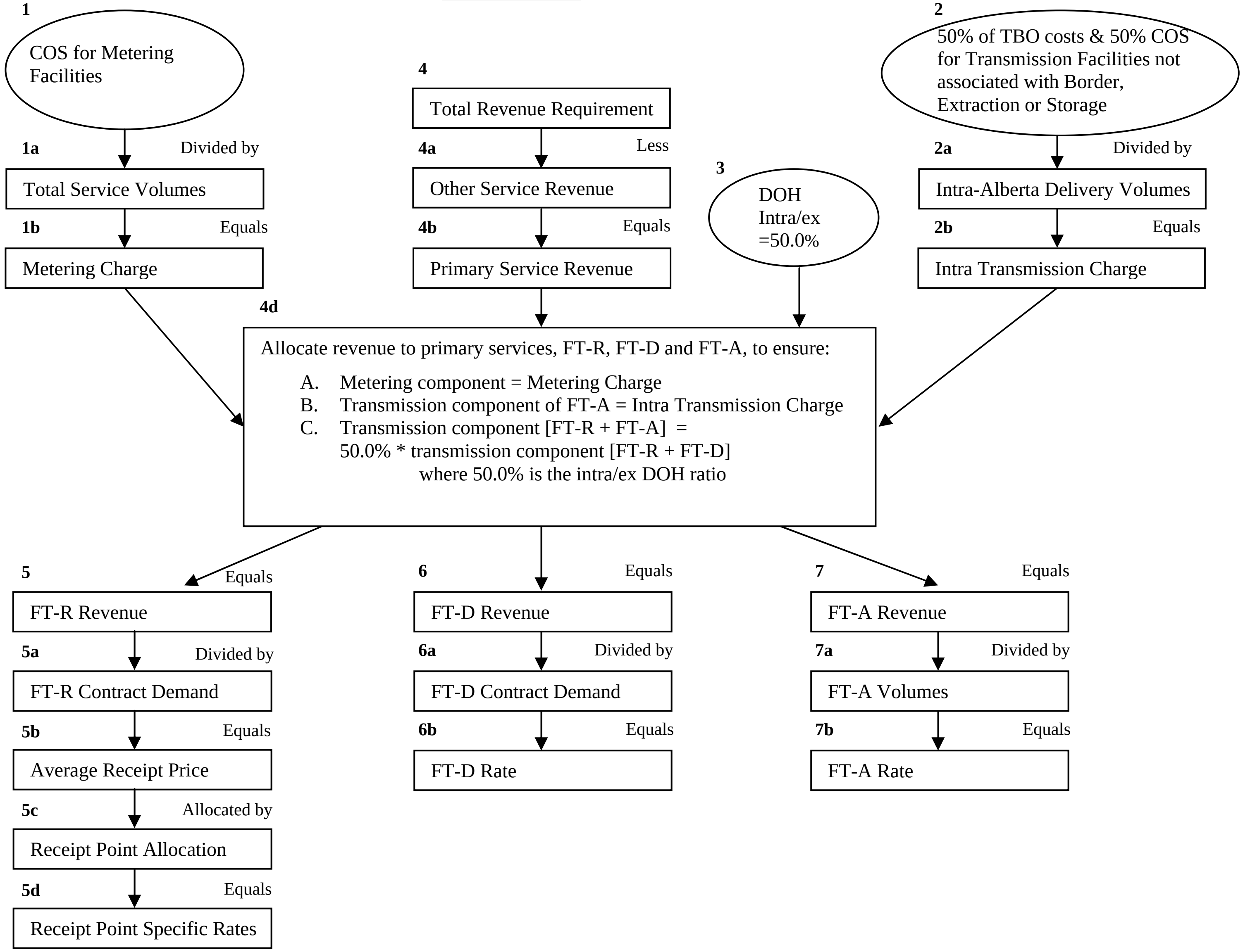
Box/Oval	**Diagram Alternative ~~2~~ ATCO 10a-2**
Oval 1	$114,741,982
Box 1a	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d
Oval 2	$16.2 Million
Box 2a	513.7 Bcf/yr
Box 2b	$0.0315 Mcf/d
Oval 3	Intra/Ex DOH 45.5%
Box 4	$1,160 Million
Box 4a	$282.6 Million
Box 4b	$877.3 Million
Box 4d	n/a
Box 5	$332.6 Million
Box 5a	2,920.1 Bcf/yr
Box 5b	$0.1139 Mcf/d
Box 6	$544.7 Million
Box 6a	2,684.7 Bcf/yr
Box 6b	$0.2029 Mcf/d
Box 7	$17.1 Million
Box 7a	374.71 Bcf/yr
Box 7b	$0.0457 Mcf/d

