



ATCO Pipelines (AP)

Yellowhead Mainline (YM)

Need Assessment Application

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Executive Summary

ATCO Pipelines, a division of ATCO Gas and Pipelines Ltd. (AP or ATCO), presents an application requesting approval from the Alberta Utilities Commission (AUC) for the Need of the Yellowhead Mainline Project (YM Project), a gas utility pipeline capital project as defined within AUC Rule 007.

The YM Project is required to provide increased system capacity to meet the additional contract and forecast demand for natural gas transportation service on the Integrated Alberta System, with much of the demand located in the greater Edmonton area. The YM Project will add capacity to meet 800 terajoules per day of incremental contracted demand and another 550 terajoules per day of forecast demand. Without the capacity addition of the YM Project there will be a shortfall of delivery capacity on the system starting in Q4 2027, and investments by those contracted for gas service will be at risk.

AP and NGTL considered multiple alternatives to meet the increased demand on the Integrated Alberta System. The alternatives can be grouped by: do nothing (Alternative 1), expansion of existing infrastructure on the NGTL and ATCO systems (Alternative 2 and 3), and creating a new corridor (Alternative 4.1, 4.2 and 4.3). From these alternatives, Alternative 1 would not meet contract demand, and Alternative 3 is more expensive than Alternatives 2 and 4; therefore, each was not considered viable for comparisons. The following table compares the remaining Alternatives and the technical and economic evaluations that were completed to select the YM Project. The evaluation included consideration of Alternative 2 (North Lateral build on the NGTL system along with expansion of AP's Inland system) and three different configurations for the new YM flow corridor.

Table 1.1: Relative Ranking of Alternatives

Alternative	Technical (Operational Efficiency, Reliability, Project Scope) (20%)	Cost (CPVRR) (70%)	Land impacts (10%)	Total
Alternative 2	1	1	1	1
Alternative 4.1 (YM Configuration 1)	2	2	4	2.2
Alternative 4.2 (YM Configuration 2)	4	3	4	3.3
Alternative 4.3 (YM Configuration 3)	3	4	4	3.8

* A ranking of 4 indicates that the Alternative is the most optimal among the Alternatives considered for the subjected category

AP notes that Alternative 4.3 (YM Configuration 3) requires less than one fifth of the compression, less than 65 percent of the pipeline length, and smaller pipe diameter than Alternative 2 (North Lateral build on the NGTL system along with expansion of AP's Inland system) to meet forecast and contracted system demand.

Based on the evaluation, AP determined Alternative 4.3 (YM Configuration 3) was selected as the best alternative for the YM Project. The YM Project consists of approximately 226 km of 914 mm (36") diameter pipeline and 18 MW of compression. This will connect supply from the NGTL January Creek transmission line near Peers to the AP Inland transmission system near Fort Saskatchewan. The YM Project provides a new flow path for natural gas from the predominate supply on the west side of the province to the consuming regions in the central part of the province. This not only meets the contracted volumes but also provides additional capacity for forecast demand on the overall system. The proposed facilities will be constructed, owned and operated by AP. At an estimated cost of \$2.8 billion (+/-30 percent), the YM Project is the best alternative to meet system requirements.

AP emphasizes the importance of obtaining approval of the need for the YM Project in as efficient a manner in order to meet system demand requirements and before making major expenditure commitments. This approach is intended to facilitate an efficient regulatory process and provide clarity about the need for and scope of the project at an

early stage. The regulatory process will include a subsequent facility application in 2025 to the AUC, including the technical and consultation requirements expected for a facility application.

The YM Project will generate both direct and indirect economic benefit and job creation in the province. It will provide additional capacity on the Integrated Alberta System, and this capacity will unlock downstream investment, facilitating development including low carbon initiatives. AP has received many letters of support for the YM Project, including letters from large industrial users of natural gas (Dow, Keyera, Plains Midstream, Heidelberg Materials and McCain Foods), industry associations (the Explorers and Producers Association of Canada and the Industrial Gas Consumers Association of Alberta), economic development groups (Alberta Industrial Heartland Association, Economic Developers Edmonton, Edmonton Global, and Calgary Chamber of Commerce) and municipalities (Sturgeon County and Strathcona County). While these are included and discussed within the application, the quote from one of the many customers supporting the project really drives home the value to the project for Alberta.

Keyera asserts that the Yellowhead Mainline Project is necessary for increasing the capacity and efficiency of Alberta's natural gas network and will be integral to the continued growth of energy, petrochemical and hydrogen projects within the Alberta Industrial Heartland; projects which support Alberta's objectives as outlined in the provincial Natural Gas Vision and Strategy.¹

AP estimates that the YM Project will create approximately 2,000 jobs during the construction phase of the project and will unlock at least \$20 billion of downstream investment in Alberta.

¹ Attachment 7, PDF p. 3.

SECTION 1 – INTRODUCTION

1.1 Overview

1. AP, hereby requests approval from the AUC of the need for the YM Project, a gas utility pipeline capital project, pursuant to AUC Rule 007 requirements (Application or Need Application).²
2. The YM Project is required to support the ability of the Integrated Alberta System to service increasing natural gas demand in Alberta, which includes incremental contracted and forecast demand. The Integrated Alberta System is the combined Alberta natural gas transmission system made up of assets owned and operated by each of AP and NGTL GP Ltd., as a general partner on behalf of NGTL Limited Partnership (NGTL), in accordance with the Alberta System Integration Agreement between ATCO Gas & Pipelines Ltd. and NGTL dated April 7, 2009, as amended (Integration Agreement).
3. AP and NGTL design the Integrated Alberta System to meet forecast demand. Specifically, as per the NGTL 2023 Annual Plan, or Annual Plan (Attachment 1), the YM Project is “required to meet the aggregate delivery requirements in the Greater Edmonton Area.”³ The YM Project is being proposed to meet contracted and forecast demand that cannot be supplied by existing infrastructure and currently approved expansion projects. The incremental contracted demand and forecast demand, and the resulting need for increased capacity on the Integrated Alberta System, are discussed further in Section 3 of this Application.
4. AP has prepared this comprehensive Need Application to demonstrate the need for the YM Project in accordance with AUC Rule 007 requirements. The Application provides evidence and analysis to address the criteria and factors pertinent to the AUC’s evaluation of the need for the project, which include system requirements, forecast demand, economic conditions, alternatives considered, industry dialogue and the overall

² AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designation, Hydro Developments and Gas Utility Pipelines*, s 13.3.

³ Attachment 1. NGTL Annual Plan, p. 2-20.

public interest. The Application is based on the best information and data available at the time of filing this Application, as well as the judgement and expertise of AP.

5. AP is filing this application separately from and prior to a subsequent facility application. AP considers this to be a prudent approach due to the scale of the project. It is critical that AP and customers have certainty through the approval of the Need Application regarding the sizing and scope of the YM Project prior to certain major expenditure commitments on the project, such as the purchase of pipe and other long lead items. A separate Need Application will give the Commission sufficient information to understand the scale and timelines required to meet the existing and incremental demand on the Integrated Alberta System, and will allow the Commission to retain the ability to examine route specific items, such as landowner consultation, through the Facility Application.

1.2 Project Description

6. The YM Project is a proposed gas utility pipeline that will be approximately 226 km* long. It will provide a direct path to supply natural gas from the western side of the Province to the Greater Edmonton Area and increase the overall capacity of the Integrated Alberta System. The forecast cost of the YM Project is \$2.8 billion.

7. While the final route is not yet established, the YM Project will include the following facilities:

- Installation of approximately 226 km of 914 mm (36") pipeline from NGTL's January Creek Transmission (LSD NE-27-54-14-W5M) to AP's existing Inland transmission system (between LSD SW-21-53-23-W4M and NW-27-55-21-W4M) with an MOP of 8,450 kPa;
- Installation of YM West Interconnect Station (LSD NE-27-54-14-W5M);
- Installation of YM East Control Station (between LSD SW-21-53-23-W4M and NW-27-55-21-W4M); and
- Installation of the YM Compressor Station (18 MW) (final site will be based on final route selection).

**Note that the length of pipeline, depending upon final routing, is expected to range between approximately 200 and 230 km. For the purposes of this Application and for the sake of consistency throughout, 226 km has been used for a baseline.*

8. The pipeline and associated facilities installed as part of the YM Project will be located within Alberta and will be entirely owned and operated by AP.

9. AP submits that the YM Project is a transformative project that is necessary to address forecast natural gas demand in Alberta and that will have direct and indirect economic benefits for the province, as detailed in the sections below.

1.3 ATCO-NGTL Integration Agreement

10. The YM Project is proposed in accordance with the framework of Alberta System Integration as approved by the Commission in past decisions. In order to provide context for the Commission's review of this Application, this section outlines the purpose and benefits of Alberta System Integration, as well as key aspects of integration and provisions of the Integration Agreement that are relevant to the YM Project.

11. The Integration Agreement, included in this Application as Attachment 2, was approved by the Commission in Decision 2010-228. It sets out principles governing the operation of the Integrated Alberta System and allows for efficient and orderly system expansion planning.

12. The goal of the Integration Agreement is to "streamline the provision of natural gas transmission services and address competitive pipeline issues in Alberta."⁴ Prior to Integration, there were several issues related to the use of the NGTL System and the AP System for both customers and the system owners. AP and NGTL had been encouraged by the Energy and Utilities Board (EUB) to explore collaborative concepts to streamline the provision of natural gas transmission services across Alberta and to address certain

⁴ Decision 2012-310, Asset Swap Application (November 22, 2012) (Alberta Utilities Commission) at para. 19. For further information, refer to the discussion in paragraph 22 of Decision 23799-D01-2019 regarding the Pembina-Keephills Transmission Project, which outlines AP's submissions in that proceeding with respect to the goal of integration in streamlining natural gas transmission services and addressing competitive pipeline issues identified by the Commission such as stacked tolls, duplicative terms of service, duplicative regulatory proceedings, increased costs, and more.

competitive pipeline issues and reduce inefficiencies.⁵ The Integration Agreement was drafted to address these issues.

13. Article 2.1 of the Integration Agreement lists the purposes of Integration, which include the provision of more effective and seamless gas transmission services, the provision of distinct and separate roles and responsibilities for each of AP and NGTL, and the use of a single system design philosophy to identify and scope new required facilities on the Integrated Alberta System. In Decision 2010-228, the Commission recognized the following benefits available to customers as a result of the Integrated Alberta System:⁶

- to enter into a single contract for transportation services on the Integrated Alberta System;
- to pay a single toll;
- to be subject to one set of terms and conditions; and
- to participate in streamlined (fewer) regulatory proceedings.

14. In accordance with its responsibilities under Sections 2.1, 4.2 and 4.5 of the Integration Agreement, and in consultation with AP, NGTL employs a single system design methodology to identify the need for new projects on the Integrated Alberta System. Consistent with its role under Alberta System Integration, NGTL identified a need for the YM Project as discussed in Section 5.2 of this Application.

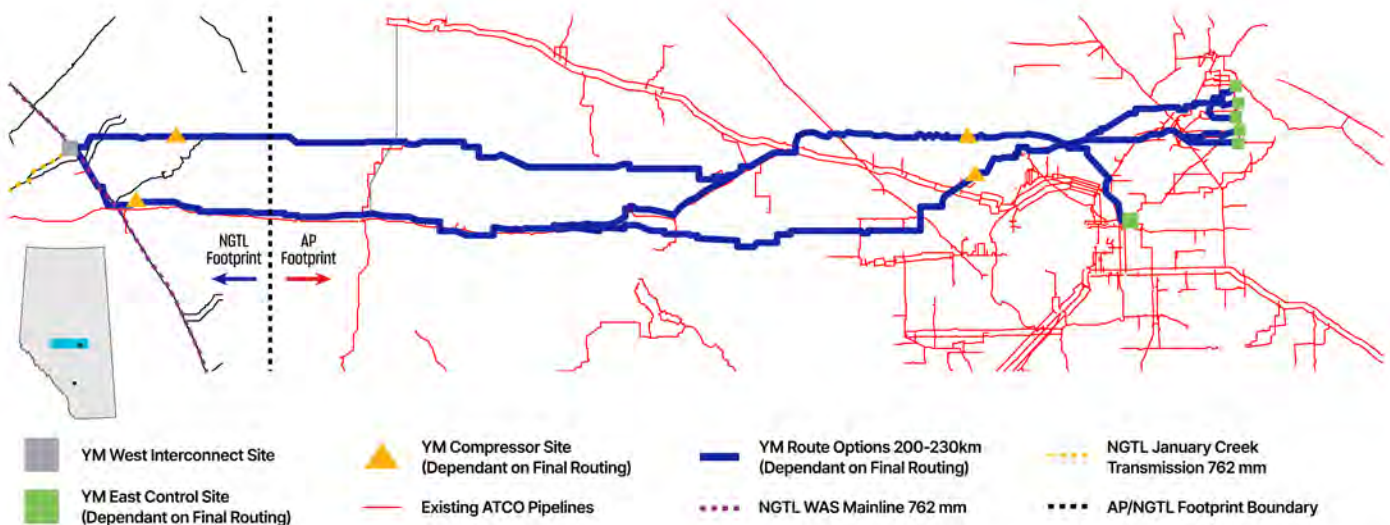
15. Under Sections 4.5(d)(i)(A) and 4.5(d)(ii)(A) of the Integration Agreement, when a need for additional infrastructure on the Integrated Alberta System is identified based on system planning, AP has the first right to construct and own identified projects within a specified area referred to as the ATCO Footprint. Correspondingly, NGTL has the first right to construct and own identified projects within a specified NGTL Footprint. The proposed YM Project, described in Section 1.2 of this Application, will be located predominantly (approximately 85 percent) in the AP Footprint, with a small portion of its western end located in the NGTL Footprint. Figure 1.1 is a map showing the proposed

⁵ Decision 2010-228.

⁶ Decision 2010-228, *supra* note 2 at para. 119.

YM Project in relation to the AP and NGTL Footprints. In accordance with Section 4.5(d)(ii)(A) of the Integration Agreement, NGTL has declined its construction and ownership rights with respect to the portion of the YM Project located in the NGTL Footprint. AP and NGTL consider this arrangement to be in the best interest of Integrated Alberta System customers because AP's sole ownership and operatorship facilitates more efficient project construction and operation. Accordingly, and as confirmed in the June 6, 2024, Decision Summary for the YM Project (Attachment 3), AP is permitted by NGTL to construct, own and operate all portions of the YM project in both the AP and NGTL Footprints.

Figure 1.1: YM Project Location and Integrated Alberta System Footprint Areas



16. Under Alberta System Integration, the Commission has jurisdiction to approve the need for capital additions proposed by AP, including the YM Project, as confirmed recently in Decision 25937-D01-2021:

...Nothing in the Integration Agreement affects the Commission's jurisdiction under the *Pipeline Act* and the *Gas Utilities Act* to approve the construction or acquisition of gas utility pipelines and related facilities, or the need for and prudence of capital additions proposed by ATCO Pipelines within its footprint.

Each of the AUC and the CER has an assigned role under the Integration Agreement. There is consequently no need...to establish a process to re-assess

the legislative framework that governs the respective roles of regulators in relation to the Alberta System.⁷

17. In that decision, the Commission also confirmed the use of the Alberta System Annual Plan, as part of integration, to guide investment and development decisions for the Integrated Alberta System:

The Commission also confirmed, in Decision 23799-D01-2019, that the overall long-term development of the Alberta System is to be guided by the Alberta System Annual Plan, which sets out a common approach to facility design under integration. The use of the annual plan, and the two guidance documents underlying it approved by NGTL and its stakeholders, have been considered by the CER and the Commission on a number of occasions. The Commission finds that the system development approach and guidance documents approved as part of integration are sufficient to guide investment and development decisions about the Alberta System, and that an ATCO Pipelines-specific investment policy is not required.⁸

18. Further detail regarding the need for the YM Project as a new investment in the Alberta Integrated System, including the role of the Annual Plan and associated guidance documents, is discussed further in the sections below.

SECTION 2 – GU1 – CURRENT OR ANTICIPATED RATE OR FACILITIES APPLICATIONS ASSOCIATED WITH THE PROJECT

2.1 Overview

19. There are no current rate or facility applications associated with the YM Project.

20. AP proposes to address rates in connection with the YM Project as part of a future General Rate Application (GRA). Consistent with Section 4.2 of the Integration Agreement, should the Commission approve the YM Project Need Application, any incremental revenue requirement for AP that is approved by the Commission, in subsequent proceedings, with respect to the YM Project will form part of the entire revenue requirement for the Integrated Alberta System.⁹

⁷ Decision 25937-D01-2021 (June 15, 2021), ATCO Gas and Pipelines Ltd. Pipeline Acquisition from Pioneer Pipeline Inc., at paras. 16-17.

⁸ *Ibid* at para 18.

⁹ Attachment 2: AP/NGTL Integration Agreement Section 4.2 PDF p. 38.

21. As discussed in the following section, if the Commission approves YM Project need, AP intends to submit a facility application to the Commission that would address the relevant facility-related requirements of AUC Rule 007.

2.2 Application Processes

22. Given the magnitude of the YM Project, which, if approved, will be a multi-year transmission system expansion project, AP requests that the need for the YM Project be reviewed in a discrete AUC proceeding separate from and prior to a YM Project facility application.

23. With respect to the timing and process for the Commission's evaluation of the need for a gas utility pipeline capital project, Rule 007 states:

The need for a gas utility pipeline capital project must be established before a licence will be issued regardless of what form of rate regulation applies to the gas utility. The Commission will assess the need for a project in the first instance the gas utility identifies the project to the Commission, either as part of a rate filing (i.e., general rate application or as part of an application for companies that are operating under performance-based regulation) or a facility application.

If a gas utility files an application for a licence for a project where the need was not previously assessed and approved in the rate decision, or before the rate decision is issued, the need will be considered in conjunction with the facility application instead of the rate filing.

Need for a project should be addressed only one time, although need may be reconsidered if there is a material change in circumstances.¹⁰

24. As noted in Decision 2014-010 in respect of AP's Urban Pipeline Initiative (UPI) program, the Commission has authority under the *Gas Utilities Act*, *Pipeline Act*, and *Alberta Utilities Commission Act* to convene a standalone proceeding to consider the need for a project outside of a rate or facility proceeding.¹¹ AP submits that the Commission has jurisdiction to control its own processes and may establish separate need and facility application proceedings as requested in this Application. This approach is consistent with the procedure used on large scale electric utility projects, where the

¹⁰ AUC Rule 007, s 13.3.

¹¹ Decision 2014-010 Section 2.2.

Alberta Electric System Operator (AESO) identifies the need which is often reviewed and approved by the Commission prior to the utility advancing certain aspects of the project.³

25. The YM Project was introduced to the Commission and the public in AP's 2024-2026 GRA, although AP did not request approval of project need as part of that application.¹² AP informed the Commission of its intention to file an application to establish the need for the project, in advance of filing a facility application, once customer contracts were in place, confirmation of the project's scope was received through the NGTL Decision Summary (Attachment 3), and sufficient information to support costs estimates was available.¹³

26. YM Project planning has now advanced to the stage that AP has sufficient information to file this Application. AP proposes that, in these circumstances, it is the most fair, expeditious, and efficient that the Commission establish a standalone proceeding to consider the need for the YM Project. AP submits that this approach will facilitate an efficient regulatory process by allowing for a robust assessment of project need prior to parties incurring time and cost in relation to a facility application, which is important given the significant scope of the project and anticipated interest in this Application. This approach will also benefit YM Project stakeholders by providing public clarity about the need for and scope of the YM Project at an early stage in project development, which will enable more meaningful participation in project consultation and engagement activities.

27. In addition, AP is not requesting the approval of the YM Project's impact on revenue requirement as part of this Application and will seek revenue requirement approval in a future GRA. Given that AP's request for a deferral account for the YM Project was not approved as part of the 2024-2026 GRA, should the need for the YM Project be approved by the Commission, and once the facility application for the YM Project has been submitted to the Commission, the YM Project costs would form part of AP's next GRA and revenue requirement.

¹² Exhibit 28369-X0002.02 Section 1.2.

¹³ Exhibit 28369-X0002.02 Section 2.3.1.

28. The Commission previously employed a standalone need application proceeding with respect to the AP UPI addressed in Decision 2012-233.¹⁴ In that case, the Commission determined that AP should demonstrate the need for the UPI as a whole, in a single proceeding, with facility approvals for UPI projects to be addressed separately.¹⁵ The Commission explained that the approach was appropriate in consideration of the multi-year, multi-phase nature of the UPI and that “making a determination on the need for the UPI will streamline the regulatory process for the future segments of the UPI both in terms of forecast revenue requirements for UPI projects and for specific facility approvals.”¹⁶

29. AP submits that a separate needs process is also appropriate in this case. The YM Project is a multi-year project that is significant in scope, and it is most efficient and effective to address project need as early as possible in a needs-specific proceeding, as discussed above. AP also emphasizes the importance of obtaining approval for the project need at this time in order to meet system demand requirements (i.e., customer timelines) and before making major expenditure commitments (e.g., material procurement).

30. Table 2.1 below sets out the estimated timing of the regulatory applications proposed to be submitted to the Commission with respect to the YM Project.

Table 2.1: Anticipated YM Project Regulatory Application Timing

Year	Application
Q3 2024	Need
Q3 2025	Facilities
2025	Future GRA

¹⁴ AUC Decision 2012-233, ATCO Pipelines, Urban Pipeline Initiative – Application Scope, Requirements and Process (September 4, 2012).

¹⁵ *Ibid* at para. 12.

¹⁶ *Ibid*.

SECTION 3 – GU2 – EXPLANATION OF WHY THE PROJECT IS REQUIRED

3.1 Overview

31. This Section provides an overview of the need for the YM Project. As stated in paragraph 2 of this application, the YM Project is required to support the ability of the Integrated Alberta System to service forecast increasing natural gas demand in Alberta, including incremental contracted and forecast demand. The YM Project “will create a new major corridor”¹⁷ that “will provide an additional direct and efficient path for the Peace River System supply to meet Greater Edmonton Area demands”.¹⁸ With this addition, capacity on the Integrated Alberta System will also become available in the southern part of the province due to the more direct flow path to the greater Edmonton area demand.

3.2 Forecast Demand

32. The total incremental demand anticipated on the Integrated Alberta System is approximately 1,350 terajoules per day (TJ/d) by 2030. This is shown in an aggregated manner in the NGTL System Annual Plan¹⁹ (Attachment 1).

33. Approximately 800 TJ/d of incremental Firm Transportation – Delivery (FT-D) contracts were signed on the Integrated Alberta System in 2023, which triggered the need for a system expansion.

34. In addition to the approximately 800 TJ/d of incremental contracted FT-D service, there is approximately 550 TJ/d (500 million cubic feet per day (MMcf/d))²⁰ of incremental forecast demand expected on the Integrated Alberta System by 2030. Design flow increases throughout this forecast period are attributable to industrial, distribution and export requirements and are supported by incremental forecast demand and new FT-D contracts. The NGTL forecast includes approximately 270 TJ/d (250 MMcf/d) of demand in the greater Edmonton area that is not yet contractually underpinned.

¹⁷ Attachment 1. NGTL Annual Plan, p. 2-22.

¹⁸ Attachment 1. NGTL Annual Plan, p. 2-23.

¹⁹ NGTL Annual Plan Figure 2-1 p. 2-17.

²⁰ Page 2-15 in Annual Plan. Note: difference in units; NGTL plan uses volumetric MMcfd, and this application uses energy unit TJ/d.

Table 3.1 Contracted and Forecasted Demand for YM Project in TJ/d

FT-D contracts	800	Total FT-D Contracts -Signed 2023
	300	FT-D Contracts – Greater Edmonton Area
	500	FT-D Contracts – Other Areas
Forecast demand	550	Total System Forecast
	270	Forecast – Greater Edmonton Area
	280	Forecast – Other Area
Total Forecast	1350	Total Incremental Demand

35. A description of some of the projects that support the rationale of the forecast demand are described in Section 7.4.

3.3 Contractual Terms and Underpinning

36. In November 2023, incremental FT-D contracts were signed between NGTL and customers for approximately 800 TJ/d of natural gas transportation on the Integrated Alberta System, including approximately 300 TJ/d²¹ in the Greater Edmonton Area. In accordance with the single system design philosophy defined in the Integration Agreement, and in consultation with AP, NGTL anticipates that the Integrated Alberta System will experience a capacity shortfall, resulting from these new contracts, starting in Q4 2027. Without incremental pipeline system additions, downstream projects including, but not limited to, the Dow Path2Zero project, the Heidelberg Materials CCUS project in Edmonton, and distribution system expansions to support population growth, could suffer significant delays. A more detailed discussion of industry dialogue is included in Section 7.4 of this Application. The YM Project will add the necessary capacity to the Integrated Alberta System to meet this incremental contract and forecast demand. The inability of the existing system to meet contracted and forecast demand is considered in the “Do Nothing” alternative in Section 6.2 of this Application.

3.4 Current Infrastructure

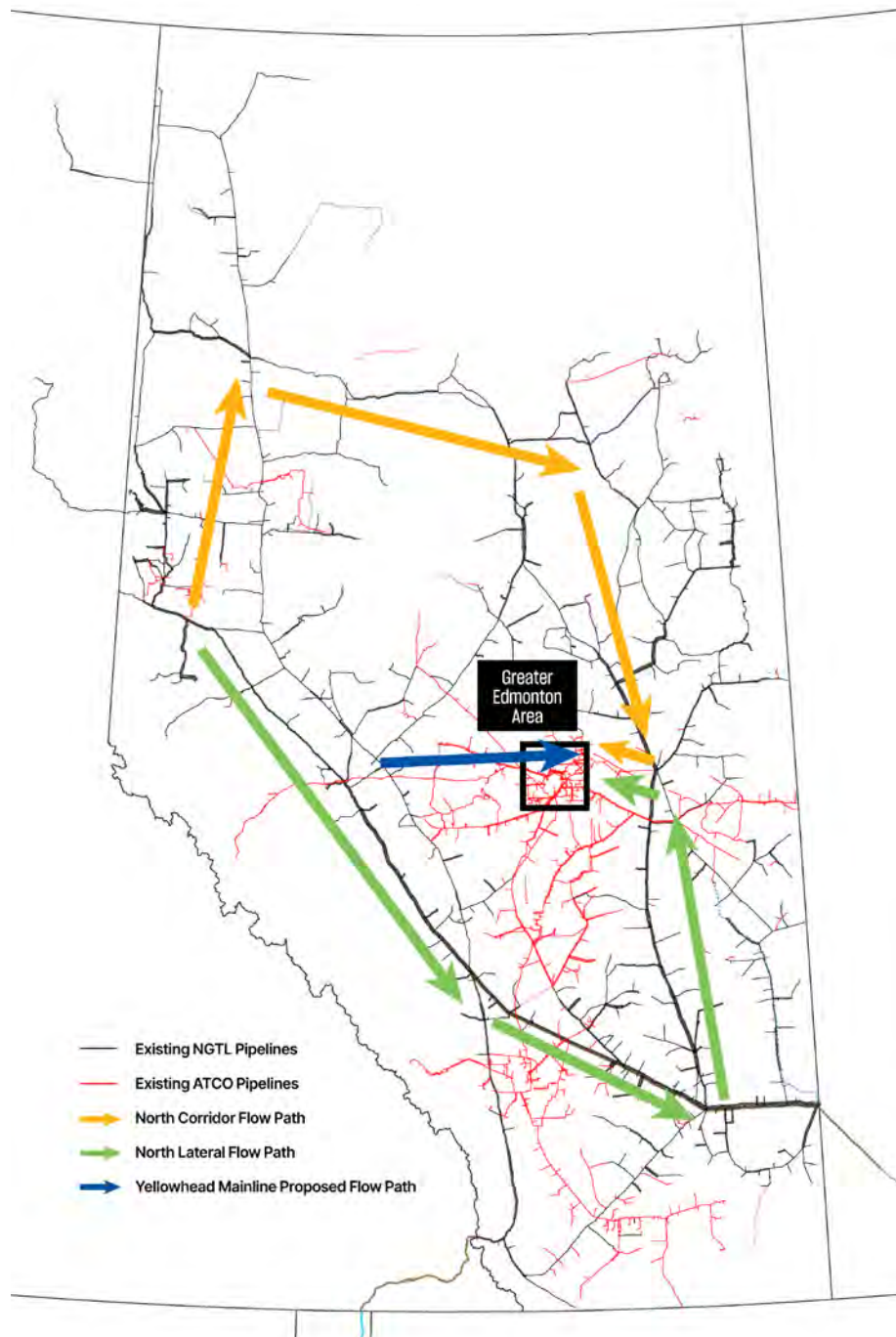
37. Currently, natural gas is supplied to the Greater Edmonton Area through many of AP’s pipeline systems and interconnects with NGTL including, but not limited to, AP’s Pembina, Pioneer, Redwater, Plains and Viking systems, and more specifically in the

²¹ Attachment 1, 2024-02-22, NGTL System Annual Plan, p. 2-22.

case of the Alberta Industrial Heartland, AP's Inland and Norma systems. These two systems are fed through NGTL's North Lateral (NLAT) System and can be supplemented by flow from NGTL's North Central Corridor during low demand and outage periods. The NLAT flow path requires natural gas to travel from northwest Alberta, southeast towards Calgary, and then back north to feed into the AP portion of the Integrated Alberta System east of Edmonton, as illustrated in green (for the NLAT pathway) in Figure 3.1. The North Central Corridor pathway is illustrated in yellow in Figure 3.1.

38. By Q4 2027, this existing infrastructure will not provide sufficient capacity to meet the aggregate system demand on the Integrated Alberta System. This is illustrated in the Annual Plan Figure 2-5 for the Greater Edmonton Area, where the design flow exceeds the design capacity of current infrastructure by 2027.

**Figure 3.1: Representation of the Alberta portion of Integrated Alberta System:
Current Flow Path vs YM Flow Path**



SECTION 4 – GU3 – LARGER INITIATIVE CONFIRMATION

39. The YM Project is a discrete project by AP on the Integrated Alberta System. Once completed, the YM Project, along with other expansion projects identified in the NGTL 2023 Annual Plan, will facilitate natural gas transportation to meet aggregate system requirements on the Integrated Alberta System.

40. It is foreseeable that potential future projects, including connections to, upgrades or expansion of the YM Project (or AP System) may require additional investment by AP. Any such projects would be the subject of separate, future applications brought before the Commission on an as-needed basis. Each application would follow the requirements of AUC Rule 007 and would address the specifics of need for that project. For clarity, customer specific connections are not included in this application. If and when the customer specific projects arise, AP would seek approval from the Commission.

41. The YM assets could also be upgraded or expanded in the future to meet longer-term demand increases that give rise to a need for further capacity on the Integrated Alberta System, if upgrades or expansion of these assets were to be the best alternative to meet the specific need as assessed at that time. Capacity could be added to the YM assets by installing additional compression or by looping. In either case, the relevant project and alternative analysis would be the subject of separate future applications before the Commission.

42. Other expansion projects identified in the NGTL 2023 Annual Plan include a number of potential NGTL facilities intended to increase throughput capability for the Peace River Project Area of Alberta and meet aggregate NGTL System requirements, with target in-service dates in 2028 to 2030.²² The YM Project, with a target in-service date in Q4 2027, is being proposed separately from these proposed additional NGTL facilities.

²² NGTL 2023 Annual Plan, s 2.3.2, pp. 2-19 to 2-20.

43. Notwithstanding potential future connections or upgrades and expansions to the YM assets, this Application is specific to the need for the YM Project. The YM Project, as proposed, is not part of a larger AP initiative.

SECTION 5 – GU4 – SUMMARY OF STUDIES AND ANALYSIS PERFORMED IN IDENTIFYING THE TIMING AND NATURE OF NEED FOR THE YM PROJECT

5.1 Overview

44. As noted in Section 3, natural gas demands are forecast to exceed the capacity of Integrated Alberta System infrastructure starting in Q4 2027 due to additional contracts coming into effect. This is based on an assessment of contractual obligations for customer deliveries on the Integrated Alberta System as well as forecast information indicating a general increase in natural gas demand in Alberta. The rationale for the selection of the YM Project as the best alternative to meet this contracted and forecast demand is discussed in Section 8.

45. This section summarizes the studies and analysis performed by AP and others in identifying the timing and nature of the need for the YM Project.

5.2 NGTL 2023 Annual Plan with respect to the Integrated Alberta System

46. Under the Integration Agreement, a single system design methodology is followed by NGTL for identifying and planning projects on the Integrated Alberta System. This methodology is based on NGTL's Facilities Design Methodology Document and the Guidelines for New Facilities (Attachment 4), which outline the criteria and process for assessing the need, scope, timing and cost of new or expanded facilities on the system.

47. The Annual Plan is an annual report created by NGTL, in accordance to Section 4.5(c) of the Integration Agreement, to identify changes required to the Integrated Alberta System based on design forecasts of receipts and deliveries on the system. The Annual Plan summarizes facilities required to meet transportation service requirements on the Integrated Alberta System. In creating the plan, NGTL analyzes pertinent data and forecasts design flows. NGTL analyzes the ability of existing facilities to meet the design flows and identifies new facilities that would be required. This analysis includes

consultation with AP in regard to the AP system and facilities in the AP footprint. The plan is presented to shippers on the Integrated Alberta System, who provide input on the plan before finalization.

48. As set out in Section 2.2 of the NGTL Annual plan, aggregated design flow on the Integrated Alberta System is forecast to “grow from 17.5 Bcf/d to 19.9 Bcf/d from 2024 to 2030”.²³ The Annual Plan also references in Section 2.3 that “the Peace River area is expected to represent an increasing share of aggregate System supply, upward of 90 percent. Since this area represents such a large portion of total system supply, ensuring that flows out of the Peace River Area and into the various demand markets attached to the NGTL System is critical to the overall balancing of NGTL aggregate System requirements.”²⁴

49. One of the demand centers identified in the Annual Plan is the Greater Edmonton Area. Incremental design flows in the Greater Edmonton Area are “attributable primarily to significant industrial growth and supported by incremental FT-D contracts.”²⁵

50. The document describes the facilities required for the Greater Edmonton Area demands, and Section 2.4 describes the concept of the Yellowhead Mainline that “will provide an additional direct and efficient path for Peace River System Supply to meet Greater Edmonton area demands.”²⁶

5.3 Analysis Specific to the AP System

51. AP and NGTL have cultivated a collaborative relationship in the operation of the Integrated Alberta System. Coordination between the parties with respect to the Integrated Alberta System encompasses a wide range of activities, from daily operational management to meet fluctuating customer demands, to coordinating complex maintenance activities that require specific operational adjustments. Over time, this close cooperation, in alignment with the intent of the Integration Agreement, has fostered a

²³ NGTL 2023 Annual Plan, s 2.2, p. 2-15.

²⁴ NGTL 2023 Annual Plan, s.2.3, p. 2-17.

²⁵ NGTL 2023 Annual Plan, s. 2.4.1 p. 2-21.

²⁶ NGTL 2023 Annual Plan, s.2.4 p. 2-23.

mutual understanding of each other's systems and has enabled AP to understand the optimal interconnections and gas routing strategies for the AP System as part of the broader Integrated Alberta System. AP's knowledge of both the AP System and NGTL System assists it in making informed decisions about the most efficient and effective ways to manage gas flow, enabling reliability and responsiveness to customer needs.

52. In response to NGTL's identification of a proposed expansion project, AP performs its own hydraulic modeling of the AP system to confirm NGTL's results and to ensure the proposal is the best option to meet the contractual and forecasted demand in the area. For the YM Project, AP modelled numerous potential options to bring gas from the NGTL part of the Integrated Alberta System to meet demand in the AP System. As well, AP completed economic analyses to determine the relative costs of these potential options.

53. This review by AP considered various factors, including the geographical location of assets and the complexities of system interconnections. Based on this, AP determined that the existing pipelines (with the exception of the Inland system with significant capacity additions) were not suitable as viable alternatives to the Project due to their specific locations and capacity limitations. The decision to pursue the alternatives outlined in the Application is thus based on a holistic understanding of the system's needs, capabilities, and constraints, reflecting AP's commitment to providing the most effective and efficient solutions for the Integrated Alberta System and its customers.

5.4 Other Studies Supporting the Need for the YM Project

54. Analysis done by the Alberta Energy Regulator (AER), as described in their assessment for Natural Gas Demand in ST98 (Attachment 5), forecasts that "total domestic demand for natural gas in Alberta is estimated to reach 220×10^6 m³/d (7.8 Bcf/d) by 2033 [or approximately 8,316 TJ/d], growing at an average annual rate of 1.5%."²⁷ In addition, "domestic demand for natural gas is expected to increase as the province will

²⁷ Attachment 5 p. 3.

likely increase its consumption of natural gas as a transition fuel to a low carbon economy”.²⁸

SECTION 6 – GU5 – ALTERNATIVES CONSIDERED

6.1 Overview

55. The existing infrastructure and approved expansion projects cannot accommodate the natural gas demand, underpinned by executed customer contracts, by 2027. AP, in conjunction with NGTL, identified and explored several Alternatives to meet this growing demand. This section describes the Alternatives considered and the determination of viability for economic and technical evaluation.

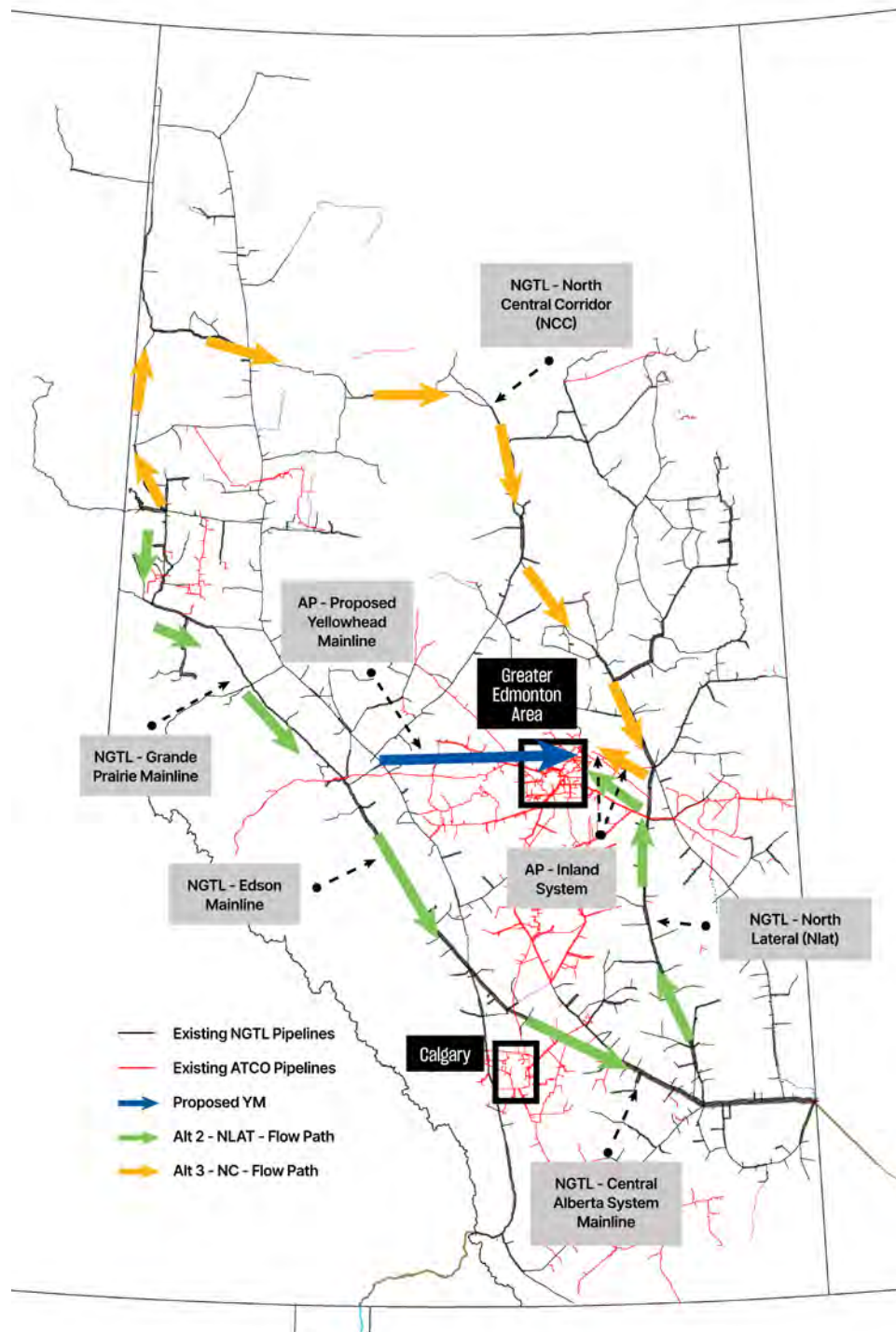
56. The Alternatives can be classified into three main categories:

- Do nothing (Alternative 1);
- Expansion of an existing major gas flow corridor (Alternative 2 and Alternative 3); and
- Addition of a new major gas flow corridor (Alternative 4, including different configurations of same, namely, Alternative 4.1, 4.2 and 4.3).

57. Figure 6.1 shows the flow paths of the Alternatives considered. Other major pipeline flow corridors on the AP system, such as the recently expanded or created Pioneer and Pembina flow corridors, the Plains System, and the Redwater System, would require significantly more infrastructure additions on the AP System and/or NGTL System compared to the alternatives listed above. As such, these alternatives were determined to be not viable based on a holistic understanding of the system's needs, capabilities, and constraints. As a result, potential infrastructure expansions on these pipeline flow corridors were not evaluated any further.

²⁸ Attachment 5, p. 3.

Figure 6.1: Flow Paths of Alternatives Considered



6.2 Do Nothing – Alternative 1

6.2.1 Alternative 1: Do nothing/Status Quo

58. Alternative 1 considers maintaining the status quo, without any changes to the Integrated Alberta System to address growing natural gas demand needs.

59. By 2027, the existing Integrated Alberta System will not be able to meet contracted gas demand (including notable contract volumes in the Greater Edmonton Area). The YM Project is intended to expand the capacity and enhance the efficiency of the province's natural gas network, connecting natural gas producers to key markets and delivering the energy required for Alberta's industrial base and growing population. Alternative 1 would necessarily see the cancellation of pending contracts across the Integrated Alberta System (not solely in the Greater Edmonton Area), significantly limiting residential, commercial, and industrial development in the province, both in the near and long term.

60. Similarly, any downstream economic benefits resulting from the development supported by the YM Project, or potential alternatives, would not be realized.

6.3 Expand Existing Corridor – Alternatives 2 and 3

6.3.1 Alternative 2: NGTL North Lateral Build and AP Inland Expansion

61. Alternative 2 would involve expanding the NGTL NLAT System and the AP Inland system. Service to the Greater Edmonton Area is currently provided, in large part, through the NLAT and Inland Systems. This flow path is shown in green in Figure 6.1, above.

62. The AP Inland System is also the most recent transmission pathway that has been used to expand capacity to the Greater Edmonton Area. Capacity increases on the Inland System will be or have been carried out through the recently approved Inland Loop Phase 2 (AUC Proceeding 29095) and the previously constructed Inland Loop and Norma Extension projects (AUC Proceedings 21258 and 2538 respectively). AP has historically found that the most cost-effective method to add smaller increments of capacity to the

Greater Edmonton Area has been through segmented projects on the Inland System flow path.

63. However, as described below, without large-scale upgrades, the existing Inland System infrastructure and approved expansion projects do not have sufficient capacity to meet the aggregated system need. As discussed below, such large-scale improvements would include pipeline looping and a compressor station installation on the AP transmission system, as well as pipeline looping and compressor station upgrades along a longer flow path that includes the NGTL Edson/Central Mainline and NLAT.

64. Figures 6.2 and 6.3, below, illustrate the scope of system expansion for the NGTL and AP portions of the Integrated Alberta System, respectively, for Alternative 2. The scopes for the NGTL and AP portions for Alternative 2 are summarized below in Tables 6.1 and 6.2, respectively.

Figure 6.2: Alternative 2 – North Lateral Build NGTL Scope

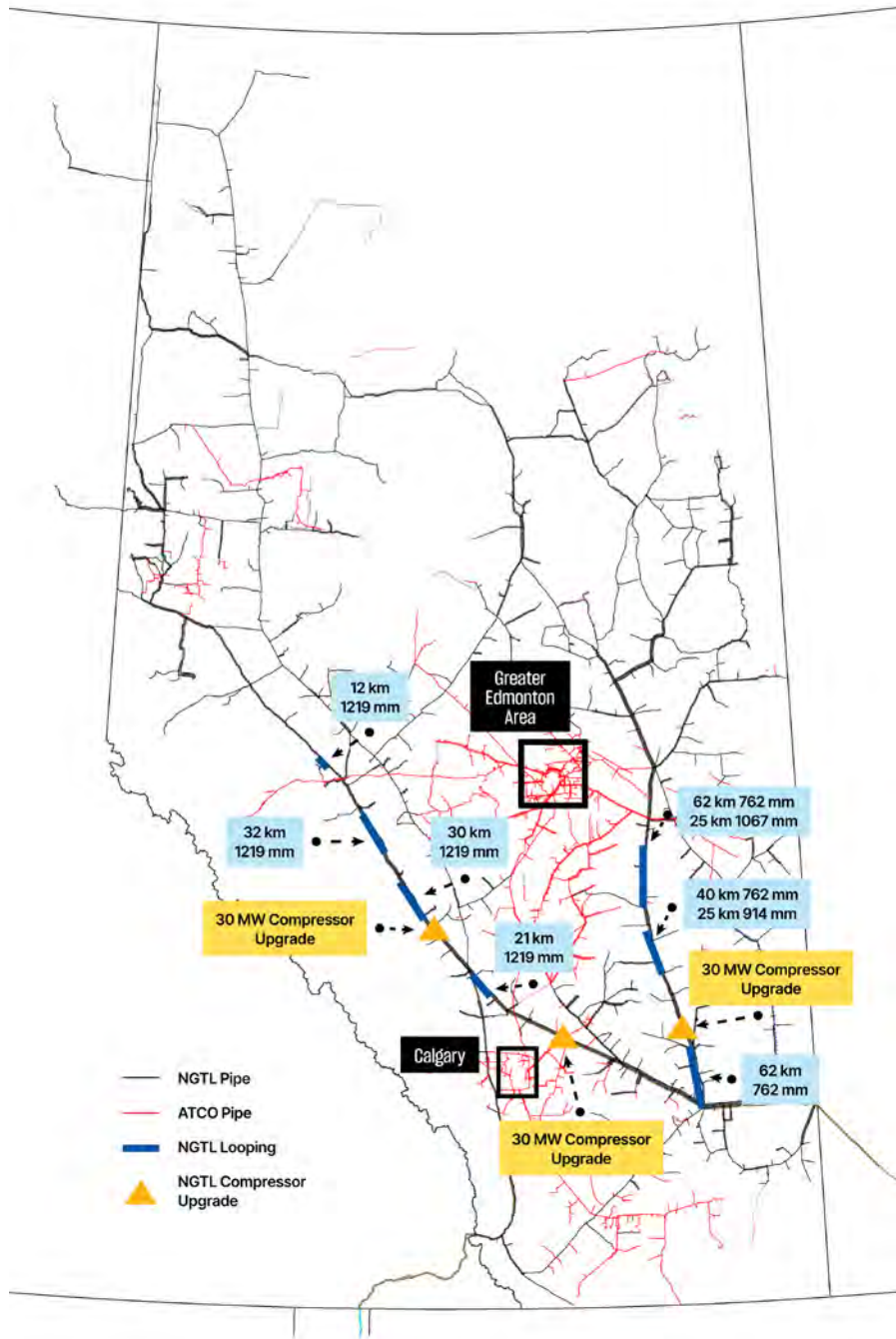


Table 6.1: Alternative 2 – North Lateral Build NGTL Scope Summary

Item	Quantity/Length
30 MW Compressor Expansion	3 units
1,219 mm Looping	95 km
1,067 mm Looping	25 km
914 mm Looping	25 km
762 mm Looping	165 km
Total	310 km

Figure 6.3: Alternative 2 – North Lateral Build AP Scope

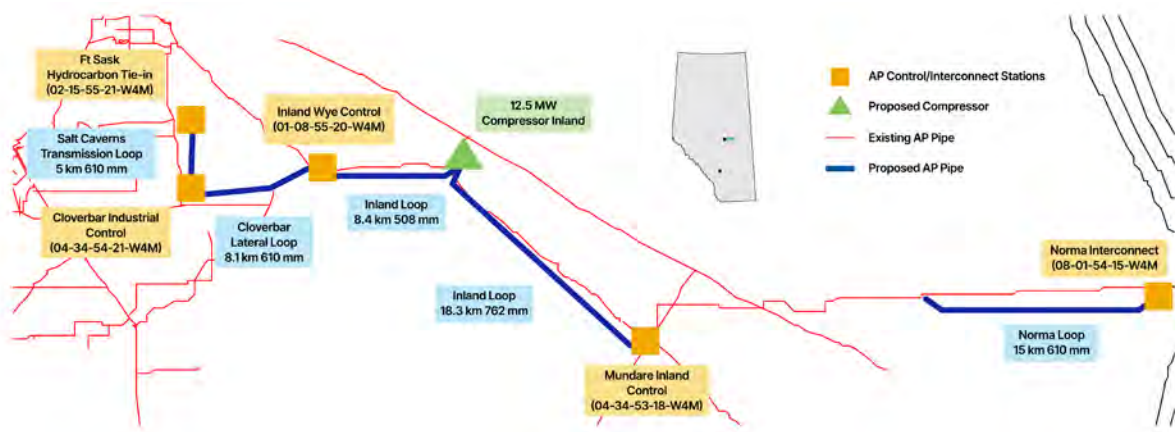


Table 6.2: Alternative 2 – North Lateral Build AP Scope Summary

Item	Size	Quantity/Length
Inland Compressor	12.5 MW	1 unit
Inland Loop	762 mm	18.3 km
Cloverbar Transmission Loop	610 mm	8.1 km
Inland Loop	508 mm	8.4 km
Norma Loop	610 mm	15 km
Salt Caverns Loop	610 mm	5 km
Total		54.8 km

6.3.2 Alternative 3: North Central Corridor and Inland Expansion

65. Alternative 3 considers increasing transmission capacity into the Greater Edmonton Area through the NGTL North Central Corridor (NCC) and the AP Inland system. This proposed flow path is shown in yellow in Figure 6.1, above. Alternative 3 requires the same expansion scope on the AP system as is described for Alternative 2.

For the NGTL system, Alternative 3 would also require a similar length of pipeline looping and intermediate compressor stations along the NCC flow path to increase throughput on this system. However, Alternative 3 would require 90 percent of the looping to be 1,219 mm pipe (vs. 30 percent for Alternative 2), which would be proportionally more expensive than the items included in Alternative 2. Therefore, Alternative 3 is far less cost-effective in meeting the required design flows on the Integrated Alberta System and is not considered a viable alternative relative to Alternative 2.

6.4 Add New Corridor – Alternative 4 (YM Configuration Alternatives)

66. While Alternatives 2 and 3 consider utilizing and expanding existing infrastructure on existing major flow corridors, Alternative 4 considers the construction of a new major flow corridor. AP considered three potential configurations as part of Alternative 4, which included variations in pipe size as well as variation in the number and size of compressor stations.

67. The three potential configurations included as part of Alternative 4 are:

Table 6.3: Alternative 4.1 (YM Configuration 1)

Item	Size	Length (km)
YM Pipeline	762 mm	226
YM Compressor 1	21 MW	N/A
YM Compressor 2	18 MW	N/A

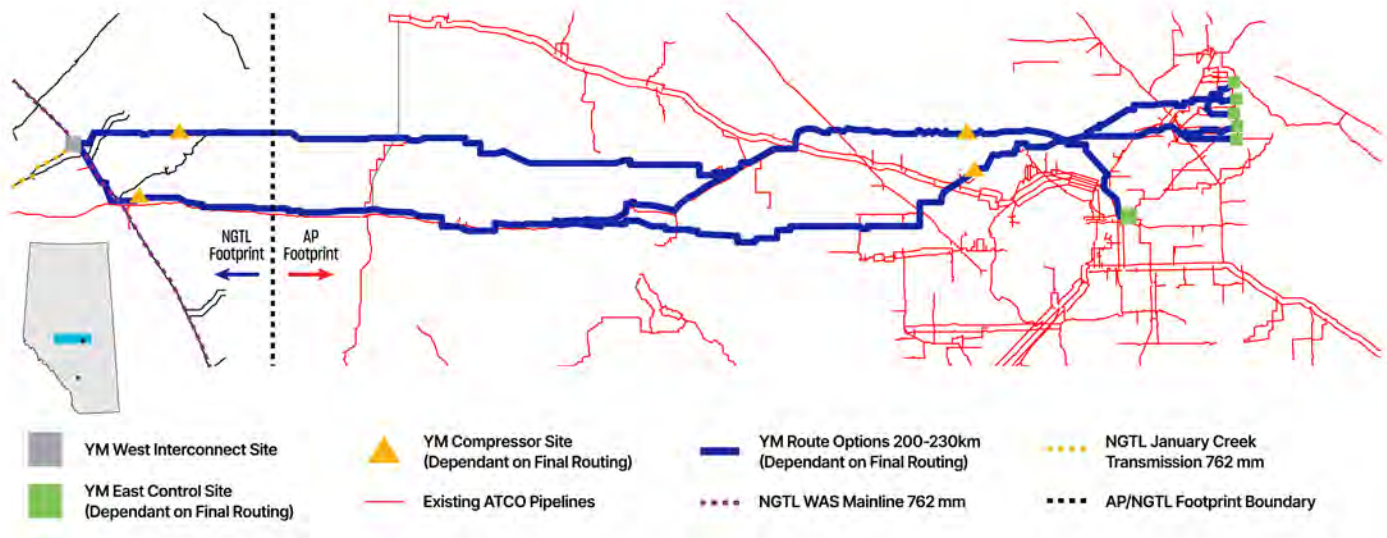
Table 6.4: Alternative 4.2 (YM Configuration 2)

Item	Size	Length (km)
YM Pipeline	1067 mm	226
YM Compressor 1	7.5 MW	N/A

Table 6.5: Alternative 4.3 (YM Configuration 3)

Item	Size	Length (km)
YM Pipeline	914 mm	226
YM Compressor 1	18 MW	N/A

Figure 6.4: Alternative 4 – Potential alignments for YM Project Configurations



68. Figure 6.4 shows the potential high-level alignments for the YM Project configurations described in Tables 6.3, 6.4 and 6.5. All figures in this subsection (6.1, 6.2 and 6.3) are indicative routes showing the options for basic location of each pipeline alternative; however, any final route would need to consider input from consultation, among other factors.

6.5 Summary of Alternatives Considered and Viability for Technical and Economic Evaluation

69. Table 6.6 summarizes the alternatives considered and their viability. A technical and economic analysis of the viable alternatives to determine the selected alternative is completed in Section 7 of this application.

Table 6.6: Summary of Alternatives Considered

Category	Alternative	Description	Viability
Do Nothing	1	Do nothing	No
Expand Existing Corridor	2	NGTL North Lateral Build + AP Inland expansion	Yes
	3	NGTL North Central Corridor Expansion + AP Inland expansion	No
Add New Corridor	4.1: YM Configuration 1	762 mm pipeline with two compressor stations	Yes

Category	Alternative	Description	Viability
	4.2: YM Configuration 2	1,067 mm pipeline with one compressor station	Yes
	4.3: YM Configuration 3	914 mm pipeline with one compressor station	Yes

70. Alternative 1 would maintain the status quo and would result in an inability to meet the contracted and forecast customer demand on the Integrated Alberta System, including those demands in the Greater Edmonton Area. Since Alternative 1 is not a viable alternative, it is not considered in the comparison below and is not discussed further in this Application.

71. Among the alternatives that would expand existing major flow corridors, Alternative 3 is clearly less desirable from a cost perspective than Alternative 2. Specifically, Alternative 3 requires looping with larger diameter piping, although requiring the same total looping length additions as Alternative 2. Given the expected higher cost for Alternative 3 (relative to Alternative 2) as a result of the use of larger diameter piping, AP in conjunction with NGTL determined that Alternative 3 is not viable. Therefore, Alternative 3 is not considered in the comparison below and is not discussed further in this Application.

72. Alternative 2 and Alternative 4 were found to be viable alternatives for technical and economic evaluation.

SECTION 7 – GU6 – TECHNICAL AND ECONOMIC COMPARISON OF ALL VIABLE ALTERNATIVES

7.1 Overview

73. This Section contains a comprehensive evaluation of each of the viable Alternatives outlined in Section 6 (Alternatives 2 and 4), including comparison of technical, economic, and other factors to determine the best alternative to deliver required design flows.

7.2 Technical Analysis of Viable Alternatives

74. The following alternatives are evaluated in detail in this Section:

- Alternative 2: NGTL NLAT Build with ATCO Inland Expansion;
- Alternative 4.1/YM Configuration 1: 762 mm pipe and two compressor stations (21 MW and 18 MW);
- Alternative 4.2/YM Configuration 2: 1,067 mm pipe and one compressor station (7.5 MW); and
- Alternative 4.3/YM Configuration 3: 914 mm pipe and one compressor station (18 MW).

7.2.1 Evaluation of System Efficiency and Reliability of Alternatives Considered

75. With respect to system efficiency, all YM Configurations provide a more direct and shorter path for the movement of gas on the Integrated Alberta System from the supply rich area in the western part of the province eastward to the Greater Edmonton Area. This minimizes the energy required (via compression) to transport gas across the Integrated Alberta System. In contrast, Alternative 2 (NGTL NLAT Build with ATCO Inland Expansion) utilizes an existing flow corridor that requires gas to be transported more than three times the distance from supply to demand and therefore requires significantly more compression. As shown in Figure 6.2, this requires movement of gas south on NGTL Edson lines, east on the NGTL CAS/EAS lines, north through the NGTL NLAT lines, and west through the AP Inland system to the Greater Edmonton Area.

76. There are minor variations between the three YM Configurations. The compression requirement for YM Configuration 1 is highest, followed by Configuration 3 and then Configuration 2. This is due to the lower energy required to move gas through a larger diameter pipeline. The corresponding effects on operating costs are captured in the economic analysis of the Alternatives, below.

77. With respect to reliability, each Alternative has a different level of reliance on compression. In general, the less compression required, the better the reliability of the system. All viable Alternatives considered are generally reliable. The YM Configurations

proposed in Alternative 4, and particularly YM Configuration 3 and YM Configuration 2, would be expected to demonstrate the highest reliability among the options due to their lower reliance on compression. They also have reduced operational complexity, with fewer potential points of failure and lower maintenance requirements.

78. Alternative 2 involves a longer flow path with multiple compression sites, which presents additional operational complexities compared to other options and could result in decreased reliability when compared to Alternative 4 configurations.

7.2.2 Evaluation of Factors Respecting the Implementation of The Project and its Alternatives, Including Timing and Risks During Construction

79. AP evaluated both regulatory process and project scope when considering factors that may impact the implementation of the YM Project and its alternatives.

80. With respect to project scope, the YM Configurations each consist of a -point-to-point pipeline with in-line compressor sites. In comparison, Alternative 2 involves multiple pipeline looping segments and multiple compression locations in each of the AP and NGTL systems. Due to the multiple segments of looping, including the potential for multiple regulatory processes for approval, it would be more difficult to predict timelines for completion of all required segments.

7.3 Economic Analysis of Alternatives

7.3.1 Estimate of the Capital, Operating and Maintenance Costs

81. Tables 7.1-7.5 show a breakdown of the capital cost of Alternative 2 and Alternative 4 (YM Configurations 1, 2 and 3). For Alternative 2, Table 7.1 provides the capital cost of the AP components and Table 7.2 provides the capital cost of the NGTL components. Combined, Table 7.1 and Table 7.2 show the total capital requirements for Alternative 2 for the purposes of the economic comparison of the alternatives. For Alternative 4, Tables 7.3 to 7.5 show the Capital Cost for each respective YM Configuration. Table 7.6 shows annual operations and maintenance costs (O&M) for the first five years for each Alternative.

Alternative 2**Table 7.1: Alternative 2 – Capital by Item for AP component of NLAT Build**

Item	Size	Length (km)	Total (\$Millions)
Inland Loop	762 mm	18.3	163
Cloverbar Transmission Loop	610 mm	8.1	58
Inland Loop	508 mm	8.4	48
Norma Loop	610 mm	15	109
Salt Caverns Loop	610 mm	5	36
Inland Compressor Station	12.5 MW	N/A	205
AP Land	N/A	N/A	20
Total AP			639

Table 7.2: Alternative 2 – Capital by Item for NGTL component of NLAT Build

Item	Size	Length (km)	Total (\$Millions)
Pipelines Looping	1219 mm	95	940
Pipeline Looping	1067 mm	25	210
Pipeline Looping	914 mm	25	180
Pipelines Looping	762 mm	165	985
Compressor Stations (3)	30 MW 30 MW 30 MW	N/A	500
Total NGTL			2,815

Alternative 4:**Table 7.3: Alternative 4.1 (YM Configuration 1) – Capital by Item**

Item	Size	Length (km)	Total (\$Millions)
YM Pipeline	762 mm	226	2,042
YM Compressor Stations (2)	18 MW 21 MW	N/A	555
YM Stations	N/A	N/A	33
YM Land	N/A	N/A	115
Total AP			2,745

Table 7.4: Alternative 4.2 (YM Configuration 2) – Capital by Item

Item	Size	Length (km)	Total (\$Millions)
YM Pipeline	1067 mm	226	2,774
YM Compressor Station	7.5 MW	N/A	191
YM Stations	N/A	N/A	33
YM Land	N/A	N/A	115
Total AP			3,113

Table 7.5: Alternative 4.3 (YM Configuration 3) – Capital by Item

Item	Size	Length (km)	Total (\$Millions)
YM Pipeline	914 mm	226	2,406
YM Compressor Station	18 MW	N/A	259
YM Stations	N/A	N/A	33
YM Land	N/A	N/A	115
Total AP			2,813

Table 7.6: Annual O&M for First Five Years (\$Millions)

Year	2028	2029	2030	2031	2032
Alternative 2 (total AP and NGTL)	159.6	167.8	181.3	184.9	189.7
Alternative 4.1	21.3	20.2	40.7	41.3	42.2
Alternative 4.2	4.0	2.8	4.6	4.8	5.3
Alternative 4.3	8.6	8.3	14.9	15.2	15.8

7.3.2 Economic Assessment, Including Assumptions, Illustrating the Cumulative Present Value of Revenue Requirement over a Multi-Year Term, Depicted, Where Possible, With a Year-by-Year Graphical Representation

82. Cumulative Present Value of Revenue Requirement (CPVRR) values for Alternative 2²⁹ and Alternative 4 (YM Configurations 1³⁰, 2³¹ and 3³²), are shown in Table 7.7. Assumptions relied upon for the CPVRR calculations include the following:

²⁹ Attachment 8.
³⁰ Attachment 9.
³¹ Attachment 10.
³² Attachment 11.

- A. Pipelines depreciation rate: 2.62³³ percent;
- B. Measurement & Regulating Equipment depreciation rate: 4.31 percent;
- C. Compressor Equipment depreciation rate: 3.68 percent;
- D. Property Taxes: 0.1 percent of Applicable Capital;
- E. Inflation Rate: 2.0 percent for 2027 and beyond; and
- F. O&M for compressor stations include fuel and greenhouse gas emissions compliance costs.

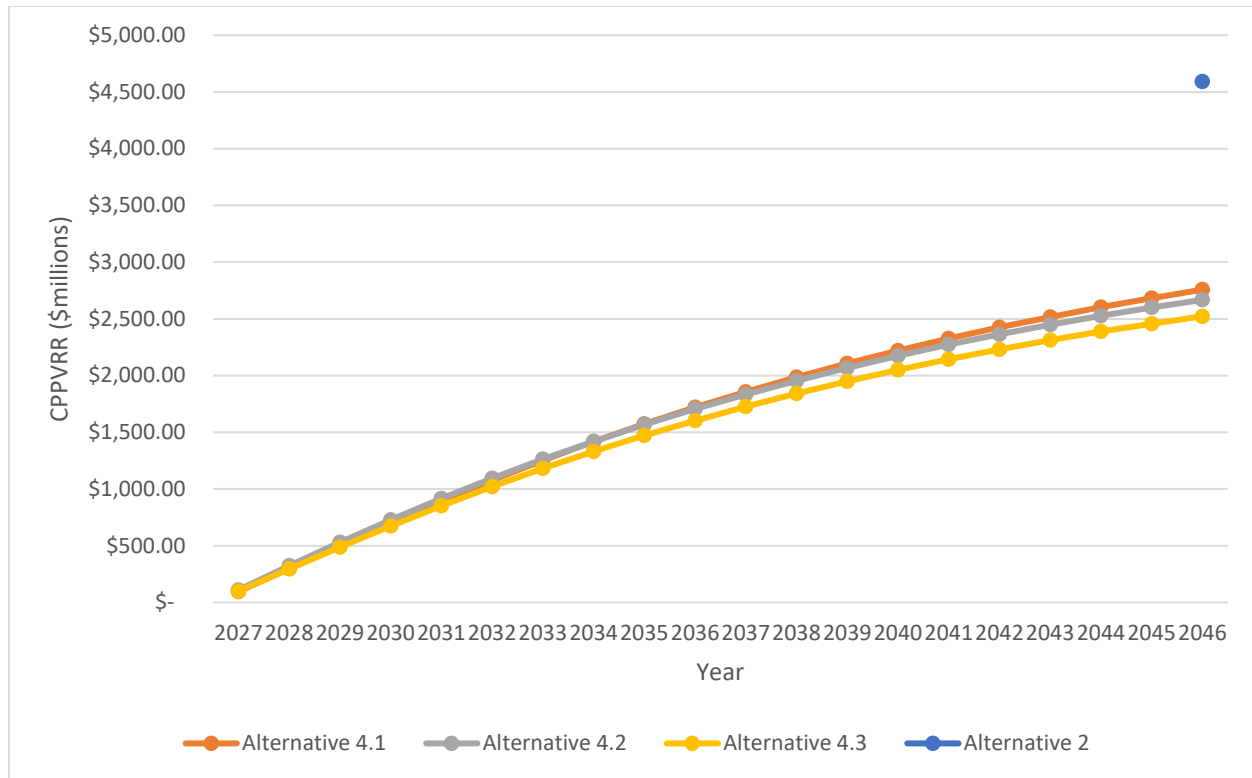
**Table 7.7: 20-Year CPVRR for YM Project and Alternatives
(\$Millions)**

Alternative	Capital Addition	AP 20-Year CPVRR	NGTL 20-Year CPVCOS³⁴	Total 20-Year CPVRR
Alternative 2 – NLAT	3,454 (total AP and NGTL)	647	3,944	4,591
4.1 (YM Configuration 1) – 762 mm	2,745	2,758	N/A	2,758
4.2 (YM Configuration 2) – 1067 mm	3,113	2,667	N/A	2,667
4.3 (YM Configuration 3) – 914 mm / YM Project	2,813	2,523	N/A	2,523

³³ This rate represents total depreciation which includes both life depreciation and net salvage.

³⁴ CPVCOS is the reference used by NGTL. The CPVCOS reference is maintained with any reference to NGTL calculations, as this is the terminology used by NGTL.

Figure 7.1: AP 20-Year CPVRR for Project and Alternatives



Note: For Alternative 2, only the 20-year CPVRR value is provided due to the information available for the NGTL component.

83. Figure 7.1 and Table 7.7 show the CPVRR and CPVRR/CPVCOS respectively. Table 7.7 clearly demonstrates that Alternative 2, which combines costs from both AP and NGTL, represents the highest cost option among the alternatives considered. Figure 7.1 further shows that Alternative 4.3 is the lowest CPVRR.

84. The estimated capital cost for Alternative 2, which would involve expanding existing infrastructure, is forecast to be \$3,454 million, which is approximately \$341 million more costly than the next highest Alternative, and \$641 million more costly than the chosen Alternative (YM Configuration 3). This substantial difference in upfront costs highlights the significant investment that would be required if AP and NGTL were to upgrade and expand existing infrastructure in order to meet growing customer demand on the Integrated Alberta System.

85. The cost disparity between Alternatives 2 and 4 becomes even more pronounced when considering the CPVRR. As discussed below, the CPVRR analysis, which considers both capital and operational expenses over a 20-year time period, further demonstrates that there is a better economic case for pursuing one of the YM Configurations making up Alternative 4 than for upgrading and expanding existing infrastructure pursuant to Alternative 2.

86. The 20-year CPVRR for the YM Configurations (refer to Table 7.7) shows that, based on CPVRR over the 20-year period, Alternative 2 is more than 65 percent more costly than any of the YM Configuration alternatives. However, the variance between the 20-year CPVRR for Alternatives 4.1, 4.2, and 4.3 is relatively modest, with less than a 10 percent difference between the highest and lowest CPVRR values. Alternative 4.3 (YM Configuration 3) has the lowest CPVRR over the 20-year period, which is \$2,523 million. This is \$144 million lower than the next lowest alternative (YM Configuration 2) and makes Alternative 4.3 the lowest-cost choice among the Alternatives considered.

87. Alternative 4.1 (YM Configuration 1) would result in the highest CPVRR among the YM Configurations considered. This higher cost is driven primarily by increased O&M expenses, as shown in Table 7.6, associated with the larger and more numerous compressor stations required for this configuration. Alternative 4.2 (YM Configuration 2), while resulting in a 20-year CPVRR closer to that of Alternative 4.3 (YM Configuration 3), still has a relatively higher estimated CPVRR due to its higher initial capital costs than Alternative 4.3 due to increased pipe size (refer to Table 7.4 and Table 7.5). Despite the potential for operational savings resulting from lower energy cost for compression, the gap between the CPVRR of YM Configuration 2 compared with YM Configuration 3 is not overcome within the 20-year timeframe.

88. Accordingly, the 20-year CPVRR analysis demonstrates that pursuing a new gas supply corridor as proposed by Alternative 4, and particularly Alternative 4.3 (YM Configuration 3), presents a short-term and long-term economic advantage

compared to the upgrading and expansion of existing infrastructure to meet increasing customer demand needs as contemplated in Alternative 2.

7.3.3 Description of Related Infrastructure that will be Impacted and a Cost Estimate for such Facilities

89. As described in Section 6, Alternative 2 would involve investment in both the AP and NGTL Systems. The NGTL infrastructure could be considered “related infrastructure” for the corresponding AP investment. The capital cost of the build proposed in Alternative 2 is outlined in Tables 7.1 and 7.2, with the NGTL 20-Year CPVCOS shown in Table 7.7.

90. Both Alternative 2 and Alternative 4 may require additional system modifications upstream of the tie-in point for the YM Project on the NGTL system. Such modifications would be identical between the Alternatives and would take place solely in the NGTL Footprint under the Integration Agreement. Since the modifications would be within the jurisdiction of the CER, and would be identical as between viable Alternatives considered herein, they are not addressed in this Application.

7.4 Ratepayer and Industry Dialogue

91. As a part of its annual plan process, NGTL presents its Annual Plan for the Integrated Alberta System to the Tolls, Tariffs, Facilities, and Procedures (TTFP) customer forum. The TTFP consists of a broad cross section of customers, including natural gas producers, midstream energy companies, power generators, industrial deliveries, and utilities. In addition, customer associations have representation within TTFP. AP is also a participant in the TTFP and supports NGTL in developing materials regarding AP scope of work in service of NGTL’s overall system design. As discussed above, the Annual Plan includes the forecast supply and demand needs for the Integrated Alberta System and describes proposed facilities to add capacity to the system in response to those needs.

92. The YM Project was presented to the TTFP on May 9, 2023 as part of a progress update toward NGTL’s previous year Annual Plan. The YM Project was made public through NGTL’s 2023 Annual Plan CER filing on March 25, 2024, and also through AP’s

press release on May 8, 2024.³⁵ As noted above, the YM Project was also referenced in AP's 2024-2026 GRA filed in 2023.

93. In addition, AP has engaged with customers and industry to discuss the YM Project. Through these discussions, letters of support for the chosen Alternative have been received from several customers that hold FT-D service on the Integrated Alberta System and require additional capacity facilitated by the YM Project to advance their projects. Customers that have provided public comments or a letter of support for the YM Project include the following:

- Dow Chemical (Dow),
- Keyera,
- Plains Midstream Canada (Plains),
- Heidelberg Materials; and
- McCain Foods.

94. Dow develops basic chemicals and plastics used to make a broad range of innovative and technology-based products and solutions in the packaging, industrial and infrastructure, and consumer care industries. Dow has announced their Fort Saskatchewan Path2Zero expansion project, located in Alberta's Industrial Heartland region, which will create the world's first net-zero emissions integrated ethylene cracker and derivatives site with respect to Scope 1 and 2 greenhouse gas emissions. Notably, Dow has stated the following in support of the YM Project:

Dow appreciates the partnership with ATCO to supply Dow's Path2Zero project. Together these projects will have a profound positive impact on communities, creating jobs and economic opportunity for Alberta... Collaboration with government officials, the community of Fort Saskatchewan, our Indigenous neighbors, and the host of partner companies such as ATCO have been key to enabling Dow's investment to move forward.³⁶

95. Dow has also provided a letter of support, in which they state:

The new pipeline and associated infrastructure are expected to be significant drivers of low-carbon economic growth in Alberta. The Yellowhead Mainline project

³⁵ <https://www.canadianutilities.com/en-ca/about-us/news/2024/122720-atco-energy-systems-announces-its-largest-ever-energy-infrastructure.html>.

³⁶ [Ibid.](#)

will expand the capacity and enhance the efficiency of Alberta's integrated natural gas system, connecting producers to key markets efficiently while delivering the energy required to meet Alberta's growing energy demand.³⁷

96. Keyera indicates in its letter that it is one of Canada's largest independent midstream businesses, holding approximately 1,300 acres of undeveloped land in the Industrial Heartland region, which are the focus of its energy transition business opportunities, including low carbon industrial hubs. In its letter of support, Keyera further states:

Keyera asserts that the Yellowhead Mainline Project is necessary for increasing the capacity and efficiency of Alberta's natural gas network and will be integral to the continued growth of energy, petrochemical and hydrogen projects within the Alberta Industrial Heartland; projects which support Alberta's objectives as outlined in the provincial Natural Gas Vision and Strategy.³⁸

97. Plains is another independent midstream business that has expressed support for the YM Project based on factors that include economic growth, energy security, environmental considerations, and community benefits. Plains states:

This project is not only vital for addressing the energy needs of Alberta but also for supporting the overall economic development of the region.³⁹

98. Heidelberg Materials, a leading supplier of cement, concrete and asphalt, noted that the YM Project has the promise "to bring numerous economic benefits to our community". The company states:

Furthermore, the additional natural gas supply provided by the Yellowhead Mainline project is positioned to help catalyze significant economic growth opportunities. In particular, the supply will be instrumental for the success of our Carbon Capture, Utilization, and Storage (CCUS) project at our Edmonton cement plant.⁴⁰

99. McCain Foods Limited, is a Canadian leader in the food industry, with over 20 thousand employees globally and more than 225 employees in southern Alberta.

³⁷ Attachment 7, PDF p. 1.

³⁸ Attachment 7, PDF p. 3.

³⁹ Attachment 7, PDF p. 4.

⁴⁰ Attachment 7, PDF p. 6.

McCain Foods is actively working to expand its food processing plant in Coaldale, Alberta. In its letter of support, McCain Foods stated that:

This project would provide incremental natural gas delivery capacity to enhance the reliability of Alberta's natural gas network. If approved, the project would expand the capacity for gas supply in Alberta, including for our operations and expansion thereof. Additionally, it would carry with it numerous other benefits to the local area including but not limited to economic benefits as well as 2,000+ jobs during construction.

100. AP has also received letters of support from industry associations and TTFP participants including:

- Explorers and Producers Association of Canada (EPAC), and
- Industrial Gas Consumers Association of Alberta (IGCAA).

101. EPAC represents 78 members who are independent oil and gas producers. In its letter of support for the project, EPAC states:

The Yellowhead Mainline project will connect growing natural gas production in Alberta to rising demand in the Edmonton and Heartland areas. This connection is vital for facilitating economic growth and ensuring that new industrial projects, including emissions reduction projects, have the necessary supply to proceed. The increased natural gas supply will support both new upstream and downstream investments, fostering further economic development and prosperity for Alberta.⁴¹

102. The IGCAA represents ten large industrial companies that consume over 2.0 bcf/d of natural gas in locations throughout Alberta, some of which are in Alberta's Industrial Heartland. Members of IGCAA, as shippers on the Integrated Alberta System, "have a vital interest in the Yellowhead Mainline Project." IGCAA also states:

The new pipeline infrastructure is expected to be a significant driver of lower-carbon economic growth in Alberta. The Yellowhead Mainline project will expand the capacity and enhance the efficiency of the province's natural gas network, connecting natural gas producers to key markets and delivering the energy needed for Alberta's growing energy demand.⁴²

⁴¹ Attachment 7, PDF p. 7.

⁴² Attachment 7, PDF p. 9.

103. In addition, the Canadian Association of Petroleum Producers (CAPP) has also recognized the importance and need for the YM Project. In its Oral Argument summary filed in the AP 2024-2026 GRA proceeding, CAPP stated that:

The ability for AP to provide timely and adequate transportation service to shippers as part of the Integrated Alberta System is critical to the commercial interests of CAPP Members. CAPP submits that **impairing this ability could cause material financial harm** to the CAPP members. [emphasis added].⁴³

104. Lastly, AP has received letters of support from several of Alberta's economic development associations:

- Alberta's Industrial Heartland Association (AIHA),
- Economic Developers Alberta (EDA),
- Edmonton Global,
- Calgary Chamber of Commerce, and
- Business Council of Alberta (BCA).

105. The AIHA is a non-profit organization founded to guide investment attraction to Alberta's Industrial Heartland. AIHA is governed by a board of directors comprised of the five municipal partners that have land within the geographic boundaries of the Alberta Industrial Heartland that includes the City of Fort Saskatchewan, Lamont County, Strathcona County, Sturgeon County, and the City of Edmonton. AP presented to AIHA and its board of directors on the YM Project on May 31, 2024. In its letter of support for the YM Project, the AIHA states:

We are grateful that ATCO continues to support the development of new business and expansion of existing industrial activity in the Heartland with visionary infrastructure projects. The Yellowhead Mainline Project will create jobs, enable billions in new investment and drive Alberta's Hydrogen roadmap and Natural Gas vision and Strategy.⁴⁴

106. Further, the AIHA notes that the project achieves two key goals for the Industrial Heartland-Designated Industrial Zone (IH-DIZ):⁴⁵

First, the Project enables reliable access to natural gas, thereby supporting a key regional advantage. Second, the Project has the potential to achieve the needed

⁴³ Exhibit 28369-X0199, CAPP Summary of Oral Argument (February 22, 2024) para. 10.

⁴⁴ Attachment 7, PDF p. 10.

⁴⁵ <https://www.alberta.ca/industrial-heartland-designated-industrial-zone>.

regulatory approvals in time to support the array of projects currently under study in the region today.⁴⁶

107. EDA is a non-profit organization with a board of directors of economic development professionals from regions across Alberta. Its mandate includes to “support Alberta communities in fostering sustainable community economic prosperity.” In its letter of support, the EDA notes that:

...this project will deliver natural gas more efficiently to the Industrial Heartland, alleviating the current bottlenecks and inefficiencies in the system. This enhanced capacity is essential for accommodating Alberta’s expanding gas needs and will bolster the province’s ability to support new businesses and growth areas.⁴⁷

108. Edmonton Global is a foreign direct investment and international business development agency, representing 14 municipalities in the Edmonton region. Its vision is to make the Edmonton region the choice location for global investment and building a sustainable and prosperous future for the Edmonton region. In its letter of support for the YM Project, Edmonton Global states:

This critical infrastructure also demonstrates that Canada’s path to net zero greenhouse gas emissions truly does run through the Edmonton region. We have demonstrated Alberta, and the Edmonton region in particular, is the home to world leading, large-scale industrial decarbonization projects. The Yellowhead Mainline project will not only enable Dow’s Path2Zero Project, but it will also allow our region to attract investment in other projects to decarbonize hydrogen, chemicals, cement and steel production.⁴⁸

109. The Calgary Chamber of Commerce provided a letter of support for the YM Project, which stated:

By expanding system capacity within the province’s intra-provincial pipeline system, the Yellowhead Mainline project will unlock additional domestic markets for Western Canada’s natural gas producers, creating tax and royalty revenue that will benefit all Albertans, while also increasing the availability of low-cost natural gas to incent future industrial investment. Critically, the project will also help drive economic growth and facilitate investment in low-carbon technologies and products including carbon capture, hydrogen, petrochemicals and building material—industries that are central to the province’s plans to diversify its economy.

⁴⁶ Attachment 7, PDF p. 10.

⁴⁷ Attachment 7, PDF p. 11.

⁴⁸ Attachment 7, PDF p. 13.

While many of the jobs and much of the capital investment associated with this project will be centered in Alberta's industrial Heartland, the indirect economic benefits the pipeline unlocks will be shared by business across the province—including within Calgary.⁴⁹

110. The BCA is a non-partisan policy organization whose 135 chief executive members represent the majority of Alberta's private sector investment, job creation, exports, and research and development. In its letter, the BCA stated:

The Edmonton and Industrial Heartland areas are brimming with economic potential. Proposed petrochemical, hydrogen, and carbon capture and storage projects put this region at the forefront of Alberta's next wave of major project development. The province stands to benefit from billions of dollars in capital investment, tens of thousands of construction and facility operation jobs, and an infusion of service-supporting government revenues.

However, this massive economic potential will be limited by a forecasted shortfall in capacity to efficiently and cost-effectively move more natural gas from Northwest Alberta directly to the Edmonton/Fort Saskatchewan area. A failure to enable timely access to natural gas service will hinder the vast economic potential of the region—and therefore Alberta's long-term prosperity.⁵⁰

111. The support provided for the YM Project represents a broad cross-section of customers and industries who identify the YM Project as a necessity not only in service of their own projects, but also to provide a growing market for producers. Further, the YM Project is recognized as a driver of economic development in Alberta by numerous associations responsible for advocacy of growth in this Province. The YM Project is foundational to numerous opportunities already in flight, and critical to solidifying future industry projects currently under consideration.

112. In addition to the letters of support received from the customers, industry associations, and economic development groups, AP received letters of support from:

- Sturgeon County, and
- Strathcona County.

⁴⁹ Attachment 7, PDF p. 15.

⁵⁰ Attachment 7, PDF p. 16

113. In its letter, Sturgeon County expressed their support for the YM Project and noted that:

We are deeply appreciative of ATCO's continued support of new businesses and the expansion of existing industrial activity in the region through visionary infrastructure projects. The Yellowhead Mainline Project will create jobs, enable billions in new investment and drive Alberta's Hydrogen Road Map and Natural Gas Vision and Strategy.

Sturgeon County, as part of the Designated Industrial Zone (IH-DIZ), will be home to several new investments focused on the production of chemical products as well as low-carbon hydrogen and power generation. The region's competitive advantage for business attraction relies on the availability of low-cost, abundant feedstocks for these facilities. As natural gas production shifts to more productive and distant fields such as the Montney Basin, projects like the Yellowhead Mainline will help maintain the Counties' competitive position.

Sturgeon County continues to engage with global investors exploring projects in decarbonized power generation, hydrogen and blue ammonia production, data centers, chemical and plastics production, biofuel production, and more. These projects depend on access to natural gas and are poised to fuel a provincial and global transition to a low-carbon economy.⁵¹

114. For its part, Strathcona County stated in their letter that:

The Yellowhead Mainline Project will provide important economic benefits for the region and Alberta, particularly through job creation during the construction phase. Local companies stand to benefit from these opportunities, ensuring a positive impact on our community and economy. Additionally, the project's potential of additional natural gas supply is key to enabling future industrial growth that will enable future downstream industries. This increase in capacity will help sustain the county's growth and contribute to the long-term economic prosperity of the area.

The expansion of natural gas infrastructure will not only support ongoing and future development projects but will also strengthen our ability to attract new investments in key sectors such as energy and petrochemicals. The anticipated downstream projects facilitated by this pipeline will bring further job creation and business opportunities, further reinforcing Strathcona County's role as a vibrant and growing hub in Alberta.⁵²

⁵¹ Attachment 7, PDF p. 17.

⁵² Attachment 7, PDF p. 18.

115. AP has compiled these letters into Attachment 7. AP expects that additional letters of support may be received and will update the Commission accordingly throughout the Application process.

116. AP has also met with Utilities Consumer Advocate (UCA), Consumers' Coalition of Alberta (CCA), City of Calgary, and the Western Export Group (WEG) to provide information regarding the proposed YM Project prior to filing this Application. Through these discussions, AP gave notice of the YM Project and Application timing, and provided these groups with an opportunity to ask questions, become aware of the project, its drivers, alternatives and the economic benefits.

