

NATIONAL ENERGY BOARD

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

IN THE MATTER OF an Application by NOVA Gas Transmission Ltd. (NGTL) pursuant to Parts I and IV of the *National Energy Board Act*; the Revised Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs (Settlement Guidelines); certain directives in the MH-031-2017 Decision; and directives contained in the Letter Decision of the National Energy Board Examination to Determine Whether to Undertake an Inquiry of the Tolling Methodologies, Tariff Provisions and Competition in Northeast British Columbia (Examination Decision) for approval of a rate design methodology and terms and conditions of service for the NGTL System and associated approvals.

NOVA GAS TRANSMISSION LTD

NGTL SYSTEM RATE DESIGN AND SERVICES APPLICATION

March 2019

To: The Secretary
National Energy Board
Suite 210, 517 Tenth Avenue SW
Calgary, AB T2R 0A8

NGTL RATE DESIGN AND SERVICES APPLICATION

NOVA Gas Transmission Ltd. (NGTL) applies pursuant to Parts I and IV of the *National Energy Board Act*; the Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs (Settlement Guidelines); certain directives in the MH-031-2017 Decision; and directives contained in the Letter Decision of the National Energy Board Examination to Determine Whether to Undertake an Inquiry of the Tolling Methodologies, Tariff Provisions and Competition in Northeast British Columbia (Examination Decision) for approval of a rate design methodology and terms and conditions of service for the NGTL System and associated approvals (Application).

BACKGROUND

1. NGTL is a wholly-owned subsidiary of TransCanada PipeLines Limited (TransCanada) and is a company as that term is defined in the *National Energy Board Act*, R.C.S. 1985, c. N-7, as amended (NEB Act).
2. NGTL owns an extensive natural gas transmission system in Western Canada comprising approximately 25,500 km of pipeline and associated compression and other facilities (the NGTL System or System).
3. TransCanada provides operating services for NGTL in accordance with an established operating agreement with NGTL.
4. The rates and provision of service on the NGTL System reflect the Rate Design and Service methodology approved by the Board on August 12, 2010 by Order TG-004-2014. Various amendments to the methodology approved in Order TG-004-2014 are proposed as part of the Application. These changes are responsive to the evolution of the NGTL System and resulting changes in circumstances that have occurred since 2010.

THE SETTLEMENT AND COMPLIANCE WITH THE SETTLEMENT GUIDELINES

5. Except as noted at paragraphs 9 and 10, the Application is supported by the NGTL Rates and Services Settlement (Settlement). The Settlement results from extensive negotiations between NGTL and NGTL System stakeholders that took place since October 2016 through a task force of the Tolls Tariffs, Facilities and Procedures (TTFP) committee.
6. The Settlement addresses a broad range of inter-related services and tolling matters on the NGTL System, including attributes and tolling of several services including Firm Transportation – Receipt (FT-R) and Firm Transportation – Delivery (FT-D), a portion of the proposed amendments to Firm Transportation – Points to Point (FT-P) service proposed in the Application, the allocation of the NGTL Revenue

- Requirement between FT-D and FT-R, contracting practices, transfer provisions, rural gas interconnections, other services and attributes matters, and the framework for the tolling methodology for the Post Provisional Phase (PPP) on the North Montney Mainline (NMML), as contemplated in the MH-031-2017 Decision (NMML Tolling Methodology).
7. While an unopposed resolution could not be achieved through the TTFP, the broad support for the Settlement and the comprehensive process that led to it support consideration of the Settlement as a contested settlement pursuant to the Settlement Guidelines. Support for the Settlement by a large number of stakeholders representing parties holding the majority of FT-R and FT-D contracts on the NGTL System demonstrate that the Settlement is supported by a broad-cross section of stakeholders. While opposed by a minority of interested parties, the Settlement complies with the Settlement Guidelines, as revised in June 2002:
- All parties having an interest in the rate design and services on the NGTL System had a fair opportunity to participate in the process and have their interests recognized and appropriately weighed.
 - No provisions of the Settlement are illegal or contrary to the NEB Act or are otherwise contrary to the public interest.

ADDITIONAL CONTENT ADDRESSED IN THE APPLICATION

8. As part of the Application, NGTL also seeks approval of matters related to the Settlement that do not form part of the Settlement. These include additional changes to FT-P service (Additional FT-P Amendments) and the specific formulaic approach to establish the surcharge in the NMML Tolling Methodology, including the proposed Surcharge Coefficient (NMML Surcharge Formula). NGTL is also providing the information it was directed to provide by the Board in the Examination Decision (Examination Directions Information).
9. The inter-relationship between various aspects of the Settlement, the Additional FT-P Amendments, the NMML Surcharge Formula and the Examination Directions Information led NGTL to conclude that they should all be addressed as part of the current Application. While NGTL requests that the Application be considered pursuant to the Settlement Guidelines, it acknowledges that the evidence pertaining to these matters is not being filed pursuant to the Settlement Guidelines.

TIME IS OF THE ESSENCE

10. Timely approval of the Application is required to allow for the implementation of the amendments resulting from the Settlement and of the Additional FT-P Amendments as proposed on January 1, 2020 or as soon as possible thereafter.

11. Timely approval of the NMML Tolling Methodology is further required in light of the upcoming expiry of the Provisional Phase¹ and the anticipated in-service date for a portion of the NMML in September 2019. NGTL therefore requests a decision of the Board on the NMML Tolling Methodology prior to June 22, 2019. Alternatively, NGTL requests that the Board approve the NMML Tolling Methodology on an interim basis pending a decision, or that the tolling methodology approved during the Provisional Period be maintained pending the Board's disposition of the Application.

STRUCTURE OF THE APPLICATION

12. The Application has been developed and organized to produce adequate information on the public record for the Board to understand the basis of the Settlement, assess its reasonableness and that of the additional proposals that are not part of the Settlement, and determine that approval of the Application is in the public interest and that the tolls resulting from the Application will be just and reasonable and not unjustly discriminatory.
13. In support of the Application, NGTL is adducing the Written Evidence of NGTL (NGTL Evidence) that addresses the amendments proposed as part of the Settlement, the Additional FT-P Amendments, the NMML Surcharge Formula and the Examination Response.
14. The NGTL Evidence contains various appendices, including information related to the Settlement process and Tariff amendments resulting from the changes proposed in the Application.
15. In addition, NGTL is also adducing the expert evidence of John J. Reed and Toby Bishop of Concentric Energy Advisors, Inc. (Concentric Evidence). In their Evidence, Mr. Reed and Mr. Bishop provide their expert opinion on the amendments proposed in the Application in terms of consistency with the Board's principles and policies.

RELIEF REQUESTED

16. NGTL requests an order of the Board:
 - a) approving the amendments to the current rate design and services methodology resulting from the Settlement;
 - b) approving the Additional FT-P Amendments;
 - c) approving the NMML Tolling Methodology, including the NMML Surcharge Formula;

¹ Reasons for Decision MH-031-2017, page 41 and Appendix III – Part IV Order (ORDER TG-003-2018).

- d) Revising the NGTL System Tariff in accordance with Appendix 4 to the NGTL Evidence; and
 - e) granting such further and other relief as NGTL may request or the Board may consider appropriate.
17. NGTL further requests that a decision on the Application be issued by the Board:
- a) sufficiently in advance of January 1, 2020 in relation to the amendments resulting from the Settlement and the Additional FT-P Amendments to allow for their implementation on January 1, 2020 or as soon as possible thereafter; and
 - b) prior to June 22, 2019 in relation to the NMML Tolling Methodology, including the NMML Surcharge Formula. Alternatively, NGTL requests that the Board approve the NMML Tolling Methodology on an interim basis pending a decision, or that the tolling methodology approved during the Provisional Period be maintained pending the Board's disposition of the Application.

Respectfully submitted,

Calgary, Alberta
March 14, 2019

NOVA Gas Transmission Ltd.

Original signed by

Bernard Pelletier
Director, Regulatory Tolls and Tariffs
Canadian Gas Pipelines

Communications related to this Application should be directed to:

Alan Matheson
Senior Regulatory Project Manager
Regulatory, Tolls and Tariffs
NOVA Gas Transmission Ltd.
450 – 1st Street SW
Calgary, Alberta T2P 5H1
Telephone: (403) 920-6256
Facsimile: (403) 920-2347
Email: alan_matheson@transcanada.com

Kevin Thrasher
Senior Legal Counsel
Canadian Law, Natural Gas Pipelines
NOVA Gas Transmission Ltd.
450 – 1st Street SW
Calgary, Alberta T2P 5H1
Telephone: (403) 920-7838
Facsimile: (403) 920-2347
Email: kevin_thrasher@transcanada.com

Marko Daljevic
Regulatory Project Manager
Regulatory, Tolls and Tariffs
NOVA Gas Transmission Ltd.
450 – 1st Street SW
Calgary, Alberta T2P 5H1
Telephone: (403) 920-7402
Facsimile: (403) 920-2347
Email: marko_daljevic@transcanada.com

Sander Duncanson
Osler, Hoskin & Harcourt, LLP
Suite 2500, 450 – 1st Street SW
Calgary, Alberta T2P 5H1
Telephone: (403) 260-7078
Facsimile: (403) 260-7024
Email: sduncanson@osler.com

1.0 INTRODUCTION

1 This Written Evidence of NOVA Gas Transmission Ltd. (NGTL Evidence) is
2 presented in support of the Application which seeks authorization of the rate design
3 resulting from a the NGTL System Rates and Services Settlement (Settlement) and
4 related approvals.

5 The Settlement is the product of extensive negotiations between NGTL and interested
6 NGTL stakeholders and represents a balance resulting from compromises of the
7 diverse interests and positions of the parties. Consequently, the changes to the NGTL
8 System (NGTL System or System) rate design methodology and terms and conditions
9 of services arising from the Settlement are inextricably linked and are presented as a
10 consolidated package for approval by the Board.

11 The Settlement addresses a broad range of inter-related services and tolling matters
12 on the NGTL System, including attributes and tolling of several services including
13 Firm Transportation – Receipt (FT-R) and Firm Transportation – Delivery (FT-D), a
14 portion of the proposed amendments to Firm Transportation – Points to Point (FT-P)
15 service proposed in the Application, the allocation of the NGTL Revenue
16 Requirement between FT-D and FT-R, contracting practices, transfer provisions, rural
17 gas interconnections, other services and attributes matters, and the framework for the
18 tolling methodology for the Post Provisional Phase (PPP) on the North Montney
19 Mainline (NMML), as contemplated in the MH-031-2017 Decision (NMML Tolling
20 Methodology).

21 The NGTL Evidence also addresses proposals that are related to matters addressed in
22 the Settlement but do not form part of the Settlement. These proposals are:

- 23 • changes to FT-P service in addition to those specified in the Settlement
24 (Additional FT-P Amendments)
- 25 • the specific formulaic approach to establish the surcharge in the NMML Tolling
26 Methodology, including the proposed Surcharge Coefficient (NMML Surcharge
27 Formula)

28 The NGTL Evidence further contains information it was directed to provide by the
29 Board in the Northeast British Columbia Examination Decision (Examination
30 Decision) related to policies affecting capital spending for system extensions,
31 depreciation policy and practices, and tolling methodology and tariff provisions
32 (Examination Response).

33 The inter-relationship between various aspects of the Settlement, the Additional FT-P
34 Amendments, the NMML Surcharge Formula, and the Examination Response led
35 NGTL to conclude that they should all be addressed as part of the current
36 Application. While NGTL requests that the Application be considered pursuant to the
37 Revised Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs

1 (Settlement Guidelines), it acknowledges that the evidence pertaining to the
2 Additional FT-P Amendments, the NMML Surcharge Formula, and the Examination
3 Response is not being filed pursuant to the Settlement Guidelines.

1.1 BACKGROUND ON THE SETTLEMENT

4 NGTL and its stakeholders periodically review the rate design and service provisions
5 of the NGTL System. The last of these comprehensive reviews occurred in the 2008-
6 2009 period and resulted in the current rate design approved by National Energy
7 Board (NEB or Board) Order TG-004-2010 in the RHW-1-2010 Decision issued in
8 August 2010.

9 Following preliminary consultations with interested parties, NGTL initiated a rate
10 design and services review in September 2016. Invitations were sent on
11 September 9, 2016 to NGTL System customers and other potentially interested
12 stakeholders. A task force of the Tolls Tariffs, Facilities and Procedures (TTFP)
13 committee was established (Task Force) to review the rate design of the NGTL
14 System.

15 The TTFP is a joint NGTL and industry working group that facilitates the efficient
16 and timely exchange of information among involved parties and then proactively
17 addresses and attempts to collaboratively resolve issues related to the tolls, tariff,
18 facilities and operating procedures of the NGTL System. TTFP discussions are
19 conducted on a confidential and without prejudice basis.

20 The purpose of the Task Force was to facilitate discussions and if necessary conduct
21 the negotiations related to the NGTL rate design and services review. The first
22 meeting of the Task Force took place on October 6, 2016, and was followed by
23 numerous additional meetings and discussions. A total of 39 Task Force meetings
24 were facilitated by NGTL and, at the request of stakeholders, NGTL did not attend
25 six of the meetings.

26 The Task Force process began with working sessions to determine the scope of the
27 Task Force and identify and agree upon principles and objectives that would inform
28 changes to rate design and services.

29 Various alternatives for each aspect of rate design and services were identified and
30 explored. Informational sessions were held in 2016 and 2017 to ensure Task Force
31 members had a sufficient understanding of the existing NGTL rate design and
32 historical context. From December 2017 to August 2018, the Task Force assessed and
33 debated multiple proposals and counter proposals from members with diverse
34 interests and engaged in negotiations. All Task Force members were encouraged
35 throughout the process to table proposals and counter proposals in an effort to seek
36 consensus across parties.

1 Following the assessment of various proposals and counter proposals, it became
2 apparent to NGTL that the majority of Task Force members had reached a consensus.
3 The draft Settlement was presented to the larger TTFP committee on
4 September 11, 2018 in the form of Resolution T2016-01 (Resolution), which included
5 the NGTL System Rates and Services Memorandum of Understanding (MOU)
6 provided as Appendix 1. The MOU documented the consensus that had developed
7 through the Task Force and represents the package of rate design, services, and
8 contracting provisions that were the outcome of the extensive negotiation process.

9 On September 18, 2018, NGTL held a special meeting of the TTFP to provide
10 members an opportunity to have a collaborative discussion and to ask questions on
11 the Resolution and MOU prior to the TTFP vote.

12 A vote on the Resolution was conducted on September 25, 2018. A majority of TTFP
13 members supported the proposed Resolution. However, at least one member indicated
14 that it is prepared to actively oppose the proposed Resolution before the Board and
15 may propose an alternative to the Board. Under the TTFP Procedures, the outcome of
16 the vote is a non-resolution. Nonetheless, given the broad support for the MOU and
17 comprehensive process that led to it, NGTL determined that filing an application as a
18 contested settlement pursuant to the Settlement Guidelines was justified in this
19 instance.

20 NGTL encouraged parties who were prepared to publicly express their support for the
21 Settlement to execute the MOU. In total, 36 parties representing a broad cross-section
22 of NGTL stakeholders chose to become signatories to the MOU. Parties who signed
23 the MOU include small, medium and large producers, power generators, utility
24 customers, industrial users, export customers, marketers, extraction service providers
25 and industry associations. Signatories to the MOU hold or represent companies that
26 hold approximately 65% of total contract quantities on the NGTL System.
27 Appendix 1 includes the MOU and the list of signatories who executed the MOU as
28 of February 28, 2019.

29 The execution of the MOU by a large number of stakeholders representing parties
30 holding the majority of FT-R and FT-D contracts on the NGTL System demonstrate
31 that the Settlement is supported by a broad cross section of stakeholders. While
32 opposed by a minority of interested parties, the Settlement complies with the
33 Settlement Guidelines, as revised in June 2002:

- 34 • All parties having an interest in the rate design and services on the NGTL System
35 had a fair opportunity to participate in the process and have their interests
36 recognized and appropriately weighed.
- 37 • No provisions of the Settlement are illegal or contrary to the *National Energy*
38 *Board Act* (NEB Act) or are otherwise contrary to the public interest.

1.2 RATE DESIGN AND SERVICES

1 The Settlement comprehensively addresses rate design and services matters on the
2 NGTL System, including various amendments to the rate design applicable to FT-R,
3 FT-D, other attributes, and aspects of the existing rate design and services for which
4 retention of the existing methodology is supported by the Settlement. The NGTL
5 Evidence also addresses the Additional FT-P Amendments. These matters are
6 addressed in Section 2.

1.3 NMML TOLLING METHODOLOGY

7 The NMML Tolling Methodology, which would apply to service provided on the
8 facilities physically located on the NMML (NMML Facilities),¹ is addressed in the
9 Settlement. Specifically, the Settlement specifies that rates on the NMML will reflect
10 the rate design resulting from the Settlement plus a surcharge. The proposed NMML
11 Tolling Methodology also includes the NMML Surcharge Formula and the associated
12 Surcharge Coefficient, which are not defined in the Settlement. The NMML Tolling
13 Methodology is addressed in Section 3.

1.4 EXAMINATION RESPONSE

14 In the Examination Decision, the Board directed NGTL to include certain information
15 as part of its application for Final 2019 tolls. Due to the interrelated nature of the
16 information being sought regarding NGTL's tolling methodology and the rate design
17 amendments being proposed as part the current Application, NGTL concluded that
18 the current Application was the appropriate forum to address the Board's direction
19 from the Examination Decision. Section 4 includes the Examination Response.

1.5 STRUCTURE OF THE APPLICATION

20 The Application has been developed and organized to produce adequate information
21 on the public record for the Board to understand the basis of the Settlement, assess its
22 reasonableness and that of the additional proposals that are not part of the Settlement,
23 and determine that approval of the Application is in the public interest and that the
24 tolls resulting from the Application will be just and reasonable and not unjustly
25 discriminatory.

26 In addition to the NGTL Evidence, NGTL also adduces the expert evidence of John J.
27 Reed and Toby Bishop of Concentric Energy Advisors, Inc. (Concentric Evidence).
28 In their evidence, Mr. Reed and Mr. Bishop provide their expert opinion on the

¹ The NMML Facilities include all facilities authorized through the Variance Application, with the exception of the Groundbirch Compressor Station that is physically located on the existing NGTL System.

1 amendments proposed in the Settlement and the additional amendments proposed in
2 the Application in terms of consistency with the Board’s principles and policies.

3 The NGTL Evidence is organized as follows:

- 4 • Section 1 Introduction.
- 5 • Section 2 Rate Design and Services—provides an overview of the proposed rate
6 design and services resulting from the Settlement and the Additional FT-P
7 Amendments.
- 8 • Section 3 NMML Tolling Methodology—addresses the proposed NMML Tolling
9 Methodology.
- 10 • Section 4 Examination Response—provides information prepared by NGTL in
11 response to the Board’s direction on the Examination.
- 12 • Section 5 Conclusion—addresses the overall reasonableness of the Settlement, the
13 Additional FT-P Amendments and of the NMML Tolling Methodology including
14 the NMML Surcharge Formula.

15 In addition, the NGTL Evidence includes the following appendices:

- 16 • Appendix 1: MOU and Signatories – presents a copy of the MOU on which the
17 Settlement is based and lists the signatories to the MOU
- 18 • Appendix 2: Written Evidence of John J. Reed and Toby Bishop of Concentric
19 Energy Advisors, Inc.
- 20 • Appendix 3: TTFP Task Force Material
- 21 • Appendix 4: Tariff Amendments
- 22 • Appendix 5: Illustrative 2017 NGTL Rates and Flow Chart
- 23 • Appendix 6: Facilities Design Methodology Document and Guidelines for
24 New Facilities
- 25 • Appendix 7: Map of the NGTL System

2.0 RATE DESIGN AND SERVICES

2.1 INTRODUCTION ON RATE DESIGN AND SERVICES PROPOSALS

1 The NGTL rate design and services are periodically reviewed through various
2 processes to ensure methodologies and terms and conditions remain reflective of
3 System operations and responsive to industry requirements. The NGTL rate design
4 was last reviewed and updated in 2010 in the RHW-1-2010 proceeding and was
5 approved through Order-TG-04-2010.

6 The NGTL System operations and utilization have changed since the RHW-1-2010
7 proceeding through which the current NGTL System rate design was approved. There
8 has been significant growth of the NGTL System and gas market dynamics have
9 evolved. Supply has continued to be sourced from further north and west on the
10 NGTL System as unconventional gas sources have become more economic while
11 supply in other areas has declined. In addition, there has been an increase in intra-
12 basin demand, which accounted for approximately 55% of the total NGTL System
13 Contract Demand Quantity (CDQ) in 2018. In particular, markets located near Fort
14 McMurray, Cold Lake, the Edmonton area, and the Calgary area have grown.

15 Influenced by the changes in operation of the NGTL System, NGTL engaged its
16 customers to determine if a review of the existing rate design would be required.
17 After receiving feedback, NGTL initiated a review of the rate design in late 2016.
18 These discussions ultimately led to the Settlement. The Settlement represents the
19 culmination of extensive collaborative discussions and negotiations between NGTL
20 and NGTL System stakeholders regarding potential changes to the existing rate
21 design methodology and the terms and conditions of services on the NGTL System.

22 This section describes the applied-for changes to the rate design methodology and
23 terms and conditions of services for the NGTL System that represent compromises in
24 the diverse interests and positions of the parties. Consequently, the individual changes
25 are inextricably linked and together have broad support from industry, which is
26 reflected in the Settlement package.