Diagram Alternative ~~1~~ ATCO 10b-1 Illustrative Rate Calculation



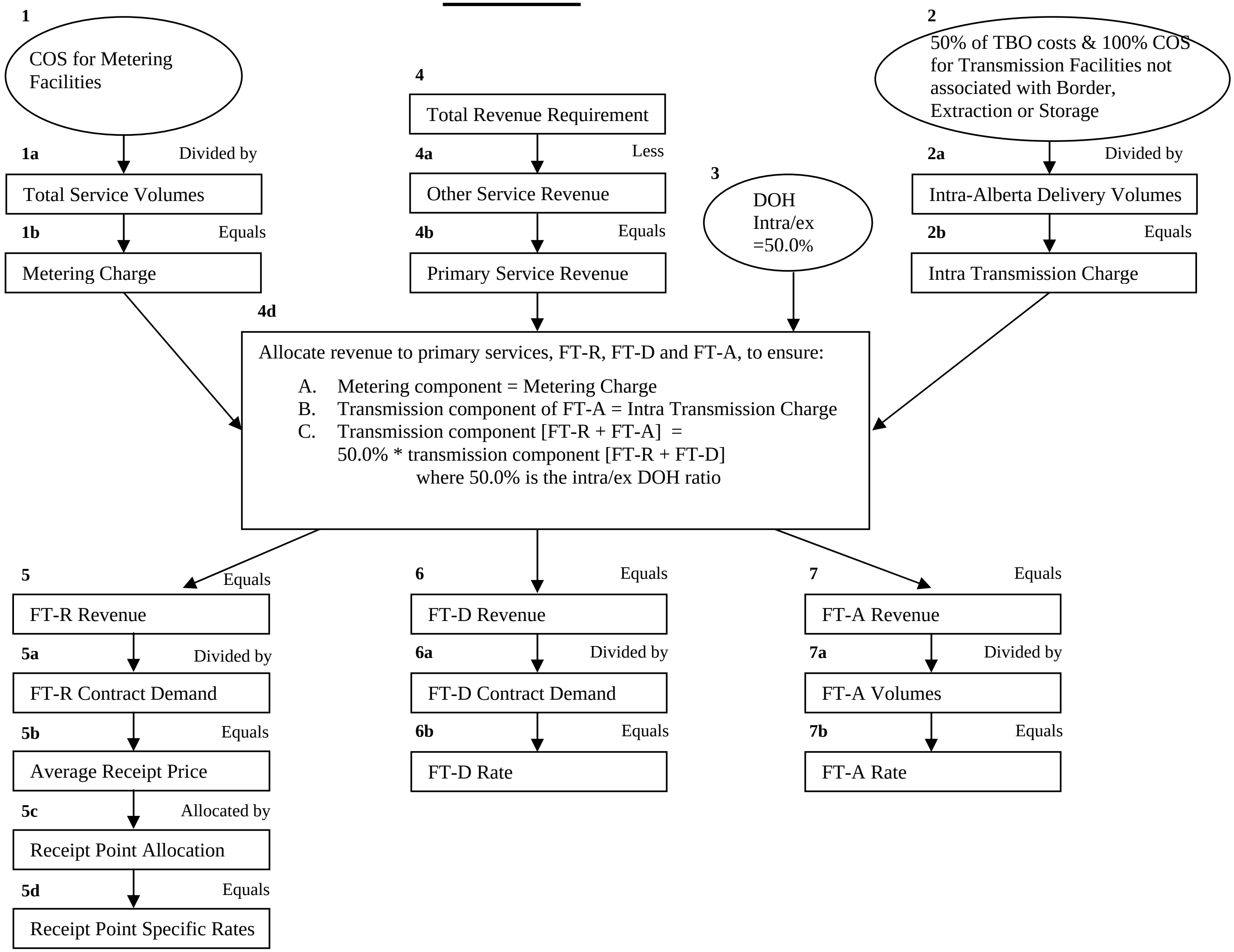
Box/Oval	**Diagram Alternative ~~1~~ATCO 10b-1**
Oval 1	$114,741,982
Box 1a	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d
Oval 2	$2.3 Million
Box 2a	513.7 Bcf/yr
Box 2b	$0.0045 Mcf/d
Oval 3	Intra/Ex DOH 50.0%
Box 4	$1,160 Million
Box 4a	$290.4 Million
Box 4b	$869.5 Million
Box 4d	n/a
Box 5	$440.4 Million
Box 5a	2,920.1 Bcf/yr
Box 5b	$0.1508 Mcf/d
Box 6	$429.2 Million
Box 6a	2,684.7 Bcf/yr
Box 6b	$0.1598 Mcf/d
Box 7	$7.0 Million
Box 7a	374.71 Bcf/yr
Box 7b	$0.0187 Mcf/d