7.5 Land Use Impacts

117. The high-level land use impacts of Alternatives 2 and 4 are summarized in Table 7.8 below.

Table 7.8: Relative Land Impacts between Alternatives

	<u>Alternative 2</u> NGTL NLAT Build with ATCO Inland Expansion	<u>Alternative 4.1</u> <u>(YM Configuration 1)</u> YM 762 mm with two compressor stations	<u>Alternative 4.2</u> <u>(YM Configuration 2)</u> YM 1067 mm with one compressor station	<u>Alternative 4.3</u> <u>(YM Configuration 3) /</u> <u>YM Project</u> YM 914 mm with one compressor station
Total pipeline length (approx.)	365 km	226 km	226 km	226 km
Land Parcels directly affected	Approximately 648	Between 346 to 425	Between 346 to 425	Between 346 to 425
Crown Land/Traditional Indigenous Land Use	Between 28% to 33%	Between 7% to 10%	Between 7% to 10%	Between 7% to 10%
Parallel to existing large linear infrastructure	95% to 100%	Up to 97%	Up to 97%	Up to 97%
Impacts to Provincial or Federal Parks	1% (Dinosaur Provincial Park and Snake Head Natural Area)	0%	0%	0%
Forested Areas	Approximately 30% to 35%	35%	35%	35%

118. AP considers the land impacts for the YM Configurations evaluated as part of Alternative 4 to be approximately equivalent. The principle differences between configurations would be due to the pipe size, as there may be a lower impact for pipelines with smaller diameters and vice versa. However, any difference in impact across the

YM Configurations is expected to be marginal because the proposed pipeline diameters do not vary significantly from each other. Accordingly, differences in land impacts across the YM Configurations will depend mostly on pipeline route selection which is independent of which YM Configuration is pursued.

119. The relative land impacts for Alternative 4 are expected to be much lower than for Alternative 2. This is because the total length of pipeline required for each of the YM Configurations assessed in Alternative 4 would be much less than for Alternative 2, and associated land impacts are expected to be proportionally lower. In addition, as shown in Table 7.8, there would be lower use of Crown Land with Traditional Land Use impacts and lower impact to forested areas for the YM Configurations proposed in Alternative 4 than for Alternative 2. The YM Configurations also are not expected to impact designated provincial or federal parks. In comparison, as shown in Table 7.8, approximately 1 percent of the project as proposed in Alternative 2 would impact Dinosaur Provincial Park and Snake Head Natural Area.

120. Therefore, on the basis of high-level land impacts, Alternative 4 is preferred to Alternative 2, and the YM Configurations considered as part of Alternative 4 are considered materially equivalent to each other.

SECTION 8 – GU7 – PREFERRED ALTERNATIVE

8.1 Overview

121. This section discusses AP's assessment, based on the analysis set out above, that Alternative 4.3 (YM Configuration 3) is the preferred option for addressing the identified need for capacity expansion of the Integrated Alberta System.

122. AP has prepared this Application for the YM Project because the existing facilities on the Integrated Alberta System cannot meet existing and forecast demand for transportation service, starting in Q4-2027. NGTL has executed contracts for service on the Integrated Alberta System that will exceed existing system capacity by Q4-2027. Alternative 4.3 represents the best alternative to meet that capacity requirement.

8.2 Rationale for Selected Alternative and Schedule

123. As outlined in Sections 6 and 7 of this Application, AP has evaluated multiple alternatives to determine how to best serve existing and additional requirements for transportation service on the Integrated Alberta System.

124. AP has selected Alternative 4.3 for the YM Project, which involves approximately 226 km of 914 mm pipeline and one 18 MW compressor station. This configuration is the best of all of the Alternatives explored, as described below.

125. The review set out in Section 7.3 of this Application demonstrates that Alternative 4.3 (YM Configuration 3) is the most economical solution among the viable alternatives with a CPVRR of \$2,523 million:

- Alternative 4.1 (YM Configuration 1) would have a 20-year CPVRR \$235 million higher than Alternative 4.3.
- Alternative 4.2 (YM Configuration 2) would have a 20-year CPVRR \$144 million higher than Alternative 4.3.
- Alternative 2 has the highest CPVRR of all viable Alternatives \$2,068 million higher than Alternative 4.3.

126. The review set out in Section 7.2 of this Application demonstrates that Alternative 4.2 (YM Configuration 2) best satisfies the technical considerations, as it is the Alternative that requires the least compression, increasing operational efficiency:

- Alternative 2, while leveraging existing infrastructure, still requires substantial investments in compression and pipeline looping. However, this alternative utilizes the most compression and has a flow path three times longer than that of the Alternative 4 (YM Configuration 1, 2, and 3), resulting in the highest line losses of all the alternatives. Therefore, Alternative 2 is the least operationally efficient alternative.
- Alternative 4.1 (YM Configuration 1) relies on two compressor sites, *versus* one compressor site for each of Alternative 4.2 and Alternative 4.3, and also has the highest compression requirement amongst the YM Configurations. Therefore, between the YM Configurations, Alternative 4.1 is least operationally efficient.

- Alternative 4.3 (YM Configuration 3) requires more compression than Alternative 4.2 (YM Configuration 2), and therefore Alternative 4.3 is slightly less operationally efficient than Alternative 4.2.

127. For land impacts, the three YM Configurations considered for Alternative 4 were determined to be materially equivalent, with minor variances due to pipe size as discussed in Section 7.5. Alternative 2 would have the highest land impacts due to longer length of pipeline construction, greater impacts on Crown Land with Traditional Land Use, and greater impacts on forested areas.

128. As shown in the table below, where a higher number is better, the recommended Alternative (4.3) has the highest score. This Alternative is the most optimal (or one of multiple most optimal Alternatives) in every category of consideration. It has the lowest 20-year CVPRR and sufficient capacity to meet forecast demand.

Table 8.1: Relative Ranking of Alternatives
(A ranking of 4 indicates that the Alternative is the most optimal among the Alternatives considered for the subject category)

Alternative	Technical (Operational Efficiency, Reliability, Project Scope) (20%)	Cost (CPVRR) (70%)	Land impacts (10%)	Total
Alternative 2	1	1	1	1
Alternative 4.1 (YM Configuration 1)	2	2	4	2.2
Alternative 4.2 (YM Configuration 2)	4	3	4	3.3
Alternative 4.3 (YM Configuration 3)	3	4	4	3.8

129. By considering these factors holistically, AP determined that Alternative 4.3 (YM Configuration 3) is the best choice for meeting the growing demand for gas on the Integrated Alberta System, due to the lower capital cost and CPVRR.

8.3 The Implementation Schedule for the Alternative

130. As referenced in Paragraph 15, NGTL issued the Decision Summary that directed AP to proceed with the YM Project. The document specifies, in the Reasons for the

Decision, that the project is required by Q4 2027 to align with contractual commitments. Figure 8.1 below shows the milestone schedule for the YM Project to meet the timing of contractual requirements.

131. As illustrated in the milestone schedule, certain activities for the YM Project will occur concurrently with the Need Application process. These activities include early engagement land consultation, engineering, and field programs to develop the pipeline route and prepare the facilities application. The purpose of early engagement land consultation is to gather input from landowners and other directly affected parties to determine the route that has the best support among these stakeholders and advance technical studies appropriately. Field programs will be focused on gathering the necessary technical information in areas such as environment, geotechnical data, and water course crossings, to similarly make determinations about pipeline routing.

132. Should the Commission approve this Application, AP will then submit a facilities application for the YM Project for review by the Commission. It should be noted that, if the Commission approves the need for the YM Project, AP will proceed with ordering pipe and other long lead materials. Therefore, AP will be making financial commitments for these materials concurrently with the Commission's evaluation of the facilities application. This is crucial to ensure materials are available in time for construction in order to achieve the planned in-service date of Q4 2027. Similarly, should the Commission approve the project Need, AP will proceed with completing right-of-way agreements concurrently with the facilities application process. Also, consistent with mandated practices, approval of the YM Project Conservation and Reclamation Plan with the Alberta Energy Regulator, as well as approval of the Historical Resources Impact Assessment with the Alberta Department of Arts, Culture, and the Status of Women, will be sought concurrently with the facilities application.

133. Initiation of construction is planned to occur in Q3 2026, after the approval of the facilities application. This construction start timing is essential to meet the proposed in-service date in Q4 2027.

Figure 8.1: YM Project Forecast Milestone Schedule

Milestone	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4	2026 Q1	2026 Q2	2026 Q3	2026 Q4	2027 Q1	2027 Q2	2027 Q3	2027 Q4
Need Application														
Early Engagement														
Field Programs														
Consultation and Land Acquisition														
Long lead materials														
Facilities Application														
Environmental and HRA approvals														
Construction														
Commissioning														

SECTION 9 – PUBLIC INTEREST AND ECONOMIC BENEFITS

9.1 Overview

134. The sections above detail the need for the YM Project in accordance with AUC Rule 007 requirements. Section 9 provides additional discussion regarding the project's impact on the public interest in an effort to further inform the Commission's assessment of this Application.

135. In particular, this section discusses the anticipated economic benefits to the Province of Alberta that would result from YM Project construction and operation. In order to be helpful, it also provides an analysis of the potential rate impact to the average ATCO Gas (AG) low use residential customer as a result of the incremental revenue requirement associated with the YM Project, concluding that such impact would be minimal.

9.2 Investment in Alberta Economy

136. The YM Project represents a significant investment in Alberta to meet the growing demand for natural gas in the province. Section 5 of this Application includes a summary of studies and other analysis related to the increase of natural gas demand in Alberta, supporting the need for the YM Project. Based on the information and analysis discussed above, the YM Project is necessary to meet incremental contracted and forecast natural gas demand in Alberta and, by adding capacity for natural gas deliveries within the province, the YM Project will enable natural gas development and investment in Alberta.

137. The YM Project will provide critical infrastructure in the Province of Alberta and will foster and create economic growth by efficiently connecting natural gas production to consumers. The benefits of the YM project have been summarized in Attachment 6 of this Application.

138. AP considers its investment in the YM Project will play a key role in driving economic growth in Alberta. Without such investment in natural gas transmission infrastructure, economic development in the Province of Alberta could be adversely impacted.

139. The YM Project is supported by the long-term natural gas reserves of the Western Canadian Sedimentary Basin (WCSB). The WCSB is one of the largest supply basins in North America and provides access to vast relatively low-cost reserves, with an estimated resource of 1,105 Tcf¹ which represents 21 percent of the total North American gas resource.⁵³

9.3 Rate Impacts of the YM Project

140. AP, working with AG and leveraging publicly available information from NGTL's rate mechanics, has completed an analysis to provide an indication of the potential rate impact to the average low use residential customer serviced through AG's tariff as a result of the incremental revenue requirement associated with the YM Project and contractual inputs. Although neither AG rates nor NGTL rates are in the scope of the application, AP is presenting information on potential AG rate impacts to the average low use residential customer so that all parties can better assess the public benefit of the YM Project, as discussed above.

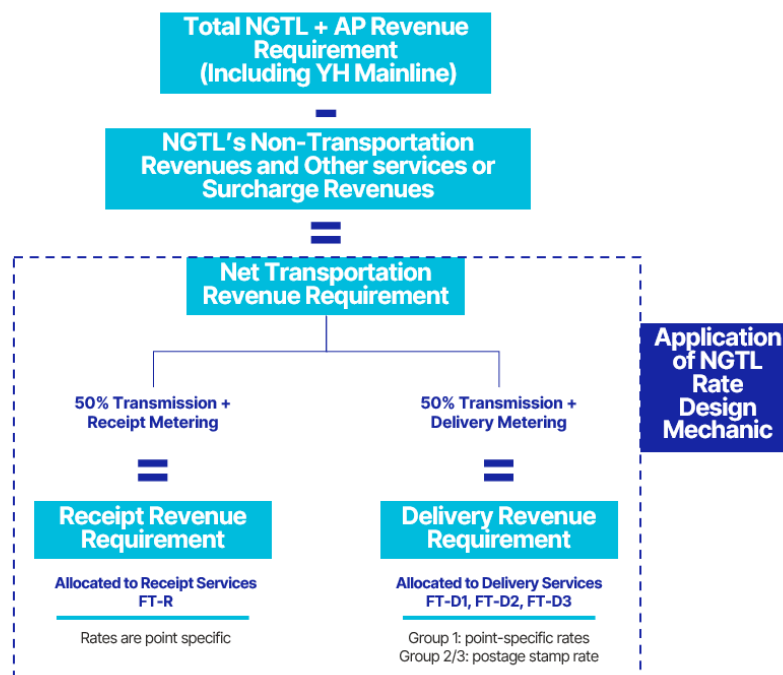
141. The YM Project, as discussed in Section 3, is designed to meet overall contracted and forecast demand on the Integrated Alberta System, including both existing and incremental contracts. Under section 4.8 of the Integration Agreement, the increased AP revenue requirement associated with the YM Project will be added to AP's overall revenue

⁵³ Attachment 1. NGTL- Annual Plan A4-2.

requirement, which is then added to NGTL's revenue requirement, to determine the overall Integrated Alberta System revenue requirement that is recovered from all billing determinants on the Integrated Alberta System. The Integrated Alberta System revenue requirement is allocated as per NGTL's rate design methodology, as approved by the CER.

142. As illustrated in Figure 9.1, the Integrated Alberta System revenue requirement is first split 50/50 between receipt (Firm Transportation – Receipt, or FT-R) and delivery (Firm Transportation – Delivery, or FT-D) functions, and then further split into Group 1 Service (FT-D1), Group 2 Service (FT-D2) and Group 3 Service (FT-D3) rates through allocation factors that are a function of the distance and diameter of pathing to delivery points as per NGTL's rate design mechanics. AG exclusively holds FT-D3 service, which attracts a 20 percent premium on top of its allocation factor when compared to FT-D2 rates. This premium is for the unique aspects of FT-D3 service relative to FT-D2, the primary aspect being that it is the last of the delivery functions to be curtailed in the event of system constraints.

Figure 9.1: Revenue Requirement to NGTL Rates Illustration



143. AP undertook a rate impact analysis specific to the average low use residential customer on AG's system by leveraging its understanding of AG's contract amounts, other gas utilities' incremental FT-D3 service, the incremental FT-D2 contracts previously stated, and NGTL's recent open season (i.e., offering of additional contract volumes). The subsequent paragraphs outline the rate impact in a sequence, covering the incremental YM Project revenue requirement, NGTL's recent open season, AG's incremental contracts and AG's customer growth. The impact of each sequence builds upon the previous one, as detailed in the subsequent paragraphs and Figure 9.2.

144. For simplicity, the rate impact analysis presented in this section does not include a detailed forecast for every AG rate group, but rather relies on the forecast growth provided in the AG 2024 Rider T Application⁵⁴ with simplified assumptions pertaining to further forecast growth for the ultra-high use customer rate group.

145. AP used the incremental revenue requirement from the YM Project for a full plant in-service year of 2028, as well as a full year of declared contracts from the YM Project. Considering the incremental revenue requirement from the YM Project exclusively, and the currently executed FT-D2 and FT-D3 associated with other gas utilities, it is anticipated that the AG's Rider T expense in 2028 will increase by approximately \$2.1 million relative to its 2024 approved Rider T application. As a result, the corresponding annual Rider T cost for the average AG low use residential customer associated with the YM Project is anticipated to increase by approximately \$0.88 annually in 2028, as compared to 2024.⁵⁵

146. On July 5, 2024, NGTL posted an Expansion Capacity Open Season for FT-D1 at the Empress and McNeil Borders for 160 TJ/d,⁵⁶ with the ability to re-allocate capacity upstream. In this analysis, AP assumed this open season will be fully subscribed and split 50/50 between the FT-D1 and FT-D2 group delivery points. With the addition of the assumption of 160 TJ/d shared between FT-D1 and FT-D2 groups, it is anticipated that

⁵⁴ Exhibit 28582-X0001.

⁵⁵ The 2024 cost is calculated using the low use Approved Rider T rate of \$1.258 less \$0.035 that relates to prior year under collection. $\$1.223 \times 105\text{GJ} = \128.41 .

⁵⁶ As per TC Customer Express; <https://www.tccustomerexpress.com/5231.html>

AG's Rider T expense in 2028 will decrease by approximately \$0.08 million relative to its approved 2024 Rider T application. The resulting impact of this factor on the annual Rider T cost for the average AG low use residential customer is anticipated to be a decrease of approximately \$0.91 annually in 2028. When combined with the preceding factors, the cumulative impact is a reduction of \$0.03 annually, as compared to 2024.

147. AP is aware that AG has contracted for approximately 238 TJ/d of FT-D3 across the province.⁵⁷ AG contracts for incremental service, and renews existing contracts, with a view to its long-term need for transportation on the Integrated Alberta System to meet its customers' peak demand requirements. The resulting annual costs stemming from AG's contracts with NGTL are reflected in AG's annual Rider T Application.⁵⁸ AG's contract utilization for the 2023/24 winter heating season was 98.8 percent. AG signed for the 238 TJ/d of incremental FT-D3 contracts for a 2027 in-service date resulting from its annual forecast review and current contract utilization. Relative to its 2024 FT-D3 contracts, these incremental contracts represent a 9 percent increase in the overall contracts that AG holds.

148. With these incremental contracts, it is anticipated that AG's Rider T expense in 2028 will increase by approximately \$23.6 million relative to its approved 2024 Rider T application. The corresponding annual Rider T cost impact as a result of this factor for the average low use residential customer is anticipated to be an increase of approximately \$9.68 annually in 2028. When combined with the preceding factors, the cumulative impact is an increase of \$9.65 annually, as compared to 2024.

149. AG contracts on a forecast basis to meet the needs of its customers under peak demand conditions. Assuming additional AG ultra-high use customers manifest as new billing determinants connected to the AG system to match the forecast for AG's FT-D3 service, the ultra-high use rate group would have a corresponding higher billing demand.

⁵⁷ AP gathers longer-term information regarding future gas transportation requirements of AG to incorporate into its hydraulic modeling of the AP and NGTL systems in consultation with NGTL. The AG forecast growth information is shared with NGTL for use in generating the overall Integrated Alberta System forecast and the NGTL System Annual Plan.

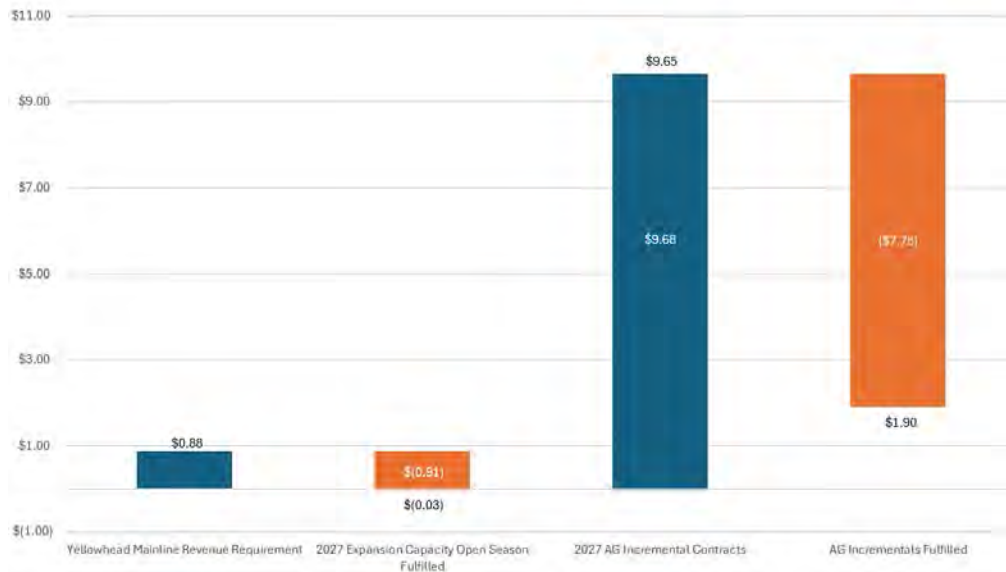
⁵⁸ For example, in Exhibit 28582-X0001.

This higher billing demand, in the approved Rider T allocation model, would shift more of the recovery of the incremental \$23.6 million to the ultra-high use rate group. Further, the incremental \$23.6 million would be socialized across all existing and future customers in the low, medium, high, and ultra-high-rate groups. As a result, the impact of this factor on the annual Rider T cost for the average low use residential customer is anticipated to be a decrease of approximately \$7.75 annually in 2028. When combined with the preceding factors, the cumulative impact is an increase of \$1.90 annually as compared to 2024.

150. Overall, the annual Rider T cost for the average AG low use residential customer, with assumptions of a growing AG customer base, the impact of the YM Project and supporting FT-D3 contracts, is anticipated to increase by approximately \$1.90 annually in 2028, as compared to 2024. For this analysis, AP deemed it reasonable to assume that customer growth in the low use rate group (the largest rate group) is largely offset by the declining usage per customer that AG has been experiencing and expects to continue.⁵⁹ It is important to note that while daily average usage per low use residential customer is expected to decline, peak day demand per customer is anticipated to remain consistent with current levels and, as such, total AG system peak day demand is forecast to increase due to the growing customer base.

⁵⁹ Decision 27388-D01-2023, paras. 58-59.

Figure 9.2: 2028 Total Rider T Cost Increase for an Average AG Low Use Residential Customer, as compared to 2024



151. In conclusion, as discussed above and shown in Figure 9.2, the potential cost impact of the YM Project and supporting FT-D3 contracts to the average AG low use residential customer is minimal. It results in an annual cost increase, over what a customer is paying in 2024, that could range from a minimum of \$1.90 annually (1.5 percent increase),⁶⁰ which includes assumptions of ultra-high use customer growth, to a maximum of \$9.65 annually (7.5 percent increase),⁶¹ with the unlikely assumption of no customer growth in AG's customer base.

152. As detailed in the sections above, the YM Project is proposed to meet significant need on the Integrated Alberta System and is a critical infrastructure investment that will facilitate economic growth in the Province of Alberta. AP submits that this, combined with its minimal anticipated rate impact to the average AG low use residential customer, demonstrates that the YM Project is in the public interest. Accordingly, AP respectfully requests that the Commission approve the need for the YM Project.

⁶⁰ $\$1.90 / \$128.41 = 1.5\%$ The \$128.41 is calculated using the low use Approved Rider T rate of \$1.258 less \$0.035 that relates to prior year under collection x 105GJ.

⁶¹ $\$9.65 / \$128.41 = 7.5\%$ The \$128.41 is calculated using the low use Approved Rider T rate of \$1.258 less \$0.035 that relates to prior year under collection x 105GJ.



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March 25, 2024

Filed Electronically

Canada Energy Regulator
Suite 210, 517 Tenth Avenue SW
Calgary, Alberta T2R 0A8

Attention: Ramona Sladic, Secretary of the Commission

Dear Ramona Sladic:

**Re: NOVA Gas Transmission Ltd. (NGTL)
NGTL System Rate Design and Services Application (Application)
File OF-Tolls-Group1-N081-2019-01 01
Hearing Order RH-001-2019
NGTL Compliance Filing to Order TG-001-2020
2023 NGTL Annual Plan**

In Order TG-001-2020, NGTL was directed by the Canada Energy Regulator (CER) to provide additional information in Appendix 4 of the NGTL Annual Plan, beginning with the year 2020.¹ This information has been included in the 2023 NGTL Annual Plan, which is attached to this letter.

Should the Commission require additional information regarding this filing, please contact me by phone at (403) 920-6256 or by email at alan_matheson@tcenergy.com.

Yours truly,
NOVA Gas Transmission Ltd.

Original signed by

Alan Matheson
Senior Regulatory Project Manager, Tolls and Tariffs
Canadian Natural Gas Pipelines

Enclosure

cc: Tolls, Tariff, Facilities and Procedures Committee

¹ Order TG-001-2020, paragraph 8 and 9 (C05448-3).

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EXECUTIVE SUMMARY

The 2023 Annual Plan provides NOVA Gas Transmission Ltd.'s (NGTL's) customers and other interested parties an overview of potential NGTL System facilities. The 2023 Annual Plan describes NGTL's outlook to the end of the decade for receipts, deliveries, peak expected flows, proposed facilities, and Design Flow requirements supporting future proposed facilities. This 2023 Annual Plan is based on NGTL's 2023 Design Forecast of receipts and deliveries.

New to this Annual Plan is a longer-term view of potential facilities that could serve aggregate system requirements with a range of targeted in-service dates out to 2030. These facilities address the forecasted changes in system flow requirements but still require their commercial underpinning to be finalized. They are presented to advance an understanding of the potential scope and scale, but need and schedule for facilities is in some cases subject to additional commercial underpinning and in all cases dependant on NGTL final investment decision and ATCO final investment decision, where applicable.

Since the release of the 2022 Annual Plan, NGTL has identified new facility projects. NGTL's Tolls, Tariff, Facilities and Procedures (TTFP) Committee has been notified of these facilities, and they are summarized in the March release of the 2024 *Facility Status Update* (NGTL 2024 Update).

In accordance with the Integration Agreement between NGTL and ATCO Pipelines (AP), NGTL provides commercial services under the NGTL Tariff across facilities of the NGTL System and the AP System. NGTL follows facility planning processes to identify facilities required for the integrated system in the NGTL and AP footprints. For an overview of these processes, see the *Facilities Design Methodology* document and the *Guidelines for New Facilities* document. NGTL files facility applications with the Canada Energy Regulator (CER) for facility additions on the NGTL System. AP files facility applications with the Alberta Utilities Commission (AUC) for facility additions on the AP System.

The facilities identified in this Annual Plan were presented to the TTFP Committee on February 22, 2024. Subsequent updates to these facilities and notifications prior to filing for their applications will be presented to the TTFP as required. These updates, as well as any new facilities proposed after issuance of this Annual Plan, will be shown in the 2024 *Facility Status Update (NGTL 2024 Update)*, which can be accessed at <http://www.tccustomerexpress.com/871.html>.

Table E-1 lists the 14 facilities identified in this 2023 Annual Plan.

Table E-1: Proposed and Potential Facility Additions

Project Area	Proposed Facilities	Annual Plan Reference	Description	Target In-Service Date	Regulator	Capital Cost (\$ Millions)
Potential Aggregate System Facilities						
Peace River	GPML Loop (Karr Section 1)	Section 2	15 km NPS 48	2028-2030	CER	205
Peace River	GPML Loop (Karr Section 2)	Section 2	16 km NPS 48	2028-2030	CER	238
Peace River	GPML Loop (Karr Section 3)	Section 2	25 km NPS 48	2028-2030	CER	332
Peace River	GPML Loop (Deep Valley North)	Section 2	14 km NPS 48	2028-2030	CER	254
Peace River	GPML Loop (Deep Valley South)	Section 2	23 km NPS 48	2028-2030	CER	379
Peace River	GPML Loop (Colt Section)	Section 2	20 km NPS 48	2028-2030	CER	404
Peace River	GPML Loop (Hornbeck Section)	Section 2	13 km NPS 48	2028-2030	CER	238
Peace River	GPML Loop (McLeod North)	Section 2	13 km NPS 48	2028-2030	CER	211
Peace River	GPML Loop (McLeod Section)	Section 2	21 km NPS 48	2028-2030	CER	321
Peace River	Wolf Lake Unit and Cooler Additions	Section 2	30 MW	2028-2030	CER	362
Peace River	Vetchland Unit and Cooler Additions	Section 2	30 MW	2028-2030	CER	352
Proposed ATCO Facilities for Greater Edmonton Area Demands						
Peace River	Yellowhead Mainline (ATCO)	Section 2	215 km NPS 36	Nov 2027	AUC	1,815
Peace River	Peers Unit Addition (ATCO)	Section 2	Up to 15 MW	Nov 2027	AUC	138
Proposed Facility for Kirby Area Demands						
North & East	Leming Loop (Sand River Section)	Section 2	22 km NPS 20	2027	CER	149
Total						5,398

The need and timing for any of the potential aggregate system facilities are contingent on further technical analysis, in some cases subject to additional commercial underpinning and in all cases dependant on NGTL final investment decision.

These facilities would be required to transport aggregate system supply in the Peace River area to meet aggregate system demands.

The proposed facilities for the Greater Edmonton and Kirby areas are required to meet growing delivery requirements in their respective regions and are underpinned by incremental contracts.

This 2023 Annual Plan includes the following sections:

- Executive Summary
- Chapter 1: Design Forecast
- Chapter 2: Design Flow and Mainline Facilities
- Chapter 3: Extensions, Lateral Loops and Meter Stations
- Appendix 1: Glossary of Terms
- Appendix 2: Facility Status Update
- Appendix 3: System Map (expected in March 2024)
- Appendix 4: Unit Transportation Costs

Electronic versions of the Annual Plan, the *Facilities Design Methodology* document, and the *Guidelines for New Facilities* document can be accessed at

<http://www.tccustomerexpress.com/871.html>.

Customers and other interested parties are encouraged to communicate their suggestions, comments, and questions to NGTL regarding the 2023 Annual Plan to:

- Joanne Unger, Director, Capacity Management (403) 920-5281
- Cory Costanzo, Director, Forecasting & Fundamentals (403) 920-7158

1.0 DESIGN FORECAST

1.1 INTRODUCTION

This Annual Plan is based on the 2023 Design Forecast of receipts and deliveries for the NGTL System. An overview of the 2023 Design Forecast was presented at the February 22, 2024 TTFP meeting.

This section describes:

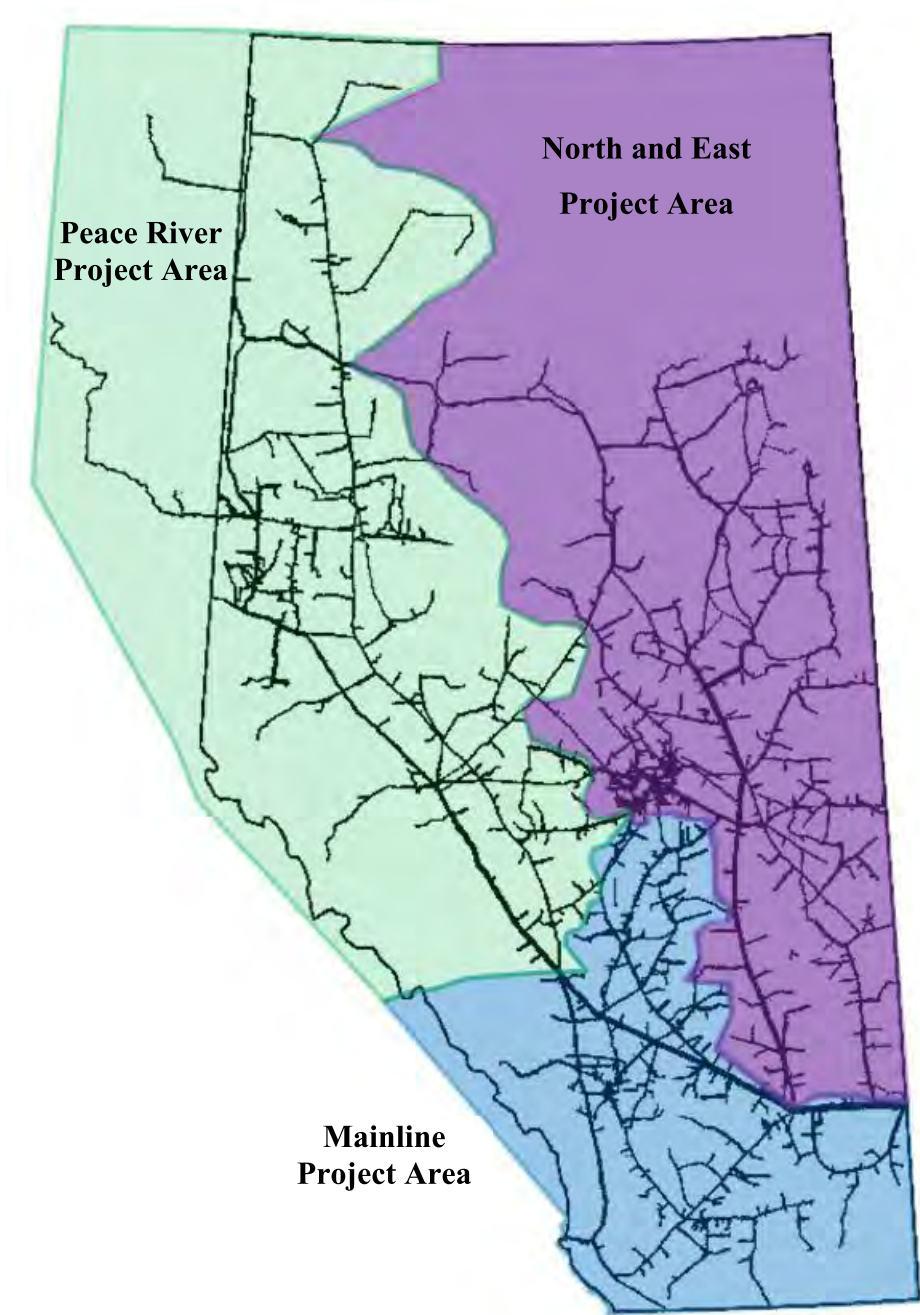
- economic assumptions used in developing the 2023 Design Forecast
- receipt and delivery forecasts for the NGTL System
- supply contribution, including winter withdrawal from storage facilities, used in the design process

For further information on forecasting methodology, see Facilities Design Methodology, Section 4.4: Design Forecast Methodology, which can be accessed at

<http://www.tccustomerexpress.com/871.html>

In order to highlight the regional forecast differences on the NGTL System, this section references the three Project Areas as per the NGTL tariff. Figure 1-1 depicts the three Project Areas.

Figure 1-1: NGTL Project Areas



1.2 ECONOMIC ASSUMPTIONS

1.2.1 General Assumptions

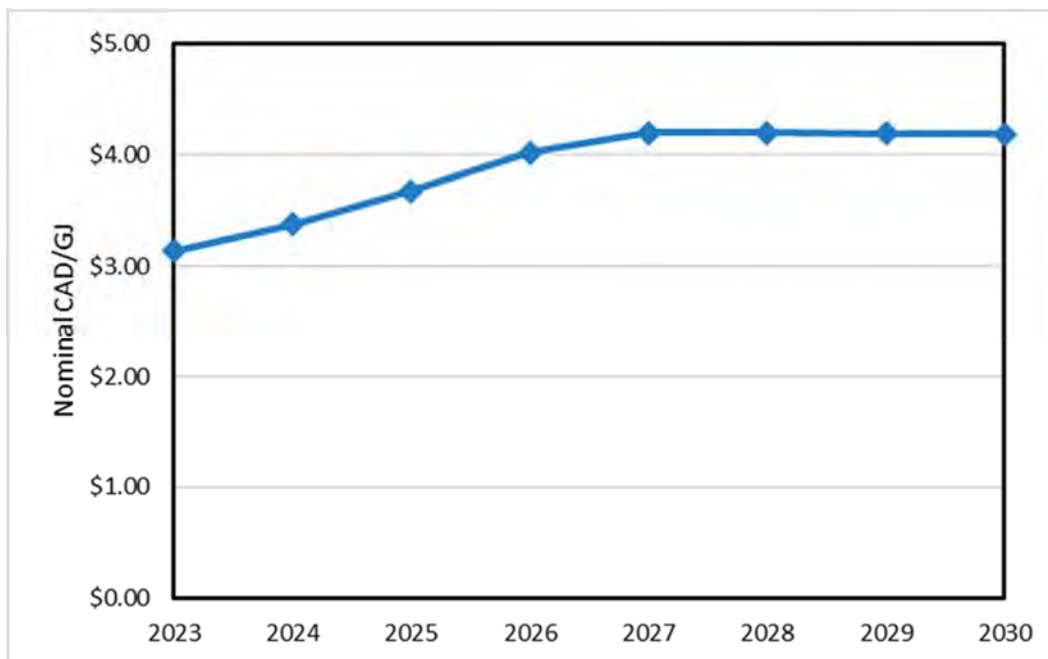
The following assumptions, developed in early 2023, reflect broader trends in the North American economy and energy markets, and underlie the forecast of receipts and deliveries:

- Owing to the abundance of natural gas resource, supply growth will be constrained by domestic demand, LNG exports, adoption of alternate technologies, and factors such as policy and ability to attain regulatory approvals.
- In the US, industrial growth is concentrated in the Gulf Coast and electric generation growth is more broadly based, while oil sands and petrochemical projects will lead the growth in Western Canada.
- In Alberta, new natural gas fired generation capacity of over 2000 megawatts will be added in 2024.
- LNG export projects are being developed in both the U.S. and Canada. North American LNG exports are expected to reach 20 Bcf/d by 2025, a growth of 13.5 Bcf/d from 2020 levels.
- Associated gas supplies from oil plays and liquids rich gas plays will continue to be strong, supported by high oil prices, exerting downward influence on North American natural gas prices.
- New natural gas supply must continually be developed to maintain and/or grow the supply in the basin due to the natural declines of existing supply.
- NIT/AECO prices are expected to average \$4.00 Cdn/GJ over the forecast period, ending in 2030.
- The average annual outlooks of receipts, deliveries, and NGTL System throughput volumes reported in this section are understood to be within a range of outcomes due to factors such as changing market conditions and the pace of WCSB supply and infrastructure development.

1.2.2 Average Natural Gas Price Forecast

TC Energy considers commodity pricing when determining the economic viability of future natural gas production. The 2023 natural gas price forecast developed by TC Energy is shown in Figure 1-2.

Figure 1-2: Average Nominal NIT Price

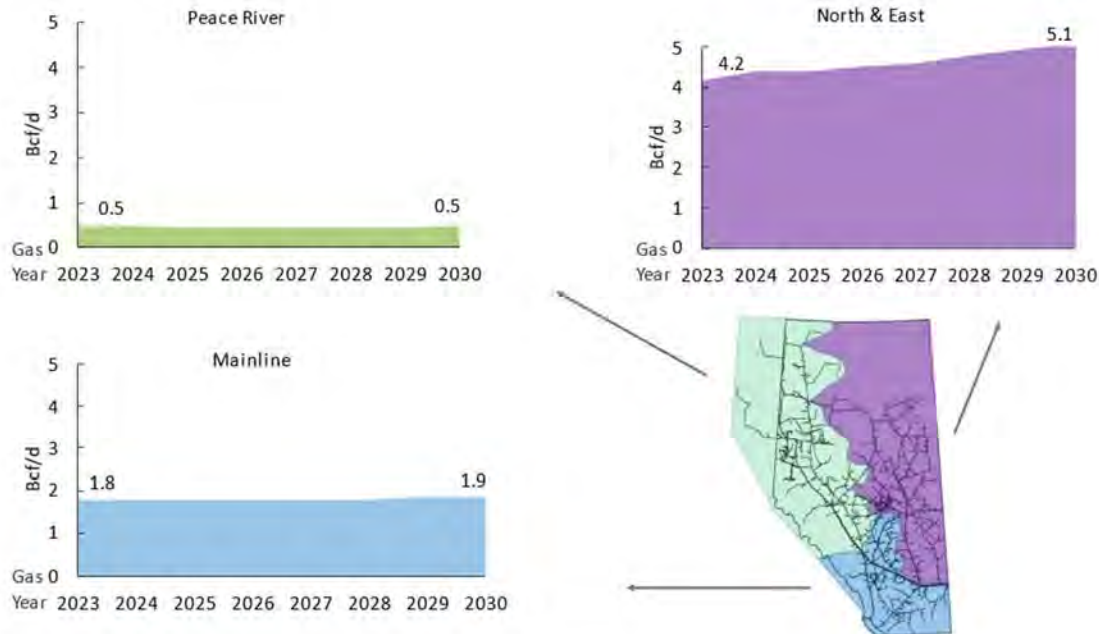


1.3 GAS DELIVERY FORECAST

Several sources of information were considered in developing the gas delivery forecast. First, operators of downstream facilities such as connecting pipelines, local distribution companies (LDCs), and industrial plants were requested to provide a forecast of their maximum, average, and minimum requirements for deliveries from the NGTL System over the next 10 years. The forecasts were analyzed and compared with historical flow patterns at NGTL Delivery Points. In cases where NGTL's analysis differed substantially from the operator's forecast, NGTL contacted the operator and either the operator's forecast was revised or NGTL adjusted its analysis. In cases where the operator did not provide a forecast, NGTL based its forecast on historical flows and growth rates for specific demand sectors.

Deliveries to intra markets on the NGTL System are forecast to rise due to increased demand in the oil sands sector and growing petrochemical investments.

Figure 1-3: System Intra Deliveries by Project Area



1.3.1 Average Annual Delivery Forecast

Forecast deliveries are expressed as an average daily flow. The Average Annual Delivery Forecast is the aggregate forecast of deliveries for the NGTL System. The Average Annual Delivery Forecast, for Gas Years 2024 through 2030 are listed by Delivery Type in Table 1-1 and further detailed by Project Area in Table 1-2.

Section 2: Design Flow and Mainline Facilities

Table 1-1: System Average Annual Delivery Forecast by Delivery Type

Delivery Type	2023 Design Forecast (10 ⁶ m ³ /d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Export	203.2	209.0	206.5	211.1	217.7	220.0	220.5
Intra System	189.3	187.8	190.1	192.5	199.0	204.5	210.1
Total System	392.6	396.8	396.6	403.6	416.8	424.5	430.5
Delivery Type	2023 Design Forecast (Bcf/d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Export	7.2	7.4	7.3	7.5	7.7	7.8	7.8
Intra System	6.7	6.6	6.7	6.8	7.0	7.2	7.4
Total System	13.9	14.0	14.0	14.2	14.7	15.0	15.2
* Fuel is included							
Note: Totals for Receipt & Delivery may not align due to rounding.							
Volumes expressed as an average daily flow for each gas year, at 101.325 kPa and 15°C.							

Table 1-2: Intra System Deliveries – Average Annual Delivery Forecast by Project Area

Project Area	2023 Design Forecast (10 ⁶ m ³ /d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	14.1	12.6	12.5	12.5	12.7	12.5	13.2
North and East	124.4	124.9	127.6	129.7	135.5	139.8	144.0
Mainline	50.8	50.3	50.0	50.4	50.9	52.2	52.9
Total	189.3	187.8	190.1	192.5	199.0	204.5	210.1
Project Area	2023 Design Forecast (Bcf/d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	0.5	0.4	0.4	0.4	0.4	0.4	0.5
North and East	4.4	4.4	4.5	4.6	4.8	4.9	5.1
Mainline	1.8	1.8	1.8	1.8	1.8	1.8	1.9
Total*	6.7	6.6	6.7	6.8	7.0	7.2	7.4
* Fuel is included							

1.3.2 Maximum Day Delivery Forecast

Peak deliveries (Maximum Day Delivery) are also forecast for the NGTL Delivery Points and are based on historical flows.

Section 2: Design Flow and Mainline Facilities

A summary of the 2023 Design Forecast winter and summer Maximum Day Delivery by Project Area for Intra System Deliveries is provided in Table 1-3 for winter and Table 1-4 for summer.

Table 1-3: Winter Maximum Day Intra System Delivery Forecast

Project Area	2023 Design Forecast (10 ⁶ m ³ /d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	34.4	34.7	34.7	34.7	34.9	34.9	35.0
North and East	177.8	188.2	192.9	196.3	204.5	206.2	206.5
Mainline	102.0	102.6	102.9	103.9	105.1	104.7	103.9
Total	314.2	325.5	330.4	334.9	344.5	345.7	345.3
Project Area	2023 Design Forecast (Bcf/d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	1.2	1.2	1.2	1.2	1.2	1.2	1.2
North and East	6.3	6.6	6.8	6.9	7.2	7.3	7.3
Mainline	3.6	3.6	3.6	3.7	3.7	3.7	3.7
Total*	11.1	11.5	11.7	11.8	12.2	12.2	12.2
* Fuel is included							

Table 1-4: Summer Maximum Day Intra System Delivery Forecast

Project Area	2023 Design Forecast (10 ⁶ m ³ /d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	32.3	32.6	32.5	32.5	32.7	32.7	32.8
North and East	168.0	169.0	173.9	176.3	183.1	185.0	187.1
Mainline	79.2	78.7	78.4	79.0	79.7	80.1	79.9
Total	279.5	280.3	284.8	287.8	295.5	297.7	299.8
Project Area	2023 Design Forecast (Bcf/d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	1.1	1.1	1.1	1.1	1.2	1.2	1.2
North and East	5.9	6.0	6.1	6.2	6.5	6.5	6.6
Mainline	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Total*	9.9	9.9	10.1	10.2	10.4	10.5	10.6
* Fuel is included							

1.4 RECEIPT FORECAST

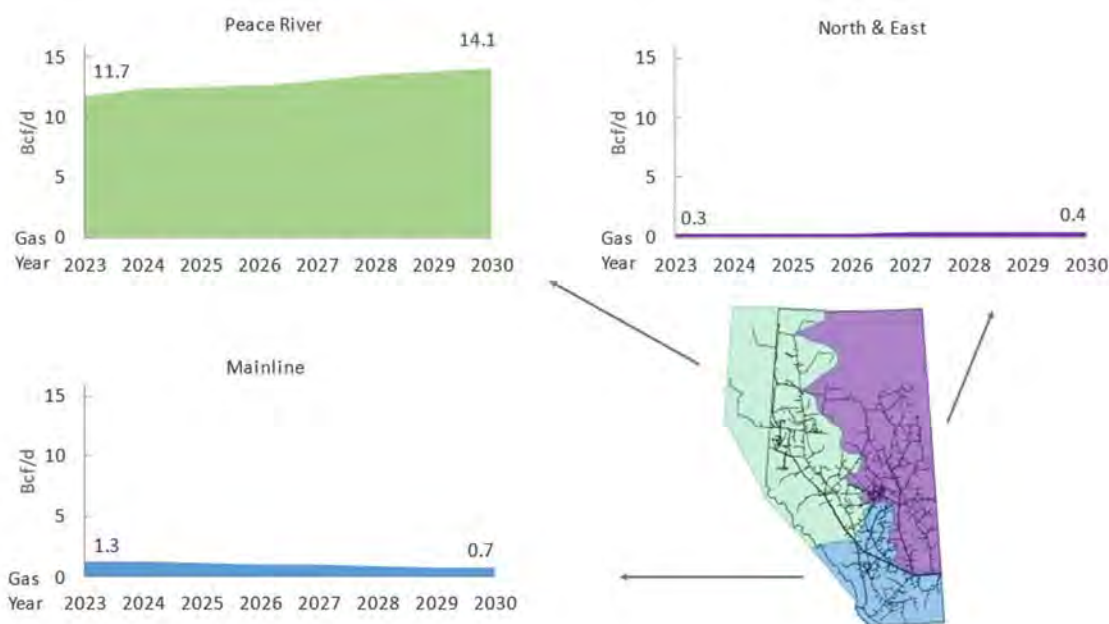
NGTL develops a Receipt Forecast on an average annual basis using information collected from several sources, including upstream information from customers, historical flows, industry publications and government agencies.

- NGTL uses activity-based forecasting methods and models to generate forecasts of future production. Factors such as gas price, liquids content in the gas, economics, total number of drilling locations available, well production profiles, pace of development, material and equipment availability, potential capital requirements, land access constraints, and gas gathering capacities are considered when developing a forecast of supply.
- For conventional production, there has been little to no development in the last few years. NGTL anticipates that conventional supply will continue to decline. This production decline will be noticed mostly in the northeast and east parts of the basin, which are areas outside of the Peace River Project Area.
- The decline rate of legacy gas and the more recent supply from shale and tight sandstone reservoirs varies across the basin and from year to year. In 2023, the basin declined by ~24%.

Exploration activity focused on shale and tight sandstone reservoirs has resulted in increasing Montney and Deep Basin gas volumes entering the NGTL System, primarily from the Peace River Project Area. The incremental shale gas and tight sandstone gas supply is expected to more than offset existing basin production declines and will gradually increase system supply to over 15 Bcf/d by 2030.

Section 2: Design Flow and Mainline Facilities

Figure 1-5: System Receipts by Project Area



Gas supplied from storage facilities was not included in the data presented in this section. For information pertaining to gas supply from Commercial Storage Facilities, see Section 1.6.

1.4.1 Average Receipt Forecast

The Average Receipt Forecast is the aggregate receipts forecast for the NGTL System for the 2024 through 2030 gas years. A summary of System Average Receipts by Project Area is expressed as an average daily flow and shown in Table 1-5.

Table 1-5: System Average Receipts

Project Area	2023 Design Forecast (10 ⁶ m ³ /d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	348.7	355.5	357.8	367.0	382.1	391.8	399.5
North and East	9.7	9.9	10.1	10.4	10.8	11.1	11.3
Mainline	34.1	31.4	28.7	26.2	23.9	21.7	19.7
Total	392.5	396.8	396.6	403.6	416.8	424.5	430.5

Project Area	2023 Design Forecast (Bcf/d)						
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Peace River	12.3	12.5	12.6	13.0	13.5	13.8	14.1
North and East	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Mainline	1.2	1.1	1.0	0.9	0.8	0.8	0.7
Total	13.9	14.0	14.0	14.2	14.7	15.0	15.2

1.5 SUPPLY DEMAND BALANCE

Supply received on to the NGTL System is balanced with System deliveries (net of gas in storage). System deliveries by destination are shown in Figure 1-6, while System receipts by Project Area are shown in Figure 1-7.

Figure 1-6: System Deliveries by Destination

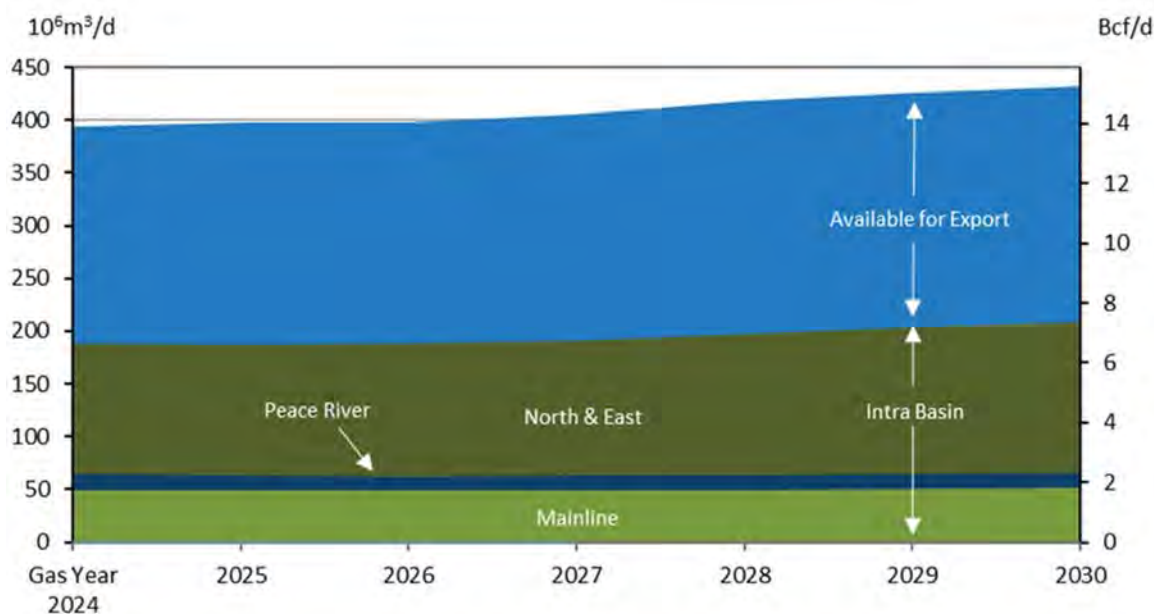
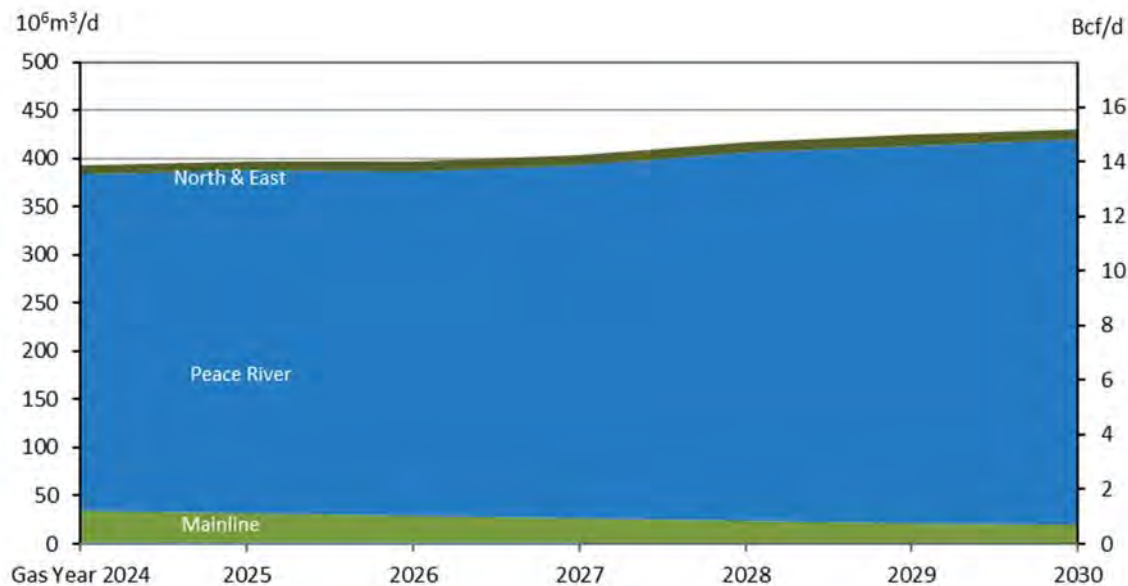


Figure 1-7: System Receipts by Project Area



The average annual outlooks of receipts, deliveries, and NGTL System throughput volumes reported in this section are understood to be within a range of outcomes due to factors such as changing market conditions and the pace of WCSB supply and infrastructure development.

1.6 STORAGE FACILITIES

1.6.1 Commercial Storage

There are nine commercial storage facilities connected to the NGTL System (AECO 'C', Big Eddy, Carbon, Chancellor, Crossfield East #2, January Creek, Severn Creek, Warwick Southeast and Aitken Creek Meter Stations). The total deliverability from storage facilities is significant, but actual maximum day receipts from storage are dependent on a number of factors, including market conditions, level of working gas, compression power at each storage facility, and NGTL System operations.

For design purposes, a supply contribution from storage facilities is used to meet peak day winter delivery requirements and provide for a better correlation between forecast

Section 2: Design Flow and Mainline Facilities

Design Flow requirements and historical actual flows for the winter period. Historical withdrawals during recent winter periods for each storage facility were used to determine a reasonable expected rate of withdrawal for future winter seasons.

For the receipt meter capacity for each of the connected commercial storage facilities, see Table 1-6.

Table 1-6: Receipt Meter Capacity from Commercial Storage Facilities

Storage Facility	Receipt Meter Capacity from Commercial Storage Facilities	
	10 ⁶ m ³ /d	Bcf/d
AECO C	40.8	1.4
Big Eddy	43.0	1.5
Aitken Creek (B.C.)	37.6	1.3
Carbon	13.6	0.5
Chancellor	28.7	1.0
Crossfield East 2	14.7	0.5
January Creek	20.2	0.7
Severn Creek	8.4	0.3
Warwick Southeast	7.6	0.3
Total	214.8	7.6
Note: Storage is considered an interruptible supply source. Totals have been rounded.		

1.6.2 Peak Shaving Storage

The Fort Saskatchewan Salt Caverns are a peak shaving storage facility in the greater Edmonton area within the ATCO Pipeline footprint, in the North of Bens Lake Design Area of the NGTL System. Similar to commercial storage facilities, the total deliverability from the peak shaving storage facility is significant, and the actual maximum day receipt from this storage also depends on a number of factors, including market conditions, level of working gas, compression power at the storage facility and NGTL System operations.

Section 2: Design Flow and Mainline Facilities

For design purposes, a supply contribution from the peak shaving storage facility is used to meet peak day winter delivery requirements and provide for a better correlation between forecast Design Flow requirements and historical actual flows for the winter period. The maximum withdrawal rate and the maximum working inventory of the storage facility are used as the upper limits for the supply contribution provided.

2.0 DESIGN FLOWS AND MAINLINE FACILITIES

2.1 INTRODUCTION

This section contains the proposed natural gas transportation mainline facilities that may be necessary to meet the Design Flow requirements. Included is information regarding facility size, routes, locations, and cost estimates.

The Design Flows are presented for Design Areas where new mainline facilities are required. Design flows are based on the 2023 Design Forecast presented in Section 1, and were determined using the methodology described in *Facilities Design Methodology*, Section 3.5: Mainline Facilities Flow Determination. This document can be accessed at <http://www.tccustomerexpress.com/871.html>. Design charts for key areas are presented to provide an understanding of how the NGTL system is evolving.

This section includes a comparison of historical flows to the Design Flows. Additionally, the expected design capability is shown for the Gas Year when facilities are required in each applicable Design Area. Where there is a shortfall between Design Flow and the design capability, a facility solution is identified. A facility application to the regulator for construction and operation is triggered by Firm Transportation (FT) contracts in excess of design capability and submitted to ensure the facility is in place in time to meet the FT requirements. Aggregated FT contract levels are also presented to indicate commercial underpinning of the proposed facilities.

This section of the Annual Plan presents potential facilities that serve aggregate system requirements, followed by proposed facilities that serve the requirements for specific areas. Presentation of the proposed facilities in this manner is intended to improve the clarity of their requirement and commercial underpinning. Contractual underpinning for the potential aggregate system facilities is still pending finalization. As such, these facilities scope and in service timing are subject to change.

An overview of the Design Flows and proposed facilities resulting from the 2023 Design Forecast, as well as the potential facilities for incremental flow, were presented to the TTFP on February 22, 2023. Subsequent updates to these facilities and notifications

prior to filing for their applications will be presented to the TTFP as they occur. These updates, as well as any new facilities proposed after issuance of this Annual Plan, will be shown in the *2024 Facility Status Update (NGTL 2024 Update)*, which can be accessed at <http://www.tccustomerexpress.com/871.html>.

For a summary of the status of mainline facilities that have been proposed, applied for, under construction or placed in-service since the December 2022 Annual Plan, see *Appendix 2: Facility Status Update*.

2.2 AGGREGATE SYSTEM REQUIREMENTS

As described in Section 1, average aggregate system demand continues to grow. From the figures provided in Table 1-1, system demand is forecast to grow from 13.9 Bcf/d to 15.2 Bcf/d from Gas Years 2024 to 2030. Also described in Section 1 is the continued aggregate supply growth and shift towards the Peace River Project Area. Increasing supply in the Peace River area will serve to offset supply declines in other areas of the system and increase the total system supply, matching the increasing aggregate system demand. From the figures provided in Table 1-5, supply in the Peace River Area grows from 88% of the total system supply to 93% of the total system supply from Gas Years 2024 to 2030, commensurate with an 9% increase in total system supply over the same period.

The forecasted annual average daily flowrates described in Section 1 are translated into peak day Design Flows which are used for system facility design. The Design Flows for the system therefore reflect the forecasted increases in average annual total system supply and demand. Figure 2-1 shows how the system Design Flows at the beginning of each Gas Year grow from 17.5 Bcf/d to 19.9 Bcf/d from 2024 to 2030. Figure 2-1 also shows the aggregate system FT-R and FT-D levels as of November 1 annually. As can be seen, the increasing Design Flows are supported by increasing system FT-R and FT-D contract levels. In addition to the secured contracts depicted on Figure 2-1, there is expressed customer interest for ~500 mmcf/d of additional firm contracting pending commercial arrangements.

Section 2: Design Flow and Mainline Facilities

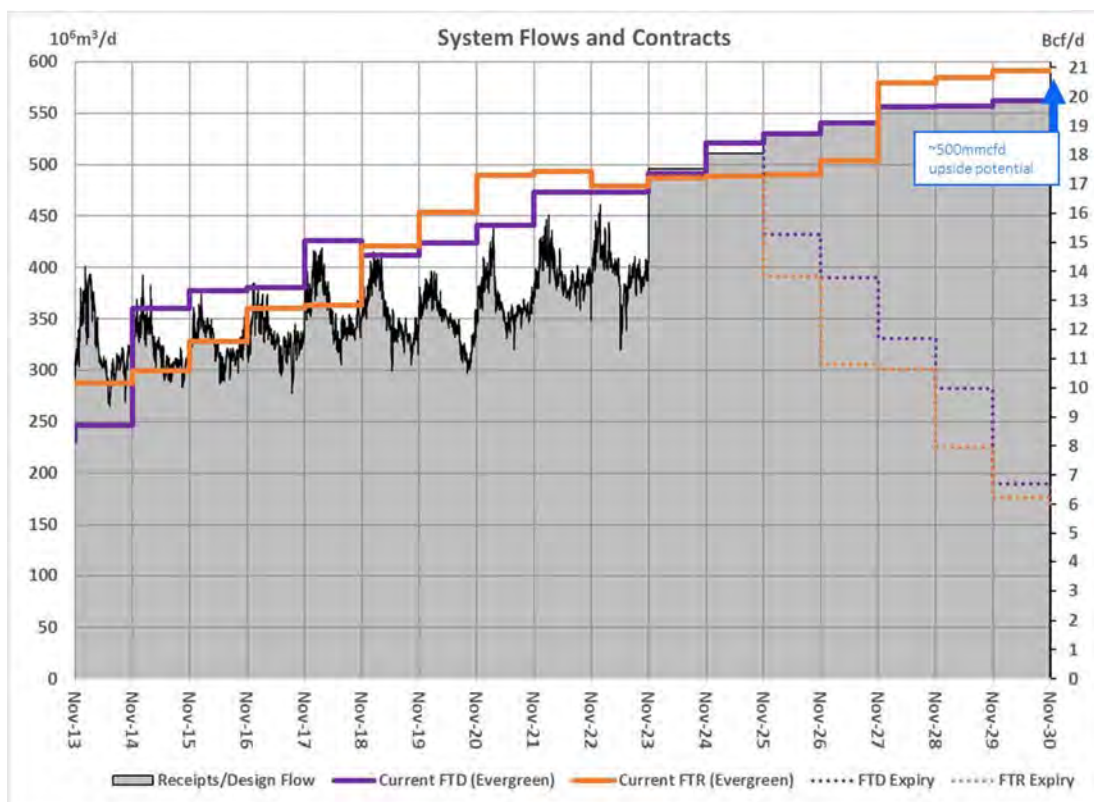
The system receipts that meet these growing system deliveries come from three sources:

1. Storage withdrawals, which have no associated FT-R contracting and are not driving additional facilities
2. Declining receipts from unconstrained areas outside the Peace River Project Area, which have minimal associated FT-R contracting and are not driving additional facilities
3. Growing receipts from the Peace River Project Area, where additional FT-R contracting is required to commercially underpin the additional facilities they are driving

Although Figure 2-1 depicts aggregate system FT-R, the additional facilities that meet the growing aggregate system requirements are required only for the growing receipts in the Peace River Project Area. As such, it is only the FT-R in the Peace River Project Area that represents the commercial underpinning for receipts at the aggregate system level. As depicted later in Figure 2-2 in Section 2.4.1, FT-R contracting in the Peace River Project Area continues to exceed the increasing receipt Design Flows in that particular area, thereby commercially underpinning proposed facilities.

Figure 2-1 also depicts the hypothetical FT expiry profiles if all contracts non-renewed. Although all previously proposed facilities continue to be required and contractually underpinned, contract renewals are closely monitored to ensure this remains true. Should underpinning change, NGTL will appropriately adjust facility plans and/or repurpose capacity.

Figure 2-1: Aggregate System Flows, Design Flows, and Contracts



2.3 FACILITIES FOR AGGREGATE SYSTEM REQUIREMENTS

As described in Section 2.2, supply in the Peace River area is expected to represent an increasing share of aggregate System supply, upward of 90%. Since this area represents such a large portion of total system supply, ensuring that flows out of the Peace River Area and into the various demand markets attached to the NGTL System is critical to the overall balancing of NGTL aggregate System requirements.

The design condition for the Peace River Area is very interdependent with total system conditions. The prevailing design condition for the Peace River Area is therefore best represented by a Total System Flow-Within condition: When total system deliveries are at their maximum and total system receipts, a vast majority of which are from the Peace River Area, also peak. System facilities must be capable of transporting enough gas out of the Peace River Project Area to meet expected peak deliveries throughout the rest of the system.

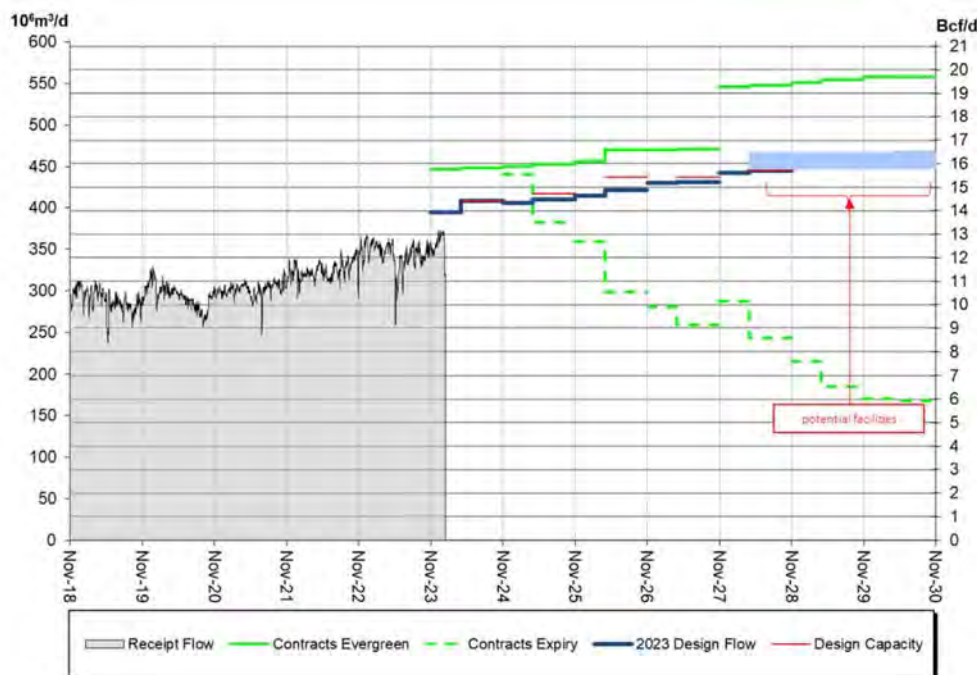
2.3.1 Design Flows – Peace River Project Area

The Design Flows for the Total System Flow-Within design condition in the Peace River Project Area are the maximum expected local receipts in the area. The forecast continued receipt growth in the area can be accommodated by 11 potential facilities.

Figure 2-2 shows historical receipts, receipt Design Flow, contract levels and design capability for the Peace River Project Area. Receipt Design Flow rises throughout this forecast period, attributable to increasing supply in the Peace River Project Area.

Although the Design Flow is forecasted to rise from 15.6 Bcf/d to 16.4 Bcf/d from Gas Year 2028 to 2030, the pace at which it will grow and any potential facilities required will be defined by customer needs and commercial arrangements. The refinement of customer needs and potential facilities over this period is represented by the light blue band in Figure 2-2. The potential facilities are required to keep the design capability above the rising Design Flow as highlighted in red in Figure 2-2. Further details on the potential facilities are provided in Section 2.3.2.

Figure 2-2: Peace River Project Area Design Chart



2.3.2 Potential Facilities for Aggregate System Requirements

Figure 2-3 shows the locations of the potential facilities required to meet the Total System Flow-Within design condition. These facilities increase the receipt capability for the Peace River Project Area, enabling aggregate system supply to meet aggregate system demand.

Figure 2-3: Potential Facilities for Aggregate System Requirements



The need and scheduling for these potential facilities are contingent on further technical analysis, in some cases subject to additional commercial underpinning and in all cases dependant on NGTL final investment decision.

Should they proceed, applications may need to be filed with the CER as early as Gas Year 2024 and targeted to be in-service between 2028-2030. For details on the potential facilities, see Table 2-1.

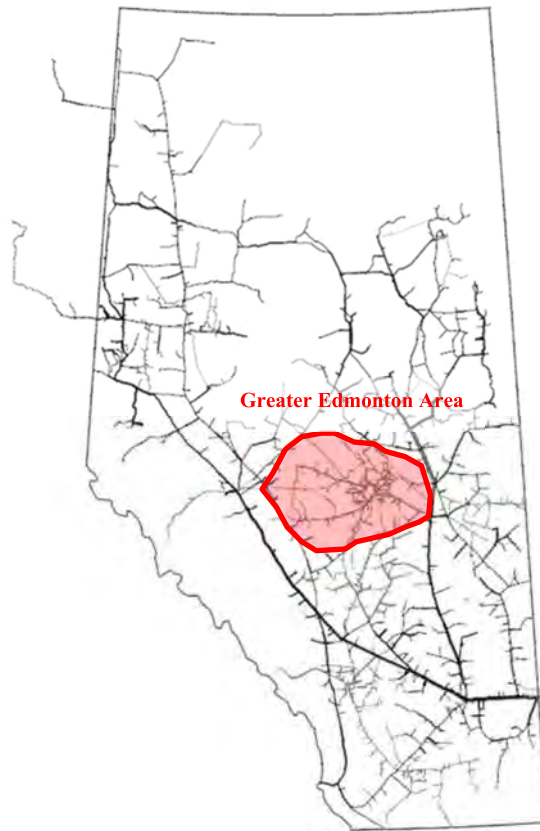
Section 2: Design Flow and Mainline Facilities

Table 2-1: Potential Facilities for Aggregate System Requirements

Map Location	Applied-For Facility	Description	Target In-Service Date	Forecast Cost (\$Millions)
1	GPML Loop (Karr Section 1)	15 km NPS 48	2028-30	205
1	GPML Loop (Karr Section 2)	16 km NPS 48	2028-30	238
1	GPML Loop (Karr Section 3)	25 km NPS 48	2028-30	332
1	GPML Loop (Deep Valley North)	14 km NPS 48	2028-30	254
1	GPML Loop (Deep Valley South)	23 km NPS 48	2028-30	379
1	GPML Loop (Colt Section)	20 km NPS 48	2028-30	404
1	GPML Loop (Hornbeck Section)	13 km NPS 48	2028-30	238
1	GPML Loop (McLeod North)	13 km NPS 48	2028-30	211
1	GPML Loop (McLeod Section)	21 km NPS 48	2028-30	321
2	Wolf Lake Unit and Cooler Additions	30 MW	2028-30	362
3	Vetchland Unit and Cooler Additions	30 MW	2028-30	352
			Total	3.296

2.4 FACILITIES FOR GREATER EDMONTON AREA DEMANDS

Two proposed facilities are required to meet the aggregate delivery requirements in the Greater Edmonton area. Deliveries in this area, shown in Figure 2-4, are a mix of power generation, other industrial, and residential/commercial deliveries. The supply required to meet Greater Edmonton area demands is currently transported through several major corridors with the most significant ones on the eastern side of Edmonton. The proposed facilities will create an additional major corridor on the western side of Edmonton which is a shorter distance to Peace River system supply.

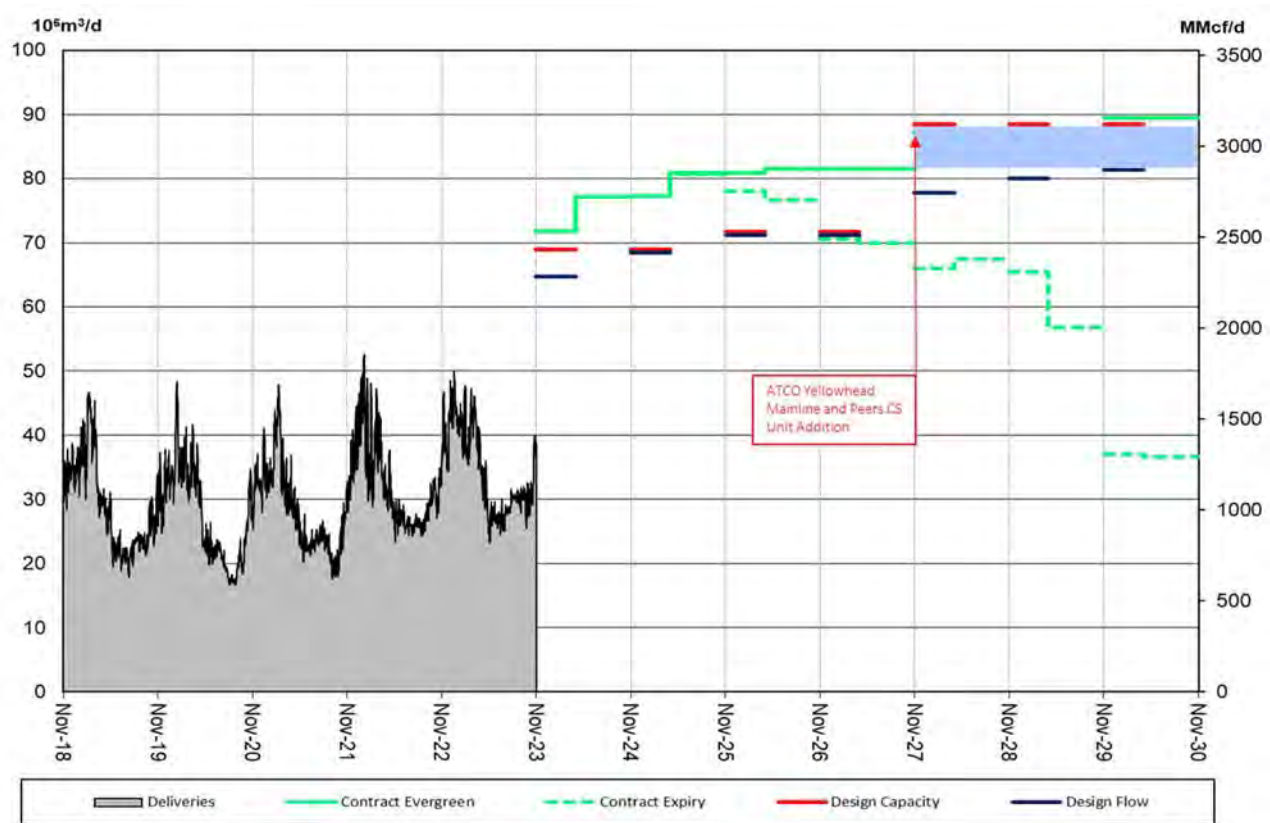
Figure 2-4: Greater Edmonton Area

2.4.1 Design Flows – Greater Edmonton Area

The prevailing design condition for the Greater Edmonton area is the Flow-Within Condition: When local area deliveries are at their maximum and local area receipts are at their minimum. As local area receipts continue to decline and demands increase, facilities are required to transport in more receipts from outside the area to satisfy demand requirements. Figure 2-5 shows historical flows, Design Flows, contract levels and design capability for the Greater Edmonton area. As can be seen, delivery Design Flow rises throughout this forecast period, attributable primarily to significant industrial growth and supported by incremental FT-D contracting. The proposed facilities are highlighted red in Figure 2-5 to provide a correlation to the increase in design capability and indicate its requirement.

Since the proposed facilities create an additional major corridor into the Greater Edmonton Area, it will provide a significant step change in design capacity. Although this increased capability is necessary for the forecast Design Flows and underpinned by incremental contracts, it will also provide additional capability that could be utilized for additional future flow increases. There is expressed customer interest for ~250 mmcf/d of additional firm contracting pending commercial arrangements that could increase the current Design Flows further. This potential increase is represented by the light blue band in Figure 2-5.

Figure 2-5: Greater Edmonton Area Design Chart



2.4.2 Proposed Facilities for Greater Edmonton Area Demands

Figure 2-6 shows the location of the proposed facilities required for Greater Edmonton area demands. These ATCO facilities will create a new major corridor capable of

operating at a higher pressure than the existing western corridors. This will provide an additional direct and efficient path for Peace River system supply to meet Greater Edmonton area demands.

Figure 2-6: Proposed Facilities for Greater Edmonton Area Demands



The application for the proposed facilities is expected to be filed with the AUC in Gas Year 2024 and targeted to be in-service for November 2027. For details on the proposed facilities, see Table 2-2.

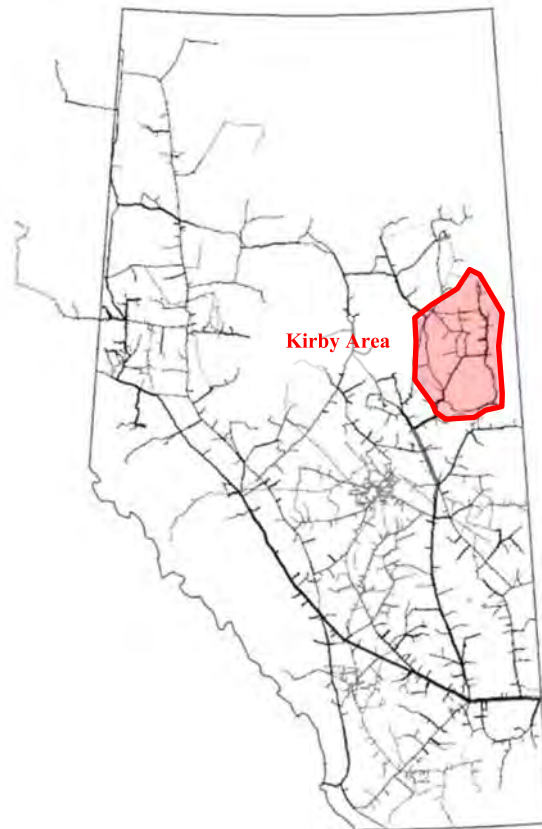
Table 2-2: Proposed Facilities for Greater Edmonton Area Demands

Map Location	Applied-For Facility	Description	Target In-Service Date	Forecast Cost (\$Millions)
1	Yellowhead Mainline (ATCO)	215 km NPS 36	Nov 2027	1,815
2	Peers Unit Addition (ATCO)	Up to 15 MW	Nov 2027	138
			Total	1,953

2.5 FACILITY FOR KIRBY AREA DEMAND

The Kirby area, shown in Figure 2-7, is located within the North and East Project Area and is a subset of the Oilsands Delivery Area. A proposed facility is required to meet the aggregate delivery requirements in the Kirby area, which is primarily for oilsands production.

Figure 2-7: Kirby Area



2.5.1 Design Flows - Kirby Area

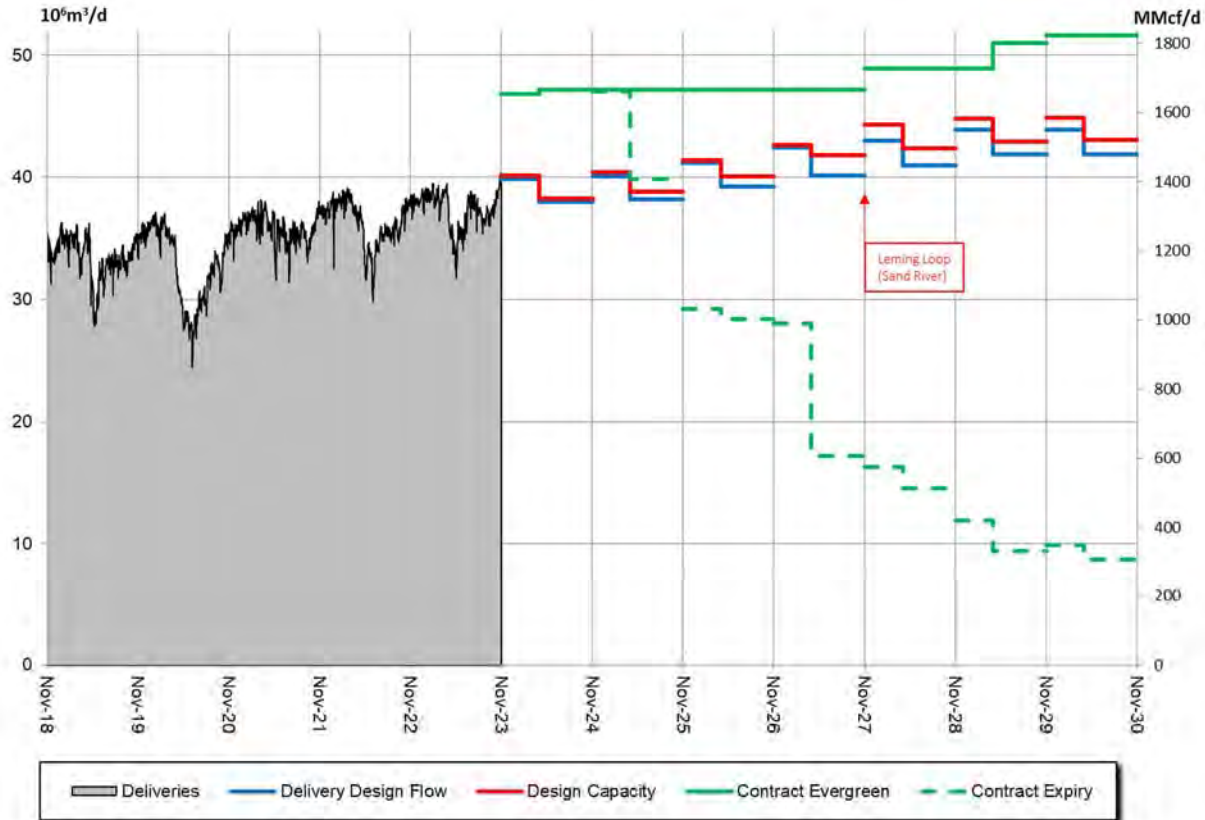
The prevailing design condition for the Kirby area is the Flow-Within condition: When area deliveries are at their maximum. The continued demand growth and changing distribution of demand in the area will be accommodated by the proposed facility.

Figure 2-8 shows historical deliveries, delivery Design Flow, contract levels and design capability for the Kirby area. As can be seen, delivery Design Flow rises throughout this

Section 2: Design Flow and Mainline Facilities

forecast period, attributable to increasing demand driven by oilsands production and supported by incremental FT-D contracting. The proposed facility is highlighted red in Figure 2-8 to provide a correlation to the increase in design capability and indicate its requirement.

Figure 2-8: Kirby Area Design Chart



2.5.2 Proposed Facility for Kirby Area Demand

Figure 2-8 shows the location of the proposed facility required to meet Kirby area requirements resulting from the Flow-Within design condition.

Figure 2-9: Proposed Facilities for Kirby Area Demand

The application for the proposed facility is expected to be filed with the CER in Gas Year 2025 and targeted to be in-service for 2027. For details on the proposed facility see Table 2-3.

Table 2-3: Proposed Facility for Kirby Area Demand

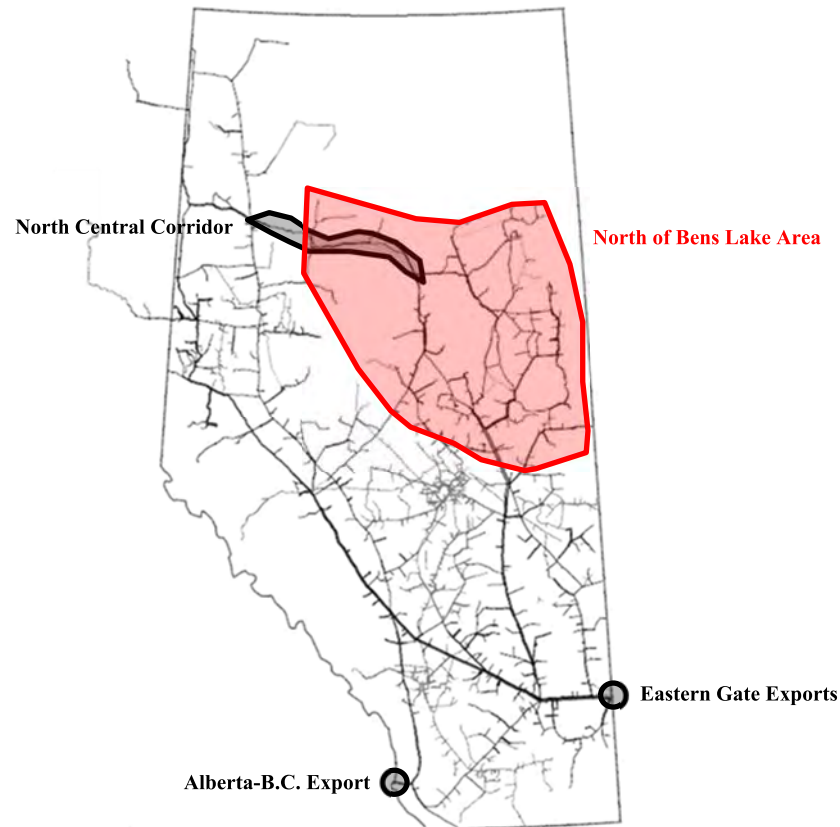
Map Location	Applied-For Facility	Description	Target In-Service Date	Forecast Cost (\$Millions)
1	Leming Loop (Sand River Section)	22 km NPS 20	2027	149
			Total	149

2.6 OTHER KEY AREAS

Design charts for other areas are presented in this section. The intent is to provide an understanding of the impact of previously proposed facilities in these other areas, and

relay how the NGTL system is evolving in general. Figure 2-10 shows the locations of these key areas.