27 The proposed changes to the NGTL System rate design methodology and terms and
28 conditions of services include:

- 29
- Rate Design Methodology:
 - 30 • The FT-R pathing methodology expanded to include the largest delivery
 - 31 markets on the NGTL System and modified price floor and ceiling levels to
 - 32 account for approximately 90% of the CDQ between the floor and ceiling. See
 - 33 section 2.2.
 - 34 • The FT-D cost allocation methodology updated to incorporate pipeline
 - 35 diameter so that rates would be derived using a distance-diameter algorithm,
 - 36 and the minimum FT-D floor rate for Group 1 Delivery Points changed to the

1 lesser of the East Gate (Empress and McNeill) and West Gate (Alberta-British
2 Columbia) FT-D1 rates. See section 2.3.

- 3 • FT-P service modified to adjust the pricing of this short-haul service,
4 introduce a toll discount when three specific conditions are met, and provide
5 FT-P shippers with greater flexibility. See section 2.4.

- 6 • Terms and Conditions of Service:

- 7 • FT-R and FT-D contracting practices are proposed to be aligned and FT-D
8 transfer provisions modified to increase flexibility. See section 2.5.

- 9 • Additional commitments related to transfers and rural gas interconnections.
10 See section 2.5.

11 The proposed rate design that resulted from this extensive review is reflective of the
12 evolving nature of the NGTL System, and is consistent with the NEB's tolling
13 principles, as further addressed in the Concentric Evidence. Overall, the proposed rate
14 design reasonably reflects customer contracting and usage of the NGTL System,
15 increasing the degree to which cost drivers are reflected in the rate design, and thus
16 enhancing cost accountability among shippers on the NGTL System.

17 A flow chart of the revenue requirement allocation under the current and proposed
18 rate design as well as the resulting illustrative rates under the proposed rate design
19 based on 2017 annualized data are provided in Appendix 5.

2.2 FIRM TRANSPORTATION – RECEIPT

20 FT-R is a receipt service providing firm receipt rights at a specific Receipt Point.
21 FT-R rates are Receipt Point specific, subject to a price floor and ceiling mechanism
22 of +/- 8 cents/Mcf/d from the average three-year FT-R daily rate.

23 The proposed rate design methodology reflects four changes to the tolling of FT-R
24 service: (i) an expanded FT-R pathing methodology; (ii) an ongoing three-year
25 pathing average method; (iii) a modified floor and ceiling rates methodology; and (iv)
26 a one-time FT-R transition mechanism associated with implementation of the
27 proposed rate design changes.

28 These proposed changes are a response to the continued evolution of the NGTL
29 System, and are necessary so that the rate design accurately reflects System
30 utilization.

2.2.1 FT-R Pathing Methodology

31 Under the current rate design, the pricing of FT-R service at Receipt Points is
32 founded on a receipt pathing methodology, which allocates a portion of the costs of
33 the NGTL System facilities to each receipt station based on distance and pipe
34 diameter cost factors. Each Receipt Point has its own rate reflecting the length and

1 pipe diameter for all the facilities required to flow natural gas along a path from that
2 specific Receipt Point to the major export Delivery Points. The current receipt
3 pathing methodology relies on two major export delivery markets: East Gate and
4 West Gate.

5 When the current receipt pathing methodology was introduced, the majority of the
6 gas flowing on the NGTL System was delivered at East Gate and West Gate,
7 therefore these export points were deemed to be reflective of System-wide utilization
8 and underpinned the assumptions within the current methodology. As previously
9 mentioned, the NGTL System has experienced tremendous intra-basin demand
10 growth in the past few years resulting in a need to adjust the historical assumptions
11 underpinning the receipt pathing methodology. As of 2017, the East Gate and West
12 Gate Delivery Points represented approximately 45% of the total delivery CDQ on
13 the NGTL System.

14 As a result of this shift in System contracting, NGTL is proposing to expand the
15 receipt pathing methodology to include additional major delivery markets on the
16 NGTL System. In addition to East Gate and West Gate, these major markets will
17 include the Oil Sands Delivery Area Liege (OSDA Liege), Oil Sands Delivery Area
18 Kirby (OSDA Kirby), Calgary area, and Edmonton area (referred to as the Major
19 Markets).

20 See Figure 2-1 for the location of the six Major Markets on the NGTL System.

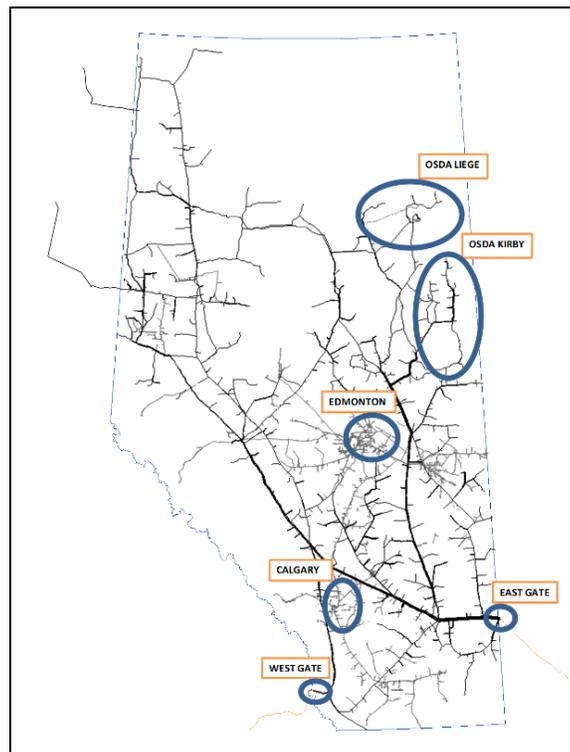


Figure 2-1: Major Markets on the NGTL System

1 The following criteria were used to identify which areas were characterized as Major
2 Markets:

- 3 • account for a significant amount of System CDQ
- 4 • represent a discrete geographic area
- 5 • have a stable demand over time.

6 The proposed change in the receipt pathing methodology encompasses the vast
7 majority of the CDQ on the NGTL System. In total, the Major Markets represent
8 approximately 90% of the contracted demand on the NGTL System in 2017.
9 Individually, each of the Major Markets are areas that account for a significant
10 amount of System CDQ in excess of 1 Bcf/d and represent more than 8% of total
11 NGTL System CDQ. In contrast, each of the segments that are not included in the
12 pathing account for 0.3 Bcf/d or less or approximately 2% or less of the System’s
13 CDQ. All of the remaining NGTL segments combined represent approximately
14 1.6 Bcf/d of System delivery contracts. See Table 2-1 for the NGTL segment CDQ
15 behind each of the Major Markets.

Table 2-1: Major Markets

Market	2017 Delivery CDQ (Bcf/d)	%
East Gate	3.87	27.9
West Gate	2.35	16.9
Calgary ¹	1.22	8.8
OSDA Liege	1.72	12.4
Edmonton	1.70	12.2
OSDA Kirby	1.41	10.1
All Other Remaining Segments	1.61	11.7
Total NGTL System	13.88	100

16 NGTL will continue to periodically re-evaluate which markets are characterized as
17 Major Markets as contracting and/or usage of the System evolves. Should a new
18 market emerge that meets the criteria listed above, the introduction of the new market
19 and any associated changes that arise from pathing to this market will be
20 communicated to the TTFP and reflected in subsequent rates filings with the NEB.
21 This proposed change to receipt pathing methodology more accurately reflects current
22 CDQ and also accommodates future changes in the NGTL System efficiently.

23 The alignment of the receipt pathing methodology with current System utilization
24 results in receipt rates that more closely reflect each Receipt Point’s operational usage
25 of the System. Fundamentally, receipt stations that operationally flow gas to nearby

¹ Includes markets located along the West Path within Alberta, excluding the West Gate export point.

1 markets will be priced at lower rates than receipt stations that flow gas across longer
2 distances. With each Receipt Point rate better reflecting its operational distance to the
3 various delivery markets, distance sensitivity in relation to the current rate design will
4 be enhanced. The proposed change to the receipt pathing methodology reasonably
5 allocates costs based on the infrastructure used to deliver gas to the Major Markets
6 and strikes a reasonable balance between capturing the evolving nature of the NGTL
7 System without introducing excessive complexity.

2.2.2 FT-R Three-Year Pathing Average

8 As part of the new receipt pathing methodology, NGTL will incorporate a three-year
9 average of the receipt paths which will reduce year-over-year rate changes and
10 enhance rate stability. The resulting path used for pricing each receipt station in any
11 given year will be a three-year average of the current and past two years of station
12 specific path data. Accordingly, a receipt station experiencing a change in its path
13 will not realize the full effect of the change to its rate until the third year.

14 This three-year pathing average will be ongoing and will provide a reasonable
15 balance between ensuring FT-R pathing reflects usage of the system while also
16 stabilizing the resulting rates. It will prevent abnormal results stemming from single
17 year events such as changes in pathing resulting from new facilities that could
18 otherwise lead to more significant rate changes from one year to the next. Overall,
19 this approach will continue to reflect usage of the system while also promoting
20 greater toll certainty and stability.

2.2.3 FT-R Floor and Ceiling

21 Currently, NGTL's receipt service rates are subject to a price floor and ceiling
22 mechanism, whereby Receipt Point rates are constrained by a floor and ceiling of
23 +/- 8 cents/Mcf/d from the average three-year FT-R daily rate. On average,
24 approximately 70% of the FT-R CDQ is currently priced between the floor and
25 ceiling rates.

26 The floor and ceiling mechanism was first introduced as part of the 1999 Products
27 and Pricing Application² to limit the impact of rate design changes introduced at the
28 time on NGTL's customers and to provide a reasonable range of receipt rates for the
29 NGTL System that would not adversely impact supply in the long-term. The price
30 floor and ceiling mechanism avoids significant receipt outliers and ensures that a
31 minimum cost accountability to the NGTL System is maintained.

² NGTL 1999 Products and Pricing Application to the Alberta Energy and Utilities Board; Application 990157; File 1604-3; Decision 2000-6.

1 The proposed rate design methodology will continue to incorporate a price floor and
2 ceiling mechanism, but the mechanism will be modified. During the calculation of
3 rates each year, NGTL will review the Receipt Point-specific rates and establish the
4 ceiling and floor such that approximately 90% of the FT-R CDQ have rates that are
5 between the FT-R floor and ceiling rates. The remaining FT-R CDQ will be situated
6 at the ceiling and floor rates, with the aim of approximately 5% at the ceiling and
7 approximately 5% at the floor. In the calculation of rates NGTL will endeavor to get
8 as close as practical to the above percentages. This proposed methodology will result
9 in floor and ceiling rates that fluctuate with each calculation of rates. In addition, to
10 maintain a minimum accountability level, an absolute FT-R floor will be set at
11 8 cents/Mcf/d. As a result of the absolute floor, there could be more than 5% of the
12 receipt CDQ at the floor in any given year.

13 Allowing for more dynamic floor and ceiling rates that fluctuate to accommodate
14 approximately 90% of the NGTL System CDQ retains the overall objective for FT-R
15 floor and ceiling rates while increasing the degree to which distance sensitivity is
16 reflected in the rate design for the NGTL System. The effect of the proposal will be a
17 widening of the band between the floor and the ceiling from 16 cents/Mcf/d to
18 approximately 28.5 cents/Mcf/d, based on 2017 data. It also has the effect of
19 decreasing the floor rate by more than 31% from 14 cents/Mcf/d to approximately 10
20 cents/Mcf/d, and increasing the ceiling rate by more than 26% from 30 cents/Mcf/d to
21 approximately 38 cents/Mcf/d. As such, receipt stations with the shortest paths to
22 market will be required to pay rates below the current floor rate, and stations with the
23 longest paths to market will be required to pay rates above the current ceiling rate.

24 Figures 2-2a and 2-2b are two 2017 NGTL System maps which compare the
25 constraints of Receipt Points under the current rate design relative to the proposed
26 changes. By widening the floor and ceiling band the number of stations that are at the
27 ceiling and floor rates are significantly reduced.

28 Overall, changing the FT-R floor and ceiling rate design enhances cost accountability
29 by increasing the degree to which distance is reflected in the rate design and sends
30 appropriate price signals. The proposal promotes the efficient use of the existing
31 NGTL System while reasonably allocating attributable common costs to differently
32 situated NGTL customers.

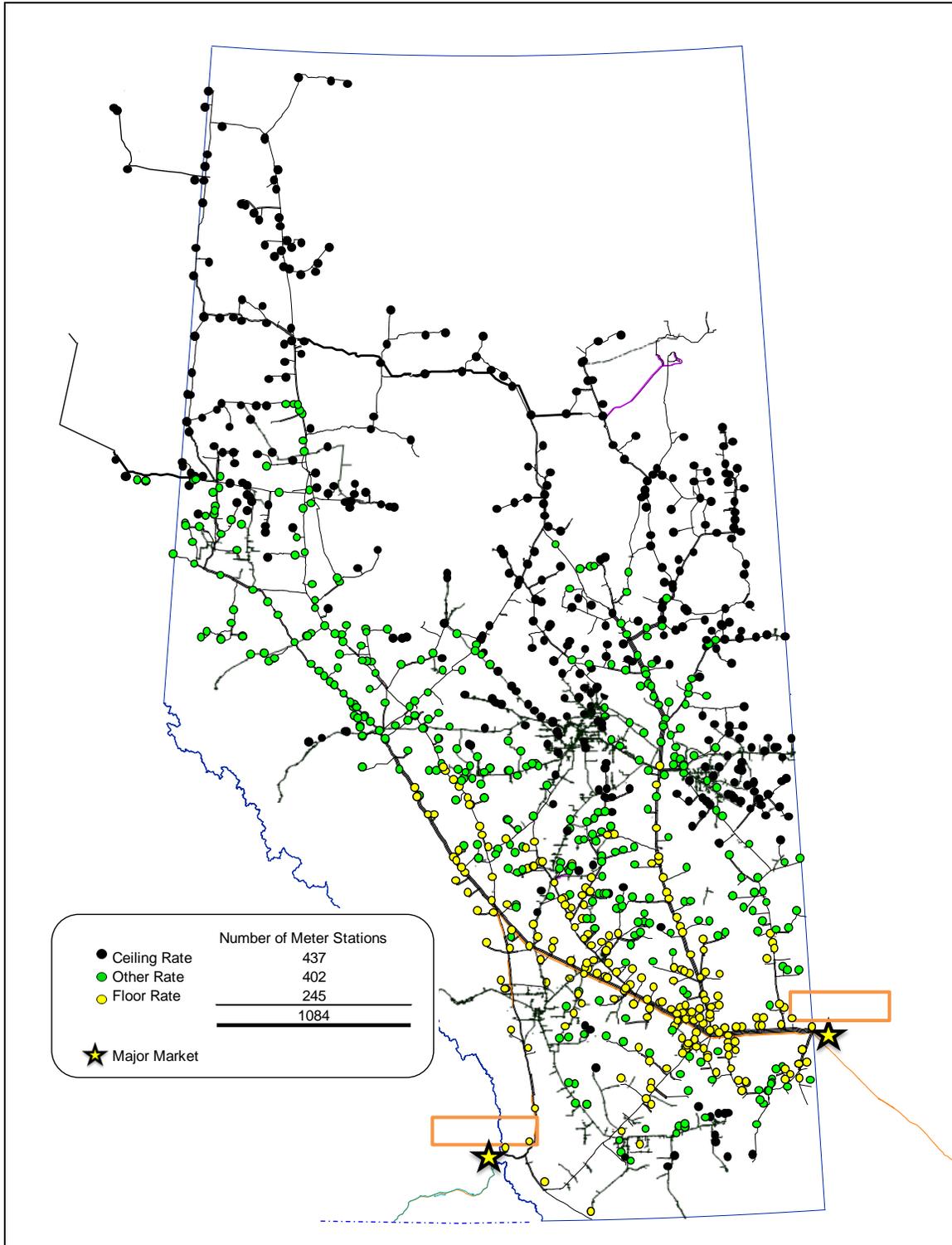


Figure 2-2a: Current FT-R Floors and Ceilings

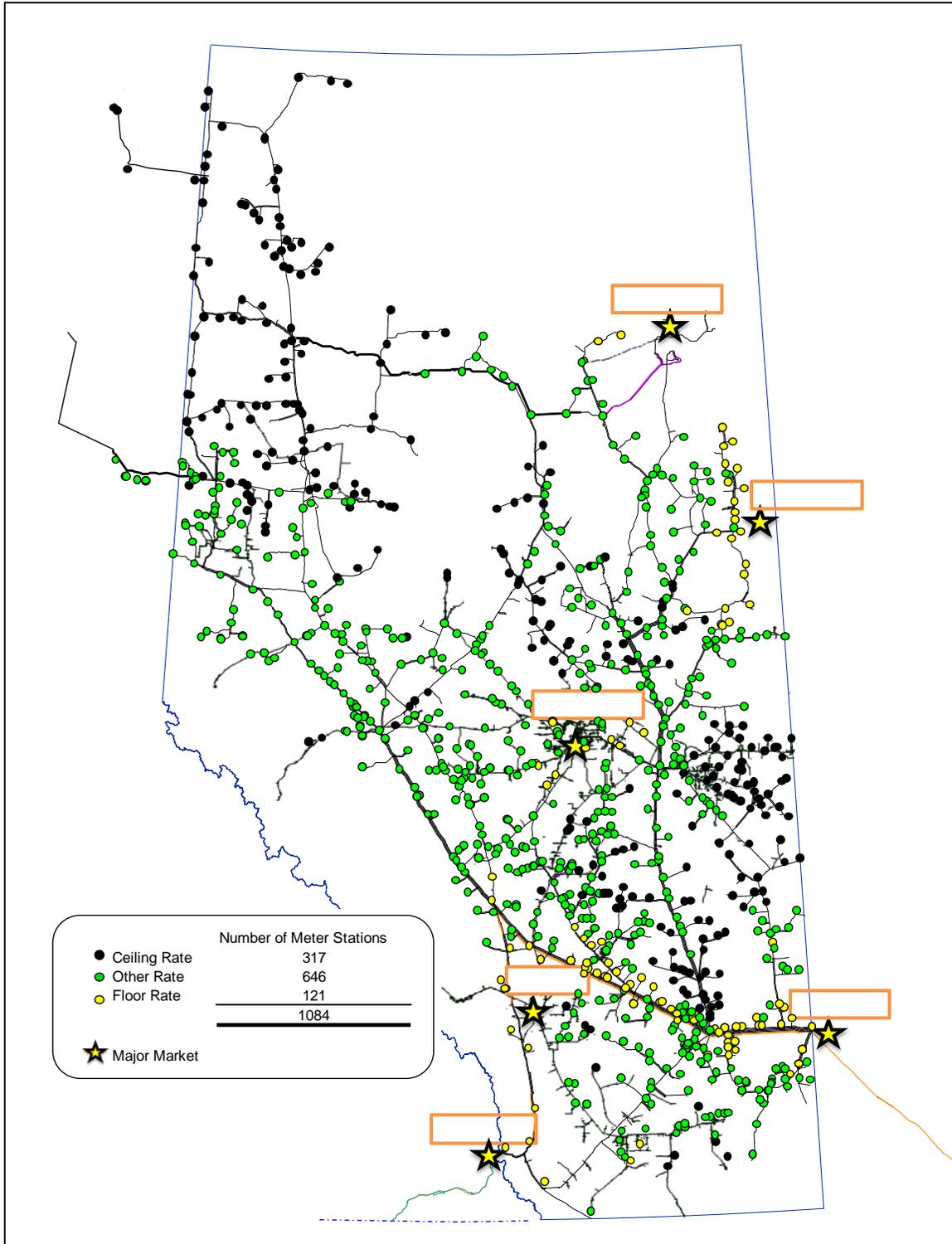


Figure 2-2b: Proposed FT-R Floors and Ceilings

2.2.4 FT-R Transition Mechanism

1 A transition mechanism will be used to help prevent significant impacts resulting
2 from the change in rate design. Specifically, the receipt transition mechanism will
3 implement the proposed changes to FT-R Service gradually over a three-year
4 transition period (FT-R Transition Period). In each year of the FT-R Transition
5 Period, the rate design changes will be transitioned in by 1/3, with the applied-for rate
6 design changes fully implemented by the third year. The rate transition mechanism
7 can be expressed using the following formula:

$$8 \quad T = A + (B - A) * X$$

9 Where:

10 T = the resulting Transition Rate, to be in effect for such Transition Year;

11 A = (i) for Year 1, the approved rate under the current rate design; or

12 (ii) for Year 2, the previous Year's Transition Rate;

13 B = the annual rate resulting from the applied-for rate design changes,
14 absent any transition mechanisms;

15 X = 1/3 for Year 1; 2/3 for Year 2.

16 This transition mechanism will apply only to receipt service rates and will have no
17 impact on delivery service rates. As a result of the proposed FT-R rate design
18 changes, Receipt Points will see a more gradual change in their rates during the FT-R
19 Transition Period. Any variance in forecast revenue due to the transition will be
20 reflected in the rates of the Receipt Points priced between the floor and the ceiling.
21 The FT-R Transition Period will provide customers time to adjust, as required, to the
22 changes to the FT-R rate design. An illustrative example of resulting transition rates
23 based on 2017 annualized data is provided in Appendix 5.

2.3 FIRM TRANSPORTATION – DELIVERY

24 FT-D is a delivery service providing firm delivery rights at a specific Delivery Point.
25 FT-D service is offered at three mutually-exclusive groups of Delivery Points:

- 26 • Group 1 Delivery Points (Group 1 or FT-D1) are major interconnection points
27 with major downstream pipeline systems. FT-D1 rates are based on an individual
28 Delivery Point Distance of Haul (DOH) resulting in delivery-point-specific rates,
29 with a floor rate equal to the rate at Group 2 Delivery Points.
- 30 • Group 2 Delivery Points (Group 2 or FT-D2) are non-Group 1 Delivery Points
31 where the customer elects to contract for standard service attributes. FT-D2 rates

1 are based on the average DOH for all Group 2 and Group 3 Delivery Points
2 relative to the average DOH for Group 1 Delivery (the DOH Ratio) and priced on
3 a postage stamp basis.