Diagram Alternative ~~2~~ ATCO 10b-2 Illustrative Rate Calculation



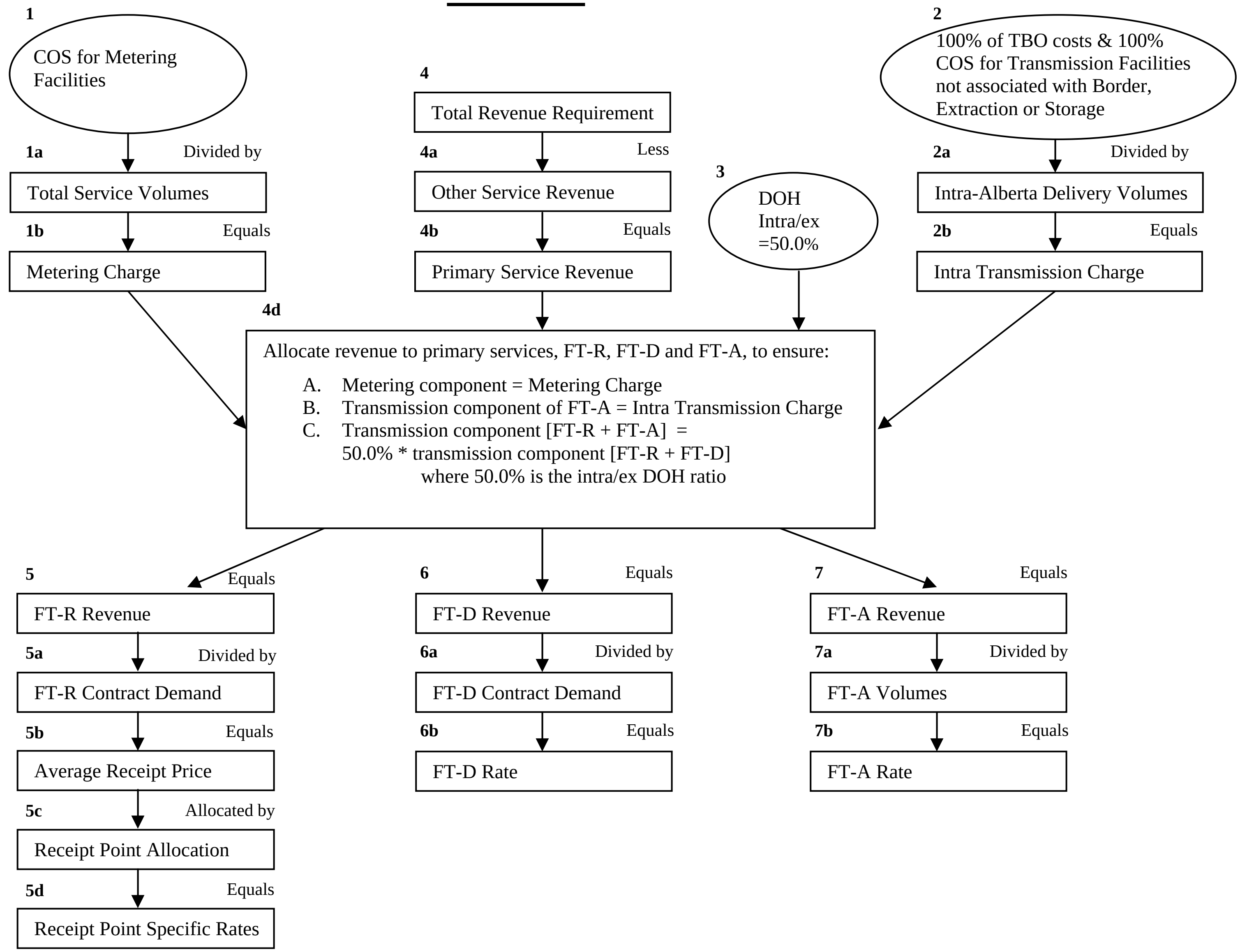
Box/Oval	**Diagram Alternative ~~2~~ ATCO 10b-2**
Oval 1	$114,741,982
Box 1a	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d
Oval 2	$8.1 Million
Box 2a	513.7 Bcf/yr
Box 2b	$0.0158 Mcf/d
Oval 3	Intra/Ex DOH 50.0%
Box 4	$1,160 Million
Box 4a	$289.3 Million
Box 4b	$870.6 Million
Box 4d	n/a
Box 5	$409.5 Million
Box 5a	2,920.1 Bcf/yr
Box 5b	$0.1402 Mcf/d
Box 6	$461.1 Million
Box 6a	2,684.7 Bcf/yr
Box 6b	$0.1718 Mcf/d
Box 7	$11.2 Million
Box 7a	374.71 Bcf/yr
Box 7b	$0.0300 Mcf/d