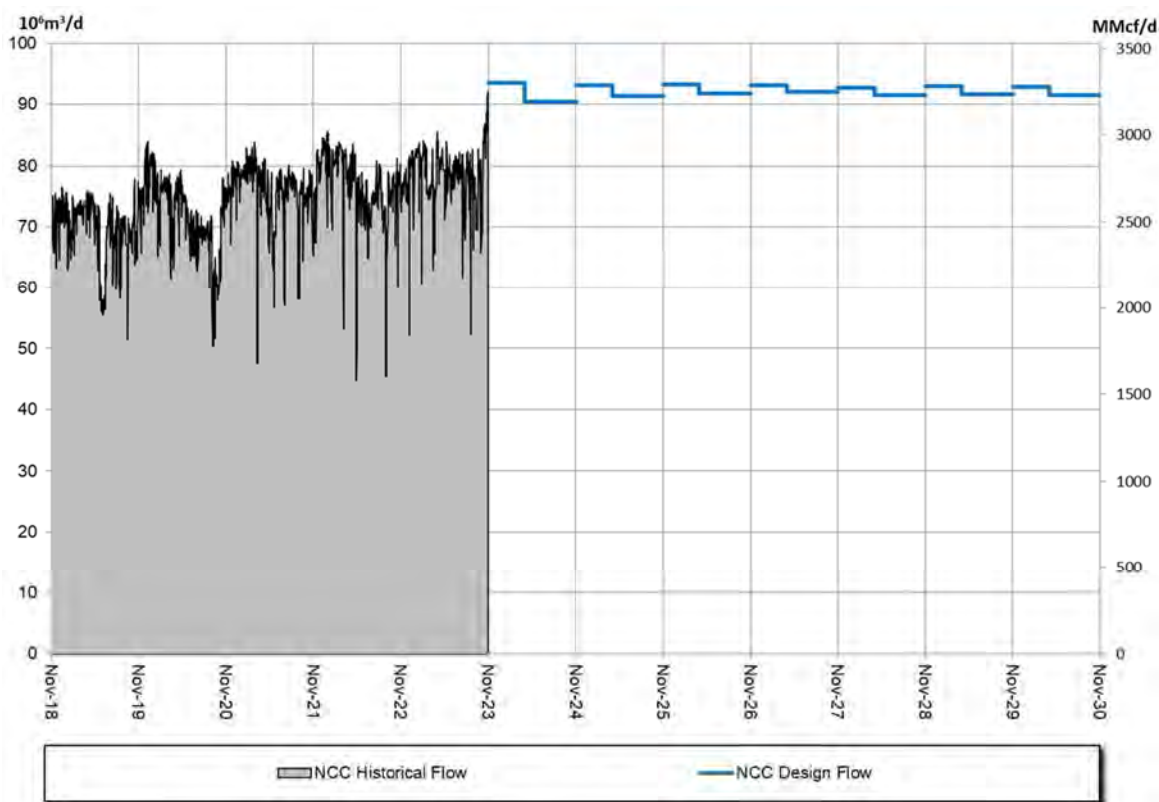
Figure 2-10: Key Areas



2.6.1 Design Flows – North Central Corridor (NCC)

The NCC is the primary corridor feeding demands in northeast Alberta, which includes major oilsands deliveries. NGTL's recent North Corridor Expansion Project increased NCC capability to help satisfy these growing deliveries, and this capability is expected to continue to be fully utilized going forwards.

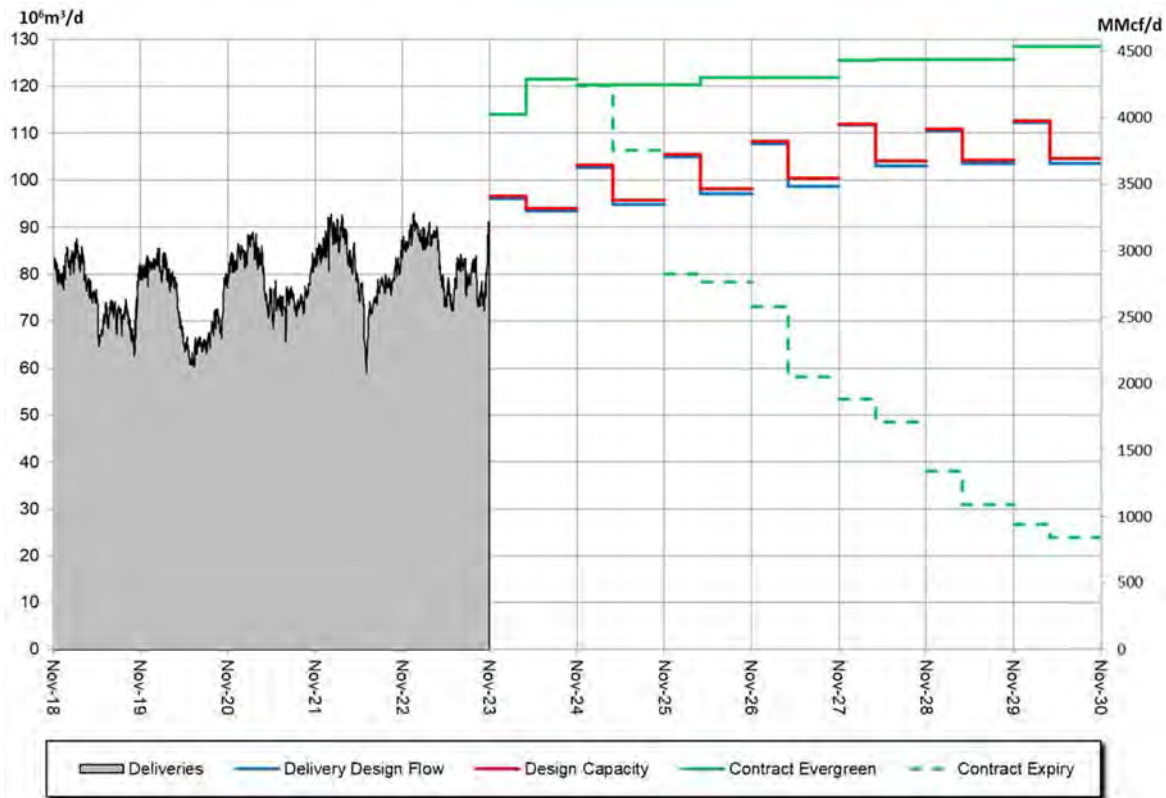
Figure 2-11: NCC Design Chart



2.6.2 Design Flows – North of Bens Lake Area

The North of Bens Lake area in northeast Alberta includes major oilsands deliveries. NGTL's recent North Corridor Expansion Project increased NCC capability to help satisfy growing deliveries in this area. Longer-term, growth in this area is projected to subside.

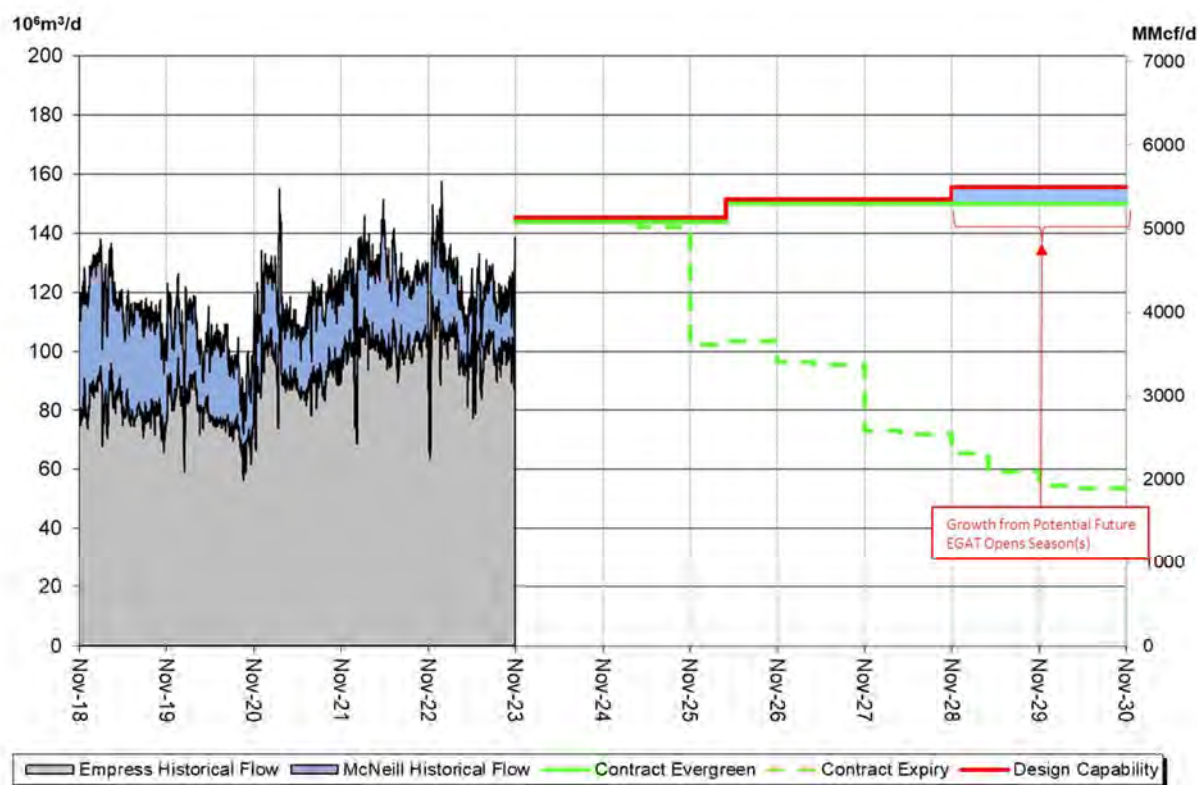
Figure 2-12: North of Bens Lake Design Chart



2.6.3 Design Capability – Eastern Gate Exports (EGAT)

EGAT exports comprises the deliveries to the Empress and McNeill export points. The additional contracting in 2026 shown in Figure 2-13 will be enabled by the approved Grande Prairie Mainline Loop No. 4 (Valhalla North Section) and Berland River Compressor Station C3 Unit Addition. The light blue band starting in November 2028 in Figure 2-13 represents potential additional contracting from potential future open season(s).

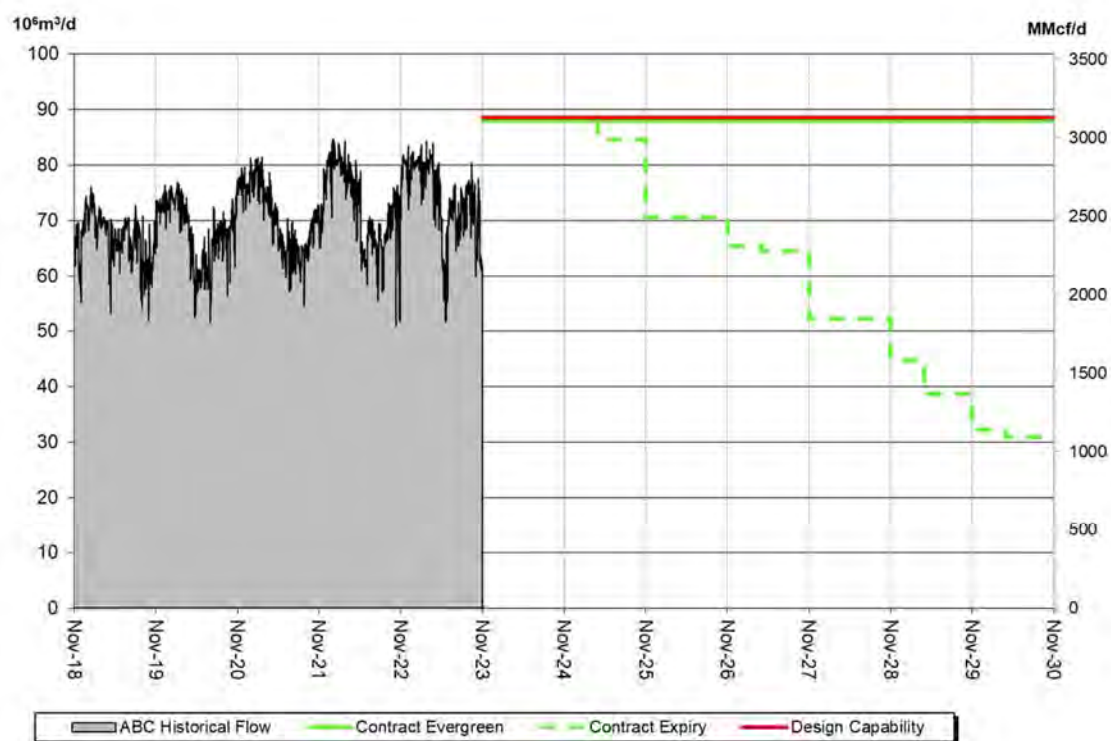
Figure 2-13: EGAT Design Chart



2.6.4 Design Capability – Alberta-British Columbia Export Point (ABC)

The ABC export point is where NGTL delivers to the Foothills B.C. system. The recent 2023 West Path Delivery project increased ABC export capability to meet the contracted export flowrates.

Figure 2-14: ABC Design Chart



3.0 EXTENSION FACILITIES, LATERAL LOOPS AND METER STATIONS

No additional extension facilities, lateral loops or receipt and delivery meter stations have been identified for this Annual Plan.

For a summary of the status of facilities that have been proposed, applied for, under construction or placed in-service since the 2022 Annual Plan, see *Appendix 2: Facility Status Update*.

Planned Meter Stations

Meter station projects are identified and planned to meet customer requests for service on an ongoing basis throughout the year. As new meter station projects are identified the TTFP will be informed and the new meter station projects will be included in the *2024 Facility Status Update (NGTL 2024 Update)*, which can be accessed at <http://www.tccustomerexpress.com/871.html>

Appendix 1: Glossary of Terms

The following definitions are provided to help the reader understand the Annual Plan. The definitions are not intended to be precise or exhaustive and have been simplified for ease of reference. These definitions should not be relied on to interpret NGTL's Gas Transportation Tariff or any Service Agreement. Capitalized terms not defined here are defined in NGTL's Gas Transportation Tariff.

Allowance for Funds Used During Construction (AFUDC)

The capitalization of financing costs incurred during construction of new facilities before the facilities are included in rate base.

Annual Plan

A document outlining NGTL's planned facility additions and major modifications.

Average Annual Delivery

The average day delivery determined for the period of one Gas Year. All forecast years are assumed to have 365 days.

Average Day Delivery

The average day delivery over a given period, determined by summing the total volumes delivered divided by the number of days in that period. It is determined for either a Delivery Point or an aggregation of Delivery Points.

Average Receipt Forecast

The forecast of average flows expected to be received onto the NGTL System at each receipt point.

Coincidental

Occurring at the same time.

Delivery Meter Station

A facility that measures gas volumes leaving the NGTL System.

Delivery Point

The point where gas might be delivered to customer by company under a Schedule of Service, which shall include but not be limited to Group 1 Delivery Point, Group 2 Delivery Point, Group 3 Delivery Point, Extraction Delivery Point and Storage Delivery Point.

Delivery Design Area

The NGTL System is divided into five delivery design areas used to facilitate delivery service within or between Delivery Design Areas:

- Northwest Alberta and Northeast BC Delivery Area
- Northeast Delivery Area
- Southwest Delivery Area
- Southeast Delivery Area
- Edmonton and Area Delivery Area

Demand Coincidence Factor

A factor applied to adjust the system maximum and minimum day deliveries in a design area to a value more indicative of the expected actual peak day deliveries.

Design Area

The NGTL System is divided into three project areas – Peace River Project Area, North and East Project Area and Mainline Project Area. These project areas are subdivided into design and sub design areas. This subdivision allows the system to be modelled in a way that best reflects the pattern of flows in each area of the system.

Design Capability

The maximum volume of gas that can be transported in a pipeline system considering design assumptions. Usually presented as a percentage of Design Flow requirements.

Design Flows

Forecast of Peak Expected Flow required to be transported in a pipeline system considering design assumptions.

Design Forecast

Forecast of the most current projection of receipts and deliveries over a five-year design horizon.

Expansion Facilities

Facilities that will expand the existing NGTL System to/from the point of customer connection, including any pipeline loop of the existing system, metering and associated connection piping and system compression.

Extension Facilities

Facilities that connect new or incremental supply or markets to the NGTL System.

Firm Transportation

Service offered to customers to receive gas onto the NGTL System at Receipt Points or deliver gas off the NGTL System at Delivery Points with a high degree of reliability.

Flow-Through Design Condition

For the purposes of facility design, a condition for a specified area when deliveries are at their minimum and receipts are at their maximum in that area.

Flow-Within Design Condition

For the purposes of facility design, a condition for a specified area when deliveries are at their maximum and receipts are at their minimum in that area.

Gas Year

A period beginning at 800 hours (08:00) Mountain Standard Time on the first day of November in any year and ending at 800 (08:00) Mountain Standard Time on the first day of November of the next year.

Interruptible Transportation

Service offered to customers to receive gas onto the NGTL System at Receipt Points or deliver gas off the NGTL System at Delivery Points, provided capacity exists in the facilities, that is not required to provide firm transportation.

Lateral

A section of pipe that connects one or more Receipt or Delivery Points to the mainline.

Liquefied Natural Gas (LNG)

Natural gas that has been cooled down to liquid form for ease of transport.

Loop

The paralleling of an existing pipeline by another pipeline.

Mainline

A section of pipe, identified through application of the mainline system design assumptions, necessary to meet the aggregate requirements of all customers.

Maximum Day Delivery

The forecast maximum volume, included in the design, to be delivered to a Delivery Point.

Maximum Operating Pressure

The maximum operating pressure at which a pipeline is operated.

Minimum Day Delivery

The forecast minimum volume, included in the design, to be delivered to a Delivery Point.

NPS

Nominal pipe size, in inches.

Non-coincidental

Non-simultaneous occurrence.

Peak Expected Flow

The peak flow expected to occur at a point or points on the NGTL System. For a design area or sub design area, this is the coincidental peak of the aggregate flow. For a single receipt point, it is equivalent to field deliverability.

Project Area

For design purposes, the NGTL System is divided into three project areas – Peace River Project Area, North and East Project Area and Mainline Project Area.

Dividing the system this way allows the system to be modelled in a way that best reflects the pattern of flows in each area of the system.

Receipt Meter Station

A facility that measures gas volumes entering the NGTL System.

Receipt Point

The point on the NGTL System at which gas may be received from customer by company under a Schedule of Service.

Storage Facility

Any commercial facility where gas is stored, that is connected to the NGTL System, and that is available to all customers.

Summer Season

The period starting April 1 and ending on October 31 of any calendar year.

System Average Receipts

The forecast of aggregate average receipts at all Receipt Points.

Transportation Design Process

The process that includes qualifying a customer's applications for service, designing additions to the system, sourcing all required facilities and installing facilities to meet firm transportation requests.

Winter Season

The period starting November 1 of any year and ending on March 31 of the following year.

Appendix 2: Facility Status Update

The Facility Status Update (NGTL 2024 Update) is available as an Adobe Acrobat PDF or MS Excel version with sort and search functionality. It is maintained as a separate document(s) which can be accessed at <http://www.tccustomerexpress.com/871.html>

Appendix 3: System Map

The System Map, including the 2023 Annual Plan facilities, is expected to be available in the second quarter of 2024 and can be accessed at <http://www.tccustomerexpress.com/ngtl-2022-annual-plan.html>.

Appendix 4: Unit Transportation Cost Data

This expanded Appendix 4 is being provided pursuant to Order TG-001-2020 through which the Canada Energy Regulator (CER) directed NGTL to extend its narrative accompanying unit cost of transportation data that the National Energy Board initially directed NGTL to provide as part of its Annual Plan in Order TG-004-2018.

Specifically, the CER directed NGTL to extend the narrative to include the following:

- a) A commentary on whether NGTL considers the trend in unit transportation costs to be a reasonable proxy for the general trend in transportation tolls for the same period. If not, NGTL must explain the reasons for the divergence. The Commission encourages NGTL, where appropriate to use scenarios to illustrate the influence of market forces on pipeline transportation costs; and
- b) NGTL's views on the future competitiveness of its tolls and its perspective on emerging market factors that might affect the long-term viability of NGTL and the competitiveness of the WCSB.

This Appendix 4 provides unit transportation cost data for three historical years and the seven forecast years covered in the 2023 Annual Plan.

Unit Transportation Cost Data (2021 to 2030)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
A: Revenue Requirement (\$ million)	2,694 ¹	2,960 ¹	3,358 ¹	3,728 ²	3,860 ²	4,075 ²	4,330 ²	4,691 ²	4,842 ²	4,909 ²
B: Throughput ³ (10⁹m³)	131	139	139	143 ⁴	145 ⁴	145 ⁴	147 ⁴	153 ⁴	155 ⁴	157 ⁴
C: A/B Unit Cost (\$ million/10⁹m³)	20.6	21.3	24.2	26.1	26.6	28.1	29.5	30.7	31.2	31.3

Sources:

1. NGTL Quarterly Surveillance Reports for the period ending December 31.
2. Forecast Revenue Requirement based on 2020-24 Settlement economic parameters and forecast capital additions.
3. Based on the sum of all NGTL deliveries excluding storage injections.
4. Based on NGTL's 2023 Design Forecast.

NGTL views the forecast unit transportation costs to be a reasonable proxy for the general trend in system average transportation tolls for the 7-year period covered in this Annual Plan. There may, however, be some divergence over time due to uncertainty associated with a multitude of factors, market outcomes and capacity scenarios that can influence future transportation costs and/or tolls, including the following:

- WCSB supply/demand changes and the related change in system capacity requirements;
- Location of supply relative to system demand, which influences extent of facilities required;
- Capacity expansion cost (e.g., depending on system requirements at the time, expansion costs could be higher or lower for an equivalent volume of firm contracts);
- Firm contracting levels (e.g., can influence system capacity requirements, and billing determinants for tolls);
- Supply/Demand characteristics (e.g., base vs. peak loads, which influence pipeline transportation costs);
- Government policy (e.g., can impact costs, firm contract levels or both, and relatedly, pipeline transportation costs);
- Environmental/Social considerations (e.g., concerns over wildlife impacts or landowner considerations and associated cost impacts);
- Technology improvements (e.g., efficiency gains leading to cost reductions);
- Services development (e.g., new services that attract and retain volumes to the system providing a net benefit to the system);
- Repurposing facilities (e.g., change in utilization in response to changes in requirements).

The WCSB is one of the largest supply basins in North America and provides access to vast relatively low-cost reserves, with an estimated resource of 1105 Tcf¹ which represents 21% of the total North American gas resource. Production of this resource is particularly economic due to the liquids uplift that producers realize, especially for wells drilled in the Montney formation. Connecting to this supply allows NGTL and its customers to maintain access to

¹ Canada's Energy Future 2020, Reference Case [CER, December 2020]

diverse intra-basin and downstream markets in order to compete with other basins and to compete for market share within the basin.

NGTL regularly assesses the competitiveness of its tolls and the WCSB's competitive access to downstream markets, inclusive of transportation costs. In addition to pipeline transportation toll levels, competitive access to downstream markets is influenced by many other factors including NGTL's multiple service offerings, flexibility of supply and demand options, and the reliability of supply, among others. NGTL notes that customers have subscribed for the full export capacity currently available on the NGTL System as well as for expansion projects to serve both intra-system and downstream demand. This demand for transportation on the NGTL System demonstrates the near-term and longer-term competitiveness of the NGTL System and the WCSB.

The upward trend in unit transportation cost shown above reflects that new facilities need to be added over time in order to maintain the connectivity between the WCSB and the various markets served by NGTL, which is essential to maintaining the long-term viability of the NGTL System and the competitiveness of the WCSB. This includes facilities required to connect the supply which continues a westward migration resulting in increased distance between supply and markets. In addition, as new facilities typically cost more than older facilities, periods of larger-scale facility additions frequently coincide with periods of an increased trend in unit transportation cost. As part of its active management of costs, NGTL assesses the long-term needs of proposed facilities, which ensures facilities being added are required over the long term to continue meeting the needs of NGTL System customers in the most efficient manner.

Future tolls are also dependent on contracting decisions of customers, which may deviate from the forecast throughput data used in the unit cost data provided above. For example, actual contract levels in future years will depend on individual customer renewal decisions over the period, which may in turn be impacted by a range of factors. Overall, however, NGTL expects continued robust demand for natural gas and transportation services on the NGTL System for the time frame considered for the Unit Transportation Cost Data. Natural gas is an essential commodity in the integrated North American economy, used as a fuel for heating and generation

Appendix 4: Unit Transportation Cost Data

of electricity, as well as a feedstock for industrial processes. In addition, North American gas is increasingly exported to global markets via LNG with a large-scale project currently being developed in western Canada. Emerging factors that could impact long-term demand include climate policies – such as carbon pricing, clean fuel standards, and incentives for renewable energy. These factors may create both opportunities and challenges for gas demand, but their impact is expected to be gradual. Natural gas remains an efficient energy source with the lowest carbon intensity among fossil fuels and is expected to play a key role in implementing environmental policies in the various markets served by the NGTL System. Challenges, however, may result from policies that disproportionately impact domestic gas supply compared to competing gas supply. NGTL will continue to incorporate new information into its assessment of long-term supply and demand outlook, and proactively manage the NGTL System in order to support its long-term viability and the competitiveness of both the NGTL System and the WCSB.

FOURTH AMENDING AGREEMENT

This FOURTH AMENDING AGREEMENT is effective as of the 15th day of July, 2016 ("Effective Date").

BETWEEN:

NOVA GAS TRANSMISSION LTD., a corporation governed by the laws of the Province of Alberta
(hereinafter referred to as "NGTL")

OF THE FIRST PART

- and -

ATCO GAS AND PIPELINES LTD., a corporation governed by the laws of the Province of Alberta, carrying on business under the trade name ATCO Pipelines
(hereinafter referred to as "ATCO")

OF THE SECOND PART

WHEREAS NGTL and ATCO are parties to the Asset Swap Agreement dated June 15, 2011, as amended by the Letter Agreement dated June 13, 2013, the First Amending Agreement dated July 31, 2013, the Second Amending Agreement dated July 9, 2014, the Letter Agreement dated October 19, 2015, the Third Amending Agreement dated October 26, 2015, and the Letter Agreement dated June 3, 2016 (the "Asset Swap Agreement");

AND WHEREAS NGTL and ATCO are parties to the Alberta System Integration Agreement dated April 7, 2009, as amended by the Supplemental Amending Agreement dated May 3, 2011, the Second Supplemental Amending Agreement dated July 31, 2016, the Third Supplemental Amending Agreement dated July 9, 2014, and the Fourth Supplemental Amending Agreement dated July 15, 2016 (the "Integration Agreement");

AND WHEREAS NGTL and ATCO have agreed to amend the Asset Swap Agreement to remove the Grande Cache Gate Facilities from the ATCO Transferred Assets and to refine the map of the ATCO footprint in accordance with amendments made July 15, 2016 to the Integration Agreement, and to memorialize these amendments by deleting and replacing Schedule A-3 of the Asset Swap Agreement.

NOW THEREFORE NGTL and ATCO agree to amend the Asset Swap Agreement as follows:

- 2 -

**ARTICLE 1
INCORPORATION, DEFINITIONS AND EFFECTIVE DATE**

- 1.1. This Fourth Amending Agreement and the provisions hereof are supplemental to the Asset Swap Agreement, and are to form part of and have the same effect as though incorporated in the Asset Swap Agreement.
- 1.2. Unless otherwise defined in this Fourth Amending Agreement, all capitalized terms contained in this Fourth Amending Agreement which are defined in the Asset Swap Agreement shall for all purposes hereof have the meaning given to them in the Asset Swap Agreement unless the context otherwise specifies or requires.
- 1.3. This Fourth Amending Agreement shall be effective as of the Effective Date first written above.

**ARTICLE 2
AMENDMENTS TO THE AGREEMENT**

- 2.1. The Asset Swap Agreement shall be amended by deleting Schedule A-3 in its entirety and replacing it with the following Schedule A-4 which is attached hereto.

**ARTICLE 3
MISCELLANEOUS**

- 3.1. This Fourth Amending Agreement supersedes all negotiations, discussions and undertakings between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Fourth Amending Agreement, the Asset Swap Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Fourth Amending Agreement may be executed by the Parties in counterparts, and may be executed and delivered electronically or by facsimile and all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties to this Fourth Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.

Per: _____

Per: _____

Patrick M. Keys
Vice-President, Commercial - West
Canadian & Eastern U.S. Gas Pipelines

ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name **ATCO
Pipelines**

Per: _____

Per: _____

Approved as to Form and Content:	
Business	<i>[Signature]</i>
Legal	<i>[Signature]</i>

- 2 -

**ARTICLE 1
INCORPORATION, DEFINITIONS AND EFFECTIVE DATE**

- 1.1. This Fourth Amending Agreement and the provisions hereof are supplemental to the Asset Swap Agreement, and are to form part of and have the same effect as though incorporated in the Asset Swap Agreement.
- 1.2. Unless otherwise defined in this Fourth Amending Agreement, all capitalized terms contained in this Fourth Amending Agreement which are defined in the Asset Swap Agreement shall for all purposes hereof have the meaning given to them in the Asset Swap Agreement unless the context otherwise specifies or requires.
- 1.3. This Fourth Amending Agreement shall be effective as of the Effective Date first written above.

**ARTICLE 2
AMENDMENTS TO THE AGREEMENT**

- 2.1. The Asset Swap Agreement shall be amended by deleting Schedule A-3 in its entirety and replacing it with the following Schedule A-4 which is attached hereto.

**ARTICLE 3
MISCELLANEOUS**

- 3.1. This Fourth Amending Agreement supersedes all negotiations, discussions and undertakings between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Fourth Amending Agreement, the Asset Swap Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Fourth Amending Agreement may be executed by the Parties in counterparts, and may be executed and delivered electronically or by facsimile and all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties to this Fourth Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.

Per: _____

Per: _____

ATCO GAS AND PIPELINES LTD., carrying on business under the trade name **ATCO Pipelines**

Per: 
Graeme Feltham, VP Engineering & Construction

Per: 
D. Jason Sharpe, Sr. VP and General Manager



SCHEDULE A-4

TRANSFERRED ASSETS, LEASED FACILITIES & FORM OF CONVEYANCE

Part I - ATCO Transferred Assets & Leased Facilities

Part I(a)- Pipeline Facilities and Leased Facilities

Part I(b)- Map of Pipeline Facilities and Leased Facilities, and ownership interconnect locations

Part II - NGTL Transferred Assets & Leased Facilities

Part II(a)- Pipeline Facilities and Leased Facilities

Part II(b)- Map of Pipeline Facilities and Leased Facilities, and ownership interconnect locations

Part III - Form of Conveyance

SCHEDULE A-4 Part I (a)
To the Fourth Amending Agreement dated July 15, 2016
ATCO Transferred Pipeline Facilities and Leased Facilities

List of ATCO Compressors

Compressor Station Name	Start Location					Engine Model	Driver Type	Unit Power (kW)	Compressor	Old ERCB Licence - Installation	Licence Approval Year	Tranche/ Closing	Map Area
	LSD	SEC	TWP	RGE	MER								
N/A													

SCHEDULE A-4 Part I (a)
To the Fourth Amending Agreement dated July 15, 2016
ATCO Transferred Pipeline Facilities and Leased Facilities

List of ATCO Meter Stations

Meter Station Name	Meter Station Type	Olt ERCB Licence No.	Installation No.	Location					Meter Type and Size	MOP (kPa)	Approval Year	Tranche/Closing	Map Area
				LSD	SEC	TWP	RGE	MER					
Stave Lake Pulp Delivery	Delivery	N/A	N/A	12	22	72	4	W5M	168mm T-30 Turbine, 168mm Orifice	8180	1989	1	11
Sheerness Powerplant Del.	Delivery	N/A	N/A	16	32	28	13	W4M	AAT-30 Turbine	8450	1999	1	52
Grande Cache Mine Delivery-SCADA	Delivery	N/A	N/A	13	10	58	8	W6M	168mm Orifice	8550	1975	4	5
HR Milner Power Plant Delivery-SCADA	Delivery	N/A	N/A	14	10	58	8	W6M	219mm Orifice, 168mm AAT-35 Turbine	6550	1999	4	5
Bluesky Receipt	Receipt	N/A	N/A	1	36	60	3	W6M	168mm Orifice, 60mm Orifice (buyback)	9930	2000	4	5
Bolton Creek Receipt	Receipt	N/A	N/A	4	5	61	3	W6M	168mm Orifice	9650	2003	4	5
Jayar Receipt	Receipt	N/A	N/A	4	5	61	3	W6M	88mm Orifice	9650	2002	4	5
Prairie Creek Receipt	Receipt	N/A	N/A	16	26	60	5	W6M	219mm AAT-80 Turbine, 60mm Orifice (buyback)	9930	2006	4	5
Rocky Creek Receipt	Receipt	N/A	N/A	6	15	61	2	W6M	168mm Orifice, 88mm Orifice (buyback)	9930	2001	4	5

SCHEDULE A-4 Part I (a)
To the Fourth Amending Agreement dated July 15, 2016
ATCO Pipeline Facilities and Leased Facilities

List of ATCO Operating Pipelines

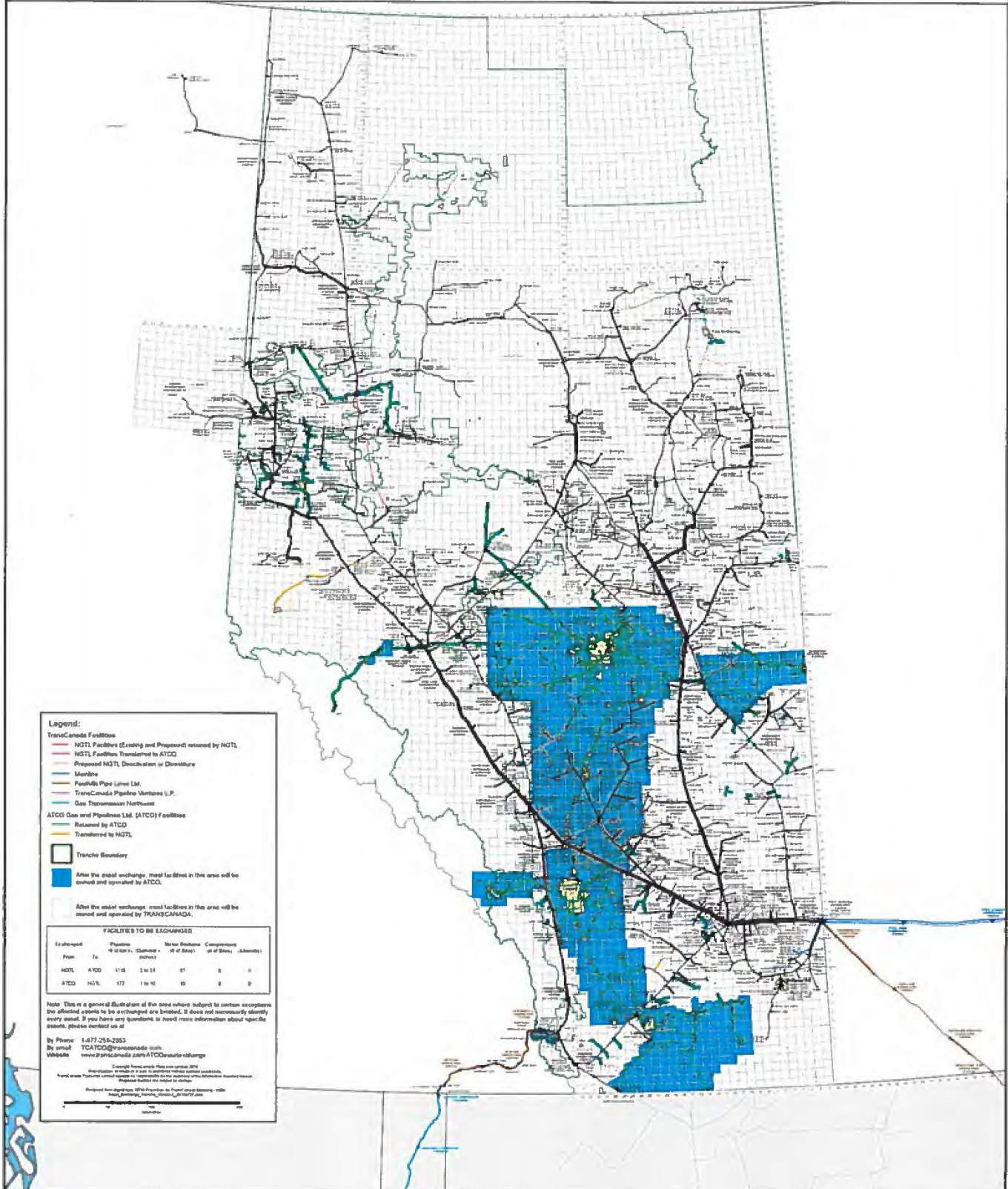
Pipe Segment Name	Facility P	Site	ERCB License	Line No.	From Legal				To Legal				Licence MOP kPa	Length km	Approval Year	Operating Status	Tranche/Closing	Map Area
OYEN TOWN LINE	P3554	42.2	A00091	1	2	3	28	4 W4	15	34	27	4 W4	6720	0.44	2009	O	1	43
GEM TRANSMISSION LINE	P3583	42.2	A01735	1	2	8	23	16 W4	16	8	23	16 W4	6620	1.69	2003	O	3	51
HUSSAR TRANSMISSION LINE	P3583	60.3	A01818	1	8	32	24	19 W4	4	13	24	20 W4	6620	7.94	2003	O	3	35
CREMONA TRANSMISSION LINE	P3559	42.2	A03598	1	4	34	29	4 W5	12	3	30	4 W5	6390	2.9	2003	O	3	44
CESSFORD TRANSMISSION LINE	P3583	42.2	A04783	1	5	25	23	12 W4	11	36	23	12 W4	6390	2.16	2003	O	1	36
GRANDE CACHE	P3364	219.1	A07524	1	12	5	63	25 W5	9	6	63	25 W5	6550	0.17	1996	O	4	5
GRANDE CACHE	P3364	219.1	A07524	17	15	10	58	8 W6	14	10	58	8 W6	6550	0.25	1994	O	4	5
GRANDE CACHE	P3364	168.3	A07524	18	14	10	58	8 W6	14	10	58	8 W6	6550	0.01	1980	O	4	5
GRANDE CACHE	P3364	219.1	A07524	23	9	6	63	25 W5	9	6	63	25 W5	6550	0.06	2005	O	4	5
GRANDE CACHE	P3364	168.3	A07524	24	9	6	63	25 W5	9	6	63	25 W5	6550	0.06	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	25	9	6	63	25 W5	9	6	63	25 W5	8280	0.1	2005	O	4	5
GRANDE CACHE	P3364	168.3	A07524	26	12	10	58	8 W6	13	10	58	8 W6	6550	0.35	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	27	13	10	58	8 W6	8	25	58	8 W6	9930	6.59	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	28	8	25	58	8 W6	9	31	58	7 W6	9930	2.81	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	29	9	31	58	7 W6	10	4	59	7 W6	9930	2.74	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	30	11	4	59	7 W6	3	14	59	7 W6	9930	4.31	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	31	3	14	59	7 W6	9	14	59	7 W6	9930	1.3	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	32	9	14	59	7 W6	10	34	59	6 W6	9930	9.66	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	33	10	34	59	6 W6	14	35	59	6 W6	9930	1.27	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	34	14	35	59	6 W6	1	2	60	6 W6	9930	0.93	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	35	1	2	60	6 W5	1	2	60	6 W6	9930	0.16	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	36	1	2	60	6 W6	11	1	60	6 W5	9930	1.33	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	37	11	1	60	6 W6	10	1	60	6 W6	9930	0.26	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	38	10	1	60	6 W6	16	26	60	5 W6	9930	11.24	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	39	16	26	60	5 W6	5	36	60	5 W6	9930	0.85	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	40	5	36	60	5 W6	13	31	60	4 W6	9930	1.97	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	41	13	31	60	4 W6	3	5	61	4 W6	9930	2.57	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	42	3	5	61	4 W6	8	4	61	4 W6	9930	2.51	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	43	1	4	61	4 W6	2	3	61	4 W6	9930	1.5	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	44	2	3	61	4 W6	4	2	61	4 W6	9930	0.59	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	45	4	2	61	4 W6	9	24	61	2 W6	9930	24.42	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	46	9	24	61	2 W6	14	19	61	1 W5	9930	0.95	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	47	14	19	61	1 W6	9	6	63	25 W5	9930	29.55	2005	O	4	5
GRANDE CACHE	P3364	168.3	A07524	48	4	7	61	2 W6	4	7	61	2 W6	9930	0.07	2005	O	4	5
GRANDE CACHE	P3364	219.1	A07524	49	6	15	61	2 W6	6	15	61	2 W6	9930	0.04	2005	O	4	5
GRANDE CACHE	P3364	273.1	A07524	50	6	34	61	1 W6	6	34	61	1 W6	9930	0.01	2006	O	4	5
GRANDE CACHE	P3364	273.1	A07524	51	14	11	62	27 W5	14	11	62	27 W5	9930	0.03	2006	O	4	5
GRANDE CACHE	P3364	114.3	A07828	11	10	18	57	8 W6	5	8	57	8 W6	6550	2.13	1996	O	4	5
GRANDE CACHE	P3364	114.3	A07828	13	5	8	57	8 W6	12	5	57	8 W6	6550	1.28	1996	O	4	5

SCHEDULE A-4 Part I (a)
To the Fourth Amending Agreement dated July 15, 2016
ATCO Pipeline Facilities and Leased Facilities

List of ATCO Operating Pipelines

GRANDE CACHE	P3364	114.3	A07828	15	12	5	57	8 W6	11	5	57	8 W6	6550	0.25	1976	O	4	5
GRANDE CACHE	P3364	114.3	A07828	16	11	5	57	8 W6	6	5	57	8 W6	6550	0.1	2000	O	4	5
GRANDE CACHE	P3364	42.2	A07828	18	4	8	57	8 W6	16	6	57	8 W6	6550	0.29	2003	O	4	5
GRANDE CACHE	P3364	114.3	A07828	20	6	5	57	8 W6	2	5	57	8 W6	6550	0.18	1998	O	4	5
GRANDE CACHE	P3364	114.3	A07828	24	6	5	57	8 W6	2	5	57	8 W6	6550	0.48	1999	O	4	5
GRANDE CACHE	P3364	114.3	A07828	32	14	10	58	8 W6	13	10	58	8 W6	6550	0.6	2004	O	4	5
GRANDE CACHE	P3364	114.3	A07828	37	13	10	58	8 W6	12	4	58	8 W6	6550	2.55	2004	O	4	5
GRANDE CACHE	P3364	114.3	A07828	38	1	5	58	8 W6	11	29	57	8 W6	6550	3.1	2004	O	4	5
GRANDE CACHE	P3364	114.3	A07828	39	12	4	58	8 W6	1	5	58	8 W6	6550	0.86	2004	O	4	5
GRANDE CACHE	P3364	114.3	A07828	40	11	29	57	8 W6	10	18	57	8 W6	6550	3.65	2006	O	4	5
LUNDBRECK-COWLEY TRANSMISSION	P3648	42.2	A08212	1	10	7	7	2 W5	16	14	7	2 W5	6520	8.06	2002	O	3	18
LOMOND TRANSMISSION	P3647	42.2	A08947	1	12	7	15	20 W4	10	14	16	20 W4	3100	14.14	2002	O	3	19
SLAVE LAKE PULP LATERAL	P3384	88.9	A24291	1	4	16	72	4 W5	10	22	72	4 W5	8160	3.9	1989	O	1	11
ROCKY MOUNTAIN HOUSE FOREST PRODUCTS LATERAL	P3356	60.3	A26879	1	12	1	38	9 W5	5	2	38	9 W5	9930	1.96	1993	O	3	46
HOGGARD CREEK TRANSMISSION	P3788	219.1	A36884	1	5	11	69	22 W5	1	1	69	22 W5	9930	4.39	2001	O	2	40
HOGGARD CREEK TRANSMISSION	P3788	219.1	A36884	2	1	1	69	22 W5	4	6	69	21 W5	9930	0.16	2001	O	2	40

SCHEDULE A-4 – Part I (b)
To the Fourth Amending Agreement dated July 15, 2016
MAP OF ATCO TRANSFERRED PIPELINE FACILITIES



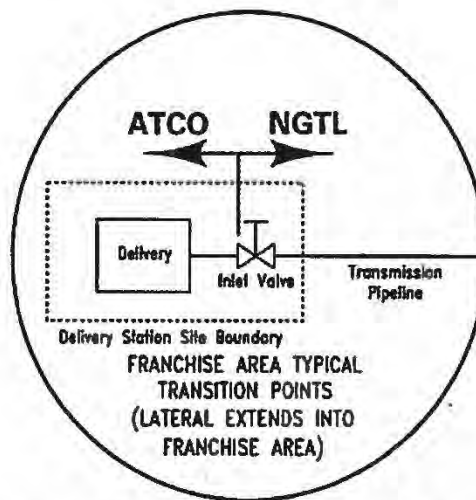
Schedule A-4 Part I (b)
to the Fourth Amending Agreement Dated July 15, 2016

Ownership Interconnect Locations

Location #	Ownership Interconnect Location Name	Legal Location	Description
1	Village of Cowley	14-07-02-W5	First inlet valve to Gate Station
2	Village of Cremona	04-30-04-W5	First inlet valve to Gate Station
3	Village of Hussar	13-24-20-W4	First inlet valve to Gate Station
4	Village of Lomond	14-16-20-W4	First inlet valve to Gate Station
5	Town of Oyen	34-27-04-W4	First inlet valve to Gate Station

Schedule A-4 Part I(b)
To the Fourth Amending Agreement Dated July 15, 2016

ATCO Franchise Area Ownership Interconnect Locations
(Lateral Extends into Franchise Area)



Interconnect location at first inlet valve to Delivery Station

Location #	Franchise Area	Legal Location	Valve Number
1	Village of Cowley	14-07-02-W5M	23320
2	Village of Cremona	04-30-04-W5M	5915
3	Village of Hussar	13-24-20-W4M	688
4	Village of Lomond	14-16-20-W4M	1095
5	Town of Oyen	34-27-04-W4M	14012

SCHEDULE A-4 Part II (a)
To the Fourth Amending Agreement dated July 15, 2016
NGTL Transferred Pipeline Facilities
List of NGTL Meter Stations

Meter Station Name	ERCB/NEB License	OLD ERCB License No.	Installation No.	Location					Meter Type and Size	MOP (kPa)	Approval Year	Tranche/Closing
				LSD	SEC	TWP	RGE	MER				
EAST CALGARY & SALES	80113	2957	1	1	3	26	29	W4M	Orifice, NPS 12 & 4	6205	1961	3
EAST CALGARY B SALES	80767	11944	1	1	3	26	29	W4M	Turbine, T60	6590	1977	3
BENALTO WEST	80137	4766	5	10	12	38	3	W5M	PD, 7M1440	6205	1975	2a
BENTLEY	80095	2062	2	12	21	40	2	W5M	PD, 4.6M900	6205	1976	2a
BONNIE GLEN	80623	24560	2	15	8	47	27	W4M	Orifice, NPS 12	9280	1998	2a
BRIGGS	80580	23762	1	5	1	39	1	W5M	Orifice, NPS 8	6205	1988	2a
CHIP LAKE	80758	11211	1	1	29	53	10	W5M	PD, 7M1440	7240	1977	2a
DAVEY LAKE	NA	NA	NA	4	17	34	26	W4M	Orifice, NPS 6	6205	2005	2a
EVERGREEN SALES	80176	7512	2	6	16	38	4	W5M	PD, 5M175	6895	1987	2a
FORSHEE	80762	11340	1	10	8	41	1	W5M	PD, 7M1440	6205	1977	2a
GAETZ LAKE SALES	80088	1985	8	15	36	38	27	W4M	Orifice, NPS 4	6205	1992	2a
GILBY #2	80095	2062	1	2	25	40	3	W5M	Orifice, NPS 6	6205	1961	2a
GILBY SOUTH PACIFIC	80095	2062	3	2	25	40	3	W5M	Orifice, NPS 8	6205	1968	2a
HAYNES SALES	80532	22457	2	11	29	38	25	W4M	Turbine, T-18	6205	1994	2a
INNISFAIL SALES	80093	2041	1	15	35	34	1	W5M	Orifice, NPS 2	6205	1988	2a
JOFFRE	80088	1985	2	15	36	38	27	W4M	Orifice, NPS 6	6205	1977	2a
JOFFRE EAST	80532	22457	5	2	19	38	25	W4M	Orifice, NPS 4	7500	2007	2a
JOFFRE SALES	NA	NA	NA	12	29	38	25	W4M	Turbine, T-60	6205	1986	2a
JOFFRE SALES #3	80532	22457	4	12	29	38	25	W4M	Turbine, T60	6275	1999	2a
JOFFRE SALES #2	80532	22457	1	12	29	38	25	W4M	Turbine, T140	6275	1987	2a
LACOMBE LAKE	NA	NA	NA	11	5	39	28	W4M	Orifice, NPS 4	6205	2004	2a
LLOYD CREEK SALES	80804	23219	1	13	32	43	1	W5M	Turbine, T18	6205	1988	2a
MEDICINE RIVER A	80176	7512	1	6	16	38	4	W5M	Orifice, NPS 4	6895	1975	2a
PEMBINA	80743	3282	1	13	17	47	9	W5M	Orifice, NPS 8	6205	1962	2a
PEMBINA SALES	80743	3282	2	13	17	47	9	W5M	Orifice, NPS 8	6175	1962	2a
PENHOLD	80088	1985	4	16	29	36	27	W4M	PD, 7M1440	6205	1973	2a
PENHOLD NORTH SALES	80148	5253	1	3	19	37	27	W4M	Turbine, T30	6205	1985	2a
PENHOLD WEST	80805	23446	1	4	13	35	28	W4M	Orifice, NPS 4	6205	1988	2a
PIPER CREEK	80532	22457	3	7	11	38	26	W4M	Orifice, NPS 8	6205	1994	2a
RIMBEY	80098	2680	1	13	32	43	1	W5M	Orifice, NPS 12	6155	1961	2a
RIMBEY WEST SALES	NA	NA	NA	13	32	43	1	W5M	Orifice, NPS 12	6205	1974	2a
SYLVAN LAKE	80137	4766	7	8	16	38	2	W5M	Orifice, NPS 6	6205	1964	2a
SYLVAN LAKE EAST	80137	4766	2	16	19	38	1	W5M	PD, 7M1440	6205	1974	2a
SYLVAN LAKE EAST #2	NA	NA	NA	16	19	38	1	W5M	Orifice, NPS 4	6205	2004	2a
SYLVAN LAKE SOUTH	80137	4766	3	13	25	37	3	W5M	Orifice, NPS 6	6205	1974	2a

SCHEDULE A-4 Part II (a)
To the Fourth Amending Agreement dated July 15, 2016
NGTL Transferred Pipeline Facilities
List of NGTL Meter Stations

SYLVAN LAKE WEST	80137	4766	1	13	33	37	3	W5M	Orifice, NPS 6	6205	1964	2a
THREE HILLS CREEK	80097	2083	2	12	13	35	26	W4M	Orifice, NPS 6	6205	1961	2a
THREE HILLS CREEK WEST	80088	1985	1	3	6	35	26	W4M	Orifice, NPS 4	6205	1977	2a
USONA SALES	80623	24560	3	1	28	46	27	W4M	Turbine, T60	6205	1998	2a
WESTROSE	80752	9332	1	13	32	43	1	W5M	Orifice, NPS 12	6155	1961	2a
WIMBORNE	80135	4532	1	5	1	34	26	W4M	Orifice, NPS 8	6205	1964	2a
WIMBORNE NORTH	80097	2083	1	16	5	35	26	W4M	Orifice, NPS 6	6205	1989	2a
WIMBORNE SALES	80406	17368	1	6	11	33	26	W4M	PD-7M1440	6205	1980	2a
ARDLEY SALES	80636	24857	1	11	32	39	22	W4M	PD, 7M1440	8450	1992	4a
ARMENA	80516	21487	1	6	3	49	21	W4M	Orifice, NPS 4	8275	1985	4a
BASHAW & BASHAW B	80372	14070	1	8	10	42	22	W4M	Orifice, NPS 6	6550	1977	4a
BASHAW WEST SALES	80330	12387	3	10	6	42	22	W4M	Orifice, NPS 2	6550	1977	4a
BITTERN LAKE & SALES	80496	20689	1	6	30	46	21	W4M	Turbine, T18	8275	1983	4a
CAMROSE CREEK	80639	24879	1	12	27	46	21	W4M	Orifice, NPS 4	8275	1990	4a
CHIGWELL	80090	1987	1	4	17	41	24	W4M	Orifice, NPS 6	6205	1977	4a
CHIGWELL EAST	80117	3014	1	7	14	41	24	W4M	Orifice, NPS 6	6205	1961	4a
CHIGWELL NORTH SALES	80090	1987	3	4	17	41	24	W4M	PD, 3M1440	6250	1977	4a
DONALDA	80206	8185	4	15	18	40	18	W4M	Orifice, NPS 4	6550	1971	4a
DUHAMEL	80402	17249	2	5	31	45	20	W4M	Orifice, NPS 4	8275	1981	4a
EDBERG	80089	1986	7	12	10	44	22	W4M	Orifice, NPS 4	8275	1985	4a
ELNORA EAST NO.2	NA	NA	NA	4	24	35	22	W4M	Orifice, NPS 4	7065	2005	4a
ERSKINE NORTH	80206	8185	3	15	31	39	20	W4M	Orifice, NPS 2	6550	1975	4a
FERINTOSH NORTH & SALES	80402	17249	1	2	32	45	21	W4M	Orifice, 2 x NPS 2	7585	1981	4a
FERINTOSH SALES	80089	1986	5	12	10	44	22	W4M	PD, 3M1440	7505	1982	4a
FERINTOSH SOUTH	NA	NA	NA	1	17	44	21	W4M	Orifice, NPS 4	8275	2005	4a
FERINTOSH WEST	80813	24966	1	9	12	44	21	W4M	Orifice, NPS 6	6895	1990	4a
GOOSEQUILL	80391	15485	2	4	22	35	22	W4M	Orifice, NPS 4	6895	1996	4a
GOOSEQUILL WEST	NA	NA	NA	16	30	35	23	W4M	Orifice, NPS 4	8275	2006	4a
HUMMOCK LAKE	NA	NA	NA	1	10	36	24	W4M	Orifice, NPS 4	6895	2004	4a
HUXLEY	80210	8218	1	5	17	34	24	W4M	Orifice, NPS 6	6205	1971	4a
HUXLEY EAST	80539	22614	1	4	29	34	23	W4M	Orifice, NPS 4	6895	1987	4a
LAKEVIEW LAKE	80154	6310	4	7	17	35	24	W4M	Orifice, NPS 2	6205	1984	4a
LAKEVIEW LAKE #2	80154	6310	5	7	17	35	24	W4M	Orifice, NPS 4	6205	2001	4a
LAMERTON	80454	19892	1	8	27	42	21	W4M	Orifice, NPS 4	6895	1995	4a
LAMERTON No.2	NA	NA	NA	8	27	42	21	W4M	Orifice, NPS 4	6895	2007	4a
LOUSANA	80243	9871	1	8	16	37	22	W4M	Orifice, NPS 4	6895	1982	4a
MALMO	NA	NA	NA	15	19	43	22	W4M	Orifice, NPS 4	8275	2005	4a

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MIKWAN	80212	8220	1	5	19	35	22	W4M	Orifice, NPS 4	6205	1971	4a
MIKWAN EAST	80391	15485	1	1	19	35	21	W4M	Orifice, NPS 8	6895	1979	4a
MIKWAN NORTH	80213	8221	1	9	8	37	23	W4M	Orifice, NPS 6	6205	1972	4a
MIQUELON LAKE	80638	24866	1	5	23	49	21	W4M	Orifice, NPS 6	8275	1990	4a
MIRROR	80453	19890	1	6	7	41	22	W4M	Orifice, NPS 8	6550	1982	4a
NEVIS NORTH	80072	714	1	7	22	39	22	W4M	Orifice, NPS 4	6205	1959	4a
NEVIS SOUTH	80072	714	2	1	3	39	22	W4M	Orifice, NPS 12	6205	1959	4a
OHATON	80482	20257	1	1	25	46	19	W4M	Orifice, NPS 2	8275	1983	4a
SPOTTED CREEK	NA	NA	NA	9	35	41	23	W4M	Orifice, NPS 6	6550	2004	4a
STETTLER SOUTH	80081	1286	18	1	12	40	20	W4M	Orifice, NPS 6	6550	1976	4a
WOOD RIVER & SALES	80089	1986	6	1	17	43	23	W4M	Orifice, NPS 4 & Turbine, T30	6205	1981	4a

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Pipe Segment Name	ERCB/ NEB Licence	OLD ERCB Licence	Line No.	Start Location					End Point					Licence MOP (kPa)	Length	Approval Year	Status	Tranche/ Closing
				LSD	SEC	TWP	RGE	MER	LSD	SEC	TWP	RGE	MER					
EAST CALGARY LATERAL -NPS 22	80113	2957	1	1	3	26	29	W4	7	7	26	1	W5	8590	11.77	1959	O	3
EAST CALGARY LATERAL -NPS 22	80113	2957	3	6	12	26	2	W5	14	7	26	2	W5	8590	8.05	2000	O	3
EAST CALGARY LATERAL -NPS 22	80113	2957	6	1	14	26	3	W5	8	15	26	3	W5	8590	2.29	2000	O	3
EAST CALGARY LATERAL -NPS 22	80113	2957	4	7	15	26	3	W5	8	15	26	3	W5	8590	0.25	1959	O	3
EAST CALGARY LATERAL -NPS 22	80113	2957	8	6	16	26	3	W5	9	16	26	4	W5	8590	9.05	2000	O	3
EAST CALGARY LATERAL -NPS 22 (ABANDONEMENT)	80133	2957	11	14	7	26	2	W5	1	14	26	3	W5	0	2.46		D	3
EAST CALGARY LATERAL -NPS 22 (ABANDONEMENT)	80113	2957	11	7	15	26	3	W5	8	16	26	3	W5	0		2000	D	3
EAST CALGARY LATERAL -NPS 22 (REPLACEMENT)	80113	2957	9	14	7	26	2	W5	1	14	26	3	W5	6590	2.46	2000	O	3
EAST CALGARY LATERAL -NPS 22 (REPLACEMENT)	80113	2957	7	7	15	26	3	W5	8	16	26	3	W5	6590	1.88	2000	D	3
EAST CALGARY LATERAL -NPS 22 (UPGRADE)	80113	2957	2	7	7	26	1	W5	6	12	26	2	W5	5590	2.17	1989	O	3
EAST CALGARY M/S	80113	2957	5	1	3	26	29	W4	1	3	26	29	W4	8210	0.12	2002	O	3
BENALTO WEST LATERAL -NPS 4	80137	4756	15	10	12	36	3	W5	8	12	38	3	W5	8450	0.87	1976	O	2a
BONNIE GLEN LATERAL -NPS 12	80623	24560	5	15	8	47	27	W4	1	28	46	27	W4	9280	7.40	1997	O	2a
BONNIE GLEN M/S PRODUCER TIE-IN - NPS 12	80623	24560	4	3	17	47	27	W4	15	8	47	27	W4	9280	1.05	1997	O	2a
BRIGGS LATERAL - NPS 6	80580	23762	1	5	1	39	1	W5	10	1	39	1	W5	8450	1.76	1988	O	2a
CROSSROADS GAS CO-OP TAP #4026	80194	7866	3	4	30	34	26	W4	4	30	34	26	W4	8205	0.05		O	2a
CWNG TAP P-304 SUPPLY LINE RELOCATION	80135	4532	3	1	2	34	26	W4	8	2	34	26	W4	6790	0.40	1999	O	2a
CYGNET LAKE M/S PRODUCER TIE-IN	80137	4766	13	16	19	38	1	W5	16	19	38	1	W5	9030	0.05	1975	O	2a
EAS ML (SYLVAN LAKE SECTION) - NPS 24	80088	1985	21	14	21	40	1	W5	15	35	37	28	W4	8280	29.90	1992	O	2a
EAS ML LOOP - NPS 24	80194	7866	1	4	30	34	26	W4	13	2	33	26	W4	7067	16.90	1970	O	2a
EASTERN ALBERTA SYSTEM ML LOOP (PENHOLD SECTION) - NPS 24	80685	27897	22	15	35	37	28	W4	1	26	35	27	W4	6200	25.41	1994	O	2a
ECKVILLE TOWN TAP RELOCATION - NPS 2	80095	2082	2	15	24	40	3	5	16	24	40	3	5	6350	0.48	2003	O	2a
FARM TAP #P-304 (CWNG)	80134	4532	2	1	2	34	26	W4	8	2	34	26	W4	7000	0.05	1991	O	2a
FERRYBANK LATERAL LOOP LINE SPLIT - NPS 8	80437	19361	2	13	33	43	1	W5	13	32	43	1	W5	8450	2.07	2000	O	2a
FERRYBANK LATERAL -NPS 8	80214	8222	18	14	13	43	1	W5	13	32	43	1	W5	8000	2.07	2001	O	2a
GILBY LATERAL - NPS 16	80095	2082	1	2	25	40	3	W5	14	21	40	1	W5	8350	14.39	1960	O	2a
INNISFAIL LATERAL - NPS 8	80093	2041	1	1	3	35	1	W5	14	4	35	28	W4	6450	6.70	1960	O	2a
INNISFAIL LATERAL -NPS 6	80093	2041	3	14	4	35	28	W4	1	26	35	27	W4	6450	16.40	1960	O	2a
JOFFRE LATERAL	80351	13143	1	15	36	38	27	W4	15	36	38	27	W4	8450	0.03	1977	O	2a
JOFFRE LATERAL - NPS 8	80088	1985	12	15	36	38	27	W4	1	34	37	27	W4	8820	12.30	1972	O	2a
JOFFRE LATERAL - NPS 8	80088	1985	14	1	34	37	27	W4	9	7	37	27	W4	8820	6.87	1972	O	2a
JOFFRE SALES #2 M/S LATERAL - NPS 8	80532	22457	2	12	29	38	25	W4	12	29	38	25	W4	8450	0.16	1999	O	2a
JOFFRE SALES LATERAL -NPS 10	80532	22457	1	9	7	37	27	W4	12	29	38	25	W4	7500	27.30	1988	O	2a
MEDICINE RIVER A LATERAL - NPS 4	80176	7512	4	6	16	38	4	W5	3	16	38	4	W5	8140	0.41	1975	O	2a
MEDICINE RIVER LATERAL - NPS 4	80176	7512	1	5	17	38	4	W5	8	17	38	4	W5	0	1.22	1977	D	2a
MEDICINE RIVER LATERAL - NPS 4	80176	7512	3	6	16	38	3	W5	13	33	37	3	W5	8550	3.87	1977	O	2a
MEDICINE RIVER LATERAL - NPS 4	80176	7512	5	8	17	38	4	W5	8	16	38	3	W5	8550	7.31	2008	O	2a
MULHURST LATERAL - NPS 12 (Purchased from Imperial Oil in Nov-96)	80623	24560	3	1	28	46	27	W4	13	33	43	1	W5	9280	32.50	1996	O	2a
PENHOLD M/S PRODUCER TIE-IN - NPS 8	80088	1985	16	16	29	38	27	W4	10	29	36	27	W4	6205	0.11	1973	O	2a
PENHOLD NORTH SALES LATERAL - NPS 8	80148	5253	1	3	19	37	27	W4	6	19	37	27	W4	6205	0.32	1986	O	2a
PLAINS ML LATERAL LOOP (THREE HILLS SECTION)	80085	27897	23	1	26	35	27	W4	5	30	34	28	W4	6280	10.26	1995	O	2a
PLAINS MAINLINE - NPS 24	80088	1985	28	13	32	43	1	W5	14	21	40	1	W5	8210	33.11	1960	O	2a
PLAINS MAINLINE - NPS 24	80088	1985	29	14	21	40	1	W5	2	2	38	28	W4	8210	29.84	1960	O	2a
PLAINS MAINLINE - NPS 24	80089	1985	30	2	2	38	28	W4	1	26	35	27	W4	8210	25.09	1960	O	2a
PLAINS MAINLINE - NPS 24	80088	1985	31	1	26	35	27	W4	12	2	33	26	W4	8210	27.15	1960	O	2a
SALES TAP #4029 FOR CROSSROADS GAS CO-OP	80088	1985	26	3	5	37	27	W4	3	5	37	27	W4	8200	0.08	1994	O	2a
SALES TAP #4238 FOR ANCHORAGE PIPELINE (Abon) & S. JAHROUS	80088	1985	25	3	16	40	1	W5	3	16	40	1	W5	8450	0.19	1968	O	2a
SALES TAP #4238 FOR GULL LAKE GAS CO-OP	80088	1985	24	3	16	40	1	W5	3	16	40	1	W5	8450	0.19	1964	O	2a
SPRINGDALE LATERAL -NPS 12	80623	24560	2	13	33	43	1	W5	13	33	43	1	W5	8450	0.23	1992	O	2a
SYLVAN LAKE EAST M/S PRODUCER TIE-IN	80137	4766	11	18	19	38	1	W5	18	19	38	1	W5	8520	0.05	1964	O	2a
SYLVAN LAKE EAST M/S -PRODUCER TIE-IN - NPS 8	80137	4766	18	18	19	38	1	W5	18	19	38	1	W5	8450	0.47	1964	O	2a

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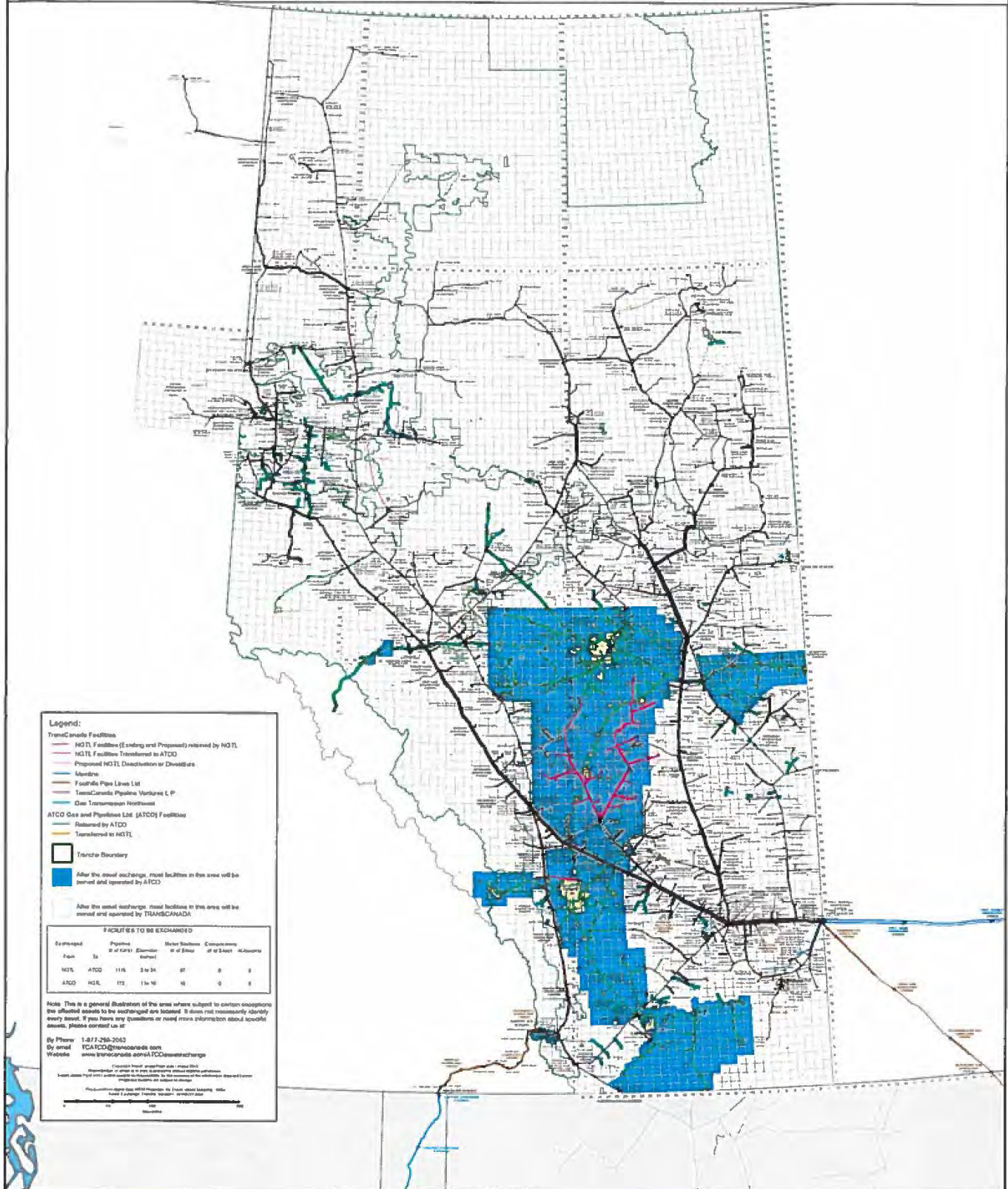
Pipe Segment Name	ERCB/ NEB Licence	OLD ERCB Licence	Line No.	Start Location					End Point					Licence MOP (kPa)	Length	Approval Year	Status	Tranche Closing
				L S D	S E C	T W P	R G E	M E R	L S D	S E C	T W P	R G E	M E R					
SYLVAN LAKE LATERAL LOOP - NPS 18	80137	4766	20	13	33	37	3	W5	15	21	38	28	W4	8450	30.50	1990	O	2a
SYLVAN LAKE LATERAL - NPS 12	80134	4768	4	13	33	37	3	W5	8	16	38	2	W5	6520	11.90	1964	O	2a
SYLVAN LAKE LATERAL - NPS 16	80137	4766	21	8	16	38	2	W5	15	31	38	28	W4	6520	16.49	2005	O	2a
SYLVAN LAKE NORTH M/S - PRODUCER TIE-IN	80137	4766	18	16	16	38	2	W5	8	18	38	2	W5	6516	0.84	1964	O	2a
SYLVAN LAKE SOUTH LATERAL - NPS 8	80137	4768	12	13	25	37	3	W5	16	2	38	3	W5	6810	3.20	1974	O	2a
SYLVAN LAKE SOUTH LATERAL LOOP - NPS 10	80137	4768	19	13	25	37	3	W5	16	2	38	3	W5	8450	3.30	1990	O	2a
SYLVAN LAKE WEST M/S - PRODUCER TIE-IN	80134	4766	9	14	32	37	3	W5	13	33	37	3	W5	7280	0.95	1964	O	2a
THREE HILLS CREEK LATERAL - NPS 8	80097	2083	1	13	13	35	26	W4	3	6	35	26	W4	8405	9.24	1980	O	2a
THREE HILLS CREEK M/S - SALES GAS LINE	80194	7866	5	12	13	35	26	W4	12	13	35	26	W4	5916	0.05		O	2a
UNKNOWN GAS TAP	80088	1985	2	1	26	39	1	W5	13	23	39	1	W5	6280	0.05	1994	O	2a
WIMBORNE NORTH LATERAL	80097	2083	2	16	5	35	26	W4	16	5	35	26	W4	9850	0.19	1989	O	2a
WIMBORNE LATERAL - NPS 12	80135	4532	1	4	12	34	26	W4	12	2	33	26	W4	6790	10.69	1963	O	2a
WIMBORNE SALES LATERAL - M/S DECOMMISSIONED	80406	17388		5	11	33	26	W4	8	11	33	26	W4	0	0.05	1981	O	2a
ARMENA LATERAL - NPS 6	80518	21487	2	5	3	49	21	W4	4	20	48	21	W4	8450	27.20	1985	O	4a
ARMENA M/S PRODUCER TIE-IN - NPS 6	80516	21487	1	11	3	49	21	W4	6	3	49	21	W4	8450	0.35	1985	O	4a
BASHAW LATERAL - NPS 6	80372	14070	1	8	10	42	22	W4	1	29	41	23	W4	8550	14.27	1978	O	4a
BASHAW WEST LATERAL - NPS 3 (Retired)	80330	12387	5	10	6	42	22	W4	5	5	42	22	W4	6895	0.61	1976	O	4a
BITTERN LAKE SALES LATERAL - NPS 6	80496	20589	1	6	30	46	21	W4	8	29	45	21	W4	8450	10.48	1983	O	4a
CAMROSE CREEK LATERAL - NPS 4	80639	24878	1	12	27	46	21	W4	4	28	46	21	W4	8280	2.30	1990	O	4a
CHAIN LAKES GAS CO-OP #4354	80261	10828	1	14	10	38	22	W4	14	10	39	22	W4	7070	0.34		O	4a
CHIGWELL E LATERAL LOOP - NPS 6	80117	3014	2	7	14	41	24	W4	14	41	24	W4	6430	0.75	1968	O	4a	
CHIGWELL EAST LATERAL - NPS 4	80117	3014	1	7	14	41	24	W4	14	41	24	W4	6895	0.50	1981	O	4a	
CHIGWELL WEST LATERAL - NPS 8	80090	1987	2	4	17	41	24	W4	1	29	41	23	W4	6430	11.57	1960	O	4a
CHIGWELL WEST LATERAL - NPS 8 ->	80090	1987	1	9	7	41	24	W4	4	17	41	24	W4	6430	0.85	1960	O	4a
CROSSROADS GAS CO-OP TAP #4020	80194	7866	6	13	21	35	24	W4	13	21	35	24	W4	7070	0.05		O	4a
DONALDA LATERAL - NPS 8	80206	8185	4	15	18	40	18	W4	7	22	39	22	W4	8380	35.47	1971	O	4a
DONALDA LATERAL LOOP - NPS 8	80635	24827	1	15	31	39	20	W4	8	22	39	22	W4	8450	18.10	1990	O	4a
DORNELEE LATERAL LOOP - NPS 8	80454	18892	3	8	27	42	21	W4	8	10	42	22	W4	6900	12.20	2004	O	4a
DUHAMEL LATERAL - NPS 4	80402	17249	6	5	31	45	20	W4	7	29	45	21	W4	8450	7.73	1981	O	4a
DUHAMEL LATERAL LOOP - NPS 8	80522	22041	1	5	31	45	20	W4	7	29	45	21	W4	8450	7.71	1985	O	4a
FERINTOSH LATERAL (NPS 6)	80089	1986	15	9	12	44	21	W4	15	8	43	23	W4	7580	31.21	1976	O	4a
FERINTOSH LATERAL LOOP - NPS 8	80089	1986	18	9	9	44	22	W4	15	8	43	23	W4	8450	15.95	1982	O	4a
FERINTOSH LATERAL LOOP #2 - NPS 10	80089	1986	6	1	17	44	21	W4	12	10	44	22	W4	8450	8.40	1989	O	4a
FERINTOSH LATERAL LOOP #2 (NPS 12)	80089	1986	5	12	10	44	22	W4	15	8	43	23	W4	8450	16.10	1989	O	4a
FERINTOSH NORTH LATERAL - NPS 6	80402	17249	4	2	32	45	21	W4	1	17	44	21	W4	8450	14.52	1980	O	4a
FERINTOSH NORTH LATERAL LOOP - NPS 10	80402	17249	8	7	29	45	21	W4	1	17	44	21	W4	8450	13.60	1989	O	4a
HUXLEY EAST LATERAL - NPS 4	80538	22614	1	4	28	34	23	W4	5	17	34	24	W4	8450	10.66	1987	O	4a
HUXLEY LATERAL - NPS 8	80210	8218	2	5	17	34	24	W4	16	22	34	25	W4	8860	5.80	1971	O	4a
HUXLEY M/S PRODUCER TIE-IN - NPS 6	80210	8218	1	8	17	34	24	W4	5	17	34	24	W4	9600	0.50	1971	O	4a
LAMERTON LATERAL - NPS 4 (DIS portion of Dornelee Lateral. U/S of Lamerton sold to Avianca in Sep-2000)	80454	18892	2	8	27	42	21	W4	8	10	42	22	W4	8450	12.30	1982	O	4a
LOUSANA LATERAL - NPS 4	80243	9871	1	8	18	37	22	W4	16	22	37	23	W4	8450	8.50	1982	O	4a
MIKWAN EAST LATERAL LOOP - NPS 4	80494	20604	1	1	19	35	21	W4	5	19	35	22	W4	8450	11.58	1983	O	4a
MIKWAN EAST LATERAL LOOP #2 - NPS 6	80391	15485	10	4	24	35	22	W4	5	19	35	22	W4	8450	8.37	1989	O	4a
MIKWAN EAST LATERAL - NPS 4	80391	15485	3	2	19	35	21	W4	5	18	35	22	W4	8450	11.29	1978	O	4a
MIKWAN EAST LATERAL - NPS 4	80391	15485	5	1	19	35	21	W4	2	19	35	21	W4	8450	0.43	1978	O	4a
MIKWAN LATERAL - NPS 6	80212	8220	1	5	19	35	22	W4	14	34	35	24	W4	9820	15.10	1971	O	4a
MIKWAN LATERAL LOOP #2 - NPS 10	80212	8220	2	5	19	35	22	W4	14	34	35	24	W4	8450	15.20	1989	O	4a
MIKWAN LATERAL LOOP - NPS 6	80391	15485	11	5	19	35	22	W4	14	34	35	24	W4	8450	15.23	2007	O	4a
MIKWAN NORTH LATERAL - NPS 8	80213	8221	1	9	8	37	23	W4	8	8	37	23	W4	9620	0.72	1971	O	4a
MIQUELON LAKE LATERAL - NPS 6	80638	24866	1	5	23	49	21	W4	6	3	49	21	W4	8450	5.50	1990	O	4a
MIRROR LATERAL - NPS 6	80453	18890	1	6	7	41	22	W4	15	9	41	23	W4	8450	6.00	1982	O	4a

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Pipe Segment Name	ERCB/ NEB Licence	OLD ERCB Licence	Line No.	Start Location					End Point					Licence MOP (kPa)	Length	Approval Year	Status	Tranche/ Closing
				LSD	SEC	TWP	RGE	MER	LSD	SEC	TWP	RGE	MER					
NEVIS LATERAL (1967) -NPS 16	80154	6310	15	6	22	39	22	W4	13	23	37	23	W4	7070	21.04	1967	O	4a
NEVIS LATERAL (1967) -NPS 16	80154	6310	16	13	23	37	23	W4	13	21	35	24	W4	7070	23.41	1967	O	4a
NEVIS LATERAL (1967) -NPS 16	80154	6310	17	13	21	35	24	W4	12	2	33	26	W4	7070	28.61	1967	O	4a
NEVIS LATERAL 1959 -NPS 16	80072	714	1	7	22	39	22	W4	2	22	39	22	W4	6200	5.40	1975	D	4a
NEVIS LATERAL EXT. LOOP (LOUSANA)	80072	714	25	6	22	39	22	W4	5	9	37	23	W4	7070	26.50	1992	O	4a
NEVIS LATERAL EXTENSION - NPS 12	80089	1986	2	15	8	43	23	W4	6	7	40	22	W4	6450	32.50	1960	O	4a
NEVIS LATERAL EXTENSION - NPS 12	80089	1986	3	6	7	40	22	W4	3	7	40	22	W4	6450	1.14	1960	O	4a
NEVIS LATERAL EXTENSION - NPS 12	80089	1986	4	3	7	40	22	W4	7	22	39	22	W4	6450	7.71	1960	O	4a
NEVIS LATERAL EXTENSION LOOP - NPS 12	80636	24857	1	15	9	41	23	W4	6	22	39	22	W4	8450	21.10	1990	O	4a
NEVIS LATERAL EXTENSION LOOP (MIRROR SECTION) - NPS 12	80636	24857	2	1	29	41	23	W4	15	9	41	23	W4	6450	3.80	1992	O	4a
NEVIS LATERAL LOOP (PINE LAKE SECTION) - NPS 16	80154	6310	12	16	5	37	23	W4	14	34	35	24	W4	8450	13.68	1990	O	4a
NEVIS LATERAL LOOP (PINE LAKE SECTION) - NPS 16	80154	6310	13	9	9	37	23	W4	16	5	37	23	W4	8450	0.67	1990	O	4a
NEVIS LATERAL LOOP (TORINGTON SECTION) -NPS 20	80154	6310	11	14	34	35	24	W4	12	2	33	26	W4	7070	33.00	1990	O	4a
NEVIS NORTH LATERAL	80077	720	1	7	22	39	22	W4	7	22	39	22	W4	7580	0.03	1959	O	4a
NEVIS NORTH LATERAL #2	80077	720	2	7	22	39	22	W4	7	22	39	22	W4	7584	0.03	1959	O	4a
NEVIS SOUTH FEEDER -NPS 8	80078	756	1	15	33	38	22	W4	1	3	39	22	W4	7580	0.45	1959	O	4a
NEVIS SOUTH LATERAL LOOP - NPS 8	80072	714	24	15	33	38	22	W4	2	3	39	22	W4	6210	0.45	1976	D	4a
OHATON LATERAL LOOP -NPS 4	80402	17249	7	1	25	46	19	W4	5	31	45	20	W4	8450	22.60	1965	D	4a
OHATON LATERAL - NPS 4	80482	20257	12	1	25	46	19	W4	5	31	45	20	W4	8450	22.57	1962	O	4a
PINE LAKE LATERAL	80154	6310	10	1	6	35	24	W4	4	6	35	24	W4	0	1.30	1965	D	4a
UNKNOWN FARM TAP	80154	6310	6	2	14	36	24	W4	2	14	36	24	W4	7070	0.20		O	4a
UNKNOWN FARM TAP	80154	6310	14	16	35	34	25	W4	16	35	34	25	W4	7070	0.07	1991	O	4a
WOOD RIVER M/S PRODUCER TIE-IN - NPS 8	80089	1986	19	16	8	43	23	W4	15	8	43	23	W4	6450	0.80		O	4a
WOOD RIVER SALES LATERAL - NPS 8	80089	1986	16	15	8	43	23	W4	1	17	43	23	W4	6450	0.11	1982	O	4a
WOOD RIVER SALES LATERAL (REVERSE LINE) - NPS 8	80089	1986	17	1	17	43	23	W4	15	8	43	23	W4	6450	0.11	1982	O	4a

SCHEDULE A-4 – Part II (b)
To the Fourth Amending Agreement dated July 15, 2016
MAP OF NGTL TRANSFERRED PIPELINE FACILITIES



Schedule A-4 Part II (b)
To the Fourth Amending Agreement Dated July 15, 2016

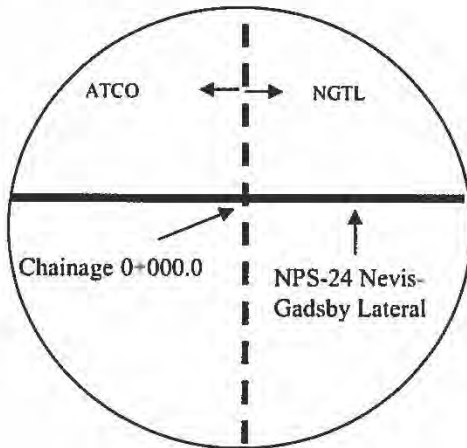
Ownership Interconnect Locations

Location #	Ownership Interconnect Location Name	Legal Location	Description
1	NPS-24 Nevis-Gadsy Lateral	1-29-41-23 W4M	Chainage 0+000.0 of NPS-24 Nevis-Gadsby Crossover.
2	NPS-24 E.A.S. Mainline and Loop NPS-12 Wimborne Lateral NPS-16 Nevis Lateral and Loop	12-2-33-26 W4M 12-2-33-26 W4M 12-2-33-26 W4M	North boundary of NGTL's Torrington Compressor Station site. North boundary of NGTL's Torrington Compressor Station site. East boundary of NGTL's Torrington Compressor Station site.
3	NPS-22 East Calgary Lateral	9-16-26-4 W5M	East boundary of NGTL's NPS-36 foothills Pipeline right-of-way.
4	NPS-22 Westeros Lateral	12-32-43-1 W5M	South boundary of NGTL's Rimbey-Westerose Meter Station site and Valve WS30-0-1SV0-PLN..

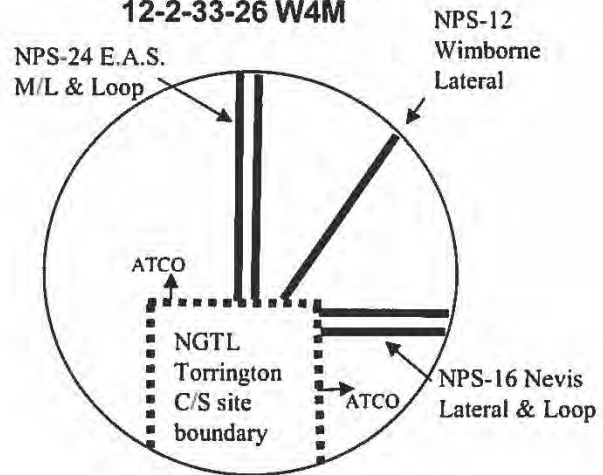
Schedule A-4 Part II (b)
To the Fourth Amending Agreement dated July 15, 2016

Ownership Interconnect Locations

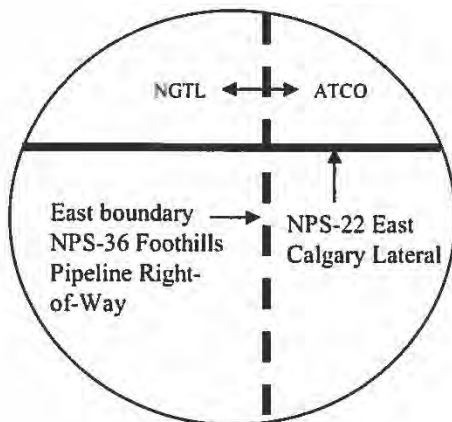
**1. NPS-24 Nevis-Gadsby
Lateral 1-29-41-23 W4M**



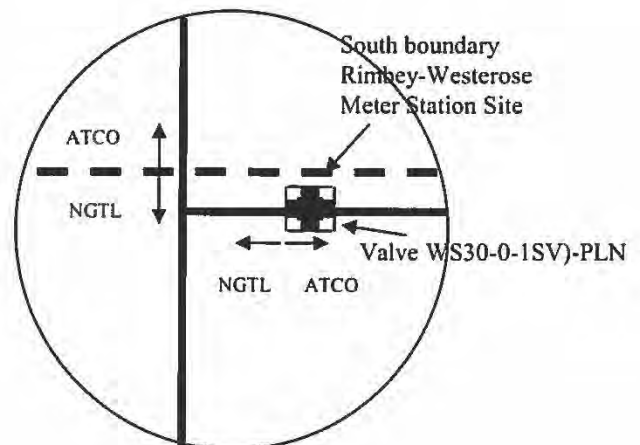
**2. Torrington C/S Site
12-2-33-26 W4M**



**3. NPS-22 East Calgary Lateral
9-16-26-4 WM**



**4. NPS-22 Westeros Lateral
12-32-43-1W5M**



Schedule A-4 Part III – Form of Conveyance

CONVEYANCE

CONVEYANCE dated the • day of •, 20__

BETWEEN:

•, a corporation incorporated under the laws of Alberta (“**Vendor**”)

- and -

•, a corporation incorporated under the laws of Alberta (“**Purchaser**”)

WHEREAS Vendor has agreed to sell and convey the Assets to Purchaser and Purchaser has agreed to purchase and accept all of Vendor’s right, title, estate and interest in and to the Transferred Assets;

THE PARTIES AGREE AS FOLLOWS:

1. Definitions

In this Conveyance “Asset Swap Agreement” means the Asset Swap Agreement dated the 15th day of June, 2011, as amended from time to time, between Vendor and Purchaser. In addition, the definitions provided for in the Asset Swap Agreement are adopted in this Conveyance.