- 4 • Group 3 Delivery Points (Group 3 or FT-D3) are non-Group 1 Delivery Points
5 where the customer elects to contract for a premium service which is offered at a
6 premium above the FT-D2 rate. FT-D3 rates are priced at a 20% premium to the
7 FT-D2 rates. This premium has been set to reflect the service attributes including
8 higher priority in comparison to FT-D2.

9 NGTL is proposing to adjust the rate design methodology for FT-D service to reflect
10 a new FT-D pathing methodology and to change the manner in which the FT-D1 floor
11 rate is calculated. These proposed changes will increase the degree to which the
12 primary cost drivers on the NGTL System are reflected in the rates and enhance
13 shipper cost accountability in light of the changes that have been experienced in the
14 System utilization in the last decade.

2.3.1 FT-D Pathing Methodology

15 Due to the reticulated nature of the NGTL System, there is more than one path over
16 which gas can physically flow to any particular Delivery Point from upstream receipt
17 supply points. In order to calculate distance to the various Delivery Points on the
18 NGTL System, NGTL relies on a delivery pathing methodology. This methodology
19 takes into account all of the available paths used to supply a Delivery Point. Each
20 path that can be used is weighted based on operational flow patterns on the NGTL
21 System. At a junction where multiple paths can be used, the various paths available
22 are weighted by the operational flow volumes. This calculation results in a weighted
23 average path distance associated with that Delivery Point.

24 NGTL proposes that the delivery cost allocation methodology be updated to
25 incorporate a distance-diameter algorithm that reflects primary cost drivers on the
26 NGTL System. It will continue to use operational flow patterns to identify which
27 receipts are within the paths of each delivery station, but will apply pipe capacity
28 instead of operational flows to calculate the weighted path for each Delivery Point.
29 The delivery cost allocation methodology will also account for the diameter of the
30 pipeline within the delivery path and will apply a delivery unit cost index (UCI)³ to
31 account for the economies of scale associated with larger diameter pipelines.

32 The use of pipeline capacity rather than operational flow to weight the delivery paths
33 will better reflect the underlying cost of the infrastructure in place to meet demand. It

³ Under the current FT-R pathing methodology the UCI is a comprehensive determination of the relative unit cost for transportation for various pipe diameters, incorporating economies of scale derived from historical acquisition costs for each pipe size.

1 also recognizes that costs incurred to provide delivery service are predominantly
2 capital-based rather than operational.

3 The proposed methodology would result in a unique distance-diameter allocator for
4 each Delivery Point on the NGTL System, which would continue to be reflected in
5 the derivation of delivery point-specific rates at Group 1 locations and into the
6 postage stamp rates for Group 2 and Group 3 locations.

7 Overall, the proposed changes to FT-D pathing would better reflect both the relative
8 distance to the applicable Delivery Point, and the unit cost differences attributable to
9 variations in pipeline diameter. In turn, these enhancements would better align costs
10 incurred to provide delivery service and the methodology used to derive the rates for
11 FT-D service. The changes would also enhance consistency between tolling of FT-R
12 and FT-D service, as both the FT-R and FT-D pathing methodologies would reflect
13 both distance and diameter in the rate design, and would utilize pipe capacity to
14 calculate weighted paths.

2.3.2 Group 1 FT-D Floor Modification

15 Under the current rate design, FT-D1 rates are based on individual Delivery Point
16 DOHs resulting in delivery-point-specific-rates, subject to a floor equal to the FT-D2
17 rate. A floor is required to ensure there is adequate cost accountability, particularly at
18 smaller Group 1 locations where DOHs may be insignificant.

19 As the NGTL System has evolved with the supply source shifting to the north and
20 west portion of the NGTL System, the DOHs to East Gate and Group 2 and 3
21 Delivery Points have increased. In contrast, the DOH to West Gate has been roughly
22 constant over time. Figure 2-3 displays the DOHs at these delivery locations over the
23 last 10 years.

24 The DOH to West Gate has become less than the average Group 2 and Group 3 DOH
25 since 2014 and is currently approximately 15% lower.⁴ However, under the current
26 FT-D1 floor methodology, the applicable floor level results in rates at West Gate
27 equal to the FT-D2 rate. Thus, the FT-D1 rate at West Gate has become less
28 representative of the applicable DOH.

⁴ The resulting yearly DOHs are utilized in the delivery rate calculation two years later. For example, 2014 DOHs were used in the calculation of 2016 delivery rates.

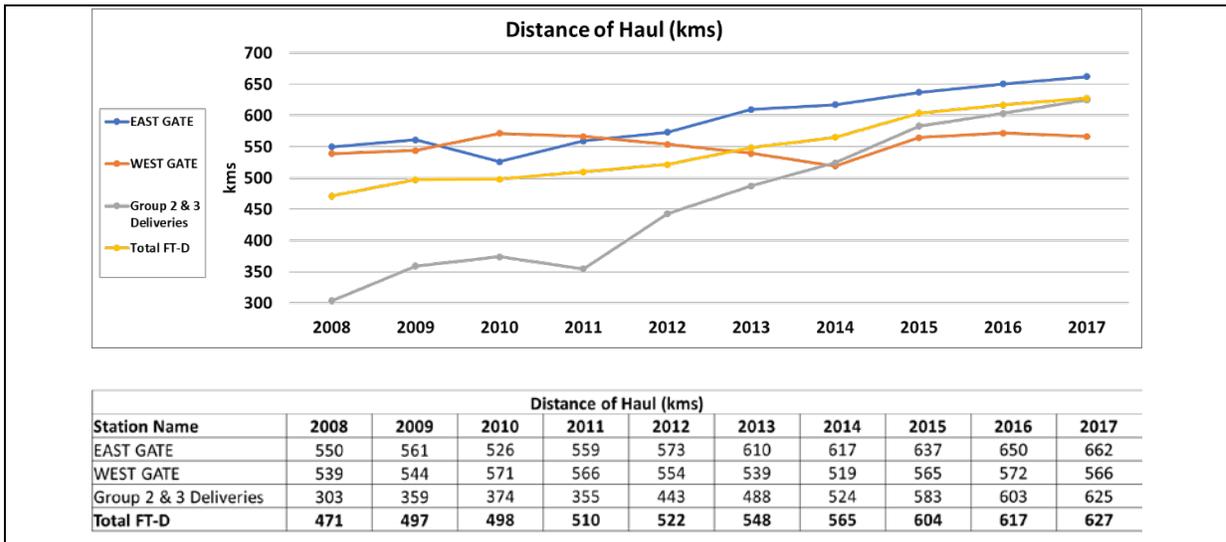


Figure 2-3: DOH to Key Delivery Locations

1 NGTL proposes to change the Group 1 floor to be the lesser of the East Gate and
 2 West Gate FT-D1 rates. This new floor will ensure that East Gate and West Gate,
 3 which account for the vast majority of Group 1 deliveries, will have rates that reflect
 4 their distance usage. At the same time, maintaining a floor set at the lesser of the East
 5 Gate and West Gate FT-D1 rates will ensure rates at smaller Group 1 Delivery Points
 6 continue to reflect reasonable cost accountability.

2.4 FIRM TRANSPORTATION – POINTS TO POINT

7 FT-P service is a firm service providing firm transportation between designated
 8 Receipt Point(s) and a designated Group 2 Delivery Point. Unlike FT-R and FT-D,
 9 FT-P does not provide direct access to the NOVA Inventory Transfer (NIT) and is
 10 typically used by customers that rely on gas they produce in the general vicinity of a
 11 specific end-use location. FT-P is a less flexible service than FT-R and FT-D that is
 12 aimed at short-haul contract customers on the NGTL System, but provides an
 13 alternative to the combined FT-R and FT-D2 rates on a short-haul basis between the
 14 Receipt Points and the Delivery Point.

15 The current FT-P rate methodology has linear price increments between the lowest
 16 FT-P rate and the highest FT-P rate in 25 km distance bands. The rate of the shortest
 17 FT-P band is the floor FT-R rate plus the postage stamp FT-D2 rate less an FT-P
 18 adjustment of 4¢/Mcf/d (\$42.95/10³m³/month). The rate of the longest FT-P band is
 19 the ceiling FT-R rate plus the postage stamp FT-D2 rate. The distance band at which
 20 the highest FT-P rate applies is for distances greater than 500 kilometers.

1 As part of the Settlement, NGTL and stakeholders agree to maintain certain features
2 of FT-P and to make a number of changes to FT-P, while recognizing that additional
3 changes to FT-P service may be warranted. The Settlement maintains the following
4 existing attributes of FT-P service:

- 5 • the service will be available for delivery only at eligible Group 2 Delivery Points
- 6 • the minimum rate for this service will be equal to the FT-R floor rate plus the
7 FT-D2 rate less the FT-P adjustment
- 8 • the maximum rate for this service will be equal to the FT-R ceiling rate plus the
9 FT-D2 rate
- 10 • fuel charges remain unchanged for FT-P
- 11 • the maximum number of Receipt Points allowed for each FT-P contract
12 remains 50

13 The Settlement includes the following changes to FT-P service:

- 14 • FT-R can be converted to FT-P; Primary Term FT-R would require an extension
15 of the contract term to ensure equivalent cost accountability
- 16 • Receipt Points defined in the FT-P contract can be changed twice a year

17 Allowing conversion from FT-R will better align access to this points-to-point service
18 from both receipt and delivery contracts, rather than only delivery contracts, as is
19 currently the case. NGTL will rely on an economic test for contracts converting from
20 FT-R to FT-P to ensure appropriate cost accountability to the System. Allowing
21 Receipt Points eligible for an FT-P contract to be adjusted twice a year will enhance
22 flexibility associated with the service.

23 For clarity, the Receipt Contract Demand held at any receipt point subject to a
24 Primary Term cannot be reduced. Specifically, for any Receipt Contract Demand held
25 at a receipt point converted from an FT-R contract during a Primary Term, the sum of
26 the remaining Receipt Contract Demand under the FT-R contract and of the Receipt
27 Contract Demand converted to an FT-P contract will need to be equal to the Receipt
28 Contract Demand under the FT-R contract prior to the conversion during the Primary
29 Term. In addition, any Receipt Contract Demand at a receipt point under Primary
30 Term pursuant to an FT-P contract directly cannot be reduced during the Primary
31 Term.

32 Further, as part of the Settlement, NGTL and interested parties recognized that
33 additional changes to FT-P services may be warranted and agreed to continue the
34 dialogue on FT-P and use reasonable efforts to reach mutually agreeable terms and
35 conditions.

1 Following execution of the Settlement, discussions around potential improvements to
2 the service took place. Based on these discussions, NGTL proposes the following
3 changes to FT-P service attributes in addition to those specified in the Settlement:

- 4 • the FT-P adjustment will increase from 4¢/Mcf/d ($\$42.95/10^3\text{m}^3/\text{month}$) to
5 10¢/Mcf/d ($\$107.37/10^3\text{m}^3/\text{month}$)
- 6 • an FT-P Price Point D will be implemented with a discount set at 85% of the FT-P
7 Price Point A when all the following three eligibility criteria (Price Point D
8 Conditions) are met:
 - 9 a. CDQ equal to or greater than $4,000/10^3\text{m}^3/\text{d}$ (approximately 150 TJ/d) and
10 less than or equal to $10,500/10^3\text{m}^3/\text{d}$ (approximately 400 TJ/d);
 - 11 b. Contract Term equal to or greater than 5 years; and
 - 12 c. FT-P Distance band shorter than or equal to 100 km.

13 For clarity, while these additional changes are related to matters addressed in the
14 Settlement, they are additional amendments proposed by NGTL (jointly referred to as
15 the Additional FT-P Amendments) that do not form part of the Settlement.

16 The increase to the FT-P adjustment is responsive to the changes that have occurred
17 on the NGTL System since FT-P was last reviewed. Over the last 8 years, the use of
18 FT-P service has declined from approximately 400 MMcf/d to 200 MMcf/d.
19 Increasing FT-R and FT-D rates over time have resulted in higher FT-P rates, making
20 the current FT-P adjustment less meaningful than before. Increasing the FT-P
21 adjustment will restore the previous incentive for short-haul shippers to consider
22 FT-P service, despite the lesser flexibility associated with the service and the lack of
23 direct access to NIT.

24 The introduction of the FT-P Price Point D is also responsive to the need for FT-P to
25 reflect the evolving nature of the NGTL System. Currently, term-differentiated rates
26 already apply to FT-P service, and establish a 5% discount for FT-P contracts longer
27 than 5 years (Price Point A of 95% of the 3-year rate). Price Point D will only apply
28 when all three Price Point D Conditions are met, which is representative of the unique
29 nature of FT-P as a points-to-point short-haul service and is not intended to set a
30 precedent for volume or other discount on other services.

31 NGTL will inform the TTFP when FT-P Price Point D contracts are executed. When
32 new facilities are required to provide such service, NGTL will also provide
33 information related to the costs of the facilities and contract revenues to ensure these
34 contracts provide net benefits to the NGTL System. This will provide transparency
35 and help stakeholders understand the extent to which Price Point D is used as a result
36 of this modification to FT-P service. In addition, as a means of ensuring the
37 introduction of Price Point D does not unduly favour a particular customer, NGTL

1 will cap the quantity of FT-P eligible for Price Point D specified in a contract at
2 10,500/10³m³/d (approximately 400 TJ/d).

3 The proposed changes to FT-P, including those specified in the Settlement as well as
4 the Additional FT-P Amendments, are expected to restore FT-P as an attractive
5 alternative for short-haul service on the NGTL System, which will provide benefits to
6 the evolving NGTL System and its users. FT-P rates will continue to accommodate
7 customers that seek a greater level of cost specificity between receipt and delivery
8 locations, while maintaining a cost-based linkage to receipt and delivery firm rates,
9 and recognizing the relatively short-haul nature of the service and the relative loss in
10 flexibility due to a lack of direct access to NIT.

2.5 OTHER MATTERS ADDRESSED IN THE SETTLEMENT

11 The Settlement specifies other changes to NGTL services. Changes to the contract
12 term calculation and the ability to effect transfers for FT-R and FT-D services are
13 proposed. The Settlement also identifies a number of services that are either changing
14 or remaining constant. These are discussed below.

2.5.1 Contracting Practices

Contract Term for FT-R and FT-D Service

15 Contract terms for FT-R and FT-D can either be in primary or secondary term.
16 During the Primary Contract Term (Primary Term), contracts are tied to a specific
17 Receipt or Delivery Point, as applicable. During the Secondary Contract Term
18 (Secondary Term), the Tariff provides flexibility to transfer contract quantity to a
19 different point where existing capacity is available. The conditions for transfer vary
20 depending on whether a requested transfer is within or outside a particular design
21 area. Currently the determination of Primary and Secondary Terms for FT-R and
22 FT-D service is different.

23 For FT-R, if new facilities are not required, a minimum Secondary Term of three
24 years is currently required. If new facilities are required to be installed, a Primary
25 Term equal to the number of years for the cumulative present value revenue to equal
26 or exceed the cumulative present value cost of service for those receipt point facilities
27 (with a minimum of one year) in addition to a minimum three-year Secondary Term
28 is required.

29 In addition, NGTL's current contracting practice in constrained areas of the System
30 where new facilities other than metering facilities are required to provide service, the
31 term requirement is the equivalent of a minimum eight-year contract with 75% of the
32 contract quantity being made up of a five-year Primary Term and a three-year
33 Secondary Term commencing at the conclusion of the five-year Primary Term, with

1 the remaining 25% of the contract quantity being a minimum eight-year Secondary
2 Term.

3 For FT-D, if no new facilities are necessary, a minimum of a one-year Secondary
4 Term is currently required. If new metering facilities at the Delivery Point are
5 necessary, a two-year Primary Term plus a minimum of a three-year Secondary Term
6 are required. If new facilities other than facilities at the Delivery Point are required, a
7 five-year Primary Term plus a minimum of a three-year Secondary Term are
8 required.

9 As part of the Settlement, NGTL and stakeholders have agreed to align how Primary
10 and Secondary Terms are calculated for both FT-R and FT-D services, as follows:

- 11 1. If no new Facilities are required, the minimum term is a Secondary Term of one
12 year;
- 13 2. If new metering Facilities are required, the minimum term is the sum of:
 - 14 a. a minimum Primary Term of between two and five years as determined under
15 the Criteria for Determining Primary Term in Appendix “E” of the Tariff; and
 - 16 b. a Secondary Term equal to six years less the Primary Term; or
- 17 3. If other new Facilities are required, the minimum term is equal to the sum of:
 - 18 a. a minimum Primary Term of two years if no new metering Facilities are
19 required or of between two and five years if new metering Facilities are
20 required as determined under the Criteria for Determining Primary Term in
21 Appendix “E” of the Tariff; and
 - 22 b. a Secondary Term equal to eight years less the Primary Term.

23 The changes do not change the treatment of existing service priorities, or the structure
24 or length of previously executed contracts.

25 Appendix E establishes the minimum contract terms that would apply in typical
26 circumstances. However, NGTL will retain the discretion to require longer contract
27 terms than those specified above, as required to ensure there is sufficient cost
28 accountability and therefore no excessive cross-subsidization. The appropriate
29 minimum contract term will be evaluated by NGTL on a project by project basis
30 having regard to the project’s costs and anticipated contract revenues.

31 Overall, the proposed changes to the contracting practices provide a reasonable
32 balance between NGTL’s desire for longer contract terms and customers’ desire for
33 greater flexibility, while ensuring the revised terms are transparent and that NGTL’s
34 customers are treated consistently.

Contract Shaping

1 Shaping provides shippers flexibility to align Primary and Secondary Terms to meet
2 the needs of their business while maintaining appropriate cost accountability to the
3 facilities.

4 As noted above, the current practice for FT-R contracts in constrained areas of the
5 NGTL System is an eight-year contract with 75% of the contract volumes being made
6 up of a five-year Primary Term, and a three-year Secondary Term commencing at the
7 conclusion of the five-year Primary Term, with the remaining 25% of the contract
8 being an eight-year Secondary Term as shown in Figure 2-4.

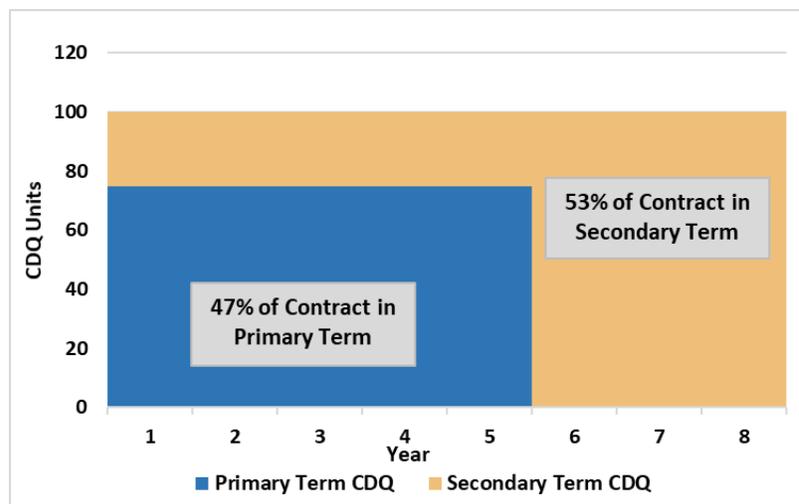


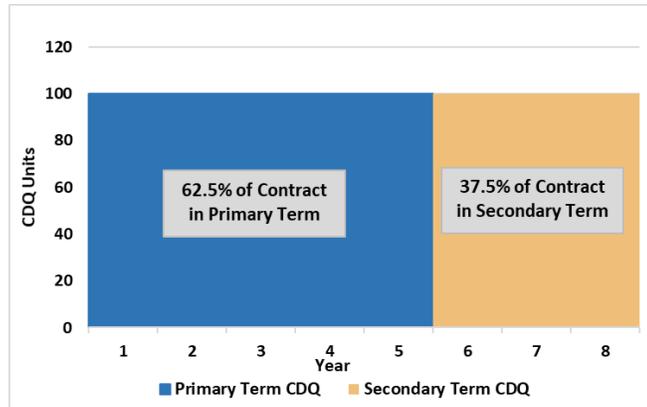
Figure 2-4: Contract Shaping – Current FT-R Practice

9 NGTL allows FT-R shippers in constrained areas of the NGTL System the ability to
10 shape their Primary and Secondary Term components of their contract as long as the
11 proportion of Primary and Secondary Term are equivalent.

12 As part of the Settlement, it was agreed that NGTL will no longer continue the
13 practice of using a 75%/25% Primary Term provision. However, NGTL agreed to
14 continue providing shippers with the ability to shape their Primary and Secondary
15 Term as long as the proportion of each is equivalent to the requirements defined
16 above in this section. This contract term provision results in a Primary Term
17 calculation which provides a more direct link between Primary Term and the costs of
18 the meter station and/or related facilities being installed.