Diagram Alternative ~~3~~ ATCO 10b-3 Illustrative Rate Calculation



Box/Oval	Diagram Alternative ~~3~~ ATCO 10b-3
Oval 1	$114,741,982
Box 1a	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d
Oval 2	$10.4 Million
Box 2a	513.7 Bcf/yr
Box 2b	$0.0203 Mcf/d
Oval 3	Intra/Ex DOH 50.0%
Box 4	$1,160 Million
Box 4a	$288.9 Million
Box 4b	$871.1 Million
Box 4d	n/a
Box 5	$397.1 Million
Box 5a	2,920.1 Bcf/yr
Box 5b	$0.1360 Mcf/d
Box 6	$474.0 Million
Box 6a	2,684.7 Bcf/yr
Box 6b	$0.1765 Mcf/d
Box 7	$12.9 Million
Box 7a	374.71 Bcf/yr
Box 7b	$0.0345 Mcf/d

Diagram Alternative ~~4~~ ATCO 10b-4 Illustrative Rate Calculation



Box/Oval	Diagram Alternative ~~4~~ ATCO 10b-4
Oval 1	$114,741,982
Box 1a	22,137,781 Mcf/d
Box 1b	$0.0142 Mcf/d
Oval 2	$16.2 Million
Box 2a	513.7 Bcf/yr
Box 2b	$0.0315 Mcf/d
Oval 3	Intra/Ex DOH 50.0%
Box 4	$1,160 Million
Box 4a	$287.7 Million
Box 4b	$872.2 Million
Box 4d	n/a
Box 5	$366.2 Million
Box 5a	2,920.1 Bcf/yr
Box 5b	$0.1254 Mcf/d
Box 6	$506.0 Million
Box 6a	2,684.7 Bcf/yr
Box 6b	$0.1885 Mcf/d
Box 7	$17.1 Million
Box 7a	374.71 Bcf/yr
Box 7b	$0.0457 Mcf/d

AP-NGTL-011 **REVISED July 7, 2005**

Reference:

Application, Section 2.0, Rate Design, Page 26 of 62 and Table 2.2.2-3, Page 23 of 62

Preamble:

NGTL states that Alternative 6 allocates costs to all service categories including FT-X and IT-S.

Request:

Please provide an explanation in tabular form why the introduction of a FT-X rate in Alternative 6 increases the FT-A rate while lowering the FT-P, FT-R, and FT-D rates compared to Alternative 4.

Response:

The explanation in tabular form is provided below:

	Alternative 4	**Alternative 6**	**Difference**
Primary Service Metering Revenue*	$88.9 M	$110.4 M	-$21.5 M
Other Services Revenue	$17.4 M	$17.4 M	-
LRS Revenue	$47.3 M	$47.3 M	-
Transportation Revenue Requirement	$1,006.3 M	$984.8 M	$21.5 M
Revenue Requirement	$1,160.0 M	$1,160.0 M	-

(*) Note: Includes FT-P metering revenue.

	Alternative 4		Alternative 6		Difference in Revenue Requirement
Service Category	DOH Allocation	Revenue Requirement	DOH Allocation	Revenue Requirement	
Primary Service Metering Revenue*		$88.9 M		$110.4 M	-$21.5 M
Other Services Revenue		$17.4 M		$17.4 M	-
LRS Revenue		$47.3 M		$47.3 M	-
Receipt	52%	$519.8 M	49%	$483.5 M	$36.3 M
Export	47%	$473.4 M	45%	$440.3 M	$33.1 M
Intra-Alberta	1%	$13.2 M	1%	$12.2 M	$1.0 M
FT-P	n/a	n/a	0%	$4.5 M	-$4.5 M
Extraction	n/a	n/a	2%	$20.9 M	-$20.9 M
Storage	n/a	n/a	2%	$23.3 M	-$23.3 M
Revenue Requirement		$1,160.0 M		$1,160.0 M	-

(*) Note: Includes FT-P metering revenue.