Conveyance

Vendor, for the consideration provided for in the Asset Swap Agreement, the receipt and sufficiency of which is hereby acknowledged by Vendor, sells, assigns, transfers and conveys the Transferred Assets to Purchaser, and Purchaser purchases and accepts the Transferred Assets from Vendor, TO HAVE AND TO HOLD the same absolutely.

2. Effective Time

This Conveyance is effective as of the Effective Time.

3. Subordinate Document

This Conveyance is executed and delivered by the Parties pursuant to the Asset Swap Agreement and the provisions of the Asset Swap Agreement shall not be merged in this Conveyance and shall prevail if there is a conflict between the provisions of the Asset Swap Agreement and this Conveyance.

4. Enurement

This Conveyance enures to the benefit of and is binding upon the Parties and their respective successors and permitted assigns.

5. Further Assurances

Each Party will, after the date of this Conveyance, at the request of the other Party and without further consideration, do all further acts and execute and deliver all further documents reasonably required to fully perform and carry out the terms of this Conveyance.

6. Counterpart

This Conveyance may be executed in as many counterparts as are necessary and all executed counterparts together shall constitute one agreement.

THE PARTIES HAVE EXECUTED THIS CONVEYANCE AS FOLLOWS:

ATCO GAS AND PIPELINES LTD.,
carrying on business under the trade name
"ATCO Pipelines"

NOVA GAS TRANSMISSION LTD.

By: _____

Name:

Title:

By: _____

Name:

Title:

LEGAL	
CONTENT	

By: _____

Name:

Title:

By: _____

Name:

Title:

LEGAL	
CONTENT	

ATCO Pipelines Alberta System Integration Application
Attachment 1
69 Pages

ALBERTA SYSTEM INTEGRATION AGREEMENT

between

ATCO GAS AND PIPELINES LTD.

and

NOVA GAS TRANSMISSION LTD.

April 7, 2009

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ALBERTA SYSTEM INTEGRATION AGREEMENT

THIS AGREEMENT is dated April 7, 2009.

BETWEEN:

ATCO GAS AND PIPELINES LTD., a corporation governed by the Laws of Alberta, carrying on business under the trade name ATCO Pipelines ("ATCO")

- and -

NOVA GAS TRANSMISSION LTD., a corporation governed by the Laws of Alberta, ("NGTL")

RECITALS:

- A. ATCO owns and operates the ATCO Pipeline Facilities as shown in Schedule A;
- B. NGTL owns and operates the NGTL Pipeline Facilities as shown in Schedule A;
- C. The Parties have agreed that, subject to receipt of appropriate Regulatory Approvals, from and after the Integration Effective Date, the Alberta System shall be operated as a single integrated system, and ATCO shall act as agent for NGTL in respect of the commercial interface with ATCO Gas, all in accordance with the terms hereof;
- D. The Parties have agreed that, subject to receipt of appropriate Regulatory Approvals, upon the execution and delivery of the Asset Swap Agreement and upon fulfillment of the conditions precedent therein (i) ATCO shall transfer the ATCO Conveyed Pipeline Facilities to NGTL, and (ii) NGTL shall transfer the NGTL Conveyed Pipeline Facilities to ATCO to achieve efficiencies.

THEREFORE, the Parties agree as follows:

ARTICLE 1 DEFINITIONS AND PRINCIPLES OF INTERPRETATION

1.1 Definitions

Whenever used in this Agreement, the following words and terms have the following meanings:

"**Affiliate**" of any Person means, at the time such determination is being made, any other Person Controlling, Controlled by or under common Control with such first Person, in each case, whether directly or indirectly;

"**Alberta System**" means (i) the Pipeline Facilities owned by ATCO and the Pipeline Facilities owned by NGTL located in Alberta on the Integration Effective Date, but excluding the Muskeg River Pipeline and the Ventures Pipeline, (ii) Alberta System Expansion Facilities, and (iii) NGTL and ATCO TBO Contracts required to provide regulated natural Gas transportation service in Alberta;

“Alberta System Ancillary Contract” means a credit support contract, guarantee, or credit support arrangement (including a letter of credit) entered into with, made by, or made in favour of, one or more Person, an Affiliate of such Person, or a Customer Credit Support Provider, which relate to an Alberta System Customer Contract;

“Alberta System Annual Plan” has the meaning ascribed to that term in Section 4.5(c);

“Alberta System Customer Contract” means a contract between NGTL and a Person to transport Gas on the Alberta System;

“Alberta System Design Functions” means the Alberta System design functions set forth in Section 4.5(b)(i), including those pertaining to Pipeline Facilities development, Alberta System Expansion Facilities and Pipeline Facilities abandonment, but excluding Minor Modifications;

“Alberta System Expansion Facilities” means those Pipeline Facilities in Alberta, or that may be integrated into the Alberta System pursuant to Section 4.5(d)(ii)(D), which are additions, betterments, expansions, renewals or replacements to the then existing Alberta System Pipeline Facilities on or after the Integration Effective Date;

“Alberta System Operations Planning” has the meaning ascribed to that term in Section 4.2(c);

“Alberta System Rate Schedules” means the rate schedules from time to time in effect for the Alberta System after the Integration Effective Date;

“Alberta System Regulatory Planning” means all planning pertaining to Regulatory Approvals in connection with the Alberta System, including those Regulatory Approvals pertaining to Pipeline Facilities, Alberta System Design Functions, Alberta System customer service functions referred to in Section 4.2(a), Alberta System Operations Planning, rate design, Alberta System Rate Schedules, Alberta System Terms and Conditions, Alberta System Tariff, and Alberta System Tolls;

“Alberta System Tariff” means the tariff from time to time in effect for the Alberta System after the Integration Effective Date;

“Alberta System Terms and Conditions” means the general terms and conditions from time to time in effect for the Alberta System after the Integration Effective Date;

“Alberta System Tolls” means the tolls from time to time in effect for the Alberta System after the Integration Effective Date;

“Agreement” means this Alberta System Integration Agreement, including all schedules, and all amendments or restatements, as permitted, and references to **“Article”** or **“Section”** mean the specified Article or Section of this Agreement;

“AS Objection Notice” has the meaning ascribed to that term in Section 5.3(a);

“Asset Swap Agreement” means the asset swap agreement substantially in the form set forth in Schedule B;

“ATCO Ancillary Contract” means a credit support contract, guarantee, or credit support arrangement (including a letter of credit) made by a Person, an Affiliate of such Person, or a

Customer Credit Support Provider in favour of ATCO which relate to an ATCO Customer Contract;

"ATCO Conveyed Pipeline Facilities" has the meaning ascribed to that term in Section 5.1(a);

"ATCO Customer Contract" means a contract between ATCO and a Person to transport Gas on the ATCO Pipeline Facilities prior to the Integration Effective Date;

"ATCO Footprint" means the areas in Alberta corresponding to the areas depicted in blue in the map set forth in Schedule A;

"ATCO Gas" means ATCO Gas, a division of ATCO Gas and Pipelines Ltd. and its successors;

"ATCO Initial Revenue Requirement" means the annual revenue requirements for ATCO for which ATCO receives Regulatory Approval for the Initial Term. Such annual revenue requirements will be calculated based on the 2009 revenue requirement, as applied for in the Revenue Requirement Settlement Application filed November 7, 2008. For each year in the Initial Term, the revenue requirement will be adjusted to include a 43% common equity ratio and the approved generic return on common equity ratio, plus adjustments based upon the updated net capital rate base, inflation for relevant revenue requirement components giving consideration for labour, benefit and supply cost increases in the Alberta marketplace, and adjustments as required for deferral accounts;

"ATCO Integration Approval" means approval by the AUC of ATCO's application to proceed with the integration of the ATCO Pipeline Facilities and NGTL Pipeline Facilities as contemplated in this Agreement, including approval of the ATCO Initial Revenue Requirement, the transitioning of ATCO Customer Contracts and ATCO Ancillary Contracts from ATCO to NGTL, and approval in principle of the asset swap pursuant to the Asset Swap Agreement;

"ATCO Parties" means ATCO and its Affiliates;

"ATCO Revenue Requirement" means the revenue requirement for ATCO for which ATCO receives Regulatory Approval pursuant to a general rate application or negotiated settlement;

"ATCO System Integrity" means the safe and reliable operation of the ATCO Pipeline Facilities;

"AUC" means the Alberta Utilities Commission and its successors from time to time;

"Business Day" means any day, other than a Saturday or Sunday, on which the main branch of Royal Bank of Canada (or its successors) in Calgary, Alberta is open for commercial banking business during normal banking hours;

"Claims" includes claims, demands, complaints, grievances, actions, application, suits, causes of action, Orders, charges, indictments, prosecutions, information or other similar processes, assessments or reassessments, judgments, debts, liabilities, expenses, costs, damages, or losses, contingent or otherwise, whether liquidated or unliquidated; matured or unmatured, disputed or undisputed, contractual, legal or equitable, known or unknown, including loss of value, reasonable professional fees, including fees and disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any of the foregoing or any proceeding relating to any of the foregoing;

“Commissioner” means the Commissioner of Competition appointed under the Competition Act or a person authorised by the Commissioner;

“Competition Act” means the *Competition Act* (Canada), R.S.C. 1985, c. C-34, as amended from time to time;

“Competition Act Approval” means the Commissioner shall have issued a written opinion pursuant to section 124.1 of the Competition Act on the applicability to the Transactions of sections 45, 90.1 or 92 of the Competition Act on terms satisfactory to each of ATCO and NGTL, acting reasonably;

“Confidential Information” means all information of every nature and kind concerning a Party’s business and the transactions contemplated by this Agreement (including the exchange of information relating to a Party, including the legal location of ATCO Pipeline Facilities, information on the design and operation of ATCO facilities, historical information concerning flows on ATCO facilities, ATCO customer contract information, ATCO pipeline system hydraulic flow information, and other ATCO information) provided in written, oral, visual or electronic form, prior to or after the date of this Agreement, by a Party or its Information Representatives to the other Party or to any of such other Party’s Information Representatives, including (i) all analyses, compilations, data studies, drawings or other documents prepared by a Party or its Information Representatives containing or based upon, in whole or in part, information received from the other Party or such other Party’s Information Representatives; and (ii) all information obtained through any on-site inspection of such Party’s Pipeline Facilities. For clarity, this Agreement is not Confidential Information and the parties are free to disclose it and file it with any Governmental Authorities;

“Consequential Damages” means indirect, consequential, incidental, punitive, exemplary damages or loss of profit, loss of revenue, or loss of opportunity, provided however that notwithstanding the foregoing, non-payment of or non-receipt of amounts otherwise payable to NGTL pursuant to the Alberta System Tariff shall not constitute “Consequential Damages”;

“Consumer Price Index” means the *All-Items* consumer price index for Alberta as published by Statistics Canada;

“Control” and any derivation thereof means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities or otherwise;

“Customer Credit Support Provider” means a Person which provides credit support to or on behalf of a Person to enable or facilitate such Person in transporting or storing Gas on Pipeline Facilities (including a financial institution which provides letters of credit or other credit support to such Person);

“Designated Executive” has the meaning ascribed to that term in Section 9.1(c);

“Disclosing Party” has the meaning ascribed to that term in Section 6.1(a);

“Encumbrances” means pledges, liens, charges, security interests, leases, title retention agreements, mortgages, restrictions, development or similar agreements, easements, rights-of-way, title defects, options or adverse claims or encumbrances of any kind or character whatsoever;

"Force Majeure" means any acts of God, including therein, but without restricting the generality thereof, lightning, earthquakes and storms, and, in addition, shall mean any strikes, lockouts or other industrial disturbances, acts of the Queen's enemy, sabotage, wars, terrorism, blockades, insurrections, riots, epidemics, landslides, floods, fires, washouts, arrests and restraints, civil disturbances, explosions, breakages of or accidents to machinery or lines of pipe, hydrate obstructions of lines of pipe, temporary failures of Gas supply, freezings of wells or delivery facilities, well blowouts, craterings, the orders of any Governmental Authority, lack of exchange capacity or pressure at interconnections with other pipelines, or any other causes, excepting financial, whether of the character or kind herein enumerated or otherwise, and not within the control of the Party claiming suspension and whether or not arising out of or resulting from an event, cause or occurrence under this Agreement or otherwise, which, by the exercise of due diligence, such Party could not have prevented or is unable to overcome; provided further that a change in Law shall not be Force Majeure;

"Gas" means natural gas having the physical and chemical characteristics qualifying it for transportation on the Alberta System in accordance with the then applicable terms and conditions;

"Governmental Authority" means any judicial, legislative, administrative, regulatory or other national, provincial, municipal or local government authority, ministry, department, any administrative agency, office, bureau, organization or authority having jurisdiction over one or more Parties or the Alberta System;

"Indemnified Party" has the meaning ascribed to that term in Section 8.3;

"Indemnifying Party" has the meaning given in Section 8.3;

"Information Representatives" means the directors, officers, employees, agents, representatives and professional advisors (including, without limitation, lawyers, accountants, consultants and financial advisors) of a Party or of its Affiliates.

"Initial Term" means the period commencing as of the Integration Effective Date up to and including December 31, 2012;

"Integration Approvals" means both the ATCO Integration Approval and the NGTL Integration Approval;

"Integration Effective Date" means that date twelve (12) months (and in any event as soon as practicable) following the later of: (i) the ATCO Integration Approval; and (ii) the NGTL Integration Approval; or such other date as the Parties may agree to;

"Laws" means applicable laws (including common law and civil law), statutes, by-laws, rules, regulations, Orders, ordinances, protocols, codes, guidelines, treaties, policies, notices, directions, decrees, judgments, awards or requirements, in each case of any Governmental Authority;

"Major Throughput Facilities" means (i) those Pipeline Facilities owned or operated by NGTL or its Affiliates which are located within the portion of the ATCO Footprint corresponding to the area depicted in white in the map set forth in Schedule A, (ii) any new or additional Pipeline Facilities constructed across the ATCO Footprint which are to be used primarily for through haul service, and (iii) capacity expansions or modifications of (i) or (ii). For greater clarity, Pipeline Facilities which are designed to transport Gas from a supply point within the ATCO Footprint to delivery points outside the ATCO Footprint or to the Major Throughput Facilities, or designed to

transport Gas from supply points outside the ATCO Footprint or from Major Throughput Facilities to markets within the ATCO Footprint are not considered to be Major Throughput Facilities;

“Material Adverse Effect” means any change, effect or circumstance that, when considered either individually or in the aggregate together with all other adverse changes, effects or circumstances with respect to which such phrase is used in this Agreement, is materially adverse to, or could reasonably be expected to have a material adverse effect on, the financial condition or results of operations of the Alberta System, other than those resulting from industry-wide conditions or general economic conditions affecting the gas pipeline industry generally;

“Minor Modifications” means minor additions/modifications to ATCO Pipeline Facilities within the ATCO Footprint having a projected capital cost of less than \$5 million (inflated annually from the Integration Effective Date at the Consumer Price Index) per addition/modification to the extent necessary to serve ATCO Gas or to the extent required for ATCO System Integrity;

“Muskeg River Pipeline” means a pipeline approximately 116 km long and 406 mm in diameter held by ATCO as of the date hereof, with a design capacity of approximately 115 TJ/day, providing natural gas transportation service to the Shell Muskeg River Mine facilities and other facilities near Fort McMurray, Alberta;

“NEB” means the National Energy Board and its successors from time to time;

“NGTL Conveyed Pipeline Facilities” has the meaning ascribed to that term in Section 5.1(a);

“NGTL Footprint” means the areas within Alberta corresponding to the areas in the map set forth in Schedule A other than those areas depicted in blue;

“NGTL Integration Approval” means approval by the NEB of NGTL’s application to proceed with the integration of the ATCO Pipeline Facilities and NGTL Pipeline Facilities as contemplated in this Agreement, including approval of the transitioning of ATCO Customer Contracts and ATCO Ancillary Contracts from ATCO to NGTL, and approval in principle of the asset swap pursuant to the Asset Swap Agreement;

“NGTL Parties” means NGTL and its Affiliates;

“NGTL Revenue Requirement” means the revenue requirement for NGTL for which NGTL receives Regulatory Approval pursuant to a general rate application or negotiated settlement, including the applicable ATCO Revenue Requirement as a component thereof, plus any NGTL costs and expenses incurred in connection with any of this Agreement or the Asset Swap Agreement;

“Notice” has the meaning ascribed to that term in Section 9.5;

“Orders” means orders, injunctions, judgments, administrative complaints, decrees, rulings, awards, assessments, directions, instructions, settlements, penalties or sanctions issued, filed or imposed by any Governmental Authority or arbitrator;

“Party” or **“Parties”** means, as the context requires, ATCO, NGTL and their successors and permitted assigns;

"Person" means any individual, sole proprietorship, partnership, firm, entity, unincorporated association, unincorporated syndicate, unincorporated organization, trust, body corporate, Governmental Authority, and where the context requires any of the foregoing when they are acting as trustee, executor, administrator or other legal representative;

"Personal Information" means information in the possession or under control of the Party or its Affiliate about an identifiable individual;

"Pipeline Facilities" means (i) natural Gas pipelines and (ii) all related facilities attached to and forming part of such pipelines including all compressors, meters, telecommunications equipment, SCADA, machinery and other equipment used or useful in connection therewith, and (iii) Gas salt caverns of ATCO in the ATCO Footprint;

"Receiving Party" has the meaning ascribed to that term in Section 6.1(a);

"Regulatory Approvals" means, collectively, all material licenses, certificates, permits, orders, approvals, determinations, opinions and authorizations from any Governmental Authority having valid jurisdiction, whether by expiry of waiting periods or otherwise;

"Representative" means the senior officer appointed by a Party in accordance with Section 3.4;

"Representing Party" has the meaning ascribed to that term in Section 7.1;

"SCADA" means supervisory control and data acquisition system;

"TBO Contract" means a Gas transportation agreement between NGTL or ATCO and another Person, as amended, restated, supplemented or modified from time to time;

"TCC" means TransCanada Corporation and its successors from time to time;

"TCC Group" means TCC and any Person Controlled by TCC and any Affiliates of NGTL from time to time;

"Third Party" has the meaning ascribed to such term in Section 8.5;

"Transactions" has the meaning ascribed to such term in Section 6.1(a)(i);

"Ventures Pipeline" means the 110 km, 610 mm outside diameter pipeline held by TransCanada Pipeline Ventures Limited Partnership as of the date hereof, which transports natural gas from Wood Buffalo Lake to the Fort McMurray, Alberta area, and the connected Pipeline Facilities owned by TransCanada Pipeline Ventures Limited Partnership which transport natural gas to Joffre, Alberta.

1.2 Certain Rules of Interpretation

In this Agreement:

- (a) **Consent** – Whenever a provision of this Agreement requires an approval or consent and the approval or consent is not delivered within the applicable time limit, then, unless otherwise specified, the Party whose consent or approval is required shall be conclusively deemed to have withheld its approval or consent.

- (b) **Currency** – Unless otherwise specified, all references to money amounts are to the lawful currency of Canada.
- (c) **Governing Law** – This Agreement is a contract made under and shall be governed by and construed in accordance with, the Laws of the Province of Alberta and the federal Laws of Canada applicable in the Province of Alberta.
- (d) **Headings** – Headings of Articles and Sections are inserted for convenience of reference only and do not affect the construction or interpretation of this Agreement.
- (e) **Including** – Where the word “including” or “includes” is used in this Agreement, it means “including (or includes) without limitation”.
- (f) **No Strict Construction** – The language used in this Agreement is the language chosen by the Parties to express their mutual intent, and no rule of strict construction shall be applied against any Party.
- (g) **Number and Gender** – Unless the context otherwise requires, words importing the singular include the plural and *vice versa* and words importing gender include all genders.
- (h) **Severability** – If, in any jurisdiction, any provision of this Agreement or its application to any Party or circumstance is restricted, prohibited or unenforceable, the provision shall, as to that jurisdiction, be ineffective only to the extent of the restriction, prohibition or unenforceability without invalidating the remaining provisions of this Agreement. The Parties shall endeavour in good faith negotiations to replace a restricted, prohibited or unenforceable provision of this Agreement with a valid provision, which comes closest to the purpose of the parties as set forth in ARTICLE 2 underlying the restricted, unenforceable provision.
- (i) **Statutory References** – A reference to a statute includes all regulations and rules made pursuant to the statute and, unless otherwise specified, the provisions of any statute, regulation or rule which amends, supplements or supersedes any such statute, regulation or rule.
- (j) **Time** – Time is of the essence in the performance of the Parties’ respective obligations.
- (k) **Time Periods** – Unless otherwise specified, time periods within or following which any payment is to be made or act is to be done, shall be calculated by excluding the day on which the period commences and including the day on which the period ends and by extending the period to the next Business Day following if the last day of the period is not a Business Day.

1.3 Knowledge

Any reference to the knowledge of any Party means to the best of the knowledge, information and belief of the Party after reviewing all relevant records and making due inquiries regarding the relevant matter of all relevant directors, and senior officers of such Party.

1.4 Entire Agreement

This Agreement, and the agreements and other documents required to be delivered pursuant to this Agreement, constitute the entire agreement between the Parties and set out all the covenants, promises, warranties, representations, conditions and agreements between the Parties in connection with the subject matter of this Agreement and supersede all prior agreements, understandings, negotiations and discussions, whether oral or written, pre-contractual or otherwise, pertaining to such subject matter. There are no covenants, promises, warranties, representations, conditions or other agreements, whether oral or written, pre-contractual or otherwise, express, implied or collateral, between the Parties in connection with the subject matter of this Agreement except as specifically set forth in this Agreement and any document required to be delivered pursuant to this Agreement.

1.5 Schedules

The schedules to this Agreement listed below are an integral part of this Agreement:

<u>Schedule</u>	<u>Description</u>
Schedule A	Map of ATCO Pipeline Facilities, NGTL Pipeline Facilities and Alberta System
Schedule B	Asset Swap Agreement
Schedule C	Form of Closing Officer's Certificate

ARTICLE 2 PURPOSE

2.1 Purpose

The purpose of this Agreement is:

- (a) to provide more effective and seamless Gas transmission service to customers on the Alberta System and to effect optimum facilities solutions to meet the needs of those customers;
- (b) to structure an arrangement that utilizes the Alberta System as a single Gas transmission enterprise;
- (c) to provide for each of ATCO and NGTL to have distinct and separate roles and responsibilities with respect to the Alberta System;
- (d) to employ a single system design philosophy to identify and scope any required Alberta System Pipeline Facilities. Any new required Alberta System Pipeline Facilities or retirement of existing Alberta System Pipeline Facilities will be determined as a result of an annual (or as required from time to time) assessment of the Alberta System Pipeline Facilities and Gas supply and demand forecasts that the Alberta System will serve;
- (e) to document the separate geographies in which each of ATCO and NGTL will add any required new Pipeline Facilities to the Alberta System;

- (f) to operate the Alberta System as a commercially integrated system with common rates and services that are used to serve all customers that transport Gas on the Alberta System. As a result Alberta System customers will receive seamless service and not pay stacked tolls within the Alberta System; and
- (g) to provide for NGTL to be the sole contractual counterparty with all Alberta System customers and to provide that ATCO will act as agent for NGTL in respect of the commercial interface with ATCO Gas.

ARTICLE 3 PRE-INTEGRATION ACTIVITIES

3.1 Customer Discussions

ATCO and NGTL acknowledge that the matters contemplated by Article 4 of this Agreement and the implementation of the Alberta System require prior approval of the AUC and the NEB. ATCO and NGTL have met with the AUC to describe the Alberta System. On October 3, 2008 the AUC suspended its competitive pipeline review proceeding in order to grant ATCO and NGTL time to meet with customer representatives to discuss the Alberta System further and to submit the required applications. ATCO and NGTL shall continue such customer discussions to assist in implementing the Alberta System.

3.2 Timing of Integration Effective Date; Cooperation

ATCO and NGTL shall each take all commercially reasonable efforts to achieve, and shall cooperate to achieve, the Integration Effective Date as soon as reasonably practicable (and in any event no later than twelve (12) months or such other date as agreed to by the Parties) after receipt of the ATCO Integration Approval and the NGTL Integration Approval, and shall each cooperate and take all actions to the extent necessary to give effect to the transactions contemplated by this Agreement. Subject to existing agreements with third parties and subject to applicable Law, each Party shall provide the other Party with access to books and records and facilities to the extent necessary to give effect to the transactions contemplated by this Agreement.

3.3 Regulatory Matters Prior to Receipt of Integration Approvals

~~From and after the date of this Agreement up until the Parties have received the Integration Approvals:~~

- (a) each Party shall continue to prosecute its respective rate negotiations and applications; provided however, that each such Party shall have the option of adjourning such applications if such Party's customers indicate a preference to do so;
- (b) each Party shall use all reasonable commercial efforts to obtain, or cause to be obtained, such Regulatory Approvals each determines necessary (acting reasonably) to enable it to complete the transactions contemplated by this Agreement, including Regulatory Approvals necessary (i) to establish the ATCO Revenue Requirement, (ii) to establish the NGTL Revenue Requirement, (iii) to permit the transfer of assets under the Asset Swap Agreement, and (iv) to effect the termination of ATCO Customer Contracts and ATCO Ancillary Contracts and replacement thereof with Alberta System Contracts and Alberta System Ancillary Contracts, provided that nothing herein shall obligate either Party to

appeal, or seek a review of, any decision of any Governmental Authority which has the effect of denying any such Regulatory Approval or granting such Regulatory Approval on conditions unsatisfactory to either of the Parties in such Party's sole discretion. Each Party shall actively support the other Party in obtaining its applicable Regulatory Approvals, and shall jointly apply for Regulatory Approvals where appropriate, to give effect to the transactions contemplated by this Agreement;

- (c) if either Party receives any decision of a Governmental Authority which has the effect of denying any Integration Approval or granting same on conditions unsatisfactory to such Party in its sole discretion, such Party shall promptly provide Notice to the other Party of such event and either Party shall have the right to terminate this Agreement on sixty (60) days notice as set forth in Section 3.7;
- (d) Subject to this Agreement, each Party shall continue to carry on business in the ordinary course prior to receipt of the Integration Approvals. If customers express a desire to contract with either Party prior to such date to transport Gas on the ATCO Pipeline Facilities or the NGTL Pipeline Facilities, as applicable, nothing herein contained shall restrict NGTL or ATCO from entering into a Gas transportation contract with such customer, provided that ATCO and NGTL shall notify such customer that the Parties intend that all such contracts shall be transitioned to Alberta System Customer Contracts effective as of the Integration Effective Date.

3.4 Appointment of Party Representatives

Each of ATCO and NGTL shall by notice in writing to the other Party appoint a representative from time to time (a "**Representative**") to coordinate Alberta System integration activities and to communicate with each other with respect to any disputes under this Agreement.

3.5 Interim Operations; Stakeholder Consultations; and Gas Transportation Contract Transition

- (a) During the period from the date of this Agreement to the Integration Effective Date, each Party shall give prompt Notice to the other Party of any Material Adverse Effect.
- (b) Neither Party shall, without the other Party's prior written consent, in its sole discretion, take any action that would make any of the representations or warranties of such Party as contained in this Agreement materially untrue or inaccurate as of the Integration Effective Date or that would result in any of the conditions set forth in this Agreement not being materially satisfied.
- (c) During the period from the date of this Agreement up to receipt of the Integration Approvals, NGTL and ATCO shall consult with all material stakeholder groups to obtain their endorsement of (or modifications to) NGTL's design philosophy that will be used in the initial Alberta System Annual Plan as well as business policies and practices.
- (d) A Gas transportation contract transition mechanism will be developed and agreed to by the Parties. The transition mechanism will ensure that current ATCO Customers will not automatically be relieved of their obligations and that they will have service made available on the Alberta System.

3.6 Conditions Precedent to the Integration Effective Date

(a) **Integration Approvals**

ATCO shall have received the ATCO Integration Approval and NGTL shall have received the NGTL Integration Approval both on terms satisfactory to each of ATCO and NGTL.

(b) **Competition Act Approval**

Competition Act Approval shall have been obtained.

(c) **Truth and Accuracy of Representations**

All of the representations and warranties of the Parties shall be true and correct in all material respects, and each Party shall have received a certificate of a senior officer of the other Party at such time confirming the truth and accuracy of all such representations as of such date, or such earlier date as may be applicable to such representations.

(d) **Compliance with Covenants**

The Parties shall have complied in all material respects with all of their covenants under this Agreement and each Party shall have received a certificate of a senior officer of the other Party at such time in the form set forth in Schedule C confirming such compliance.

(e) **No Proceedings**

There shall be no proceedings pending or threatened against one or more of the Parties or any Person, the presence of which would have a Material Adverse Effect, and each Party shall have received a certificate of a senior officer of the other Party at such time in the form set forth in Schedule C confirming the absence of such proceedings, to the best knowledge of such Party after due enquiry.

(f) **Full Disclosure**

Subject to applicable Laws, the Representing Party has made available to the other Party all information, including the financial, marketing, sales and operational information on a historical basis relating to the Alberta System, which would be material to the other Party. All such information which has been provided to the other Party is true and correct in all material respects and no material fact or facts have been omitted from that information which would make such information misleading.

(g) **Certificate confirming fulfillment/waiver of conditions precedent**

Each Party shall have delivered to the other Party hereto a certificate of a senior officer of such Party in the form set forth in Schedule C confirming fulfillment or waiver, as applicable of the conditions precedent set forth in this Section 3.6 which are for the benefit of such Party to the extent such conditions are fulfilled or waived.

3.7 Benefit/Waiver of Conditions; Termination

The conditions precedent set forth in Section 3.6 shall be for the benefit of each Party hereto and each such condition precedent may be waived in whole or in part by each such Party by Notice to the other Party. In the event that any of the conditions set forth in Section 3.6 is not complied with or performed in each case to each Party's satisfaction acting reasonably on or before December 31, 2010 and compliance or performance is not waived by the applicable Party, a Party may, at its option acting reasonably, thereafter terminate this Agreement on sixty (60) days notice in writing to the other Party, provided that the subject conditions precedent are not complied with or waived before the end of such sixty (60) day period.

ARTICLE 4 MATTERS TO EFFECT INTEGRATION

4.1 Transitioning of Customers

As of the Integration Effective Date:

- (a) All of the ATCO Customer Contracts and the ATCO Ancillary Contracts shall be transitioned from ATCO to NGTL on terms and conditions satisfactory to both Parties having regard to the NGTL Integration Approval and the ATCO Integration Approval and applicable Laws; and
- (b) the only tariff applicable to any portion of the Alberta System shall be the Alberta System Tariff.

4.2 NGTL Roles and Responsibilities

(a) Customer Service

From and after the Integration Effective Date, NGTL shall be responsible for carrying out all Alberta System customer service functions on the Alberta System, including:

- (i) nominations;
- (ii) allocations;
- (iii) customer account balancing and management;
- (iv) line pack management;
- (v) contract administration (including Alberta System Customer Contracts and Alberta System Ancillary Contracts);
- (vi) exposure calculations;
- (vii) billing;
- (viii) collections;
- (ix) fuel ratio determination and management;

- (x) determination of lost and unaccounted for Gas;
- (xi) identification of measurement data integrity issues;
- (xii) processing of prior period adjustments;
- (xiii) Gas quality management; and
- (xiv) call centre activities.

(b) **Alberta System Tariff**

NGTL shall, subject to Regulatory Approvals, be responsible for establishing the Alberta System Terms and Conditions; the Alberta System Tariff; the Alberta System Rate Schedules and the Alberta System Tolls, all of which will require structuring so that they meet the needs of the Alberta core market served by local distribution companies connected to the Alberta System.

(c) **Operations Planning**

NGTL will be responsible for all operations planning functions for the Alberta System Gas transmission assets. Operations planning is responsible for the following daily functions ("**Alberta System Operations Planning**"):

- (i) simulation of the Alberta System to determine capacity available during the Gas day incorporating scheduled maintenance and unplanned system upsets;
- (ii) authorization of customer nominations based on allocation of capacity consistent with Alberta System Tariff service priorities;
- (iii) determination of the most efficient flows on each pipeline segment, TBO Contracts and Gas salt caverns (required for the provision of regulated natural Gas transportation service to Alberta customers, including ATCO Gas) on the Alberta System to meet authorized customer nominations and ensure that all obligations to receive, transport and deliver Gas are met;
- (iv) communication of such flows (referred to in Section 4.2(c)(iii)) and set points to NGTL and ATCO control centres; and
- (v) determination and implementation of curtailments of customer nominations as required due to operational upsets and in compliance with the Alberta System Tariff priority of service.

In accordance with Section 4.2(b), NGTL shall ensure that the operations planning function addresses the needs of the Alberta core market served by local distribution companies connected to the Alberta System.

(d) **Alberta System Regulatory Planning**

NGTL shall carry out Alberta System Regulatory Planning and ATCO shall cooperate with NGTL to the extent necessary to enable NGTL to carry out Alberta System Regulatory Planning; provided that ATCO will continue planning of, and seeking

Regulatory Approvals for, the ATCO Revenue Requirement and Pipeline Facilities ATCO constructs within the ATCO Footprint, subject to and in accordance with this Agreement.

4.3 ATCO Roles and Responsibilities

(a) Appointment by NGTL of ATCO as agent in dealings with ATCO Gas

ATCO shall act as agent for NGTL in respect of the commercial interface with ATCO Gas. Specifically, ATCO shall have responsibility for the following functions, as agent for NGTL, in regards to the Alberta System Customer Contract with ATCO Gas pursuant to the Tariff:

- (i) negotiation of new service contracts in accordance with the Alberta System Tariff;
- (ii) negotiation of amendments to service contracts in accordance with the Alberta System Tariff;
- (iii) gathering of longer term information regarding future Gas transportation requirements;
- (iv) identification of new delivery meter stations;
- (v) identification of necessary modification to existing delivery meter stations, identifying potential new types of services required;
- (vi) billing and collections;
- (vii) determination of flows at each interconnection point between ATCO and ATCO Gas as required by NGTL for real-time operations planning, for daily supply demand balancing and for after-the-fact billing; and
- (viii) facilitating resolution of contractual or operating disputes or issues that may arise.

(b) Information Pertaining to ATCO Gas

NGTL shall, except where prohibited by any Laws or other applicable bona fide confidentiality provisions or obligations, provide ATCO with access to all material contract and operating information, reports and data related to the provision of service to ATCO Gas to the extent required to enable ATCO to perform its role as agent in respect of the commercial interface with ATCO Gas. Similarly, ATCO shall, except where prohibited by any Laws or other applicable bona fide confidentiality provisions or obligations, provide NGTL with access to all contract, measurement, demand and service requirements related to ATCO Gas to the extent required to enable NGTL to perform its design, customer service and Alberta System Operations Planning responsibilities for the entire Alberta System.

(c) Invoices and Billings; Cooperation

NGTL shall determine the invoices from time to time for ATCO Gas and shall forward such invoices to ATCO for payment by ATCO Gas. The Parties shall cooperate to the extent required to give effect to this Section 4.3.

4.4 NGTL and ATCO Roles in Operating Their Owned Pipeline Facilities

(a) Standard of Care and Use

From and After the Integration Effective Date:

- (i) ATCO shall operate the ATCO Pipeline Facilities which form part of the Alberta System as a reasonably prudent pipeline operator;
- (ii) NGTL shall operate the NGTL Pipeline Facilities which form part of the Alberta System as a reasonably prudent pipeline operator;
- (iii) Subject to this Agreement, including Sections 4.5(b)(i), 4.5(c) and 4.5(f)(i), ATCO shall make the ATCO Pipeline Facilities which form part of the Alberta System available for the sole use of the Alberta System in perpetuity for the purposes set forth in this Article 4;
- (iv) Subject to this Agreement, including Sections 4.5(b)(i), 4.5(c) and 4.5(f)(i), NGTL shall make the NGTL Pipeline Facilities which form part of the Alberta System available for the sole use of the Alberta System in perpetuity for the purposes set forth in this Article 4; and
- (v) NGTL and ATCO shall accept receipts and deliveries of Gas on their respective Pipeline Facilities as required for the efficient operation of the Alberta System in accordance with this Agreement, including Section 4.2(c).

(b) Gas Control

Each of NGTL and ATCO shall be responsible for Gas control functions for the Pipeline Facilities that it owns. Each Party shall operate the Pipeline Facilities that it owns in the Alberta System in accordance with the flows and set points determined by NGTL's operations planning group. Gas control functions include: dispatching, monitoring and control, and responding to alarms and events (including emergency preparedness).

(c) Maintenance Planning; Field Operations; SCADA and Measurement Data

- (i) ATCO shall be responsible for planning and scheduling maintenance of the ATCO Pipeline Facilities.
- (ii) NGTL shall be responsible for planning and scheduling maintenance of the NGTL Pipeline Facilities.
- (iii) To the extent practical, ATCO and NGTL shall coordinate maintenance activities to optimize system operations, minimize impact to customers, and minimize costs.

- (iv) ATCO shall be responsible for the field operations of the ATCO Pipeline Facilities.
- (v) NGTL shall be responsible for the field operations of the NGTL Pipeline Facilities.
- (vi) ATCO shall be responsible for SCADA and measurement data on the ATCO Pipeline Facilities.
- (vii) NGTL shall be responsible for SCADA and measurement data on the NGTL Pipeline Facilities.
- (viii) ATCO and NGTL agree to share SCADA and measurement data as required to implement their responsibilities under this Agreement.

4.5 Design and Expansion Responsibilities

(a) Regulatory Matters

- (i) From and after receipt of the Integration Approvals, ATCO shall not, subject to Section 4.5(d)(ii)(A), apply for any Regulatory Approvals to construct any Pipeline Facilities within the NGTL Footprint without the prior written consent of NGTL in its sole discretion. Nothing in this Agreement shall restrict ATCO from constructing facilities outside of Alberta for its own account provided that these assets do not form part of the Alberta System.
- (ii) From and after receipt of the Integration Approvals, NGTL shall not, subject to Section 4.5(d)(i)(A), apply for any Regulatory Approvals to construct any Pipeline Facilities within the ATCO Footprint, other than the Major Throughput Facilities, without the prior written consent of ATCO in its sole discretion.
- (iii) Nothing in this Agreement shall prevent ATCO Gas from constructing facilities, which are not part of the Alberta System, for local distribution customers.

(b) Alberta System Design

- ~~(i) A single system design philosophy shall be used to identify and scope any required Alberta System Pipeline Facilities. From and after receipt of the Integration Approvals, NGTL shall be responsible for determining whether any new Alberta System Pipeline Facilities (other than Minor Modifications) are required, or whether any existing Alberta System Pipeline Facilities should be retired, abandoned or removed, in accordance with such ongoing single system design philosophy, with such determination by NGTL to be made in consultation with ATCO and provided that no ATCO Pipeline Facilities in the ATCO Footprint will be retired, abandoned or removed without the consent of ATCO, and based on an annual (or as required from time to time) assessment of the Alberta System Pipeline Facilities and gas supply and demand forecasts that the Alberta System will serve.~~
- (ii) ATCO shall continue to be responsible for planning Minor Modifications.

(c) **Alberta System Annual Plan**

From and after receipt of the Integration Approvals, NGTL shall prepare, maintain and amend, on an annual basis (or from time to time as required), the Alberta System Pipeline Facilities plan (the "**Alberta System Annual Plan**") which describes the Pipeline Facilities required for the Alberta System, including Pipeline Facilities that ATCO owns within Alberta, in the then-current and future years. The design shall be based upon Alberta System design practices which reflect the long term facility requirements for an area and result in the installation of optimized least cost facilities based upon long term ownership and operation costs of the Alberta System.

(d) **Alberta System Expansion**

(i) Construction Matters – ATCO Rights and Responsibilities, and Consequence of Failure to Construct

- (A) In the event that the Alberta System Annual Plan identifies a requirement for Pipeline Facilities additions within the ATCO Footprint (with the exception of Major Throughput Facilities), ATCO shall be responsible for the detailed design and construction of such Pipeline Facilities at its sole risk and, subject to the terms of this Agreement, expense. The Alberta System Pipeline Facilities added within the ATCO Footprint by ATCO shall be designed and constructed in compliance with the Alberta System Annual Plan. In the event that ATCO declines to construct the Pipeline Facilities identified in the Alberta System Annual Plan, any member of the TCC Group shall be permitted to construct the required Pipeline Facilities and such Pipeline Facilities shall be owned by such member of the TCC Group.
- (B) ATCO shall take all reasonable commercial efforts to obtain all Regulatory Approvals to enable the cost of the new Alberta System Pipeline Facilities owned by ATCO from time to time to be added to ATCO's rate base and/or revenue requirement.
- (C) NGTL shall indemnify ATCO for any costs and expenses (excluding Consequential Damages) that are incurred by ATCO prior to the receipt of Regulatory Approvals for the design of new or additional Pipeline Facilities within the ATCO Footprint to the extent that such costs and expenses are disallowed or conditioned by the applicable Governmental Authority in its initial decision with respect to including such facilities in rate base for reasons due to the design of facilities carried out by NGTL or another Person in the TCC Group on its behalf.
- (D) ATCO shall be responsible for all ongoing revenue requirement and rate base justifications provided from time to time for any ATCO Pipeline Facilities which are approved for construction and initial inclusion in rate base.

(ii) Construction Matters – NGTL Rights and Responsibilities, and Consequence of Failure to Construct

- (A) In the event that the Alberta System Annual Plan identifies a requirement for Pipeline Facilities additions within the NGTL Footprint or that would be Major Throughput Facilities, NGTL or another Person in the TCC Group on its behalf shall be responsible for the detailed design and construction of these Pipeline Facilities at its sole risk and expense. The Pipeline Facilities added by NGTL or such other Person in the TCC Group shall be designed and constructed in compliance with the Alberta System Annual Plan. In the event that NGTL or such Person in the TCC Group declines to construct the Pipeline Facilities identified in the Alberta System Annual Plan, ATCO shall be permitted to construct the required Pipeline Facilities and such Pipeline Facilities shall be owned by ATCO.
- (B) NGTL shall take all reasonable commercial efforts to obtain all Regulatory Approvals to enable the cost of the new Alberta System Pipeline Facilities constructed and owned by NGTL or such other Person in the TCC Group to be added to NGTL's rate base and/or revenue requirement.
- (C) NGTL shall be responsible for all revenue requirement and rate base justifications provided from time to time for any NGTL Pipeline Facilities.
- (D) To the extent that any member of the TCC Group proposes to add Pipeline Facilities to the Alberta System which are located outside Alberta within the portion of the Western Canada Sedimentary Basin that is located within north-east British Columbia, ATCO shall not object to the construction, modification and integration of these Pipeline Facilities into the Alberta System.

(e) **Cooperation; Modelling and Access to Information and Pipeline Facilities**

ATCO shall, except where prohibited by any Laws or other applicable confidentiality provisions or obligations, promptly provide NGTL with all material information regarding its Pipeline Facilities, compression and salt cavern storage facilities and TBO Contracts to the extent required to enable NGTL to model/simulate the entire Alberta System to identify optimal expansions as part of the Alberta System Annual Plan and to optimize daily operations.

(f) **Consultation; Regulatory Approvals**

- (i) NGTL shall consult with ATCO as part of the Alberta System Annual Plan process.
- (ii) Each Party shall use all reasonable commercial efforts to obtain, or cause to be obtained, such Regulatory Approvals each determines necessary (acting reasonably) to enable it to complete the Transactions from and after the Integration Effective Date, provided that nothing herein shall obligate either Party to appeal, or seek a review of, any decision of any Governmental Authority which has the effect of denying any such Regulatory Approval or granting such Regulatory Approval on conditions unsatisfactory to either of the Parties in such

Party's sole discretion. Each Party shall actively support the other Party in obtaining the ATCO Integration Approval and the NGTL Integration Approval, and shall jointly apply for Regulatory Approvals where appropriate in connection with Pipeline Facilities swaps or additions in accordance with the terms of this Agreement.

- (iii) ATCO shall not, subject to Section 4.5(d)(ii)(A), seek Regulatory Approvals for construction of or modifications to any Pipeline Facilities on the Alberta System without the prior approval of NGTL to ensure optimal expansion of the combined Alberta System; provided however that the foregoing shall not restrict ATCO from seeking Regulatory Approvals for and constructing Minor Modifications.
- (iv) ATCO and NGTL shall use all reasonable commercial efforts to cooperate with each other in order to apply for and obtain Competition Act Approval.

4.6 Insurance

Each Party shall maintain appropriate insurance for the Alberta System Pipeline Facilities owned by such Party.

4.7 Injunctive Relief

A Party shall be irreparably injured by a breach of any of Sections 4.4(a)(i), 4.4(a)(ii), 4.4(a)(iii), 4.4(a)(iv), 4.5(a), or 6.1 of this Agreement by the other Party or its Affiliates which could not be adequately compensated by damages. Notwithstanding Section 9.1, each of the Parties shall be entitled to legal and equitable relief, including injunctive relief and specific performance in respect of a breach of any of such sections of this Agreement by the other Party or its Affiliates. Each Party irrevocably acknowledges and agrees that it is estopped from contesting or opposing the fact that such a breach has caused irreparable harm to the other Party or the Party's rights to equitable relief, in the event of any breach of any of the applicable above referenced sections of this Agreement. Such remedies shall not be deemed to be exclusive remedies but shall be in addition to all other remedies available at law or at equity.

4.8 ATCO Revenue Requirement

As of the Integration Effective Date, NGTL shall collect the monthly portion of the ATCO Revenue Requirement from the Alberta System customers and shall pay such monthly portion of the ATCO Revenue Requirement to ATCO subject to and in accordance with AUC Regulatory Approvals. Monthly payments to ATCO shall be for the preceding month (billing month) and will be paid to ATCO by the last Business Day of the month following the billing month subject to and in accordance with AUC Regulatory Approvals.

ARTICLE 5 ASSET SWAPS

5.1 Asset Swap Matters

- (a) Subject to appropriate Regulatory Approvals, the Parties shall enter into the Asset Swap Agreement to rationalize Pipeline Facilities within the Alberta System as soon as practicable after receipt of the ATCO Integration Approval, the NGTL Integration Approval and Competition Act Approval, by concurrently conveying (i) certain Pipeline

Facilities within the NGTL Footprint owned by ATCO from ATCO to NGTL as agreed by the Parties (the “**ATCO Conveyed Pipeline Facilities**” and (ii) certain Pipeline Facilities within the ATCO Footprint owned by NGTL (other than Major Throughput Facilities) from NGTL to ATCO as agreed by the Parties (the “**NGTL Conveyed Pipeline Facilities**”), with the aggregate value of the ATCO Conveyed Pipeline Facilities to be equal to the aggregate value of the NGTL Conveyed Pipeline Facilities, having consideration of, but not limited to, regulatory book costs. The swap of assets will not affect the revenue requirement of either Party.

- (b) In the event that the ATCO Conveyed Pipeline Facilities and the NGTL Conveyed Pipeline Facilities proposed to be swapped in accordance with the Asset Swap Agreement are not of equal value, NGTL and ATCO shall work together to best select a similar pool of Pipeline Facilities to be swapped pursuant to the Asset Swap Agreement having regard to (i) the intent that the transferred Pipeline Facilities of each Party are to be of equal value having consideration of, but not limited to, regulatory book costs, (ii) the intent that neither Party is to be negatively impacted by such swap, and (iii) the intent to create the most efficient Alberta System through the asset swap process.

5.2 Interim Operations

- (a) During the period from the date of this Agreement to the Integration Effective Date, each Party shall:
 - (i) except as otherwise contemplated or permitted by this Agreement, operate its Pipeline Facilities in the ordinary course, consistent with past practice; and
 - (ii) maintain appropriate insurance relating to its Pipeline Facilities.

5.3 Asset Valuation Dispute Resolution

- (a) If any Party objects in good faith to any item of the identification or valuation of the Assets to be transferred pursuant to the Asset Swap Agreement, it shall so advise the other Party by delivery of a written notice (the “**AS Objection Notice**”). The Objection Notice shall set out the reasons for such Party’s objections as well as the amount in dispute and reasonable details of the calculation of such amount.
- ~~(b) Any dispute arising out of an AS Objection Notice shall first be referred to the Representatives of each Party designated for such purpose (each, an “**AS Designated Executive**”). If the AS Designated Executives fail to settle such dispute within 30 days after it is referred to them for resolution pursuant to this Section 5.3, either Party to such dispute shall refer the matter to the President (or person holding an equivalent position) of each Party.~~
- (c) The arbitration provisions of Article 9 shall not apply to the resolution of any dispute arising out of an AS Objection Notice.

ARTICLE 6 CONFIDENTIALITY

6.1 Confidentiality

- (a) Subject to Section 6.1(b), unless a Party receiving information (the **"Receiving Party"**) obtains the prior written consent of the other Party (the **"Disclosing Party"**), a Receiving Party shall:
 - (i) not use Disclosing Party Confidential Information for any purpose whatsoever except for the purpose of the transactions contemplated by this Agreement and the Asset Swap Agreement, or any Regulatory Approvals to the extent required in connection with such transactions (the **"Transactions"**); and
 - (ii) maintain the Disclosing Party Confidential Information in confidence and shall not disclose the Disclosing Party Confidential Information to any Person.
- (b) The obligations created by Section 6.1 shall not preclude a Receiving Party from:
 - (i) disclosing Disclosing Party Confidential Information to a Receiving Party's Information Representatives to the extent that the Receiving Party's Information Representatives need to know the Disclosing Party Confidential Information to evaluate the Transactions but only if such Receiving Party's Information Representatives are under obligations reasonably satisfactory to the Disclosing Party not to use or disclose the Disclosing Party Confidential Information to the same extent that the Receiving Party is precluded hereunder from using or disclosing Confidential Information;
 - (ii) using or disclosing the Disclosing Party Confidential Information at a time when such Disclosing Party Confidential Information is generally available to the public other than as a direct or indirect result of any disclosure which is prohibited under this Agreement;
 - (iii) disclosing the Disclosing Party Confidential Information to the extent such disclosure is required by Law or competent authority of any Governmental Authority, in which case the Receiving Party shall notify the Disclosing Party prior to such disclosure and will furnish only that portion of the Disclosing Party's Confidential Information which it is legally required to disclose, in the opinion of its legal counsel;
 - (iv) using or disclosing the Disclosing Party Confidential Information to the extent that the Receiving Party can demonstrate that the Disclosing Party's Confidential Information was, prior to the receipt thereof from the Disclosing Party, in the possession of the Receiving Party or its Affiliates or was subsequently independently developed by the Receiving Party or its Affiliates;
 - (v) using or disclosing the Disclosing Party Confidential Information to the extent that such Disclosing Party Confidential Information was received by the Receiving Party from a third party (other than the Disclosing Party or any of the Disclosing Party's Information Representatives) who to the knowledge of the Receiving Party, after reasonable inquiry, was not under an obligation of secrecy

to the Disclosing Party in respect of such Disclosing Party Confidential Information at the time such Disclosing Party Confidential Information was provided to the Receiving Party; and

- (vi) disclosing the Disclosing Party Confidential Information to the Receiving Parties' customers and interested and affected parties, provided that such disclosure shall be for the sole purpose of obtaining the customers' and interested and affected parties' approval of the proposal by ATCO and NGTL to collaborate to structure the Transactions, and that any Disclosing Party Confidential Information to be provided to any such customers and interested and affected parties shall be agreed upon by the Parties, shall where practicable be expressly marked "confidential" and shall be disclosed on a strictly without prejudice basis.
- (c) The Receiving Party shall be responsible for compliance by the Receiving Party's Information Representatives with the terms of this Agreement.
- (d) The Receiving Party shall use all reasonable, necessary and appropriate efforts to safeguard the Disclosing Party Confidential Information from disclosure or use other than as permitted hereby.
- (e) Information required to be maintained in confidence hereunder which is specific shall not be deemed to be (i) generally available to the public merely because it is embraced by more general knowledge generally available to the public, or (ii) in the prior possession of a Party merely because it is embraced by more general knowledge in the prior possession of such Party. Any combination of features shall not be deemed to be generally available to the public merely because individual features are separately in the public domain unless the combination itself is in the public domain. Any combination of features shall not be considered to have been in the prior possession of a Party merely because individual features were separately in the prior possession of such Party, unless the combination itself was in the prior possession of such Party.
- (f) Subject to this Agreement, although each of the Parties has endeavoured to include in the Confidential Information provided to the other Party only those materials which are believed to be reliable and relevant for the purposes of the Transactions, each Party acknowledges that Confidential Information provided hereunder to the other Party is done so without representation or warranty as to the accuracy or completeness thereof. Subject to this Agreement, each Party further acknowledges that the other Party shall not have any liability, direct or indirect, as a result of its use of or reliance on, Confidential Information supplied by the other Party.
- (g) In the event that a Party is required pursuant to applicable Laws or stock exchange rules or by a Governmental Authority to disclose any Confidential Information, the Receiving Party shall notify the Disclosing Party prior to such disclosure and shall furnish only that portion of the Disclosing Party's Confidential Information which it is legally required to disclose.
- (h) If this Agreement is terminated without completion of the Transactions, each Party, in its role as Receiving Party, shall promptly deliver to the other Party, in its role as Disclosing Party, any originals, copies or other reproductions or extracts of the Disclosing Party Confidential Information (including any documents, memoranda, notes or other material in written or other recorded form whatsoever prepared by a Receiving Party or its

Representatives related to the Disclosing Party Confidential Information) that relates to: (i) all Gas flows received and delivered on the Pipeline Facilities, except for Gas flows at the interconnects between the ATCO Pipelines Facilities and the NGTL Pipeline Facilities; (ii) Pipeline Facilities hydraulic models; and (iii) any other information stamped as Confidential Information. The Receiving Party shall, upon request, provide the Disclosing Party with a signed certificate attesting to the compliance with this Section 6.1(h). The Receiving Party shall in any event continue to maintain the confidence of all Confidential Information.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES OF THE PARTIES

7.1 Representations and warranties

Each Party (the “**Representing Party**”) represents and warrants to the other Party, the matters set out below:

(a) **Incorporation and Corporate Power**

The Representing Party is a corporation existing under the laws of Alberta and has all necessary corporate power, authority and capacity to enter into this Agreement and the Asset Swap Agreement (collectively, the “**Material Agreements**”), to carry out its obligations under the Material Agreements, to own its assets and to carry on its business as presently conducted.

(b) **Registration**

Neither the nature of the Representing Party’s business nor the location or character of the assets owned or leased by the Representing Party requires it to be registered, licensed or otherwise qualified as an extra-provincial or foreign corporation in any jurisdiction other than where it is duly registered, licensed or otherwise qualified for such purpose and other than jurisdictions where the failure to be so registered, licensed or otherwise qualified does not have a material adverse effect on the Representing Party.

(c) **Due Authorization and Enforceability of Obligations**

~~The execution and delivery of the Material Agreements and the consummation of the transactions contemplated by the Material Agreements have been duly authorized by all necessary corporate action on the part of the Representing Party. This Agreement constitutes, and each other agreement to be executed by the Representing Party in connection with this Agreement (including the other Material Agreements) shall constitute, a valid and binding obligation of the Representing Party enforceable against it in accordance with its terms.~~

(d) **Absence of Conflicting Agreements**

The Representing Party is not a party to, bound or affected by or subject to any:

- (i) indenture, mortgage, lease, agreement, obligation or instrument;
- (ii) charter or by-law;

- (iii) Laws; or
- (iv) authorizations and approvals, including any franchises, certificates, Orders, consents, directives, notices, licences, permits, variances, registrations or other rights issued to or required by or from any Governmental Authority;

that would be violated, breached by, or under which default would occur, or an Encumbrance, or adverse claim of any kind, or right of termination or acceleration, or any right of a third party would, or with notice or the passage of time would, be created, as a result of the execution and delivery of, or performance of obligations under, this Agreement or any other agreement to be entered into under the terms of this Agreement, including the Material Agreements.

(e) **Regulatory Approvals**

Except for the Regulatory Approvals which are being sought by the Parties in accordance with this Agreement, no approval, Order, consent of or filing with any Governmental Authority is required on the part of the Representing Party, in connection with the execution and delivery of this Agreement.

(f) **Absence of Undisclosed Liabilities**

The Representing Party has not incurred any liabilities or obligations (whether accrued, absolute, contingent or otherwise), which continue to be outstanding, except as disclosed in its financial statements, as disclosed by Notice to the other Party hereto, or as incurred in the ordinary course of business and which do not have a Material Adverse Effect.

(g) **Absence of Changes and Unusual Transactions**

Since the date of this Agreement there has not been any change in the financial condition, or operations of the Alberta System other than changes in the ordinary course of business, none of which has a Material Adverse Effect.

ARTICLE 8

INDEMNIFICATION; NO CONSEQUENTIAL DAMAGES; EFFECT OF FORCE MAJEURE

8.1 Indemnification by ATCO

ATCO shall be liable to and shall indemnify and save harmless NGTL, its directors, officers, agents and employees and the other NGTL Parties (collectively referred to as the “**NGTL Indemnified Parties**”) from and against all Claims, whether or not arising due to third party Claims, which may be made or brought against the NGTL Indemnified Parties, or which they may suffer or incur, directly or indirectly, as a result of or in connection with or relating to:

- (a) any non-fulfilment or breach of any covenant or agreement on the part of ATCO contained in this Agreement or in any certificate or other document furnished by or on behalf of ATCO pursuant to this Agreement other than the Asset Swap Agreement; and
- (b) any misrepresentation or any incorrectness in or breach of any representation or warranty of ATCO contained in this Agreement or in any certificate or other document furnished

by or on behalf of ATCO pursuant to this Agreement other than the Asset Swap Agreement.

8.2 Indemnification by NGTL

NGTL shall be liable to and shall indemnify and save harmless ATCO, its directors, officers, employees, and agents and the other ATCO Parties (collectively referred to as the “**ATCO Indemnified Parties**”) from and against all Claims, whether or not arising due to third party Claims, which may be made or brought against the ATCO Indemnified Parties, or which they may suffer or incur, directly or indirectly as a result of or in connection with or relating to:

- (a) any non-fulfilment or breach of any covenant or agreement on the part of NGTL contained in this Agreement or in any certificate or other document furnished by or on behalf of NGTL pursuant to this Agreement other than the Asset Swap Agreement; and
- (b) any misrepresentation or any incorrectness in or breach of any representation or warranty of NGTL contained in this Agreement or in any certificate or other document furnished by or on behalf of NGTL pursuant to this Agreement other than the Asset Swap Agreement.

8.3 Indemnification Procedures for Third Party Claims

- (a) In the case of Claims made by a third party with respect to which indemnification is sought, the Party seeking indemnification (the “**Indemnified Party**”) shall give prompt notice, and in any event within sixty (60) days, to the other Party (the “**Indemnifying Party**”) of any such Claims made upon it. If the Indemnified Party fails to give such notice, such failure shall not preclude the Indemnified Party from obtaining such indemnification but its right to indemnification may be reduced to the extent that such delay prejudiced the defence of the Claim or increased the amount of liability or cost of defence.
- (b) The Indemnifying Party shall have the right, by notice to the Indemnified Party given not later than sixty (60) days after receipt of the notice described in Section 8.3(a), to assume the control of the defence, compromise or settlement of the Claim, provided that such assumption shall, by its terms, be without cost to the Indemnified Party and provided the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in accordance with the terms contained in this Section 8.3 in respect of that Claim.
- (c) Upon the assumption of control of any Claim by the Indemnifying Party as set out in Section 8.3(b), the Indemnifying Party shall diligently proceed with the defence, compromise or settlement of the Claim at its sole expense, including, if necessary, employment of counsel and experts reasonably satisfactory to the Indemnified Party and, in connection therewith, the Indemnified Party shall cooperate fully, but at the expense of the Indemnifying Party with respect to any out-of-pocket expenses incurred, to make available to the Indemnifying Party all pertinent information and witnesses under the Indemnified Party’s control, make such assignments and take such other steps as in the opinion of counsel for the Indemnifying Party are reasonably necessary to enable the Indemnifying Party to conduct such defence. The Indemnified Party shall also have the right to participate in the negotiation, settlement or defence of any Claim at its own expense.

- (d) The final determination of any Claim pursuant to this Section 8.3, including all related costs and expenses, shall be binding and conclusive upon the Parties as to the validity or invalidity, as the case may be, of such Claim against the Indemnified Party.
- (e) If the Indemnifying Party does not assume control of a Claim as permitted in Section 8.3(b), the Indemnified Party shall be entitled to make such settlement of the Claim as in its sole discretion may appear advisable, and such settlement or any other final determination of the Claim shall be binding upon the Indemnifying Party in the event the Indemnifying Party is ultimately judged liable to indemnify the Indemnified Party.

8.4 Trustee and Agent

Each Party acknowledges that the other Party is acting as trustee and agent for the remaining NGTL Indemnified Parties or ATCO Indemnified Parties, as the case may be, on whose behalf and for whose benefit the indemnity in Section 8.1 or Section 8.2, as the case may be, is provided and that such remaining Indemnified Parties shall have the full right and entitlement to take the benefit of and enforce such indemnity notwithstanding that they may not individually be parties to this Agreement. Each Party agrees that the other Party may enforce the indemnity for and on behalf of such remaining Indemnified Parties and, in such event, the Party from whom indemnification is sought shall not in any proceeding to enforce the indemnity by or on behalf of such remaining Indemnified Parties assert any defence thereto based on the absence of authority or consideration or privity of contract and irrevocably waives the benefit of any such defence.

8.5 No Consequential Damages

Notwithstanding any other provision of this Agreement, no Party shall be liable to indemnify or compensate any Person for Consequential Damages pursuant to this Agreement except that if an Indemnified Party is liable to pay Consequential Damages to a Person (other than another Indemnified Party (a "**Third Party**")) pursuant to a Claim for which the Indemnified Party is entitled to indemnification under Section 8.1 or 8.2, the Indemnifying Party will be liable to indemnify the Indemnified Party for such Consequential Damages to the extent the Indemnified Party is liable to pay them to such Third Party.

8.6 Force Majeure

- (a) Subject to the other provisions of this Section 8.6, if either Party fails to observe or perform any of the covenants or obligations herein imposed upon it and such failure shall have been occasioned by, or in connection with, or in consequence of Force Majeure, such failure shall be deemed not to be in breach of such covenants or obligations.
- (b) Neither Party shall be entitled to the benefit of the provisions of Section 8.6(a) under any or all of the following circumstances: (a) to the extent that the failure was caused by the sole negligence of the Party claiming suspension; or (b) to the extent that the failure was caused by the Party claiming suspension having failed to remedy the condition where it is within that Party's ability alone to do so and to resume the performance of such covenants or obligations, with reasonable dispatch; or (c) if the failure was caused by lack of funds or with respect to the payment of any amount or amounts then due under this Agreement; or (d) unless as soon as possible after the happening of the occurrence relied upon or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming Party's ability to observe or perform any of its covenants or obligations under this Agreement, the Party claiming suspension shall have given to the

other Party notice, either in writing or by facsimile, to the effect that such Party is unable by reason of Force Majeure (the nature whereof shall be therein specified) to perform the particular covenants or obligations.

- (c) The Party claiming suspension shall likewise give notice, as soon as possible after the Force Majeure condition is remedied, to the effect that the same is remedied and that such Party has resumed, or is then in a position to resume, the performance of such covenants or obligations.
- (d) Notwithstanding anything to the contrary in this Section 8.6 expressed or implied, the Parties agree that the settlement of strikes, lockouts and other industrial disturbances shall be entirely within the discretion of the particular Party involved therein and such Party may make settlement thereof at such time and on such terms and conditions as it may deem to be advisable and no delay in making such settlement shall deprive such party of the benefit of Section 8.6(a).

ARTICLE 9 MISCELLANEOUS

9.1 General Dispute Resolution

- (a) Unless this Agreement expressly provides for a different dispute resolution process with respect to a particular dispute, and subject to Section 4.7, this Section 9.1 shall apply to any dispute arising under or in connection with this Agreement (whether arising in contract, tort or otherwise, and whether arising at law or in equity), including:
 - (i) any dispute regarding the construction, interpretation, performance, validity or enforceability of any provision of this Agreement or whether any Person is in compliance with, or breach of, any provisions of this Agreement; and
 - (ii) the applicability of this Section 9.1 to a particular dispute.
- (b) Except for valuation disputes falling within the scope of Section 5.3 and matters falling within the scope of Section 4.7, the provisions of this Section 9.1 shall be the exclusive method of resolving disputes. It is the intent of the Parties that the matters agreed upon to be arbitrated be decided as set forth herein and they shall not seek to have this Section 9.1 rendered unenforceable or to have such matter decided in any other way.
- (c) Except as provided for in Section 4.7, all disputes arising out of or in connection with this Agreement, or the breach, termination, interpretation or invalidity hereof, shall first be referred to the Representatives of each Party designated for such purpose (each, a **"Designated Executive"**). If the Representatives fail to settle such dispute within 30 days after it is referred to them for resolution pursuant to this Section 9.1, either Party to such dispute shall refer the matter to the President of each Party.
- (d) If the Presidents of the Parties fail to settle such dispute within 30 days after it is referred to them for resolution pursuant to Section 9.1(c), either Party to such dispute may refer the matter to arbitration before a panel of 3 neutral arbitrators, with one arbitrator to be selected by each Party and the final arbitrator to be selected jointly by the first two arbitrators. The arbitration shall be held in Calgary, Alberta under the National Arbitration Rules of the ADR Institute of Canada, Inc. All arbitrators shall have

experience resolving commercial disputes in the gas pipeline industry and shall have experience resolving disputes reasonably similar to the dispute they are called upon to resolve. The arbitration panel's decision shall be in writing and shall be supported by detailed findings of fact and conclusions of law. The arbitration decision shall be final and binding on all parties thereto. All costs and expenses of such arbitration shall be borne in the manner determined by the panel.

- (e) Should any litigation be commenced between the Parties concerning any provision of this Agreement or the rights and duties hereunder, the Party prevailing in such litigation shall be entitled, in addition to such other relief as may be granted in such proceeding, to a reasonable sum as and for their legal fees in such litigation, which sum shall be determined in such litigation or in a separate action for such purpose.
- (f) Remedies provided under the provisions of this Agreement shall be cumulative and, except as to the agreement for binding arbitration contained in this Section 9.1, shall be in addition to the remedies provided by law or in equity.

9.2 Other Business or Activities

For the avoidance of doubt, nothing contained in this Agreement grants any rights not expressly mentioned herein or except as provided in Sections 3.3, 4.5(a), and 4.5(b) restricts any Party from engaging in any business or activity for its own individual profit.

9.3 Public Notices

The Parties shall jointly plan and co-ordinate any public notices, press releases, and any other publicity concerning the transactions contemplated by this Agreement and no Party shall act in this regard without the prior approval of the other, such approval not to be unreasonably withheld, unless such disclosure is required to meet timely disclosure obligations of any Party under applicable Laws or stock exchange rules in circumstances where prior consultation with the other Party is not practicable and a copy of such disclosure is provided to the other Party at such time as it is made to the regulatory authority.

9.4 Expenses

Except as otherwise provided in this Agreement each Party shall pay all costs and expenses (including the fees and disbursements of legal counsel and other advisers) it incurs in connection with the negotiation, preparation and execution of this Agreement and the transactions contemplated by this Agreement.

9.5 Notices

Any notice, consent or approval required or permitted to be given in connection with this Agreement (in this Section referred to as a "Notice") shall be in writing and shall be sufficiently given if delivered (whether in person, by courier service or other personal method of delivery), or if transmitted by facsimile:

- (a) in the case of a Notice to ATCO at:

909 – 11th Avenue S.W.
Calgary, Alberta T2R 1L8

Fax: 403.245.7636

Attention: Controller

(b) in the case of a Notice to NGTL at:

450 1st Street, S.W.
Calgary, Alberta T2P 5H1
Fax: 403.920.2460

Attention: Corporate Secretary

Any Notice delivered or transmitted to a Party as provided above shall be deemed to have been given and received on the day it is delivered or transmitted, provided that it is delivered or transmitted on a Business Day prior to 5:00 p.m. local time in the place of delivery or receipt. However, if the Notice is delivered or transmitted after 5:00 p.m. local time or if such day is not a Business Day then the Notice shall be deemed to have been given and received on the next Business Day.

A Party may, from time to time, change its address by giving Notice to the other Party in accordance with the provisions of this Section.

9.6 Assignment

No Party may assign this Agreement or any rights or obligations under this Agreement without the prior written consent of the other Party, not to be unreasonably withheld; provided that a Party may assign this Agreement to an Affiliate, without consent of the other Party, without releasing the assigning Party from its obligations under this Agreement. Any assignment of this Agreement by a Party shall only be made in conjunction with an assignment of that Party's interest in Alberta System Pipeline Facilities to the same assignee.

9.7 Relationship of Parties

Nothing in this Agreement or in the relationship of the Parties shall be read or construed so as to make the Parties partners of each other. Except as expressly set forth herein, neither Party shall be considered to be an agent or representative of the other Party or have any authority or power to act for or to undertake any obligation on behalf of the other Party.

9.8 Continuing Agreement; Survival

This Agreement shall be effective from and after the date of execution by the Parties and shall continue until such time as all of the Pipeline Facilities of the Alberta System are abandoned and fully reclaimed. Except as set forth in Section 3.7, neither Party shall have any right to terminate this Agreement. The obligations of the Parties under Section 6.1, ARTICLE 8, Section 9.1 and this Section 9.8 shall survive indefinitely.

9.9 Enurement

This Agreement enures to the benefit of and is binding upon the Parties and their respective successors (including any successor by reason of amalgamation of any Party) and permitted assigns.

9.10 No Third Party Beneficiary

Nothing contained in this Agreement shall create any rights in, or be deemed to have been executed for the benefit of any Person that is not a Party hereto.

9.11 Amendment

No amendment, supplement, modification or waiver or termination of this Agreement and, unless otherwise specified, no consent or approval by any Party, is binding unless executed in writing by the Party to be bound.

9.12 Further Assurances

The Parties shall, with reasonable diligence, do all things and provide all such reasonable assurances as may be required to consummate the transactions contemplated by this Agreement, and each Party shall provide such further documents or instruments required by any other Party as may be reasonably necessary or desirable to effect the purpose of this Agreement and carry out its provisions. The Parties shall work together to best utilize each company's manpower and expertise to provide additional efficiencies to the Alberta System, as may be agreed to by the Parties from time to time.

9.13 Submission To Jurisdiction

- (a) Each Party submits to the jurisdiction of Alberta courts in any action, application, reference or other proceeding arising out of or related to this Agreement and agrees that all claims in respect of any such actions, application, reference or other proceeding shall be heard and determined in such Alberta courts.
- (b) The Parties shall not raise any objection to the venue of any action, application, reference or other proceeding arising out of or related to this Agreement in the Alberta Courts, including the objection that the proceedings have been brought in an inconvenient forum.
- (c) The Parties hereby waive any rights to trial by jury.

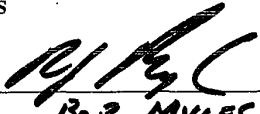
9.14 Execution and Delivery

~~This Agreement may be executed by the Parties in counterparts and may be executed and delivered by facsimile and all the counterparts and facsimiles together constitute one and the same agreement.~~

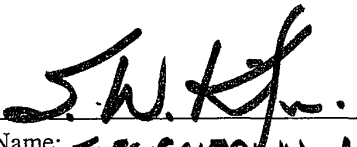
IN WITNESS OF WHICH the Parties have duly executed this Agreement.

ATCO GAS AND PIPELINES LTD.,
carrying on business under the trade name
ATCO Pipelines

NOVA GAS TRANSMISSION LTD.

By: 
Name: **BOB MYLES**
Title: **PRESIDENT, ATCO PIPELINES**

By: _____
Name: _____
Title: _____

By: 
Name: **SIEGFRIED W. KIEFER**
Title: **MANAGING DIRECTOR
UTILITIES**

By: _____
Name: _____
Title: _____

IN WITNESS OF WHICH the Parties have duly executed this Agreement.


ATCO GAS AND PIPELINES LTD.,
carrying on business under the trade name
ATCO Pipelines

NOVA GAS TRANSMISSION LTD.

By: _____

Name:

Title:

By: 

Name: Max Feldman

Title: Sr. VP, Canadian Pipelines

By: _____

Name:

Title:

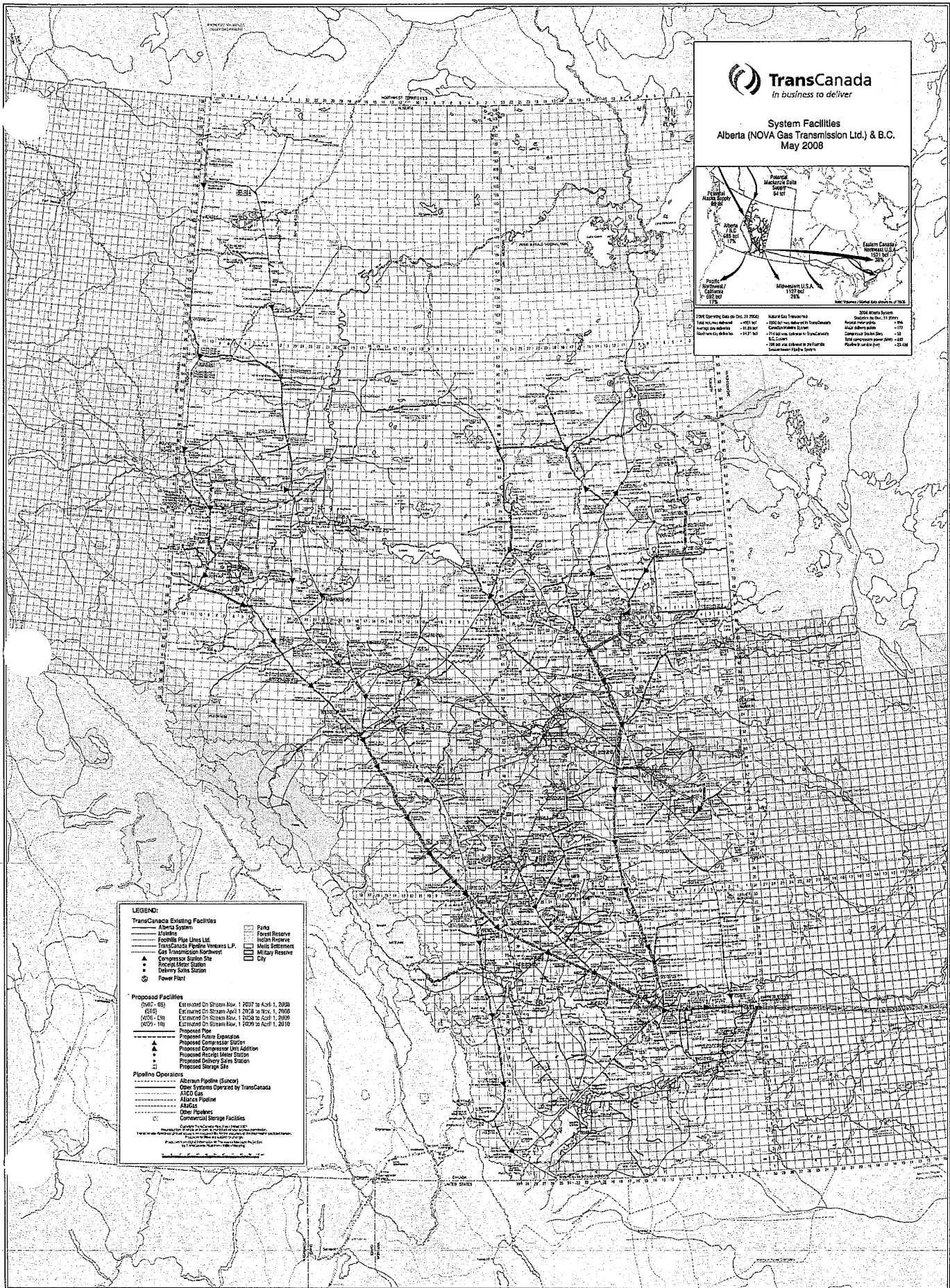
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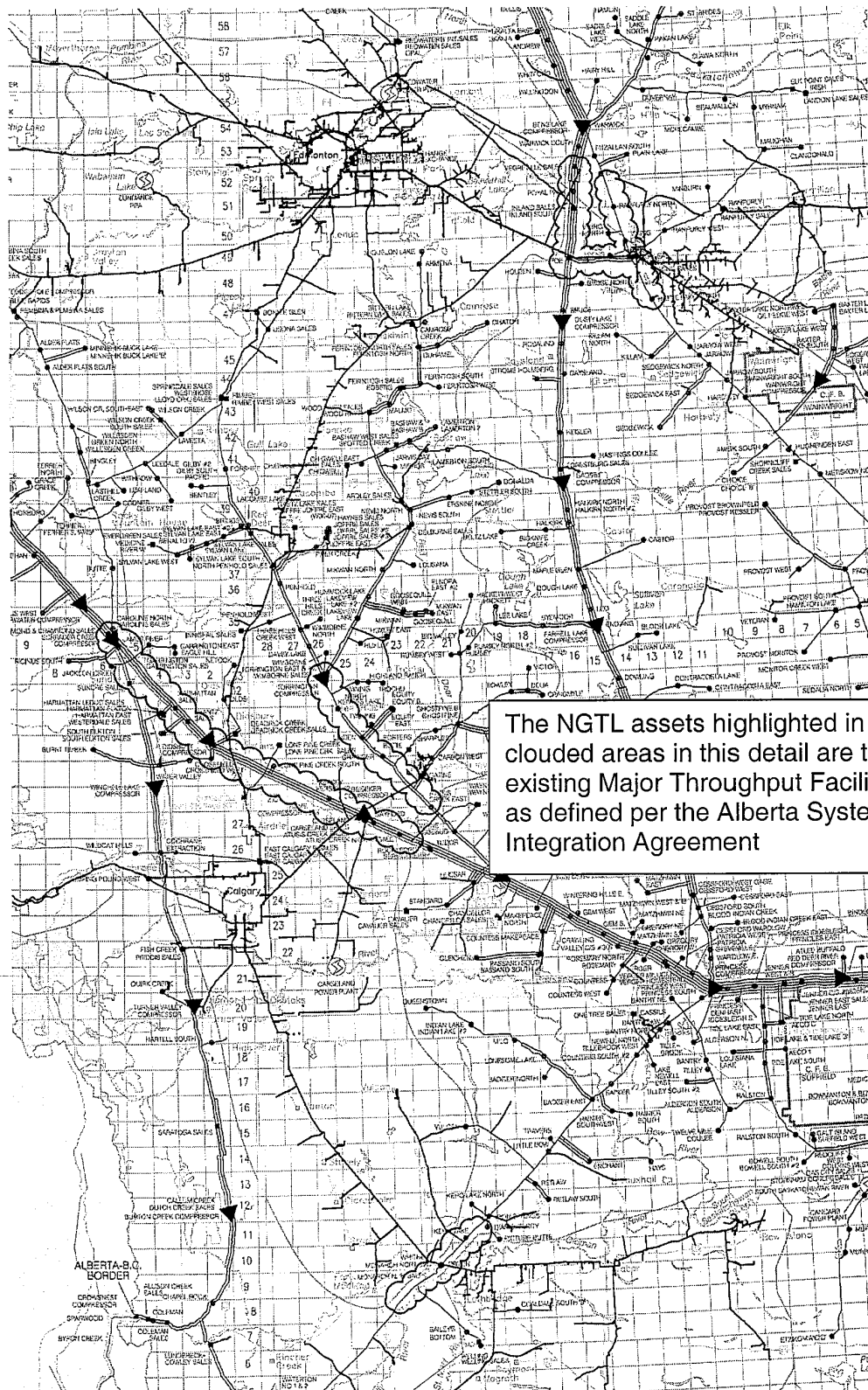
Name:

Title:

Donald J. DeGrandis
Corporate Secretary

Legal	
Content	





THIS ASSET SWAP AGREEMENT is dated ●, 2009

BETWEEN:

ATCO GAS AND PIPELINES LTD., a corporation incorporated under the laws of Alberta and carrying on business under the trade name "ATCO Pipelines" ("ATCO")

- and -

NOVA GAS TRANSMISSION LTD., a corporation governed by the laws of Alberta, ("NGTL").

RECITALS:

- A. ATCO and NGTL are party to the Alberta System Integration Agreement;
- B. ATCO owns and operates the ATCO Pipeline Facilities as shown in Schedule A to the Alberta System Integration Agreement;
- C. NGTL owns and operates the NGTL Pipeline Facilities as shown in Schedule A to the Alberta System Integration Agreement;
- D. The Parties have obtained the ATCO Integration Approval and the NGTL Integration Approval;
- E. Upon the execution and delivery of this Agreement, the Parties shall cooperate to identify the Transferred Assets to be swapped in the initial and subsequent Closings;
- F. Upon receipt of appropriate Regulatory Approvals and fulfillment of the conditions precedent herein applicable to a Closing, ATCO shall transfer the ATCO Transferred Assets in connection with each such Closing to NGTL, and NGTL shall concurrently transfer the NGTL Transferred Assets in connection with each such Closing to ATCO.

THEREFORE, the Parties agree as follows:

ARTICLE 1 DEFINITIONS AND PRINCIPLES OF INTERPRETATION

1.1 Definitions

Capitalized terms used but not defined in this Agreement shall have the meanings ascribed to them in the Alberta System Integration Agreement, and in addition, whenever used in this Agreement, the following capitalized words and terms have the following meanings:

"**Affiliate**" of any Person means, at the time such determination is being made, any other Person Controlling, Controlled by or under common Control with such first Person, in each case, whether directly or indirectly;

"**Agreement**" means this asset swap agreement, including all schedules, and all amendments or restatements as permitted, and references to "Article", "Section" or "Schedule" mean the specified Article, Section or Schedule of or to this Agreement;

"**Alberta System Integration Agreement**" means the Alberta system integration agreement dated April 7, 2009 between ATCO and NGTL;

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"Assumed Obligations" means all obligations and liabilities relating to the Transferred Assets except for the Retained Obligations, including or excluding the Environmental Liabilities, as agreed to by the Parties with respect to the Transferred Assets applicable to a Closing;

"Claims" includes claims, demands, complaints, grievances, actions, application, suits, causes of action, Orders, charges, indictments, prosecutions, information or other similar processes, assessments or reassessments, judgments, debts, liabilities, expenses, costs, damages, or losses, contingent or otherwise, whether liquidated or unliquidated, matured or unmatured, disputed or undisputed, contractual, legal or equitable, known or unknown, including loss of value, reasonable professional fees, including fees and disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any of the foregoing or any proceeding relating to any of the foregoing;

"Closing" means each completion of the transfer to and acceptance by a Party of the Transferred Assets in one or more tranches under this Agreement;

"Closing Date" means, with respect to each Closing, the date upon which each such Closing shall take place with respect to the Transferred Assets to be transferred in such Closing;

"Closing Time" means 8 o'clock a.m., Calgary time, on the applicable Closing Date or such other time on such date as the Parties may agree in writing as the time at which such Closing shall take place;

"Competition Act Clearance" means that, on or before the Closing Date, (a) the Commissioner shall have issued an advance ruling certificate under section 102 of the Competition Act in respect of the transactions contemplated by this Agreement, or (b) the applicable waiting period under Part IX of the Competition Act shall have expired or been waived and unless this clause (b) shall have been waived by the Parties, the Commissioner shall have advised the Parties in writing that she does not then have grounds on which to initiate proceedings before the Competition Tribunal under the merger provisions of the Competition Act for an order in respect of the transactions contemplated by this Agreement;

"Contracts" means those contracts and agreements directly relating to the construction, ownership or physical operation of the Transferred Assets, including transferable manufacturer's warranties;

"Control" and any derivation thereof means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities or otherwise;

"Conveyance" means a conveyance executed by the Parties, substantially in the form set out as Schedule A hereto;

"Encumbrances" means pledges, liens, charges, security interests, leases, title retention agreements, mortgages, restrictions, development or similar agreements, easements, rights-of-way, title defects, options or adverse claims or encumbrances of any kind or character whatsoever;

"Environment" means the environment or natural environment and includes air, surface water, ground water, land surface, soil, and subsurface strata, and **"Environmental"** shall have a corresponding meaning;

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“Environmental Audit” means the environmental audit of a scope to be agreed upon by the Parties with respect to the Transferred Assets to be conducted by one or more independent environmental auditing firms retained by the Parties as provided for in Section 2.5;

“Environmental Laws” means Laws relating to the protection of the Environment, and includes any Laws relating to the storage, generation, use, handling, manufacture, processing, transportation, treatment, release and disposal of Hazardous Substances;

“Environmental Liabilities” means all environmental liabilities, including all obligations and liabilities, whether arising, accruing or existing prior to or after the date of this Agreement, respecting (i) the location, state or condition of all or any of the Transferred Assets; (ii) the abandonment (whether abandonment in place, removal or otherwise) of any or all of the Transferred Assets (including any associated closing, decommissioning, dismantling and removal of any foundations, structures or equipment in connection with such abandonment); and (iii) the restoration and reclamation of the surface or subsurface of the related lands, all in compliance with Laws.