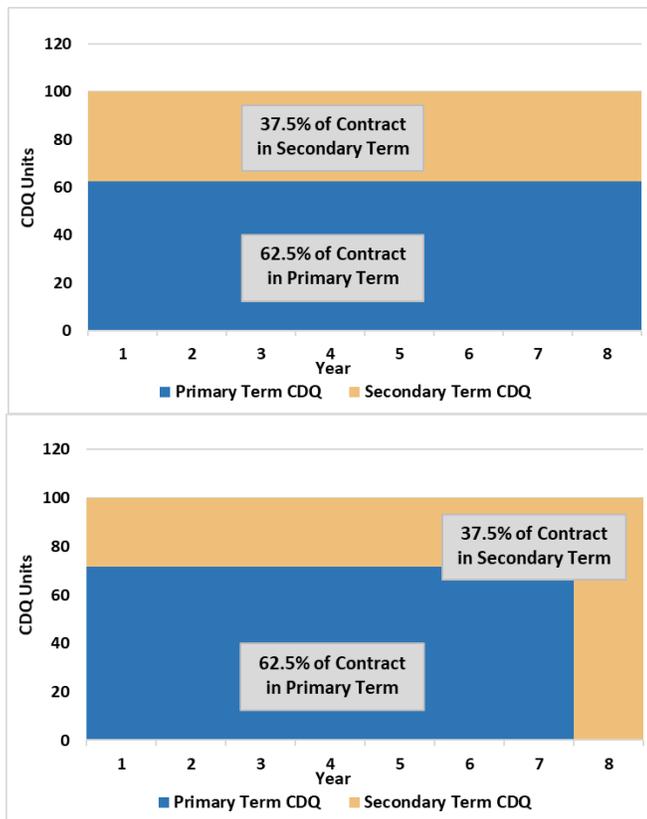
19 Under the Settlement, the default minimum contract term in constrained areas of the
20 System will be an 8-year total term with the Primary Term equal to the term
21 calculated in Tariff Appendix E, with a minimum between 2 years and 5 years. The
22 Secondary Term is equal to eight years minus the Primary Term. Figure 2-5 illustrates
23 a Primary and Secondary Term in constrained areas when the Appendix E calculation
24 establishes a 5-year Primary Term and 3 years Secondary Term. In this example, a

1 total of 62.5% of the contract would be in Primary Term and 37.5% in Secondary
2 Term.



**Figure 2-5: Illustrative Default Contract Shaping for Appendix E
Minimum Primary Term of 5 years and Secondary Term of 3 Years**

3 As is the practice today, shippers will have the ability to shape their contract
4 quantities under Primary and Secondary Term so long as a comparable contractual
5 accountability as the default minimum remains in place. Figure 2-6 illustrates
6 possible options for contract shaping that maintain the same proportion of contract in
7 Primary and in Secondary Term as the default example in Figure 2-5.



**Figure 2-6: Illustrative Alternative Contract Shaping for Appendix E
Minimum Primary Term of 5 years and Secondary Term of 3 Years**

1 Meter stations will continue to be sized to meet the total annual contract volume, and
2 the Primary Term volume will be determined based on the Tariff Appendix E
3 calculation to ensure accountability to the facility is maintained.

Contract Renewal, Turnback and Term-up for FT-R and FT-D Service

4 Following extensive discussions as part of the Task Force, broad support was reached
5 on renewal notice period, turnback provision, and the absence of term-up provision.

- 6 • **Renewal notice** – A customer holding a contract that includes renewal rights
7 may, with at least one year’s notice in advance of expiry of the term, renew that
8 contract for a minimum term of one year. Settling Parties agreed to keep the
9 minimum renewal term as one year.
- 10 • **Turnback provision** – If new or additional pipeline facilities are required to
11 increase the capabilities of the system to meet requests for incremental FT Service
12 a turnback provision provides NGTL customers with the opportunity to
13 permanently cancel part or all of their existing firm service contract if it reduces
14 the need for the incremental facilities. NGTL will invite turn back of contracts if
15 in NGTL’s opinion, to be determined at NGTL’s sole discretion on a case by case
16 basis, there is a reasonable likelihood that turn back contracts could affect the
17 appropriate design for facilities.
- 18 • **Term-up provision** – Discussion took place on the possibility of implementing a
19 term-up provision, similar to that applicable on the TransCanada Mainline. As
20 part of this Settlement, it was agreed that NGTL would not implement such a
21 provision.

Extensions versus Expansions

22 The Parties to the Settlement expressed broad support for the continued application of
23 rolled-in tolling and the applicable rate design of the NGTL System as a default
24 methodology for new extensions and expansions to the System. This treatment will be
25 conditional on an assessment of the degree of integration, nature of service and
26 satisfactory determination that there is no excessive cross-subsidization having regard
27 to project costs and associated contract revenues. As described in Section 2.5.1,
28 NGTL will retain the right to require longer contract terms to ensure sufficient
29 commercial underpinning for new facilities.

2.5.2 Transfers

30 Transfers allow NGTL System customers to maximize the use of their firm contracts
31 by adapting to supply and market conditions by changing the contracted receipt or
32 delivery from one point to another one. For example, FT-D customers with contracts
33 in Secondary Term are permitted to request to transfer CDQ to another Delivery

1 Point. Similarly, FT-R customers with contracts in Secondary Term are able to
2 request to transfer CDQ to another Receipt Point. In both cases, transfers are subject
3 to NGTL having sufficient capacity and the conditions set out in the applicable Rate
4 Schedule being satisfied.

5 While no changes to FT-R transfers are proposed, pursuant to the Settlement, NGTL
6 will introduce increased FT-D transfer flexibility and incremental transfer reporting.
7 No changes related to the way in which service transfer requests are analyzed or
8 processed are proposed. The proposed changes to increase FT-D transfer flexibility
9 are as follows:

- 10 • Transfers between Group 1 Delivery Points will continue to be allowed daily
11 between Empress and McNeill (and vice-versa) as a 1-year pilot project.
- 12 • Transfers between Group 2 Delivery Points are currently under a pilot program
13 that enables transfer requests on a daily basis. NGTL will convert this pilot into a
14 permanent procedure to enable better flexibility for customers in managing their
15 transportation agreements.
- 16 • Transfers between Group 1 Delivery Points and Group 2 Delivery Points (and
17 vice-versa) will be allowed semi-monthly as a 1-year pilot project.
- 18 • Transfers between Group 3 Delivery Points for new meter stations within existing
19 sub-groups would be allowed to facilitate first time transfers, on a daily basis,
20 under a new 1-year pilot program, provided there is at a minimum 2 business
21 days' notice to NGTL.

22 For transfer options under pilot projects, NGTL has the discretion to suspend the pilot
23 if unforeseen harm or unintended negative consequences to the System are observed
24 and may modify, terminate, extend, or convert the pilot into a permanent procedure at
25 any time. If applicable, NGTL would inform the TTFP prior to any such change.

26 In addition, to improve transparency and aid customers in making decisions related to
27 requesting transfers, NGTL will work collaboratively with the TTFP to develop
28 transfer reporting for FT-R and FT-D. The incremental reporting related to transfers
29 will include a:

- 30 • monthly report of transfers for each project area/ delivery design area
- 31 • standard approach to communicating the acceptance or denial of a transfer

32 Providing this additional flexibility and transparency will enable customers to make
33 better business decisions and thus provide a higher level of customer service.

2.5.3 Rural Gas Interconnections (Taps)

34 Rural gas interconnections or Taps allow rural end-users with an average daily
35 demand of less than 1 TJ and peak daily demand of less than 5 TJ to access to the

1 NGTL System. Taps users include small local distribution companies (LDCs), rural
2 gas cooperatives, and municipal corporations. Costs associated with Taps facilities
3 are recovered through a contribution in aid of construction (CIAC), and measurement
4 facilities are operated by the interconnecting party. No rate is charged for delivery at
5 a Taps. A connecting operator agreement between NGTL and the operator of the
6 interconnection governs the relationship between NGTL and a particular Taps user.

7 As part of the Settlement, NGTL committed to hold discussions seeking to codify in
8 the Tariff the existing practices for Taps. Taps users and NGTL agreed to use
9 reasonable efforts to draft terms and conditions for existing rural tap and inter-
10 connecting points and to seek required approvals for inclusion of these in the NGTL
11 Tariff. If Taps users and NGTL cannot mutually agree on appropriate terms and
12 conditions, then no changes would be made. NGTL will review the terms of the
13 connecting operator agreements as part of this effort. Existing connecting operator
14 agreements between third parties and NGTL or ATCO Pipelines would be migrated
15 to a Tariff pro-forma agreement, as appropriate, provided terms are agreed to for rural
16 tap and interconnecting points and consensus of the TTFP is achieved.

17 Codification, if these discussions are ultimately successful, would provide greater
18 transparency for all NGTL stakeholders, including current and potential Taps users.

2.5.4 Other Services and Attributes

19 Throughout the collaborative process there was extensive education and discussion
20 provided around all aspects of NGTL's current rate design and service attributes.
21 Following these discussions, broad support was reached through the Settlement to
22 maintain NGTL's current practice on a number of services, attributes and
23 methodologies including:

- 24 • **Interruptible – Access to Storage (IT-S)**, which provides shippers with
25 interruptible access to injections and withdrawals from storage.
- 26 • **Firm Transportation - Extraction (FTX)**, which provides customers with the
27 ability to receive and deliver quantities of gas at extraction plants (also called
28 straddle or stripping plants).
- 29 • **CO₂ Management Service (CO₂)** – NGTL's General Terms and Conditions
30 (GT&C) require gas received at a Receipt Point to contain less than 2% by
31 volume of carbon dioxide. CO₂ service allows a customer's gas that exceeds this
32 level of CO₂ to be received on the NGTL System.
- 33 • **Facilities Connection Service (FCS)** – is designed to provide metering and other
34 facilities for deliveries from the NGTL System at extraction plants and storage
35 facilities.
- 36 • **Pressure / Temperature Service (PT)** – allows a customer to receive onto the
37 NGTL System quantities of gas which vary in temperature and or pressure from
38 the values specified in GT&C.

- 1 • **Other Service (OS)** – is an omnibus service that is designed to cover service not
2 otherwise covered under any other NGTL rate schedule.
- 3 • **Fuel Allocation** –receipt customers are responsible to provide fuel in-kind that is
4 required for the Operation of the NGTL System.
- 5 • **Demand Charge Credits** – Appendix B of the NGTL Tariff, Relief for Mainline
6 Capacity Restrictions, specifies credits to a customer’s demand charges which are
7 applied during mainline capacity restrictions. The relief is available to FT-R, FT-
8 RN and LRS-3 customers. Should a mainline capacity restriction continue for
9 more than 30 consecutive days and limit the aggregate the volumes received at a
10 Receipt Point to 50% or less of the customer’s CDQ a demand charge credit is
11 applied.
- 12 • **Load Retention Service – 3 (LRS-3)** is a non-standard service for a particular
13 customer entailing the receipt of gas from a specified Receipt Point to the
14 Empress Delivery Point.

2.5.5 NMML Tolling Methodology

15 The Settlement specifies that customers on the NMML will be subject to a surcharge
16 in addition to the otherwise applicable rates under the NGTL rate design. The NMML
17 Tolling Methodology is addressed in Section 3.

2.5.6 Tariff Amendments Resulting from the Settlement

18 The changes discussed in Section 2 necessitate a number of updates to the NGTL
19 Tariff, which are provided in Appendix 4 in both black-line and clean along with a
20 summary of the changes.

2.6 CONCLUSION

21 The Settlement’s changes to the NGTL rate design and services result from extensive
22 negotiations between NGTL and NGTL stakeholders. The proposed rate design and
23 service attributes represent a balance resulting from the diverse interest and positions
24 of the parties. Overall the proposed changes to the NGTL rate design better reflect
25 current customer contracting and usage of the NGTL System, and increase the
26 distance sensitivity of the rate design through changes in pathing and ceilings, while
27 ensuring appropriate customer cost accountability is maintained. As further addressed
28 in the Concentric Evidence, the changes are also consistent with the Board’s tolling
29 principles.

30 In addition, NGTL submits that the Additional FT-P Amendments are necessary to
31 restore FT-P as an attractive option for short-haul customers who source their gas
32 close to the end use location.

3.0 NORTH MONTNEY MAINLINE TOLLING METHODOLOGY

3.1 BACKGROUND FOR THE NORTH MONTNEY MAINLINE TOLLING METHODOLOGY

1 On March 20, 2017, NGTL filed an application seeking variance to the Certificate
2 and Order related to the approval of the NMML Project (Variance Application). The
3 variance sought was to enable NGTL to proceed with construction of a portion of the
4 NMML independent of any final investment decision related to liquefied natural gas
5 (LNG) development, in light of new contractual commitments and associated need for
6 a portion of the NMML. The Board considered and approved the Variance
7 Application in the MH-031-2017 proceeding and issued the MH-031-2017 Decision
8 in May 2018.

9 As part of the proceeding, the Board also considered matters related to Part IV of the
10 NEB Act and determined that a new Toll Order, Order TG-003-2018, should replace
11 Order TG-002-2015 that had been issued in accordance with the initial approval of
12 the NMML.

13 Order TG-002-2015 was issued following the Board's GH-001-2014 Decision and
14 was premised on two distinct time periods:

- 15 • the Transition Period, defined as occurring prior to the commencement of LNG
16 deliveries; and
- 17 • the Post-Transition Period, which would begin following commencement of
18 delivery for LNG or four years from the commencement of service on the
19 NMML, whichever came first.

20 The Board had determined that during the Transition Period, rates on the NMML
21 would be calculated based on the applicable NGTL rate design and the sum of the
22 revenue requirement for the NMML and existing NGTL System, subject to the
23 establishment of a deferral account. This decision reflected the Board's view that
24 during the Transition Period, the facilities would be sufficiently integrated with the
25 rest of the NGTL System, the nature of service would be similar and the level of
26 cross-subsidization would not be excessive when supported by the deferral account.¹

27 The genesis of the Variance Application was the new contractual underpinning for the
28 NMML that occurred subsequent to the GH-001-2014 Decision. This gave rise to a
29 need for a subset of the NMML facilities independent from LNG development.² The
30 contracts supporting the Variance Application included changes made in response the

¹ GH-001-2014 Report, pages 33-37

² These facilities were referred to as the Variance Facilities in the MH-031-2017 proceeding and include facilities physically located on the NMML (referred to as the NMML Facilities in this Application) and the Groundbirch Compressor Station.

1 Board's direction from GH-001-2014.³ These changes included an increase in cost
2 accountability by extending the underlying contracts of the committed shippers to
3 20-year terms, as well as a greater number of shippers executing Project Expenditure
4 Authorizations (PEAs). Moreover, NGTL instituted a restricted Secondary Term,
5 which prohibits NMML shippers from transferring their FT-R service to non-NMML
6 receipt locations.

7 In approving the Variance Application, the Board concluded that the changed
8 circumstances that supported the Variance Application addressed some of its previous
9 concerns.⁴ Order TG-003-2018 replaced Order TG-002-2015 and redefined different
10 time periods:

- 11 • the Provisional Period (ending one year following Governor in Council [GIC]
12 approval)
- 13 • the PPP

14 As was the case during the Transition Period, rates on the NMML during the
15 Provisional Period can be calculated based on the current NGTL rate design and the
16 sum of the revenue requirement for the NMML and existing NGTL System, with the
17 exception that the FT-R ceilings will not apply. The Order also defined a default
18 tolling methodology for the PPP, but provided the opportunity for NGTL to seek
19 approval of a new tolling methodology prior to the expiry of the Provisional Period.
20 A similar opportunity also existed in Order TG-002-2015.

21 The Board provided guidance with respect to the tolling methodology for the PPP and
22 suggested that at least three alternatives could be used:

- 23 • Developing a separate cost pool for the NMML facilities, whereby the costs of the
24 NMML facilities are allocated to the NMML cost pool and the existing NGTL
25 System cost pool in proportions reflecting the fact that NMML shippers are the
26 main drivers of the costs of the NMML facilities;
- 27 • Applying a surcharge to shippers on the NMML facilities, in addition to the rate
28 these shippers would pay under NGTL's existing toll methodology; and
- 29 • Creating a toll zone, including the NMML facilities, which would result in an
30 increased allocation of the costs caused by the NMML facilities shippers to the
31 FT-R rates.⁵

32 Mindful of this guidance, NGTL has developed a NMML Tolling Methodology that
33 incorporates a surcharge formula applicable to service on the NMML Facilities. The
34 proposed NMML Tolling Methodology would substantially increase the cost
35 responsibility of the NMML shippers, address concerns previously raised by the

³ GH-001-2014 Report, pages 60-63

⁴ MH-031-2017 Decision, page 35.

⁵ MH-031-2017 Decision, page 42.

1 Board over cross-subsidization and the promotion of economic efficiency, while
2 ensuring the rates are just and reasonable and not unjustly discriminatory. The
3 following sections outline the proposed NMML Tolling Methodology.

4 Discussions on rate design changes that led to the Settlement and that are described in
5 Section 2 were initiated in October 2016, and were therefore well underway prior to
6 the MH-031-2017 Decision being issued. Nonetheless, many of the proposed changes
7 to the NGTL rate design described in Section 2 are responsive to the Board's
8 concerns expressed in that decision, including enhanced distance sensitivity for FT-R
9 service and changes to the FT-R ceiling methodology. The Decision also informed
10 the latter part of the rate design negotiations that concluded in September 2018.

11 Following the issuance of the MH-031-2017 Decision, NGTL also engaged the
12 NMML shippers and subsequently the Task Force members, which ultimately led to
13 the NMML Tolling Methodology being addressed in the Settlement. The MOU
14 includes the following provision with respect to the NMML Tolling Methodology:

15 *The Parties acknowledge that the North Montney Mainline Shippers will*
16 *be subject to a surcharge in addition to the otherwise applicable rates*
17 *under the NGTL rate design. This results in a more meaningful financial*
18 *contribution from the North Montney Mainline Shippers to the cost of*
19 *using the existing NGTL System and the North Montney Mainline.*
20 *Revenue generated from this surcharge will be a credit to existing NGTL*
21 *Shippers and allocated equally (50/50) to receipt and delivery services.⁶*

22 The proposed NMML Tolling Methodology is made up of two components. The first
23 is the rate resulting from the proposed NGTL System rate design, which reflects
24 increased distance sensitivity for the NGTL System as a whole, including the NMML
25 Facilities. The second component is a formula-based surcharge applicable only to
26 services on the NMML Facilities. The effect of the surcharge has to be considered in
27 conjunction with the proposed changes in NGTL's rate design. For clarity, the
28 NMML Tolling Methodology agreed to in the Settlement includes a surcharge but
29 does not specify a level for the surcharge. As part of this Application, NGTL is
30 proposing the level of surcharge that it believes is appropriate in the circumstances
31 through the proposed NMML Surcharge Formula, which incorporates the proposed
32 Surcharge Coefficient. While NGTL's evidence on the NMML Tolling Methodology
33 jointly addresses both the surcharge framework and the NMML Surcharge Formula,
34 any evidence related to the level of the surcharge and the proposed Surcharge
35 Coefficient reflects the position of NGTL rather than that of the parties to the
36 Settlement who may take a different position.

⁶ See Appendix 1 MOU and Signatories, MOU, page 7.

1 A surcharge methodology reflects a preference by NGTL and Parties to the
2 Settlement for allocating costs and revenues using a single cost pool, and maintaining
3 the liquidity and the value of NIT, which depends on the separation of receipt and
4 delivery contracts on the System. Applying a surcharge in addition to the otherwise
5 applicable FT-R rate was amongst the options provided by the Board in the
6 MH-031-2017 Decision as a means of addressing its concerns for the PPP.
7 Implementing other alternatives noted by the Board in the MH-031-2017 Decision,
8 such as a zonal methodology, would have resulted in significant impacts to the
9 existing system rate design, rates, commercial operations, and may have negatively
10 impacted the liquidity and value of NIT. NGTL and Parties to the Settlement
11 determined that a surcharge methodology was the most appropriate approach to
12 address the Board's concerns in MH-031-2017, as it is most compatible with the
13 overall NGTL System rate design.

14 In addition, NGTL believes that the proposed NMML Tolling Methodology
15 substantially increases the cost responsibility of the NMML shippers and addresses
16 the Board's cross-subsidization concerns between the existing NGTL System
17 shippers and the NMML shippers. The proposed tolling approach is also
18 commensurate with the Board's views of the degree to which the NMML Facilities
19 are integrated with the NGTL System, such that the outcome is not unjustly
20 discriminatory.

21 In contrast, NGTL believes that stand-alone tolling for the PPP would be
22 inappropriate as it would ignore the benefits to existing NGTL System shippers that
23 result from the addition of the NMML Facilities, including lower rates resulting from
24 incremental volumes, rate stability from long-term contracts, increased liquidity at
25 NIT and access to low-cost supply. Furthermore, as noted in the Concentric Evidence,
26 existing shippers would have no cost responsibility for NMML Facilities under a
27 stand-alone methodology but would receive substantial benefit, which would be
28 inconsistent with the Board's concerns with respect to cross-subsidization, the
29 guidance over allocation of a portion of NMML costs attributable to existing system
30 shippers, and would not send an appropriate price signal. Stand-alone tolling would
31 also fail to account for the similar nature of service and the level of integration
32 between the existing NGTL System and the NMML Facilities, and therefore impose a
33 tolling distinction that is not commensurate with the differences in circumstances
34 observed by the Board in the MH-031-2017 Decision. These matters are further
35 addressed in Sections 3.5 and 3.6, and in the Concentric Evidence. NGTL submits
36 that imposing a stand-alone tolling methodology for the PPP would result in rates that
37 are not just and reasonable and are unjustly discriminatory.

3.2 NMML TOLLING METHODOLOGY

38 As noted above, the NMML Tolling Methodology is made up of two components: the
39 NGTL System rate, which would reflect the proposed changes to the NGTL System

1 rate design summarized in Section 2, and a surcharge based on the NMML Surcharge
2 Formula. The two components of the NMML Tolling Methodology are addressed in
3 more detail below, as well as a discussion of the overall reasonableness and impact of
4 the NMML Tolling Methodology.

3.2.1 NGTL Base Rate Resulting from Application of the Proposed Rate Design

5 The first component of the rates to which the NMML shippers would be subject to is
6 the rate at each NMML Receipt Point resulting from the NGTL rate design. It reflects
7 the recovery of the costs associated with the NMML shippers' use of the integrated
8 NGTL System, including the cost of the existing NGTL System and the portion of
9 costs associated with the NMML Facilities not otherwise recovered through a
10 surcharge.