Service	Alternative 4 Adjusted Revenue Requirement by Service	Alternative 6 Adjusted Revenue Requirement by Service	Difference in Adjusted Revenue Requirement by Service
Primary Service Metering Revenue*	$88.9 M	$110.4 M	-$21.5 M
Other Services Revenue	$17.4 M	$17.4 M	-
LRS Revenue	$47.3 M	$47.3 M	-
FT-R	$388.2 M	$366.6 M	$21.6 M
FT-RN	$5.0 M	$4.8 M	$0.2 M
IT-R	$118.1 M	$112.2 M	$5.9 M
FT-P (½)	$8.5 M	n/a	8.5
FT-D	$404.4 M	$375.8 M	$28.6 M
FT-DW	-	-	-
STFT	-	-	-
IT-D	$68.9 M	$64.5 M	$4.4 M
FT-A	-$0.3 M	$7.3 M	-$7.6 M
FT-P (½)	$8.5 M	n/a	$8.5 M
FCS	$4.9 M	$4.9 M	-
FT-P	n/a	$4.5 M	-$4.5 M
FT-X	n/a	$20.9 M	-$20.9 M
IT-S	n/a	$23.3 M	-$23.3 M
Revenue Requirement	$1,160.0 M	$1,160.0 M	-

(*) Note: Includes FT-P metering revenue.

Service	Alternative 4		Alternative 6		Difference in Transmission Rate (Mcf/d)
	Demand Quantity (Bcf/y)	Transmission Rate (Mcf/d)	Demand Quantity (Bcf/y)	Transmission Rate (Mcf/d)	
FT-R	2,920.1	13.3	2,920.1	12.6	0.7
FT-D	2,684.7	15.1	2,684.7	14.0	1.1
FT-A	374.7	-0.1	374.7	2.0	-2.0
FT-P	n/a	n/a	139.0	3.3	-3.3
FT-X	n/a	n/a	155.1	13.5	-13.5
IT-S	n/a	n/a	1,361.4	1.7	-1.7

Service	Alternative 4	Alternative 6	Difference in Rate (Mcf/d)
	Rate (Mcf/d)	Rate (Mcf/d)	
FT-R	14.71	13.97	0.74
FT-D	16.48	15.42	1.06
FT-A	1.34	3.37	-2.03
FT-P	15.09	6.11	6.11
FT-X	n/a	14.88	-14.88
IT-S	n/a	3.13	-3.13
FT-RN	20.35	19.54	0.81
IT-R	15.62	14.83	0.79
IT-D	18.14	16.96	1.18
LRS	18.13	18.13	0.00
LRS-2	50,000 /month	50,000 /month	0.00
LRS-3	17.81	17.81	0.00

AP-NGTL-030(e) to (h) **REVISED July 7, 2005**

Reference:

Reference:

NGTL Response to ATCO-NGTL-P1, Excel spreadsheets provided as attachments (i.e. Exhibit 02-003-003 NGTL Excel Alternative 1 2005-06-01.xls)

Preamble:

NGTL provided excel spreadsheets which show the derivation of the revenue values shown in Tables 2.2-1, 3.2-1, 4.2-1, 5.2-1, 6.2-1, and 7.2-1 of Appendix 2B of the Application.

The formula for Cell D33 in the Alternatives 1, 2, and 3 excel spreadsheets is as follows:

“((($D$30/$D$44)+(-$D$51+$D$50))-0.455*((($D$30/$D$44)+(-$D$51+$D$50)-$D$51)))/(($D$43/$D$44)+0.455*(1-($D$43/$D$44)))”

Request:

(e) In Alternative 4, please confirm whether the FT-P Revenue of $17.0 Million (Cell D45), which is taken from worksheet FT-P, includes the total FT-P Revenue or whether it excludes the $3.9 Million metering revenue previously deducted in Cell D9. Please fully explain.

(f) In Alternative 4, the FT-A Transmission Revenue Requirement by Service Category (Cell D51) is calculated by taking the FT-A Transmission Revenue by Service Category (Cell D35) and deducting the FCS Revenue (Cell D44) and one-half of the total FT-P Revenue (Cell D45) including fuel. The FT-A Transmission Revenue Requirement is only designed to recover delivery transmission costs. Why did NGTL deduct one-half of the FT-P revenue from the FT-A Transmission Revenue Requirement instead of just the portion of FT-P revenue that is designed to collect delivery transmission charges? Please fully explain.