“ETA” means the *Excise Tax Act* (Canada);

“Governmental Authority” means any legislative, administrative, regulatory or other national, provincial, municipal or local government authority, ministry, department, any administrative agency, office, bureau, organization or authority having jurisdiction over one or more Party or the Transferred Assets;

“GST” means, collectively, the goods and services tax and harmonized sales tax imposed under Part IX of the ETA and any similar value-added or multi-staged tax imposed under any applicable provincial or territorial legislation, or any successor or parallel tax;

“Hazardous Substances” means any pollutants, contaminants, wastes of any nature, hazardous substances, hazardous materials, toxic substances, prohibited substances, dangerous substances or dangerous goods in excess of that permitted by Laws;

“Indemnified Party” has the meaning given in Section 6.3;

“Indemnifying Party” has the meaning given in Section 6.3;

“Land Rights” means all easements, rights-of-way (including the Pipeline ROW), rights of access, rights of entry, governmental entry and access rights, crossing agreements, joint use agreements, surface leases, licenses and such other surface rights by virtue of which the holder is entitled to occupy or access lands on or under which any of the Transferred Pipeline Facilities are located;

“License” means all permits, licenses, certificates, franchises, consents, approvals, rights, variances, exemptions or other authorizations of or from a Governmental Authority that relate to the construction, ownership or operation of the Transferred Assets;

“Material Adverse Change” means a material change, event, fact or omission in respect of the Transferred Assets, (i) in or affecting the physical condition (including material damage by fire or other hazard) or operation of the Transferred Pipeline Facilities, or (ii) which has or is reasonably expected to have a significant adverse effect on the value of the Transferred Assets;

“Material Adverse Effect” means any change, effect or circumstance that, when considered either individually or in the aggregate together with all other adverse changes, effects or

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circumstances with respect to which such phrase is used in this Agreement, is materially adverse to, or could reasonably be expected to have a material adverse effect on the value, financial condition or the operation of, the Transferred Assets of a Party, other than those resulting from industry-wide conditions or general economic conditions affecting the Gas pipeline industry generally;

"Miscellaneous Interests" means all interests of a Party in and to all property, assets and rights of every nature and kind directly relating to the ownership, operation and maintenance of the Transferred Pipeline Facilities (other than the Transferred Pipeline Facilities themselves), applicable to a particular Closing to the extent required for such ownership, operation and maintenance, and includes such interests in:

- (a) the Pipeline Documentation;
- (b) the Contracts;
- (c) the Land Rights; and
- (d) the Licenses,

as described in Part II of Schedule A to the Conveyance applicable to such Closing, but does not include those interests relating to the ownership, operation and maintenance of pipeline facilities retained by such Party.

"Non-Assignable Rights" has the meaning given in Section 3.3;

"Notice" has the meaning given in Section 7.3;

"Parties" means both ATCO and NGTL and **"Party"** means either one of them;

"Permitted Encumbrances" means the Encumbrances listed in Schedule B;

"Pipeline Documentation" means all material documentation and records of a Party in such Party's possession relating to the Transferred Pipeline Facilities of such Party, including the drawings of the Transferred Pipeline Facilities, and including data and information stored on computer-related or other electronic media;

"Pipeline Facilities" means (i) natural Gas pipelines and (ii) related pipeline facilities attached to and forming part of such pipelines including all compressor stations, meter stations, telecommunications equipment and other equipment, SCADA, valves and machinery used or useful in connection therewith, but specifically excluding radio equipment specific to a Party;

"Pipeline ROW" means all those interests of a Party in and to that portion of the rights-of-way as described in Part III of Schedule A to the Conveyance applicable to a Closing;

"Receiving Party" has the meaning given in Section 3.1(c);

"Receiving Party Indemnified Parties" has the meaning given in Section 6.1;

"Regulatory Approvals" means, collectively, all material licenses, certificates, permits, orders, approvals, determinations and authorizations from any Governmental Authority having valid jurisdiction, whether by expiry of waiting periods or otherwise, including any Competition Act Clearance;

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"Regulatory Costs" means all third-party costs incurred by either Party for the purposes of obtaining the Transfer Regulatory Approvals;

"Release" has the meaning prescribed in any Environmental Law and includes any release, spill, leak, pumping, pouring, emission, emptying, discharge, injection, escape, leaching, disposal, dumping, deposit, spraying, burial, abandonment, incineration, seepage, placement or introduction;

"Representing Party" has the meaning given in Section 5.1;

"Retained Obligations" means any and all Claims occurring, arising or accruing in relation to all or any of the Transferred Assets, to the extent such Claims accrue prior to the Closing Time applicable to such Transferred Assets including or excluding Environmental Liabilities, as agreed to by the Parties with respect to the Transferred Assets applicable to a Closing;

"Tax Act" means the *Income Tax Act* (Canada);

"Taxes" includes taxes, duties, fees, premiums, assessments, imposts, levies and other charges of any kind whatsoever imposed by any Governmental Authority, including all interest, penalties, fines, additions to tax or other additional amounts imposed by any Governmental Authority in respect thereof, and including those levied on, or measured by, or referred to as, income, gross receipts, profits, capital, transfer, land transfer, sales, goods and services, harmonized sales, use, value-added, excise, stamp, withholding, business, franchising, property, development, occupancy, employer health, payroll, employment, health, social services, education and social security taxes, all surtaxes, all customs duties and import and export taxes, countervail and anti-dumping, all licence, franchise and registration fees and all employment insurance, health insurance and Canada, Québec and other government pension plan premiums or contributions;

"Transfer Regulatory Approvals" has the meaning given in Section 2.1(a);

"Transferred Assets" means collectively the Transferred Pipeline Facilities and the Miscellaneous Interests applicable to a particular Closing;

"Transferred Pipeline Facilities" means the Pipeline Facilities of a Transferring Party as currently described in Part I of Schedule A, and shown in the drawings in Part IV of Schedule A, to the Conveyance applicable to such Closing, as may be amended and updated by the Parties from time to time;

"Transferring Party" has the meaning given in Section 3.1(c); and

"Transferring Party Indemnified Parties" has the meaning given in Section 6.2.

1.2 Certain Rules of Interpretation In this Agreement:

- (a) **Currency:** Unless otherwise specified, all references to money amounts are to the lawful currency of Canada.
- (b) **Governing Law:** This Agreement is a contract made under and shall be governed by and construed in accordance with the laws in force in the Province of Alberta and the federal laws of Canada applicable in the Province of Alberta.

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- (c) **Headings:** Headings of Articles, Sections and Schedules are inserted for convenience of reference only and shall not affect the construction or interpretation of this Agreement.
- (d) **Including:** Where the word “including” or “includes” is used in this Agreement, it means “including (or includes) without limitation”.
- (e) **No Strict Construction:** The language used in this Agreement is the language chosen by the Parties to express their mutual intent, and no rule of strict construction shall be applied against any Party.
- (f) **Number and Gender:** Unless the context otherwise requires, words importing the singular include the plural and vice versa and words importing gender include all genders.
- (g) **Severability:** If, in any jurisdiction, any provision of this Agreement or its application to any Party or circumstance is restricted, prohibited or unenforceable, the provision shall, as to that jurisdiction, be ineffective only to the extent of the restriction, prohibition or unenforceability without invalidating the remaining provisions of this Agreement.
- (h) **Statutory references:** A reference to a statute includes all regulations and rules made pursuant to the statute and, unless otherwise specified, the provisions of any statute, regulation or rule which amends, supplements or supersedes any such statute, regulation or rule.
- (i) **Time:** Time is of the essence in the performance of the Parties’ respective obligations.
- (j) **Time Periods:** Unless otherwise specified, time periods within or following which any payment is to be made or act is to be done, shall be calculated by excluding the day on which the period commences and including the day on which the period ends and by extending the period to the next Business Day following if the last day of the period is not a Business Day.

1.3 Entire Agreement

This Agreement is delivered pursuant to Section 5.1 of the Alberta System Integration Agreement. This Agreement and the agreements and other documents required to be delivered pursuant to this Agreement, constitute the entire agreement between the Parties and set out all the covenants, promises, warranties, representations, conditions, understandings and agreements between the Parties in connection with the subject matter of this Agreement and supersede all prior agreements, understandings, negotiations and discussions, whether oral or written, pre-contractual or otherwise, other than the Alberta System Integration Agreement. There are no covenants, promises, warranties, representations, conditions, understandings or other agreements, whether oral or written, pre-contractual or otherwise, express, implied or collateral, between the Parties in connection with the subject matter of this Agreement, except as specifically set forth in this Agreement and any document required to be delivered pursuant to this Agreement.

1.4 Schedules

The schedules to this Agreement, as listed below, are an integral part of this Agreement:

<u>Schedule</u>	<u>Description</u>
A	Form of Conveyance Transferred Assets

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Part I – Pipeline Facilities
Part II – Miscellaneous Interests
Part III – Pipeline ROW
Part IV – Drawing of Pipeline Facilities

B Permitted Encumbrances

ARTICLE 2 PRE-CLOSING ACTIVITIES AND DUE DILIGENCE

2.1 Regulatory Matters

- (a) **Transfer Regulatory Approvals:** ATCO and NGTL shall each use all reasonable commercial efforts to obtain, or cause to be obtained, such Regulatory Approvals each determines necessary (acting reasonably) to enable it to complete the transactions contemplated by this Agreement, including (i) applications to be made by ATCO and (ii) applications to be made by NGTL (collectively, the “**Transfer Regulatory Approvals**”) provided that nothing herein shall obligate either Party to appeal, or seek a review of, any decision of any Governmental Authority which has the effect of denying any such Transfer Regulatory Approval or granting same on conditions unsatisfactory to either of the Parties in such Party’s sole discretion. Each Party shall actively support the other Party in obtaining its applicable Transfer Regulatory Approvals.
- (b) **Failure or Rejection of Regulatory Approval:** If either ATCO or NGTL receives any final decision of a Governmental Authority which has the effect of denying any Regulatory Approval contemplated by Section 2.1(a) or granting same on conditions unsatisfactory to such Party in its sole discretion, such Party shall promptly provide Notice to the other Party of such event.

2.2 Cooperation regarding Closing; Identification of Transferred Assets For Each Closing; Access for Investigation

- (a) Each Party shall cooperate with the other Party to identify the prospective Closing Dates for each Closing of Transferred Pipeline Facilities and to identify the Transferred Pipeline Facilities for each such Closing.
- (b) Each Party shall permit the other Party and its representatives, between the date of this Agreement and the Closing Time applicable to a Closing, without interference to the ordinary conduct of the operations of such Party, to have reasonable access to the Pipeline Facilities proposed to be part of the Transferred Pipeline Facilities of the other Party for such Closing during normal business hours, to enable such Party to diligently conduct all such examinations and investigations as it considers appropriate in connection with the transfer contemplated herein.
- (c) Each Party shall furnish to the other Party copies of Pipeline Documentation and Contracts as such other Party shall from time to time reasonably request, all of which Pipeline Documentation shall be considered Confidential Information, held subject to and in accordance with Article 6 of the Alberta System Integration Agreement. Notwithstanding the foregoing, neither Party shall be required to disclose any information, records, files or other data to the other Party where prohibited by any Laws or other applicable confidentiality provisions or obligations.

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2.3 Interim Operations

- (a) During the period from the date of this Agreement to the Closing Time applicable to a Closing, each Party shall, with respect to the Transferred Pipeline Facilities to be transferred at such Closing:
 - (i) **Conduct Business in the Ordinary Course:** except as otherwise contemplated or permitted by the Alberta System Integration Agreement or this Agreement, operate such Transferred Pipeline Facilities of such Party in the ordinary course, consistent with past practice;
 - (ii) **Continue Insurance:** continue in force all policies of insurance maintained by such Party relating to such Transferred Assets of such Party; and
 - (iii) **Material Adverse Change:** give prompt Notice to the other Party of any Material Adverse Change in respect of such Transferred Assets.
- (b) Each Party shall not, without the other Party's prior written consent, such consent not to be unreasonably withheld:
 - (i) in any way encumber or alienate its interest in any Transferred Assets of such Party, incur any material liabilities or any material obligations in respect of any such Transferred Assets for which the other Party may become liable, or in any material way affect the manner in which such Transferred Assets are operated or maintained, or which would materially adversely affect such Transferred Assets; or
 - (ii) take any action that would make any of the representations or warranties of such Party as contained in this Agreement or the Alberta System Integration Agreement materially untrue or inaccurate as of the Closing Time or that would result in any of the conditions set forth in this Agreement not being materially satisfied.

2.4 Risk of Loss

At all times prior to Closing, the Transferred Assets of each Transferring Party to be transferred to the other Party upon such Closing, the operation thereof and the attendant risk of loss, shall remain with the Transferring Party.

2.5 Environmental Audit

- (a) Receiving Party shall have the right to request that an Environmental Audit be conducted on Transferring Party's Pipeline Facilities to be transferred on Closing.
- (b) The Parties shall jointly retain an independent environmental auditing firm to conduct an Environmental Audit referred to in Section 2.5(a).
- (c) Transferring Party shall provide Receiving Party and its agents access to and the right to inspect the Transferred Pipeline Facilities during normal business hours.
- (d) All out-of-pocket costs and expenses related to an Environmental Audit of Transferred Pipeline Facilities shall be shared equally by the Parties; provided that such costs and

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expenses shall be included in the determination of the value of each Party's Transferred Assets pursuant to the terms of the Alberta System Integration Agreement.

- (e) A copy of the written report of the Environmental Audit shall be provided to each Party.
- (f) Receiving Party shall from time to time but no later than sixty (60) days before an applicable Closing Date give written notice to Transferring Party describing in reasonable detail all defects relating to the Transferred Assets other than Environmental Liabilities identified in the Environmental Audit that, in the reasonable opinion of such Party, have a Material Adverse Effect which such Party requires to have remedied ("**Deficiencies**"). Transferring Party shall use reasonable efforts to promptly remedy the Deficiencies specified by the Receiving Party. Receiving Party shall notify Transferring Party if the Deficiencies are not remedied to Receiving Party's satisfaction within two (2) Business Days after Transferring Party has provided Receiving Party with notice of the remedies undertaken to remedy the Deficiencies and that the remedies are complete.
- (g) If all Deficiencies are not remedied to the Receiving Party's satisfaction, acting reasonably, prior to 5:00 p.m. on the third Business Day before the applicable Closing Date, Receiving Party shall elect by written notice prior to 5:00 p.m. on the second Business Day before Closing Date:
 - (i) with the agreement of the Transferring Party to grant a further period of time within which Transferring Party may remedy the unremedied Deficiencies to the Receiving Party's satisfaction, acting reasonably, or
 - (ii) to waive the unremedied Deficiencies and proceed with the applicable Closing, or
 - (iii) to remove the Transferred Assets with the Deficiencies from the Closing and the Parties shall use reasonable efforts to identify other proposed Transferred Assets of equal value to replace the Transferred Assets that were removed; or
 - (iv) to terminate such Closing.

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- 2.6 Either Party may from time to time but no later than sixty (60) Business Days before the Closing Date give written notice to the other Party describing any Environmental Liabilities identified in the Environmental Audit that, in the reasonable opinion of the Party, have a Material Adverse Effect on the Transferred Assets. Purchaser and Vendor shall mutually agree upon a course of action and time frame to address such Environmental Liabilities or either Party may elect to terminate the transfer of Transferred Assets in connection with such Closing to the extent such Environmental Liabilities are proposed by the Parties to be part of the Assumed Obligations.
- 2.7 Prior to exercising any right to terminate a Closing or transfer of Transferred Assets under this ARTICLE 2, the matter shall be referred to the Parties' respective AS Designated Executives to determine if any other course of action is available. If the AS Designated Executives fail to resolve the matter within 30 days after it is referred to them pursuant to this Section 2.7, either Party may refer the matter to the President (or person holding an equivalent position) of each Party.

ARTICLE 3 TRANSFER

3.1 Actions taken by the Parties

Subject to the provisions of this Agreement, at the Closing Time:

- (a) **Transfer of Transferred Assets:** each Transferring Party shall convey, transfer and/or assign (as applicable) to the Receiving Party, and the Receiving Party shall accept the conveyance, transfer and/or assignment (as applicable) of, the Transferred Assets of the Transferring Party to be transferred at such Closing;
- (b) **Retention and Assumption of Obligations:** each Receiving Party shall assume the Assumed Obligations pertaining to the Transferred Assets being transferred to such Party and each Transferring Party shall retain the Retained Obligations pertaining to the Transferred Assets being transferred by such Party;
- (c) **Conveyance and Transfer Documents:** each Party (the "Transferring Party") shall execute and deliver to the other Party (the "Receiving Party") the Conveyance applicable to such Closing and all other such conveyances, assignments, instruments of transfer, deeds, assurances, consents and other documents as may reasonably be necessary to effectively transfer to the Receiving Party the Transferred Assets of the Transferring Party; each Transferring Party shall deliver up to the Receiving Party possession of the Transferred Assets of the Transferring Party, free and clear of all Encumbrances (other than Permitted Encumbrances) or an undertaking in writing to discharge any Encumbrances (other than Permitted Encumbrances) as soon as practicable after the Closing Date;
- (d) **Pipeline Documentation:** each Transferring Party shall use commercially reasonable efforts having regard for the age of the applicable Transferred Pipeline Facilities, to deliver to the Receiving Party copies of all material Pipeline Documentation and Contracts in the possession of the Transferring Party and which the Transferring Party may lawfully provide to the Receiving Party, or a written undertaking to use commercially reasonable efforts to provide such documents within 90 days following the Closing Date; and
- (e) **Other Documents:** each Party shall deliver such other documents as may reasonably be necessary to complete the transactions provided for in this Agreement.

3.2 Taxes

- (a) All Taxes, if any (other than the GST), payable in respect of the transfer of the Transferred Assets as described in this Agreement or the registration of title to the Transferred Assets consequential to such transfer shall be borne by the Receiving Party. Receiving Party shall pay directly to the appropriate Governmental Authority all such Taxes payable by it in accordance with Laws and, upon the reasonable request of Transferring Party, furnish proof of such payment. The determination of the relative value of Transferred Assets of each Party in a Closing shall take into account adjustments at the Closing Date to account for prepaid property taxes, rentals and similar payments and assessments.
- (b) Receiving Party shall be liable for and shall pay to Transferring Party an amount equal to any GST in connection with the purchase and sale of the Transferred Assets transferred by Transferring Party under this Agreement. To the extent permitted under Section 221(2) of the ETA and any equivalent or corresponding provision under any applicable Laws, Receiving Party shall self-assess and remit directly to the appropriate Governmental Authority any GST payable (after reflecting the provisions of Section 228(6) of the ETA) in connection with the transfer of any of the Land Rights. Receiving Party shall make and file a return(s) in accordance with the requirements of Section 228(4) of the ETA and any equivalent or corresponding provision under any applicable Laws.

3.3 Non-Assignable Rights

Nothing in this Agreement shall be construed as an assignment of, or an obligation or an attempt on the part of Transferring Party to assign to Receiving Party, any contract, license, lease, agreement, commitment, entitlement or engagement, (including any of the Miscellaneous Interests), which, as a matter of Law or by its terms, is (i) not assignable, or (ii) not assignable without the approval or consent of the issuer thereof or the other party or parties thereto, without first obtaining such approval or consent (collectively, in this Section 3.3, the "**Non-Assignable Rights**"). In connection with such Non-Assignable Rights, Transferring Party shall:

- (a) co-operate with Receiving Party to take commercially reasonable steps to obtain any necessary approvals or consents, where relevant;
- (b) co-operate with Receiving Party in any reasonable arrangements designed to provide the benefits of such Non-Assignable Rights to Receiving Party, including holding any such Non-Assignable Rights in trust for Receiving Party or acting as agent for Receiving Party;
- (c) enforce any rights of Transferring Party arising from such Non-Assignable Rights; and
- (d) take all such actions and do, or cause to be done, all such things at the request of Receiving Party as shall reasonably be necessary in order that the value of any Non-Assignable Rights shall be preserved and shall enure to the benefit of Receiving Party.

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ARTICLE 4 CONDITIONS PRECEDENT

4.1 Transferring Party's Conditions Precedent to Transfer of Assets being transferred to the Receiving Party

The obligation of each Transferring Party to complete the transfer of the Transferred Assets being transferred by such Party under this Agreement shall be subject to the satisfaction of or compliance with, at or before the applicable Closing Time, each of the following conditions precedent (each of which is acknowledged to be inserted for the exclusive benefit of the Transferring Party and may be waived by it in whole or in part):

- (a) **Truth and Accuracy of Representations:** All of the representations and warranties of the Receiving Party made in or pursuant to this Agreement shall be true and correct in all material respects at the Closing Time and with the same effect as if made at and as of the Closing Time and the Transferring Party shall have received a certificate of a senior officer of the Receiving Party confirming the truth and correctness of such representations and warranties.
- (b) **Performance of Obligations:** Receiving Party shall have performed or complied with, in all material respects, all its obligations, covenants and agreements under this Agreement.
- (c) **Regulatory Approvals:** All material Regulatory Approvals contemplated in Section 2.1(a) shall have been obtained at or before the Closing Time, in form and substance satisfactory to Transferring Party.
- (d) **Receipt of Closing Documentation:** Transferring Party shall have received copies of all such documentation or other evidence as it may reasonably request in order to establish the consummation of the transactions contemplated by this Agreement.
- (e) **No Proceedings:** There shall be no injunction or restraining order issued preventing, and no pending or threatened Claim or judicial or administrative proceeding, or investigation against any Party by any Governmental Authority, for the purpose of enjoining or preventing the consummation of the transactions contemplated in this Agreement or otherwise claiming that this Agreement or the consummation of such transactions is improper or would give rise to proceedings under any Laws.
- (f) **No Material Adverse Change:** As of the Closing Time, no Material Adverse Change shall be in existence and continuing.
- (g) **Concurrent Transfer of Transferred Assets:** the Transfer of each Transferring Party's Transferred Assets shall occur concurrently.

If any of the foregoing conditions in this Section 4.1 has not been fulfilled by the applicable Closing, Transferring Party may terminate such Closing by Notice to Receiving Party, in which event the Parties are released from all obligations in respect of such Closing. However, Transferring Party may waive compliance with any condition in whole or in part if it sees fit to do so, without prejudice to its rights of termination in the event of non-fulfilment of any other condition.

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4.2 Receiving Party's Conditions Precedent to Transfer of Assets being transferred by the Transferring Party

The obligation of Receiving Party to complete the transfer of the Transferred Assets under this Agreement is subject to the satisfaction of, or compliance with, at or before the Closing Time, each of the following conditions precedent (each of which is acknowledged to be inserted for the exclusive benefit of Receiving Party and may be waived by it in whole or in part):

- (a) **Truth and Accuracy of Representations:** All of the representations and warranties of Transferring Party made in or pursuant to this Agreement shall be true and correct in all material respects at the Closing Time and with the same effect as if made at and as of the Closing Time and Receiving Party shall have received a certificate of a senior officer of Transferring Party confirming the truth and correctness of such representations and warranties.
- (b) **Performance of Obligations:** Transferring Party shall have performed or complied with, in all material respects, all its obligations, covenants and agreements under this Agreement.
- (c) **Regulatory Approvals:** All material Regulatory Approvals contemplated in Section 2.1(a) shall have been obtained at or before the Closing Time, in form and substance satisfactory to Receiving Party.
- (d) **Receipt of Closing Documentation:** Receiving Party shall have received copies of all such documentation or other evidence as it may reasonably request in order to establish the consummation of the transactions contemplated by this Agreement.
- (e) **No Proceedings:** There shall be no injunction or restraining order issued preventing, and no pending or threatened Claim or judicial or administrative proceeding, or investigation against any Party by any Governmental Authority, for the purpose of enjoining or preventing the consummation of the transactions contemplated in this Agreement or otherwise claiming that this Agreement or the consummation of such transactions is improper or would give rise to proceedings under any Laws.
- (f) **No Material Adverse Change:** As of the Closing Time, no Material Adverse Change shall be in existence and continuing.
- (g) **No Encumbrances:** Receiving Party shall have received evidence reasonably satisfactory to it that the Transferred Assets are free and clear of all Encumbrances other than the Permitted Encumbrances.
- (h) **Concurrent Transfer of Transferred Assets:** the Transfer of each Transferring Party's Transferred Assets shall occur concurrently.

If any of the foregoing conditions in this Section 4.2 has not been fulfilled by the applicable Closing, Receiving Party may terminate such Closing by Notice to Transferring Party, in which event the Parties are released from all obligations under such Closing. However, Receiving Party may waive compliance with any condition in whole or in part if it sees fit to do so, without prejudice to its rights of termination in the event of non-fulfilment of any other condition.

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4.3 Actions to Satisfy Closing Conditions

Each of the Parties shall take all such actions as are within its power to control, and use reasonable commercial efforts to cause other actions to be taken which are not within its power to control, so as to ensure compliance with each of the conditions and covenants set forth in this ARTICLE 4 which are for the benefit of the other Party.

ARTICLE 5 REPRESENTATIONS AND WARRANTIES

5.1 Representations and Warranties

Each Party (the “**Representing Party**”) represents and warrants to the other Party, the matters set out below.

- (a) **Incorporation:** The Representing Party is a corporation validly existing under the laws of Alberta.
- (b) **Due Authorization and Enforceability of Obligations:** The Representing Party has all necessary corporate power, authority and capacity to enter into this Agreement and to carry out its obligations under this Agreement. The execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement have been duly authorized by all necessary corporate action on the part of the Representing Party. This Agreement constitutes a valid and binding obligation of the Representing Party enforceable against it in accordance with its terms subject to any limitations imposed by Law.
- (c) **Absence of Conflicting Agreements:** To the Representing Party’s knowledge after reasonable inquiry, the Representing Party is not a party to, bound or affected by or subject to any:
 - (i) indenture, mortgage, lease, agreement, obligation or instrument;
 - (ii) charter or by-law;
 - (iii) Laws; or
 - (iv) governmental authorizations including, approvals, certificates, orders, consents, directives, notices, licences, variances, registrations or similar rights, except any applicable Regulatory Approval which are of a nature customarily obtained in the ordinary course prior to fulfillment of the conditions precedent hereto, including any Competition Act Clearance;that would be violated, breached by, or under which default would occur or an Encumbrance, would, or with notice or the passage of time would, be created as a result of the execution and delivery of, or performance of obligations under, this Agreement or any other agreement to be entered into under the terms of this Agreement, that in any such instance would have a material adverse effect on the Transferred Assets transferred by the Representing Party or the transactions contemplated by this Agreement.
- (d) **Tax Resident:** The Representing Party is not a non-resident person of Canada for the purposes of the Tax Act.

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- (e) **No Broker:** The Representing Party has carried on all negotiations relating to this Agreement and the transactions contemplated in this Agreement directly and without intervention on its behalf of any other party in such manner as to give rise to any valid claim for a brokerage commission, finder's fee or other like payment.
- (f) **GST Registration:** The Representing Party is duly registered under Subdivision (d) of Division V of Part IX of the ETA with respect to the goods and services tax and harmonized sales tax.
- (g) **Title to Transferred Assets:** The Transferring Party is the sole legal and beneficial owner and (where its interests are registrable) the sole registered owner of the Transferred Assets with good and valid title, free and clear of all Encumbrances other than Permitted Encumbrances and is exclusively entitled to possess and (subject only to the conditions precedent set forth in Sections 4.1 and 4.2) dispose of same.
- (h) **Transferred Assets Constructed in Compliance with Law:** The Transferred Assets were constructed (i) in accordance with applicable Laws at the time of construction and the Transferring Party has not received any notice of any alleged violation of any such Laws and (ii) in conformance with applicable codes of construction at the time of construction except for non-compliance with such codes which does not have a Material Adverse Effect. The Transferring Party has developed and implemented corporate policies and procedures designed to provide for compliance in all material respects with applicable Laws and has complied with such policies and procedures in all material respects with respect to such Transferred Assets.
- (i) **Operation of Transferred Assets:** The Transferring Party has operated and maintained the Transferred Assets in a prudent manner in accordance with good industry practices.
- (j) **Environmental Matters:** The Transferring Party has never been prosecuted for or convicted of any material offence under any Environmental Law relating to the Transferred Assets, nor has the Transferring Party been found liable in any proceeding to pay any material fine or penalty to any Governmental Authority as a result of any Release or threatened Release or as a result of the breach of any Environmental Law in respect of the Transferred Assets, and to the knowledge of the Transferring Party there is no basis for any such proceeding and no such fines or penalties are outstanding.
- (k) **Litigation:** Except as disclosed in writing to the Receiving Party, there are no Claims, investigations or other proceedings, including appeals and applications for review, in progress, or, to the knowledge of the Transferring Party, pending or threatened against or relating to the Transferring Party before any Governmental Authority which, if determined adversely to the Transferring Party, would,
 - (i) have a Material Adverse Effect on the Transferred Assets,
 - (ii) enjoin, restrict or prohibit the transfer of all or any part of the Transferred Assets as contemplated by this Agreement, or
 - (iii) delay, restrict or prevent the Transferring Party from fulfilling any of its obligations set out in this Agreement or arising from this Agreement,

and the Transferring Party has no knowledge of any existing ground on which any such action, suit, litigation or proceeding might be commenced with any reasonable likelihood of success.

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- (l) **Material Third Party Consents:** The Representing Party has received all material consents from third parties that it considers necessary to give effect to the Closing of the Transferred Assets.

5.2 Disclaimer

- (a) Neither Party makes any representations or warranties whatsoever except, and to the extent, expressly set forth in this ARTICLE 5 and disclaims, and shall not be liable for, any other representation or warranty which may have been made or alleged to have been made in any document or instrument relative hereto or in any statement or information made or communicated in any manner. In particular, the Representing Party (except to the extent specifically addressed in Section 5.1) makes no representations or warranties whatsoever with respect to the quality, fitness, condition or merchantability of the Transferred Assets transferred by the Representing Party pursuant to this Agreement.
- (b) Each Party acknowledges that the other Party, subject to the express representations and warranties contained within Section 5.1 or the other express provisions of this Agreement (including Section 3.1(b)), is transferring the Transferred Assets of the other Party on an "as is, where is" basis in such a state as the Transferred Assets of the other Party shall exist at the Closing Date and, further, each Party shall not have any claim or action against the other Party in respect of the location, state or condition of all or any of the Transferred Assets of the other Party or the suitability or fitness of such Transferred Assets for that Party's intended use or purpose except to the extent specifically addressed in Section 5.1 and the other express provisions of this Agreement.

5.3 Survival

- (a) All representations and warranties contained in this Agreement on the part of each of the Parties shall survive the Closing, the execution and delivery under this Agreement of any bills of sale, instruments of conveyance, assignments or other instruments of transfer of title to any of the Transferred Assets.
- (b) Except as provided below, such representations and warranties shall only survive for a period of 2 years from the applicable Closing Date with respect to the applicable Transferred Assets; provided that:
- (i) representations and warranties concerning tax matters shall survive for a period of 90 days after the relevant Governmental Authority shall no longer be entitled to assess liability for tax against the Representing Party for any particular taxation year, having regard to, without limitation, any waivers given by such Party in respect of any taxation year; and
- (ii) the Receiving Party's obligations and liabilities in respect of the Assumed Obligations shall not expire and shall survive indefinitely.

No claim for any incorrectness in or breach of any representation, warranty, covenant or agreement made in this Agreement may be made or shall be enforceable by a Party, whether by legal proceedings or otherwise, unless Notice of such claim, with reasonable particulars, is given by such Party to the Party against whom such claim is made prior to the expiry of the relevant survival period set forth above.

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ARTICLE 6 INDEMNIFICATION

6.1 Indemnification by the Transferring Party

- (a) The Transferring Party shall indemnify and save harmless the Receiving Party, its directors, officers, agents, employees and shareholders (collectively referred to as the **"Receiving Party Indemnified Parties"**) from and against all Claims, whether or not arising due to third party Claims, which may be made or brought against the Receiving Party Indemnified Parties, or which they may suffer or incur, directly or indirectly, as a result of or in connection with or relating to:
- (i) any non-fulfilment or breach of any covenant or agreement on the part of the Transferring Party contained in this Agreement or in any certificate or other document furnished by or on behalf of the Transferring Party pursuant to this Agreement; or
 - (ii) any misrepresentation or any incorrectness in or breach of any representation or warranty of the Transferring Party contained in this Agreement or in any certificate or other document furnished by or on behalf of the Transferring Party pursuant to this Agreement;

6.2 Indemnification by the Receiving Party

- (a) The Receiving Party shall indemnify and save harmless the Transferring Party, its directors, officers, employees, agents and shareholders (collectively referred to as the **"Transferring Party Indemnified Parties"**) from and against all Claims, whether or not arising due to third party Claims, which may be made or brought against the Transferring Party Indemnified Parties, or which they may suffer or incur, directly or indirectly as a result of or in connection with or relating to:
- (i) any non-fulfilment or breach of any covenant or agreement on the part of the Receiving Party contained in this Agreement or in any certificate or other document furnished by or on behalf of the Receiving Party pursuant to this Agreement; or
 - (ii) any misrepresentation or any incorrectness in or breach of any representation or warranty of the Receiving Party contained in this Agreement or in any certificate or other document furnished by or on behalf of the Receiving Party pursuant to this Agreement

provided that nothing contained in this Section 6.2 shall extend to the Retained Obligations.

6.3 Indemnification Procedures for Third Party Claims

- (a) In the case of Claims made by a third party with respect to which indemnification is sought, the Party seeking indemnification (the **"Indemnified Party"**) shall give prompt notice, and in any event within sixty (60) days, to the other Party (the **"Indemnifying Party"**) of any such Claims made upon it. If the Indemnified Party fails to give such notice, such failure shall not preclude the Indemnified Party from obtaining such indemnification but its right to indemnification may be reduced to the extent that such

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delay prejudiced the defence of the Claim or increased the amount of liability or cost of defence.

- (b) The Indemnifying Party shall have the right, by notice to the Indemnified Party given not later than sixty (60) days after receipt of the notice described in Section 6.3(a), to assume the control of the defence, compromise or settlement of the Claim, provided that such assumption shall, by its terms, be without cost to the Indemnified Party and provided the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in accordance with the terms contained in this Section 6.3 in respect of that Claim.
- (c) Upon the assumption of control of any Claim by the Indemnifying Party as set out in Section 6.3(b), the Indemnifying Party shall diligently proceed with the defence, compromise or settlement of the Claim at its sole expense, including, if necessary, employment of counsel and experts reasonably satisfactory to the Indemnified Party and, in connection therewith, the Indemnified Party shall cooperate fully, but at the expense of the Indemnifying Party with respect to any out-of-pocket expenses incurred, to make available to the Indemnifying Party all pertinent information and witnesses under the Indemnified Party's control, make such assignments and take such other steps as in the opinion of counsel for the Indemnifying Party are reasonably necessary to enable the Indemnifying Party to conduct such defence. The Indemnified Party shall also have the right to participate in the negotiation, settlement or defence of any Claim at its own expense.
- (d) The final determination of any Claim pursuant to this Section 6.3, including all related costs and expenses, shall be binding and conclusive upon the Parties as to the validity or invalidity, as the case may be, of such Claim against the Indemnifying Party.
- (e) If the Indemnifying Party does not assume control of a Claim as permitted in Section 6.3(b), the Indemnified Party shall be entitled to make such settlement of the Claim as in its sole discretion may appear advisable, and such settlement or any other final determination of the Claim shall be binding upon the Indemnifying Party.

6.4 Exclusive Remedy

The rights of indemnity set forth in this ARTICLE 6 are the sole and exclusive remedy of each Party in respect of any misrepresentation, incorrectness in or breach of any representation or warranty, or breach of covenant, by the other Party under this Agreement but are not, for clarity, the sole and exclusive remedy under any instruments or documents delivered pursuant to this Agreement. Accordingly, the Parties waive, from and after the Closing, any and all rights, remedies and claims that one Party may have against the other, whether at law, under any statute or in equity (including but not limited to claims for contribution or other rights of recovery arising under any Environmental Laws, claims for breach of contract, breach of representation and warranty, negligent misrepresentation and all claims for breach of duty), or otherwise, directly or indirectly, relating to the provisions of this Agreement or the transactions contemplated by this Agreement other than as expressly provided for in this ARTICLE 6, other than those arising with respect to any fraud or wilful misconduct and other than those provided for in other documents or instruments delivered pursuant to this Agreement. The Parties agree that if a Claim for indemnification is made by one Party in accordance with Section 6.1(a) or Section 6.2(a) as the case may be, and there has been a refusal by the other Party to make payment or otherwise provide satisfaction in respect of such Claim, then a legal proceeding is the appropriate means to seek a remedy for such refusal. This ARTICLE 6 shall remain in full force and effect in all circumstances and shall not be terminated by any breach (fundamental, negligent or otherwise) by any Party of its representations, warranties or covenants under this Agreement or under any Closing document or by any termination or rescission of this Agreement by any Party.

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6.5 Trustee and Agent

Each Party acknowledges that the other Party is acting as trustee and agent for the remaining Receiving Party Indemnified Parties or the Transferring Party Indemnified Parties, as the case may be, on whose behalf and for whose benefit the indemnity in Section 6.1 or Section 6.2, as the case may be, is provided and that such remaining Indemnified Parties shall have the full right and entitlement to take the benefit of and enforce such indemnity notwithstanding that they may not individually be parties to this Agreement. Each Party agrees that the other Party may enforce the indemnity for and on behalf of such remaining Indemnified Parties and, in such event, the Party from whom indemnification is sought will not in any proceeding to enforce the indemnity by or on behalf of such remaining Indemnified Parties assert any defence thereto based on the absence of authority or consideration or privity of contract and irrevocably waives the benefit of any such defence.

ARTICLE 7 GENERAL

7.1 Cost and Expenses

- (a) The Regulatory Costs of a Party shall be such Party's sole cost and expense.
- (b) Except as otherwise provided in this Agreement, each Party shall pay and be responsible for all costs and expenses (including the fees and disbursements of legal counsel and other advisers) it incurs in connection with the negotiation, preparation and execution of this Agreement and the transactions contemplated by this Agreement.

7.2 Public Notices

The Parties shall jointly plan and co-ordinate any public notices, press releases, and any other publicity concerning the transactions contemplated by this Agreement and no Party shall act in this regard without the prior approval of the other Party, such approval not to be unreasonably withheld, unless such disclosure is required to meet timely disclosure obligations of any Party under applicable Laws and stock exchange rules in circumstances where prior consultation with the other Party is not practicable and a copy of such disclosure is provided to the other Party at such time as it is made to the regulatory authority.

7.3 Notices

Any notice, consent or approval required or permitted to be given in connection with this Agreement (each, a "**Notice**") shall be in writing and shall be sufficiently given if delivered (whether in person, by courier service or other personal method of delivery), or if transmitted by facsimile:

in the case of a Notice to ATCO at:

909-11th Avenue S.W.
Calgary, AB T2R 1L8
Attention: Controller
Fax: 403.245.7636

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in the case of a Notice to NGTL at:

Nova Gas Transmission Ltd.
450-1st Street SW
Calgary, AB T2P 5H1
Attention: Corporate Secretary
Fax: (403) 920-2460

Any Notice delivered or transmitted to a Party as provided above shall be deemed to have been given and received on the day it is delivered or transmitted, provided that it is delivered or transmitted on a Business Day prior to 5:00 p.m. local time in the place of delivery or receipt. However, if the Notice is delivered or transmitted after 5:00 p.m. local time or if such day is not a Business Day then the Notice shall be deemed to have been given and received on the next Business Day. Any Party may, from time to time, change its address by giving Notice to the other Parties in accordance with the provisions of this Section 7.3.

7.4 Amendment

No amendment, supplement, modification or waiver or termination of this Agreement and, unless otherwise specified, no consent or approval by any Party, shall be binding unless executed in writing by the Party to be bound thereby.

7.5 Assignment

No Party may assign this Agreement or any rights or obligations under this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld; provided that a Party may assign this Agreement to an Affiliate, without consent of the other Party, without releasing the assigning Party from its obligations under this Agreement. Any assignment of this Agreement by a Party to an assignee shall only be made in conjunction with an assignment of that Party's interest in the Alberta System Integration Agreement to such assignee.

7.6 Enurement

This Agreement shall enure to the benefit of and be binding upon the Parties and their respective successors (including any successor by reason of amalgamation of any Party) and permitted assigns.

7.7 Further Assurances

The Parties shall, with reasonable diligence, do all such things and provide all such reasonable assurances as may be required to consummate the transactions contemplated by this Agreement, and each Party shall provide such further documents or instruments required by any other Party as may be reasonably necessary or desirable to effect the purpose of this Agreement and carry out its provisions, whether before or after an applicable Closing provided that the costs and expenses of any actions taken after an applicable Closing at the request of a Party shall be the responsibility of the requesting Party.

7.8 Execution and Delivery

This Agreement may be executed by the Parties in counterparts and may be executed and delivered by facsimile and all such counterparts and facsimiles shall together constitute one and the same agreement.

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REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
EXECUTION PAGE TO FOLLOW

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IN WITNESS OF WHICH the Parties have duly executed this Agreement.

ATCO GAS AND PIPELINES LTD.,
carrying on business under the trade name
“ATCO Pipelines”

By: _____

Name:

Title:

By: _____

Name:

Title:

LEGAL	
CONTENT	

NOVA GAS TRANSMISSION LTD.

By: _____

Name:

Title:

By: _____

Name:

Title:

LEGAL	
CONTENT	

SCHEDULE A
FORM OF CONVEYANCE: ATTACHED

CONVEYANCE

CONVEYANCE made effective the ● day of ●, 200●.

BETWEEN:

ATCO GAS AND PIPELINES LTD., a corporation incorporated
under the laws of Alberta and carrying on business under the trade
name "ATCO PIPELINES" ("ATCO")
- and -

NOVA GAS TRANSMISSION LTD., a corporation governed by
the laws of Alberta, ("NGTL").

WHEREAS pursuant to the Asset Swap Agreement dated ●, 2009, ● has agreed to convey the
Transferred Assets to ●.

THE PARTIES AGREE AS FOLLOWS:

1. Definitions

In this Conveyance "Asset Swap Agreement" means the Asset Swap Agreement dated April ●, 2009 between ATCO and NGTL. Capitalized terms used but not defined in this Conveyance shall have the meanings ascribed to them in the Asset Swap Agreement.

2. Conveyance

●, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ●, conveys, transfers and/or assigns, as applicable, to ● the Transferred Assets listed in Parts I, II, III and IV of Schedule "A" to this Conveyance.

3. Effective Time

This Conveyance is effective as of 8:00 a.m. Calgary Time on ●, 200●.

4. Subordinate Document

This Conveyance is executed and delivered by ATCO and NGTL pursuant to the Asset Swap Agreement and the provisions of the Asset Swap Agreement shall not be merged in this Conveyance and shall remain in full force and effect and shall prevail if there is a conflict between the provisions of the Asset Swap Agreement and this Conveyance.

5. Representations and Warranties

The representations and warranties of ● set forth in Article 5 of the Asset Swap Agreement are hereby incorporated by reference into this Conveyance and are deemed to be made as of the Effective Time set forth in Section 3 of this Conveyance.

6. **Enurement**

This Conveyance enures to the benefit of and is binding upon ATCO and NGTL and their respective successors and permitted assigns.

7. **Further Assurances**

Each of ATCO and NTGL will, after the date of this Conveyance, at the request of the other Party and without further consideration, do all further acts and execute and deliver all further documents reasonably required to fully perform and carry out the terms of this Conveyance.

8. **Governing Law**

This Conveyance is a contract made under and shall be governed by and construed in accordance with the laws in force in the Province of Alberta and the federal laws of Canada applicable in the Province of Alberta.

9. **Survival**

The representations and warranties set forth in this Conveyance shall survive for the period set forth in Section 5.3 of the Asset Swap Agreement.

10. **Counterpart**

This Conveyance may be executed in as many counterparts as are necessary and all executed counterparts together shall constitute one agreement.

THE PARTIES HAVE EXECUTED THIS CONVEYANCE effective the ● day of ●, 2009.

ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name "ATCO
PIPELINES"

NOVA GAS TRANSMISSION LTD.

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

SCHEDULE A TO CONVEYANCE

ATCO Transferred Assets

Part I – Pipeline Facilities

Part II – Miscellaneous Interests

Part III – Pipeline ROW

Part IV – Drawing of Pipeline Facilities

NGTL Transferred Assets

Part I – Pipeline Facilities

Part II – Miscellaneous Interests

Part III – Pipeline ROW

Part IV – Drawing of Pipeline Facilities

PART III OF SCHEDULE A TO CONVEYANCE- PIPELINE ROW

Note: The Pipeline ROW includes all those interests of ● in and to the portion of the rights-of-way described below which is directly relating to the ownership, operation and maintenance of the Pipeline Facilities (but excludes all interests of ● in and to the portion of the rights-of-way described below which is directly relating to the ownership, operation and maintenance of pipeline facilities retained by ●).

SCHEDULE B PERMITTED ENCUMBRANCES

“Permitted Encumbrances” means:

1. Easements, servitudes, leases, licenses, permits, consents, approvals, authorizations, rights-of-way, rights of use and similar rights and privileges in, over or in respect of land (including in, over or in respect of the Land Rights) and any amendments thereto or postponements thereof, including: (a) easements, servitudes, leases, rights-of-way, rights of use and rights of a similar nature granted to or vested in public utilities, pipeline owners, common carriers, and/or similar bodies or granted to or vested in any Governmental Authority; (b) easements, servitudes, permits, leases, licenses, consents, approvals, authorizations, rights-of-way and rights of use for highways and other roads, railways, sewers, drains, pipelines, gas and water mains, electric light, power, telephone, telegraph or cable television conduits, poles, wires, cables and other utilities of whatever nature, and (c) all rights reserved to, held by or vested in a Person who had the power to acquire the same by expropriation.
2. The right reserved to, held by or vested in any Governmental Authority by the terms of any lease, licence, franchise, grant, permit, consent, approval or authorization forming part of the Transferred Assets, or by any statutory provision, to terminate any lease, licence, franchise, grant, permit, consent, approval or authorization or to require annual or other periodic payments as a condition of the continuance of them.
3. Rights reserved to, held by or vested in any Governmental Authority to control, regulate or use any of the Transferred Assets in any manner including matters of development and zoning and all other Laws.
4. The right reserved to, held by or vested in any person to create or incur a lien:
 - (a) for Taxes, assessments or charges accruing to any Governmental Authority which are not due as at the Closing Date; or
 - (b) that is a mechanics' lien, builders' lien, materialmens' lien or a lien of a similar nature in respect of services rendered or goods supplied, but only to the extent such lien relates to goods or services for which payment is not due as at the Closing Date, including any undetermined or inchoate liens which have not at the time been filed pursuant to Laws.
5. Liens incurred, created and granted in the ordinary course of business to a public utility or Governmental Authority in connection with operations conducted with respect to the Transferred Assets, but only to the extent those liens relate to costs and expenses for which payment is not due as at the Closing Date.
6. Any lien contemplated by paragraphs 4 and 5 above which has been created or incurred but is being contested in good faith by the Transferring Party.
7. The lien or any right of distress reserved in or exercisable under any lease for rent and for compliance with the terms of such lease.

Page

8. Rights and privileges of any Person other than the Transferring Party or its Affiliates to work, prospect for, explore for, drill for, win, take remove, store treat or dispose of mines, oil, gas, coal or other minerals or subsurface materials which exist within, upon or under any property, and to enter upon, use and occupy any property for any purpose whatever or in any manner whatever in connection with such working, prospecting, exploring, drilling, winning, taking, removing, storing, treating or disposing, whether such rights or privileges were reserved or excepted by or from the grant to the Transferring Party or its Affiliates or were granted, demised or released to others before or after the acquisition by the Transferring Party or its Affiliates of its interest in such property.
9. Any subsisting reservations or exceptions, including royalties, contained in the original grant of the land from the Crown.
10. The terms and conditions of any of the Pipeline Documentation, Contracts, Land Rights, Licenses and other Miscellaneous Interests.
11. Defects or irregularities in title to the Land Rights which are of a minor nature and do not materially adversely affect the use or value of the Land Rights affected thereby.

RECEIPT

● hereby acknowledges receipt of the ● Transferred Assets listed in Parts I, II, III and IV of Schedule "A" to the Conveyance dated ●, 200● between ATCO and NGTL.

DATED this ● day of ●, 200●.

●

By: _____

Name:

Title:

By: _____

Name:

Title:

CERTIFICATE OF OFFICER
(the "Certificate")

TO: ●

Reference is made to Section 3.6 of the Alberta System Integration Agreement dated ●, 2009 between ATCO GAS AND PIPELINES LTD. carrying on business under the trade name ATCO Pipelines ("ATCO") and NOVA Gas Transmission Ltd. ("NGTL") (the "Agreement").

Capitalized terms used but not defined in this undertaking shall have the respective meanings ascribed to them in the Agreement.

I, _____, hereby certify in my capacity as ● of ● and not in my personal capacity and without personal liability, as follows:

1. I have reviewed and am familiar with the Agreement.
2. All representations and warranties in respect of ● contained in Article 7 of the Agreement are true and correct in all material respects as of the current date, except for those representations and warranties expressly stated to be made as of, or specifically in relation to, an earlier date.
3. ● has complied in all material respects with all of its covenants under the Agreement.
4. To the best of my knowledge, after due inquiry, there are no proceedings pending or threatened against ●, the presence of which would have a Material Adverse Effect.
5. Each of the conditions precedent set forth in Section 3.6 of the Agreement which are for the benefit of ● has either been fulfilled or waived [describe any specific waiver].

DATED at Calgary, Alberta the _____ day of _____, 200●.

●

By: _____

Name:

Title:

ATTACHMENT – 1

SUPPLEMENTAL AMENDING AGREEMENT

ATCO Pipelines
Asset Swap Application - Attachment 1
February 15, 2012

SUPPLEMENTAL AMENDING AGREEMENT

This AGREEMENT is made as of the 3rd day of May, 2011.

BETWEEN:

NOVA GAS TRANSMISSION LTD., a corporation governed by
the laws of the Province of Alberta
(hereinafter referred to as "NGTL")

OF THE FIRST PART

- and -

ATCO GAS AND PIPELINES LTD., a corporation governed by
the laws of the Province of Alberta, carrying on business under the
trade name ATCO Pipelines
(hereinafter referred to as "ATCO")

OF THE SECOND PART

WHEREAS NGTL and ATCO are parties to the Alberta System Integration Agreement dated April 7, 2009 (the "Agreement");

AND WHEREAS NGTL and ATCO have agreed to amend the Agreement as herein provided.

ARTICLE 1 **INCORPORATION, DEFINITIONS AND EFFECTIVE DATE**

- 1.1 This Supplemental Amending Agreement and the provisions hereof are supplemental to the Agreement, and are to form part of and have the same effect as though incorporated in the Agreement.
- 1.2 Unless otherwise defined in this Supplemental Amending Agreement, all capitalized terms contained in this Supplemental Amending Agreement which are defined in the Agreement shall for all purposes hereof have the meaning given to them in the Agreement unless the context otherwise specifies or requires.
- 1.3 This Supplemental Amending Agreement shall be effective as of the date of this Agreement.

ARTICLE 2
AMENDMENTS TO THE AGREEMENT

2.1 The Agreement shall be amended as follows:

- (a) by deleting Schedule A in its entirety and replacing it with the following Schedule A-1 which is attached hereto.

- (b) by deleting the definition of “**ATCO Footprint**” in Section 1.1 and replacing it with the following:

“**ATCO Footprint**” means the areas in Alberta within the boundaries legally described and depicted in blue for illustrative purposes in the map set forth in Schedule A-1 and the Franchise Areas.

- (c) by adding the following definitions to Section 1.1:

“**Customer**” means any Person named as a Customer in a Service Agreement or Schedule of Service under the Alberta System Tariff.

“**Franchise Agreements**” means any existing franchise agreement approved by the AUC, entered into between ATCO and a Municipality and listed in Schedule A-1 or any new franchise agreement approved by the AUC, each as amended or renewed from time to time.

“**Franchise Areas**” means the area in Alberta subject to the applicable Franchise Agreement set forth in Schedule A-1, as updated from time to time.

“**Franchise Fee**” means any fees, taxes and other charges approved by the AUC and payable by ATCO pursuant to a Franchise Agreement and included in the ATCO Initial Revenue Requirement and ATCO Revenue Requirement.

- (d) by deleting the definition of “**NGTL Footprint**” in Section 1.1 and replacing it with the following:

“**NGTL Footprint**” means the areas within Alberta other than the ATCO Footprint.

- (e) By deleting the definition of “**Major Throughput Facilities**” and replacing it with the following:

“**Major Throughput Facilities**” means (i) those Pipeline Facilities owned or operated by NGTL or its Affiliates which are located within the ATCO Footprint, (ii) any new or additional Pipeline Facilities constructed across the ATCO Footprint which are to be used primarily for through haul service, and (iii) capacity expansions or modifications of (i) or (ii). For greater clarity, Pipeline Facilities which are designed to transport Gas from a supply point within the ATCO Footprint to delivery points outside the ATCO Footprint or to the Major

Throughput Facilities, or designed to transport Gas from supply points outside the ATCO Footprint or from Major Throughput Facilities to markets within the ATCO Footprint are not considered to be Major Throughput Facilities;

- (f) by adding the following Article 10:

**ARTICLE 10
FRANCHISE AREAS**

10.1 Franchise Agreements and Franchise Fees

ATCO shall be responsible for negotiating and obtaining AUC approval of all Franchise Agreements and Franchise Fees, including any renewal or termination of any Franchise Agreement or any increase or decrease of any Franchise Fee.

10.2 Collection of Franchise Fees

As of the Integration Effective Date and subject to Regulatory Approval:

- (a) Each month, on or before the due date for "Prior Period Receipt / Delivery OPV and Storage Service Allocations" as identified in the "Gas Balance Schedules and Recovery" report located on the Alberta System Customer Express Website, ATCO will provide to NGTL finalized measurement and allocations at all ATCO owned delivery meter stations with applicable Franchise Fees;
- (b) Each month, one business day following receipt of the information identified in (a), NGTL will provide ATCO with monthly information ATCO reasonably determines necessary for ATCO to calculate the applicable Franchise Fee for the prior month for each delivery point within the Franchise Areas. All information provided by NGTL to ATCO pursuant to this subsection 10.2(b) shall be confidential information and ATCO shall not:
 - (i) Disclose the confidential information to any other Person, unless NGTL has provided ATCO with its prior written consent; and
 - (ii) Use the confidential information for any purpose whatsoever except for the purpose of calculating the Franchise Fee;
- (c) Each month, on or before the due date for "Receipt & Delivery OPV's, Storage Service and Prior period Measurement Allocations" as identified in the "Gas Balance Schedules and Recovery" report located on the Alberta System Customer Express Website, ATCO will calculate and provide NGTL with the Franchise Fee amount for the prior month for each Customer subject to the Franchise Fee applicable to the delivery points as identified in the Alberta System Tariff;

- (d) Each month NGTL will collect such Franchise Fees from each Customer subject to a Franchise Fee, for and on behalf of ATCO by including the Franchise Fee on such Customer's monthly gas transportation bill;
- (e) NGTL shall remit to ATCO the Franchise Fees billed by NGTL to its' Customers at a delivery point subject to a Franchise Fee and ATCO shall remit the Franchise Fees to the applicable Municipality in accordance with the applicable Franchise Agreement;
- (f) ATCO shall identify and provide to NGTL a list of the existing ATCO delivery points subject to Franchise Fees as of the Integration Effective Date. NGTL will, subject to Regulatory Approvals, set out those delivery points that are subject to a Franchise Fee and identified by ATCO in the Alberta System Tariff. ATCO Gas shall provide the applicable calculation methodology used to calculate the Franchise Fees in the ATCO Gas Tariff;
- (g) As of the Integration Effective Date, delivery points that are not subject to a Franchise Fee as identified in the Alberta System Tariff will only become subject to a Franchise Fee if:
 - (i) there is an expansion of an existing Franchise Area or a new Franchise Area, and such expansion or new Franchise Area includes such delivery point; and
 - (ii) it is finally determined by a tribunal or court of competent jurisdiction that the Franchise Fee is applicable to such delivery point;
- (h) If a new delivery point becomes subject to a Franchise Fee, ATCO shall advise NGTL one month prior to the commencement of the Franchise Fee and provide NGTL with a copy of the Franchise Agreement and AUC or other tribunal or court approval of such agreement and NGTL shall, subject to Regulatory Approvals, amend the Alberta System Tariff accordingly;
- (i) If a delivery point identified in the Alberta System Tariff is no longer subject to a Franchise Fee for any reason, ATCO shall notify NGTL immediately and NGTL will amend the Alberta System Tariff accordingly.

ARTICLE 3 **MISCELLANEOUS**

- 3.1 This Supplemental Amending Agreement supercedes all negotiations, discussions and undertakings between the parties in relation to the subject matter hereof.

ATCO Pipelines
Asset Swap Application - Attachment 1
February 15, 2012

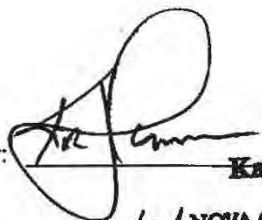
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- 3.2 Except as specifically amended by this Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3 This Supplemental Amending Agreement may be executed by the parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the parties to this Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.



ATCO GAS AND PIPELINES LTD.,
carrying on business under the trade
name ATCO Pipelines

Per: 
Karl Johansson
President
NOVA Gas Transmission Ltd.

Per: 
Stephen M. V. Clark
Vice-President, Commercial
NOVA Gas Transmission Ltd.

Per: _____

Per: _____

Legal	
Content	


- 3.2 Except as specifically amended by this Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3 This Supplemental Amending Agreement may be executed by the parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the parties to this Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.

ATCO GAS AND PIPELINES LTD.,
carrying on business under the trade
name **ATCO Pipelines**

Per: _____

Per:  **E.L. (Ed) Jansen**
Vice President, Regulatory & Cont
ATCO Pipelines

Per: _____

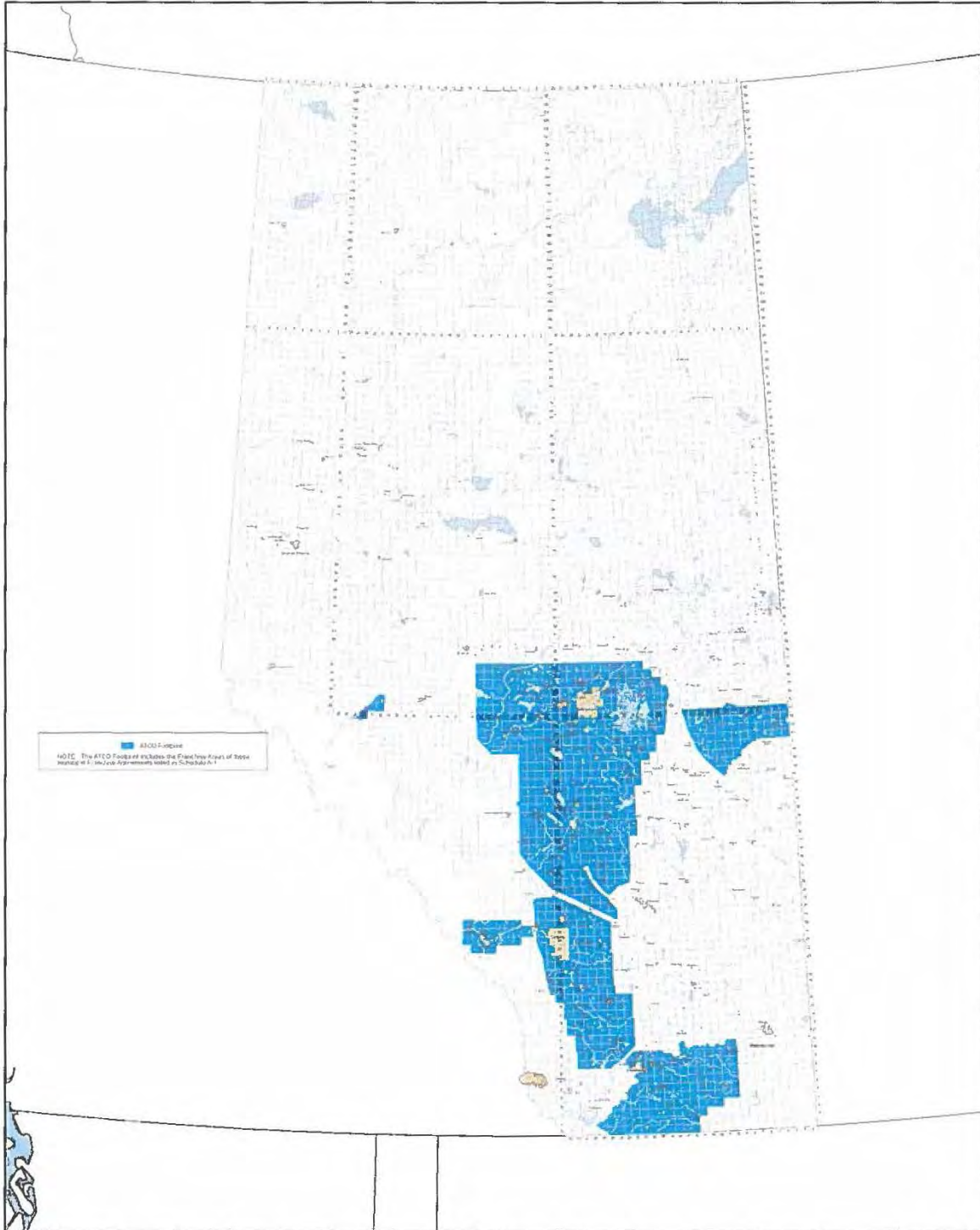
Per:  _____

B.G. (Brendan) Dolan
Sr. Vice President & GM
ATCO Pipelines

ATCO Pipelines
Asset Swap Application - Attachment 1
February 15, 2012

SCHEDULE A-1

To the Supplemental Amending Agreement dated May 3, 2011 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.



Schedule A-1
to the Supplemental Amending Agreement
dated May 3, 2011 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lloydminster Area	NW 31-51-13 W4M	14-33-51-8 W4M	From the east boundary of NGTL's NPS-12 Flat Lake Lateral along the north boundary of the TWP 51 to the west boundary of NGTL's NPS-12 Maughan Crossover lateral. Includes ATCO facilities within the County of Minburn No. 027 (Hamlet of Lavoy) franchise area.
		14-33-51-8 W4M	8-14-52-8 W4M	North along the west boundary of NGTL's NPS-12 Maughan Crossover lateral to the north boundary of the the ATCO pipeline right-of-way.
		8-14-52-8 W4M	NW 35-51-7 W4M	Follow the north boundary of the ATCO pipeline right-of-way to the north boundary of TWP 51. Includes ATCO pipeline, right-of-way to 11-53-9 W4M and NGTL pipeline and right-of-way to Maughan meter station site in 11-32-52-7 W4M.
		NW 35-51-7 W4M	NE Corner 51-1 W4M	Follow the north boundary of TWP 51 to the Alberta - Saskatchewan border.
		NE Corner 51-1 W4M	SE Corner 48-1 W4M	Follow the Alberta - Saskatchewan border south to the bottom of TWP 48.
		SE Corner 48-1 W4M	SW Corner 48-4 W4M	West along the south boundary of TWP 48.
		SW Corner 48-4 W4M	4-7-47-4 W4M	Follow the west boundary of RNG 4 to the south side of the Battle River.
		4-7-47-4 W4M	SE 27-43-9 W4M	West along the south side of the Battle River to the east boundary of the NGTL NPS-14 Flat Lake Lateral. Includes ATCO pipeline, right-of-way to tie-in at NGTL's Gilt Edge West meter station site in 4-23-46-6 W4M and the two ATCO pipelines, including the lands between the two pipelines, to the Town of Wainwright in 14-25-44-7 W4M.
		SE 27-43-9 W4M	NW 31-51-13 W4M	Follow the east side of the NGTL NPS-14 Flat Lake Lateral and any NGTL meter station sites overlapping the NPS-14 Flat Lake Lateral north to the north boundary of TWP 51. Includes Atco pipeline, right-of-way to 30-42-9 W4M and ATCO facilities within the Town of Hardisty; ATCO pipeline, right-of-way to 11-36-47-13 W4M and ATCO facilities within the Town of Viking franchise area; and multiple ATCO pipelines, rights-of-way to the west boundary of NGTL's NPS-16 North Lateral Extension in NW 4-49-15 W4M.

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Hinton Area	NE Corner 53-22 W5M	SE Corner 52-22 W5M	From the NE corner of 53-22 W5M south along the east boundary of 53-22 W5M to the SE corner of 52-22 W5M. Includes ATCO's NPS-10 Wabamum pipeline, right-of-way to Sundance lateral junction in 15-35-52-20 W5M.
		SE Corner 52-22 W5M	NE Corner 51-24 W5M	From the SE corner of 52-22 W5M west along the south boundary of 52-22 W5M to the NE corner 51-24 W5M.
		NE Corner 51-24 W5M	SE Corner 51-24 W5M	From the NE corner 51-24 W5M south along the east boundary of 51-24 W5M to the SE corner 51-24 W5M.
		SE Corner 51-24 W5M	SE 2-51-26 W5M	From the SE corner 51-24 W5M west along the south boundary of 51-24 W5M to the south side of the Athabasca River in SE 2-51-26 W5M. Includes ATCO's NPS-4/6/8 pipeline, rights-of-way to the Jasper National Park border in 49-27 W5M.
		SE 2-51-26 W5M	NE 32-53-22 W5M	Follow the south side of the Athabasca River to the north boundary of NE 32-53-22 W5M. Includes ATCO's NPS-3/4 Fish Creek Lateral, right-of-way from 1-31-51-24 W5M to 2-33-51-25 W5M; and ATCO's NPS-12 Fishnet Lateral, right-of-way from 13-29-51-24 W5M to 2-33-51-25 W5M.
		NE 32-53-22 W5M	NE Corner 53-22 W5M	From the north boundary of NE 32-53-22 W5M east along the north boundary of 53-22 W5M to the NE corner of 53-22 W5M.

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Edmonton/ Red Deer Area	NW Corner 57-10 W5M	NE Corner 57-18 W4M	Follow the north boundary TWP 57 to 57-18 W4M. Excludes ATCO pipeline, right-of-way to 16-2-57-3 W5M and NGTL's NPS-10 Redwater Lateral, right-of-way to NE 29-57-21 W4M at NGTL's meter station site boundary. Includes ATCO pipeline, right-of-way to 10-35-59-25 W4M and ATCO facilities within Village of Clyde Franchise Area.
		NE Corner 57-18 W4M	NE Corner 56-18 W4M	South along the east boundary of TWP 57-18 W4M.
		NE Corner 56-18 W4M	NE Corner 56-17 W4M	East along the north boundary of TWP 56-17 W4M.
		NE Corner 56-17 W4M	NE Corner 55-17 W4M	South along the east boundary of TWP 56-17 W4M.
		NE Corner 55-17 W4M	NE Corner 55-16 W4M	East along the north boundary TWP 55-16 W4M.
		NE Corner 55-16 W4M	NE Corner 54-16 W4M	South along the east boundary of TWP 55-16 W4M.
		NE Corner 54-16 W4M	NE 36- 54-15 W4M	East along the north boundary of TWP 54-15 W4M to the west boundary of the NGTL NPS-30 Flat Lake Lateral Loop #4.
		NE 36- 54-15 W4M	1-36-54-15 W4M	South along the west boundary of NGTL's NPS-30 Flat Lake Lateral Loop #4 to RNG 14 W4M.
		1-36-54-15 W4M	1-53-15 W4M	South along the east boundary of TWP 54-15 W4M to the north boundary of NGTL's NPS-16 North Lateral Extension.
		1-53-15 W4M	4-49-15 W4M	South along the west boundary of NGTL's NPS-16 North Lateral Extension to the south boundary of TWP 49. Includes ATCO facilities within the Town of Vegreville.
		4-49-15 W4M	NE Corner 48-17 W4M	West along the south boundary of TWP 49.
		NE Corner 48-17 W4M	SE Corner 47-17 W4M	South along the east boundary of TWP 48-17 W4M.
		SE Corner 47-17 W4M	SE Corner 47-18 W4M	West along the south boundary of TWP 47.
		SE Corner 47-18 W4M	SE Corner 46-18 W4M	South along the east boundary of TWP 46-18 W4M.
		SE Corner 46-18 W4M	SE Corner 46-19 W4M	West along the south boundary of TWP 46.
		SE Corner 46-19 W4M	SE Corner 43-19 W4M	South along the east boundary of TWP 45-19 W4M.
		SE Corner 43-19 W4M	SE Corner 43-20 W4M	West along the south boundary of TWP 43.
		SE Corner 43-20 W4M	SE Corner 37-20 W4M	South along the east boundary of TWP 42-20 W4M to SE corner 37-20 W4M. Includes NGTL pipeline, right-of-way and meter stations and sites to SE 36-41-20 W4M and to 15-18-40-18 W4M.
		SE Corner 37-20 W4M	SE Corner 37-21 W4M	West along the south boundary of TWP 37.
		SE Corner 37-21 W4M	SE Corner 35-21 W4M	South along the east boundary of TWP 36-21 W4M.

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ATCO FOOTPRINT

		SE Corner 35-21 W4M	NE 31-34-20 W4M	East along the south boundary of TWP 35 to the west boundary of NGTL's NPS-6 Hackett West Lateral in NE 31-34-20 W4M.
		NE 31-34-20 W4M	16-19-29-23 W4M	South along the west boundary of NGTL's NPS-6 Hackett West lateral, NPS-8 Ghostpine Lateral Extension and NPS-18 Ghostpine West Lateral to the north boundary of NGTL's NPS-30 Plains Mainline Loop. Excludes NGTL NPS-4 Rumsey West pipeline, right-of-way to 4-35-33-21 W4M and NPS-12 Ghostpine pipeline, right-of-way to 1-11-31-21 W4M and existing connected meter stations and sites.
		16-19-29-23 W4M	12-2-33-26 W4M	Northwest along the north boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor. Excludes NGTL's Equity Lateral/Loops, right-of-way to NE 29-31-23 W4M and NPS-8 Twining North and NPS-6 Trochu Laterals, rights-of-way to 4-31-32-23 W4M and existing connected meter stations, compressor stations and sites.
		12-2-33-26 W4M	SE 24-28-23 W4M	Southeast along the south boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor to the east boundary of 24-28-23 W4M. Excludes any existing NGTL connected meter stations and sites. Includes any existing ATCO pipelines, rights-of-way to and in the Carbon area in 16-29-22 W4M including ATCO facilities within the Village of Carbon Franchise Area.
		SE 24-28-23 W4M	10-24-26-23 W4M	South along the east boundary of TWP 28-23 W4M to the north boundary of NGTL's Central Alberta System Mainline corridor in 10-24-26-23 W4M. Excludes ATCO pipeline, right-of-way to 12-22-26-23 W4M.
		10-24-26-23 W4M	4-19-34-5 W5M	Northwest along the north boundary of the Central Alberta System Mainline corridor to the west boundary of TWP 34-5 W5M. Excludes NGTL's NPS-6 Lone Pine Creek South Lateral, Loop, rights-of-way to 5-27-29-28 W4M; NPS-10 Lone Pine Creek Lateral, right-of-way to SW 23-30-28 W4M and NPS 10 Garrington HBOG, NPS-8 Garrington East and NPS-8 Eagle Hill Laterals, rights-of-way to SW 8-34-3 W5M and existing connected meter stations and sites (Ex. Rockyford, Nightingale, Gayford, etc. meter stations). Includes NGTL's NPS-4 Netook, NPS-12 Olds Lateral and Extension pipelines, rights-of-way to NE-21-33-1 W5M and NPS-16 Carstairs lateral, right-of-way to SE 2-33-26 W4M and existing connected meter stations and sites.
		4-19-34-5 W5M	NW Corner 46-5 W5M	North along the west boundary of TWP 34-5 W5M to the NW corner of TWP 46-5 W5M. Excludes NGTL NPS-6 Codner Lateral, right-of-way to 15-31-39-5 W5M and existing NGTL connected meter stations and sites. Includes NGTL NPS-22 Westerosse Lateral, right-of-way to east boundary of NGTL's NPS-42 Western Alberta System Mainline Loop in SE 25-40-7 W5M, Lasthill Creek pipeline, right-of-way to 8-29-40-6 W5M and Leafland pipeline, right-of-way to 4-21-40-5 W5M and existing connected meter stations and sites.
		NW Corner 46-5 W5M	3-47-9 W5M	West along the north boundary of TWP 46-5 W5M to the east boundary of NGTL's NPS-30 Western Alberta System Mainline right-of-way in 3-47-9 W5M.
		3-47-9 W5M	30-48-10 W5M	Northwest along the east boundary of the NPS-30 Western Alberta System Mainline to the west boundary of TWP 48-10 W5M. Excludes existing NGTL connected meter stations, compressor stations and sites.
		30-48-10 W5M	NW Corner 57-10 W5M	North along the west boundary of TWP 49-10 W5M to the NW corner 57-10 W5M. Includes ATCO pipeline, right-of-way to east boundary ATCO's Peers compressor station in 53-13 W5M

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Calgary Area	NW 29-29-4 W5M	3-30-3 W5M	From the southeast junction of NGTL's NPS-42 Western Alberta System Mainline Loop and NPS-16 Crossfield Lateral Loop right-of-way follow the south boundary of the NPS-16 Crossfield Lateral Loop right-of-way east to the south boundary of 3-30-3 W5M. Excludes existing meter stations and sites.
		3-30-3 W5M	SE Corner 30-2 W5M	Follow the south boundary of TWP 30-2 W5M to SE corner 30-2 W5M. Excludes existing meter stations and sites.
		SE Corner 30-2 W5M	NE 12-30-2 W5M	North along the east boundary of TWP 30-2 W5M to the south boundary of NGTL's NPS-48 Central Alberta System Mainline Loop #2 right-of-way in NE 12-30-2 W5M.
		NE 12-30-2 W5M	8-1-27-24 W4M	Follow the south boundary of NGTL's Central Alberta System Mainline Loop corridor to the east boundary of TWP 27-24 W4M. Exclude NGTL pipeline, rights-of-way to 11-13-28-1 W5M and existing meter stations, compressor stations and sites. Includes ATCO pipelines, rights-of-way in TWP 30-1 W5M, TWP 28-25 W4M and TWP 27-25 W4M.
		8-1-27-24 W4M	NE Corner 17-24 W4M	From the south boundary of NGTL's Central Alberta System Mainline Loop corridor in 8-1-27-24 W4M follow the east boundary of TWP 27-24 W4M south to the NE corner of TWP 17-24 W4M.
		NE Corner 17-24 W4M	NE Corner 17-22 W4M	East along the north boundary of TWP 17-24 W4M.
		NE Corner 17-22 W4M	NE 13-11-22 W4M	South along the east boundary of TWP 17-22 W4M to the north boundary of NGTL's NPS-24 South Lateral right-of-way in NE 13-11-22 W4M. Excludes NGTL NPS-12 Vulcan lateral, right-of-way to SW 19-15-21 W4M and NPS-6 Keho Lake Lateral, right-of-way to 16-13-12-22 W4M. Excludes existing meter stations and sites, however includes Vulcan meter station and site in 16-13-15-22 W4M.

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ATCO FOOTPRINT

		NE 13-11-22 W4M	1-6-9-24 W4M	Follow the north boundary of NGTL's NPS-24 South Lateral right-of-way to the south boundary of TWP 9-24 W4M. Includes existing NGTL meter stations and sites, however excludes Keho Lake meter station and site.
		1-6-9-24 W4M	SW Corner 9-28 W4M	West along the south boundary of TWP 9-24 W4M to the southwest corner of TWP 9-28 W4M.
		SW Corner 9-28 W4M	SW Corner 13-28 W4M	North along the west boundary of TWP 9-28 W4M to the SW corner of TWP 13-28 W4M.
		SW Corner 13-28 W4M	SW Corner 13-29 W4M	West along the south boundary of TWP 13-28 W4M to the SW corner of TWP 13-29 W4M.
		SW Corner 13-29 W4M	SW Corner 15-29 W4M	North along the west boundary of TWP 13-29 W4M to SW corner of TWP 15-29 W4M.
		SW Corner 15-29 W4M	SE Corner 15-1 W5M	West along the south boundary of TWP 15-29 W4M to the southeast corner of TWP 15-1 W5M.
		SE Corner 15-1 W5M	SE Corner 17-1 W5M	North along the east boundary of TWP 15-1 W5M to the SE Corner of TWP 17-1 W5M.
		SE Corner 17-1 W5M	SW Corner 17-1 W5M	West along the south boundary of TWP 17-1 W5M to the SW corner of TWP 17-1 W5M.
		SW Corner 17-1 W5M	SW Corner 18-1 W5M	North along the west boundary of TWP 17-1 W5M to the SW corner of TWP 18-1 W5M.
		SW Corner 18-1 W5M	SE 5-18-2 W5M	West along the south boundary of TWP 18-1 W5M to the east boundary of NGTL's Western Alberta System Mainline right-of-way corridor.
		SE 5-18-2 W5M	NW 29-29-4 W5M	North along the east boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of NGTL's NPS-16 Crossfield Lateral Loop right-of-way. Excludes NGTL's NPS-6 Black Diamond lateral, right-of-way to 10-12-19-2 W5M and meter stations, compressor stations and sites

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ATCO FOOTPRINT

		NW Corner 26-12 W5M	NE Corner 26-6 W5M	East along the north boundary of TWP 26-12 W5M.
		NE Corner 26-6 W5M	NE Corner 12-26-6 W5M	South along the east boundary of TWP 26-6 W5M to the NE corner of Section 12-26-6 W5M.
		NE Corner 12-26-6 W5M	NE 9-26-4 W5M	East along the north boundary of Section 12-26-6 W5M to the west boundary of NGTL's Western Alberta System Mainline right-of-way corridor in 9-26-4 W5M.
		NE 9-26-4 W5M	SE 3-25-4 W5M	South along the west boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of TWP 25-4 W5M. Excludes NGTL pipeline, right-of-way to 13-13-25-5 W5M and existing meter stations and sites. Excludes Atco pipelines in TWP 25-4 W5M and north 1/2 of TWP 24-4 W5M.
		SE 3-25-4 W5M	SE Corner 25-6 W5M	West along the south boundary of TWP 25-4 W5M to the SE corner of TWP 25-6
		SE Corner 25-6 W5M	SE Corner 24-6 W5M	South along the east boundary of TWP 25-6 W5M to the SE corner of TWP 24-6 W5M.
		SE Corner 24-6 W5M	SE Corner 24-9 W5M	West along the south boundary of TWP 24-6 W5M to the SE corner TWP 24-9 W5M.
		SE Corner 24-9 W5M	SE Corner 23-9 W5M	South along the east boundary of TWP 24-9 W5M to the SE corner TWP 23-9 W5M.
		SE Corner 23-9 W5M	SW Corner 23-11 W5M	West along the south boundary of TWP 23-9 W5M to the SW corner TWP 23-11 W5M.
		SW Corner 23-11 W5M	SW Corner 24-11 W5M	North along the west boundary of TWP 23-11 W5M to the SW corner TWP 24-11 W5M.
		SW Corner 24-11 W5M	SW Corner 24-12 W5M	West along the south boundary of TWP 24-11 W5M to the SW corner TWP 24-12 W5M.
		SW Corner 24-12 W5M	NW Corner 26-12 W5M	North along the west boundary of TWP 24-12 W5m to the NW corner TWP 26-12 W6M.

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ATCO FOOTPRINT

ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
Lethbridge Area	14-33-10-22 W4M	33-10-19 W4M	From the east junction of NGTL's NPS-24 South Lateral right-of-way and the north boundary of TWP 10-22 W4M follow the north boundary of TWP 10-22 W4M east to the Oldman River in 33-10-19 W4M. Includes ATCO facilities within the Town of Picture Butte franchise area.
	33-10-19 W4M	2-12-11 W4M	Follow the north boundary of the Oldman and South Saskatchewan Rivers to the southern boundary of TWP 12-11 W4M. Includes Atco pipeline, right-of-way to 8-7-12-13 W4M.
	2-12-11 W4M	NE Corner 11-10 W4M	East along the north boundary of TWP 11-11 W4M to the NE corner 11-10 W4M.
	NE Corner 11-10 W4M	SE Corner 5-10 W4M	Follow the east boundary of TWP 11-10 W4M south to the SE corner of 5-10 W4M.
	SE Corner 5-10 W4M	SE Corner 5-12 W4M	Follow the south boundary of TWP 5-10 W4M to the SE corner of TWP 5-12 W4M.
	SE Corner 5-12 W4M	SE Corner 4-12 W4M	Follow the east boundary of TWP 5-12 W4M south to the SE corner of TWP 4-12 W4M.
	SE Corner 4-12 W4M	SE Corner 4-14 W4M	Follow the south boundary of TWP 4-12 W4M west to the SE corner of TWP 4-14 W4M.
	SE Corner 4-14 W4M	SE Corner 3-14 W4M	Follow the east boundary of TWP 4-14 W4M south to the SE corner of 3-14 W4M.
	SE Corner 3-14 W4M	SE Corner 3-15 W4M	Follow the south boundary of TWP 3-14 W4M west to the SE corner of 3-15 W4M.
	SE Corner 3-15 W4M	SE Corner 1-15 W4M	Follow the east boundary of TWP 3-15 W4M south to the Alberta/Montana border.

ATCO Pipelines
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ATCO FOOTPRINT

		SE Corner 1-15 W4M	SW Corner 1-25 W4M	West along the south boundary of TWP 1-15 W4M to the SW corner of TWP 1-25 W4M.
		SW Corner 1-25 W4M	NW Corner 7-1-25 W4M	North along the west boundary of TWP 1-25 W4M to NW corner of TWP 7-1-25 W4M.
		NW Corner 7-1-25 W4M	SW 14-1-26 W4M	West along the north boundary of 7-1-25 W4M to the east boundary of NGTL's NPS-16 Waterton Montana Lateral right-of-way.
		SW 14-1-26 W4M	NE 34-1-27 W4M	Northwest along the north boundary of NGTL's NPS-16 Waterton Montana lateral right-of-way to the south side of the Lee Creek in NE 34-1-27 W4M.
		NE 34-1-27 W4M	13-33-9-23 W4M	Follow the south side of the Lee Creek, St Mary and Old Man Rivers to the south boundary of NGTL's NPS-24 South Lateral in 13-33-9-23 W4M. Excludes the NGTL pipeline, right-of-way to 2-1-7-22 W4M but includes the NGTL m/s in 2-1-7-22 W4M.
		13-33-9-23 W4M	14-33-10-22 W4M	Follow the south boundary of NGTL's NPS-24 South Lateral northeast to the north boundary of TWP 10-22 W4M. Includes all NGTL meter stations and sites.

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ATCO FOOTPRINT

OTHER AREAS	COMMENTS		
Crowsnest Pass	Franchise Area ("FA") incorporates a number of municipalities through the Crowsnest Pass. ATCO retains all their own existing facilities in the Municipality of Crowsnest Pass FA. ATCO obtains NGTL's Allison Creek Sales meter station and 0.75 km x NPS-2 lateral. NGTL retains Coleman Sales m/s (overlaps M/L ROW). NGTL retains Coleman receipt m/s (overlaps M/L ROW) and 0.81 km x NPS-8 upstream producer tie-in.		
Tap (SCADA) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (SCADA) locations identified in the Asset Swap Agreement.		
Tap (UFG) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (UFG) locations identified in the Asset Swap Agreement.		
Pikanni Indian Reserve	ATCO retains all their own existing facilities extending from the Glenwood Control Interconnect with NGTL in 16-32-5-27 W4M to 4-9-7-28 W4M including all facilities within the Pikanni Indian Reserve.		
Tsuu T'ina Indian Reserve	ATCO retains all their own existing facilities extending from the Bragg Creek Interconnect with NGTL in 6-2-24-4 W5M to 13-10-23-5 W5M including all facilities within the Tsuu T'ina Indian Reserve.		
Saddle Lake Indian Reserve	ATCO retains all their own existing facilities extending from the Saddle Lake Indian Reserve Interconnect with NGTL in 16-32-57-11 W4M to 9-34-57-12 W4M including all facilities within the Saddle Lake Indian Reserve.		
Sawridge Indian Reserve	ATCO retains all their own existing facilities extending from the Slave Lake Mitsue Control Station in 10-30-72-4 W5M to 10-31-72-5 W5M including all facilities within the Sawridge Indian Reserve and the Town of Slave Lake franchise area. NGTL to obtain the NPS-3 Overlea Interconnect (4-16-72-04 W5M) to Slave Lake Pulp (10-22-72-4 W5M) facilities.		