11 While not proposed specifically in response to the Board's MH-031-2017 Decision,
12 but rather through the NGTL Task Force process, a number of the proposed changes
13 to the NGTL rate design address the Board's concerns in the MH-031-2017 Decision
14 by increasing the degree to which distance is reflected in the FT-R rates, and thus
15 increasing cost accountability from shippers on the NMML Facilities. One of these
16 changes is the ceiling methodology proposal which results in an increase to the
17 NGTL ceiling rate, and as a result, substantially increases the distance sensitivity of
18 FT-R rates charged on the NMML Facilities.⁷ Figure 3-1 illustrates the base rates
19 resulting from the proposed rate design on the NMML Facilities prior to the
20 application of the NMML Surcharge.

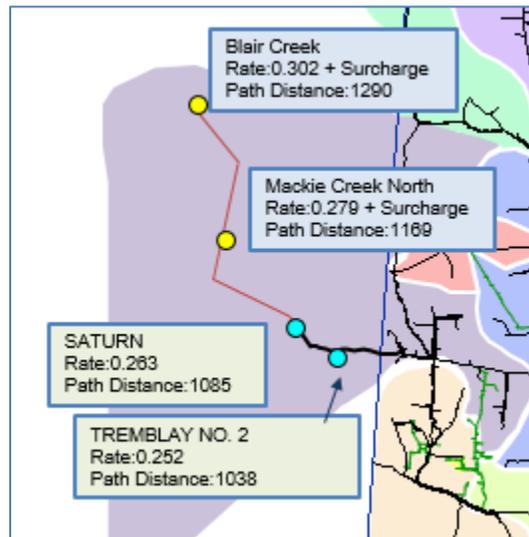


Figure 3-1: NGTL Base Rates on the NMML Facilities under the Proposed Rate Design

⁷ See Section 2 Rate Design and Services.

1 As a result of the proposed rate design changes, none of the Receipt Points on the
2 NMML Facilities would be constrained by the ceiling. The proposed modifications to
3 NGTL’s rate design are expected to result in FT-R rates on the NMML Facilities that
4 are between 2 to 4 cents/Mcf above the Saturn receipt rate, depending on the Receipt
5 Point. For example, the FT-R rate resulting from the proposed rate design (excluding
6 the NMML surcharge) at the Blair Creek receipt meter station is expected to be 4
7 cents/Mcf or 15% higher than the FT-R rate at the Saturn receipt meter station. In
8 contrast, at the time of the Variance Application, rates on the NMML were expected
9 to be at or near the ceiling, such that the same or similar rate was expected to apply at
10 Receipt Points between Saturn and Blair Creek. Cost responsibility for service at
11 Receipt Points on the NMML Facilities is further enhanced through the proposed
12 NMML surcharge, as described below.

3.2.2 NMML Surcharge Formula

13 The second component of the NMML Tolling Methodology is a surcharge proposed
14 to apply to service on the NMML Facilities, which would be calculated annually
15 based on the NMML Surcharge Formula.

16 The NMML Surcharge Formula is calculated as a surcharge coefficient applied to the
17 ratio of the NMML Revenue Requirement and the NMML Billing Determinants. The
18 surcharge reflects the following three variables:

- 19 • The NMML Revenue Requirement associated with the NMML Facilities.
- 20 • The NMML Billing Determinants, including the firm contract levels and forecast
21 interruptible flows on the NMML. Taking the ratio of the Revenue Requirement
22 and Billing Determinants yields a NMML unit cost.
- 23 • The final variable, the NMML Surcharge Coefficient, is applied to this unit cost
24 ratio. The Settlement does not prescribe the specific level of the NMML
25 Surcharge Coefficient. For the reasons that follow, NGTL proposes a coefficient
26 of 0.3 and the evidence presented reflects this specific proposal.

27
$$\text{The NMML Surcharge Formula} = \text{NMML Surcharge Coefficient} \left(\frac{\text{NMML Revenue Requirement}}{\text{NMML Billing Determinants}} \right)$$

28 The proposed formulaic approach was determined to be reasonable based on the
29 factors analyzed in this Section and will be consistently applied over time in a
30 transparent manner as circumstances evolve. A formulaic surcharge approach has
31 several advantages. First, it allows for consistency as NMML shippers will be subject
32 to any changes that occur in the NGTL rate design just like all other shippers on the
33 NGTL System. Second, the surcharge component is inherently adaptive and adjusts to
34 changes in the NMML Revenue Requirement and Billing Determinants. The
35 surcharge design allows for changing and unforeseen circumstances such as changing
36 capital costs, depreciation, and additional incremental contracting. Lastly, a formula
37 allows for rates that are transparent in their calculation and simple to administer.

1 The proposed Surcharge Coefficient is based on NGTL’s informed judgment having
2 regard to numerous qualitative and quantitative aspects discussed within the
3 remainder of Section 3. These various factors, including the guidance provided by the
4 Board in the MH-031-2017 Decision, the increased distance sensitivity and cost
5 accountability resulting from the proposed changes to the NGTL System rate design,
6 the need for and resulting benefits to the existing NGTL System for the gas to be
7 received on the NMML, and the need to ensure there would be a meaningful
8 contribution to both the incremental NMML cost of service and to the costs of the
9 existing NGTL System, as demonstrated by the resulting revenue to cost ratio and
10 rate impacts. NGTL also sought to mitigate concerns over unjust discrimination by
11 proposing a NMML Tolling Methodology that is commensurate with the differences
12 in circumstances observed by the Board relative to existing NGTL shippers. In
13 consideration of these factors, NGTL believes the proposed surcharge is a reasonable
14 solution for an appropriate tolling methodology to be applied on the NMML
15 Facilities.

16 Based on the proposed NMML Surcharge Formula and the current estimates of the
17 costs and billing determinants, the resulting level of the surcharge is expected to
18 average approximately \$0.10/Mcf/d over the 2019 to 2022 period. The surcharge will
19 significantly increase the applicable rates at each Receipt Point on the NMML
20 Facilities, relative to that which would otherwise result from application of the NGTL
21 System rate design (which also reflects greater distance sensitivity and cost
22 accountability relative to the rate design that applied at the time of the Variance
23 Application). Figure 3-2 displays the resulting rates inclusive of the NMML
24 Surcharge Formula.

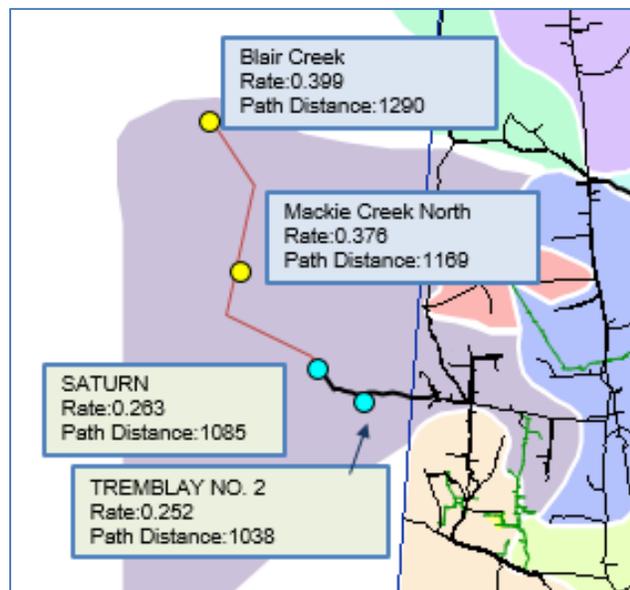


Figure 3-2: Estimated Rates on the NMML Facilities inclusive of the NMML Surcharge Formula

1 The resulting Surcharge would apply to the monthly rates of applicable firm service
2 on the NMML, such as FT-R, while the daily equivalent of the surcharge would apply
3 to interruptible services, such as IT-R.

4 In order to provide stability in the surcharge during the first two years of NMML
5 operation, NGTL proposes to average the forecast surcharge following the first in-
6 service date. Based on an in-service date of September 2019, the NMML Surcharge
7 would initially be applied on a 16-month average for the last four months of 2019 and
8 2020. NGTL intends to adjust the specific period for averaging as required depending
9 on the actual in-service date. Starting from the second full-year of operation, which is
10 expected to be 2021, and going forward, the surcharge would be determined annually.

3.3 APPROPRIATENESS OF THE NMML TOLLING METHODOLOGY

11 In the MH-031-2017 Decision the Board described an appropriate tolling
12 methodology for the PPP in two ways:

- 13 • as providing a meaningful contribution to the cost of utilizing the existing NGTL
14 System, as well as fully recovering the incremental cost of the NMML Facilities;⁸
15 or
- 16 • as recovering the full cost of utilizing the existing NGTL System as well as the
17 incremental costs of the NMML Facilities, less the portion of the costs
18 attributable to existing System users' indirect use of, and need for, the NMML
19 Facilities.⁹

20 NGTL submits that its proposed NMML Tolling Methodology results in a meaningful
21 contribution to both the incremental cost of service and the existing NGTL System.
22 The two approaches to looking at cost coverage simply differ in the order by which
23 they apply the NMML revenues to either the existing NGTL System cost or the
24 incremental NMML Cost of Service (COS).

25 If one looks at first assigning the incremental NMML revenues to the NMML costs,
26 as contemplated in the first approach, the proposed methodology fully recovers the
27 NMML incremental costs and also results in a contribution to the existing NGTL
28 System of \$70 million annually or \$1.4 billion over 20 years. At the time of the
29 Variance Application, the contracts on the NMML were expected to provide an
30 annual contribution of \$22 million to the existing NGTL System. As such, shippers
31 on the NMML are now expected to more than triple their contribution to the existing
32 NGTL System relative to what was expected in the Variance Application.

⁸ MH-031-2017 Decision, page 41.

⁹ MH-031-2017 Decision, page 59.

1 If one looks at first assigning the incremental NMML revenues to the cost of the
2 existing System, as contemplated in the second approach, the proposed methodology
3 fully recovers the costs of utilizing the existing NGTL System and is expected to
4 generate an additional \$62 million in annual contribution to the incremental cost of
5 service associated with the NMML Facilities. The NMML FT-R rates were expected
6 to be at or near the ceiling in the Variance Application.

7 Regardless of the order in which incremental NMML revenues are considered (i.e.,
8 first to NMML Facilities costs or first to existing System costs), the outcome is a
9 meaningful contribution to both the incremental cost of service of the NMML and to
10 the existing NGTL System, which the Board previously recognized as the relevant
11 factor in assessing cost causation, not the order through which incremental revenues
12 are assigned to the new facilities and the existing NGTL System.¹⁰

13 NGTL's proposed tolling methodology reasonably allocates costs amongst the
14 NMML shippers and existing NGTL shippers. The NMML Tolling Methodology
15 takes into account the contribution of the NMML shippers to the costs of the NMML
16 Facilities and the existing NGTL System, and the magnitude of this contribution can
17 be observed by considering the following:

- 18 • By applying the proposed NMML surcharge of approximately 10 cents/Mcf/d¹¹
19 NMML shippers will pay some of the highest receipt rates on the NGTL System.
20 The daily FT-R rates at the Blair Creek receipt meter station are expected to be
21 14 cents/Mcf/d or approximately 50% higher than the rates at the Saturn receipt
22 meter station, which is only 200 km downstream.
- 23 • The resulting rates on the NMML would generate revenues that range from
24 approximately 140% to 170% of the NMML cost of service over the first 20 years
25 of the contract terms.
- 26 • By applying the proposed rate design changes and the NMML Surcharge
27 Formula, the direct NMML revenue would cover 22% of the total 2017 NGTL
28 Receipt Revenue Requirement, inclusive of the NMML Facilities, despite the
29 NMML Shipper contracts making up only 12% of the total receipt contracts.
- 30 • NGTL's proposed NMML Tolling Methodology would generate substantial
31 revenues comparable to those that would be generated under stand-alone tolling.
32 The revenue contribution from the NMML shippers is expected to be an average
33 of 73% of the revenue that would be generated under the stand-alone stacked toll
34 for the first 20 years of the contract term.

35 Overall, NGTL submits that the resulting rates to be paid by NMML shippers would
36 reasonably reflect the costs of the NMML Facilities and their use of the existing
37 NGTL System, while also reasonably reflecting the benefits of the NMML Facilities

¹⁰ GH-001-2014 Report, page 41.

1 to the existing NGTL System and its users. NGTL submits that taken as a whole, the
2 changes it has proposed in this Application address the Board’s concerns in the
3 MH-031-2017 Decision.

3.4 THE NMML TOLLING METHODOLOGY IS RESPONSIVE TO THE BOARD’S VIEWS IN THE VARIANCE APPLICATION

4 In the MH-031-2017 Decision, the Board provided guidance on an acceptable NMML
5 tolling methodology for the PPP. In this section, NGTL explains how the proposed
6 NMML Tolling Methodology is responsive to the Board’s guidance.

7 These matters are also addressed in the Concentric Evidence in Appendix 2.

3.4.1 Level of Integration and Nature of Service Provided

8 In the MH-031-2017 Decision, the Board found the NMML Facilities to be integrated
9 with the existing NGTL System, but not sufficiently to support the use of rolled-in
10 tolling under the existing NGTL rate design over the long-term.¹² Further, the nature
11 of service offered on the NMML Facilities was determined to be substantially the
12 same as that offered on the existing NGTL System.¹³

13 The proposed NMML Tolling Methodology continues to reflect the similar nature of
14 service as provided by NGTL to existing shippers while also being commensurate
15 with the degree of integration that the Board stated exists with the rest of the NGTL
16 System.

17 As recognized by the Board, all gas received on the NMML Facilities will also flow
18 on the existing NGTL System, which demonstrates a significant degree of integration
19 between the NMML and the existing NGTL System. Gas received on the NMML will
20 be delivered on the existing NGTL System and serve the need of existing NGTL
21 System FT-D customers, including many of the parties holding FT-R contracts on the
22 NMML.

3.4.2 Cross-Subsidization

23 In the MH-031-2017 Decision, the Board concluded that applying NGTL’s existing
24 tolling methodology to the NMML Facilities would result in excessive levels of
25 cross-subsidization, which would violate the cost causation principle and produce
26 economically inefficient results over the long term. The Board took issue with
27 NGTL’s application of the ceiling rate resulting in a “zero incremental toll” from the
28 Saturn receipt ceiling level to the Blair Creek end of the NMML Facilities, which is

¹² MH-031-2017 Decision, page 35.

¹³ *Ibid.*

1 approximately 200 km upstream of Saturn. However, the Board acknowledged that
2 the Variance Application had reduced its previous concerns with respect to the risk of
3 future underutilization of the NMML Facilities through a reduced project scope,
4 refinements in cost estimates from class 4 rather than class 5, longer term contracts,
5 improved revenue recovery and cancellation of deliveries at the Mackie Creek
6 Interconnection.¹⁴

7 The proposed NMML Tolling Methodology is responsive to the Board's concerns
8 with respect to cross-subsidization. As noted above, the changes to the NGTL System
9 rate design will increase distance sensitivity on the NMML, which was a key concern
10 of the Board related to excessive cross-subsidization. In addition, implementation of a
11 surcharge methodology would further increase the cost contribution made by NMML
12 shippers, which is responsive to the Board's concerns over allocation of costs and
13 risks of the NMML Facilities. The net effect of the NMML Tolling Methodology
14 results in revenues from NMML shippers exceeding the cost of the NMML Facilities
15 over the initial 20-years by over \$1.4 billion, which is a significant increase from that
16 presented in the Variance Application.

3.4.3 Economic Efficiency

17 In the MH-031-2017 Decision, the Board expressed concerns over economic
18 efficiency that were directly linked to its concerns over the level of cross-
19 subsidization. Accordingly, the NMML Tolling Methodology is responsive to these
20 concerns by addressing the Board's concerns with respect to cross-subsidization.

3.4.4 Separate Cost Pools and Deferral Account

21 In the MH-031-2017 Decision, the Board directed that a separate cost pool be
22 maintained for the life of the NMML (or until the Board directs otherwise) and that
23 NGTL include a proposal for the disposition of the accumulated deferral account
24 balance with any tolling proposal during the Provisional Period. These matters are
25 addressed in Section 3.7.1.

3.4.5 Unjust Discrimination

26 In the MH-031-2017 Decision, the Board concluded that where there are differences
27 in shippers' circumstances, deviating from applying the existing tolling methodology
28 would not offend the prohibition against unjust discrimination.¹⁵

29 NGTL accepts this conclusion but submits that any departure in tolling methodology
30 has to be commensurate with the differences in shippers' circumstances in order for
31 the discrimination not to be unjust. NGTL has traditionally applied a policy that relies

¹⁴ MH-031-2017 Decision, pages 36-38.

¹⁵ MH-031-2017 Decision, page 39.

1 on rolled-in tolling of facility additions, whether expansions or extensions. This
2 rolled-in tolling treatment has been applied to extensions in the same area as the
3 NMML Facilities, including the 77 km Groundbirch Mainline Extension and the
4 24 km Saturn Extension.

5 While the NMML Tolling Methodology would create a distinction by imposing a
6 surcharge not applicable on other NGTL System facilities, in NGTL's view, the
7 proposed level of surcharge under the NMML Tolling Methodology is commensurate
8 to the differences observed by the Board in the Variance Decision between NMML
9 shippers and existing NGTL shippers.

3.4.6 Competition and Commercial Impacts

10 In the MH-031-2017 Decision, the Board reiterated the view that in the case of
11 competition amongst regulated pipelines, adherence to the principle of cost causation
12 lays the foundation for fair competition. The Board concluded that under the current
13 toll methodology, the NMML would have had an unfair advantage and indicated that
14 its tolerance for cross-subsidization was low.

15 As noted above, the NMML Tolling Methodology addresses concerns over cross-
16 subsidization and economic efficiency and therefore supports fair competition.

3.5 ADDITIONAL FACTORS SUPPORTING THE REASONABLENESS OF THE PROPOSED NMML TOLLING METHODOLOGY

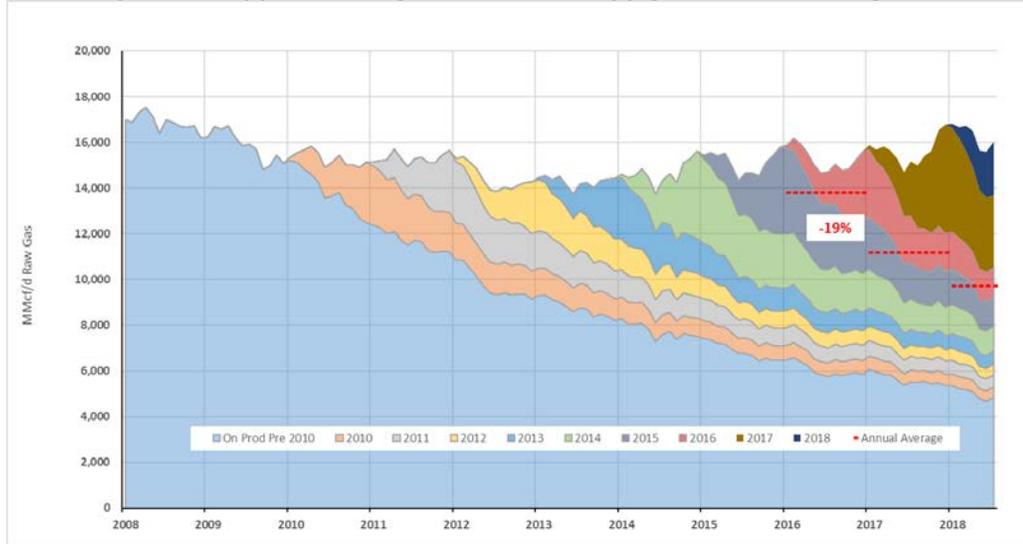
17 The Board has recognized that it is the needs of the aggregate System that require
18 both new and existing facilities. As such, all NGTL shippers historically have shared
19 in the costs and benefits resulting from new and existing facilities. In the
20 MH-031-2017 Decision, the Board recognized that a portion of the NMML Facilities
21 costs are caused by the need of existing system shippers.¹⁶ However, at the time of
22 the Decision the Board was not persuaded that the NMML Facilities would result in
23 any objectively identifiable and significant incremental delivery revenue, and that
24 existing System shippers without contracts on the NMML Facilities only indirectly
25 contribute to the need for, and use of, the facilities, by generating demand for
26 maintaining declining System supply. Since the MH-031-2017 Decision was issued,
27 several factors have continued to evolve which further demonstrate the existing
28 System's requirement for the NMML Facilities, not only to replace declining System
29 supply, but also to meet incremental System delivery contracts. These factors
30 demonstrate the appropriateness of attributing a reasonable portion of the NMML
31 Facilities costs to existing NGTL shippers as identified by the Board in the
32 MH-031-2017 Decision.

¹⁶ MH-031-2017 Decision, page 37.

1 In this Section, NGTL addresses additional factors that illustrate the need of the
 2 existing System for the gas to be received on the NMML Facilities and the resulting
 3 benefits to the System. These factors include the need for the NMML Facilities to
 4 replace System declines, the need for NMML Facilities to meet incremental System
 5 delivery requirements, the need for NMML Facilities to support market balancing,
 6 and the long-term benefits that the 20-year contracts on the NMML Facilities will
 7 provide. These factors further support the reasonableness of the proposed NMML
 8 Tolling Methodology.

3.5.1 The NMML Facilities Provide New Supply to Replace NGTL System Declines

9 In the Variance Application, NGTL noted that WCSB supply declines on average by
 10 18% per year, which represented approximately 2 Bcf/d on the NGTL System
 11 requiring replacement annually. Figure 3-3 illustrates the latest full calendar year of
 12 data, and shows that the WCSB supply now declines on average by 19% per year,
 13 which represents approximately 2.4 Bcf/d of supply on the NGTL System annually.



Source: Based on raw natural gas production data produced by IHS Market Ltd.