(g) Does NGTL agree that there is a mismatch in the calculation described in part (f) of this question between the FT-A Transmission Revenue by Service Category (which recovers only delivery transmission costs) and the one-half of the FT-P

Revenue (which recovers delivery metering costs and one-half of transmission costs and fuel)? Please fully explain.

(h) Please recalculate Alternative 4 updating cells as required:

(i) the FT-A Transmission Revenue Requirement by Service Category (Cell D51) is equal to the FT-A Transmission Revenue by Service Category (Cell D35) less the FCS -EAV Revenue (Cell D44) and less only that portion of the FT-P Revenue (Cell D45) designed to collect intra-Alberta delivery transmission charges; and

(ii) restating total FT-P Revenue (Cell D45) to correct any double counting of $3.9 million of FT-P Revenues noted in part (e) of this question.

Response:

(e) The FT-P rate is based on the full path cost of providing service from specific receipt points to a specific delivery point; it is comprised of the receipt metering, a transmission component contained within the floor and ceiling range, and the delivery metering component. By design, the minimum transmission component of the FT-P rate is equal to the minimum transmission component of the FT-R rate, the maximum transmission component of the FT-P rate is equal to the maximum transmission component of the FT-R rate and the FT-P transmission rate for the average intra-Alberta DOH (225 - 250 km) is equal to the transmission component of the average FT-R rate.

In order to maintain this relationship between the FT-R rate and the FT-P rate in this alternative, the metering revenue for FT-P must be excluded from the transmission revenue requirement. For simplicity the FT-P metering revenue was included with the metering revenue of the primary services (FT-R, FT-D, FT-A) in the excel spreadsheet as the primary service metering revenue is also excluded from the transmission revenue requirement.

As a result the FT-P revenue of $17.0 million excludes the $3.9 million metering revenue.

(f) NGTL did not deduct one half of the FT-P revenue from the FT-A Transmission Revenue Requirement instead of just the portion of FT-P revenue that is designed to collect delivery transmission charges. These two numbers do not include any metering revenue.

(g) There is no mismatch. The one-half FT-P revenue does not include delivery metering costs.

(h)

(i) The removal of the FCS revenue from this calculation will not enable NGTL to generate its revenue requirement. Therefore, NGTL cannot recalculate Alternative 4 on this premise.

(ii) The FT-P revenue in Cell D45 does not include any of the $3.9 million of the FT-P metering revenue.

CCA-NGTL-004 **REVISED July 7, 2005**

Reference:

Section 2.4.1 Simmons Facilities Analysis

Request:

(a) Please explain why only directly associated meter station revenue is used in the calculations.

(b) Please confirm that $2.7 million of indirect FT-R revenue was not included in the calculations. Please provide the accounting treatment and rate treatment of the $2.7 million.

(c) Please explain how indirect revenue is associated with the Simmons Facility.

(d) Please provide any associated revenues which are not included in table 2.4.1-3 which are related with the Simmons Facility.

Response:

(a) Only directly associated meter station revenues were used in the calculation of the revenue in Table 2.4.1-3 to illustrate that these facilities generated more revenue than the associated costs without attributing any indirectly related revenue to them.

(b) Confirmed. This calculation has been updated. Please refer to the response to EnCana-NGTL-011, as revised. As per the update, the indirect FT-R revenue is $2.1 million. Please refer to the response to CCA-NGTL-006(a).

(c) In December of 2004, the delivery stations connected to the Simmons facilities had more delivery volumes than the receipt stations connected to the Simmons facilities had receipt volumes. Consequently, receipts from other parts of the Alberta System must have been delivered at Simmons stations. These other volumes are the indirect receipt revenue that is associated with Simmons facilities.

CCA-NGTL-004 **REVISED July 7, 2005**

(d) Other than the $~~2.7~~ 2.1 million in indirect receipt revenue, NGTL is not aware of any other revenue associated with the Simmons facilities that is not included in Table 2.4.1-3.

EnCana-NGTL-011 **REVISED July 7, 2005**

Reference:

Section 2.4, Intra-Alberta Delivery Service Accountability, Page 42, Table 2.4.1-3

Preamble:

The table shows the cost of service and revenues for the Simmons facilities.

Request:

(a) Please provide the volumes and per-unit charges used to derive the revenues for the various services.