ATCO Pipelines
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FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Acme	ATCO and Village of Acme	March 8, 2004	29	25	W4
City of Airdrie	ATCO and City of Airdrie	September 4, 2007	27	1	W5
Alberta Beach	ATCO and Alberta Beach	August 17, 2010	54	3	W5
Village of Alix	ATCO and Village of Alix	March 21, 2006	40	22	W4
Village of Amisk	ATCO and Village of Amisk	December 14, 2010	41	8	W4
Village of Andrew	ATCO and Village of Andrew	November 26, 1999	56	16	W4
Summer Village of Argentia Beach	ATCO and Summer Village of Argentia Beach	June 24, 2010	47	28	W4
Her Majesty the Queen (Banff National Park)	ATCO and Her Majesty the Queen (Banff National Park)	June 23, 1987	25	12	W4
Town of Banff	ATCO and Town of Banff	February 13, 2006	25	12	W5
Village of Barnwell	ATCO and Village of Barnwell	January 18, 2001	9	17	W4
Village of Barons	ATCO and Village of Barons	November 17, 2009	12	23	W4
Town of Bashaw	ATCO and Town of Bashaw	March 16, 2004	42	21	W4
Town of Bassano	ATCO and Town of Bassano	June 12, 2006	21	18	W4
Town of Beaverlodge	ATCO and Town of Beaverlodge	February 27, 2006	72	10	W6
Village of Beiseker	ATCO and Village of Beiseker	May 25, 2010	28	26	W4
Town of Bentley	ATCO and Town of Bentley	March 23, 2004	40	1	W5
Village of Berwyn	ATCO and Village of Berwyn	November 15, 2004	82	24	W5
Village of Big Valley	ATCO and Village of Big Valley	June 7, 2006	35	20	W4
Village of Bittern Lake	ATCO and Village of Bittern Lake	November 15, 2000	46	22	W4
Town of Black Diamond	ATCO and Town of Black Diamond	September 7, 2005	20	2	W5
Town of Blackfalds	ATCO and Town of Blackfalds	April 13, 2004	39	27	W4
Town of Bon Accord	ATCO and Town of Bon Accord	October 27, 2004	56	24	W4
Town of Bow Island	ATCO and Town of Bow Island	September 22, 2003	10	11	W4
Town of Bowden	ATCO and Town of Bowden	February 12, 2007	34	1	W5
Village of Breton	ATCO and Village of Breton	February 17, 2004	48	4	W5
Town of Brooks	ATCO and Town of Brooks	September 7, 2004	18	15	W4
Town of Bruderheim	ATCO and Town of Bruderheim	April 7, 2004	56	20	W4
County of Forty Mile No. 8 (Hamlet of Burdett)	ATCO and County of Forty Mile No. 8 (Hamlet of Burdett)	August 26, 2009	10	12	W4
City of Calgary	ATCO and City of Calgary	December 20, 1911	24	1	W5
City of Camrose	ATCO and City of Camrose	April 26, 2004	47	20	W4
Town of Canmore	ATCO and Town of Canmore	April 6, 2004	24	10	W5
Village of Carbon	ATCO and Village of Carbon	February 8, 2010	29	23	W4
Town of Cardston	ATCO and Town of Cardston	September 27, 2007	3	25	W4
Village of Carmangay	ATCO and Village of Carmangay	February 23, 2010	13	23	W4
Village of Caroline	ATCO and Village of Caroline	September 27, 2001	36	6	W5
Town of Carstairs	ATCO and Town of Carstairs	July 9, 2007	30	1	W5
Village of Champion	ATCO and Village of Champion	February 22, 2010	15	23	W4
Village of Chipman	ATCO and Village of Chipman	September 13, 2010	54	19	W4
Town of Claresholm	ATCO and Town of Claresholm	April 28, 2005	12	27	W4
Village of Clive	ATCO and Village of Clive	April 26, 2004	40	25	W4
Village of Clyde	ATCO and Village of Clyde	March 12, 2010	60	25	W4
Town of Coaldale	ATCO and Town of Coaldale	June 12, 2000	9	20	W4
Town of Coalhurst	ATCO and Town of Coalhurst	May 18, 2010	9	22	W4
Town of Cochrane	ATCO and Town of Cochrane	August 8, 2005	26	4	W5
City of Cold Lake	ATCO and City of Cold Lake	October 25, 2005	63	2	W4
Village of Consort	ATCO and Village of Consort	April 26, 2004	35	6	W4
Town of Coronation	ATCO and Town of Coronation	July 14, 2009	36	11	W4
Village of Coutts	ATCO and Village of Coutts	August 12, 2008	1	15	W4

ATCO Pipelines
Asset Swap Application - Attachment 1
February 15, 2012

SCHEDULE A-1
to the Supplemental Amending Agreement dated May 3, 2011 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Cowley	ATCO and Village of Cowley	August 20, 2002	7	1	W5
Village of Cremona	ATCO and Village of Cremona	December 14, 2004	30	4	W5
Town of Crossfield	ATCO and Town of Crossfield	April 20, 2010	28	1	W5
Municipality of Crowsnest Pass	ATCO and Municipality of Crowsnest Pass	January 6, 2009	8	4	W5
Village of Czar	ATCO and Village of Czar	April 13, 2000	40	6	W4
Village of Delburne	ATCO and Village of Delburne	March 27, 2007	37	23	W4
Town of Didsbury	ATCO and Town of Didsbury	January 16, 2007	31	1	W5
Village of Donnelly	ATCO and Village of Donnelly	August 16, 2005	78	21	W5
Town of Drayton Valley	ATCO and Town of Drayton Valley	October 6, 2004	49	7	W5
Village of Duchess	ATCO and Village of Duchess	May 17, 2001	20	14	W4
Birch Hills County (Hamlet of Eaglesham)	ATCO and Birch Hills County (Hamlet of Eaglesham)	June 8, 2005	78	26	W5
Town of Eckville	ATCO and Town of Eckville	June 14, 2004	39	3	W5
Village of Edgerton	ATCO and Village of Edgerton	April 14, 2004	44	4	W4
City of Edmonton	ATCO and City of Edmonton	July 21, 2010	52	24	W4
Town of Edson	ATCO and Town of Edson	April 11, 2006	53	17	W5
Village of Elnora	ATCO and Village of Elnora	May 18, 2004	35	23	W4
Parkland County (Hamlet of Entwistle)	ATCO and Parkland County (Hamlet of Entwistle)	February 9, 2010	53	7	W5
Town of Fairview	ATCO and Town of Fairview	June 1, 2004	81	3	W6
Town of Falher	ATCO and Town of Falher	May 25, 2004	78	21	W5
Village of Foremost	ATCO and Village of Foremost	January 19, 2004	6	11	W4
Town of Fort Macleod	ATCO and Town of Fort Macleod	September 25, 2001	9	26	W4
City of Fort Saskatchewan	ATCO and City of Fort Saskatchewan	September 29, 2004	54	22	W4
Town of Fox Creek	ATCO and Town of Fox Creek	June 4, 2001	62	19	W5
Town of Gibbons	ATCO and Town of Gibbons	September 14, 2005	55	23	W4
Village of Girouxville	ATCO and Village of Girouxville	May 12, 2004	78	22	W5
Village of Glenwood	ATCO and Village of Glenwood	June 1, 2010	5	27	W4
Summer Village of Golden Days	ATCO and Summer Village of Golden Days	May 25, 2004	47	1	W5
City of Grande Prairie	ATCO and City of Grande Prairie	February 28, 2006	71	6	W6
Village of Granum	ATCO and Village of Granum	October 12, 2004	10	26	W4
Town of Grimshaw	ATCO and Town of Grimshaw	November 12, 2001	83	23	W5
Town of Hardisty	ATCO and Town of Hardisty	September 23, 2004	43	9	W4
Town of High River	ATCO and Town of High River	October 12, 2004	19	29	W4
Village of Hill Spring	ATCO and Village of Hill Spring	March 16, 2010	4	27	W4
Village of Hines Creek	ATCO and Village of Hines Creek	July 26, 2005	84	4	W6
Town of Hinton	ATCO and Town of Hinton	February 3, 2004	51	25	W5
Village of Holden	ATCO and Village of Holden	January 17, 2005	49	16	W4
Village of Hughenden	ATCO and Village of Hughenden	July 18, 2000	41	7	W4
Village of Hussar	ATCO and Village of Hussar	January 18, 2001	24	20	W4
Village of Hythe	ATCO and Village of Hythe	February 26, 2007	73	11	W6
Town of Innisfail	ATCO and Town of Innisfail	January 2, 2007	35	28	W4
Village of Innisfree	ATCO and Village of Innisfree	August 21, 2008	51	11	W4
Village of Irma	ATCO and Village of Irma	October 12, 2004	45	9	W4
Town of Irricana	ATCO and Town of Irricana	March 15, 2010	27	26	W4
Summer Village of Itaska Beach	ATCO and Summer Village of Itaska Beach	August 25, 2004	47	1	W5
Municipality of Jasper	ATCO and Municipality of Jasper	August 1, 2006	45	1	W6

ATCO Pipelines
Asset Swap Application - Attachment 1
February 15, 2012

SCHEDULE A-1
to the Supplemental Amending Agreement dated May 3, 2011 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Her Majesty the Queen (Jasper National Park)	ATCO and Her Majesty the Queen (Jasper National Park)	August 1, 2006	45	1	W6
Village of Kitscoty	ATCO and Village of Kitscoty	September 6, 2005	50	3	W4
Town of Lacombe	ATCO and Town of Lacombe	May 10, 2004	40	27	W4
Town of Lamont	ATCO and Town of Lamont	April 27, 2004	55	19	W4
County of Minburn No. 027 (Hamlet of Lavoy)	ATCO and County of Minburn No. 027 (Hamlet of Lavoy)	October 19, 2009	52	13	W4
Town of Legal	ATCO and Town of Legal	September 5, 2006	57	25	W4
City of Lethbridge	ATCO and City of Lethbridge	January 5, 2002	8	21	W4
Village of Linden	ATCO and Village of Linden	June 28, 2004	30	25	W4
City of Lloydminster	ATCO and City of Lloydminster	January 26, 2008	49	1	W4
Village of Lomond	ATCO and Village of Lomond	May 16, 2005	16	20	W4
Village of Longview	ATCO and Village of Longview	December 10, 2001	18	2	W5
Village of Loughheed	ATCO and Village of Loughheed	April 18, 2002	43	11	W4
Town of Magrath	ATCO and Town of Magrath	January 12, 2010	5	22	W4
Village of Mannville	ATCO and Village of Mannville	October 26, 2004	50	9	W4
Town of Mayerthorpe	ATCO and Town of Mayerthorpe	February 14, 2005	57	8	W5
Town of McLennan	ATCO and Town of McLennan	May 9, 2005	77	19	W5
Town of Milk River	ATCO and Town of Milk River	December 13, 2004	2	16	W4
Town of Millet	ATCO and Town of Millet	August 11, 2004	48	24	W4
Village of Minburn	ATCO and Village of Minburn	May 4, 2004	50	10	W4
Lacombe County (Hamlet of Mirror)	ATCO and Lacombe County (Hamlet of Mirror)	July 13, 2006	40	22	W4
Town of Mundare	ATCO and Town of Mundare	June 1, 2004	53	16	W4
Village of Nampa	ATCO and Village of Nampa	April 20, 2004	81	21	W5
Town of Nanton	ATCO and Town of Nanton	October 3, 2005	16	28	W4
Village of Nobleford	ATCO and Village of Nobleford	September 26, 2006	10	23	W4
Town of Okotoks	ATCO and Town of Okotoks	February 1, 1912	20	29	W4
Town of Olds	ATCO and Town of Olds	April 10, 2007	32	1	W5
Village of Onoway	ATCO and Village of Onoway	April 26, 2004	55	2	W5
Town of Oyen	ATCO and Town of Oyen	January 8, 2008	27	4	W4
Town of Peace River	ATCO and Town of Peace River	September 27, 2010	83	21	W5
Town of Penhold	ATCO and Town of Penhold	June 9, 2008	36	28	W4
Town of Picture Butte	ATCO and Town of Picture Butte	August 28, 2006	10	21	W4
Summer Village of Point Alison	ATCO and Summer Village of Point Alison	October 1, 2007	53	4	W5
Town of Ponoka	ATCO and Town of Ponoka	August 10, 2004	43	25	W4
Town of Provost	ATCO and Town of Provost	September 9, 2004	39	2	W4
Town of Raymond	ATCO and Town of Raymond	August 5, 2008	6	20	W4
City of Red Deer	ATCO and City of Red Deer	March 27, 2006	38	27	W4
Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	ATCO and Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	July 6, 2006	89	9	W4
Town of Rimbey	ATCO and Town of Rimbey	February 24, 2004	42	2	W5
Town of Rocky Mountain House	ATCO and Town of Rocky Mountain House	December 7, 2004	37	7	W5
Village of Rockyford	ATCO and Village of Rockyford	May 11, 2005	27	22	W4
Village of Rosemary	ATCO and Village of Rosemary	January 13, 2004	21	16	W4
Village of Rycroft	ATCO and Village of Rycroft	August 12, 2004	78	5	W6
Village of Ryley	ATCO and Village of Ryley	July 26, 2004	50	17	W4

ATCO Pipelines
Asset Swap Application - Attachment 1
February 15, 2012

SCHEDULE A-1
to the Supplemental Amending Agreement dated May 3, 2011 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Summer Village of Seba Beach	ATCO and Summer Village of Seba Beach	May 20, 2010	53	6	W5
Town of Sexsmith	ATCO and Town of Sexsmith	April 16, 2007	73	6	W6
Summer Village of Silver Beach	ATCO and Summer Village of Silver Beach	February 28, 2005	47	28	W4
Town of Slave Lake	ATCO and Town of Slave Lake	May 6, 2008	72	5	W5
Town of Spirit River	ATCO and Town of Spirit River	June 18, 2001	78	6	W6
City of Spruce Grove	ATCO and City of Spruce Grove	June 17, 2010	52	27	W4
City of St. Albert	ATCO and City of St. Albert	March 23, 2006	54	25	W4
Village of Standard	ATCO and Village of Standard	September 8, 2010	25	22	W4
Town of Stavely	ATCO and Town of Stavely	January 26, 2010	14	27	W4
Village of Stirling	ATCO and Village of Stirling	July 16, 2009	6	19	W4
Town of Stony Plain	ATCO and Town of Stony Plain	August 9, 2004	53	27	W4
Strathcona County (Hamlet of Sherwood Park)	ATCO and Strathcona County (Hamlet of Sherwood Park)	July 7, 2010	53	22	W4
Town of Strathmore	ATCO and Town of Strathmore	February 3, 2010	24	25	W4
Town of Swan Hills	ATCO and Town of Swan Hills	August 22, 2007	66	10	W5
Town of Sylvan Lake	ATCO and Town of Sylvan Lake	January 22, 2004	39	1	W5
Town of Taber	ATCO and Town of Taber	May 11, 2010	9	16	W4
Village of Thorsby	ATCO and Village of Thorsby	December 14, 2010	49	1	W5
Town of Tofield	ATCO and Town of Tofield	April 26, 2004	50	19	W4
Town of Trochu	ATCO and Town of Trochu	February 21, 2005	33	23	W4
Town of Turner Valley	ATCO and Town of Turner Valley	February 17, 2004	20	3	W5
Town of Vauxhall	ATCO and Town of Vauxhall	November 16, 2009	13	16	W4
Town of Vegreville	ATCO and Town of Vegreville	September 27, 2004	52	14	W4
Town of Vermilion	ATCO and Town of Vermilion	April 7, 2004	51	6	W4
Village of Veteran	ATCO and Village of Veteran	August 28, 2007	35	8	W4
Town of Viking	ATCO and Town of Viking	September 20, 2004	48	12	W4
Town of Vulcan	ATCO and Town of Vulcan	January 26, 2009	16	24	W4
Village of Warburg	ATCO and Village of Warburg	July 12, 2004	48	3	W5
Town of Wembley	ATCO and Town of Wembley	June 23, 2008	71	8	W6
City of Wetaskiwin	ATCO and City of Wetaskiwin	December 5, 2007	46	24	W4
Town of Whitecourt	ATCO and Town of Whitecourt	August 20, 2007	59	12	W5

FOURTH SUPPLEMENTAL AMENDING AGREEMENT

This AGREEMENT is made as of the 15th day of July, 2016 ("Effective Date").

BETWEEN:

NOVA GAS TRANSMISSION LTD., a corporation governed by the laws of the Province of Alberta
(hereinafter referred to as "NGTL")

OF THE FIRST PART

- and -

ATCO GAS AND PIPELINES LTD., a corporation governed by the laws of the Province of Alberta, carrying on business under the trade name ATCO Pipelines
(hereinafter referred to as "ATCO")

OF THE SECOND PART

WHEREAS NGTL and ATCO are parties to the Alberta System Integration Agreement dated April 7, 2009, as amended by the Supplemental Amending Agreement dated May 3, 2011, the Second Supplemental Amending Agreement dated July 31, 2016, and the Third Supplemental Amending Agreement dated July 9, 2014 (the "Agreement");

AND WHEREAS NGTL and ATCO are parties to the Asset Swap Agreement dated June 15, 2011, as amended by the Letter Agreement dated June 13, 2013, the First Amending Agreement dated July 31, 2013, the Second Amending Agreement dated July 9, 2014, the Third Amending Agreement October 26, 2015, the Letter Agreement dated June 3, 2016, and the Fourth Amending Agreement dated July 15, 2016 (the "Asset Swap Agreement");

AND WHEREAS NGTL and ATCO have agreed to amend the Agreement: to more precisely delineate the ATCO footprint that prior to the Effective Date of this Fourth Supplemental Amending Agreement was set out in the figure to Schedule A-3 to the Third Supplemental Amending Agreement dated July 9, 2014; and, to make certain amendments to the description of the ATCO footprint as given in the ATCO Footprint table of that Schedule A-3.

ARTICLE 1 INCORPORATION, DEFINITIONS AND EFFECTIVE DATE

- 1.1. This Fourth Supplemental Amending Agreement and the provisions hereof are supplemental to the Agreement, and are to form part of and to have the same effect as though incorporated in the Agreement.
- 1.2. Unless otherwise defined in this Fourth Supplemental Amending Agreement, all capitalized terms contained in this Fourth Supplemental Amending Agreement which are defined in the Agreement shall for all purposes hereof have the meaning given to them in the Agreement unless the context otherwise specifies or requires.

- 2 -

- 1.3. This Fourth Supplemental Amending Agreement shall be effective as of the Effective Date of this agreement.

**ARTICLE 2
AMENDMENTS TO THE AGREEMENT**

- 2.1. The Agreement shall be amended as follows:
- (a) by deleting Schedule A-3 in its entirety and replacing it with the following Schedule A-4 which is attached hereto.

**ARTICLE 3
MISCELLANEOUS**

- 3.1. This Fourth Supplemental Amending Agreement supercedes all negotiations, discussions and undertakings, including the Letter Agreement, between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Fourth Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Fourth Supplemental Amending Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties to this Second Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the Effective Date first written above.

NOVA GAS TRANSMISSION LTD.

Patrick M. Keys
Vice-President, Commercial - West
Canadian & Eastern U.S. Gas Pipeline



Per: 

Per: 

ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name ATCO Pipelines

Per: _____

Per: _____

Approved as to Form and Content:	
Business	
Legal	

- 2 -

- 1.3. This Fourth Supplemental Amending Agreement shall be effective as of the Effective Date of this agreement.

ARTICLE 2 AMENDMENTS TO THE AGREEMENT

- 2.1. The Agreement shall be amended as follows:
- (a) by deleting Schedule A-3 in its entirety and replacing it with the following Schedule A-4 which is attached hereto.

ARTICLE 3 MISCELLANEOUS

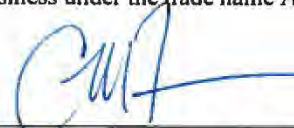
- 3.1. This Fourth Supplemental Amending Agreement supercedes all negotiations, discussions and undertakings, including the Letter Agreement, between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Fourth Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Fourth Supplemental Amending Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties to this Fourth Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the Effective Date first written above.

NOVA GAS TRANSMISSION LTD.

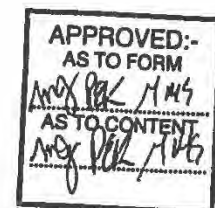
ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name ATCO Pipelines

Per: _____

Per: 
Graeme Feltham, VP Engineering & Construction

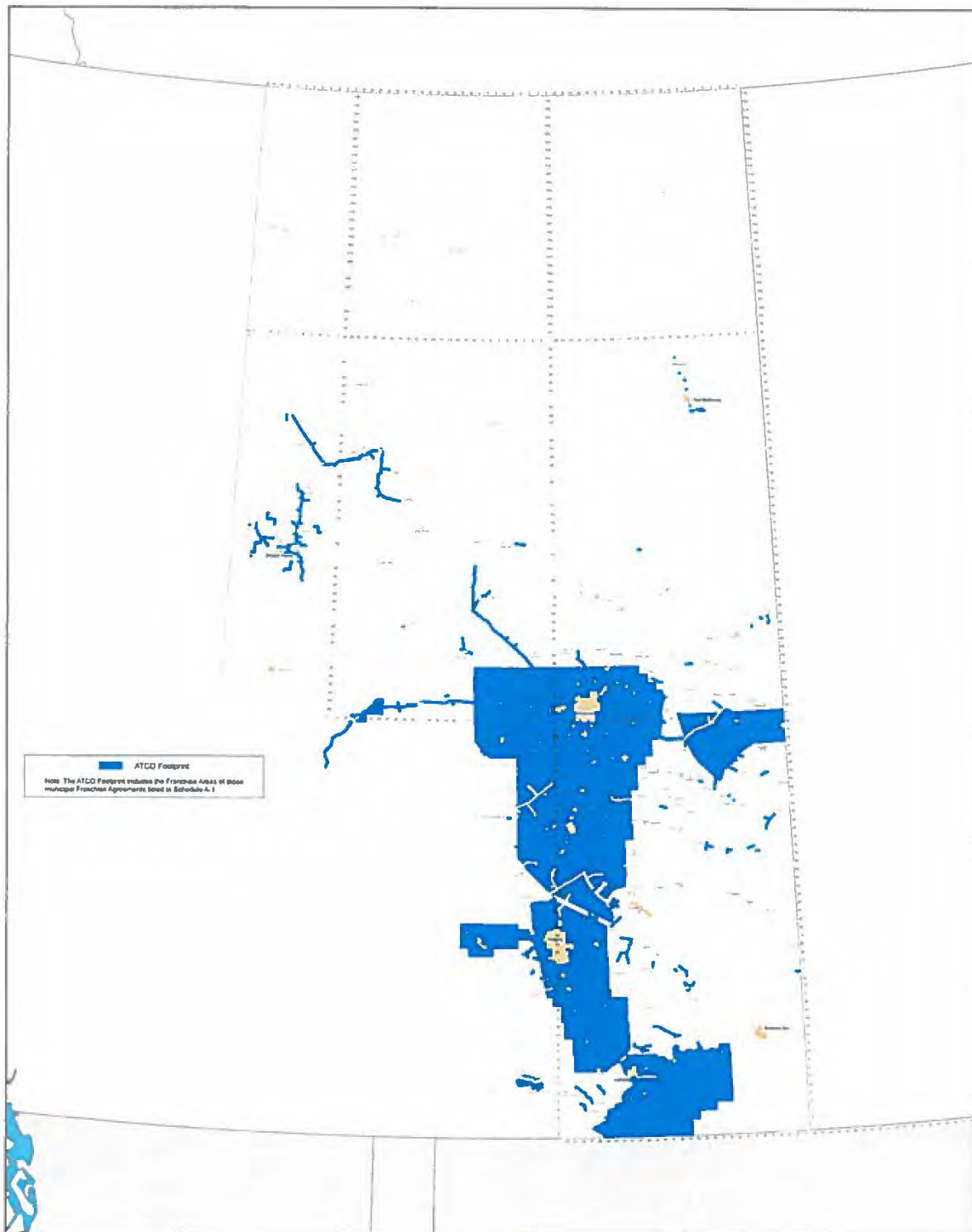
Per: _____

Per: 
D. Jason Sharpe, Sr. VP. and General manager



SCHEDULE A-4

To the Fourth Supplemental Amending Agreement dated July 15, 2016 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.



Schedule A-4
to the Fourth Supplemental Amending Agreement
dated July 15, 2016 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lloydminster Area	NW 31-51-13 W4M	14-33-51-8 W4M	From the east boundary of NGTL's NPS-12 Flat Lake Lateral along the north boundary of the TWP 51 to the west boundary of NGTL's NPS-12 Maughan Crossover lateral. Includes ATCO facilities within the County of Minburn No. 027 (Hamlet of Lavoy) franchise area.
		14-33-51-8 W4M	8-14-52-8 W4M	North along the west boundary of NGTL's NPS-12 Maughan Crossover lateral to the north boundary of the the ATCO pipeline right-of-way.
		8-14-52-8 W4M	NW 35-51-7 W4M	Follow the north boundary of the ATCO pipeline right-of-way to the north boundary of TWP 51. Includes ATCO pipeline, right-of-way to 11-53-9 W4M and excludes NGTL pipeline and right-of-way to Maughan meter station site in 11-32-52-7 W4M.
		NW 35-51-7 W4M	NE Corner 51-1 W4M	Follow the north boundary of TWP 51 to the Alberta - Saskatchewan border.
		NE Corner 51-1 W4M	SE Corner 48-1 W4M	Follow the Alberta - Saskatchewan border south to the bottom of TWP 48.
		SE Corner 48-1 W4M	SW Corner 48-4 W4M	West along the south boundary of TWP 48.
		SW Corner 48-4 W4M	4-7-47-4 W4M	Follow the west boundary of RNG 4 to the south side of the Battle River.
		4-7-47-4 W4M	SE 27-43-9 W4M	West along the south side of the Battle River to the east boundary of the NGTL NPS-14 Flat Lake Lateral. Includes ATCO pipeline, right-of-way to tie-in at NGTL's Gill Edge West meter station site in 4-23-46-6 W4M and the two ATCO pipelines, including the lands between the two pipelines, to the Town of Wainwright in 14-25-44-7 W4M.
		SE 27-43-9 W4M	NW 31-51-13 W4M	Follow the east side of the NGTL NPS-14 Flat Lake Lateral and any NGTL meter station sites overlapping the NPS-14 Flat Lake Lateral north to the north boundary of TWP 51. Includes Atco pipeline, right-of-way to 30-42-9 W4M and ATCO facilities within the Town of Hardisty; ATCO pipeline, right-of-way to 11-36-47-13 W4M and ATCO facilities within the Town of Viking franchise area; and multiple ATCO pipelines, rights-of-way to the west boundary of NGTL's NPS-16 North Lateral Extension in NW 4-49-15 W4M. Excludes NGTL's Ranfurly Lateral Loop, Maughan Crossover Lateral, Minburn Lateral, Ranfurly Crossover Lateral rights-of-way and Torlea, Torlea East, Ranfurly West, Minburn, Ranfurly, Ranfurly 'B', Ranfurly 'C' and Ranfurly Sales meter stations and sites.

Schedule A-4
to the Fourth Supplemental Amending Agreement
dated July 15, 2016 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Hinton Area	NE Corner 53-22 W5M	SE Corner 52-22 W5M	From the NE corner of 53-22 W5M south along the east boundary of 53-22 W5M to the SE corner of 52-22 W5M.
		SE Corner 52-22 W5M	NE Corner 51-24 W5M	From the SE corner of 52-22 W5M west along the south boundary of 52-22 W5M to the NE corner 51-24 W5M.
		NE Corner 51-24 W5M	SE Corner 51-24 W5M	From the NE corner 51-24 W5M south along the east boundary of 51-24 W5M to the SE corner 51-24 W5M.
		SE Corner 51-24 W5M	SE 2-51-26 W5M	From the SE corner 51-24 W5M west along the south boundary of 51-24 W5M to the south side of the Athabasca River in SE 2-51-26 W5M. Includes ATCO's NPS-4/6/8 pipeline, rights-of-way to the Jasper National Park border in 49-27 W5M.
		SE 2-51-26 W5M	NE 32-53-22 W5M	Follow the south side of the Athabasca River to the north boundary of NE 32-53-22 W5M. Includes ATCO's NPS-3/4 Fish Creek Lateral, right-of-way from 1-31-51-24 W5M to 2-33-51-25 W5M; and ATCO's NPS-12 Fishnet Lateral, right-of-way from 13-29-51-24 W5M to 2-33-51-25 W5M.
		NE 32-53-22 W5M	NE Corner 53-22 W5M	From the north boundary of NE 32-53-22 W5M east along the north boundary of 53-22 W5M to the NE corner of 53-22 W5M.

Schedule A-4
to the Fourth Supplemental Amending Agreement
dated July 15, 2016 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Edmonton/ Red Deer Area	NW Corner 57-10 W5M	NE Corner 57-18 W4M	Follow the north boundary TWP 57 to 57-18 W4M. Excludes NGTL's NPS-10 Redwater Lateral, right of-way to NE 29-57-21 W4M and NGTL's Redwater Sales, Redwater 'B' Sales and Opal meter stations and sites. Includes ATCO pipeline, right-of-way to 10-35-59-25 W4M and ATCO facilities within Village of Clyde Franchise Area.
		NE Corner 57-18 W4M	NE Corner 56-18 W4M	South along the east boundary of TWP 57-18 W4M.
		NE Corner 56-18 W4M	NE Corner 56-17 W4M	East along the north boundary of TWP 56-17 W4M.
		NE Corner 56-17 W4M	NE Corner 55-17 W4M	South along the east boundary of TWP 56-17 W4M.
		NE Corner 55-17 W4M	NE Corner 55-16 W4M	East along the north boundary TWP 55-16 W4M.
		NE Corner 55-16 W4M	NE Corner 54-16 W4M	South along the east boundary of TWP 55-16 W4M.
		NE Corner 54-16 W4M	NE 36- 54-15 W4M	East along the north boundary of TWP 54-15 W4M to the west boundary of the NGTL NPS-30 Flat Lake Lateral Loop #4.
		NE 36- 54-15 W4M	1-36-54-15 W4M	South along the west boundary of NGTL's NPS-30 Flat Lake Lateral Loop #4 to RNG 14 W4M.
		1-36-54-15 W4M	1-53-15 W4M	South along the east boundary of TWP 54-15 W4M to the north boundary of NGTL's NPS-16 North Lateral Extension.
		1-53-15 W4M	4-49-15 W4M	South along the west boundary of NGTL's NPS-16 North Lateral Extension to the south boundary of TWP 49. Includes ATCO facilities within the Town of Vegreville.
		4-49-15 W4M	NE Corner 48-17 W4M	West along the south boundary of TWP 49.
		NE Corner 48-17 W4M	SE Corner 47-17 W4M	South along the east boundary of TWP 48-17 W4M.
		SE Corner 47-17 W4M	SE Corner 47-18 W4M	West along the south boundary of TWP 47.
		SE Corner 47-18 W4M	SE Corner 46-18 W4M	South along the east boundary of TWP 46-18 W4M.
		SE Corner 46-18 W4M	SE Corner 46-19 W4M	West along the south boundary of TWP 46.
		SE Corner 46-19 W4M	SE Corner 43-19 W4M	South along the east boundary of TWP 45-19 W4M.
		SE Corner 43-19 W4M	SE Corner 43-20 W4M	West along the south boundary of TWP 43.
		SE Corner 43-20 W4M	SE Corner 37-20 W4M	South along the east boundary of TWP 42-20 W4M to SE corner 37-20 W4M. Includes NGTL pipeline, right-of-way and meter stations and sites to 15-18-40-18 W4M. Excludes NGTL's Nevis-Gadsby Lateral and right-of-way to chainage 0+000.0 in 1-29-41-23 W4M, Lamerton South, Jarvis Bay meter stations and sites.
		SE Corner 37-20 W4M	SE Corner 37-21 W4M	West along the south boundary of TWP 37.
		SE Corner 37-21 W4M	SE Corner 35-21 W4M	South along the east boundary of TWP 36-21 W4M.
		SE Corner 35-21 W4M	NE 31-34-20 W4M	East along the south boundary of TWP 35 to the west boundary of NGTL's NPS-6 Hackett West Lateral in NE 31-34-20 W4M.

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		NE 31-34-20 W4M	16-19-29-23 W4M	South along the west boundary of NGTL's NPS-6 Hackett West lateral, NPS-8 Ghostpine Lateral Extension and NPS-18 Ghostpine West Lateral to the north boundary of NGTL's NPS-30 Plains Mainline Loop. Excludes NGTL NPS-4 Rumsey West pipeline, right-of-way to 4-35-33-21 W4M and NPS-12 Ghostpine pipeline, right-of-way to 1-11-31-21 W4M and existing connected meter stations and sites.
		16-19-29-23 W4M	12-2-33-26 W4M	Northwest along the north boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor. Excludes NGTL's Equity Lateral/Loops, right-of-way to NE 29-31-23 W4M and NPS-8 Twining North and NPS-6 Trochu Laterals, rights-of-way to 4-31-32-23 W4M and existing connected meter stations, compressor stations and sites.
		12-2-33-26 W4M	12-2-33-26 W4M	Excludes the NGTL Torrington Compressor Station within 12-2-33-26 W4M.
		12-2-33-26 W4M	SE 24-28-23 W4M	Southeast along the south boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor to the east boundary of 24-28-23 W4M. Excludes any existing NGTL connected meter stations and sites. Includes any existing ATCO pipelines, rights-of-way to and in the Carbon area in 16-29-22 W4M including ATCO facilities within the Village of Carbon Franchise Area.
		SE 24-28-23 W4M	10-24-26-23 W4M	South along the east boundary of TWP 28-23 W4M to the north boundary of NGTL's Central Alberta System Mainline corridor in 10-24-26-23 W4M. Excludes ATCO pipeline, right-of-way to 12-22-26-23 W4M.
		10-24-26-23 W4M	4-19-34-5 W5M	Northwest along the north boundary of the Central Alberta System Mainline corridor to the west boundary of TWP 34-5 W5M. Excludes NGTL's NPS-6 Lone Pine Creek South Lateral, Loop, rights-of-way to 5-27-29-28 W4M; NPS-10 Lone Pine Creek Lateral, right-of-way to SW 23-30-28 W4M and NPS-10 Garrington HBOG, NPS-8 Garrington East and NPS-8 Eagle Hill Laterals, rights-of-way to SW 8-34-3 W5M and existing connected meter stations and sites (Ex. Rockyford, Nightingale, Gayford, etc. meter stations). Excludes NGTL's NPS-4 Netook, NPS-12 Olds Lateral and Extension pipelines, rights-of-way to NE-21-33-1 W5M; NPS-6 Deadrick Creek lateral, right-of-way to NE-33-30-1 W5M, and NPS-16 Carstairs lateral, right-of-way to SE 2-33-26 W4M and existing connected meter stations and sites.
		4-19-34-5 W5M	NW Corner 46-5 W5M	North along the west boundary of TWP 34-5 W5M to the NW corner of TWP 46-5 W5M. Includes Rimbey/Westerose meter station site in 13-32-43-1 W5M. Excludes NGTL NPS-6 Codner Lateral, right-of-way to 15-31-39-5 W5M and existing NGTL connected meter stations and sites. Excludes NGTL NPS-22 Westerose South Lateral, right-of-way to the south boundary of NGTL's, Lasthill Creek pipeline, right-of-way to 8-29-40-6 W5M and Leafland pipeline, right-of-way to 4-21-40-5 W5M, Gilby West pipeline, right-of-way to 9-6-40-3 W5M, Wilson Creek Lateral & Loop, right-of-way to 4-28-43-4 W4M, Wilson Creek Southeast Lateral, right-of-way to 9-21-43-4 W4M and existing connected Lasthill Creek, Leafland, Lavetsa, Leedale, Withrow, Gilby West, Gilby Sales, Wilson Creek South Sales, Wilson Creek Southeast and Wilson Creek meter stations and sites.
		NW Corner 46-5 W5M	3-47-9 W5M	West along the north boundary of TWP 46-5 W5M to the east boundary of NGTL's NPS-30 Western Alberta System Mainline right-of-way in 3-47-9 W5M.

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		3-47-9 W5M	30-48-10 W5M	Northwest along the east boundary of the NPS-30 Western Alberta System Mainline to the west boundary of TWP 48-10 W5M. Excludes existing NGTL connected meter stations, compressor stations and sites.
		30-48-10 W5M	NW Corner 57-10 W5M	North along the west boundary of TWP 49-10 W5M to the NW corner 57-10 W5M. Includes ATCO Wabamum-Hinton pipeline, right-of-way, connected meter stations, compressor stations and sites to east boundary 52-22 W5M.

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	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
Calgary Area		NW 29-29-4 W5M	3-30-3 W5M	From the southeast junction of NGTL's NPS-42 Western Alberta System Mainline Loop and NPS-16 Crossfield Lateral Loop right-of-way follow the south boundary of the NPS-16 Crossfield Lateral Loop right-of-way east to the south boundary of 3-30-3 W5M. Excludes existing meter stations and sites.
		3-30-3 W5M	SE Corner 30-2 W5M	Follow the south boundary of TWP 30-2 W5M to SE corner 30-2 W5M. Excludes existing meter stations and sites.
		SE Corner 30-2 W5M	NE 12-30-2 W5M	North along the east boundary of TWP 30-2 W5M to the south boundary of NGTL's NPS-48 Central Alberta System Mainline Loop #2 right-of-way in NE 12-30-2 W5M.
		NE 12-30-2 W5M	8-1-27-24 W4M	Follow the south boundary of NGTL's Central Alberta System Mainline Loop corridor to the east boundary of TWP 27-24 W4M. Exclude NGTL pipeline, rights-of-way to 11-13-28-1 W5M and existing meter stations, compressor stations and sites. Includes ATCO pipelines, rights-of-way in TWP 30-1 W5M, TWP 28-25 W4M and TWP 27-25 W4M.
		8-1-27-24 W4M	NE Corner 17-24 W4M	From the south boundary of NGTL's Central Alberta System Mainline Loop corridor in 8-1-27-24 W4M follow the east boundary of TWP 27-24 W4M south to the NE corner of TWP 17-24 W4M.
		NE Corner 17-24 W4M	NE Corner 17-22 W4M	East along the north boundary of TWP 17-24 W4M.
		NE Corner 17-22 W4M	NE 13-11-22 W4M	South along the east boundary of TWP 17-22 W4M to the north boundary of NGTL's NPS-24 South Lateral right-of-way in NE 13-11-22 W4M. Excludes NGTL NPS-12 Vulcan lateral, right-of-way to SE 24-15-22 W4M and NPS-6 Keho Lake North Lateral, right-of-way to 16-13-12-22 W4M. Excludes existing meter stations and sites.
		NE 13-11-22 W4M	1-6-9-24 W4M	Follow the north boundary of NGTL's NPS-24 South Lateral right-of-way to the south boundary of TWP 9-24 W4M. Excludes existing NGTL meter stations and sites.
		1-6-9-24 W4M	SW Corner 9-28 W4M	West along the south boundary of TWP 9-24 W4M to the southwest corner of TWP 9-28 W4M.
		SW Corner 9-28 W4M	SW Corner 13-28 W4M	North along the west boundary of TWP 9-28 W4M to the SW corner of TWP 13-28 W4M.
		SW Corner 13-28 W4M	SW Corner 13-29 W4M	West along the south boundary of TWP 13-28 W4M to the SW corner of TWP 13-29 W4M.
		SW Corner 13-29 W4M	SW Corner 15-29 W4M	North along the west boundary of TWP 13-29 W4M to SW corner of TWP 15-29 W4M.
		SW Corner 15-29 W4M	SE Corner 15-1 W5M	West along the south boundary of TWP 15-29 W4M to the southeast corner of TWP 15-1 W5M.
		SE Corner 15-1 W5M	SE Corner 17-1 W5M	North along the east boundary of TWP 15-1 W5M to the SE Corner of TWP 17-1 W5M.
		SE Corner 17-1 W5M	SW Corner 17-1 W5M	West along the south boundary of TWP 17-1 W5M to the SW corner of TWP 17-1 W5M.
		SW Corner 17-1 W5M	SW Corner 18-1 W5M	North along the west boundary of TWP 17-1 W5M to the SW corner of TWP 18-1 W5M.

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	SW Corner 18-1 W5M	SE 5-18-2 W5M	West along the south boundary of TWP 18-1 W5M to the east boundary of NGTL's Western Alberta System Mainline right-of-way corridor.
	SE 5-18-2 W5M	NW 29-29-4 W5M	North along the east boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of NGTL's NPS-16 Crossfield Lateral Loop right-of-way. Excludes NGTL's NPS-6 Black Diamond lateral, right-of-way to 10-12-19-2 W5M and meter stations, compressor stations and sites
	NW Corner 26-12 W5M	NE Corner 26-6 W5M	East along the north boundary of TWP 26-12 W5M.
	NE Corner 26-6 W5M	NE Corner 12-26-6 W5M	South along the east boundary of TWP 26-6 W5M to the NE corner of Section 12-26-6 W5M.
	NE Corner 12-26-6 W5M	NE 9-26-4 W5M	East along the north boundary of Section 12-26-6 W5M to the west boundary of NGTL's Western Alberta System Mainline right-of-way corridor in 9-26-4 W5M.
	NE 9-26-4 W5M	SE 3-25-4 W5M	South along the west boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of TWP 25-4 W5M. Excludes NGTL pipeline, right-of-way to 13-13-25-5 W5M and existing meter stations and sites. Excludes Atco pipelines in TWP 25-4 W5M and north 1/2 of TWP 24-4 W5M.
	SE 3-25-4 W5M	SE Corner 25-6 W5M	West along the south boundary of TWP 25-4 W5M to the SE corner of TWP 25-6
	SE Corner 25-6 W5M	SE Corner 24-6 W5M	South along the east boundary of TWP 25-6 W5M to the SE corner of TWP 24-6 W5M.
	SE Corner 24-6 W5M	SE Corner 24-9 W5M	West along the south boundary of TWP 24-6 W5M to the SE corner TWP 24-9 W5M.
	SE Corner 24-9 W5M	SE Corner 23-9 W5M	South along the east boundary of TWP 24-9 W5M to the SE corner TWP 23-9 W5M.
	SE Corner 23-9 W5M	SW Corner 23-11 W5M	West along the south boundary of TWP 23-9 W5M to the SW corner TWP 23-11 W5M.
	SW Corner 23-11 W5M	SW Corner 24-11 W5M	North along the west boundary of TWP 23-11 W5M to the SW corner TWP 24-11 W5M.
	SW Corner 24-11 W5M	SW Corner 24-12 W5M	West along the south boundary of TWP 24-11 W5M to the SW corner TWP 24-12 W5M.
	SW Corner 24-12 W5M	NW Corner 26-12 W5M	North along the west boundary of TWP 24-12 W5m to the NW corner TWP 26-12 W6M.

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	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lethbridge Area	14-33-10-22 W4M	33-10-19 W4M	From the east junction of NGTL's NPS-24 South Lateral right-of-way and the north boundary of TWP 10-22 W4M follow the north boundary of TWP 10-22 W4M east to the Oldman River in 33-10-19 W4M. Includes ATCO facilities within the Town of Picture Butte franchise area.
		33-10-19 W4M	2-12-11 W4M	Follow the north boundary of the Oldman and South Saskatchewan Rivers to the southern boundary of TWP 12-11 W4M. Includes Atco pipeline, right-of-way to 8-7-12-13 W4M.
		2-12-11 W4M	NE Corner 11-10 W4M	East along the north boundary of TWP 11-11 W4M to the NE corner 11-10 W4M.
		NE Corner 11-10 W4M	SE Corner 5-10 W4M	Follow the east boundary of TWP 11-10 W4M south to the SE corner of 5-10 W4M.
		SE Corner 5-10 W4M	SE Corner 5-12 W4M	Follow the south boundary of TWP 5-10 W4M to the SE corner of TWP 5-12 W4M.
		SE Corner 5-12 W4M	SE Corner 4-12 W4M	Follow the east boundary of TWP 5-12 W4M south to the SE corner of TWP 4-12 W4M.
		SE Corner 4-12 W4M	SE Corner 4-14 W4M	Follow the south boundary of TWP 4-12 W4M west to the SE corner of TWP 4-14 W4M.
		SE Corner 4-14 W4M	SE Corner 3-14 W4M	Follow the east boundary of TWP 4-14 W4M south to the SE corner of 3-14 W4M.
		SE Corner 3-14 W4M	SE Corner 3-15 W4M	Follow the south boundary of TWP 3-14 W4M west to the SE corner of 3-15 W4M.
		SE Corner 3-15 W4M	SE Corner 1-15 W4M	Follow the east boundary of TWP 3-15 W4M south to the Alberta/Montana border.
		SE Corner 1-15 W4M	SW Corner 1-25 W4M	West along the south boundary of TWP 1-15 W4M to the SW corner of TWP 1-25 W4M.
		SW Corner 1-25 W4M	NW Corner 7-1-25 W4M	North along the west boundary of TWP 1-25 W4M to NW corner of TWP 7-1-25 W4M.
		NW Corner 7-1-25 W4M	SW 14-1-26 W4M	West along the north boundary of 7-1-25 W4M to the east boundary of NGTL's NPS-16 Waterton Montana Lateral right-of-way.
		SW 14-1-26 W4M	NE 34-1-27 W4M	Northwest along the north boundary of NGTL's NPS-16 Waterton Montana lateral right-of-way to the south side of the Lee Creek in NE 34-1-27 W4M.
		NE 34-1-27 W4M	13-33-9-23 W4M	Follow the south side of the Lee Creek, St Mary and Old Man Rivers to the south boundary of NGTL's NPS-24 South Lateral in 13-33-9-23 W4M. Excludes the NGTL pipeline, right-of-way to 2-1-7-22 W4M and meter stations.
		13-33-9-23 W4M	14-33-10-22 W4M	Follow the south boundary of NGTL's NPS-24 South Lateral northeast to the north boundary of TWP 10-22 W4M. Excludes all NGTL meter stations and sites.
		SE-6-10-19 W4M	SE-19-9-19 W4M	Excludes NGTL Coaldale Lateral and associated right-of-way from SE-6-10-19 W4M to SE-19-9-19 W4M. Excludes all associated NGTL meter station sites.
		9-11-8-19 W4M	13-10-8-21 W4M	Excludes NGTL Coaldale South Lateral and associated right-of-way from 9-11-8-19 W4M to 13-10-8-21 W4M. Excludes all associated NGTL meter station sites.

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OTHER AREAS		COMMENTS
	Crowsnest Pass	Franchise Area ("FA") incorporates a number of municipalities through the Crowsnest Pass. ATCO retains all their own existing facilities in the Municipality of Crowsnest Pass FA. NGTL retains NGTL's Alison Creek Sales meter station and 0.75 km x NPS-2 lateral. NGTL retains Coleman Sales m/s (overlaps M/L ROW). NGTL retains Coleman receipt m/s (overlaps M/L ROW) and 0.81 km x NPS-8 upstream producer tie-in.
	Tap (SCADA) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (SCADA) locations identified in the Asset Swap Agreement.
	Tap (UFG) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (UFG) locations identified in the Asset Swap Agreement.
	Pikanni Indian Reserve	ATCO retains all their own existing facilities extending from the Glenwood Control Interconnect with NGTL in 16-32-5-27 W4M to 4-9-7-28 W4M including all facilities within the Pikanni Indian Reserve.
	Tsuu T'ina Indian Reserve	ATCO retains all their own existing facilities extending from the Bragg Creek Interconnect with NGTL in 6-2-24-4 W5M to 13-10-23-5 W5M including all facilities within the Tsuu T'ina Indian Reserve.
	Saddle Lake Indian Reserve	ATCO retains all their own existing facilities extending from the Saddle Lake Indian Reserve Interconnect with NGTL in 16-32-57-11 W4M to 9-34-57-12 W4M including all facilities within the Saddle Lake Indian Reserve.
	Sawridge Indian Reserve	ATCO retains all their own existing facilities extending from the Slave Lake Mtsue Control Station in 10-30-72-4 W5M to 10-31-72-5 W5M including all facilities within the Sawridge Indian Reserve and the Town of Slave Lake Franchise Area. NGTL to obtain the NPS-3 Overline Interconnect (4-16-72-04 W5M) to Slave Lake Pulp (10-22-72-4 W5M) is the City of Grande Prairie Franchise Area and includes ATCO pipelines, rights-of-way, meter stations and compressor station sites extending outside the Grande Prairie Franchise Area south to 11-29-67-3 W5M, west to the Wembley Franchise Area; and north to 15-10-79-8 W5M, as well as the existing Grovedale pipeline and right of way from 15-28-68-7 W5M to 16-32-69-6 W5M.
(ATCO Map 4)	Grande Prairie Area	
(ATCO Maps 2 & 56)	Beaverlodge Area	ATCO retains the existing: Hythe-Beaverlodge Transmission line and right of way from 13-12-74-11 W5M to 3-1-72-10 W5M including the Beaverlodge PRT Delivery in 4-3-72-10 W5M, the Huellan-Rio Grande Transmission line and right of way between 13-28-70-11 W5M and 5-28-71-9 W5M, the Saskatchewan Mountain Transmission line and right of way from 15-21-72-10 W5M to 1-25-72-9 W5M, and the La Glace Transmission line and right of way from 15-20-75-9 W5M to 4-16-74-8 W5M.
(ATCO Map 57)	Fort McMurray Area	ATCO retains the existing: Fort McMurray South Transmission line associated and right of way from 13-16-88-9 W4M to 9-13-88-8 W4M, including the lateral and associated right of way extending from 3-25-88-9 W4M to 4-28-83-8 W4M; Fort McMurray Gate 1 Lateral and right of way from 12-4-89-9 W4M to 12-9-89-9 W4M; Northlands Forest Products Lateral and right of way from 9-1-91-10 W4M to 14-6-91-9 W4M; Fort McMurray Mining Ind. Gate Lateral and right of way from 7-12-92-10 W4M to 5-12-92-10 W4M; Tap #88252 Lateral within 1-1-72-17 W4M; and Tap #11538 Lateral within 2-1-72-17 W4M.
(ATCO Map 48)	Tepee Creek Area	ATCO retains the existing facilities within the Tepee Creek Transmission line right of way in 13-12-74-4 W5M to 1-27-73-3 W5M.
(ATCO Map 1)	Peace River Area	ATCO retains the existing: Worsley-McLennan Transmission pipeline, associated laterals and right of ways, extending from McLennan 5-23-87-7 W5M to north to Peace River 0 31-83-21 W5, west to Fairview 05-34-681-03 W5 and then north west to Worsley 05-23-087-07 W5; as well as the Worsley Town line from 16-24-87-8 W5M to 1-1-67-8 W5M. Includes the Grimshaw Receipt Meter in 11-23-83-23 W5M, Island Creek Receipt 13-20-82-3 W5M, Hines Creek Forest Products Delivery 12-15-84-4 W5M, and Eureka River North Receipt 3-2-86-6 W5M.
(ATCO Map 10)	Swan Hills Area	ATCO retains the existing pipeline facilities and their associated right of ways: Swan Hills Transmission from 15-25-64-11 W5M to 16-2-57-3 W5M; Swan Hills Town Loop from 5-25-84-11 W5M to 6-14-88-10 W5M; Swan Hills Waste Treatment Line from 13-11-66-10 W5M to 13-6-67-8 W5M; Noel Lake Compressor Suction Line from 10-1-62-8 W5M to 15-1-62-8 W5M; Corbett Creek Lateral from 5-13-61-7 W5M to 15-19-61-6 W5M; Thunder Lateral from 15-30-60-5 W5M to 8-14-60-6 W5M. ATCO additionally retains the Majesau Lake (13-15-57-3 W5M); Newton Receipt (12-6-58-3 W5M); Lunford Receipt (6-13-59-5 W5M); Twin Lakes Receipt (15-22-59-5 W5M); Thunder Lake Receipt (8-14-60-6 W5M); Corbett South Receipt (15-19-61-6 W5M); Mystery Lake Receipt (5-13-61-7 W5M); Goose Creek Receipt (5-32-61-7 W5M); Swan Hills Waste Treatment Delivery (13-6-67-8 W5M); Freeman River Receipt (5-26-63-9 W5M); and Tribute Receipt (9-26-64-11 W5M) meter stations; and Noel Lake (15-1-62-8 W5M) Compressor Station.
	House Mountain Area	ATCO to retain the House Mountain pipeline, Miscible Flood Delivery Lateral, Swan Hills Miscible Injection Delivery meter station, House Mountain Receipt and Inverness River Receipt meter stations and associated rights-of-way within NGTL's Footprint from 15-25-64-11 W5M to 1-8-70-10 W5M.
(ATCO Map 7)	Whitecourt Area	ATCO retains the existing pipeline facilities and their associated right of ways: Whitecourt Transmission from 15-23-59-11 W5M to 12-36-59-12 W5M; Whitecourt Power Delivery Lateral from 16-11-60-12 W5M to 9-4-60-12 W5M; Miller Western Pulp Delivery Lateral from 4-1-60-12 W5M to 10-35-59-12 W5M; Whitecourt Peace Pipe Delivery Lateral from 15-23-59-11 W5M to 13-24-59-11 W5M; and the Carson Creek Transmission from 4-23-61-12 W5M to 16-11-60-12 W5M. As well ATCO retains the Whitecourt Power meter station in 10-4-60-12 W5M.
(ATCO Map 14)	Cold Lake Area	ATCO retains the existing pipeline facilities and their associated right of ways: Nova-Grande Centre-Cold Lake Transmission running from 13-13-62-2 W4M to 3-24-63-2 W4M as well as 15-1-63-3 W4M to 2-6-63-2 W4M, and the Ardmore Town Line from 5-12-62-4 W4M to 12-1-62-4 W4M.
(ATCO Map 12)	Andrew Town Area	ATCO retains the existing Andrew Town Line and associated right of way from 12-35-55-16 W4M to 1-32-56-16 W4M.
(ATCO Map 15)	Rocky Mountain House Town Area	ATCO retains the existing Rocky Mountain House Town Line and associated right of way from 16-30-39-6 W5M to 1-27-39-7 W5M.
(ATCO Map 24)	Loughheed Town Area	ATCO retains the existing Loughheed Town Line and associated right of way from 4-26-43-11 W4M to 3-33-43-11 W4M.
(ATCO Map 27)	Edgerton Town Area	ATCO retains the existing Edgerton Town Line and associated right of way from 12-15-44-3 W4M to 12-1-44-4 W4M.
(ATCO Map 23)	Forestburg Area	ATCO retains the existing Forestburg Generating Plant Transmission and associated right of way from 5-34-40-16 W4M to 12-29-40-15 W4M and Forestburg Power Plant Delivery (12-29-40-15 W4M).
(ATCO Map 28)	Provost Area	ATCO retains the existing Provost Codogan Transmission pipeline system and associated right of ways from 1-25-37-4 W4M to 4-17-39-2 W4M, and extending west from 13-27-39-3 W4M to 12-36-38-4 W4M.

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(ATCO Map 29)	Coronation Area	ATCO retains the existing Coronation Town Line pipeline system and associated right of ways from 1-22-35-11 W4M to 9-14-36-11 W4M and extending east from 10-2-36-11 W4M to 14-26-35-10 W4M.
(ATCO Map 30)	Veteran Area	ATCO retains the existing Veteran Town Line pipeline system and associated right of way from 1-8-35-8 W4M to 15-8-35-8 W4M, and extending west from 6-17-35-8 W4M to 16-10-35-8 W4M.
(ATCO Map 31)	Consort Area	ATCO retains the existing pipeline facilities and their associated right of ways: Consort Town Line 3-28-35-5 W4M to 16-15-35-6 W4M, and the Monitor Town Line 10-3-35-5 W4M to 9-1-35-5 W4M.
(ATCO Map 17)	Priddis Area	ATCO retains the existing pipeline facility and associated right of way of the Priddis Rural Transmission Line from 6-31-22-3 W5M to 1-35-22-4 W5M.
(ATCO Map 17)	Millerville Area	ATCO retains the existing pipeline facility and associated right of way of the Millerville Transmission Line from 13-34-20-4 W5M to 4-14-21-4 W5M.
(ATCO Map 20)	Vauxhall Area	ATCO retains the existing pipeline facility and associated right of way of the Vauxhall Transmission Line from 16-8-14-18 W4M to 8-9-13-16 W4M, and Vauxhall Foodie Branch Line from 8-9-13-16 W4M to 6-7-13-15 W4M.
(ATCO Map 21)	Turin Area	ATCO retains the existing pipeline facilities and their associated right of ways: Turin East Mission and Turin West Mission between 6-4-12-19 W4M and 1-4-12-21 W4M, and the Iron Springs Laterals from 16-20-11-20 W4M to 1-15-11-19 W4M, extending south from 1-21-11-20 W4M to 16-9-11-20 W4M.
(ATCO Map 22)	Glenwood Area	ATCO retains the existing pipeline facilities and their associated right of ways: Standoff Transmission Line from 2-14-7-26 W4M to 14-9-6-25 W4M, Glenwood Transmission Line from 16-32-5-27 W4M to 6-12-5-27 W4M; Glenwood Loop Line from 16-32-5-27 W4M to 11-23-5-27 W4M, Hillsprings Transmission from 4-10-5-28 W4M to 11-16-4-27 W4M.
(ATCO Map 32)	Rockyford Area	ATCO retains the existing pipeline facilities and their associated right of ways: Rosebud Transmission from 6-18-27-21 W4M to 3-18-27-21 W4M, and Rockyford Transmission from 1-26-27-22 W4M to 12-22-28-23 W4M.
(ATCO Map 33)	Gleichen Area	ATCO retains the existing pipeline facilities and their associated right of ways: Cluny Branch Line from 4-16-23-21 W4M to 13-4-22-21 W4M, Gleichen-Cluny Branch Line from 11-27-23-21 W4M to 14-27-23-21 W4M; Gleichen Transmission Line from 15-36-21-21 W4M to 5-18-22-22 W4M, Gleichen Trans Line Loop from 4-16-23-21 W4M to 16-32-22-22 W4M, Standoff Transmission Line from 15-36-24-21 W4M to 13-1-25-22 W4M, and Pinewide Swane Lateral within 4-13-23-22 W4M.
(ATCO Map 34)	Bassano Area	ATCO retains the existing pipeline facility and associated right of way of the Bassano Transmission Line from 12-4-22-18 W4M to 14-17-21-18 W4M.
(ATCO Map 37)	Duchess Area	ATCO retains the existing pipeline facilities and their associated right of ways: Duchess Branch Line from 4-22-21-15 W4M to 4-16-20-14 W4M, and the Rosemary Transmission Line from 1-6-21-15 W4M to 9-1-21-16 W4M.
(ATCO Map 38)	Brooks Area	ATCO retains the existing pipeline facilities and their associated right of ways: Brooks North Transmission Line from 13-6-18-13 W4M to 8-12-19-14 W4M, Brooks South Transmission Line from 13-21-18-14 W4M to 14-29-16-14 W4M, Brooks Stafford Branch Line from 13-17-19-13 W4M to 3-9-19-14 W4M, and Stafford Transmission Line from 16-6-19-14 W4M to 3-19-19-14 W4M, including the Princess Brook Receipt (13-17-19-13 W4M) Meter station.
(ATCO Map 53)	Caroline Area	ATCO retains the existing pipeline facility and associated right of way of the Caroline Town Line in 7-14-36-6 W5M.
(ATCO Map 47)	Czar Area	ATCO retains the existing pipeline facilities and their associated right of ways: Czar Town Line from 1-19-40-6 W4M to 7-20-40-6 W4M, Newalta Superbox Branch Line from 9-4-41-7 W4M to 10-33-40-7 W4M, Hughenden Town Line from 13-9-41-7 W4M to 9-8-41-7 W4M, Amisk Town Line from 8-35-41-8 W4M to 14-26-41-8 W4M.

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to the Fourth Supplemental Amending Agreement dated July 16, 2015 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Acme	ATCO and Village of Acme	March 8, 2004	29	25	W4
City of Airdrie	ATCO and City of Airdrie	September 4, 2007	27	1	W5
Alberta Beach	ATCO and Alberta Beach	August 17, 2010	54	3	W5
Village of Alix	ATCO and Village of Alix	March 21, 2006	40	22	W4
Village of Amisk	ATCO and Village of Amisk	December 14, 2010	41	8	W4
Village of Andrew	ATCO and Village of Andrew	November 26, 1999	56	16	
Summer Village of Argentia Beach	ATCO and Summer Village of Argentia Beach	June 24, 2010	47	28	W4
Her Majesty the Queen (Banff National Park)	ATCO and Her Majesty the Queen (Banff National Park)	June 23, 1987	25	12	W4
Town of Banff	ATCO and Town of Banff	February 13, 2006	25	12	W4
Village of Barnwell	ATCO and Village of Barnwell	January 18, 2001	9	17	W5
Village of Barons	ATCO and Village of Barons	November 17, 2009	12	23	W4
Town of Bashaw	ATCO and Town of Bashaw	March 16, 2004	42	21	W4
Town of Bassano	ATCO and Town of Bassano	June 12, 2006	21	18	W4
Town of Beaverlodge	ATCO and Town of Beaverlodge	February 27, 2006	72	10	W4
Village of Beiseker	ATCO and Village of Beiseker	May 25, 2010	28	26	W6
Town of Bentley	ATCO and Town of Bentley	March 23, 2004	40	1	W4
Village of Berwyn	ATCO and Village of Berwyn	November 15, 2004	82	24	W5
Village of Big Valley	ATCO and Village of Big Valley	June 7, 2006	35	20	W5
Village of Bittern Lake	ATCO and Village of Bittern Lake	November 15, 2000	46	22	W4
Town of Black Diamond	ATCO and Town of Black Diamond	September 7, 2005	20	2	W4
Town of Blackfalds	ATCO and Town of Blackfalds	April 13, 2004	39	27	W5
Town of Bon Accord	ATCO and Town of Bon Accord	October 27, 2004	56	24	W4
Town of Bow Island	ATCO and Town of Bow Island	September 22, 2003	10	11	W4
Town of Bowden	ATCO and Town of Bowden	February 12, 2007	34	1	W4
Village of Breton	ATCO and Village of Breton	February 17, 2004	48	4	W5
Town of Brooks	ATCO and Town of Brooks	September 7, 2004	18	15	W5
Town of Bruderheim	ATCO and Town of Bruderheim	April 7, 2004	56	20	W4
County of Forty Mile No. 8 (Hamlet of Burdett)	ATCO and County of Forty Mile No. 8 (Hamlet of Burdett)	August 26, 2009	10	12	W4
City of Calgary	ATCO and City of Calgary	December 20, 1911	24	1	W4
City of Camrose	ATCO and City of Camrose	April 26, 2004	47	20	W5
Town of Canmore	ATCO and Town of Canmore	April 6, 2004	24	10	W4
Village of Carbon	ATCO and Village of Carbon	February 8, 2010	29	23	W5
Town of Cardston	ATCO and Town of Cardston	September 27, 2007	3	25	W4
Village of Carmangay	ATCO and Village of Carmangay	February 23, 2010	13	23	W4
Village of Caroline	ATCO and Village of Caroline	September 27, 2001	36	6	W4
Town of Carstairs	ATCO and Town of Carstairs	July 9, 2007	30	1	W5
Village of Champion	ATCO and Village of Champion	February 22, 2010	15	23	W5
Village of Chipman	ATCO and Village of Chipman	September 13, 2010	54	19	W4
Town of Claresholm	ATCO and Town of Claresholm	April 28, 2005	12	27	W4
Village of Clive	ATCO and Village of Clive	April 26, 2004	40	25	W4
Village of Clyde	ATCO and Village of Clyde	March 12, 2010	60	25	W4
Town of Coaldale	ATCO and Town of Coaldale	June 12, 2000	9	20	W4
Town of Coalhurst	ATCO and Town of Coalhurst	May 18, 2010	9	22	W4
Town of Cochrane	ATCO and Town of Cochrane	August 8, 2005	26	4	W4
City of Cold Lake	ATCO and City of Cold Lake	October 25, 2005	63	2	W5

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FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Consort	ATCO and Village of Consort	April 26, 2004	35	6	W4
Town of Coronation	ATCO and Town of Coronation	July 14, 2009	36	11	W4
Village of Coutts	ATCO and Village of Coutts	August 12, 2008	1	15	W4
Village of Cowley	ATCO and Village of Cowley	August 20, 2002	7	1	W4
Village of Cremona	ATCO and Village of Cremona	December 14, 2004	30	4	W5
Town of Crossfield	ATCO and Town of Crossfield	April 20, 2010	28	1	W5
Municipality of Crowsnest Pass	ATCO and Municipality of Crowsnest Pass	January 6, 2009	8	4	W5
Village of Czar	ATCO and Village of Czar	April 13, 2000	40	6	W5
Village of Delburne	ATCO and Village of Delburne	March 27, 2007	37	23	W4
Town of Didsbury	ATCO and Town of Didsbury	January 16, 2007	31	1	W4
Village of Donnelly	ATCO and Village of Donnelly	August 16, 2005	78	21	W5
Town of Drayton Valley	ATCO and Town of Drayton Valley	October 6, 2004	49	7	W5
Village of Duchess	ATCO and Village of Duchess	May 17, 2001	20	14	W5
Birch Hills County (Hamlet of Eaglesham)	ATCO and Birch Hills County (Hamlet of Eaglesham)	June 8, 2005	78	26	W4
Town of Eckville	ATCO and Town of Eckville	June 14, 2004	39	3	W5
Village of Edgerton	ATCO and Village of Edgerton	April 14, 2004	44	4	W5
City of Edmonton	ATCO and City of Edmonton	July 21, 2010	52	24	W4
Town of Edson	ATCO and Town of Edson	April 11, 2006	53	17	W4
Village of Elnora	ATCO and Village of Elnora	May 18, 2004	35	23	W5
Parkland County (Hamlet of Entwistle)	ATCO and Parkland County (Hamlet of Entwistle)	February 9, 2010	53	7	W4
Town of Fairview	ATCO and Town of Fairview	June 1, 2004	81	3	W5
Town of Falher	ATCO and Town of Falher	May 25, 2004	78	21	W6
Village of Foremost	ATCO and Village of Foremost	January 19, 2004	6	11	W5
Town of Fort Macleod	ATCO and Town of Fort Macleod	September 25, 2001	9	26	W4
City of Fort Saskatchewan	ATCO and City of Fort Saskatchewan	September 29, 2004	54	22	W4
Town of Fox Creek	ATCO and Town of Fox Creek	June 4, 2001	62	19	W4
Town of Gibbons	ATCO and Town of Gibbons	September 14, 2005	55	23	W5
Village of Girouxville	ATCO and Village of Girouxville	May 12, 2004	78	22	W4
Village of Glenwood	ATCO and Village of Glenwood	June 1, 2010	5	27	W5
Summer Village of Golden Days	ATCO and Summer Village of Golden Days	May 25, 2004	47	1	W4
City of Grande Prairie	ATCO and City of Grande Prairie	February 28, 2006	71	6	W5
Village of Granum	ATCO and Village of Granum	October 12, 2004	10	26	W6
Town of Grimshaw	ATCO and Town of Grimshaw	November 12, 2001	83	23	W4
Town of Hardisty	ATCO and Town of Hardisty	September 23, 2004	43	9	W5
Town of High River	ATCO and Town of High River	October 12, 2004	19	29	W4
Village of Hill Spring	ATCO and Village of Hill Spring	March 16, 2010	4	27	W4
Village of Hines Creek	ATCO and Village of Hines Creek	July 26, 2005	84	4	W4
Town of Hinton	ATCO and Town of Hinton	February 3, 2004	51	25	W6
Village of Holden	ATCO and Village of Holden	January 17, 2005	49	16	W5
Village of Hughenden	ATCO and Village of Hughenden	July 18, 2000	41	7	W4
Village of Hussar	ATCO and Village of Hussar	January 18, 2001	24	20	W4
Village of Hythe	ATCO and Village of Hythe	February 26, 2007	73	11	W4
Town of Innisfail	ATCO and Town of Innisfail	January 2, 2007	35	28	W6
Village of Innisfree	ATCO and Village of Innisfree	August 21, 2008	51	11	W4

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FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Irma	ATCO and Village of Irma	October 12, 2004	45	9	W4
Town of Irricana	ATCO and Town of Irricana	March 15, 2010	27	26	W4
Summer Village of Itaska Beach	ATCO and Summer Village of Itaska Beach	August 25, 2004	47	1	W4
Municipality of Jasper	ATCO and Municipality of Jasper	August 1, 2006	45	1	W5
Her Majesty the Queen (Jasper National Park)	ATCO and Her Majesty the Queen (Jasper National Park)	August 1, 2006	45	1	W6
Village of Kitscoty	ATCO and Village of Kitscoty	September 6, 2005	50	3	W6
Town of Lacombe	ATCO and Town of Lacombe	May 10, 2004	40	27	W4
Town of Lamont	ATCO and Town of Lamont	April 27, 2004	55	19	W4
County of Minburn No. 027 (Hamlet of Lavoy)	ATCO and County of Minburn No. 027 (Hamlet of Lavoy)	October 19, 2009	52	13	W4
Town of Legal	ATCO and Town of Legal	September 5, 2006	57	25	W4
City of Lethbridge	ATCO and City of Lethbridge	January 5, 2002	8	21	W4
Village of Linden	ATCO and Village of Linden	June 28, 2004	30	25	W4
City of Lloydminster	ATCO and City of Lloydminster	January 26, 2008	49	1	W4
Village of Lomond	ATCO and Village of Lomond	May 16, 2005	16	20	W4
Village of Longview	ATCO and Village of Longview	December 10, 2001	18	2	W4
Village of Lougheed	ATCO and Village of Lougheed	April 18, 2002	43	11	W5
Town of Magrath	ATCO and Town of Magrath	January 12, 2010	5	22	W4
Village of Mannville	ATCO and Village of Mannville	October 26, 2004	50	9	W4
Town of Mayerthorpe	ATCO and Town of Mayerthorpe	February 14, 2005	57	8	W4
Town of McLennan	ATCO and Town of McLennan	May 9, 2005	77	19	W5
Town of Milk River	ATCO and Town of Milk River	December 13, 2004	2	16	W5
Town of Millet	ATCO and Town of Millet	August 11, 2004	48	24	W4
Village of Minburn	ATCO and Village of Minburn	May 4, 2004	50	10	W4
Lacombe County (Hamlet of Mirror)	ATCO and Lacombe County (Hamlet of Mirror)	July 13, 2006	40	22	W4
Town of Mundare	ATCO and Town of Mundare	June 1, 2004	53	16	W4
Village of Nampa	ATCO and Village of Nampa	April 20, 2004	81	21	W4
Town of Nanton	ATCO and Town of Nanton	October 3, 2005	16	28	W5
Village of Nobleford	ATCO and Village of Nobleford	September 26, 2006	10	23	W4
Town of Okotoks	ATCO and Town of Okotoks	February 1, 1912	20	29	W4
Town of Olds	ATCO and Town of Olds	April 10, 2007	32	1	W4
Village of Onoway	ATCO and Village of Onoway	April 26, 2004	55	2	W5
Town of Oyen	ATCO and Town of Oyen	January 8, 2008	27	4	W5
Town of Peace River	ATCO and Town of Peace River	September 27, 2010	83	21	W4
Town of Penhold	ATCO and Town of Penhold	June 9, 2008	36	28	W5
Town of Picture Butte	ATCO and Town of Picture Butte	August 28, 2006	10	21	W4
Summer Village of Point Alison	ATCO and Summer Village of Point Alison	October 1, 2007	53	4	W4
Town of Ponoka	ATCO and Town of Ponoka	August 10, 2004	43	25	W5
Town of Provost	ATCO and Town of Provost	September 9, 2004	39	2	W4
Town of Raymond	ATCO and Town of Raymond	August 5, 2008	6	20	W4
City of Red Deer	ATCO and City of Red Deer	March 27, 2006	38	27	W4
Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	ATCO and Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	July 6, 2006	89	9	W4

SCHEDULE A-4
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NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Town of Rimbey	ATCO and Town of Rimbey	February 24, 2004	42	2	W4
Town of Rocky Mountain House	ATCO and Town of Rocky Mountain House	December 7, 2004	37	7	W5
Village of Rockyford	ATCO and Village of Rockyford	May 11, 2005	27	22	W5
Village of Rosemary	ATCO and Village of Rosemary	January 13, 2004	21	16	W4
Village of Rycroft	ATCO and Village of Rycroft	August 12, 2004	78	5	W4
Village of Ryley	ATCO and Village of Ryley	July 26, 2004	50	17	W6
Summer Village of Seba Beach	ATCO and Summer Village of Seba Beach	May 20, 2010	53	6	W4
Town of Sexsmith	ATCO and Town of Sexsmith	April 16, 2007	73	6	W5
Summer Village of Silver Beach	ATCO and Summer Village of Silver Beach	February 28, 2005	47	28	W6
Town of Slave Lake	ATCO and Town of Slave Lake	May 6, 2008	72	5	W4
Town of Spirit River	ATCO and Town of Spirit River	June 18, 2001	78	6	W5
City of Spruce Grove	ATCO and City of Spruce Grove	June 17, 2010	52	27	W6
City of St. Albert	ATCO and City of St. Albert	March 23, 2006	54	25	W4
Village of Standard	ATCO and Village of Standard	September 8, 2010	25	22	W4
Town of Stavely	ATCO and Town of Stavely	January 26, 2010	14	27	W4
Village of Stirling	ATCO and Village of Stirling	July 16, 2009	6	19	W4
Town of Stony Plain	ATCO and Town of Stony Plain	August 9, 2004	53	27	W4
Strathcona County (Hamlet of Sherwood Park)	ATCO and Strathcona County (Hamlet of Sherwood Park)	July 7, 2010	53	22	W4
Town of Strathmore	ATCO and Town of Strathmore	February 3, 2010	24	25	W4
Town of Swan Hills	ATCO and Town of Swan Hills	August 22, 2007	66	10	W4
Town of Sylvan Lake	ATCO and Town of Sylvan Lake	January 22, 2004	39	1	W5
Town of Taber	ATCO and Town of Taber	May 11, 2010	9	16	W5
Village of Thorsby	ATCO and Village of Thorsby	December 14, 2010	49	1	W4
Town of Tofield	ATCO and Town of Tofield	April 26, 2004	50	19	W5
Town of Trochu	ATCO and Town of Trochu	February 21, 2005	33	23	W4
Town of Turner Valley	ATCO and Town of Turner Valley	February 17, 2004	20	3	W4
Town of Vauxhall	ATCO and Town of Vauxhall	November 16, 2009	13	16	W5
Town of Vegreville	ATCO and Town of Vegreville	September 27, 2004	52	14	W4
Town of Vermilion	ATCO and Town of Vermilion	April 7, 2004	51	6	W4
Village of Veteran	ATCO and Village of Veteran	August 28, 2007	35	8	W4
Town of Viking	ATCO and Town of Viking	September 20, 2004	48	12	W4
Town of Vulcan	ATCO and Town of Vulcan	January 26, 2009	16	24	W4
Village of Warburg	ATCO and Village of Warburg	July 12, 2004	48	3	W4
Town of Wembley	ATCO and Town of Wembley	June 23, 2008	71	8	W5
City of Wetaskiwin	ATCO and City of Wetaskiwin	December 5, 2007	46	24	W6
Town of Whitecourt	ATCO and Town of Whitecourt	August 20, 2007	59	12	W4

SECOND SUPPLEMENTAL AMENDING AGREEMENT

This AGREEMENT is made as of the 31st day of July, 2013.

BETWEEN:

NOVA GAS TRANSMISSION LTD., a corporation governed by the laws of the Province of Alberta
(hereinafter referred to as “**NGTL**”)

OF THE FIRST PART

- and -

ATCO GAS AND PIPELINES LTD., a corporation governed by the laws of the Province of Alberta, carrying on business under the trade name ATCO Pipelines
(hereinafter referred to as “**ATCO**”)

OF THE SECOND PART

WHEREAS NGTL and ATCO are parties to the Alberta System Integration Agreement dated April 7, 2009 as amended by the Supplemental Amending Agreement dated May 3, 2011 (the “**Agreement**”);

AND WHEREAS NGTL and ATCO are parties to the letter agreement dated June 13, 2013 (the “**Letter Agreement**”);

AND WHEREAS NGTL and ATCO have agreed to amend the Agreement in accordance with the Letter Agreement as herein provided.

ARTICLE 1 INCORPORATION, DEFINITIONS AND EFFECTIVE DATE

- 1.1. This Second Supplemental Amending Agreement and the provisions hereof are supplemental to the Agreement, and are to form part of and have the same effect as though incorporated in the Agreement.
- 1.2. Unless otherwise defined in this Second Supplemental Amending Agreement, all capitalized terms contained in this Second Supplemental Amending Agreement which are defined in the Agreement shall for all purposes hereof have the meaning given to them in the Agreement unless the context otherwise specifies or requires.
- 1.3. This Second Supplemental Amending Agreement shall be effective as of the date of this Agreement.

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ARTICLE 2 AMENDMENTS TO THE AGREEMENT

2.1. The Agreement shall be amended as follows:

- (a) by deleting Schedule A-1 in its entirety and replacing it with the following Schedule A-2 which is attached hereto.
- (b) by deleting Section 4.5(d)(i)(A) and replacing it with the following:

“In the event that the Alberta System Annual Plan identifies a requirement for Pipeline Facilities additions within the ATCO Footprint (with the exception of Major Throughput Facilities), ATCO shall be responsible for the detailed design and construction of such Pipeline Facilities at its sole risk and, subject to the terms of this Agreement, expense. The Alberta System Pipeline Facilities added within the ATCO Footprint by ATCO shall be designed and constructed in compliance with the Alberta System Annual Plan.

Should ATCO determine that such Pipeline Facilities cannot be constructed within the ATCO Footprint due to landowner or technical issues, then ATCO shall have the right to construct such Pipeline Facilities up to 100 meters from the ATCO Footprint. Should ATCO determine that such Pipeline Facilities cannot be constructed within the ATCO Footprint or within 100 meters from the ATCO Footprint due to landowner or technical issues, then ATCO shall request approval from NGTL to construct such Pipeline Facilities beyond 100 meters from the ATCO Footprint, which approval should not be unreasonably withheld by NGTL. Any such Pipeline Facilities constructed by ATCO shall become part of the ATCO Footprint.

In the event that ATCO declines to construct the Pipeline Facilities identified in the Alberta System Annual Plan, any member of the TCC Group shall be permitted to construct the required Pipeline Facilities and such Pipeline Facilities shall be owned by such member of the TCC Group.”

- (c) by deleting Section 4.5(d)(ii)(A) and replacing it with the following:

“In the event that the Alberta System Annual Plan identifies a requirement for Pipeline Facilities additions within the NGTL Footprint or that would be Major Throughput Facilities, NGTL or another Person in the TCC Group on its behalf shall be responsible for the detailed design and construction of these Pipeline Facilities at its sole risk and expense. The Pipeline Facilities added by NGTL or such other Person in the TCC Group shall be designed and constructed in compliance with the Alberta System Annual Plan.

Should NGTL determine that such Pipeline Facilities cannot be constructed within the NGTL Footprint due to landowner or technical issues, then NGTL shall have the right to construct such Pipeline Facilities up to 100 meters from the NGTL Footprint. Should NGTL determine that such Pipeline Facilities cannot be constructed within the NGTL Footprint or within 100 meters from the NGTL Footprint due to landowner or technical issues, then NGTL shall request approval from ATCO to construct such Pipeline Facilities beyond 100 meters from the

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NGTL Footprint, which approval should not be unreasonably withheld by ATCO. Any such Pipeline Facilities constructed by NGTL shall become part of the NGTL Footprint.

In the event that NGTL or such Person in the TCC Group declines to construct the Pipeline Facilities identified in the Alberta System Annual Plan, ATCO shall be permitted to construct the required Pipeline Facilities and such Pipeline Facilities shall be owned by ATCO."


**ARTICLE 3
MISCELLANEOUS**


- 3.1. This Second Supplemental Amending Agreement supercedes all negotiations, discussions and undertakings, including the Letter Agreement, between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Second Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Second Supplemental Amending Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties to this Second Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.

ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name ATCO Pipelines

Per:  V.P. Commercial Service & Design Per: _____

Per:  Patrick M. Keys Per: _____

Patrick M. Keys
Vice-President, Commercial - West
Canadian & Eastern U.S. Gas Pipelines

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NGTL Footprint, which approval should not be unreasonably withheld by ATCO. Any such Pipeline Facilities constructed by NGTL shall become part of the NGTL Footprint.

In the event that NGTL or such Person in the TCC Group declines to construct the Pipeline Facilities identified in the Alberta System Annual Plan, ATCO shall be permitted to construct the required Pipeline Facilities and such Pipeline Facilities shall be owned by ATCO.”

**ARTICLE 3
MISCELLANEOUS**

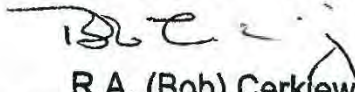
- 3.1. This Second Supplemental Amending Agreement supercedes all negotiations, discussions and undertakings, including the Letter Agreement, between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Second Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Second Supplemental Amending Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF the Parties to this Second Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.

ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name ATCO Pipelines

Per: _____

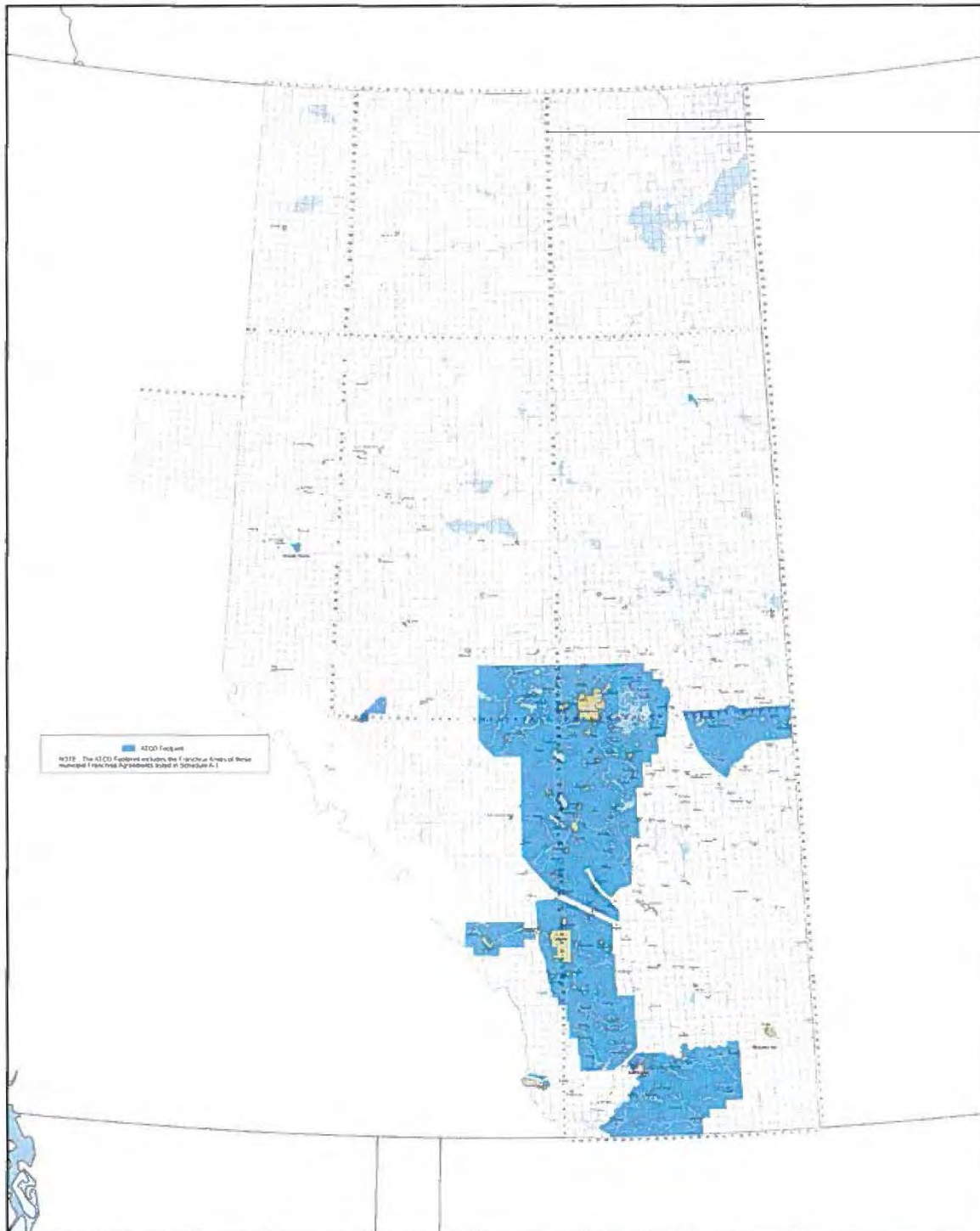
Per: 
R.A. (Bob) Cerkiewicz
Vice President, Regulatory & Controller

Per: _____

Per: 
B.G. (Brendan) Dolan
President
ATCO Pipelines

UCA-Utilities 14(a) Attachment 3

SCHEDULE A-2
To the Second Supplemental Amending Agreement dated July 31, 2013 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.