Figure 3-3: WCSB Gas Production Additions by Year

14 NGTL shippers’ contracting decisions, including renewals, non-renewals, and new
 15 contracts, are a strong indicator of the areas in the WCSB that producers have
 16 identified as economic and where they intend to drill new wells. For NGTL, it is
 17 important to facilitate new contracting associated with the shifting of production to
 18 ensure that the WCSB can maintain its competitiveness relative to other low cost
 19 North American supply sources.

20 Consistent with shipper contracting decisions, NGTL has observed actual production
 21 onto the System continuing to shift into the Peace River Area of the System. For
 22 example, in 2013, 37% of System supply came from production outside of the Peace
 23 River Area. By 2017, non-Peace River supply had decreased to 24%. Figure 3-4

1 illustrates that in 2017/2018 the vast majority of new WCSB wells were drilled in the
2 Peace River Area. In contrast, in 2007/2008, a substantial portion of the drilling was
3 occurring in other areas of the System. As existing wells outside of the Peace River
4 Area continue to decline without replacement, new facilities in the Peace River Area,
5 including the NMML, are needed to enable the System to continue providing markets
6 with access to economic supply. Absent access to low cost supply, System demand
7 for FT-D service would likely not be at the same level, and downstream market
8 demand may be captured by other competing basins.

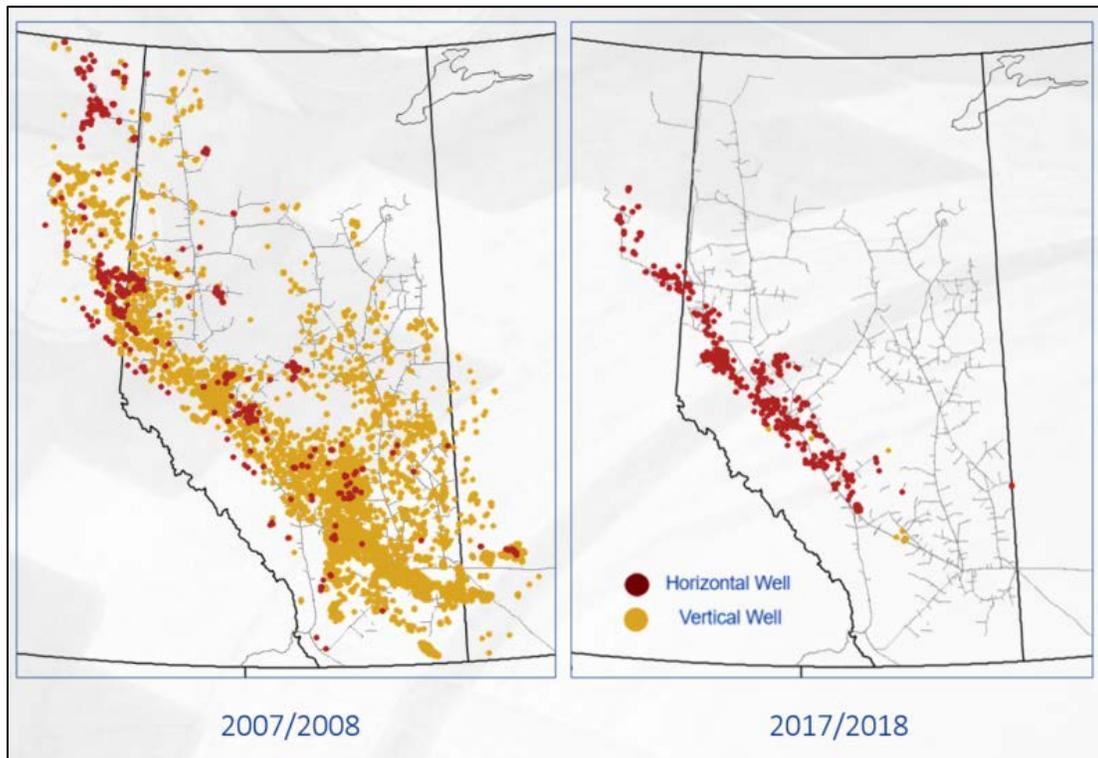


Figure 3-4: Drilling Activity

3.5.2 The NMML Facilities Provide New Supply to Support Incremental Delivery Contracts

9 At the time of the MH-031-2017 Decision, the Board did not have sufficient evidence
10 to determine that the NMML Facilities would result in significant incremental
11 deliveries. There is now sufficient evidence regarding System-wide firm delivery
12 contracts and NMML Shipper aggregate delivery contracts to support such a finding.

13 Shippers on the NGTL System have continued to execute substantial incremental firm
14 delivery contracts. Since March 2017, when the NMML receipt contracts were
15 executed, NGTL has executed FT-D contracts at intra-basin and export Delivery
16 Points totaling over 3.4 Bcf/d, approximately 2 Bcf/d of which have been signed
17 since the close of the MH-031-2017 record. NMML shippers have contributed to the
18 incremental FT-D contracting. Including new and previously executed FT-D

1 contracts, NMML shippers now hold a combined 1.49 Bcf/d of FT-D service on the
2 System. Although receipt and delivery services on the NGTL System are not directly
3 linked and transactions rely on NIT to connect supply and demand, NMML shippers
4 have informed NGTL of their need for their NMML supply to meet their NGTL
5 delivery contracts.

6 Despite this new evidence of NMML volumes leading to incremental delivery
7 contracts, NGTL notes that the proposed NMML Tolling Methodology does not take
8 into account any indirect delivery revenue in the NMML surcharge calculation, which
9 illustrates the conservative nature of the methodology.

10 The incremental delivery contracts on the NGTL System, including those facilitated
11 by NMML supply, provide further demonstration of the physical integration of the
12 NMML Facilities with the NGTL System and the existing System's need for, and use
13 of, the NMML Facilities.

3.5.3 The NMML Facilities Contribute to Market Balancing on the NGTL System

14 In natural gas markets, there are frequently lagged responses to commodity price
15 signals resulting in a market disequilibrium. In high priced environments, suppliers
16 tend to invest more in production; whereas in low priced environments, demand tends
17 to increase. These market dynamics result in temporary supply/demand imbalances,
18 which are reflected through NGTL's FT-R and FT-D contracting levels.

19 Since 2017, the growing availability of economic supply connecting to the System
20 has facilitated the growing demand on the NGTL System. More than 3.4 Bcf/d of
21 incremental delivery contracts were executed on the NGTL System in this period.
22 The combination of the incremental FT-D contracts and FT-R contract non-renewals
23 in areas of the basin where drilling has declined has resulted in receipt and delivery
24 contracting now being in approximate balance in 2019.

25 NGTL's historical and future FT-R and FT-D contract levels are shown in Figure 3-5.
26 Figure 3-5 exemplifies how supply and demand contracting requirements on the
27 System shift over time. For example:

- 28 • In 2011, there were 20% more receipt contracts than delivery contracts, which
29 equated to approximately a 1.6 Bcf/d difference.
- 30 • By November 2014, FT-R and FT-D contracting levels had inverted with delivery
31 contracts exceeding supply contracts by 20%, a difference of approximately
32 2.1 Bcf/d.
- 33 • By November 2018, supply and delivery contracts on the System were in
34 approximate balance.
- 35 • Between late 2019 and 2022, supply contracts gradually increase above delivery
36 contracts levels; however, the illustrated FT-R contract level assumes 100%

1 renewal of receipt contracts. On the other extreme, if 100% of eligible receipt
2 contracts non-renew, FT-R contracts levels could drop as low as 13 Bcf/d or
3 approximately 4 Bcf/d below executed delivery contracts.

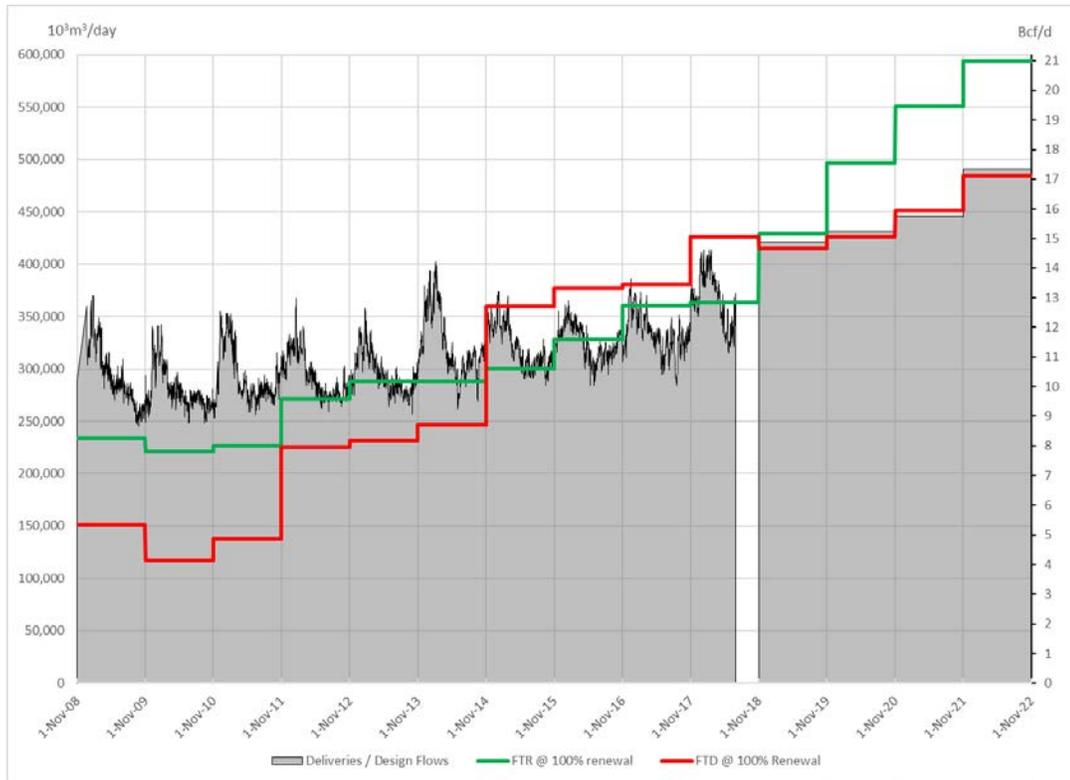


Figure 3-5: System Flows and Contracts (Nov 1 annual snapshots)

4 Although it is not possible to accurately predict future contracting decisions on the
5 System, historical contracting illustrates the ability of the market to adjust over time
6 based on market forces. Consistent with the historical need of the NGTL System to
7 expand over time to ensure it maintains access to sufficient economic supply to meet
8 the market demand on the System, connecting the prolific North Montney supply area
9 to the NGTL System will ensure that the WCSB is able to successfully compete for
10 downstream markets and continue to meet the growing need of intra-basin markets.
11 This in turn will provide benefits to existing NGTL System customers, such that it is
12 appropriate that they contribute a share of the cost of the NMML Facilities.

3.5.4 The NMML Facilities Provide the NGTL System with Long Term Revenue

13 Long-term accountability to the NGTL System from NMML shippers has been
14 demonstrated through the 20-year contract terms that the NMML shippers previously
15 executed to underpin the NMML Facilities. As concluded by the Board in the
16 MH-031-2017 Decision, the 20-year contracts hold NMML shippers more

1 accountable for the costs of the NMML Facilities.¹⁷ The contracts also provide a
2 long-term benefit to existing NGTL System shippers through secured revenue, which
3 provides greater rate certainty and stability, and provides market access to a long-
4 term source of economic supply. Additionally, between the issuance of the
5 MH-031-2017 Decision and mid-February 2019, customers have executed
6 232 MMcf/d of additional NMML FT-R contracts. With these additional 20-year
7 contracts, there is now secured revenue for the NGTL System from contracts on the
8 NMML Facilities that extends out to 2044.

9 When comparing the NMML receipt revenue of approximately \$230 million to the
10 NGTL Receipt Revenue Requirement, the direct NMML FT-R revenue is estimated
11 to cover 22% of the total NGTL Receipt Revenue Requirement despite the NMML
12 Shipper contracts making up only 12% of the receipt contracts.¹⁸

3.6 IMPACTS OF THE NMML TOLLING METHODOLOGY

13 In the Variance Application, NGTL provided the cost of service and tolling impact
14 information associated with the NMML Facilities and the previous NGTL rate design
15 and rolled-in tolling methodology. To better understand the impact of the proposed
16 NMML Tolling Methodology, NGTL has updated the analysis based on updated
17 NMML COS, billing determinants and the proposed NMML Tolling Methodology.
18 Except as specifically noted, the analysis relies on the same methodology and
19 assumptions used in the Variance Application. Comparing the results to those
20 expected at the time of the Variance Application demonstrates the significant increase
21 in cost accountability of the NMML shippers and benefits to the existing NGTL
22 System that result from the proposed NMML Tolling Methodology.

23 The estimated capital cost for the NMML Facilities is \$1.62 billion. The updated
24 capital estimate is based on a Class 3 estimate (+10%/-10%), which is less variable
25 than the Class 4 capital cost estimate (+20%/-15%) used at the time of the Variance
26 Application.

27 The associated annual cost of service has been updated to reflect Order TG-003-2018.
28 It includes estimates for additional cost items that will be tracked as part of the
29 NMML COS, including new costs such as Emissions Costs.

¹⁷ MH-031-2017 Decision, page 35.

¹⁸ The calculation relies on the NMML contracts, the 2017 NGTL System Revenue Requirement plus the incremental cost of service associated with the NMML.

1 Table 3-1 provides the updated COS impacts associated with the NMML Facilities.

Table 3-1: Forecast COS for the NMML Facilities

	2019	2020	2021	2022	2023
Total Incremental COS (\$000s)	38,214	159,691	163,210	163,439	163,206

2 Table 3-2 shows the profile for the average annual FT-R contract quantity associated
 3 with the NMML Facilities. There has been an increase of over 10% since the
 4 Variance Application as illustrated in Figure 3-6, with annualized 2019 quantities
 5 only appearing lower due to a deferred on-stream date.¹⁹

Table 3-2: NMML Facilities Average Annual FT-R CDQ

Contracts for the Facilities	2019	2020	2021	2022	2023	2024	2025
Cumulative FT-R CDQ (MMcf/d)	299	1,188	1,506	1,657	1,680	1,710	1,717
Cumulative FT-R CDQ (10 ³ m ³ /d)	8,461	33,646	42,652	46,939	47,577	48,426	48,639

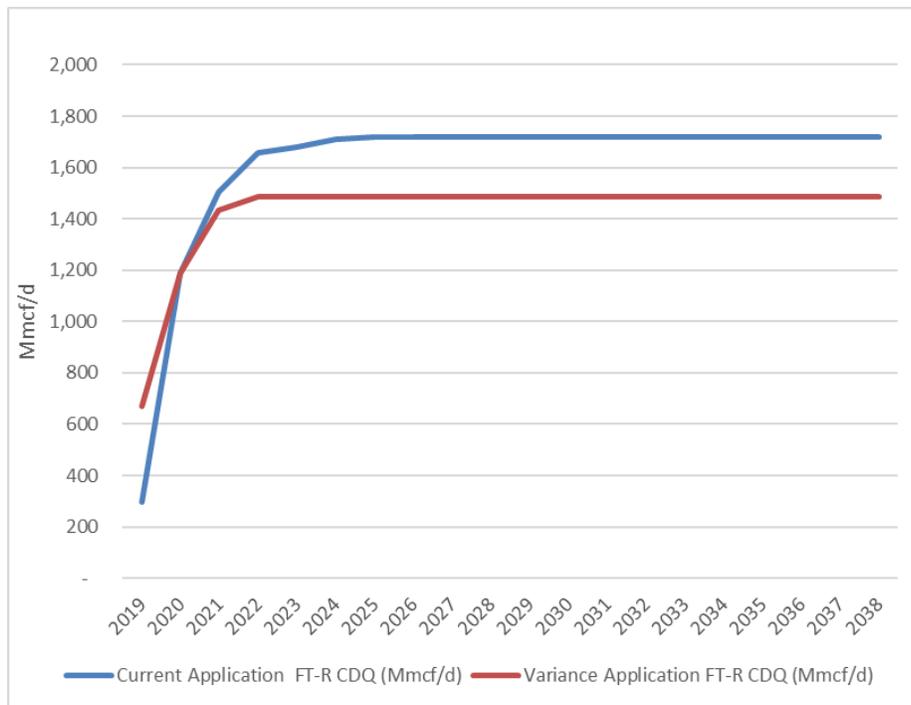


Figure 3-6: Comparison to previous NMML Facilities Average Annual FT-R CDQ for the first 20 years

¹⁹ During the MH-031-2017 proceeding, the NMML Facilities were expected to be in-service in April 2019 for the Aitken Creek Section and April 2020 for the Kahta Section. The Aitken Creek Section is now expected to be in service in September 2019.

1 The annual rates determination process will not be significantly changed. The NMML
 2 Facilities COS will be included in the annual NGTL System Revenue Requirement
 3 that appears in the first box of the Illustrative Rates and Flow Chart for the Proposed
 4 Rate Design shown in Appendix 5.

5 A new step will be added to account for the revenue generated directly from the
 6 NMML surcharge (NMML Surcharge Revenue), as shown in the same flow chart.
 7 The NMML Surcharge Revenue will reflect the forecast revenue expected to be
 8 recovered from the application of the NMML Surcharge Formula. This amount will
 9 be deducted from the total NGTL Revenue Requirement to derive the Net
 10 Transportation Revenue Requirement that is used to calculate NGTL System rates,
 11 and will therefore contribute to reducing FT-R and FT-D rates. The resulting NGTL
 12 System rates will reflect the NGTL System billing determinants, including those
 13 associated with the NMML Facilities.

14 The remaining steps in the Illustrative NGTL Rates and Flow Chart will be
 15 unchanged.

16 Table 3-3 shows the forecast surcharge rate and revenue.

Table 3-3: Forecast NMML Surcharge and Revenue

	2019	2020	2021	2022	2023
Illustrative Surcharge Rate (\$/Mcf/d)	0.109	0.109	0.089	0.081	0.080
Illustrative Surcharge Revenue (\$000s)	11,869	47,202	48,963	49,032	48,962

17 The cumulative proposed changes to NMML rates in this Application are expected to
 18 result in NMML shippers' rates generating revenues that are over 140% of the
 19 NMML COS once the facility costs and contracts are fully effective. In contrast, this
 20 ratio in the Variance Application when all contracts were in place was 116%.
 21 Figure 3-7 illustrates the forecast annual revenues to cost ratios for the NMML
 22 Facilities based solely on the NMML FT-R rate plus the application of the NMML
 23 Surcharge Formula.

24 This results in NMML contract revenues generating \$1.4 billion in incremental
 25 revenue contribution beyond the NMML COS over the first 20-years of the NMML
 26 Facilities. Compared to the Variance Application, the incremental revenue
 27 contribution would be \$900 million higher over the first 20-years of the contract
 28 terms. The average annual contribution to the System for the first 20 years of
 29 contracts is \$70 million, or \$47 million more when compared to the Variance
 30 Application. Figure 3-8 illustrates the annual revenues and COS for the NMML
 31 Facilities. It is important to note that this revenue contribution is solely from the
 32 NMML FT-R rate and the application of the NMML Surcharge Formula, meaning it
 33 conservatively excludes other sources of revenues, such as: interruptible revenue,
 34 incremental NMML contracting, and all revenue associated with delivery contracts.

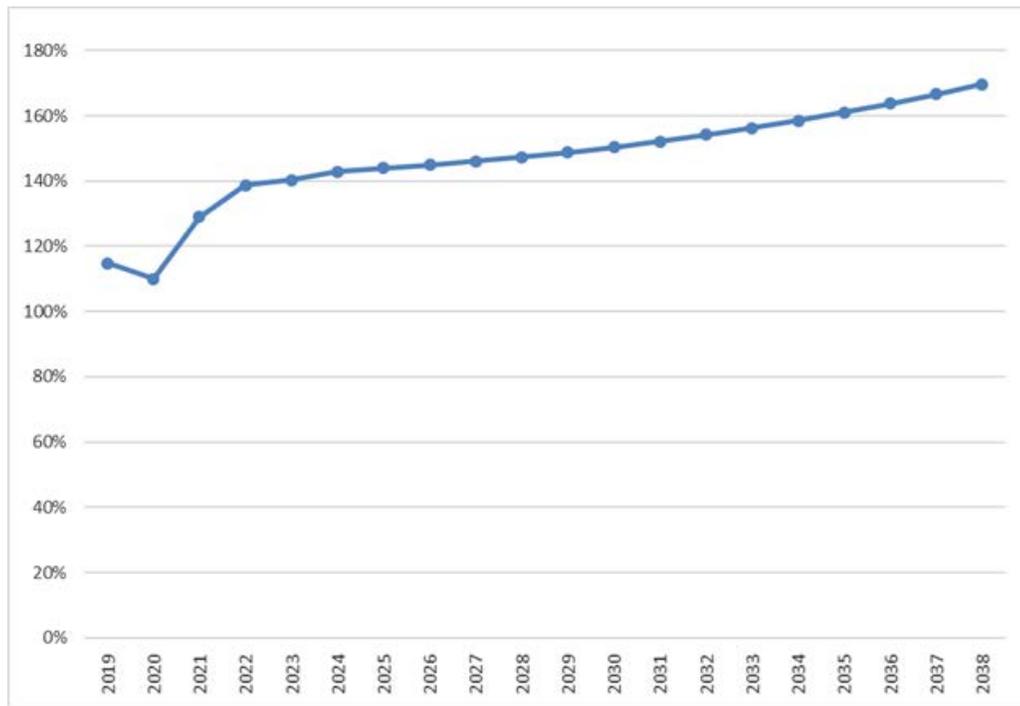


Figure 3-7: Estimated Annual Revenue to Cost Ratio for the NMML Facilities

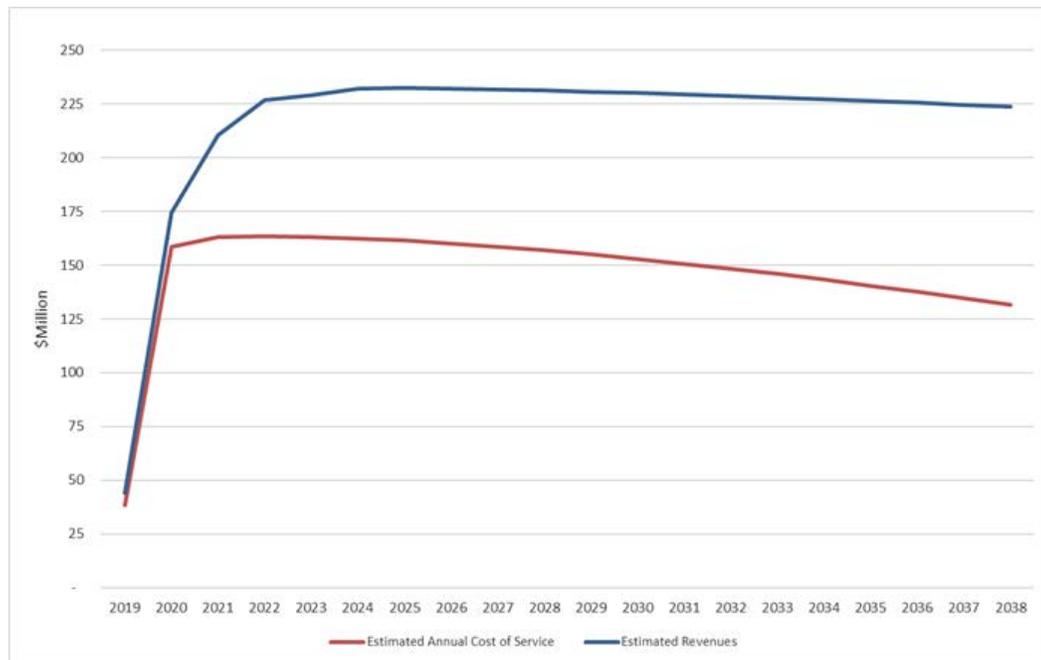


Figure 3-8: Estimated Annual Costs and Revenues for the NMML Facilities

1 Moreover, the updated rate impacts illustrate further benefits to the existing NGTL
 2 System compared to those presented in the Variance Application. The 5-year average
 3 rate reduction is approximately 2 cents/Mcf for a full path rate. Using the same
 4 method to determine rate impacts the expected values are illustrated in Table 3-4.