(b) Please provide the calculation of the "additional $2.7 million of indirect FT-R revenue associated with the FT-A service".

Response:

(a) Please refer to the response to ATCO-NGTL-017(d).

(b) The calculation of the additional $~~2.7~~ 2.1 million of indirect FT-R revenue is as follows: FT-R volume (10, 410 MMcf) and IT-R volume (3,337 MMcf) is subtracted from FT-A volume (25,801 MMcf). The difference is multiplied by the average 2004 FT-R rate of $0.174 Mcf, to get the annual revenue of $~~2.7~~ 2.1 million.

IGCAA-NGTL-006 **REVISED July 7, 2005**

Reference:

Application Section 2, page 9 of 62

Preamble:

IGCAA wants to understand more about the rational for the cost allocation methodology used for the existing FT-P service. NGTL indicates that: “the charge for the average transmission component for FT-P service is said to equal the charge for the average transmission component of FT-R service.

Request:

(a) Please explain exactly how NGTL establishes rates for FT-P service.

(b) How are NGTL’s existing methodology for establishing FT-P rates reflective of the costs actually incurred by NGTL in providing FT-P service?

(c) Please describe all of the attributes of FT-P service that make it more or less flexible than combined FT-R/ FT-A service.

Response:

(a) All services (receipt, export delivery and intra-Alberta) require gas to be measured either onto or from the Alberta System. Metering is a standard function and has an average standard metering cost of 1.42¢/Mcf on each of the receipt and delivery sides.

The FT-R rate incorporates a transmission component to reflect the cost of facilities required to transport the gas. The transmission component for the average FT-R rate is 14.09¢/Mcf. The FT-R rate for a particular receipt point is based on the cost of the facilities designed to transport gas from the specific receipt point to the major delivery points so the rate of any particular receipt point will vary around the average. The average FT-R rate combines the receipt metering component of 1.42¢/Mcf with the average transmission component of 14.09¢/Mcf. The floor prices defines the minimum rate to receive gas onto the system and consists of the receipt metering component of 1.42¢/Mcf and a minimum transmission component of 6.09¢/Mcf for a total of 7.51¢/Mcf. The ceiling price defines the maximum rate to receive gas onto the system and consists of the metering component of 1.42¢/Mcf and a maximum transmission component of 22.09¢/Mcf for a total of 23.51¢/Mcf.

Since the rate for FT-P is based on the full path cost of providing service from specific receipt points to a specific intra-Alberta delivery point, it is comprised of the 1.42¢/Mcf receipt metering, a transmission component contained within the floor and ceiling range, and the 1.42¢/Mcf delivery metering component. To be consistent with FT-R, the minimum transmission component cost for the FT-P is 6.09¢/Mcf, the maximum transmission component cost is 22.09¢/Mcf and the average transmission cost to move the average intra-Alberta distance of haul will be 14.09¢/Mcf. Rates for FT-P between the floor and ceiling values are increased based on 25-km distance intervals. The average intra-Alberta distance of haul is 250 km (2003 Distance of Haul Study, rounded to the nearest 25 km). Therefore there are nine increments between the minimum FT-P distance of 25 km and the average distance of 250 km, resulting in a transmission cost component of 0.89¢/Mcf per 25-km increment. Therefore, the FT-P transmission component is based on the system average unit transmission cost, bounded by the floor and ceiling rate and is reflective of the costs actually incurred by NGTL in providing FT-P service.

(b) Please refer to the response in (a).

(c) Please note that the attributes ascribed to the FT-R/FT-A combination are based on FT-R. The primary differences between FT-P service and the FT-R/FT-A service combination are provided below.

Service Attribute	**FT-P Service**	**FT-R/FT-A Combination**
Access to NIT	No access to NIT	Access to NIT
No. of Receipt Points	Specified Receipt Points	All Receipt Points
No. of Delivery Points	One per contract	n/a
Minimum Volume	Min. 5.0 MMcf/d	No minimum
Type of Rate	Monthly Demand	Monthly Demand
Rate	FT-P Table, function of FT-R rates(distance only)	Receipt Point Specific (diameter/distance)
Term Differentiated Rates	Yes	Yes
Monthly Charges	Demand x Rate + over-run	Demand x Rate + over-run
Fuel Allocation	50% of System Fuel	100% of System Fuel
Term (Facilities)	Primary Term	Primary term + three years
Renewal Notice	Minimum one year	Minimum one year
Capacity Release	No Capacity Release	Capacity Release
Transfers	Transfers only to other receipt points in contract	Transfers allowed
Term Swaps	No Term Swaps	Term Swaps