Schedule A-2
to the Second Supplemental Amending Agreement
dated July 31, 2013 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lloydminster Area	NW 31-51-13 W4M	14-33-51-8 W4M	From the east boundary of NGTL's NPS-12 Flat Lake Lateral along the north boundary of the TWP 51 to the west boundary of NGTL's NPS-12 Maughan Crossover lateral. Includes ATCO facilities within the County of Minburn No. 027 (Hamlet of Lavoy) franchise area.
		14-33-51-8 W4M	8-14-52-8 W4M	North along the west boundary of NGTL's NPS-12 Maughan Crossover lateral to the north boundary of the the ATCO pipeline right-of-way.
		8-14-52-8 W4M	NW 35-51-7 W4M	Follow the north boundary of the ATCO pipeline right-of-way to the north boundary of TWP 51. Includes ATCO pipeline, right-of-way to 11-53-9 W4M and NGTL pipeline and right-of-way to Maughan meter station site in 11-32-52-7 W4M.
		NW 35-51-7 W4M	NE Corner 51-1 W4M	Follow the north boundary of TWP 51 to the Alberta - Saskatchewan border.
		NE Corner 51-1 W4M	SE Corner 48-1 W4M	Follow the Alberta - Saskatchewan border south to the bottom of TWP 48.
		SE Corner 48-1 W4M	SW Corner 48-4 W4M	West along the south boundary of TWP 48.
		SW Corner 48-4 W4M	4-7-47-4 W4M	Follow the west boundary of RNG 4 to the south side of the Battle River.
		4-7-47-4 W4M	SE 27-43-9 W4M	West along the south side of the Battle River to the east boundary of the NGTL NPS-14 Flat Lake Lateral. Includes ATCO pipeline, right-of-way to tie-in at NGTL's Gilt Edge West meter station site in 4-23-46-6 W4M and the two ATCO pipelines, including the lands between the two pipelines, to the Town of Wainwright in 14-25-44-7 W4M.
		SE 27-43-9 W4M	NW 31-51-13 W4M	Follow the east side of the NGTL NPS-14 Flat Lake Lateral and any NGTL meter station sites overlapping the NPS-14 Flat Lake Lateral north to the north boundary of TWP 51. Includes Atco pipeline, right-of-way to 30-42-9 W4M and ATCO facilities within the Town of Hardisty; ATCO pipeline, right-of-way to 11-36-47-13 W4M and ATCO facilities within the Town of Viking franchise area; and multiple ATCO pipelines, rights-of-way to the west boundary of NGTL's NPS-16 North Lateral Extension in NW 4-49-15 W4M.

Schedule A-2
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NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Hinton Area	NE Corner 53-22 W5M	SE Corner 52-22 W5M	From the NE corner of 53-22 W5M south along the east boundary of 53-22 W5M to the SE corner of 52-22 W5M.
		SE Corner 52-22 W5M	NE Corner 51-24 W5M	From the SE corner of 52-22 W5M west along the south boundary of 52-22 W5M to the NE corner 51-24 W5M.
		NE Corner 51-24 W5M	SE Corner 51-24 W5M	From the NE corner 51-24 W5M south along the east boundary of 51-24 W5M to the SE corner 51-24 W5M.
		SE Corner 51-24 W5M	SE 2-51-26 W5M	From the SE corner 51-24 W5M west along the south boundary of 51-24 W5M to the south side of the Athabasca River in SE 2-51-26 W5M. Includes ATCO's NPS-4/6/8 pipeline, rights-of-way to the Jasper National Park border in 49-27 W5M.
		SE 2-51-26 W5M	NE 32-53-22 W5M	Follow the south side of the Athabasca River to the north boundary of NE 32-53-22 W5M. Includes ATCO's NPS-3/4 Fish Creek Lateral, right-of-way from 1-31-51-24 W5M to 2-33-51-25 W5M; and ATCO's NPS-12 Fishnet Lateral, right-of-way from 13-29-51-24 W5M to 2-33-51-25 W5M.
		NE 32-53-22 W5M	NE Corner 53-22 W5M	From the north boundary of NE 32-53-22 W5M east along the north boundary of 53-22 W5M to the NE corner of 53-22 W5M.

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Edmonton/ Red Deer Area	NW Corner 57-10 W5M	NE Corner 57-18 W4M	Follow the north boundary TWP 57 to 57-18 W4M. Excludes ATCO pipeline, right-of-way to 16-2-57-3 W5M and NGTL's NPS-10 Redwater Lateral, right-of-way to NE 29-57-21 W4M at NGTL's meter station site boundary. Includes ATCO pipeline, right-of-way to 10-35-59-25 W4M and ATCO facilities within Village of Clyde Franchise Area.
		NE Corner 57-18 W4M	NE Corner 56-18 W4M	South along the east boundary of TWP 57-18 W4M.
		NE Corner 56-18 W4M	NE Corner 56-17 W4M	East along the north boundary of TWP 56-17 W4M.
		NE Corner 56-17 W4M	NE Corner 55-17 W4M	South along the east boundary of TWP 56-17 W4M.
		NE Corner 55-17 W4M	NE Corner 55-16 W4M	East along the north boundary TWP 55-16 W4M.
		NE Corner 55-16 W4M	NE Corner 54-16 W4M	South along the east boundary of TWP 55-16 W4M.
		NE Corner 54-16 W4M	NE 36- 54-15 W4M	East along the north boundary of TWP 54-15 W4M to the west boundary of the NGTL NPS-30 Flat Lake Lateral Loop #4.
		NE 36- 54-15 W4M	1-36-54-15 W4M	South along the west boundary of NGTL's NPS-30 Flat Lake Lateral Loop #4 to RNG 14 W4M.
		1-36-54-15 W4M	1-53-15 W4M	South along the east boundary of TWP 54-15 W4M to the north boundary of NGTL's NPS-16 North Lateral Extension.
		1-53-15 W4M	4-49-15 W4M	South along the west boundary of NGTL's NPS-16 North Lateral Extension to the south boundary of TWP 49. Includes ATCO facilities within the Town of Vegreville.
		4-49-15 W4M	NE Corner 48-17 W4M	West along the south boundary of TWP 49.
		NE Corner 48-17 W4M	SE Corner 47-17 W4M	South along the east boundary of TWP 48-17 W4M.
		SE Corner 47-17 W4M	SE Corner 47-18 W4M	West along the south boundary of TWP 47.
		SE Corner 47-18 W4M	SE Corner 46-18 W4M	South along the east boundary of TWP 46-18 W4M.
		SE Corner 46-18 W4M	SE Corner 46-19 W4M	West along the south boundary of TWP 46.
		SE Corner 46-19 W4M	SE Corner 43-19 W4M	South along the east boundary of TWP 45-19 W4M.
		SE Corner 43-19 W4M	SE Corner 43-20 W4M	West along the south boundary of TWP 43.
		SE Corner 43-20 W4M	SE Corner 37-20 W4M	South along the east boundary of TWP 42-20 W4M to SE corner 37-20 W4M. Includes NGTL pipeline, right-of-way and meter stations and sites to 15-18-40-18 W4M. Excludes NGTL's Nevis-Gadsby Lateral and right-of-way to chainage 0+000.0 in 1-29-41-23 W4M, Lamerton South, Jarvis Bay meter stations and sites.
		SE Corner 37-20 W4M	SE Corner 37-21 W4M	West along the south boundary of TWP 37.

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NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

		SE Corner 37-21 W4M	SE Corner 35-21 W4M	South along the east boundary of TWP 36-21 W4M.
		SE Corner 35-21 W4M	NE 31-34-20 W4M	East along the south boundary of TWP 35 to the west boundary of NGTL's NPS-6 Hackett West Lateral in NE 31-34-20 W4M.
		NE 31-34-20 W4M	16-19-29-23 W4M	South along the west boundary of NGTL's NPS-6 Hackett West lateral, NPS-8 Ghostpine Lateral Extension and NPS-18 Ghostpine West Lateral to the north boundary of NGTL's NPS-30 Plains Mainline Loop. Excludes NGTL NPS-4 Rumsey West pipeline, right-of-way to 4-35-33-21 W4M and NPS-12 Ghostpine pipeline, right-of-way to 1-11-31-21 W4M and existing connected meter stations and sites.
		16-19-29-23 W4M	12-2-33-26 W4M	Northwest along the north boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor. Excludes NGTL's Equity Lateral/Loops, right-of-way to NE 29-31-23 W4M and NPS-8 Twining North and NPS-6 Trochu Laterals, rights-of-way to 4-31-32-23 W4M and existing connected meter stations, compressor stations and sites.
		12-2-33-26 W4M	SE 24-28-23 W4M	Southeast along the south boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor to the east boundary of 24-28-23 W4M. Excludes any existing NGTL connected meter stations and sites. Includes any existing ATCO pipelines, rights-of-way to and in the Carbon area in 16-29-22 W4M including ATCO facilities within the Village of Carbon Franchise Area.
		SE 24-28-23 W4M	10-24-26-23 W4M	South along the east boundary of TWP 28-23 W4M to the north boundary of NGTL's Central Alberta System Mainline corridor in 10-24-26-23 W4M. Excludes ATCO pipeline, right-of-way to 12-22-26-23 W4M.
		10-24-26-23 W4M	4-19-34-5 W5M	Northwest along the north boundary of the Central Alberta System Mainline corridor to the west boundary of TWP 34-5 W5M. Excludes NGTL's NPS-6 Lone Pine Creek South Lateral, Loop, rights-of-way to 5-27-29-28 W4M; NPS-10 Lone Pine Creek Lateral, right-of-way to SW 23-30-28 W4M and NPS-10 Garrington HBOG, NPS-8 Garrington East and NPS-8 Eagle Hill Laterals, rights-of-way to SW 8-34-3 W5M and existing connected meter stations and sites (Ex. Rockyford, Nightingale, Gayford, etc. meter stations). Includes NGTL's NPS-4 Netook, NPS-12 Olds Lateral and Extension pipelines, rights-of-way to NE-21-33-1 W5M and NPS-16 Carstairs lateral, right-of-way to SE 2-33-26 W4M and existing connected meter stations and sites.
		4-19-34-5 W5M	NW Corner 46-5 W5M	North along the west boundary of TWP 34-5 W5M to the NW corner of TWP 46-5 W5M. Excludes NGTL NPS-6 Codner Lateral, right-of-way to 15-31-39-5 W5M and existing NGTL connected meter stations and sites. Includes NGTL NPS-22 Westerosé Lateral, right-of-way to east boundary of NGTL's NPS-42 Western Alberta System Mainline Loop in SE 25-40-7 W5M, Lasthill Creek pipeline, right-of-way to 8-29-40-6 W5M and Leafland pipeline, right-of-way to 4-21-40-5 W5M and existing connected meter stations and sites.
		NW Corner 46-5 W5M	3-47-9 W5M	West along the north boundary of TWP 46-5 W5M to the east boundary of NGTL's NPS-30 Western Alberta System Mainline right-of-way in 3-47-9 W5M.
		3-47-9 W5M	30-48-10 W5M	Northwest along the east boundary of the NPS-30 Western Alberta System Mainline to the west boundary of TWP 48-10 W5M. Excludes existing NGTL connected meter stations, compressor stations and sites.
		30-48-10 W5M	NW Corner 57-10 W5M	North along the west boundary of TWP 49-10 W5M to the NW corner 57-10 W5M. Includes ATCO Wabamum-Hinton pipeline, right-of-way, connected meter stations, compressor stations and sites to east boundary 52-22 W5M.

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NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Calgary Area	NW 29-29-4 W5M	3-30-3 W5M	From the southeast junction of NGTL's NPS-42 Western Alberta System Mainline Loop and NPS-16 Crossfield Lateral Loop right-of-way follow the south boundary of the NPS-16 Crossfield Lateral Loop right-of-way east to the south boundary of 3-30-3 W5M. Excludes existing meter stations and sites.
		3-30-3 W5M	SE Corner 30-2 W5M	Follow the south boundary of TWP 30-2 W5M to SE corner 30-2 W5M. Excludes existing meter stations and sites.
		SE Corner 30-2 W5M	NE 12-30-2 W5M	North along the east boundary of TWP 30-2 W5M to the south boundary of NGTL's NPS-48 Central Alberta System Mainline Loop #2 right-of-way in NE 12-30-2 W5M.
		NE 12-30-2 W5M	8-1-27-24 W4M	Follow the south boundary of NGTL's Central Alberta System Mainline Loop corridor to the east boundary of TWP 27-24 W4M. Exclude NGTL pipeline, rights-of-way to 11-13-28-1 W5M and existing meter stations, compressor stations and sites. Includes ATCO pipelines, rights-of-way in TWP 30-1 W5M, TWP 28-25 W4M and TWP 27-25 W4M.
		8-1-27-24 W4M	NE Corner 17-24 W4M	From the south boundary of NGTL's Central Alberta System Mainline Loop corridor in 8-1-27-24 W4M follow the east boundary of TWP 27-24 W4M south to the NE corner of TWP 17-24 W4M.
		NE Corner 17-24 W4M	NE Corner 17-22 W4M	East along the north boundary of TWP 17-24 W4M.
		NE Corner 17-22 W4M	NE 13-11-22 W4M	South along the east boundary of TWP 17-22 W4M to the north boundary of NGTL's NPS-24 South Lateral right-of-way in NE 13-11-22 W4M. Excludes NGTL NPS-12 Vulcan lateral, right-of-way to SW 19-15-21 W4M and NPS-6 Keho Lake Lateral, right-of-way to 16-13-12-22 W4M. Excludes existing meter stations and sites, however includes Vulcan meter station and site in 16-13-15-22 W4M.

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ATCO FOOTPRINT

		NE 13-11-22 W4M	1-6-9-24 W4M	Follow the north boundary of NGTL's NPS-24 South Lateral right-of-way to the south boundary of TWP 9-24 W4M. Includes existing NGTL meter stations and sites, however excludes Keho Lake meter station and site.
		1-6-9-24 W4M	SW Corner 9-28 W4M	West along the south boundary of TWP 9-24 W4M to the southwest corner of TWP 9-28 W4M.
		SW Corner 9-28 W4M	SW Corner 13-28 W4M	North along the west boundary of TWP 9-28 W4M to the SW corner of TWP 13-28 W4M.
		SW Corner 13-28 W4M	SW Corner 13-29 W4M	West along the south boundary of TWP 13-28 W4M to the SW corner of TWP 13-29 W4M.
		SW Corner 13-29 W4M	SW Corner 15-29 W4M	North along the west boundary of TWP 13-29 W4M to SW corner of TWP 15-29 W4M.
		SW Corner 15-29 W4M	SE Corner 15-1 W5M	West along the south boundary of TWP 15-29 W4M to the southeast corner of TWP 15-1 W5M.
		SE Corner 15-1 W5M	SE Corner 17-1 W5M	North along the east boundary of TWP 15-1 W5M to the SE Corner of TWP 17-1 W5M.
		SE Corner 17-1 W5M	SW Corner 17-1 W5M	West along the south boundary of TWP 17-1 W5M to the SW corner of TWP 17-1 W5M.
		SW Corner 17-1 W5M	SW Corner 18-1 W5M	North along the west boundary of TWP 17-1 W5M to the SW corner of TWP 18-1 W5M.
		SW Corner 18-1 W5M	SE 5-18-2 W5M	West along the south boundary of TWP 18-1 W5M to the east boundary of NGTL's Western Alberta System Mainline right-of-way corridor.
		SE 5-18-2 W5M	NW 29-29-4 W5M	North along the east boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of NGTL's NPS-16 Crossfield Lateral Loop right-of-way. Excludes NGTL's NPS-6 Black Diamond lateral, right-of-way to 10-12-19-2 W5M and meter stations, compressor stations and sites

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ATCO FOOTPRINT

		NW Corner 26-12 W5M	NE Corner 26-6 W5M	East along the north boundary of TWP 26-12 W5M.
		NE Corner 26-6 W5M	NE Corner 12-26-6 W5M	South along the east boundary of TWP 26-6 W5M to the NE corner of Section 12-26-6 W5M.
		NE Corner 12-26-6 W5M	NE 9-26-4 W5M	East along the north boundary of Section 12-26-6 W5M to the west boundary of NGTL's Western Alberta System Mainline right-of-way corridor in 9-26-4 W5M.
		NE 9-26-4 W5M	SE 3-25-4 W5M	South along the west boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of TWP 25-4 W5M. Excludes NGTL pipeline, right-of-way to 13-13-25-5 W5M and existing meter stations and sites. Excludes Atco pipelines in TWP 25-4 W5M and north 1/2 of TWP 24-4 W5M.
		SE 3-25-4 W5M	SE Corner 25-6 W5M	West along the south boundary of TWP 25-4 W5M to the SE corner of TWP 25-6
		SE Corner 25-6 W5M	SE Corner 24-6 W5M	South along the east boundary of TWP 25-6 W5M to the SE corner of TWP 24-6 W5M.
		SE Corner 24-6 W5M	SE Corner 24-9 W5M	West along the south boundary of TWP 24-6 W5M to the SE corner TWP 24-9 W5M.
		SE Corner 24-9 W5M	SE Corner 23-9 W5M	South along the east boundary of TWP 24-9 W5M to the SE corner TWP 23-9 W5M.
		SE Corner 23-9 W5M	SW Corner 23-11 W5M	West along the south boundary of TWP 23-9 W5M to the SW corner TWP 23-11 W5M.
		SW Corner 23-11 W5M	SW Corner 24-11 W5M	North along the west boundary of TWP 23-11 W5M to the SW corner TWP 24-11 W5M.
		SW Corner 24-11 W5M	SW Corner 24-12 W5M	West along the south boundary of TWP 24-11 W5M to the SW corner TWP 24-12 W5M.
		SW Corner 24-12 W5M	NW Corner 26-12 W5M	North along the west boundary of TWP 24-12 W5m to the NW corner TWP 26-12 W6M.

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lethbridge Area	14-33-10-22 W4M	33-10-19 W4M	From the east junction of NGTL's NPS-24 South Lateral right-of-way and the north boundary of TWP 10-22 W4M follow the north boundary of TWP 10-22 W4M east to the Oldman River in 33-10-19 W4M. Includes ATCO facilities within the Town of Picture Butte franchise area.
		33-10-19 W4M	2-12-11 W4M	Follow the north boundary of the Oldman and South Saskatchewan Rivers to the southern boundary of TWP 12-11 W4M. Includes Atco pipeline, right-of-way to 8-7-12-13 W4M.
		2-12-11 W4M	NE Corner 11-10 W4M	East along the north boundary of TWP 11-11 W4M to the NE corner 11-10 W4M.
		NE Corner 11-10 W4M	SE Corner 5-10 W4M	Follow the east boundary of TWP 11-10 W4M south to the SE corner of 5-10 W4M.
		SE Corner 5-10 W4M	SE Corner 5-12 W4M	Follow the south boundary of TWP 5-10 W4M to the SE corner of TWP 5-12 W4M.
		SE Corner 5-12 W4M	SE Corner 4-12 W4M	Follow the east boundary of TWP 5-12 W4M south to the SE corner of TWP 4-12 W4M.
		SE Corner 4-12 W4M	SE Corner 4-14 W4M	Follow the south boundary of TWP 4-12 W4M west to the SE corner of TWP 4-14 W4M.
		SE Corner 4-14 W4M	SE Corner 3-14 W4M	Follow the east boundary of TWP 4-14 W4M south to the SE corner of 3-14 W4M.
		SE Corner 3-14 W4M	SE Corner 3-15 W4M	Follow the south boundary of TWP 3-14 W4M west to the SE corner of 3-15 W4M.
		SE Corner 3-15 W4M	SE Corner 1-15 W4M	Follow the east boundary of TWP 3-15 W4M south to the Alberta/Montana border.

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ATCO FOOTPRINT

		SE Corner 1-15 W4M	SW Corner 1-25 W4M	West along the south boundary of TWP 1-15 W4M to the SW corner of TWP 1-25 W4M.
		SW Corner 1-25 W4M	NW Corner 7-1-25 W4M	North along the west boundary of TWP 1-25 W4M to NW corner of TWP 7-1-25 W4M.
		NW Corner 7-1-25 W4M	SW 14-1-26 W4M	West along the north boundary of 7-1-25 W4M to the east boundary of NGTL's NPS-16 Waterton Montana Lateral right-of-way.
		SW 14-1-26 W4M	NE 34-1-27 W4M	Northwest along the north boundary of NGTL's NPS-16 Waterton Montana lateral right-of-way to the south side of the Lee Creek in NE 34-1-27 W4M.
		NE 34-1-27 W4M	13-33-9-23 W4M	Follow the south side of the Lee Creek, St Mary and Old Man Rivers to the south boundary of NGTL's NPS-24 South Lateral in 13-33-9-23 W4M. Excludes the NGTL pipeline, right-of-way to 2-1-7-22 W4M but includes the NGTL m/s in 2-1-7-22 W4M.
		13-33-9-23 W4M	14-33-10-22 W4M	Follow the south boundary of NGTL's NPS-24 South Lateral northeast to the north boundary of TWP 10-22 W4M. Includes all NGTL meter stations and sites.

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ATCO FOOTPRINT

OTHER AREAS	COMMENTS		
Crowsnest Pass	Franchise Area ("FA") incorporates a number of municipalities through the Crowsnest Pass. ATCO retains all their own existing facilities in the Municipality of Crowsnest Pass FA. ATCO obtains NGTL's Allison Creek Sales meter station and 0.75 km x NPS-2 lateral. NGTL retains Coleman Sales m/s (overlaps M/L ROW). NGTL retains Coleman receipt m/s (overlaps M/L ROW) and 0.81 km x NPS-8 upstream producer tie-in.		
Tap (SCADA) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (SCADA) locations identified in the Asset Swap Agreement.		
Tap (UFG) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (UFG) locations identified in the Asset Swap Agreement.		
Pikanni Indian Reserve	ATCO retains all their own existing facilities extending from the Glenwood Control Interconnect with NGTL in 16-32-5-27 W4M to 4-9-7-28 W4M including all facilities within the Pikanni Indian Reserve.		
Tsuu T'ina Indian Reserve	ATCO retains all their own existing facilities extending from the Bragg Creek Interconnect with NGTL in 6-2-24-4 W5M to 13-10-23-5 W5M including all facilities within the Tsuu T'ina Indian Reserve.		
Saddle Lake Indian Reserve	ATCO retains all their own existing facilities extending from the Saddle Lake Indian Reserve Interconnect with NGTL in 16-32-57-11 W4M to 9-34-57-12 W4M including all facilities within the Saddle Lake Indian Reserve.		
Sawridge Indian Reserve	ATCO retains all their own existing facilities extending from the Slave Lake Mitsue Control Station in 10-30-72-4 W5M to 10-31-72-5 W5M including all facilities within the Sawridge Indian Reserve and the Town of Slave Lake franchise area. NGTL to obtain the NPS-3 Overlea Interconnect (4-16-72-04 W5M) to Slave Lake Pulp (10-22-72-4 W5M) facilities.		
Grande Prairie Area	Is the City of Grande Prairie Franchise Area and includes ATCO pipelines, rights-of-way, meter stations and compressor station sites extending outside the Grande Prairie Franchise Area south to the Wapiti River Valve in 16-9-70-5 W6M, west to the Wembley Franchise Area; and north to 15-10-79-6 W6M.		

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NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Acme	ATCO and Village of Acme	March 8, 2004	29	25	W4
City of Airdrie	ATCO and City of Airdrie	September 4, 2007	27	1	W5
Alberta Beach	ATCO and Alberta Beach	August 17, 2010	54	3	W5
Village of Alix	ATCO and Village of Alix	March 21, 2006	40	22	W4
Village of Amisk	ATCO and Village of Amisk	December 14, 2010	41	8	W4
Village of Andrew	ATCO and Village of Andrew	November 26, 1999	56	16	W4
Summer Village of Argentia Beach	ATCO and Summer Village of Argentia Beach	June 24, 2010	47	28	W4
Her Majesty the Queen (Banff National Park)	ATCO and Her Majesty the Queen (Banff National Park)	June 23, 1987	25	12	W4
Town of Banff	ATCO and Town of Banff	February 13, 2006	25	12	W5
Village of Barnwell	ATCO and Village of Barnwell	January 18, 2001	9	17	W4
Village of Barons	ATCO and Village of Barons	November 17, 2009	12	23	W4
Town of Bashaw	ATCO and Town of Bashaw	March 16, 2004	42	21	W4
Town of Bassano	ATCO and Town of Bassano	June 12, 2006	21	18	W4
Town of Beaverlodge	ATCO and Town of Beaverlodge	February 27, 2006	72	10	W6
Village of Beiseker	ATCO and Village of Beiseker	May 25, 2010	28	26	W4
Town of Bentley	ATCO and Town of Bentley	March 23, 2004	40	1	W5
Village of Berwyn	ATCO and Village of Berwyn	November 15, 2004	82	24	W5
Village of Big Valley	ATCO and Village of Big Valley	June 7, 2006	35	20	W4
Village of Bittern Lake	ATCO and Village of Bittern Lake	November 15, 2000	46	22	W4
Town of Black Diamond	ATCO and Town of Black Diamond	September 7, 2005	20	2	W5
Town of Blackfalds	ATCO and Town of Blackfalds	April 13, 2004	39	27	W4
Town of Bon Accord	ATCO and Town of Bon Accord	October 27, 2004	56	24	W4
Town of Bow Island	ATCO and Town of Bow Island	September 22, 2003	10	11	W4
Town of Bowden	ATCO and Town of Bowden	February 12, 2007	34	1	W5
Village of Breton	ATCO and Village of Breton	February 17, 2004	48	4	W5
Town of Brooks	ATCO and Town of Brooks	September 7, 2004	18	15	W4
Town of Bruderheim	ATCO and Town of Bruderheim	April 7, 2004	56	20	W4
County of Forty Mile No. 8 (Hamlet of Burdett)	ATCO and County of Forty Mile No. 8 (Hamlet of Burdett)	August 26, 2009	10	12	W4
City of Calgary	ATCO and City of Calgary	December 20, 1911	24	1	W5
City of Camrose	ATCO and City of Camrose	April 26, 2004	47	20	W4
Town of Canmore	ATCO and Town of Canmore	April 6, 2004	24	10	W5
Village of Carbon	ATCO and Village of Carbon	February 8, 2010	29	23	W4
Town of Cardston	ATCO and Town of Cardston	September 27, 2007	3	25	W4
Village of Carmangay	ATCO and Village of Carmangay	February 23, 2010	13	23	W4
Village of Caroline	ATCO and Village of Caroline	September 27, 2001	36	6	W5
Town of Carstairs	ATCO and Town of Carstairs	July 9, 2007	30	1	W5
Village of Champion	ATCO and Village of Champion	February 22, 2010	15	23	W4
Village of Chipman	ATCO and Village of Chipman	September 13, 2010	54	19	W4
Town of Claresholm	ATCO and Town of Claresholm	April 28, 2005	12	27	W4
Village of Clive	ATCO and Village of Clive	April 26, 2004	40	25	W4
Village of Clyde	ATCO and Village of Clyde	March 12, 2010	60	25	W4
Town of Coaldale	ATCO and Town of Coaldale	June 12, 2000	9	20	W4
Town of Coalhurst	ATCO and Town of Coalhurst	May 18, 2010	9	22	W4
Town of Cochrane	ATCO and Town of Cochrane	August 8, 2005	26	4	W5
City of Cold Lake	ATCO and City of Cold Lake	October 25, 2005	63	2	W4
Village of Consort	ATCO and Village of Consort	April 26, 2004	35	6	W4
Town of Coronation	ATCO and Town of Coronation	July 14, 2009	36	11	W4
Village of Coutts	ATCO and Village of Coutts	August 12, 2008	1	15	W4
Village of Cowley	ATCO and Village of Cowley	August 20, 2002	7	1	W5

SCHEDULE A-2
to the Second Supplemental Amending Agreement dated July 31, 2013 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Cremona	ATCO and Village of Cremona	December 14, 2004	30	4	W5
Town of Crossfield	ATCO and Town of Crossfield	April 20, 2010	28	1	W5
Municipality of Crowsnest Pass	ATCO and Municipality of Crowsnest Pass	January 6, 2009	8	4	W5
Village of Czar	ATCO and Village of Czar	April 13, 2000	40	6	W4
Village of Delburne	ATCO and Village of Delburne	March 27, 2007	37	23	W4
Town of Didsbury	ATCO and Town of Didsbury	January 16, 2007	31	1	W5
Village of Donnelly	ATCO and Village of Donnelly	August 16, 2005	78	21	W5
Town of Drayton Valley	ATCO and Town of Drayton Valley	October 6, 2004	49	7	W5
Village of Duchess	ATCO and Village of Duchess	May 17, 2001	20	14	W4
Birch Hills County (Hamlet of Eaglesham)	ATCO and Birch Hills County (Hamlet of Eaglesham)	June 8, 2005	78	26	W5
Town of Eckville	ATCO and Town of Eckville	June 14, 2004	39	3	W5
Village of Edgerton	ATCO and Village of Edgerton	April 14, 2004	44	4	W4
City of Edmonton	ATCO and City of Edmonton	July 21, 2010	52	24	W4
Town of Edson	ATCO and Town of Edson	April 11, 2006	53	17	W5
Village of Elnora	ATCO and Village of Elnora	May 18, 2004	35	23	W4
Parkland County (Hamlet of Entwistle)	ATCO and Parkland County (Hamlet of Entwistle)	February 9, 2010	53	7	W5
Town of Fairview	ATCO and Town of Fairview	June 1, 2004	81	3	W6
Town of Falher	ATCO and Town of Falher	May 25, 2004	78	21	W5
Village of Foremost	ATCO and Village of Foremost	January 19, 2004	6	11	W4
Town of Fort Macleod	ATCO and Town of Fort Macleod	September 25, 2001	9	26	W4
City of Fort Saskatchewan	ATCO and City of Fort Saskatchewan	September 29, 2004	54	22	W4
Town of Fox Creek	ATCO and Town of Fox Creek	June 4, 2001	62	19	W5
Town of Gibbons	ATCO and Town of Gibbons	September 14, 2005	55	23	W4
Village of Girouxville	ATCO and Village of Girouxville	May 12, 2004	78	22	W5
Village of Glenwood	ATCO and Village of Glenwood	June 1, 2010	5	27	W4
Summer Village of Golden Days	ATCO and Summer Village of Golden Days	May 25, 2004	47	1	W5
City of Grande Prairie	ATCO and City of Grande Prairie	February 28, 2006	71	6	W6
Village of Granum	ATCO and Village of Granum	October 12, 2004	10	26	W4
Town of Grimshaw	ATCO and Town of Grimshaw	November 12, 2001	83	23	W5
Town of Hardisty	ATCO and Town of Hardisty	September 23, 2004	43	9	W4
Town of High River	ATCO and Town of High River	October 12, 2004	19	29	W4
Village of Hill Spring	ATCO and Village of Hill Spring	March 16, 2010	4	27	W4
Village of Hines Creek	ATCO and Village of Hines Creek	July 26, 2005	84	4	W6
Town of Hinton	ATCO and Town of Hinton	February 3, 2004	51	25	W5
Village of Holden	ATCO and Village of Holden	January 17, 2005	49	16	W4
Village of Hughenden	ATCO and Village of Hughenden	July 18, 2000	41	7	W4
Village of Hussar	ATCO and Village of Hussar	January 18, 2001	24	20	W4
Village of Hythe	ATCO and Village of Hythe	February 26, 2007	73	11	W6
Town of Innisfail	ATCO and Town of Innisfail	January 2, 2007	35	28	W4
Village of Innisfree	ATCO and Village of Innisfree	August 21, 2008	51	11	W4
Village of Irma	ATCO and Village of Irma	October 12, 2004	45	9	W4
Town of Irricana	ATCO and Town of Irricana	March 15, 2010	27	26	W4
Summer Village of Itaska Beach	ATCO and Summer Village of Itaska Beach	August 25, 2004	47	1	W5
Municipality of Jasper	ATCO and Municipality of Jasper	August 1, 2006	45	1	W6
Her Majesty the Queen (Jasper National Park)	ATCO and Her Majesty the Queen (Jasper National Park)	August 1, 2006	45	1	W6
Village of Kitscoty	ATCO and Village of Kitscoty	September 6, 2005	50	3	W4

SCHEDULE A-2
to the Second Supplemental Amending Agreement dated July 31, 2013 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Town of Lacombe	ATCO and Town of Lacombe	May 10, 2004	40	27	W4
Town of Lamont	ATCO and Town of Lamont	April 27, 2004	55	19	W4
County of Minburn No. 027 (Hamlet of Lavoy)	ATCO and County of Minburn No. 027 (Hamlet of Lavoy)	October 19, 2009	52	13	W4
Town of Legal	ATCO and Town of Legal	September 5, 2006	57	25	W4
City of Lethbridge	ATCO and City of Lethbridge	January 5, 2002	8	21	W4
Village of Linden	ATCO and Village of Linden	June 28, 2004	30	25	W4
City of Lloydminster	ATCO and City of Lloydminster	January 26, 2008	49	1	W4
Village of Lomond	ATCO and Village of Lomond	May 16, 2005	16	20	W4
Village of Longview	ATCO and Village of Longview	December 10, 2001	18	2	W5
Village of Loughheed	ATCO and Village of Loughheed	April 18, 2002	43	11	W4
Town of Magrath	ATCO and Town of Magrath	January 12, 2010	5	22	W4
Village of Mannville	ATCO and Village of Mannville	October 26, 2004	50	9	W4
Town of Mayerthorpe	ATCO and Town of Mayerthorpe	February 14, 2005	57	8	W5
Town of McLennan	ATCO and Town of McLennan	May 9, 2005	77	19	W5
Town of Milk River	ATCO and Town of Milk River	December 13, 2004	2	16	W4
Town of Millet	ATCO and Town of Millet	August 11, 2004	48	24	W4
Village of Minburn	ATCO and Village of Minburn	May 4, 2004	50	10	W4
Lacombe County (Hamlet of Mirror)	ATCO and Lacombe County (Hamlet of Mirror)	July 13, 2006	40	22	W4
Town of Mundare	ATCO and Town of Mundare	June 1, 2004	53	16	W4
Village of Nampa	ATCO and Village of Nampa	April 20, 2004	81	21	W5
Town of Nanton	ATCO and Town of Nanton	October 3, 2005	16	28	W4
Village of Nobleford	ATCO and Village of Nobleford	September 26, 2006	10	23	W4
Town of Okotoks	ATCO and Town of Okotoks	February 1, 1912	20	29	W4
Town of Olds	ATCO and Town of Olds	April 10, 2007	32	1	W5
Village of Onoway	ATCO and Village of Onoway	April 26, 2004	55	2	W5
Town of Oyen	ATCO and Town of Oyen	January 8, 2008	27	4	W4
Town of Peace River	ATCO and Town of Peace River	September 27, 2010	83	21	W5
Town of Penhold	ATCO and Town of Penhold	June 9, 2008	36	28	W4
Town of Picture Butte	ATCO and Town of Picture Butte	August 28, 2006	10	21	W4
Summer Village of Point Alison	ATCO and Summer Village of Point Alison	October 1, 2007	53	4	W5
Town of Ponoka	ATCO and Town of Ponoka	August 10, 2004	43	25	W4
Town of Provost	ATCO and Town of Provost	September 9, 2004	39	2	W4
Town of Raymond	ATCO and Town of Raymond	August 5, 2008	6	20	W4
City of Red Deer	ATCO and City of Red Deer	March 27, 2006	38	27	W4
Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	ATCO and Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	July 6, 2006	89	9	W4
Town of Rimbey	ATCO and Town of Rimbey	February 24, 2004	42	2	W5
Town of Rocky Mountain House	ATCO and Town of Rocky Mountain House	December 7, 2004	37	7	W5
Village of Rockyford	ATCO and Village of Rockyford	May 11, 2005	27	22	W4
Village of Rosemary	ATCO and Village of Rosemary	January 13, 2004	21	16	W4
Village of Rycroft	ATCO and Village of Rycroft	August 12, 2004	78	5	W6
Village of Ryley	ATCO and Village of Ryley	July 26, 2004	50	17	W4
Summer Village of Seba Beach	ATCO and Summer Village of Seba Beach	May 20, 2010	53	6	W5
Town of Sexsmith	ATCO and Town of Sexsmith	April 16, 2007	73	6	W6
Summer Village of Silver Beach	ATCO and Summer Village of Silver Beach	February 28, 2005	47	28	W4

UCA-Utilities 14(a) Attachment 3

SCHEDULE A-2
to the Second Supplemental Amending Agreement dated July 31, 2013 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Town of Slave Lake	ATCO and Town of Slave Lake	May 6, 2008	72	5	W5
Town of Spirit River	ATCO and Town of Spirit River	June 18, 2001	78	6	W6
City of Spruce Grove	ATCO and City of Spruce Grove	June 17, 2010	52	27	W4
City of St. Albert	ATCO and City of St. Albert	March 23, 2006	54	25	W4
Village of Standard	ATCO and Village of Standard	September 8, 2010	25	22	W4
Town of Stavely	ATCO and Town of Stavely	January 26, 2010	14	27	W4
Village of Stirling	ATCO and Village of Stirling	July 16, 2009	6	19	W4
Town of Stony Plain	ATCO and Town of Stony Plain	August 9, 2004	53	27	W4
Strathcona County (Hamlet of Sherwood Park)	ATCO and Strathcona County (Hamlet of Sherwood Park)	July 7, 2010	53	22	W4
Town of Strathmore	ATCO and Town of Strathmore	February 3, 2010	24	25	W4
Town of Swan Hills	ATCO and Town of Swan Hills	August 22, 2007	66	10	W5
Town of Sylvan Lake	ATCO and Town of Sylvan Lake	January 22, 2004	39	1	W5
Town of Taber	ATCO and Town of Taber	May 11, 2010	9	16	W4
Village of Thorsby	ATCO and Village of Thorsby	December 14, 2010	49	1	W5
Town of Tofield	ATCO and Town of Tofield	April 26, 2004	50	19	W4
Town of Trochu	ATCO and Town of Trochu	February 21, 2005	33	23	W4
Town of Turner Valley	ATCO and Town of Turner Valley	February 17, 2004	20	3	W5
Town of Vauxhall	ATCO and Town of Vauxhall	November 16, 2009	13	16	W4
Town of Vegreville	ATCO and Town of Vegreville	September 27, 2004	52	14	W4
Town of Vermilion	ATCO and Town of Vermilion	April 7, 2004	51	6	W4
Village of Veteran	ATCO and Village of Veteran	August 28, 2007	35	8	W4
Town of Viking	ATCO and Town of Viking	September 20, 2004	48	12	W4
Town of Vulcan	ATCO and Town of Vulcan	January 26, 2009	16	24	W4
Village of Warburg	ATCO and Village of Warburg	July 12, 2004	48	3	W5
Town of Wembley	ATCO and Town of Wembley	June 23, 2008	71	8	W6
City of Wetaskiwin	ATCO and City of Wetaskiwin	December 5, 2007	46	24	W4
Town of Whitecourt	ATCO and Town of Whitecourt	August 20, 2007	59	12	W5

THIRD SUPPLEMENTAL AMENDING AGREEMENT

This AGREEMENT is made as of the 9th day of July, 2014.

BETWEEN:

NOVA GAS TRANSMISSION LTD., a corporation governed by the laws of the Province of Alberta
(hereinafter referred to as "NGTL")

OF THE FIRST PART

- and -

ATCO GAS AND PIPELINES LTD., a corporation governed by the laws of the Province of Alberta, carrying on business under the trade name ATCO Pipelines
(hereinafter referred to as "ATCO")

OF THE SECOND PART

WHEREAS NGTL and ATCO are parties to the Alberta System Integration Agreement dated April 7, 2009 as amended by the Supplemental Amending Agreement dated May 3, 2011 and the Second Supplemental Amending Agreement dated July 31, 2013 (the "Agreement");

AND WHEREAS NGTL and ATCO are parties to the Asset Swap Agreement dated June 15, 2011 as amended by the First Amending Agreement dated July 31, 2013 (the "Asset Swap Agreement");

AND WHEREAS on June 4, 2014 pursuant to Section 2.6(b) of the Asset Swap Agreement, NGTL provided a notice of deficiency for the ATCO Transferred Assets as highlighted in the copy of Schedule A-1 Part 1(a) of the First Amending Agreement which was attached to such notice (the "House Mountain Facilities");

AND WHEREAS on June 27, 2014 pursuant to Section 2.7(a)(ii)(b) of the Asset Swap Agreement, ATCO elected to remove the House Mountain Facilities from Schedule A-1 of the Asset Swap Agreement;

AND WHEREAS NGTL and ATCO have agreed to amend the Agreement to remove the House Mountain Facilities from the NGTL Footprint.

ARTICLE 1 INCORPORATION, DEFINITIONS AND EFFECTIVE DATE

- 1.1. This Third Supplemental Amending Agreement and the provisions hereof are supplemental to the Agreement, and are to form part of and have the same effect as though incorporated in the Agreement.
- 1.2. Unless otherwise defined in this Third Supplemental Amending Agreement, all capitalized terms contained in this Third Supplemental Amending Agreement which are defined in the Agreement

shall for all purposes hereof have the meaning given to them in the Agreement unless the context otherwise specifies or requires.

- 1.3. This Third Supplemental Amending Agreement shall be effective as of the date first written above.

**ARTICLE 2
AMENDMENTS TO THE AGREEMENT**

- 2.1. The Agreement shall be amended by deleting Schedule A-2 in its entirety and replacing it with the following Schedule A-3 which is attached hereto.


**ARTICLE 3
MISCELLANEOUS**


- 3.1. This Third Supplemental Amending Agreement supercedes all negotiations, discussions and undertakings between the Parties in relation to the subject matter hereof.
- 3.2. Except as specifically amended by this Third Supplemental Amending Agreement, the Agreement heretofore executed and delivered shall remain in full force and effect and is hereby ratified and confirmed.
- 3.3. This Third Supplemental Amending Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

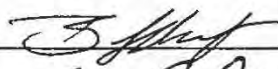
IN WITNESS WHEREOF the Parties to this Third Supplemental Amending Agreement have caused it to be executed by their duly authorized officers as of the day and year first written above.

NOVA GAS TRANSMISSION LTD.

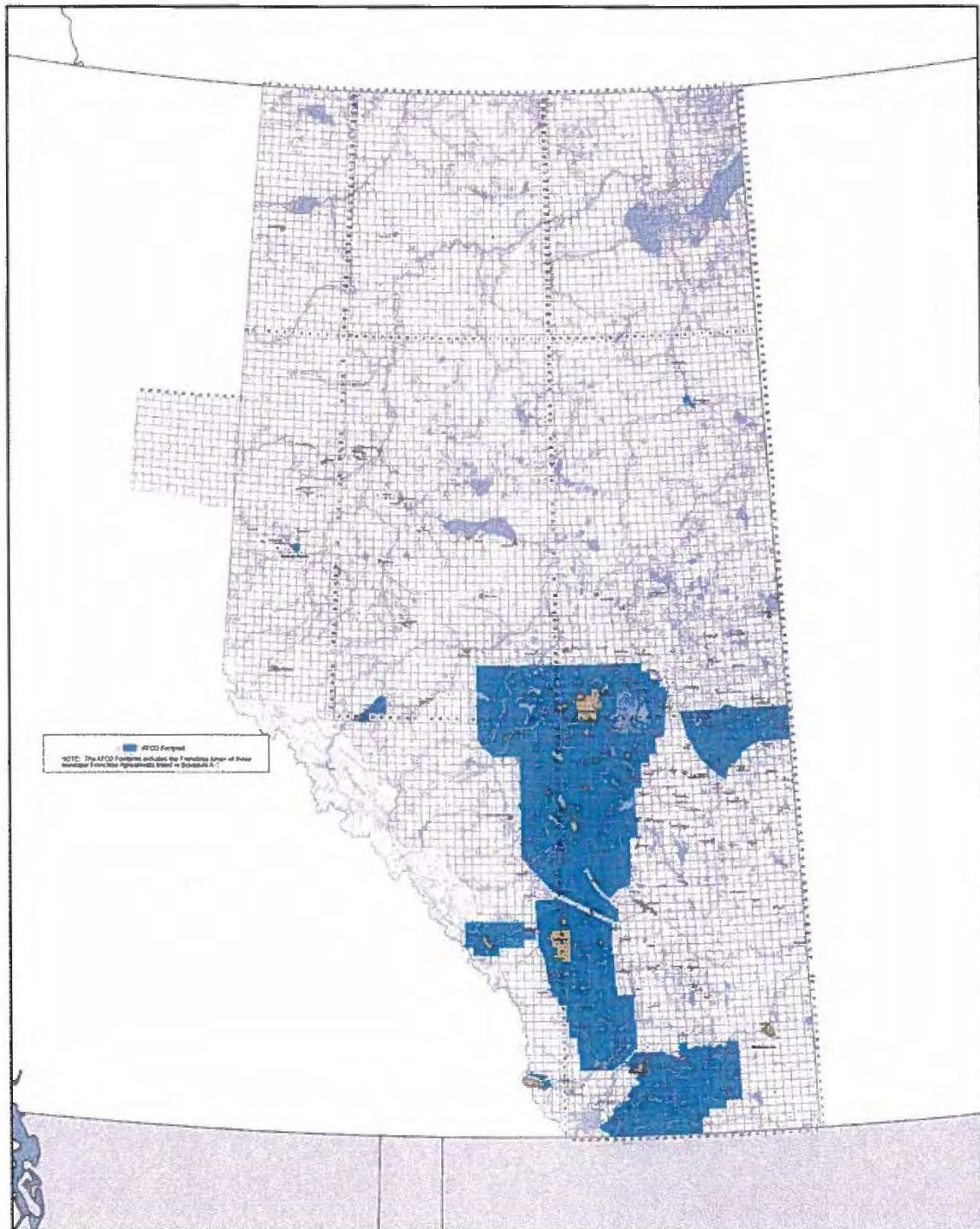
ATCO GAS AND PIPELINES LTD., carrying
on business under the trade name ATCO Pipelines


Per: Norm Bowman
Vice President
Commercial Services and Design


Per: Patrick M. Keys
Vice-President, Commercial - West
Canadian & Eastern U.S. Gas Pipelines


Per: Brian R. Hahn
President
ATCO Pipelines

SCHEDULE A-3
To the Third Supplemental Amending Agreement dated July 9, 2014 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.



Schedule A-3
to the Third Supplemental Amending Agreement
dated July 9, 2014 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lloydminster Area	NW 31-51-13 W4M	14-33-51-8 W4M	From the east boundary of NGTL's NPS-12 Flat Lake Lateral along the north boundary of the TWP 51 to the west boundary of NGTL's NPS-12 Maughan Crossover lateral. Includes ATCO facilities within the County of Minburn No. 027 (Hamlet of Lavoy) franchise area.
		14-33-51-8 W4M	8-14-52-8 W4M	North along the west boundary of NGTL's NPS-12 Maughan Crossover lateral to the north boundary of the the ATCO pipeline right-of-way.
		8-14-52-8 W4M	NW 35-51-7 W4M	Follow the north boundary of the ATCO pipeline right-of-way to the north boundary of TWP 51. Includes ATCO pipeline, right-of-way to 11-53-9 W4M and NGTL pipeline and right-of-way to Maughan meter station site in 11-32-52-7 W4M.
		NW 35-51-7 W4M	NE Corner 51-1 W4M	Follow the north boundary of TWP 51 to the Alberta - Saskatchewan border.
		NE Corner 51-1 W4M	SE Corner 48-1 W4M	Follow the Alberta - Saskatchewan border south to the bottom of TWP 48.
		SE Corner 48-1 W4M	SW Corner 48-4 W4M	West along the south boundary of TWP 48.
		SW Corner 48-4 W4M	4-7-47-4 W4M	Follow the west boundary of RNG 4 to the south side of the Battle River.
		4-7-47-4 W4M	SE 27-43-9 W4M	West along the south side of the Battle River to the east boundary of the NGTL NPS-14 Flat Lake Lateral. Includes ATCO pipeline, right-of-way to tie-in at NGTL's Gilt Edge West meter station site in 4-23-46-6 W4M and the two ATCO pipelines, including the lands between the two pipelines, to the Town of Wainwright in 14-25-44-7 W4M.
		SE 27-43-9 W4M	NW 31-51-13 W4M	Follow the east side of the NGTL NPS-14 Flat Lake Lateral and any NGTL meter station sites overlapping the NPS-14 Flat Lake Lateral north to the north boundary of TWP 51. Includes Atco pipeline, right-of-way to 30-42-9 W4M and ATCO facilities within the Town of Hardisty; ATCO pipeline, right-of-way to 11-36-47-13 W4M and ATCO facilities within the Town of Viking franchise area; and multiple ATCO pipelines, rights-of-way to the west boundary of NGTL's NPS-16 North Lateral Extension in NW 4-49-15 W4M.

Schedule A-3
to the Third Supplemental Amending Agreement
dated July 9, 2014 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Hinton Area	NE Corner 53-22 W5M	SE Corner 52-22 W5M	From the NE corner of 53-22 W5M south along the east boundary of 53-22 W5M to the SE corner of 52-22 W5M.
		SE Corner 52-22 W5M	NE Corner 51-24 W5M	From the SE corner of 52-22 W5M west along the south boundary of 52-22 W5M to the NE corner 51-24 W5M.
		NE Corner 51-24 W5M	SE Corner 51-24 W5M	From the NE corner 51-24 W5M south along the east boundary of 51-24 W5M to the SE corner 51-24 W5M.
		SE Corner 51-24 W5M	SE 2-51-26 W5M	From the SE corner 51-24 W5M west along the south boundary of 51-24 W5M to the south side of the Athabasca River in SE 2-51-26 W5M. Includes ATCO's NPS-4/6/8 pipeline, rights-of-way to the Jasper National Park border in 49-27 W5M.
		SE 2-51-26 W5M	NE 32-53-22 W5M	Follow the south side of the Athabasca River to the north boundary of NE 32-53-22 W5M. Includes ATCO's NPS-3/4 Fish Creek Lateral, right-of-way from 1-31-51-24 W5M to 2-33-51-25 W5M; and ATCO's NPS-12 Fishnet Lateral, right-of-way from 13-29-51-24 W5M to 2-33-51-25 W5M.
		NE 32-53-22 W5M	NE Corner 53-22 W5M	From the north boundary of NE 32-53-22 W5M east along the north boundary of 53-22 W5M to the NE corner of 53-22 W5M.

Schedule A-3
to the Third Supplemental Amending Agreement
dated July 9, 2014 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Edmonton/ Red Deer Area	NW Corner 57-10 W5M	NE Corner 57-18 W4M	Follow the north boundary TWP 57 to 57-18 W4M. Excludes ATCO pipeline, right-of-way to 16-2-57-3 W5M and NGTL's NPS-10 Redwater Lateral, right-of-way to NE 29-57-21 W4M at NGTL's meter station site boundary. Includes ATCO pipeline, right-of-way to 10-35-59-25 W4M and ATCO facilities within Village of Clyde Franchise Area.
		NE Corner 57-18 W4M	NE Corner 56-18 W4M	South along the east boundary of TWP 57-18 W4M.
		NE Corner 56-18 W4M	NE Corner 56-17 W4M	East along the north boundary of TWP 56-17 W4M.
		NE Corner 56-17 W4M	NE Corner 55-17 W4M	South along the east boundary of TWP 56-17 W4M.
		NE Corner 55-17 W4M	NE Corner 55-16 W4M	East along the north boundary TWP 55-16 W4M.
		NE Corner 55-16 W4M	NE Corner 54-16 W4M	South along the east boundary of TWP 55-16 W4M.
		NE Corner 54-16 W4M	NE 36- 54-15 W4M	East along the north boundary of TWP 54-15 W4M to the west boundary of the NGTL NPS-30 Flat Lake Lateral Loop #4.
		NE 36- 54-15 W4M	1-36-54-15 W4M	South along the west boundary of NGTL's NPS-30 Flat Lake Lateral Loop #4 to RNG 14 W4M.
		1-36-54-15 W4M	1-53-15 W4M	South along the east boundary of TWP 54-15 W4M to the north boundary of NGTL's NPS-16 North Lateral Extension.
		1-53-15 W4M	4-49-15 W4M	South along the west boundary of NGTL's NPS-16 North Lateral Extension to the south boundary of TWP 49. Includes ATCO facilities within the Town of Vegreville.
		4-49-15 W4M	NE Corner 48-17 W4M	West along the south boundary of TWP 49.
		NE Corner 48-17 W4M	SE Corner 47-17 W4M	South along the east boundary of TWP 48-17 W4M.
		SE Corner 47-17 W4M	SE Corner 47-18 W4M	West along the south boundary of TWP 47.
		SE Corner 47-18 W4M	SE Corner 46-18 W4M	South along the east boundary of TWP 46-18 W4M.
		SE Corner 46-18 W4M	SE Corner 46-19 W4M	West along the south boundary of TWP 46.
		SE Corner 46-19 W4M	SE Corner 43-19 W4M	South along the east boundary of TWP 45-19 W4M.
		SE Corner 43-19 W4M	SE Corner 43-20 W4M	West along the south boundary of TWP 43.
		SE Corner 43-20 W4M	SE Corner 37-20 W4M	South along the east boundary of TWP 42-20 W4M to SE corner 37-20 W4M. Includes NGTL pipeline, right-of-way and meter stations and sites to 15-18-40-18 W4M. Excludes NGTL's Nevis-Gadsby Lateral and right-of-way to chainage 0+000.0 in 1-29-41-23 W4M, Lamerton South, Jarvis Bay meter stations and sites.
		SE Corner 37-20 W4M	SE Corner 37-21 W4M	West along the south boundary of TWP 37.
		SE Corner 37-21 W4M	SE Corner 35-21 W4M	South along the east boundary of TWP 36-21 W4M.

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ATCO FOOTPRINT

		SE Corner 35-21 W4M	NE 31-34-20 W4M	East along the south boundary of TWP 35 to the west boundary of NGTL's NPS-6 Hackett West Lateral in NE 31-34-20 W4M.
		NE 31-34-20 W4M	16-19-29-23 W4M	South along the west boundary of NGTL's NPS-6 Hackett West lateral, NPS-6 Ghostpine Lateral Extension and NPS-18 Ghostpine West Lateral to the north boundary of NGTL's NPS-30 Plains Mainline Loop. Excludes NGTL NPS-4 Rumsay West pipeline, right-of-way to 4-35-33-21 W4M and NPS-12 Ghostpine pipeline, right-of-way to 1-11-31-21 W4M and existing connected meter stations and sites.
		16-19-29-23 W4M	12-2-33-26 W4M	Northwest along the north boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor. Excludes NGTL's Equity Lateral/Loops, right-of-way to NE 29-31-23 W4M and NPS-8 Twinning North and NPS-6 Trochu Laterals, rights-of-way to 4-31-32-23 W4M and existing connected meter stations, compressor stations and sites.
		12-2-33-26 W4M	SE 24-28-23 W4M	Southeast along the south boundary of the NPS-30 Plains Mainline & Loop pipeline right-of-way corridor to the east boundary of 24-28-23 W4M. Excludes any existing NGTL connected meter stations and sites. Includes any existing ATCO pipelines, rights-of-way to and in the Carbon area in 16-29-22 W4M including ATCO facilities within the Village of Carbon Franchise Area.
		SE 24-28-23 W4M	10-24-26-23 W4M	South along the east boundary of TWP 28-23 W4M to the north boundary of NGTL's Central Alberta System Mainline corridor in 10-24-26-23 W4M. Excludes ATCO pipeline, right-of-way to 12-22-26-23 W4M.
		10-24-26-23 W4M	4-19-34-5 W5M	Northwest along the north boundary of the Central Alberta System Mainline corridor to the west boundary of TWP 34-5 W5M. Excludes NGTL's NPS-6 Lone Pine Creek South Lateral, Loop, rights-of-way to 5-27-29-28 W4M; NPS-10 Lone Pine Creek Lateral, right-of-way to SW 23-30-28 W4M and NPS-10 Garrington HBOG, NPS-8 Garrington East and NPS-8 Eagle Hill Laterals, rights-of-way to SW 8-34-3 W5M and existing connected meter stations and sites (Ex. Rockyford, Nightingale, Gayford, etc. meter stations). Includes NGTL's NPS-4 Netook, NPS-12 Olds Lateral and Extension pipelines, rights-of-way to NE-21-33-1 W5M and NPS-16 Carstairs lateral, right-of-way to SE 2-33-26 W4M and existing connected meter stations and sites.
		4-19-34-5 W5M	NW Corner 46-5 W5M	North along the west boundary of TWP 34-5 W5M to the NW corner of TWP 46-5 W5M. Excludes NGTL NPS-6 Codner Lateral, right-of-way to 15-31-39-5 W5M and existing NGTL connected meter stations and sites. Includes NGTL NPS-22 Westrose Lateral, right-of-way to east boundary of NGTL's NPS-42 Western Alberta System Mainline Loop in SE 25-40-7 W5M, Lasthill Creek pipeline, right-of-way to 8-29-40-8 W5M and Leafland pipeline, right-of-way to 4-21-40-5 W5M and existing connected meter stations and sites.
		NW Corner 46-5 W5M	3-47-9 W5M	West along the north boundary of TWP 46-5 W5M to the east boundary of NGTL's NPS-30 Western Alberta System Mainline right-of-way in 3-47-9 W5M.
		3-47-9 W5M	30-48-10 W5M	Northwest along the east boundary of the NPS-30 Western Alberta System Mainline to the west boundary of TWP 48-10 W5M. Excludes existing NGTL connected meter stations, compressor stations and sites.
		30-48-10 W5M	NW Corner 57-10 W5M	North along the west boundary of TWP 49-10 W5M to the NW corner 57-10 W5M. Includes ATCO Wabamum-Hinton pipeline, right-of-way, connected meter stations, compressor stations and sites to east boundary 52-22 W5M.

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Calgary Area	NW 29-29-4 W5M	3-30-3 W5M	From the southeast junction of NGTL's NPS-42 Western Alberta System Mainline Loop and NPS-16 Crossfield Lateral Loop right-of-way follow the south boundary of the NPS-16 Crossfield Lateral Loop right-of-way east to the south boundary of 3-30-3 W5M. Excludes existing meter stations and sites.
		3-30-3 W5M	SE Corner 30-2 W5M	Follow the south boundary of TWP 30-2 W5M to SE corner 30-2 W5M. Excludes existing meter stations and sites.
		SE Corner 30-2 W5M	NE 12-30-2 W5M	North along the east boundary of TWP 30-2 W5M to the south boundary of NGTL's NPS-48 Central Alberta System Mainline Loop #2 right-of-way in NE 12-30-2 W5M.
		NE 12-30-2 W5M	8-1-27-24 W4M	Follow the south boundary of NGTL's Central Alberta System Mainline Loop corridor to the east boundary of TWP 27-24 W4M. Exclude NGTL pipeline, rights-of-way to 11-13-28-1 W5M and existing meter stations, compressor stations and sites. Includes ATCO pipelines, rights-of-way in TWP 30-1 W5M, TWP 28-25 W4M and TWP 27-25 W4M.
		8-1-27-24 W4M	NE Corner 17-24 W4M	From the south boundary of NGTL's Central Alberta System Mainline Loop corridor in 8-1-27-24 W4M follow the east boundary of TWP 27-24 W4M south to the NE corner of TWP 17-24 W4M.
		NE Corner 17-24 W4M	NE Corner 17-22 W4M	East along the north boundary of TWP 17-24 W4M.
		NE Corner 17-22 W4M	NE 13-11-22 W4M	South along the east boundary of TWP 17-22 W4M to the north boundary of NGTL's NPS-24 South Lateral right-of-way in NE 13-11-22 W4M. Excludes NGTL NPS-12 Vulcan lateral, right-of-way to SW 19-15-21 W4M and NPS-6 Keho Lake Lateral, right-of-way to 16-13-12-22 W4M. Excludes existing meter stations and sites, however includes Vulcan meter station and site in 16-13-15-22 W4M.

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ATCO FOOTPRINT

		NE 13-11-22 W4M	1-6-9-24 W4M	Follow the north boundary of NGTL's NPS-24 South Lateral right-of-way to the south boundary of TWP 9-24 W4M. Includes existing NGTL meter stations and sites, however excludes Kehoe Lake meter station and site.
		1-6-9-24 W4M	SW Corner 9-28 W4M	West along the south boundary of TWP 9-24 W4M to the southwest corner of TWP 9-28 W4M.
		SW Corner 9-28 W4M	SW Corner 13-28 W4M	North along the west boundary of TWP 9-28 W4M to the SW corner of TWP 13-28 W4M.
		SW Corner 13-28 W4M	SW Corner 13-29 W4M	West along the south boundary of TWP 13-28 W4M to the SW corner of TWP 13-29 W4M.
		SW Corner 13-29 W4M	SW Corner 15-29 W4M	North along the west boundary of TWP 13-29 W4M to SW corner of TWP 15-29 W4M.
		SW Corner 15-29 W4M	SE Corner 15-1 W5M	West along the south boundary of TWP 15-29 W4M to the southeast corner of TWP 15-1 W5M.
		SE Corner 15-1 W5M	SE Corner 17-1 W5M	North along the east boundary of TWP 15-1 W5M to the SE Corner of TWP 17-1 W5M.
		SE Corner 17-1 W5M	SW Corner 17-1 W5M	West along the south boundary of TWP 17-1 W5M to the SW corner of TWP 17-1 W5M.
		SW Corner 17-1 W5M	SW Corner 18-1 W5M	North along the west boundary of TWP 17-1 W5M to the SW corner of TWP 18-1 W5M.
		SW Corner 18-1 W5M	SE 5-18-2 W5M	West along the south boundary of TWP 18-1 W5M to the east boundary of NGTL's Western Alberta System Mainline right-of-way corridor.
		SE 5-18-2 W5M	NW 29-29-4 W5M	North along the east boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of NGTL's NPS-16 Crossfield Lateral Loop right-of-way. Excludes NGTL's NPS-6 Black Diamond lateral, right-of-way to 10-12-19-2 W5M and meter stations, compressor stations and sites

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ATCO FOOTPRINT

		NW Corner 26-12 W5M	NE Corner 26-6 W5M	East along the north boundary of TWP 26-12 W5M.
		NE Corner 26-6 W5M	NE Corner 12-26-6 W5M	South along the east boundary of TWP 26-6 W5M to the NE corner of Section 12-26-6 W5M.
		NE Corner 12-26-6 W5M	NE 9-26-4 W5M	East along the north boundary of Section 12-26-6 W5M to the west boundary of NGTL's Western Alberta System Mainline right-of-way corridor in 9-26-4 W5M.
		NE 9-26-4 W5M	SE 3-25-4 W5M	South along the west boundary of NGTL's Western Alberta System Mainline right-of-way to the south boundary of TWP 25-4 W5M. Excludes NGTL pipeline, right-of-way to 13-13-25-5 W5M and existing meter stations and sites. Excludes Atco pipelines in TWP 25-4 W5M and north 1/2 of TWP 24-4 W5M.
		SE 3-25-4 W5M	SE Corner 25-6 W5M	West along the south boundary of TWP 25-4 W5M to the SE corner of TWP 25-6
		SE Corner 25-6 W5M	SE Corner 24-6 W5M	South along the east boundary of TWP 25-6 W5M to the SE corner of TWP 24-6 W5M.
		SE Corner 24-6 W5M	SE Corner 24-9 W5M	West along the south boundary of TWP 24-6 W5M to the SE corner TWP 24-9 W5M.
		SE Corner 24-9 W5M	SE Corner 23-9 W5M	South along the east boundary of TWP 24-9 W5M to the SE corner TWP 23-9 W5M.
		SE Corner 23-9 W5M	SW Corner 23-11 W5M	West along the south boundary of TWP 23-9 W5M to the SW corner TWP 23-11 W5M.
		SW Corner 23-11 W5M	SW Corner 24-11 W5M	North along the west boundary of TWP 23-11 W5M to the SW corner TWP 24-11 W5M.
		SW Corner 24-11 W5M	SW Corner 24-12 W5M	West along the south boundary of TWP 24-11 W5M to the SW corner TWP 24-12 W5M.
		SW Corner 24-12 W5M	NW Corner 26-12 W5M	North along the west boundary of TWP 24-12 W5m to the NW corner TWP 26-12 W6M.

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ATCO FOOTPRINT

	ATCO FOOTPRINT BOUNDARY DESCRIPTION	FROM	TO	COMMENTS
	Lethbridge Area	14-33-10-22 W4M	33-10-19 W4M	From the east junction of NGTL's NPS-24 South Lateral right-of-way and the north boundary of TWP 10-22 W4M follow the north boundary of TWP 10-22 W4M east to the Oldman River in 33-10-19 W4M. Includes ATCO facilities within the Town of Picture Butte franchise area.
		33-10-19 W4M	2-12-11 W4M	Follow the north boundary of the Oldman and South Saskatchewan Rivers to the southern boundary of TWP 12-11 W4M. Includes Atco pipeline, right-of-way to 8-7-12-13 W4M.
		2-12-11 W4M	NE Corner 11-10 W4M	East along the north boundary of TWP 11-11 W4M to the NE corner 11-10 W4M.
		NE Corner 11-10 W4M	SE Corner 5-10 W4M	Follow the east boundary of TWP 11-10 W4M south to the SE corner of 5-10 W4M.
		SE Corner 5-10 W4M	SE Corner 5-12 W4M	Follow the south boundary of TWP 5-10 W4M to the SE corner of TWP 5-12 W4M.
		SE Corner 5-12 W4M	SE Corner 4-12 W4M	Follow the east boundary of TWP 5-12 W4M south to the SE corner of TWP 4-12 W4M.
		SE Corner 4-12 W4M	SE Corner 4-14 W4M	Follow the south boundary of TWP 4-12 W4M west to the SE corner of TWP 4-14 W4M.
		SE Corner 4-14 W4M	SE Corner 3-14 W4M	Follow the east boundary of TWP 4-14 W4M south to the SE corner of 3-14 W4M.
		SE Corner 3-14 W4M	SE Corner 3-15 W4M	Follow the south boundary of TWP 3-14 W4M west to the SE corner of 3-15 W4M.
		SE Corner 3-15 W4M	SE Corner 1-15 W4M	Follow the east boundary of TWP 3-15 W4M south to the Alberta/Montana border.

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		SE Corner 1-15 W4M	SW Corner 1-25 W4M	West along the south boundary of TWP 1-15 W4M to the SW corner of TWP 1-25 W4M.
		SW Corner 1-25 W4M	NW Corner 7-1-25 W4M	North along the west boundary of TWP 1-25 W4M to NW corner of TWP 7-1-25 W4M.
		NW Corner 7-1-25 W4M	SW 14-1-26 W4M	West along the north boundary of 7-1-25 W4M to the east boundary of NGTL's NPS-16 Waterton Montana Lateral right-of-way.
		SW 14-1-26 W4M	NE 34-1-27 W4M	Northwest along the north boundary of NGTL's NPS-16 Waterton Montana lateral right-of-way to the south side of the Lee Creek in NE 34-1-27 W4M.
		NE 34-1-27 W4M	13-33-9-23 W4M	Follow the south side of the Lee Creek, St Mary and Old Man Rivers to the south boundary of NGTL's NPS-24 South Lateral in 13-33-9-23 W4M. Excludes the NGTL pipeline, right-of-way to 2-1-7-22 W4M but includes the NGTL m/s in 2-1-7-22 W4M.
		13-33-9-23 W4M	14-33-10-22 W4M	Follow the south boundary of NGTL's NPS-24 South Lateral northeast to the north boundary of TWP 10-22 W4M. Includes all NGTL meter stations and sites.

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ATCO FOOTPRINT

OTHER AREAS	COMMENTS		
Crowsnest Pass	Franchise Area ("FA") incorporates a number of municipalities through the Crowsnest Pass. ATCO retains all their own existing facilities in the Municipality of Crowsnest Pass FA. ATCO obtains NGTL's Allison Creek Sales meter station and 0.75 km x NPS-2 lateral. NGTL retains Coleman Sales m/s (overlaps M/L ROW). NGTL retains Coleman receipt m/s (overlaps M/L ROW) and 0.81 km x NPS-8 upstream producer tie-in.		
Tap (SCADA) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (SCADA) locations identified in the Asset Swap Agreement.		
Tap (UFG) Locations	ATCO to retain facilities within NGTL's Footprint downstream of the isolation valve(s) Tap (UFG) locations identified in the Asset Swap Agreement.		
Pikanni Indian Reserve	ATCO retains all their own existing facilities extending from the Glenwood Control Interconnect with NGTL in 16-32-5-27 W4M to 4-9-7-28 W4M including all facilities within the Pikanni Indian Reserve.		
Tsuu T'ina Indian Reserve	ATCO retains all their own existing facilities extending from the Bragg Creek Interconnect with NGTL in 6-2-24-4 W5M to 13-10-23-5 W5M including all facilities within the Tsuu T'ina Indian Reserve.		
Saddle Lake Indian Reserve	ATCO retains all their own existing facilities extending from the Saddle Lake Indian Reserve Interconnect with NGTL in 16-32-57-11 W4M to 9-34-57-12 W4M including all facilities within the Saddle Lake Indian Reserve.		
Sawridge Indian Reserve	ATCO retains all their own existing facilities extending from the Slave Lake Mitsue Control Station in 10-30-72-4 W5M to 10-31-72-5 W5M including all facilities within the Sawridge Indian Reserve and the Town of Slave Lake franchise area. NGTL to obtain the NPS-3 Overlea Interconnect (4-16-72-04 W5M) to Slave Lake Pulp (10-22-72-4 W5M) facilities.		
Grande Prairie Area	Is the City of Grande Prairie Franchise Area and includes ATCO pipelines, rights-of-way, meter stations and compressor station sites extending outside the Grande Prairie Franchise Area south to the Wapiti River Valve in 16-9-70-5 W6M, west to the Wembley Franchise Area; and north to 15-10-79-6 W6M.		
House Mountain Area	ATCO to retain the House Mountain pipeline, Miscible Flood Delivery Lateral, Swan Hills Miscible Injection Delivery meter station, House Mountain Receipt and Inverness River Receipt meter stations and associated rights-of-way within NGTL's Footprint from 15-25-64-11 W5M to 1-8-70-10 W5M.		

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FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Acme	ATCO and Village of Acme	March 8, 2004	29	25	W4
City of Airdrie	ATCO and City of Airdrie	September 4, 2007	27	1	W5
Alberta Beach	ATCO and Alberta Beach	August 17, 2010	54	3	W5
Village of Alix	ATCO and Village of Alix	March 21, 2006	40	22	W4
Village of Amisk	ATCO and Village of Amisk	December 14, 2010	41	8	W4
Village of Andrew	ATCO and Village of Andrew	November 26, 1999	56	16	W4
Summer Village of Argentia Beach	ATCO and Summer Village of Argentia Beach	June 24, 2010	47	28	W4
Her Majesty the Queen (Banff National Park)	ATCO and Her Majesty the Queen (Banff National Park)	June 23, 1987	25	12	W4
Town of Banff	ATCO and Town of Banff	February 13, 2006	25	12	W5
Village of Barnwell	ATCO and Village of Barnwell	January 18, 2001	9	17	W4
Village of Barons	ATCO and Village of Barons	November 17, 2009	12	23	W4
Town of Bashaw	ATCO and Town of Bashaw	March 16, 2004	42	21	W4
Town of Bassano	ATCO and Town of Bassano	June 12, 2006	21	18	W4
Town of Beaverlodge	ATCO and Town of Beaverlodge	February 27, 2006	72	10	W6
Village of Beiseker	ATCO and Village of Beiseker	May 25, 2010	28	26	W4
Town of Bentley	ATCO and Town of Bentley	March 23, 2004	40	1	W5
Village of Berwyn	ATCO and Village of Berwyn	November 15, 2004	82	24	W5
Village of Big Valley	ATCO and Village of Big Valley	June 7, 2006	35	20	W4
Village of Bittern Lake	ATCO and Village of Bittern Lake	November 15, 2000	46	22	W4
Town of Black Diamond	ATCO and Town of Black Diamond	September 7, 2005	20	2	W5
Town of Blackfalds	ATCO and Town of Blackfalds	April 13, 2004	39	27	W4
Town of Bon Accord	ATCO and Town of Bon Accord	October 27, 2004	56	24	W4
Town of Bow Island	ATCO and Town of Bow Island	September 22, 2003	10	11	W4
Town of Bowden	ATCO and Town of Bowden	February 12, 2007	34	1	W5
Village of Breton	ATCO and Village of Breton	February 17, 2004	48	4	W5
Town of Brooks	ATCO and Town of Brooks	September 7, 2004	18	15	W4
Town of Bruderheim	ATCO and Town of Bruderheim	April 7, 2004	56	20	W4
County of Forty Mile No. 8 (Hamlet of Burdett)	ATCO and County of Forty Mile No. 8 (Hamlet of Burdett)	August 26, 2009	10	12	W4
City of Calgary	ATCO and City of Calgary	December 20, 1911	24	1	W5
City of Camrose	ATCO and City of Camrose	April 26, 2004	47	20	W4
Town of Canmore	ATCO and Town of Canmore	April 6, 2004	24	10	W5
Village of Carbon	ATCO and Village of Carbon	February 8, 2010	29	23	W4
Town of Cardston	ATCO and Town of Cardston	September 27, 2007	3	25	W4
Village of Carmangay	ATCO and Village of Carmangay	February 23, 2010	13	23	W4
Village of Caroline	ATCO and Village of Caroline	September 27, 2001	36	6	W5
Town of Carstairs	ATCO and Town of Carstairs	July 9, 2007	30	1	W5
Village of Champion	ATCO and Village of Champion	February 22, 2010	15	23	W4
Village of Chipman	ATCO and Village of Chipman	September 13, 2010	54	19	W4
Town of Claresholm	ATCO and Town of Claresholm	April 28, 2005	12	27	W4
Village of Clive	ATCO and Village of Clive	April 26, 2004	40	25	W4
Village of Clyde	ATCO and Village of Clyde	March 12, 2010	60	25	W4
Town of Coaldale	ATCO and Town of Coaldale	June 12, 2000	9	20	W4
Town of Coalhurst	ATCO and Town of Coalhurst	May 18, 2010	9	22	W4
Town of Cochrane	ATCO and Town of Cochrane	August 8, 2005	26	4	W5
City of Cold Lake	ATCO and City of Cold Lake	October 25, 2005	63	2	W4
Village of Consort	ATCO and Village of Consort	April 26, 2004	35	6	W4
Town of Coronation	ATCO and Town of Coronation	July 14, 2009	36	11	W4
Village of Coutts	ATCO and Village of Coutts	August 12, 2008	1	15	W4

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FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Village of Cowley	ATCO and Village of Cowley	August 20, 2002	7	1	W5
Village of Cremona	ATCO and Village of Cremona	December 14, 2004	30	4	W5
Town of Crossfield	ATCO and Town of Crossfield	April 20, 2010	28	1	W5
Municipality of Crowsnest Pass	ATCO and Municipality of Crowsnest Pass	January 6, 2009	8	4	W5
Village of Czar	ATCO and Village of Czar	April 13, 2000	40	6	W4
Village of Delburne	ATCO and Village of Delburne	March 27, 2007	37	23	W4
Town of Didsbury	ATCO and Town of Didsbury	January 16, 2007	31	1	W5
Village of Donnelly	ATCO and Village of Donnelly	August 16, 2005	78	21	W5
Town of Drayton Valley	ATCO and Town of Drayton Valley	October 6, 2004	49	7	W5
Village of Duchess	ATCO and Village of Duchess	May 17, 2001	20	14	W4
Birch Hills County (Hamlet of Eaglesham)	ATCO and Birch Hills County (Hamlet of Eaglesham)	June 8, 2005	78	26	W5
Town of Eckville	ATCO and Town of Eckville	June 14, 2004	39	3	W5
Village of Edgerton	ATCO and Village of Edgerton	April 14, 2004	44	4	W4
City of Edmonton	ATCO and City of Edmonton	July 21, 2010	52	24	W4
Town of Edson	ATCO and Town of Edson	April 11, 2006	53	17	W5
Village of Elnora	ATCO and Village of Elnora	May 18, 2004	35	23	W4
Parkland County (Hamlet of Entwistle)	ATCO and Parkland County (Hamlet of Entwistle)	February 9, 2010	53	7	W5
Town of Fairview	ATCO and Town of Fairview	June 1, 2004	81	3	W6
Town of Falher	ATCO and Town of Falher	May 25, 2004	78	21	W5
Village of Foremost	ATCO and Village of Foremost	January 19, 2004	6	11	W4
Town of Fort Macleod	ATCO and Town of Fort Macleod	September 25, 2001	9	26	W4
City of Fort Saskatchewan	ATCO and City of Fort Saskatchewan	September 29, 2004	54	22	W4
Town of Fox Creek	ATCO and Town of Fox Creek	June 4, 2001	62	19	W5
Town of Gibbons	ATCO and Town of Gibbons	September 14, 2005	55	23	W4
Village of Girouxville	ATCO and Village of Girouxville	May 12, 2004	78	22	W5
Village of Glenwood	ATCO and Village of Glenwood	June 1, 2010	5	27	W4
Summer Village of Golden Days	ATCO and Summer Village of Golden Days	May 25, 2004	47	1	W5
City of Grande Prairie	ATCO and City of Grande Prairie	February 28, 2006	71	6	W6
Village of Granum	ATCO and Village of Granum	October 12, 2004	10	26	W4
Town of Grimshaw	ATCO and Town of Grimshaw	November 12, 2001	83	23	W5
Town of Hardisty	ATCO and Town of Hardisty	September 23, 2004	43	9	W4
Town of High River	ATCO and Town of High River	October 12, 2004	19	29	W4
Village of Hill Spring	ATCO and Village of Hill Spring	March 16, 2010	4	27	W4
Village of Hines Creek	ATCO and Village of Hines Creek	July 26, 2005	84	4	W6
Town of Hinton	ATCO and Town of Hinton	February 3, 2004	51	25	W5
Village of Holden	ATCO and Village of Holden	January 17, 2005	49	16	W4
Village of Hughenden	ATCO and Village of Hughenden	July 18, 2000	41	7	W4
Village of Hussar	ATCO and Village of Hussar	January 18, 2001	24	20	W4
Village of Hythe	ATCO and Village of Hythe	February 26, 2007	73	11	W6
Town of Innisfail	ATCO and Town of Innisfail	January 2, 2007	35	28	W4
Village of Innisfree	ATCO and Village of Innisfree	August 21, 2008	51	11	W4
Village of Irma	ATCO and Village of Irma	October 12, 2004	45	9	W4
Town of Irricana	ATCO and Town of Irricana	March 15, 2010	27	26	W4
Summer Village of Itaska Beach	ATCO and Summer Village of Itaska Beach	August 25, 2004	47	1	W5
Municipality of Jasper	ATCO and Municipality of Jasper	August 1, 2006	45	1	W6

SCHEDULE A-3
to the Third Supplemental Amending Agreement dated July 9, 2014 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Her Majesty the Queen (Jasper National Park)	ATCO and Her Majesty the Queen (Jasper National Park)	August 1, 2006	45	1	W6
Village of Kitscoty	ATCO and Village of Kitscoty	September 6, 2005	50	3	W4
Town of Lacombe	ATCO and Town of Lacombe	May 10, 2004	40	27	W4
Town of Lamont	ATCO and Town of Lamont	April 27, 2004	55	19	W4
County of Minburn No. 027 (Hamlet of Lavoy)	ATCO and County of Minburn No. 027 (Hamlet of Lavoy)	October 19, 2009	52	13	W4
Town of Legal	ATCO and Town of Legal	September 5, 2006	57	25	W4
City of Lethbridge	ATCO and City of Lethbridge	January 5, 2002	8	21	W4
Village of Linden	ATCO and Village of Linden	June 28, 2004	30	25	W4
City of Lloydminster	ATCO and City of Lloydminster	January 26, 2008	49	1	W4
Village of Lomond	ATCO and Village of Lomond	May 16, 2005	16	20	W4
Village of Longview	ATCO and Village of Longview	December 10, 2001	18	2	W5
Village of Loughheed	ATCO and Village of Loughheed	April 18, 2002	43	11	W4
Town of Magrath	ATCO and Town of Magrath	January 12, 2010	5	22	W4
Village of Mannville	ATCO and Village of Mannville	October 26, 2004	50	9	W4
Town of Mayerthorpe	ATCO and Town of Mayerthorpe	February 14, 2005	57	8	W5
Town of McLennan	ATCO and Town of McLennan	May 9, 2005	77	19	W5
Town of Milk River	ATCO and Town of Milk River	December 13, 2004	2	16	W4
Town of Millet	ATCO and Town of Millet	August 11, 2004	48	24	W4
Village of Minburn	ATCO and Village of Minburn	May 4, 2004	50	10	W4
Lacombe County (Hamlet of Mirror)	ATCO and Lacombe County (Hamlet of Mirror)	July 13, 2006	40	22	W4
Town of Mundare	ATCO and Town of Mundare	June 1, 2004	53	16	W4
Village of Nampa	ATCO and Village of Nampa	April 20, 2004	81	21	W5
Town of Nanton	ATCO and Town of Nanton	October 3, 2005	16	28	W4
Village of Nobleford	ATCO and Village of Nobleford	September 26, 2006	10	23	W4
Town of Okotoks	ATCO and Town of Okotoks	February 1, 1912	20	29	W4
Town of Olds	ATCO and Town of Olds	April 10, 2007	32	1	W5
Village of Onoway	ATCO and Village of Onoway	April 26, 2004	55	2	W5
Town of Oyen	ATCO and Town of Oyen	January 8, 2008	27	4	W4
Town of Peace River	ATCO and Town of Peace River	September 27, 2010	83	21	W5
Town of Penhold	ATCO and Town of Penhold	June 9, 2008	36	28	W4
Town of Picture Butte	ATCO and Town of Picture Butte	August 28, 2006	10	21	W4
Summer Village of Point Alison	ATCO and Summer Village of Point Alison	October 1, 2007	53	4	W5
Town of Ponoka	ATCO and Town of Ponoka	August 10, 2004	43	25	W4
Town of Provost	ATCO and Town of Provost	September 9, 2004	39	2	W4
Town of Raymond	ATCO and Town of Raymond	August 5, 2008	6	20	W4
City of Red Deer	ATCO and City of Red Deer	March 27, 2006	38	27	W4
Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	ATCO and Regional Municipality of Wood Buffalo (Urban Area of Fort McMurray)	July 6, 2006	89	9	W4
Town of Rimbey	ATCO and Town of Rimbey	February 24, 2004	42	2	W5
Town of Rocky Mountain House	ATCO and Town of Rocky Mountain House	December 7, 2004	37	7	W5
Village of Rockyford	ATCO and Village of Rockyford	May 11, 2005	27	22	W4
Village of Rosemary	ATCO and Village of Rosemary	January 13, 2004	21	16	W4
Village of Rycroft	ATCO and Village of Rycroft	August 12, 2004	78	5	W6
Village of Ryley	ATCO and Village of Ryley	July 26, 2004	50	17	W4

SCHEDULE A-3
to the Third Supplemental Amending Agreement dated July 9, 2014 between
NOVA GAS TRANSMISSION LTD. and ATCO GAS AND PIPELINES LTD.

FRANCHISE AGREEMENTS

Municipality Name	Franchise Agreement		Illustrative Location		
	Between	Dated	TWP	RNG	MRD
Summer Village of Seba Beach	ATCO and Summer Village of Seba Beach	May 20, 2010	53	6	W5
Town of Sexsmith	ATCO and Town of Sexsmith	April 16, 2007	73	6	W6
Summer Village of Silver Beach	ATCO and Summer Village of Silver Beach	February 28, 2005	47	28	W4
Town of Slave Lake	ATCO and Town of Slave Lake	May 6, 2008	72	5	W5
Town of Spirit River	ATCO and Town of Spirit River	June 18, 2001	78	6	W6
City of Spruce Grove	ATCO and City of Spruce Grove	June 17, 2010	52	27	W4
City of St. Albert	ATCO and City of St. Albert	March 23, 2006	54	25	W4
Village of Standard	ATCO and Village of Standard	September 8, 2010	25	22	W4
Town of Stavely	ATCO and Town of Stavely	January 26, 2010	14	27	W4
Village of Stirling	ATCO and Village of Stirling	July 16, 2009	6	19	W4
Town of Stony Plain	ATCO and Town of Stony Plain	August 9, 2004	53	27	W4
Strathcona County (Hamlet of Sherwood Park)	ATCO and Strathcona County (Hamlet of Sherwood Park)	July 7, 2010	53	22	W4
Town of Strathmore	ATCO and Town of Strathmore	February 3, 2010	24	25	W4
Town of Swan Hills	ATCO and Town of Swan Hills	August 22, 2007	66	10	W5
Town of Sylvan Lake	ATCO and Town of Sylvan Lake	January 22, 2004	39	1	W5
Town of Taber	ATCO and Town of Taber	May 11, 2010	9	16	W4
Village of Thorsby	ATCO and Village of Thorsby	December 14, 2010	49	1	W5
Town of Tofield	ATCO and Town of Tofield	April 26, 2004	50	19	W4
Town of Trochu	ATCO and Town of Trochu	February 21, 2005	33	23	W4
Town of Turner Valley	ATCO and Town of Turner Valley	February 17, 2004	20	3	W5
Town of Vauxhall	ATCO and Town of Vauxhall	November 16, 2009	13	16	W4
Town of Vegreville	ATCO and Town of Vegreville	September 27, 2004	52	14	W4
Town of Vermilion	ATCO and Town of Vermilion	April 7, 2004	51	6	W4
Village of Veteran	ATCO and Village of Veteran	August 28, 2007	35	8	W4
Town of Viking	ATCO and Town of Viking	September 20, 2004	48	12	W4
Town of Vulcan	ATCO and Town of Vulcan	January 26, 2009	16	24	W4
Village of Warburg	ATCO and Village of Warburg	July 12, 2004	48	3	W5
Town of Wembley	ATCO and Town of Wembley	June 23, 2008	71	8	W6
City of Wetaskiwin	ATCO and City of Wetaskiwin	December 5, 2007	46	24	W4
Town of Whitecourt	ATCO and Town of Whitecourt	August 20, 2007	59	12	W5

CAPACITY MANAGEMENT DECISION SUMMARY

ATCO Pipelines Yellowhead Mainline

Decision Summary



Project name:		ATCO Pipelines Yellowhead Mainline		
Capacity Management project status after funding:		Proposal Phase		
Decision summary type:		Phase Funding		
Initial distribution date:		June 6, 2024		
To:		Chris MacDonald, ATCO Pipelines Planning		
From:		Jane Maynard, Engineer, System Design West		
Commercial	Requested incremental funds:	\$22,500,000		
	Previously authorized funds, Item ID, authorized date:	\$2,500,000	112842507	May 25, 2023
	Total authorized funds (inclusive of this decision, excludes AFUDC):	\$25,000,000		
	Authorized spending limit level required:	Level 8 - \$50,000,000		
	Board of directors authorized amount:	N/A		
Capacity Management	Project type:	Loop/Expansion		
	Line of business, province, footprint:	NGTL	AB	ATCO
	SAP project numbers (PPM item # / PS ID #):	N/A		N/A
	Required in-service date:	November 1, 2027		
Projects	Total estimated project cost and cost estimate date:	\$2,100,000,000 ¹		December 1, 2023
	Cost estimate class and accuracy range:	BER 50 (+100% / -50%)		
	Regulatory application type and estimated filing date:	AUC		August 2024
	Targeted in-service date:	November 1, 2027		

1. Scope of Project will be finalized based on signed contractual commitments in conjunction with the NGTL forecast. The \$2,100 MM estimate corresponds to a NPS 36 pipeline size with compression.