Table 3-4: Rate Impacts

	2019	2020	2021	2022	2023
Illustrative Rate Impacts (cents/Mcf/d)					
Average Firm Receipt	(0.1)	(0.7)	(1.2)	(1.6)	(1.6)
FT-D Group 1 Rate – Empress/McNeill	(0.1)	(0.3)	(0.6)	(0.8)	(0.8)
FT-D Group 1 Rate – Alberta-BC Border	(0.1)	(0.4)	(0.7)	(1.0)	(1.1)
FT-D Group 2 Rate	(0.1)	(0.4)	(0.8)	(1.1)	(1.1)
FT-D Group 3 Rate	(0.1)	(0.5)	(0.9)	(1.3)	(1.4)
Illustrative Rate Impacts (\$/10³m³/d)					
Average Firm Receipt	(0.049)	(0.245)	(0.413)	(0.552)	(0.562)
FT-D Group 1 Rate – Empress/McNeill	(0.019)	(0.100)	(0.207)	(0.293)	(0.300)
FT-D Group 1 Rate – Alberta-BC Border	(0.024)	(0.126)	(0.261)	(0.370)	(0.378)
FT-D Group 2 Rate	(0.026)	(0.133)	(0.276)	(0.391)	(0.399)
FT-D Group 3 Rate	(0.031)	(0.160)	(0.332)	(0.470)	(0.479)

3.7 IMPLICATION OF THE NMML TOLLING METHODOLOGY FOR ORDER TG-003-2018

5 Implementation of the NMML Tolling Methodology requires consequential
 6 amendments to Order TG-003-2018 (Toll Order), which are sought as part of the
 7 request for approval of the NMML Tolling Methodology.

3.7.1 Conditions Proposed to be Removed or Modified

8 A number of conditions contained in the Toll Order are no longer required or require
 9 modifications as a result of the proposed NMML Tolling Methodology. Specifically,
 10 NGTL suggests that Conditions 1, 2 and 3 be removed or modified in association
 11 with the approval of the NMML Tolling Methodology, as follows.

12 In relation to Condition 1, NGTL submits that overall, the greater cost accountability
 13 associated with the NMML Tolling Methodology eliminates the need to formally
 14 maintain a separate NMML cost pool, as contemplated in Condition 1 of the Toll
 15 Order. Nevertheless, NGTL recognizes that some reporting requirements to derive the
 16 NMML COS will still be required to determine the level of the surcharge.

17 Condition 2 of the Toll Order addresses the tolling methodologies to be applied
 18 during the Provisional Period and Post Provisional Phase. NGTL submits that the
 19 content of Condition 2 should be replaced with wording related to the proposed
 20 NMML Tolling Methodology.

1 In particular, content related to the Provisional Phase would no longer be applicable,
2 including matters related to the deferral account. NGTL does not expect the NMML
3 Facilities to be in service prior to the conclusion of the Provisional Period, such that
4 no revenue has been recorded in the deferral account and allocation of NMML costs
5 is addressed in the NMML Tolling Methodology, thus removing the need for
6 Conditions 2a), 2b) and 2d). Further, Condition 2c) is no longer applicable since
7 NGTL has filed for approval of an alternative tolling methodology through the
8 Application.

9 In addition, Condition 3b), which addresses Progress Energy's rights of termination
10 for its North Montney PEA, is no longer applicable as the right was previously
11 waived.²⁰

3.7.2 Condition Proposed to be Maintained

12 Condition 3a) of the Order directs NGTL to return to the Board for approval of a
13 tolling methodology for the NMML Facilities should a new market emerge for gas
14 received onto the NMML. Retaining this condition will continue Board oversight
15 over the NMML Tolling Methodology that may be affected by a future change of
16 circumstances.

3.8 CONCLUSION

17 The proposed NMML Tolling Methodology incorporates both the changes to the
18 overall NGTL rate design discussed in Section 2 and the NMML Surcharge Formula,
19 which incorporates the proposed level of the Surcharge Coefficient. The proposed
20 NMML Tolling Methodology is responsive to the guidance provided by the Board in
21 the MH-031-2017 Decision, is mindful of the increased distance sensitivity and cost
22 accountability resulting from the proposed changes to the NGTL System rate design,
23 is reflective of the needs of, and resulting benefits to, the existing NGTL System
24 arising from the gas to be received on the NMML Facilities, and results in a
25 meaningful contribution to both the incremental cost of service of the NMML
26 Facilities and to the existing NGTL System by NMML shippers. At the same time,
27 the proposed NMML Tolling methodology strikes a reasonable balance such that the
28 resulting tolling distinction between NMML shippers and existing NGTL System
29 receipt shippers is commensurate with the differences in circumstances observed by
30 the Board, thus mitigating potential concerns over unjust discrimination. NGTL
31 submits that the proposed NMML Tolling Methodology adheres to the Board's
32 tolling principles and will yield rates that are just and reasonable and not unjustly
33 discriminatory.

²⁰ NGTL's letter to the Board on July 25, 2018 re. Condition 3 of Tolling Order TG-003-2018 [A93243-1].

1 Timely approval of the NMML Tolling Methodology is required in light of the
2 upcoming expiry of the Provisional Period and of the anticipated in-service date for
3 the NMML Facilities in September 2019. NGTL therefore requests a decision of the
4 Board prior to June 22, 2019. Alternatively, NGTL requests that the Board approve
5 the NMML Tolling Methodology on an interim basis pending a decision, or that the
6 tolling methodology approved during the Provisional Period be maintained pending
7 the Board's disposition of the Application.

4.0 INFORMATION REGARDING DIRECTIONS FROM THE EXAMINATION

4.1 BACKGROUND ON THE EXAMINATION AND RELATED DIRECTIONS

1 On March 16, 2017, the Board initiated an examination as to whether an inquiry of
2 the tolling methodologies or tariff provisions of one or more of the Group 1 NEB
3 regulated natural gas pipeline companies operating in Northeast BC is warranted, and
4 if so, what the scope of the inquiry should include (Examination). The Examination
5 included a comment process, information requests and reply comments by
6 participants.

7 On March 8, 2018, the Board determined that holding an inquiry would introduce
8 undue uncertainty to the Northeast BC supply basin and may not effectively resolve
9 the potential issues raised by parties in the Examination (Examination Decision).
10 Rather, the Board concluded that its established processes, including revisions to the
11 NEB Filing Manual and upcoming toll applications were better suited to address these
12 potential issues.

13 Among other directions, the Board required NGTL to file information related to:

- 14 • policies affecting capital spending for system extensions
- 15 • depreciation policy and practices
- 16 • tolling methodology and tariff provisions

17 With respect to tolling methodology, the Board commented that if an alternative
18 methodology is proposed, NGTL must provide a description of the methodology and
19 an assessment of how it adapts to system utilization, sends appropriate price signals
20 and complies with the cost-based tolling principle. Due to the interrelated nature of
21 the information being sought regarding NGTL's tolling methodology and the rate
22 design amendments being proposed as part the current Application, NGTL concluded
23 that the current Application was the appropriate forum to address the Board's
24 direction from the Examination Decision.

25 This section contains NGTL's response to the Board's directions in the Examination
26 Decision and has been structured to align with the three aforementioned topics for
27 which the Board sought information from NGTL.

4.2 POLICIES AFFECTING CAPITAL SPENDING FOR SYSTEM EXTENSIONS

28 With respect to policies affecting capital spending for system extensions, the Board
29 directed NGTL to file an analysis of:

- 30 1. How NGTL's Tariff and Guidelines for New Facilities (Facilities Guidelines)
31 ensure appropriate cost accountability for shippers requiring receipt extensions;

1 the analysis should describe any changes proposed to introduce stronger cost
2 accountability for receipt shippers and NGTL.

- 3 2. Include an overview of how NGTL's Tariff (e.g., Rate Schedule FT-R and
4 Appendix E to the Tariff), Facilities Guidelines, the Facilities Design
5 Methodology Document (FDMD) and NGTL's Annual Plan (Annual Plan), when
6 applied together with NGTL's toll methodology, contribute to:
- 7 a. the optimization of NGTL's extension additions
 - 8 b. the utilization of its existing infrastructure

9 A number of pieces of information work together to ensure appropriate accountability
10 for extensions, as well as optimization of NGTL's extensions and utilization of
11 existing infrastructure on the NGTL System. In response to the requests, NGTL
12 provides the following information:

- 13 • background on the development of and reasons for the Annual Plan, FDMD, and
14 Facilities Guidelines,
- 15 • an overview of the steps involved in the NGTL extension and expansion process,
- 16 • a description of how the Tariff and Facilities Guidelines work together to ensure
17 appropriate cost accountability, and
- 18 • an overview of how the Tariff, Annual Plan, the Facilities Guidelines, and the
19 FDMD work together to optimize the system.

4.2.1 Background

20 This section provides an overview of the key documents that are utilized together to
21 ensure efficient expansion and utilization of the NGTL System and provide for
22 appropriate cost accountability.

NGTL Tariff

23 NGTL's Tariff provides the terms and conditions under which service is provided to
24 customers on the NGTL System. This includes provisions relating to conditions under
25 which service is offered, contract term, renewal rights, financial assurances, pricing
26 and charges for service, priority of service, provisions relating to service flexibility
27 (e.g., FT-D Alternate Access, transfers etc.), as well as others. The Tariff, together
28 with the NGTL Toll Methodology, establishes expectations with respect to the
29 accountability required of customers for service on the NGTL System. The proposed
30 amendments to the NGTL rate design addressed in Section 2 include amendments
31 with respect to minimum contract term.

Annual Plan

32 The Annual Plan provides customers and other interested parties an overview of
33 potential NGTL System facilities that are expected to be applied for within the

1 following year. The Annual Plan also describes the long-term outlook of supply and
2 markets on the NGTL System, and the development of design flows that support the
3 proposed facility additions. The development of the Annual Plan was initially in
4 response to the Energy Resources Conservation Board (ERCB) Information letter
5 (IL 90-8) in June of 1990, requiring NGTL to increase the amount of information on
6 future plans and increase the open communication with shippers and other interested
7 parties. As a result, the first Annual Plan was produced for the 1991/92 gas year and
8 has since been produced annually.

FDMD

9 The FDMD provides an overview of the facility planning processes employed to
10 determine design flows and identify mainline facility requirements, as well as, new
11 receipt and delivery meter stations, and extensions on the NGTL System. The
12 document provides the various design criteria that are used across the System and
13 within the various NGTL Project and Design Areas to determine facility requirements
14 on the NGTL System. The FDMD is available publicly on the Customer Express
15 website for review by interested parties.

Facilities Guidelines

16 The Facilities Guidelines outline the circumstances under which NGTL will
17 extend/expand its system, and the guiding principles and processes that apply. The
18 development and implementation of the Facilities Guidelines was an outcome of
19 NGTL's 1999 Products and Pricing Application and subsequent discussions with
20 industry stakeholders. As a result of those negotiations and regulatory processes, and
21 at the request of customers, NGTL stopped constructing laterals defined as less than
22 12 inches in diameter. The intent of the change was to introduce a greater degree of
23 competition for provision of new Alberta receipt laterals upstream, and new Alberta
24 delivery laterals downstream, of the existing system and to impose greater
25 accountability for these costs on those customers requesting new Alberta receipt and
26 delivery laterals. NGTL would continue to construct and apply a rolled-in tolling
27 methodology to meter stations, tie-ins, loops of existing laterals, as well as extensions
28 12 inches in diameter or greater. In order to ensure efficient use of capital, an industry
29 optimal tie-in process (Optimal Tie-in Process) was also introduced as part of the
30 Facilities Guidelines with the objective of minimizing the overall industry cost
31 associated with connecting to the NGTL System.

32 Table 4-1 summarizes the Extension Facilities Criteria currently included in the
33 Facilities Guidelines. As a guideline, the determination of whether NGTL will
34 construct an extension facility will depend on whether the majority of the criteria are
35 met.

Table 4-1: Extension Facilities Criteria

NGTL/AP Builds (Owns/Operates)	NGTL/AP Does Not Build (does not Own/Operate)
Facilities to serve aggregate forecast as per Annual Plan process	Facilities to serve specific customer requests – whatever NGTL cannot justify through Annual Plan process, third party would build
Facilities greater than or equal to 12 inches in diameter	Facilities less than 12 inches in diameter
Facilities greater than 20 kilometres in length. Associated connection piping.	Facilities less than 20 kilometres in length
Volumes greater than 100 MMcf/d	Volumes less than 100 MMcf/d

1 Since 2000, two updates to the Facilities Guidelines have been completed. The first
2 was in October 2011, which included updates to account for:

- 3
- 4 • the 2009 change to NEB regulation
 - 5 • the 2010 Rate Design and Service changes
 - 6 • the 2011 NGTL/ATCO Pipeline (AP) integration
 - 7 • the creation of the TTFP, to replace two prior committees in 2004

8 The second was on October 31, 2018, which was communicated to the TTFP, it
9 reflected administrative updates to simplify and streamline the document, but with no
change to the intent of the Facilities Guidelines.

10 Copies of the current version of the Facilities Guidelines and FDMD are provided in
11 Appendix 6.

4.2.2 NGTL Extension and Expansion Process

12 The following section provides an overview of the multistep process applied to
13 determine whether NGTL will extend and/or expand the System. This process
14 incorporates the Facilities Guidelines, the FDMD, NGTL’s contracting practices and
15 the Annual Plan process, which all work together to optimize the System by
16 maximizing the utilization of existing assets and planning efficient expansion of the
17 NGTL system, while ensuring appropriate cost accountability.

18 Upon receiving a request(s) for firm service, NGTL first considers the Facilities
19 Guidelines to determine if NGTL will extend the System. As described in the
20 Facilities Guidelines, an Optimal Tie-in analysis is completed to ensure that a
21 requesting customer’s connection to the system is at a location that minimizes overall
22 industry costs. NGTL also conducts local supply and market analyses to assess the
23 future supply and market requirements of the System. This information is used to
24 support the requirement for facility additions, and is considered for pipeline sizing to
25 ensure future volume in the area can be accommodated while minimizing multiple
26 builds. Properly sizing the pipe to a new area and avoiding multiple builds results in
27 improved cost efficiencies industry-wide.

1 Next the customer is offered a contract aligned to NGTL’s contracting practice and
2 NGTL’s Tariff provisions. Section 2.5.1 describes the current and proposed
3 contracting practices for new service on the NGTL System. To ensure appropriate
4 cost accountability, NGTL retains sole discretion to alter the default terms to require
5 longer contract terms in order to ensure sufficient cost accountability and that there is
6 no excessive cross-subsidization having regard to project costs and associated
7 contract revenues.

8 Once a customer executes contracts, the new and existing contracts are considered
9 when determining the System supply and market forecast and establishing design
10 flows that are utilized in the determination of the System facility requirements and
11 alternatives analysis. This is the Annual Plan process, the results of which are
12 published and shared with customers and stakeholders annually in the Annual Plan
13 document and through the TTFP forum. Should a facility be required outside of the
14 Annual Plan process, similar steps to the aforementioned process are completed and a
15 Facility Notification is provided to the TTFP prior to facilities application.

16 The following sections provide additional detail on how the NGTL extension and
17 expansion process ensures extension accountability and optimization of new and
18 existing facilities on the NGTL system.

4.2.3 Extension Accountability

19 This section discusses how NGTL’s Tariff, the proposed rate design changes and
20 Facilities Guidelines ensure appropriate cost accountability for receipt and delivery
21 extensions.

22 As previously mentioned, the Facilities Guidelines contribute to ensuring appropriate
23 cost accountability for shippers through both the Extension Facilities Criteria as well
24 as the Optimal Tie-in Process. For example, if a customer’s request results in
25 circumstances that do not meet the Facilities Guidelines extension criteria, such that
26 NGTL will not build an extension to provide incremental service, accountability is
27 placed on the requesting customer(s) to build to the System in accordance with the
28 intent of the Facilities Guidelines. Alternatively, if the circumstances are such that
29 NGTL will build an extension, NGTL then applies its Optimal Tie-in Process along
30 with established design methodologies as described in the FDMD (including
31 evaluation of acquisition or Transportation by Others (TBO) options), together with
32 area supply and market analysis, to ensure that efficient facility additions are
33 proposed that meet the requirements of the system. This ensures that only reasonable
34 costs are added to the System that are to be recovered from shippers through tolls.

35 Additionally, the Optimal Tie-in Process ensures that a requesting customer’s
36 connection to the system is at a location that minimizes overall industry costs and
37 recognizes the benefits of utilizing existing infrastructure, resulting in cost

1 efficiencies. This analysis influences which facilities would be added to the NGTL
2 System and therefore the costs the customer(s) is(are) accountable for.

3 Once the additional facilities are determined, a customer is offered a contract that
4 meets NGTL's contracting practice and NGTL's Tariff provisions, and ensures there
5 is appropriate cost accountability.

6 As described in Section 2 of this Application, NGTL is proposing several changes to
7 its rate design and Tariff that improve cost accountability on the system. These
8 include changes to the FT-R and FT-D pathing algorithms, the FT-R floor and ceiling
9 range, the Group 1 FT-D floor price and changes to the contract term provisions for
10 FT-R and FT-D service. The proposed changes reflect the on-going evolution of the
11 System, better reflect overall use of the System, provide better alignment across
12 services as well as greater transparency to the contracting requirements of customers.

4.2.4 Optimization of NGTL Facility Additions and Utilization of Existing Assets

13 The following section provides an overview of how the Facilities Guidelines, the
14 FDMD, the Tariff and Toll Methodology and the Annual Plan work together to
15 optimize the system ensuring utilization of existing assets and efficient expansion of
16 the NGTL System.

17 The application of the Facilities Guidelines, which was described earlier, contributes
18 to facility addition optimization by ensuring customer tie-in locations result in the
19 lowest overall industry cost (which recognizes the benefits of utilizing existing
20 infrastructure), consider local area volume potential when sizing pipe based on the
21 Facilities Guidelines and FDMD criteria and that potential mainline extensions are
22 aligned with NGTL's business practice and industry expectations. All three benefits
23 ensure improved cost-efficiencies industry-wide.

24 The FDMD details the processes utilized to determine design flows and resulting
25 facility requirements on the NGTL System. The design flows reflect an estimate of
26 peak expected requirements for each of the design areas across the system. Some of
27 the key design criteria included in the FDMD to ensure the design flows are
28 reasonable, the proposed facilities are optimized, and contribute to increased
29 utilization on existing infrastructure include (See Appendix 6: Facilities Guidelines
30 and FDMD for a full description of each design criteria):

- 31 • Optimal Tie-in Process
- 32 • Selecting facility alternatives that result in the lowest long-term cumulative
33 present value cost of service (CPVCOS Analysis)
- 34 • Consideration of long-term gas flows and facility requirements, when planning
35 and sizing facilities

- 1 • Consideration of acquisitions or TBO arrangements on other pipeline systems as
2 an alternative to constructing new facilities
- 3 • Supply-Demand Balancing – utilizes lesser of peak supply or peak demand for
4 mainline facilities design
- 5 • Demand Coincidence – recognizes that all demands do not peak simultaneously,
6 thereby reducing flow requirements
- 7 • Downstream Capability Methodology – uses the lesser of contracts or
8 downstream pipeline takeaway capacity at interconnects
- 9 • Storage – recognizes the contribution of storage withdrawals during peak winter
10 demand periods

11 By applying these criteria in the design process, NGTL ensures peak demand will be
12 met through an optimal facility set.