Service Attribute	FT-P Service	FT-R/FT-A Combination
Priority	Firm Priority	Firm Priority
Renewal Notice	One year	One Year
Conversion on Renewal	To FT-P or FT-R	To FT-P or FT-R
Renewal Term	Minimum one year	Minimum one year
Inventory Account	Separate Account for Service	On~~c~~e Customer Account
Balance Zone	Not allowed for account	Greater of 2 TJ or 4%
Imbalances	Rolled into customer account	Must meet Balance Zone
Assignments	All or partial volume ~~only~~	All or partial volume
Accountability	Primary Term + FCS	Primary + Secondary Term

Whether FT-P service is more or less flexible than the FT-R/FT-A service combination depends upon the value each customer places on each of the attributes listed in the table above. However, in general some attributes of FT-P would be considered to be more restrictive than the corresponding attributes for the FT-R/FT-A service combination. This is reflected in the FT-P rate.

WEG-NGTL-008 **REVISED July 7, 2005**

Reference:

Appendix 2A, Distance of Haul Study, page 3 of 13, Methodology

Request:

(a) Did NGTL's filed DOH study incorporate gas flows into or out of both storage and extraction for the determination of distances of haul for receipt, intra-Alberta and ex-Alberta services?

(b) If the answer to (a) is "yes", please explain in detail how such flows were factored into the calculations.

(c) How does the DOH study factor seasonal variations into the determination of distances of haul?

Response:

(a) The DOH study treats extraction delivery points in the same manner as other intra-Alberta delivery points. Therefore, extraction delivery points are a component of overall intra-Alberta DOH calculations. The study also treats flows to extraction delivery points in the same manner as flows to other intra-Alberta delivery points. Please refer to the 2003 DOH Study in Appendix 1 to Appendix 2A of the Application for an explanation of the DOH calculation methodology.

All volumes that are delivered into storage stations under IT-S must be received from storage under IT-S and continue to their ultimate destinations. For this reason, storage stations are not included in the DOH calculation for either the intra-Alberta DOH or ex-Alberta DOH. However, storage volumes into and out of storage stations are used in the DOH model to balance the flows on a monthly basis as generally storage volumes are being injected in the summer months and withdrawn in the winter months.

(b) ~~Deliveries to extraction facilities are treated in the same manner as deliveries to other intra-Alberta delivery stations. Please refer to the 2003 DOH Study in Appendix 1 to Appendix 2A of the Application for an explanation of the DOH calculation methodology.~~ Please refer to the response to (a).

(c) The DOH study is compiled using monthly flow paths and monthly volumes. Each monthly volume and flow path is based on the average daily flows for that particular month. This analysis of flow on a monthly basis accounts for seasonal variations.

Please refer to the Application, Appendix 1 to Appendix 2A, DOH study, Page 7 of 13, Table 4.1 for results by month for 2003.

WEG-NGTL-027 **REVISED July 7, 2005**

Reference:

Section 3.0, Energy Conversion, page 8, line 11 and page 9, lines 4-5

Request:

(a) Based on the WEG's CD (approximately 1.42 bcfd), what is the annual adverse impact in dollars on WEG, of NGTL's energy conversion proposal?

(b) Does NGTL consider this amount to be of "minor impact"?

(c) Is NGTL able to provide any quantifiable tangible benefits of energy conversion to western export shippers that would mitigate this dollar impact?

Response:

NGTL does not arrive at a CD of 1.42 Bcf/d for the export services held by the members of WEG. NGTL calculates that the WEG members collectively hold 976 MMcf/d of export service at NGTL's western gate. Even if the export service held by WEG's members' associated companies are also included, NGTL calculates a total CD at the western gate of only 1.17 Bcf/d.

(a) Based on a CD of 1.17 Bcf/d the impact is approximately $318,000/year. This annual impact can fluctuate up and down with changes to the heating value. Please refer to the response to WEG-NGTL-028(a).

(b) Yes. $318,000 is a minor amount in relation to the $66 million total annual demand charges on 1.17 Bcf/day of export service. The impact of this amount on the export rate is only .~~0007~~ 0.07¢/GJ. In comparison, the annual variation in the export delivery rate as a result of other factors over the past five years has ranged from a decrease of 1¢/GJ to an increase of 1¢/GJ, which translates to an annual increase or decrease of $4.5 million on a CD of 1.17 Bcf/d.

(c) Please refer to the response to BR-NGTL-026(c).