13 The design criteria mentioned above, whether focused on minimizing facility costs or
14 determination of design flows, also contribute to the utilization of existing assets. The
15 Optimal Tie-in Process, CPVCOS Analysis for facility alternatives, and consideration
16 of acquisitions or TBO, inherently recognize the benefits of existing infrastructure
17 and therefore contribute to its utilization. In addition, the criteria that are focused on
18 ensuring design flow assumptions are reasonable (e.g., supply-demand balancing,
19 demand coincidence, etc.) also contribute to utilization of all assets on the system as
20 their intent is to ensure proposed facility additions do not exceed those required to
21 meet peak expected requirements.

22 This approach, in turn, results in an appropriate level of cost that is included in the
23 NGTL System revenue requirement and therefore, the rates charged to customers.
24 The NGTL rate design reflects the economies of scale and scope of the NGTL
25 System, and ensures that costs are allocated to points across the System in a manner
26 that reasonably reflects how the System is used. By reflecting the cost of providing
27 service, the rate design adheres to the cost causation principle. This results in benefits
28 to all NGTL shippers as they are charged rates that are determined in a transparent
29 manner and applied consistently across the System.

30 Finally, the Annual Plan documents summarize the results of NGTL's annual design
31 process, which provides interested stakeholders the ability to review design
32 assumptions and the resulting facility requirements. The Annual Plan is provided
33 publicly on TransCanada's website in December of each year and the facilities
34 expected to be applied-for are presented to interested parties through the Annual Plan
35 presentation at the TTFP. In this forum, customers are given the opportunity to
36 question NGTL about its proposed design and assumptions. Furthermore, Appendix 2
37 of the Annual Plan tracks the proposed Annual Plan facilities and updates capital
38 costs as the projects progress, from the initial proposal through to in-service. This
39 provides additional transparency to project costs for customers on an on-going basis.

1 Overall, the processes outlined above, together with stakeholder discussions and
2 regulatory processes before the Board, jointly work to ensure the NGTL System is
3 expanded efficiently, the utilization of existing infrastructure is maximized, and
4 appropriate cost accountability provisions are in place.

4.3 DEPRECIATION POLICIES AND PRACTICES

5 In the Examination Decision, the NEB directed NGTL to address the following three
6 depreciation questions:

- 7 1. how NGTL's system-wide depreciation rates recognize the changing flows on its
8 system and the changing utilization levels on mainline sections/segments
- 9 2. whether the service life for receipt facilities in the depreciation study are aligned
10 with the receipt contract terms so that captive customers are not burdened with
11 responsibility for receipt extensions after receipt contracts have terminated; and
- 12 3. the steps that NGTL proposes to take to ensure that the costs of any undepreciated
13 receipt pipeline facilities that are being or will be underutilized or not used will be
14 allocated fairly to shippers and NGTL in the future.

15 This section provides NGTL's response to these directions. The first question is
16 addressed first, followed by a joint discussion associated with the inter-related second
17 and third questions.

4.3.1 Depreciation Rates, Changing Flows and Utilization Levels on Mainline Sections/Segments

18 The Board expects Group 1 companies, such as NGTL, to periodically file updated
19 depreciation studies. The depreciation studies inform the regulator and serve to: 1)
20 ensure depreciation rates appropriately reflect a system's economic planning horizon
21 (EPH), 2) set an appropriate depreciation rate to ensure both short-term and long-term
22 rates are just and reasonable, 3) ensure that inter-generational risks are minimized,
23 and, 4) reflect changes in the system including flows/utilization levels. NGTL last
24 filed an updated depreciation study prepared by Concentric Advisors ULC on
25 July 31, 2017. The depreciation study reflects the objectives and it supported
26 discussions between NGTL and its stakeholders as part of the 2018-2019 Revenue
27 Requirement Settlement approved by the Board in Order TG-004-2018.

28 One of the primary outputs of depreciation reviews is the service life estimate for
29 each asset class in rate base. Service life estimates are based on a review of the
30 company practice and outlook as it relates to plant operation and retirement, informed
31 professional judgement which incorporates analysis of historical plant retirement
32 data, a review of the company's upcoming capital and retirement projects, and
33 consideration of current practice in the natural gas industry.

1 NGTL's depreciation methodology yields annual depreciation rates related to the
2 NGTL System's laterals, mainline transmission pipelines and general plant. The
3 determination of an appropriate range of EPH dates for each pipeline asset type can
4 be based on a number of different factors. The extent to which a factor may be
5 relevant to a particular pipeline asset varies. In some cases, which factor or factors are
6 most relevant to certain asset classes may change over time, which highlights the
7 importance of performing periodic depreciation studies and of adapting depreciation
8 rates to changes in circumstances.

9 In the most recent depreciation study, NGTL considered, with the support of
10 Concentric Advisors ULC, the following factors in determining EPHs:

- 11 • availability of supply to the pipeline
- 12 • availability of market demand
- 13 • consumption of service value
- 14 • engineering based retirement studies
- 15 • competitiveness of the pipeline
- 16 • opportunity for the recovery of the investment
- 17 • projected long-term use of the pipeline
- 18 • approved EPHs of peer companies
- 19 • management discretion

20 The development of the EPH end dates for this study were impacted by several
21 changed circumstances, including:

- 22 • volatile gas and crude oil commodity prices
- 23 • increases in the gas supply reserves available to the NGTL System
- 24 • provincial and federal announcements regarding carbon reduction and elimination
25 initiatives
- 26 • increasing environmental and regulatory complexity to build new pipelines and to
27 add capacity to existing pipelines
- 28 • approved EPH dates for similar large diameter transmission pipelines

29 Over the period since the prior depreciation study was conducted, virtually all of the
30 above circumstances impacted the NGTL System and played a role in establishing the
31 current EPHs and the resulting depreciation rates.

32 In order to effectively incorporate changes in circumstances, NGTL typically files an
33 updated depreciation study with the Board every three to five years. This allows
34 NGTL to integrate updated information reflecting both exogenous and internal
35 impacts, including changes in flows or utilization levels, on a periodic basis. Any
36 resulting changes are then reflected in the overall assessment of EPHs for NGTL at
37 that time. For example, as part of its last depreciation study, NGTL included a

1 forecast of capital additions, which ensures current rates reflect the continued
2 evolution of the NGTL System, including changes in flows and utilization levels.

3 Further, in recognition of the distinct flows, utilization and other characteristics,
4 NGTL has maintained the practice of segmentation of the System into the ‘lateral’
5 and ‘mainline’ segments first implemented in the 2012 Depreciation Study. These
6 two segments are defined as follows:

- 7 • “lateral” segment represents smaller diameter pipe and the associated facilities
8 that connect specific (mostly conventional) supply to the “mainline” segment
- 9 • “mainline” segment represents pipe and the associated facilities connecting the
10 key supply areas with core markets and other transmission systems

11 This segmentation methodology allows depreciation rates to reflect the fact that
12 laterals and mainlines on NGTL have different expected uses and resulting EPHs.
13 This differentiation is applied system-wide to produce a reasonable allocation of
14 system costs. Should other factors lead NGTL to conclude further segmentation is
15 warranted, it would be possible to implement changes prospectively as part of future
16 depreciation studies.

17 For example, NGTL could group its laterals and mains into sub-segments
18 differentiated by geographic regions. There could be potential benefits of further
19 alignment of depreciation and consumption of economic value to the extent the sub-
20 groupings experience sufficiently different economic life factors. However, an
21 evaluation of the factors for such an approach would need to consider that although
22 some assets in one Project Area may reasonably be expected to have less remaining
23 economic life than assets in another area, they may also be older vintage and more
24 depreciated, which would potentially reduce any benefit of further segmentation.
25 Additionally, on an aggregate Project Area basis, the system is currently highly
26 utilized and expanding to facilitate transportation of growing supply in the Peace
27 River Project Area (PRPA) through to all major markets served by the NGTL System.
28 From a mainline segment perspective, this directionally supports a more uniform EPH
29 across the system rather than applying further geographic segmentation.

30 In addition to depreciation analyses, NGTL conducts separate system reviews that
31 include an analysis of design and operational capacities incorporating changes in
32 utilization levels. This ongoing process is not limited to the review of utilization
33 levels, but also considers current and forecast contractual requirements, and current
34 and future OM&A and integrity costs. NGTL’s review process is also used to identify
35 facilities that can be decommissioned, abandoned or divested. This review process
36 along with NGTL’s depreciation analyses, ensure that the NGTL System continues to
37 reflect changes in flows and utilization levels.

4.3.2 Economic Life, Contract Terms, and Allocation of Facilities Costs

1 NGTL's receipt facilities, as well as other facilities, are integrated with the rest of the
2 NGTL System. As such, the allocation of impact, including benefits, burdens, and
3 risks of the facilities align with the allocation applicable to all NGTL System
4 facilities. NGTL's rate design treats costs on the integrated system in a uniform and
5 reasonable manner, and all integrated system customers share in the costs and
6 benefits resulting from this treatment of facility costs. In addition, NGTL relies on
7 group accounting procedures, which maintain depreciation records by asset class and
8 not by individual asset or geographic breakdown.¹

9 The NGTL System is depreciated by specific asset class within each of the mainline,
10 lateral and general plant segments. These depreciation rates, combined with
11 reasonable EPHs for each asset class, produce a composite depreciation rate for the
12 system. This permits the recovery of invested capital from shippers according to the
13 remaining service life for the system as a whole. The resulting annual depreciation
14 expense is included in the revenue requirement for the NGTL System. To the extent
15 that actual throughput and associated revenues vary relative to what was expected in a
16 given year, all shippers on the system share in this variance through the annual rate
17 setting process. As such, the costs associated with all facilities, including depreciation
18 expense, are recovered from the integrated system shippers, similar to other costs
19 included in the revenue requirement of the integrated system. The rates that shippers
20 pay reflect the overall cost of providing the service.

21 Generally, it is common for long-lived assets such as pipelines to have contract terms
22 that are shorter than the service life of the asset. Few prospective shippers could
23 execute contracts that match the expected service life of an asset (e.g., 40 years).
24 Imposing such a requirement would result in significant under-investments in
25 infrastructure, which would be detrimental to economic development and the
26 Canadian public interest. The typical practice for Canadian pipelines has therefore
27 been to require reasonable initial contract terms to underpin facilities expansions,
28 while encouraging contract renewals and ongoing pipeline utilization beyond the
29 initial terms.

30 NGTL completes a supply assessment prior to proposing a project and considers its
31 overall supply outlook as part of periodic depreciation studies. This provides
32 confidence that facilities will still be needed after the initial firm contracts expire.
33 Under a scenario where some contracts are not renewed, facilities can continue to be

¹ Under group accounting procedures, NGTL does not have net book value at an individual asset level but can determine allocated net book values based on simplifying assumptions for illustrative purposes. Significant time and effort would be required to validate and refine these assumptions for all individual assets or sub-groups of assets for the purposes of further segmentation within a depreciation study. Therefore, a compelling business or economic rationale would be required prior to contemplating further segmentation for depreciation purposes.

1 used to provide interruptible service. Renewal rates on NGTL System facilities have
2 fluctuated over time depending on overall capacity utilization. When the system is
3 constrained, as has been the case in recent years, renewal rates are very high at
4 approximately 90%. When the system is less constrained, renewal rates have been
5 lower at approximately 50% to 60%, but reliance on interruptible services is typically
6 higher under these system conditions.

7 While initial contract terms may be a relevant consideration, they are not
8 determinative of expected economic life of expansion facilities. Other factors
9 provided in Section 4.3.1 are relevant to this determination, including the availability
10 of supply, availability of markets, competitiveness and expected long-term use of the
11 facilities. It would be inconsistent with depreciation principles to ignore these other
12 factors and rely exclusively on initial contract term in establishing depreciation rates.
13 Adopting this practice would result in inter-generational inequities in that shippers
14 underpinning expansion facilities would pay a disproportionate share of depreciation
15 expense in this initial period, while future shippers would benefit from continued use
16 of the fully-depreciated facilities at a significantly lower cost.

17 Aligning depreciation and expected economic life is a reasonable approach, as it
18 results in a fair allocation of depreciation expense between initial and future shippers
19 of the NGTL System. While some facilities may have a shorter than average
20 economic life, other facilities may have a longer than average economic life.
21 Consistently applying depreciation rates across the entire NGTL System best ensures
22 a reasonable allocation of risks and benefits between NGTL and its shippers.
23 Recovering undepreciated costs across an integrated system through system-wide
24 depreciation rates reduces business risk for the NGTL System, resulting in a lower
25 cost of capital than would otherwise be required. This allocation of risk across all of
26 the system facilities benefits all NGTL System shippers through a lower cost of
27 capital and depreciation expense than would otherwise apply to separately
28 depreciated assets, and thus lower rates. It also provides a framework under which
29 investments in facilities can be made and ensures ongoing reliable service is provided
30 benefiting all system shippers. Ultimately, this commercial structure promotes the
31 Canadian public interest, as it is essential in maintaining investment and continued
32 economic development of the WCSB.

33 Although longer contract terms are generally preferable from the pipeline's
34 perspective, it is necessary to balance contract term provisions with what is
35 reasonable for customers while being mindful of preserving the system's
36 competitiveness. Rates calculated based upon the total system depreciation expense
37 help to maintain lower and more stable rates for all services on all paths. If NGTL
38 were to depreciate facilities according to initial contract terms, all shippers, including
39 captive shippers, would be burdened by higher rates to access the system. Thus,
40 shippers benefit from lower rates, access to service, and the certainty that results from
41 the expectation that the depreciation methodology will be applied consistently to the
42 system and that the level of depreciation expense will not vary drastically year-to-

1 year. Overall, this allocation of system-wide depreciation, resulting lower cost of
2 capital and the ability for shippers to contract for reasonable contract terms, all
3 generate a fair allocation of risks and benefits to an integrated pipeline system, and
4 support inter-generational equity.

4.4 TOLLING METHODOLOGIES AND TARIFF PROVISIONS

5 In the Examination Decision, the Board instructed NGTL to provide an assessment of
6 various factors if the current methodology was retained. If an alternate methodology
7 is proposed, as is the case in this Application, NGTL was directed to provide a
8 description of the methodology and an assessment of how it adapts to system
9 utilization, sends appropriate price signals and complies with the cost-based tolling
10 principles.

11 Sections 2 and 3 of the Application, as well as the expert evidence of Concentric
12 Energy Advisors, Inc., address the proposed NGTL rate design and the NMML
13 Tolling Methodology. That evidence contains information that is responsive to the
14 Board's direction and demonstrates that collectively, the proposed changes are
15 responsive to changes in system utilization and enhance price signals and consistency
16 with the cost-based/user-pay tolling principle.

17 NGTL will continue to utilize a distance-diameter FT-R pathing methodology as is
18 appropriate given the System's reticulated nature, varied distance of haul by receipt
19 point, and multitude of pipe diameters. As discussed in Section 2.2, the pathing
20 methodology has been revised to account for NGTL's significant intra-basin demand,
21 and now includes pathing to additional major markets. Beyond the immediate
22 addition of new major markets, NGTL's criteria for the future addition of new major
23 markets demonstrates that the methodology is capable of responding to shifts in
24 system utilization. Overall, the approach results in rates priced to more accurately
25 reflect actual gas flows, and as a result, provide rates that are reasonably
26 representative of the costs associated with utilizing each receipt and delivery point.

27 The proposed tolling methodology will also increase cost accountability for new and
28 existing NGTL facilities. NGTL's new, dynamic approach to floor and ceiling rates
29 allows them to fluctuate as the system evolves, and will result in approximately 90%
30 of System CDQs being tolled at an unconstrained rate. Again, this results in price
31 signals more reflective of the costs to utilize specific facilities, and ensures shippers
32 underpinning new facilities pay a rate reflective of these costs.

33 Current asset utilization is incorporated into NGTL's rates through its pathing
34 methodology. The distance-diameter pathing methodology reflects projected physical
35 flows on facilities, and considers these factors in the rates it outputs. Future utilization
36 is also reflected in rates as it factors into the establishment of depreciation rates. To
37 determine appropriate depreciation rates, NGTL retains experts to review its

1 assessments of supply availability, market demand, competitiveness and long-term
2 prospects. These considerations are ultimately reflected in rates when the resulting
3 depreciation rates are reviewed and approved by the Board.

4 When NGTL's system design process determines that aggregate system demand is
5 such that physical extensions are required, the appropriate sizing of these facilities is
6 an important factor in ensuring that NGTL's overall rates remain just and reasonable.
7 Another factor is whether the costs of these extensions are appropriately reflected in
8 rates charged to those utilizing and benefitting from those facilities. The overall rate
9 design, including the distance-diameter algorithm and the proposed approach to floor
10 and ceiling rates recognizes the incremental cost of the facilities, while also
11 recognizing that the NGTL System as a whole benefits from the addition of new
12 supply or connections to new markets. Further, the contract term requirements as
13 discussed in Section 2 ensure an appropriate level of cost accountability directly
14 assigned to those underpinning any new facilities.

15 Ultimately, the NGTL System's reticulated nature and variety of facilities located
16 across a large geographical area requires a sophisticated tolling methodology that
17 accounts for these differences. The proposed tolling methodology is sufficiently
18 flexible such that its application to the entirety of the NGTL System, including new
19 extensions, would result in rates that are just, reasonable and not unjustly
20 discriminatory. However, given the breadth of the System, there may be unique
21 circumstances that require unique solutions to be implemented to the otherwise
22 applicable framework.

23 The proposed treatment of NMML shippers and Facilities is one example of such
24 additional steps being taken. NMML shippers are subject to 20-year contract terms
25 including a restricted Secondary Term, and the NMML Tolling Methodology is
26 proposed to apply to services utilizing the NMML Facilities. In general, the
27 possibility of adjustments in such cases is contemplated within Section 2.4 of the
28 MOU, and can appropriately be considered in the specific cases where circumstances
29 warrant an adjustment.

5.0 CONCLUSION AND OVERALL JUSTIFICATION

1 In submitting this Application, NGTL seeks approval of a comprehensive suite of
2 inter-related services and tolling matters on the NGTL System, more specifically,
3 attributes and tolling of several services including: FT-R, FT-D and FT-P, the
4 allocation of the NGTL Revenue Requirement between FT-D and FT-R, contracting
5 practices, transfer provisions, rural gas interconnections, other services and attributes
6 matters, and the NMML Tolling Methodology.

7 The Application is supported by the Settlement, which is the product of extensive
8 negotiations between NGTL and its stakeholders. The Settlement represents a balance
9 of interests amongst the parties, and results from compromises of the diverse interests
10 and positions of the parties. Consequently, the changes to the NGTL System rate
11 design methodology and terms and conditions of services arising from the Settlement
12 are inextricably linked and should be considered as a package.

13 The overall reasonableness of the Settlement is demonstrated by the broad support
14 from a large number of stakeholders representing the majority of FT-R and FT-D
15 contract holders on the NGTL System. Further, the supporting parties represent a
16 broad cross-section of stakeholders, including small, medium and large producers,
17 power generators, utility customers, industrial users, export customers, marketers,
18 extraction service providers and industry associations.

19 Since the rate design of the system was last reviewed, the NGTL System has
20 continued to evolve, the amendments proposed in this Application are responsive to
21 the evolution of the System. The Settlement amendments will increase the distance
22 sensitivity of the rate design, improve cost accountability, and enhance flexibility.
23 The consistency of the rate design will also be improved through the greater
24 alignment that will be achieved between FT-R and FT-D services. Overall, the
25 amendments proposed to the rate design and provision of service adhere to the
26 Board's tolling principles.

27 The Application also addresses the Additional FT-P Amendments and the NMML
28 Surcharge Formula, which relate to matters in the Settlement but are not part of the
29 Settlement.

30 The Additional FT-P Amendments, along with the changes to FT-P specified in the
31 Settlement are necessary to restore FT-P as an attractive option for short-haul
32 customers who source their gas close to the end use location.

33 The proposed NMML Tolling Methodology, which incorporates both the changes to
34 the overall NGTL rate design and the NMML Surcharge Formula (including the
35 proposed NMML Surcharge Coefficient), is responsive to the Board's concerns
36 expressed in its MH-031-2017 Decision regarding the tolling of the NMML Facilities.
37 Specifically, the proposed NMML Tolling Methodology adheres to the Board's

1 tolling principles, exhibits increased distance sensitivity, and enhances cost
2 accountability, and will result in rates on the NMML that generate revenue covering
3 the incremental COS of the NMML Facilities while providing a meaningful financial
4 contribution to the existing NGTL System. At the same time, the proposed NMML
5 Tolling methodology strikes a reasonable balance such that the resulting tolling
6 distinction between NMML shippers and existing NGTL System receipt shippers is
7 commensurate with the differences in circumstances observed by the Board, thus
8 mitigating potential concerns over unjust discrimination.

9 Moreover, the Application includes information NGTL prepared in response to the
10 Board's direction from the NEBC Examination Decision that addresses (i) policies
11 affecting capital spending for system extensions, (ii) depreciation policy and
12 practices, and (iii) tolling methodology and tariff provisions. NGTL submits that this
13 information is responsive to the Examination Decision and it reflects the amendments
14 proposed in the Application.

15 The evidence filed in support of the Application, including the NGTL Evidence, the
16 Concentric Evidence and the various Appendices demonstrate the reasonableness of
17 the Settlement and of the additional relief sought in the Application. NGTL submits
18 that approval of the Application is in the Canadian public interest and will result in
19 tolls that are just and reasonable and not unjustly discriminatory.

20 NGTL respectfully requests timely approval of the Application such that the rate
21 design amendments can be implemented as proposed on January 1, 2020 and that the
22 NMML Tolling Methodology can be approved prior to the expiry of the NMML
23 Provisional Phase, which would provide clarity for all parties to allow them to make
24 informed decisions in the development of WCSB natural gas resources.