PROJECT DESCRIPTION:

The ATCO Pipeline (AP) Yellowhead Mainline Project (See Appendix A – Project Map) scope consists of:

CAPACITY MANAGEMENT DECISION SUMMARY

ATCO Pipelines Yellowhead Mainline

- Installation of approximately 215 km of 914 mm pipeline from NGTL's January Creek Transmission (NE-27-54-14-W5M) to ATCO's Inland System (between SW-21-53-23-W4M and NW-27-55-21-W4M).
- Installation of a new 5-20 MW compressor (Yellowhead Mainline Compressor Site; the final site will be based on final route selection.
- Installation of Yellowhead Mainline East Control, including pressure regulation and flow measurement equipment, location to be determined with final route selection.
- Installation of Yellowhead Mainline West Control, including pressure regulating and flow measurement equipment (NE-27-54-14- W5M)

ATCO updated the proposed scope set out above from the May 2023 BER based on an initial evaluation of system requirements and initial feasible routing alternatives identified through desktop analysis only. The scope above is subject to change as project planning and preliminary assessments are completed by both ATCO and NGTL, as applicable. This includes route selection, which will be based on consultation and other criteria following ATCO's review of project options.

DECISION PROPOSED:

To authorize ATCO Pipelines to proceed with the proposal phase for the Yellowhead Mainline Project. NGTL and ATCO have agreed to authorize \$22,500,000 through Q3 2024, for a total ATCO Pipelines estimated and ATCO Pipelines funded expenditure of up to \$25,000,000. The total AP estimated cost of the Project is \$2,100,000,000, however the scope will be finalized based on signed contractual commitments in conjunction with the NGTL forecast. The estimate has been reviewed by NGTL and is not unreasonable based on available information used to determine the current scope. If funding incremental to the \$25,000,000 is required, either for the Proposal Phase authorized by this Decision Summary, or for further work on the Yellowhead Mainline Project, then ATCO Pipelines will notify NGTL in advance and request authorization from NGTL. NGTL will evaluate the request, and if determined not unreasonable by NGTL, an amended Decision Summary will be issued.

Previously authorized funds and Item ID:	\$2,500,000	112842507
Requested incremental funds:	\$22,500,000	
Total authorized funds (inclusive of this decision):	\$25,000,000	

All funding requirements shown are in Canadian dollars.

CAPACITY MANAGEMENT DECISION SUMMARY

ATCO Pipelines Yellowhead Mainline

DELIVERABLES:

The increased funds will be used to continue routing assessment, complete initial project consultations, including but not limited to, landowner, governmental, and Indigenous consultation, on identified routes, begin field studies including environmental, geotechnical, hydrological, and survey, and advance initial engineering design work. Completion of these activities in summer 2024 is required to maintain the current project schedule.

Completion of the feasibility study will include a Class 4 (+50%/-30%) project cost estimate, which will be provided to NGTL to support total project authorization.

This incremental funding request is required to continue work on the Yellowhead Mainline project, as noted above, through Q3 2024, to maintain the requested schedule. This expenditure request does not limit ATCO's ability to request additional expenditure authorization if required to progress the Yellowhead Mainline between now and Q3 2024 but is based on ATCO's estimate of the costs required at this time.

REASONS FOR THE DECISION:

1. As per the Integration Agreement between NGTL Limited Partnership, by its general partner NGTL GP Ltd. (successor in interest to NOVA Gas Transmission Ltd.) and ATCO Gas and Pipelines Ltd., NGTL is responsible for determining the requirements for any new pipeline facilities (other than minor modifications) using a single system design philosophy based on long term annual gas supply and demand outlook.
2. Without the proposed facility, NGTL/ATCO will be unable to meet contractual commitments.
3. The proposed facility is required to be in-service for November 1, 2027, to align contractual commitments.
4. The Proposal Phase funding is required to progress project activities and maintain the in-service date.

BACKGROUND:

The Alberta Integrated System requires expansion to accommodate forecasted and contracted demand growth throughout the system, which includes significant growth in the demand in Greater Edmonton Area.

To keep up with growing supply and demand, as well as shifts in supply and demand on the integrated system, the Yellowhead Mainline is proposed to bring natural gas from the western portion of the province to the Edmonton/Fort Saskatchewan area. The pipeline will tie into the high-pressure NGTL January Creek system and connect to the existing ATCO Inland system in the Fort Saskatchewan area. The Yellowhead Mainline will provide direct access to the demand market for receipt customers during summer and winter operations.

CAPACITY MANAGEMENT DECISION SUMMARY

ATCO Pipelines Yellowhead Mainline

Based on the existing and incremental contracts and forecasted demand in the system, the Yellowhead Mainline will be designed to accommodate the peak forecast demand of the Alberta Integrated System and provide a market for receipt gas on the system.

ATTACHMENTS:

Appendix A – Project Map


Appendix B – Preliminary Assessment of Key Dates


Appendix C – AP BER 50

CAPACITY MANAGEMENT DECISION SUMMARY

ATCO Pipelines Yellowhead Mainline

REVIEWERS AND APPROVERS:

Reviewer Name	Position	Team/Department	Signature	Date Signed
Heather Krislock	VP	CG Commercial Operations		Jun 10, 2024

Approver Name	Position	Team/ Department	Signature	Date Signed
Jay White	VP	CG Commercial		Jun 12, 2024

EMAIL DISTRIBUTION:

<u>Commercial Operations</u> System Design West, Connie Wang, Larry Jensen, Joanne Unger, Heather Krislock
<u>Projects</u>
<u>Commercial</u> Tyler Cook, Alex Harris, Grant Kuntz, Jay White
<u>Other</u> Cynthia Loke, Cory Costanzo
<u>ATCO</u> Chris MacDonald, Therese van der Hoorn, Rob Parackal

APPENDIX A – PROJECT MAP



APPENDIX B – PRELIMINARY ASSESSMENT OF KEY DATES

- February/March – Pipe sizing finalization
- Late August – AUC needs application
- Early 2025 – Long lead order

APPENDIX C – AP BER 50



YELLOWHEAD MAINLINE BUDGET ESTIMATE REQUEST June 2024

Project Information

Project Name	Yellowhead Mainline
Pipeline(s)	Proposed 914 mm Yellowhead Mainline
LSD	NE-27-54-14-W5M to the ATCO Inland System between SW-21-53-23-W4M and NW-27-55-21-W4M.

As per the Integration Agreement between Nova Gas Transmission Ltd. (NGTL) and ATCO Gas and Pipelines Ltd. (ATCO), NGTL is responsible for determining the requirements for any new pipeline facilities (other than minor modifications) using a single system design philosophy based on long-term annual gas supply and demand outlook. As part of this process, NGTL has communicated the requirement for the Yellowhead Mainline to ATCO, as initially presented to TTFP on May 9, 2023. The Yellowhead Mainline is situated in both the ATCO Footprint and NGTL Footprint (~85% / ~15%, respectively) as defined by the Integration Agreement. In accordance with the Integration Agreement, NGTL has declined to construct the portion of the Yellowhead Mainline within the NGTL Footprint.

The Alberta Utilities Commission (AUC) must review and approve the Project's need, route, and location, as well as the inclusion in ATCO's rate base/revenue requirement of costs associated with the Yellowhead Mainline. This document requests NGTL to confirm that the Yellowhead Mainline is the most viable and appropriate option to meet the growth based on the design philosophy of the Alberta Integrated System and that the requested expenditures are reasonable and necessary to progress the project. The foregoing confirmations are required to allow ATCO to continue progressing the project until AUC approval can be obtained, as set out below.

Affected Facilities

Table 1 – Facilities information

Name	NGTL #	Summary Point	LSD	Work
Yellowhead Mainline West Interconnect	N/A	N/A	NE-27-54-14-W5M	Install
Yellowhead Mainline Compressor Site	N/A	N/A	TBD	Install
Yellowhead Mainline East Control	N/A	N/A	TBD	Install

Project Scope

As shown in Figure 1, the proposed scope of the Project consists of:

- Installation of approximately 200-220 km of 914 mm pipeline from NGTL's 762 mm January Creek Transmission (NE-27-54-14-W5M) to ATCO's Inland System (between SW-21-53-23-W4M and NW-27-55-21-W4M).
- Installation of a new 5-20 MW compressor (Yellowhead Mainline Compressor Site); the final site will be based on final route selection.

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**YELLOWHEAD MAINLINE
BUDGET ESTIMATE REQUEST
June 2024**

- Installation of Yellowhead Mainline East Control, including pressure regulation equipment, location to be determined with final route selection.
- Installation of Yellowhead Mainline West Interconnect, including pressure regulating and flow measurement equipment (NE-27-54-14-W5M)

ATCO updated the proposed scope set out above from the May 2023 BER based on an initial evaluation of system requirements and initial feasible routing alternatives identified through desktop analysis only. The scope above is subject to change as project planning and preliminary assessments are completed by both ATCO and NGTL, as applicable. This includes route selection, which will be based on consultation and other criteria following ATCO's review of project options.

Project Need

The Alberta Integrated System requires expansion to accommodate forecasted growth throughout the system. The Yellowhead Mainline Project is required to meet contractual obligations on the Alberta Integrated System; without the project, NGTL/ATCO will not be able to meet contractual commitments.

To keep up with growing demand and supply shift, the Yellowhead Mainline is proposed to bring natural gas from the western portion of the province to the Edmonton/Fort Saskatchewan area. The pipeline will tie into the high-pressure NGTL January Creek system and connect to the existing ATCO Inland system in the Fort Saskatchewan area. The Yellowhead Mainline will provide direct access to the demand market for receipt customers during summer and winter operations.

Based on the existing and incremental contracts and forecasted demand in the system, the Yellowhead Mainline will be designed to accommodate the peak forecast demand of the Alberta Integrated System and provide a market for receipt gas on the system.

Project Cost

As part of ATCO's initial assessment, a Class 5 (+100%/-50%) project estimate of \$2,100,000,000 was developed based on a 914 mm pipeline size with compression. This estimate will be updated once the project scope has been finalized and the feasibility study is complete.

Project Timing

Project scoping began in May 2023 with the initial feasibility funding approval of \$2,500,000. The project has a target in-service date of Q4-2027 to meet the needs of the Alberta Integrated System.



**YELLOWHEAD MAINLINE
BUDGET ESTIMATE REQUEST
June 2024**

Expenditure Level Request

ATCO requests NGTL to confirm that the costs associated with the work described below, totaling up to \$25,000,000 (inclusive of the currently approved \$2,500,000), are reasonable and necessary to progress the project, ATCO requests confirmation by June 7, 2024.

The increased funds will be used to continue routing assessment, complete initial project consultations, including but not limited to, landowner, governmental, and Indigenous consultation, on identified routes, begin field studies including environmental, geotechnical, hydrological, and survey, and advance initial engineering design work. These activities are required in summer 2024 to maintain the current project schedule.

Completion of the feasibility study will include a Class 4 (+50%/-30%) project cost estimate.

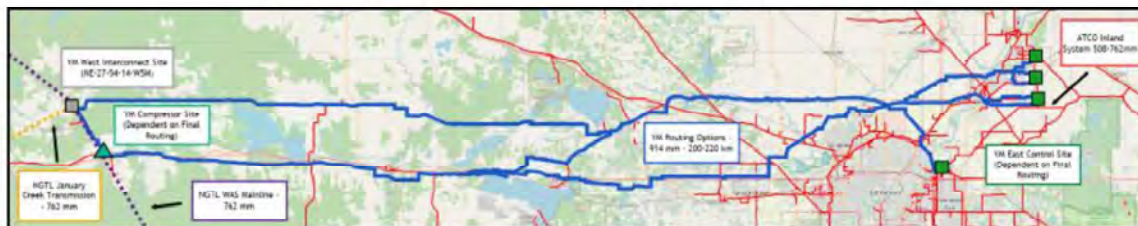
This incremental funding request is required to continue work on the Yellowhead Mainline project, as noted above, into Q3 2024, to maintain the requested schedule.



**YELLOWHEAD MAINLINE
BUDGET ESTIMATE REQUEST
June 2024**

Appendix A – Area Map

Figure 1 – Proposed Yellowhead Mainline – Project Routing Options (June 2024)



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NOVA Gas Transmission Ltd.
Facilities Design Methodology Document (FDMD)

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NOVA Gas Transmission Ltd.

Facilities Design Methodology Document (FDMD)

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1 INTRODUCTION

The Facilities Design Methodology Document provides an overview of the facility planning processes employed to identify mainline facility requirements and new receipt and delivery meter stations and extension facilities. The overview will provide readers with the background to understand the purpose of and necessity for facilities requirements.

The Guidelines for New Facilities describe the new facilities that NGTL may construct. An electronic version of the Guidelines for New Facilities can be accessed at: <http://www.tccustomerexpress.com/871.html>

New facilities are divided into two categories:

- expansion facilities, which would include pipeline loop of the existing system, metering and associated connection piping and system compression; and
- extension facilities, which would include pipelines generally greater than 20 km (12.4 miles) in length, 305 mm (12 inches) or more in diameter, with volumes greater than $2.8 \times 10^6 \text{ m}^3/\text{d}$ (100 MMcf/d), that are expected to meet the aggregate forecast of two or more facilities (gas plants/industrials).

The facilities design process, described in Section 4, contains two distinct facility planning sub-processes. The first sub-process relates to the facilities planning, design and construction of mainline expansion facilities. The second sub-process relates to the facilities planning, design and construction of new receipt and delivery facilities and connecting extensions. NGTL uses these processes to identify the necessary facility additions required to be placed in-service.

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Facilities Design Methodology Document (FDMD)**

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An important element of the facilities design process is the filing of specific facility applications. Facilities applications are filed with the regulator to facilitate proposed construction schedules, which must account for summer or winter construction constraints and the time required to procure major facility components such as pipe, compressors and valves.

The design flow determination used to determine the mainline expansion facility requirements is described in Section 3.5. Mainline facilities expansions are included in the Annual Plan Section 2 – Design Flow and Mainline Facilities.

Receipt and delivery facilities included in the Annual Plan Section 3 – Extension Facilities, Lateral Loops and Meter Stations, intended to meet Customers' firm transportation Service Agreements, are designed as part of the facility design process but are constructed independently of the construction of mainline expansion facilities. If these facilities are in place prior to the completion of mainline expansion facilities, Customers may be offered interruptible transportation pending the availability of sufficient mainline transportation capability.

2 THE NGTL SYSTEM

The physical characteristics of the NGTL System and the changing flow patterns on the system present significant design challenges. The NGTL System transports gas from many geographically diverse Receipt Points and moves it through pipelines that generally increase in size as they approach the major delivery points

The NGTL System is designed to meet the peak day design flow requirements of its Customers. NGTL's obligation under its firm transportation Service Agreements with each Customer is to:

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- receive gas from the Customer at the Customer's Receipt Points including the transportation of gas; and
- deliver gas to the Customer at the Customer's Delivery Points including the transportation of gas.

NGTL's facility design must ensure prudently sized facilities in order to meet flow requirements. The system design methodology developed to achieve this objective is described in the remainder of this document.

Firm transportation capability may exist from time to time at certain Export Delivery Points for Short Term Firm Transportation-Delivery service ("STFT"). This capability availability is either ambient temperature related capability or capability created by unsubscribed Firm Transportation Delivery ("FT-D1") transportation. Firm transportation capability may also exist in the winter season at certain Export Delivery Points for Firm Transportation-Delivery Winter service ("FT-DW") due to ambient temperature related capability. Interruptible transportation capability may exist from time to time on certain parts of the NGTL System based on unutilized or unsubscribed Firm Transportation

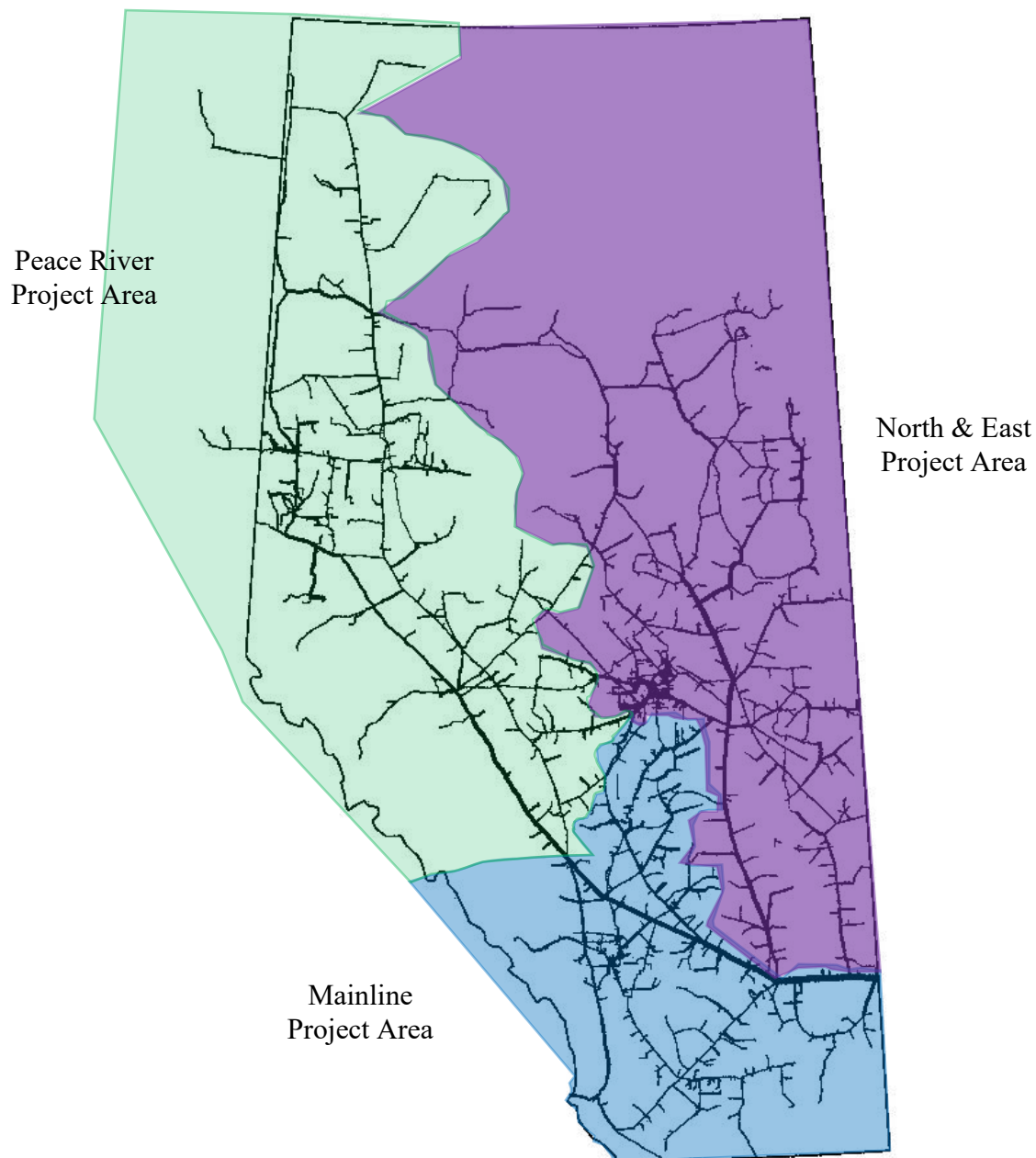
2.1 NGTL System Project and Design Areas

For design purposes, the NGTL System is divided into the three project areas shown in Figure 2.1, which are in turn divided into the design areas and design sub areas described in Sections 2.2 to 2.4. Dividing the pipeline system this way allows the system to be hydraulically modeled in a way that best reflects the pattern of flows in each specific area of the system, as described in Section 3.5. As the NGTL System evolves, changes to these divisions may be made as required, to ensure hydraulic modelling continues to reflect the pattern of flow. In addition, the NGTL System is divided into delivery design areas as described in Section 2.5.

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**Figure 2.1
NGTL System Project Areas**



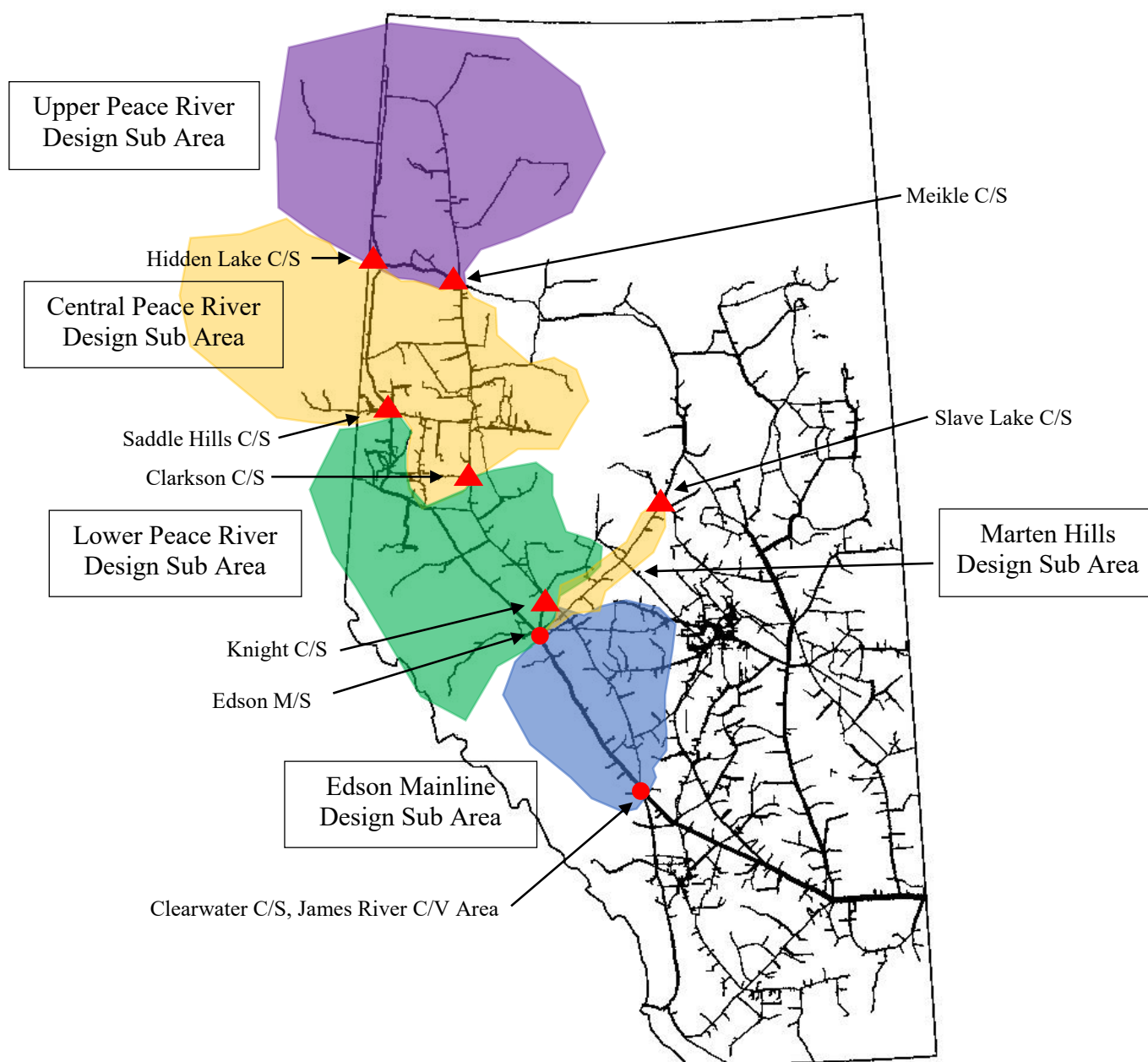
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2.2 Peace River Project Area

The Peace River Project Area comprises the Peace River, Marten Hills, and Edson Mainline Design Areas (Figure 2.2).

Figure 2.2
Peace River Project Area



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Peace River Design Area

The Peace River Design Area comprises three design sub areas: the Upper Peace River Design Sub Area; the Central Peace River Design Sub Area; and the Lower Peace River Design Sub Area.

Upper Peace River Design Sub Area

The Upper Peace River Design Sub Area comprises facilities north of the Meikle River and Hidden Lake Compressor Stations.

Central Peace River Design Sub Area

The Central Peace River Design Sub Area comprises facilities north of the Clarkson and Saddle Hills Compressor Stations up to the Meikle River and Hidden Lake Compressor Stations.

Lower Peace River Design Sub Area

The Lower Peace River Design Sub Area comprises facilities north of the Edson Meter Station up to the Clarkson and Saddle Hills Compressor Stations.

Marten Hills Design Area

The Marten Hills Design Area comprises facilities from the Slave Lake Compressor Station to the Edson Meter Station.

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Edson Mainline Design Sub Area

The Edson Mainline Design Sub Area comprises facilities from the Edson Meter Station and Knight Compressor Station to the Clearwater Compressor Station/James River Control Valve area.

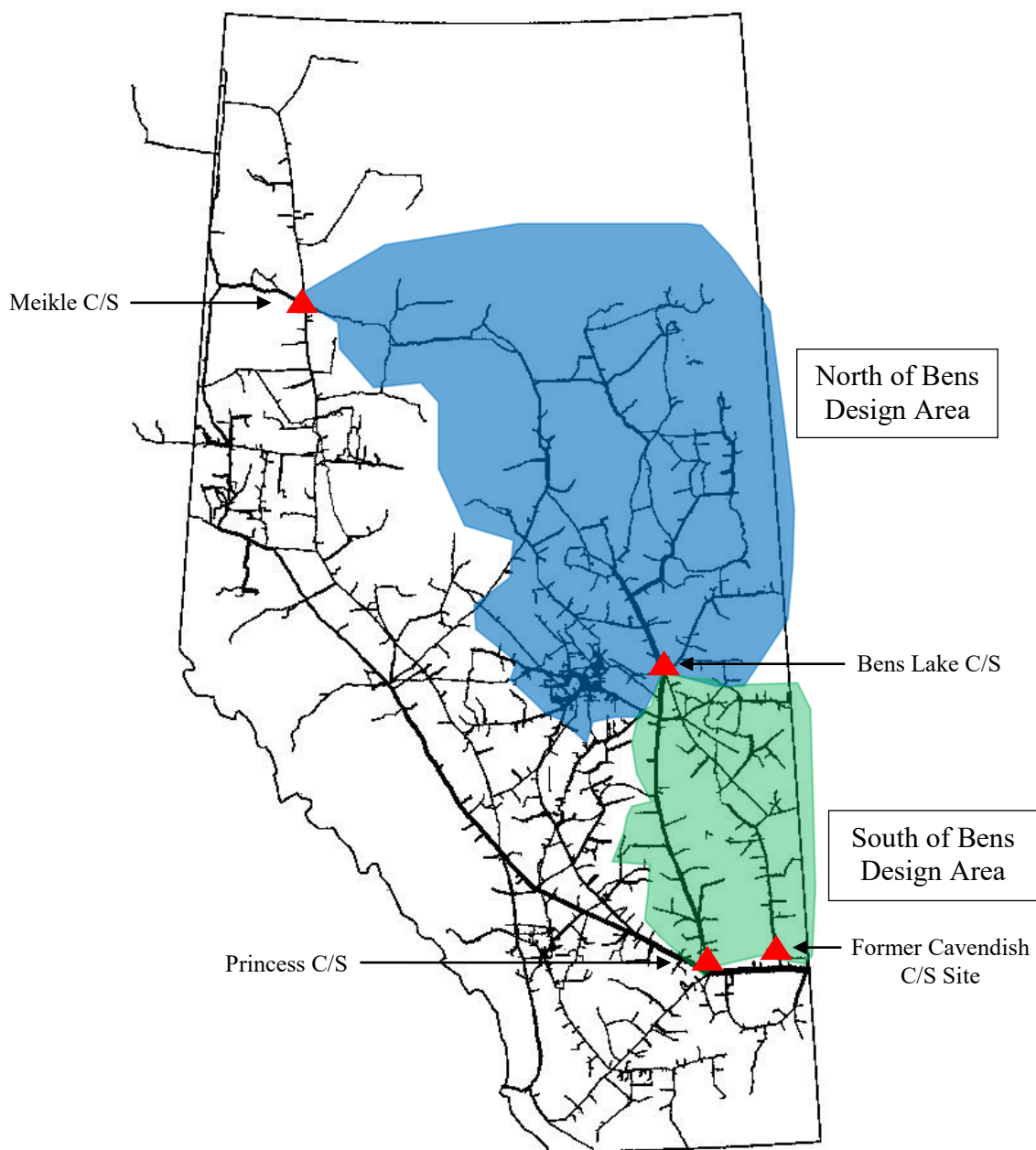
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2.3 North and East Project Area

The North and East Project Area (Figure 2.3) comprise the North of Bens Lake and South of Bens Lake Design Areas.

**Figure 2.3
North and East Project Area**



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North of Bens Lake Design Area

The North of Bens Lake Design Area comprises facilities north of the Bens Lake Compressor Station up to the Meikle River Compressor Station.

South of Bens Lake Design Area

The South of Bens Lake Design Area comprises facilities north of the Princess Compressor Station and former Cavendish Compressor Station site up to the Bens Lake Compressor Station.

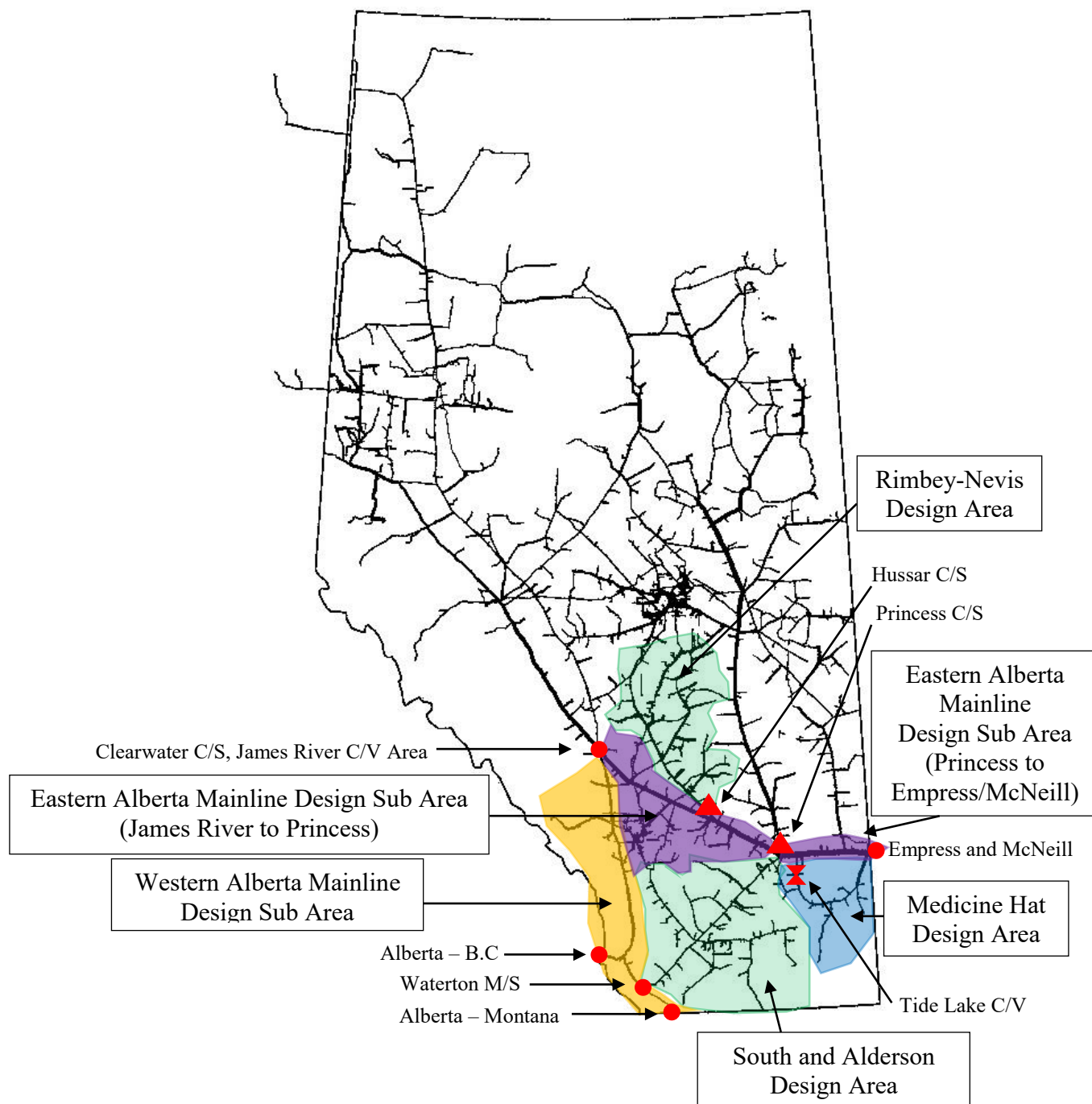
2.4 Mainline Project Area

The Mainline Project Area (Figure 2.4) comprises the Mainline Design Area, the Rimbey-Nevis Design Area, the South and Alderson Design Area and the Medicine Hat Design Area.

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**Figure 2.4
Mainline Project Area**



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Mainline Design Area

The Mainline Design Area comprises three design sub areas: the Eastern Alberta Mainline Design Sub Area (James River to Princess); the Eastern Alberta Mainline Design Sub Area (Princess to Empress/McNeill); and the Western Alberta Mainline Design Sub Area.

Eastern Alberta Mainline Design Sub Areas

The Eastern Alberta Mainline Design Area comprises two sections, James River to Princess and Princess to Empress/McNeill. The James River to Princess section comprises facilities from the James River Control Valve to the Princess Compressor Station. The Princess to Empress/McNeill section comprises facilities from the Princess Compressor Station to the Empress and McNeill Export Delivery Points.

Western Alberta Mainline Design Sub Area

The Western Alberta Mainline Design Sub Area comprises facilities from the James River Control Valve to the Alberta-British Columbia Export and the Alberta-Montana Delivery Points.

Rimbey-Nevis Design Area

The Rimbey-Nevis Design Area comprises facilities north of the Hussar Compressor Station up to the city of Edmonton.

South and Alderson Design Area

The South and Alderson Design Area comprises facilities from the Princess Compressor Station to the Waterton Meter Stations.

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Medicine Hat Design Area

The Medicine Hat Design Area comprises facilities south the Tide Lake Control Valve and south (upstream) of the Empress and McNeill Export Delivery Point.

2.5 Delivery Design Area (DDA)

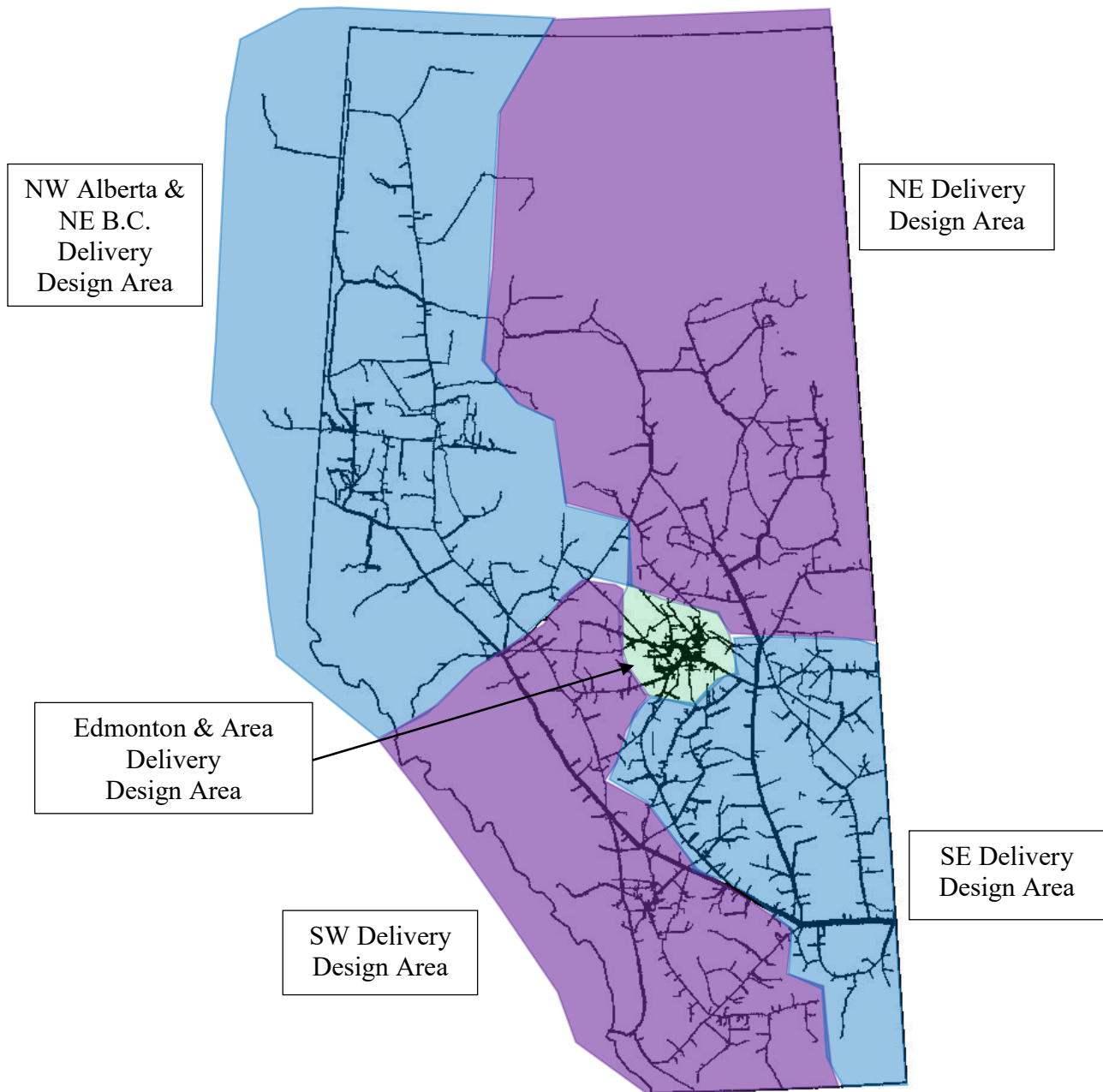
The NGTL System is also divided into five delivery design areas (Figure 2.5). The delivery design areas have special significance to the transfer of FT-D service as described in Rate Schedule FT-D Firm Transportation - Delivery of NGTL's Gas Transportation Tariff.

- (i) the Northwest Alberta and Northeast B.C. Area;
- (ii) the Northeast Alberta Area;
- (iii) the Southwest Alberta Area;
- (iv) the Southeast Alberta Area; and
- (v) Edmonton and Area.

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**Figure 2.5
Delivery Design Areas**



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3 BASIS FOR DESIGN FLOW DETERMINATION

The following sections describe the design flow methodology used throughout the NGTL System to size various facilities to meet Customer requirements.

3.1 Receipt Meter Station Design Methodology

The design of new receipt meter stations is based on the methodology that the highest possible flow through the receipt meter station will be the lesser of the aggregate Receipt Contract Demand under firm transportation Service Agreements for all Customers at the meter station or the capability of upstream producer facilities.

3.2 Receipt Extension Facilities Design Methodology

Extension facilities for receipts are designed to transport peak expected flow (Section 4.4. 2 taking into consideration Receipt Contract Demand under firm transportation Service Agreements and the extension facilities criteria as described in the Guidelines for New Facilities shown in Table 3.2.

**Table 3.2
Extension Facilities Criteria**

NGTL Builds (Owns/Operates)
Facilities to serve aggregate forecast as per Annual Plan process
Facilities greater than or equal to 305 mm (12 inches) in diameter
Facilities greater than 20 kilometers (12.4 miles) in length
Volumes greater than 2.8 10 ⁶ m ³ /d (100 MMcf/d)

Peak expected flow at specific receipt points (field deliverability) is based on an assessment of reserves, flow capability, future supply development and the capability of upstream gathering and processing facilities at each receipt meter station on the extension facility.

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This design methodology recognizes and accommodates the potential for Customers to maximize peak expected flow from a small area of the NGTL System. In NGTL's assessment of facility alternatives to accommodate peak expected flow, a number of facility configurations are considered which may include future facilities. The assessment of facility alternatives includes both NGTL and third party costs to ensure the most orderly, economic and efficient construction of combined facilities. NGTL typically selects the proposed facilities and optimal tie-in point on the basis of overall (NGTL and third party) lowest cumulative present value cost of service ("CPVCOS").

3.3 Delivery Meter Station Design Methodology

The design of new delivery meter stations is based on the methodology that the highest possible flow through the delivery meter station will be the lesser of the aggregate Delivery Contract Demand under firm transportation Service Agreements for all Customers at the meter station or the capability of facilities downstream of the meter station.

3.4 Delivery Extension Facilities Design Methodology

Delivery extension facilities are designed to transport maximum day delivery taking into consideration the extension facilities criteria as described in the Guidelines for New Facilities as shown in Table 3.2. In NGTL's assessment of facility alternatives to accommodate maximum day delivery, a number of facility configurations are considered which may include future facilities. NGTL's assessment of facility alternatives includes both NGTL and third party costs to ensure the most orderly, economic and efficient construction of combined facilities. NGTL typically selects the proposed facilities and optimal tie-in point on the basis of overall (NGTL and third party) lowest CPVCOS.

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3.5 Mainline Facilities Flow Determination

The Mainline facilities flow determination is based on the receipt and delivery forecasts as described in section 4.4.

In each periodic design review, the facilities necessary to provide the capability to meet future design flow requirements are identified. To ensure the facilities identified are the most economic, a minimum five-year forecast of facilities requirements is considered.

While the design of the NGTL System is affected by many interrelated factors, the following major design methodologies are currently included in determination of design flows:

- supply-demand balancing methodology;
- design area delivery methodology;
- downstream capability methodology;
- storage methodology;
- productive capability methodology; and
- maximum delivery methodology.

These methodologies are briefly described in Sections 3.5.1 to 3.5.6.

3.5.1 Supply-Demand Balancing Methodology

The NGTL System is designed to transport gas from many Receipt Points to multiple Delivery Points (Section 2). The pipeline system is designed to meet deliveries based on the general methodology that gas will be drawn on an equally

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prorated basis from each Receipt Point on the pipeline system. If gas is nominated in a manner that differs from the pattern assumed in the system design, delivery shortfalls may occur.

The supply-demand balancing methodology is applied to situations where the total system peak day supply exceeds the total system peak day delivery requirements and results in a system design that reduces the take from all system receipt points to align with the overall system demands.

3.5.2 Design Area Delivery Methodology

In identifying facilities to transport gas within or through a design area, NGTL takes the approach that the facilities must be capable of transporting the highest required flow into or out of that area. This is accomplished using the design area delivery methodology, which considers the following key factors:

- delivery requirements within the design area;
- delivery requirements outside the design area; and
- delivery requirements at the major Export Delivery Points.

This methodology is periodically reviewed to ensure load conditions that are likely to occur under system operations are reflected in the system design.

The design area delivery methodologies relied upon for the design review process for each design area are described in Table 3.5.2.

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Table 3.5.2
Design Area Delivery Methodologies

Design Area	Prevailing Design Season	Winter ¹	Summer ¹
<ul style="list-style-type: none"> Peace River (including Upper, Central & Lower Design Sub Areas) <ul style="list-style-type: none"> Flow Through Flow Within Marten Hills North and East Project Area (North and South of Bens Lake Design Areas) <ul style="list-style-type: none"> Flow Through Flow Within Mainline Rimbey Nevis <ul style="list-style-type: none"> Flow Through Flow Within South and Alderson Medicine Hat <ul style="list-style-type: none"> Flow Through Flow Within 	Winter Winter ⁴ Summer Summer Winter ⁴ Summer Summer Winter ⁴ Summer Summer Winter ⁴	Min u/s James ² /Max/Max Max/Max/Min Min u/s James ² /Avg/Max Min ³ /Avg/Max Max Area Delivery Min u/s James ² /Avg/Max Min/Avg/Max Max Area Delivery Min/Avg/Max Min/Avg/Max Max Area Delivery	Min u/s James ² /Max/Max Max/Max/Min Min u/s James ² /Max/Max Min ³ /Max/Max Max Area Delivery Min u/s James ² /Max/Max Min/Max/Max Max Area Delivery Min/Max/Max Min/Max/Max Max Area Delivery

NOTES:¹ Demand within design area/Intra-basin demand outside design area /Export Delivery Points.² u/s James = upstream James River Interchange.³ Total North and East Project Area.⁴ Seasonally Adjusted Receipt Flow Conditions.

Min = minimum

Avg = average

Max = maximum

Certain Design Areas have two distinct flow conditions that are examined in assessing facilities requirements. First, there is the “flow through” condition. The “flow through” design condition occurs when the receipts are at the peak expected volume and the deliveries are at a seasonal minimum volume. Second, there is the “flow within” condition that is governed by the maximum day delivery and seasonal available supply within the area. The “flow within” design condition occurs when the receipts are at a seasonal low volume and the deliveries are at a seasonal maximum volume.

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For example, in the Peace River Design Area, the “flow through” condition in the winter season currently governs facility requirements. A Min upstream James/Max/Max design flow methodology is applied to generate design flow requirements. The Min upstream James/Max/Max design flow condition assumes that the Delivery Points upstream of the James River Interchange are at their minimum day delivery values, while the Delivery Points elsewhere on the system and the major Export Delivery Points are at their maximum day delivery values.

By contrast, the “flow within” condition in the winter season currently governs facility requirements in the North and East Project Area. Seasonally adjusted minimum receipts and maximum area deliveries are the most appropriate conditions to describe the constraining design.

NGTL reviews delivery patterns for each design area. These reviews show that while individual Delivery Points will require maximum day delivery, the probability that all Delivery Points will require maximum day delivery simultaneously is extremely low. To account for this, a factor, called the demand coincidence factor, was applied to decrease the forecast maximum day delivery for the aggregate of all the Delivery Points within each design area to a value more indicative of the forecast peak day deliveries. Similarly, demand coincidence factors were determined and applied to increase the aggregate minimum day delivery values at Delivery Points within each design area to be more indicative of the expected minimum day delivery.

3.5.3 Downstream Capability Methodology

The system design is based on the methodology that the maximum day delivery at the Delivery Points will not exceed the lesser of the capability of the downstream pipeline or the aggregate of the firm transportation Service Agreements associated with those Delivery Points. Downstream capability is determined through ongoing dialogue with downstream pipeline operators.

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3.5.4 Storage Methodology

The Storage Facilities connected to the NGTL System at the AECO ‘C’, Big Eddy, Carbon, Chancellor, Crossfield East, January Creek, Rat Creek West, Severn Creek, and Warwick Southeast Storage Meter Stations are shown in Figure 3.5.4. Maximum receipt meter capabilities for Storage Facilities are presented in the Annual Plan Section 1.6.

For facility planning purposes it is assumed that:

- For the winter period, system design flow requirements will include receipt volumes from selected Storage Facilities onto the NGTL System at approximately average historical withdrawal levels.

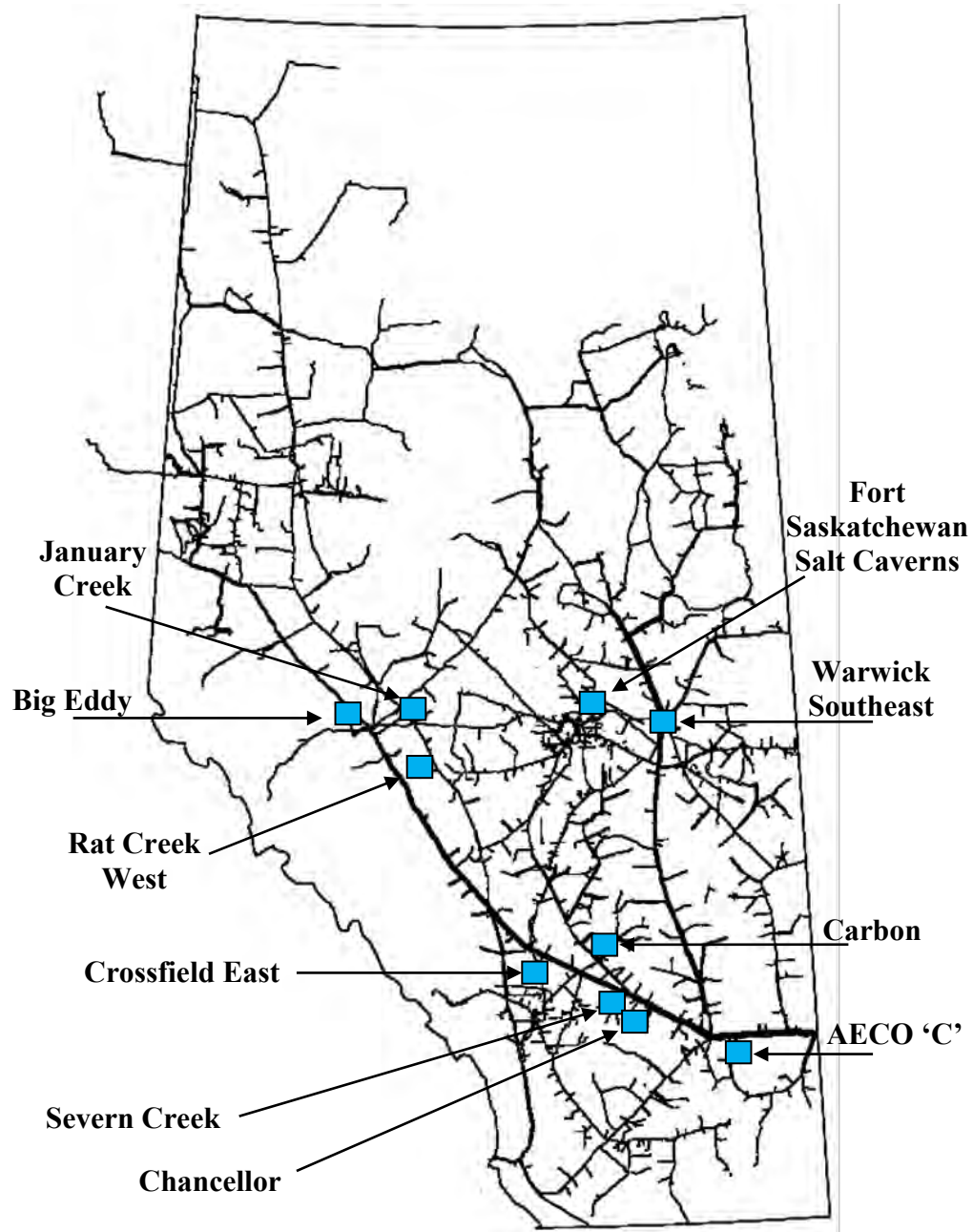
This methodology recognizes the supply contribution from Storage Facilities to meet peak day winter delivery requirements and provide for a better correlation between forecast design flow requirements and historical actual flows for the winter period. Volumes withdrawn from the Storage Facilities will be considered as interruptible flows, but will be incorporated into the flow analysis within all design areas where it may lead to a reduction in the design flow requirements and a potential reduction in additional mainline facilities.

- For the summer period, system design flow requirements will not include delivery volumes from the NGTL System into Storage Facilities. Consequently, for the purpose of calculating design flow requirements, volumes injected into the Storage Facilities will be considered to be interruptible flows and will therefore not be reflected in the design of mainline facilities.

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**Figure 3.5.4
Location of Storage Facilities on the NGTL System**



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3.5.5 Productive Capability Methodology

In areas where gas is drawn from a small collection of Receipt Points, there is a greater likelihood that the peak expected flow will be required simultaneously from all such Receipt Points than is the case when gas is drawn from an area having a large number of Receipt Points. As a result, the system design for those areas with a small collection of Receipt Points, usually at the extremities of the system, is based on the methodology that the system must be capable of simultaneously receiving the aggregate of the peak expected flow from each Receipt Point. However, when the productive capability methodology is applied to any collection of Receipt Points, the flows from the other areas upstream of a common point are reduced such that the supply-demand balancing methodology (Section 3.5.1) is maintained through that common point. This results in the system upstream of the common point being designed to match the capability of the system downstream of the common point.

3.5.6 Maximum Delivery Methodology

In areas where gas is supplied to a small collection of Delivery Points, there is a greater likelihood that the maximum delivery flow will be required simultaneously at all such Delivery Points than is the case when gas is supplied to an area having a large number of Delivery Points. Areas dominated by temperature-sensitive demand also have a greater likelihood of simultaneous maximum delivery flow to their Delivery Points. As a result, the system design for those areas is based on the methodology that the system must be capable of simultaneously delivering the aggregate maximum delivery flow to each Delivery Point.

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3.6 Maintaining Required Flow Levels

The design of the NGTL System is based on the methodology that facilities comprising the system are in-service and operating. However, facilities are not 100 percent reliable and are not always available for service. Facilities will experience scheduled down-time for regular maintenance and will also experience occasional unscheduled down-time. This may impact the ability to maintain required flow levels.

3.7 System Optimization

System optimization has been and will continue to be an integral part of the overall system design process. The NGTL System is optimized to reduce operating and maintenance costs without adversely affecting throughput. The intent is to maximize volumes on the system in order to minimize rates. Accordingly, cost reduction initiatives are not intended to reduce system volumes. The identification of compressor units and/or pipe that should be removed from service or replaced continues to be an integral part of the overall system design.

4 TRANSPORTATION DESIGN PROCESS

Periodic design reviews are conducted throughout the year to closely monitor industry activity and respond to Customer requirements for firm transportation on a timely basis.

The following is a brief overview of the significant activities involved in the facility design process. While Receipt Points, Delivery Points and extension facilities are designed as part of the transportation design process, the construction of these facilities may take place independently of the construction of mainline facilities.

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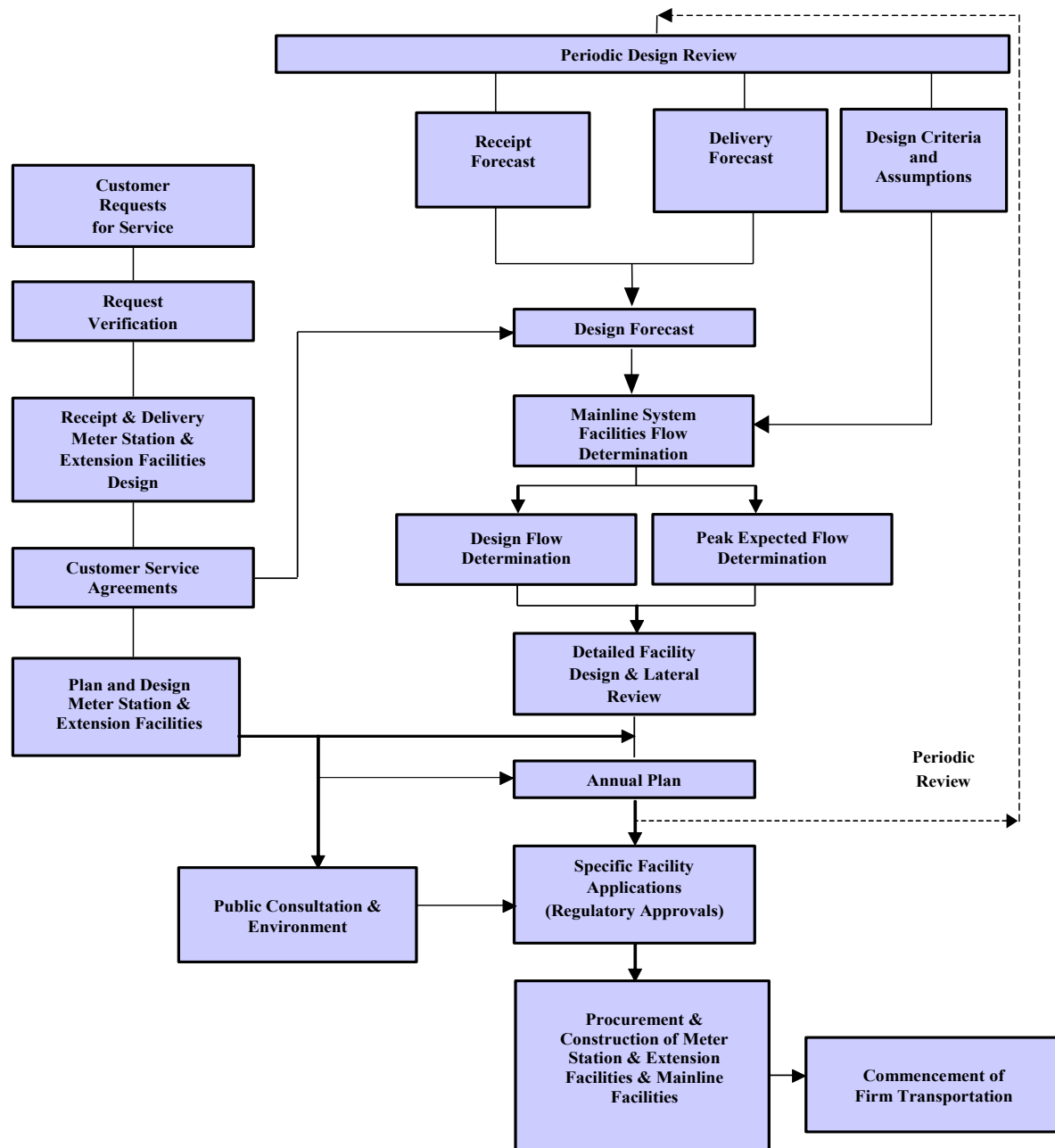
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The activities relating to the transportation design process are described below and are shown in the process flow chart included as Figure 4. Although activities have been grouped in distinct phases, some of the activities occur concurrently.

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**Figure 4
Facility Design Process**



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4.1 Customer Request Phase

Requests for firm transportation are received by NGTL and included in the transportation design process.

Requests for firm transportation are reviewed through this process and categorized as requiring new facilities, requiring expansion of existing facilities, or not requiring either new facilities or expansion of existing facilities. Each category of receipt and delivery facility is treated somewhat differently in the following phases of the design process.

4.2 New Meter Station and Extension Facilities Design

NGTL proceeds with the design of new meter stations and extension facilities to meet Customers' requirements for those requests for firm transportation that remain after the initial review process and are consistent with the Guidelines for New Facilities.

NGTL, with significant input from Customers, has established economic criteria that must be met prior to receipt meter stations being constructed. The criteria are described in Appendix E of NGTL's Gas Transportation Tariff entitled *Criteria for Determining Primary Term*.

For delivery meter stations, the term of service is described in Rate Schedule FT-D Firm Transportation - Delivery of NGTL's Gas Transportation Tariff.

In the design of new extension facilities, the receipt or delivery volume and location of each new facility is identified. In the case of receipt facilities, a review is undertaken of the reserves that are identified as supporting each new extension facility to ensure the Receipt Point peak expected flow for the area can be

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accommodated. In the case of delivery facilities, a review is undertaken to establish the forecast demand levels that are identified for each new extension facility to ensure the maximum day delivery for the area can be accommodated. Hydraulic and economic analyses are also conducted, using the design methodologies for new meter station and extension facilities described in Section 3.1 through Section 3.4.

Once the design is completed and construction costs estimated, Project and Expenditure Authorizations for new receipt and delivery meter stations and related Service Agreements are prepared and forwarded to Customers for authorization.

4.3 Existing Meter Station Design

Concurrent with the design of new meter stations and extension facilities (Section 4.2), NGTL proceeds with the identification of new metering requirements and lateral capacity constraints associated with incremental firm transportation requests at existing Receipt and Delivery Points. If no new facilities are required, Customers requesting Service are asked to execute firm transportation Service Agreements. Where additional metering is identified as being required, construction costs are estimated, and Project and Expenditure Authorizations and related Service Agreements are prepared and forwarded to Customers for authorization. When a lateral capacity constraint is identified, a review of the area peak expected flow is undertaken to determine potential looping requirements. Lateral loops are designed in conjunction with the design of mainline facilities.

4.4 Design Forecast Methodology

As shown in Figure 4, the transportation design process involves the preparation of a design forecast. The design forecast is a projection of anticipated peak expected flow, average receipts, and delivery requirements on the NGTL System, and plays an

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essential role in the determination of future facility requirements and planning capital expenditures.

The design forecast comprises the forecast of peak expected flow at each Receipt Point, the average receipt forecast and the gas delivery forecast. The following sections describe these forecasts and the methods by which they are developed.

4.4.1 Average Receipt Forecast

Average receipt is the forecast of the annual average volume expected to be received onto the pipeline system at each Receipt Point. The Annual Plan Section 1.4 presents the forecast of average receipts within the three main Project Areas on the NGTL System.

NGTL forecasts average expected flow through an assessment of reserves, flow capability and future supply development. NGTL determines this information based on data gathered from government sources, Canadian Gas Potential Committee studies, and through interaction with producers and Customers active in the area.

4.4.2 Peak Expected Flow Forecast

In order to predict peak expected flows a peaking factor is applied to the average receipt forecast to yield a more realistic design condition. The peaking factor is derived from an analysis of historical coincidental peak to average flow observed within the design areas over a number of gas years. In areas with new receipt production, existing and requested firm service contracts are also taken into consideration.

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4.4.3 Gas Delivery Forecast

Delivery forecasts for each Delivery Point and each Export Delivery Point are developed. Each forecast includes average annual delivery as well as average, maximum and minimum delivery for both the winter and summer seasons. These seasonal conditions are used in the transportation design process to meet firm transportation delivery requirements over a broad range of operating conditions. The gas delivery forecast is reported in detail in the Annual Plan Section 1.3.

The development of the gas delivery forecast draws upon historical data and a wide variety of information sources, including general economic indicators and growth trends. These gas forecasts are augmented by analysis of each end use market.

A consideration in developing the maximum day gas delivery forecast for Export Delivery Points is the forecast of new firm transportation Service Agreements. Firm transportation Service Agreements (new Service Agreements or renewals of expiring Service Agreements) are assumed to be authorized at each major Export Delivery Point to a level based on the average annual delivery forecast and historical data. The average annual delivery forecast is developed through consideration of Customer requests for firm transportation and from NGTL's market analysis. NGTL's market analysis considers market growth, the competitiveness of Western Canada Sedimentary Basin gas within the various markets and a general assessment of the North American gas supply and demand outlook (Annual Plan Section 1.2).

The key component to the development of the delivery forecast is the assessment of economic development by market sectors within the province. The potential for additional electrical, industrial and petrochemical plants, oil sands, heavy oil exploitation, miscible flood projects, new natural gas liquids extraction facilities and residential/commercial space heating is evaluated. Each year, NGTL also surveys

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large industrial and local distribution customers who receive gas from the NGTL System regarding their forecast of gas requirements for the next several years.

5 MAINLINE DESIGN PHASE

The detailed mainline hydraulic design is completed using the Design Forecast and the mainline facilities design methodologies described in Section 3.5 as well as system optimization described in Section 3.7. Computer simulations of the pipeline system are performed to identify the facilities that would be required to meet firm and peak transportation expectations.

The following guidelines are used in assessing and determining the facilities requirements in the Annual Plan.

5.1 Flow Equation

The input parameters for the flow equation used for hydraulic simulations are based on the characteristics of the NGTL System. These parameters include friction and efficiency factors.

Friction factors are determined using the Smooth Pipe/Rough Pipe friction factor calculation method. In high-pressure gas transmission lines, such as the NGTL System, two types of flow regimes can be observed: fully turbulent flow or Rough Pipe Flow and partially turbulent flow or Smooth Pipe Flow. The flow regime is determined by the Reynolds Number which is a function of gas density, velocity, viscosity and pipe diameter. The Smooth Pipe/Rough Pipe calculation method makes friction factor dependent on Reynolds Number in Smooth Pipe Flow and surface roughness dependent in Rough Pipe Flow. The assumption used for pipe surface

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roughness is generally 19.05 micro meters or 750 micro inches for internally uncoated pipes and 6.35 micro meters or 250 micro inches for internally coated pipes.

The reduced friction resulting from internally coating pipes can improve their performance. Studies have shown that on pipes larger than 914 mm (30 inches) in diameter, the cost benefit provided by internal coating outweighs the added cost of its application. A guideline of applying internal coating to new NGTL pipelines greater than 914 mm (30 inches) inches in diameter is used.

Efficiency factors for all pipes are set at 100% unless measured data indicates differently. In these cases, studies are conducted to tune the efficiency factors of these pipe segments to better match measured data.

5.2 Maximum Operating Pressure

A higher maximum operating pressure (“MOP”) results in a more efficient system. It is possible to consider more than one MOP when reviewing the long term expansion of the pipeline system. If the expansion is such that a complete looping of an existing pipeline is likely within a few years, then it may be appropriate to consider developing a high-pressure line that will eventually be isolated from the existing system.

5.3 Temperature Parameters

Pipeline design requires that reasonable estimates be made for ambient air and ground temperatures. These parameters influence the design in the following areas:

- power requirements for compressors;
- cooling requirements at compressor stations; and
- pressure drop calculations in pipes.

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Winter and summer design ambient temperatures are determined using historical daily temperatures from Environment Canada at a number of representative locations. An interpolation/extrapolation method was used to calculate the peak day ambient temperature for pipeline sections within each design area.

5.4 Pipe Size and Compression Requirements

A combination of pipe and compression facilities is reviewed to meet the design flow requirements. The possible combinations are almost unlimited so guidelines have been developed based upon experience and engineering judgment to assist in determining pipe size and compression requirements.

Experience has shown that the pressure drop along the mainline system should be within a range of approximately 15 to 35 kPa/km (3.5 to 8.0 psi/mile) of pipe. Above this range, compressor power requirements become excessive because of high friction losses, and pipeline loop usually becomes more economical than adding compression.

In addition, experience has also shown that generally it is advantageous to provide for a loop with a diameter at least as large as the largest existing line being looped. As a guide to selecting loop length, the loop should extend between two existing block valves where possible, thus minimizing system outages and impact from failures. In cases where design flow requirements are projected to increase, it is usually cost effective to add loop in a manner that will ensure that no additional loop will be required in the same area in the near future.

There is some flexibility in the location of compressor stations when new compression is required. Shifting the location changes the pressure at the inlet to the station and, hence, the compression ratio (i.e., the ratio of outlet pressure to inlet

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pressure). Capital costs, fuel costs, and environmental and public concerns are also key factors in selecting compressor station location.

5.5 Selection of Proposed and Alternative Facilities

Various alternatives are identified when combinations of the facility configurations and optimization parameters are considered. This process requires a careful evaluation of alternative designs to select those appropriate for further study.

Facilities that are most likely to meet future gas flows and minimize the long term cost of service are considered. As well, when appropriate, Transportation By Others (TBO) or purchase of existing other party facilities, are considered as an alternative to constructing facilities.

The process to identify the potential for facilities requirements begins with the generation of design flow and peak expected flow requirements (Annual Plan Section 2). Then, design capabilities on the system are determined to identify where capability restrictions will occur. Pipe sizes, MOP and routings, as well as compressor station sizes and locations are evaluated as part of alternative solutions to eliminate these capability restrictions.

The capital cost of each reasonable alternative is then estimated. Rule of thumb costing guidelines are established at the beginning of the process. These guidelines take the form of cost per kilometer of pipeline and cost per unit type of compression and are based on the latest actual construction costs experienced by NGTL. Adjustments may be made for exceptions (i.e., winter/summer construction, location, and river crossings) that significantly impact these rule of thumb costing guidelines.

The results of the preliminary hydraulics and rule of thumb costs are compared and the best alternatives are given further study.

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Simulations of gas flows on the NGTL System are performed for future years to determine when each new compressor station or section of loop should be installed and to establish the incremental power required at each station. Additional hydraulic flow simulations beyond the design period are performed for each remaining alternative to further define the location and size of compressor stations and loops.

Once the requirement for facilities in each year is determined, hydraulic flow simulations are performed based on seasonal average flows for each of the future years to determine compressor fuel usage, annual fuel, and operating and maintenance costs for each facility.

Next, detailed capital cost estimates for new facilities are determined to further improve upon the assessment of alternatives. Where appropriate, the alternatives include the use of standard compressor station designs which are incorporated into the cost estimates. These capital cost estimates reflect the best available information regarding the cost of labour and materials based on the preliminary project scope and also consider land and environmental constraints that may affect project timing and costs.

In reviewing capital, fuel, operating and maintenance costs, it is possible that some alternatives will have higher costs in all of these categories than other alternatives. The higher cost alternatives are eliminated from further consideration.

The annual cost of service, based on capital and operating cost estimates, is determined for each remaining alternative. This calculation includes annual fuel costs, capital costs escalated to the in-service date, annual operating costs, municipal and income taxes, return on investment and depreciation. The present value of each of the annual cost of service calculations are determined and then summed to calculate the CPVCOS for each alternative.

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The proposed facilities are usually selected on the basis of lowest CPVCOS and lowest first year capital cost. However, a number of alternatives may be comparable when these costs are considered. For practical purposes, when these alternatives are essentially equal based on financial analyses, other relevant factors including operability of the facilities, environmental considerations and land access may more heavily influence alternative selections.

GUIDELINES FOR NEW FACILITIES

TC Energy (NGTL SYSTEM) TOLLS, TARIFF, FACILITIES & PROCEDURES COMMITTEE (TTFP)

GUIDELINES FOR NEW FACILITIES

(Version 04)

Version #	Date	Reasons for Changes	Guidelines Section
Version 01	July 11, 2000 Nov 08, 2000	Initial report – “unopposed” resolution Initial report – “unopposed” resolution	F2000-01, F2000-02, F2000-03 F2000-04
Version 02	Oct 18, 2011	NEB Regulation for Alberta System Alberta System Integration Agreement Alberta System Rate Design: FT-D	Entire Entire F2000-03
Version 03	Oct 31, 2018	Administrative Updates	Entire
Version 04	Sept 25, 2020	Administrative Updates Added Appendix 3	Entire Appendix 3

GUIDELINES FOR NEW FACILITIES

TC Energy (NGTL SYSTEM) Tolls, Tariff, Facilities and Procedures (TTFP)

Guidelines for New Facilities

Under the Alberta System Integration Agreement the facilities of NOVA Gas Transmission Ltd. (NGTL) and ATCO Pipelines (AP) are operated as a single transmission system under NGTL's Tariff. NGTL will utilize the NGTL design philosophy for system expansions and extensions. The Agreement also identified distinct geographic areas ("Footprints") within Alberta for the construction of new facilities by each of NGTL and AP. NGTL's Guidelines for New Facilities apply to facilities constructed by NGTL and AP within their respective Footprints.

Definitions:

- NGTL System means the facilities in Alberta and BC owned by NGTL and the facilities in Alberta owned by AP.

Guiding Principles:

- These procedures apply to the NGTL System.
- NGTL/AP will expand the NGTL System to meet individual customer requests.
- NGTL will modify (expand/extend) the existing NGTL System to meet aggregate contractual obligations for receipt and delivery service.
- Customers are not precluded from building facilities. Third party construction has implications on ownership, operation and accountability.
- Guidelines would apply to the majority of situations.
- The established NGTL System Annual Plan process will be followed.

NGTL's design philosophy shall be used to identify and scope any required NGTL System facilities. NGTL shall be responsible for determining the requirement for new or modifications to existing NGTL System facilities.¹ NGTL shall prepare, maintain and amend on an annual basis the NGTL System Annual Plan.

NGTL's facility planning processes are outlined in the Annual Plan. The Annual Plan provides regulators and industry participants with an understanding of how specific facility applications fit into the overall long-term development of the NGTL System. The Annual Plan includes descriptions of NGTL's design assumptions and criteria, as well as the outlook for gas receipts and deliveries, and proposed facility additions.

NGTL shall file facility applications with the Canada Energy Regulator (CER) or its successor for facility additions on the NGTL System in BC and within the "NGTL Footprint" in Alberta. AP shall file facility applications with the Alberta Utilities Commission (AUC) for facility additions on the NGTL System within the "ATCO Footprint" in Alberta.

Facilities that are identified subsequent to presentation of the Annual Plan to the TTFP will be disclosed to the TTFP prior to filing the facility application.

¹ With the exception of Minor Modifications constructed by AP as defined in the Alberta System Integration Agreement.

GUIDELINES FOR NEW FACILITIES

Circumstances (what/when) under which NGTL/AP will construct (own/operate) new facilities on the NGTL System.

As per the Alberta Energy and Utilities Board (“EUB”) Decision 2000-6 respecting NGTL’s 1999 Products and Pricing Application, NGTL will not construct (own/operate) laterals to connect to the NGTL System. As outlined in the EUB Decision 2000-6, the EUB accepted as reasonable NGTL’s submission that “*in general new connections of 12 inches or less in diameter distinctly associated with one or a few customers would normally be considered laterals, while facilities required to meet the aggregate forecast of more than one customer would normally be classified as mainline*”.

Under the following definitions/criteria NGTL/AP will construct (own/operate) new facilities on the NGTL System. For an illustrative example of the definitions refer to

Appendix 1 – Schematic to Aid Definitions.

Expansion Facilities:

NGTL will identify expansions on the NGTL System on an annual basis as per the Annual Plan process and will expand (own/operate) the NGTL System to/from the point of customer connection, generally downstream in the case of receipt and upstream in the case of deliveries. This would include any loop of the existing system, metering and associated connection piping and system compression.

Extension Facilities

Extension facilities are those facilities which connect new or incremental supply or markets to the NGTL System. The determination of whether NGTL/AP will construct the extension facility will depend on whether or not the majority of the criteria are met (Extension Facilities Criteria). NGTL/AP will use the criteria described in the table below as a guideline to construct extension facilities.

Extension Facilities Criteria

NGTL/AP Builds, Owns and Operates	NGTL/AP Does Not Build, Own and Operate
Facilities to serve the aggregate forecast as per the Annual Plan process, generally two or more gas plant receipts or industrial deliveries.	Facilities to serve specific customer requests. Facilities that cannot be justified by NGTL through the Annual Plan process, customer 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, and associated connection piping.	Facilities less than 20 kilometres in length.
Volumes greater than 100 MMcf/d.	Volumes less than 100 MMcf/d.

Connection of Storage Facilities

Refer to the Connection of Storage Facilities Procedure for criteria pertaining to connection of new storage facilities.

Optimal Tie-in Procedure

Customers wishing to connect receipt or delivery facilities to the NGTL System may be required to construct facilities in order to make that connection. The Customer requesting service with NGTL will discuss the best location for connection to the system as well as the best timing for the construction of the tie-in facilities.

The Optimal Tie-in Procedure ensures the sharing of appropriate information to determine the lowest, cost-efficient solution, considering the overall cost to build to connect gas to the system while adhering to

GUIDELINES FOR NEW FACILITIES

the design, efficiency and safety standards of NGTL. In addition, the process ensures fair and consistent treatment of all parties.

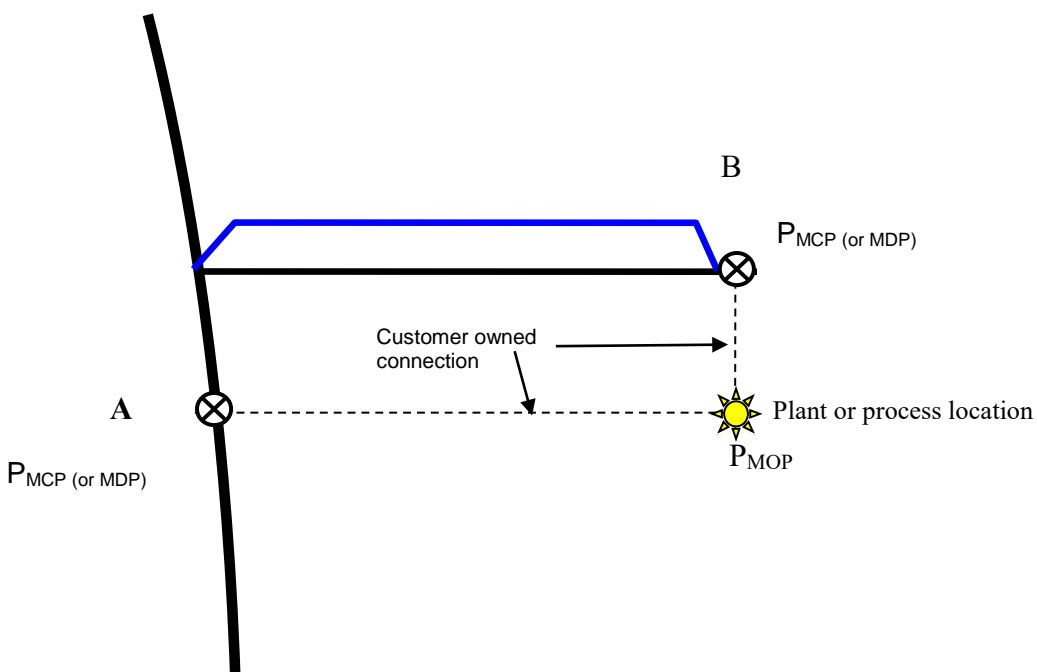
The procedure contemplates and establishes necessary criteria to ensure consistency in the determination of optimal tie-in points, such as a consistent method for determining the cost of NGTL and customer facilities. It must also address customer requests in a timely manner.

The following steps describe the process for the Optimal Tie-in to the NGTL System for customer facilities: (Also see Appendix 2 – Process for Determination of Optimal Tie-in and Associated Accountability).

1. Customer requests service by providing a completed Application for Service (AFS) to NGTL.

In order to ensure that NGTL has all of the necessary information to determine the facility requirements, a completed AFS with all of the required information including; plant location, plant capacity, plant maximum operating pressure (MOP), requested volume, on-stream date, gas quality, reserve information, etc. is required.

NGTL will provide customer with the Maximum Contract Pressure (MCP) for receipt facilities and the minimum delivery pressure (MDP) for delivery facilities at the alternative tie-in points as indicated in the illustrative example below.



2. NGTL estimates the capital costs of the facilities required (including NGTL System and customer cost) based on the customer requested volume and the volume potential in the local area.

The analysis includes customer connection costs to ensure the most orderly, economic and efficient construction of the combined facilities (i.e., if customer costs were ignored, NGTL would minimize its cost, causing the customer to incur additional costs that may be uneconomic). To highlight this situation and as an extreme example, if the customer costs were excluded from the analysis the most optimum tie-in from the perspective of the NGTL System would be the export delivery points.

GUIDELINES FOR NEW FACILITIES

NGTL will perform hydraulic analysis to determine any capacity constraints and facility requirements based on the plant MOP or MDP as applicable and the NGTL junction pressure. All cost estimates, including customer costs, will be determined based on NGTL Rule of Thumb cost estimates and will not include capitalization (indirect capital) or AFUDC amounts.

In determining customer costs, NGTL will use its own estimate of the facilities required, typically pipe, to accommodate the customer's requested volume. Customer compression costs will also be included if NGTL has determined that more than one alternative exists for tie-in and there is a difference in the pipeline operating pressure between alternatives. In determining the estimate of capital costs, only practical pipe sizes will be used (i.e., NPS 4, 6, 8, 10 and 12 inches etc.).

NGTL will continue to maintain its system design criteria of sizing a system expansion loop or extension facility (subject to meeting extension criteria) to accommodate future volume potential in the area for receipt facilities and to accommodate an estimate of the aggregate demand for the area for delivery facilities.

Receipt Volume Forecast

In determining area supply potential for the purpose of appropriately sizing system expansion loops, two categories of gas supply are considered. The two categories are:

- a) Existing Gas Supply: This is gas production that is currently drilled, completed, and tied-in to gathering and processing facilities and is being marketed. This gas supply will decline naturally and, typically, production rates are maintained by the development of New Gas Supply.
- b) New Gas Supply: This is potential gas supply that must be drilled, completed, and tied-in to gathering and processing facilities in order to be marketed. Once this development occurs, this gas supply becomes existing gas. There is inherently more risk associated with New Gas Supply than there is with Existing Gas Supply. New Gas Supply is more affected by commodity price and geologic risk.

If applicable, gas supply available from interconnections with other pipeline systems is considered as well.

Delivery Volume Forecast

In determining area delivery potential for the purpose of appropriately sizing system extension and expansion loops, all potential deliveries within a market area are considered including receipts and deliveries on competitive pipelines, if applicable.

NGTL bases its analysis on:

- historical flow information;
- data from public sources (e.g., various news publications, customer websites and press releases, Government agencies such as the NEB or its successor and the AER, industry associations such as the Canadian Association of Petroleum Producers (CAPP), and public announcements).

Gas delivery forecasts are generated based on the above information and used in the hydraulic analysis for the area.

GUIDELINES FOR NEW FACILITIES

- 3. NGTL will estimate and compare the cumulative present value cost of service (CPVCOS) of each alternative (both first year costs and future costs - including NGTL System and customer) using the aggregate volume assumption.**

The CPVCOS estimate for each alternative will be calculated as follows:

Estimate of	=	CPVCOS of NGTL System expansion facilities (including both directly attributable and non-directly attributable facilities); plus
CPVCOS		CPVCOS of NGTL System extension facilities (if any); plus CPVCOS of customer connection facilities.

The CPVCOS will be determined on the same basis as the CPVCOS as described in NGTL's Tariff, Appendix E, "Criteria for Determining Primary Term". The one exception to this is that the CPVCOS for tie-in determination will be based on depreciation rates currently in effect such that the CPVCOS is calculated over the depreciable life of the facility. Otherwise, the determination of CPVCOS for each tie-in alternative will include operating and maintenance expenses, municipal taxes, income taxes, and return on rate base.

- 4. NGTL identifies the least cost CPVCOS alternative as the optimal tie-in point.**

The optimal tie-in determination will be based upon the least cost comparison of the CPVCOS amounts determined in Step 3. The results from Step 3 will be discussed with the customer to illustrate the tie-in determination and key assumptions used for each alternative.

- 5. NGTL determines the contract terms and conditions as per NGTL's Tariff and reviews with the customer.**

If the customer has elected a tie-in option other than the optimal tie-in point, the shipper is responsible for costs associated with facilities in excess of costs at the optimal tie-in point through a contribution-in-aid-of-construction. NGTL would have some discretion to decline projects not using the optimal tie-in point which are not in the best interests of its other customers.

- 6. Customer accepts the terms and conditions of service including the optimal tie-in point.**

Another factor that may have an impact on the customer's decision is the receipt point specific toll at the connection point. NGTL will provide this information to the customer as it may factor into the customer's acceptance of the terms and conditions of service.

- 7. Customer executes the contract and NGTL proceeds with the necessary facilities application to the regulator.**
- 8. Upon approval from the regulator, NGTL proceeds with construction of the necessary facilities additions and subsequent service commencement proceeds.**
- 9. If Customer does not accept the terms and conditions of the contract including the optimal tie-in point, NGTL and the customer will work together to alter the assumptions (i.e., plant location, contract volume etc.) in an attempt to provide an alternative that is acceptable to the customer and NGTL.**

GUIDELINES FOR NEW FACILITIES

10.Changed assumptions fail to gain customer acceptance and the customer wishes to tie-in at a point other than the optimal tie-in point.

If the customer wishes to tie-in at a point other than the optimal tie-in point and NGTL agrees the customer would be responsible, through a capital contribution, for all costs (including future costs) in excess of the cost of the optimal tie-in as the task force agreed that the rate base should remain neutral and that the remainder of the customers should not have to pay for the customer's sub-optimal tie-in choice.

11.If NGTL does not agree with the customer's wish to tie-in at the sub-optimal point, the customer may take the issue to the dispute resolution process.

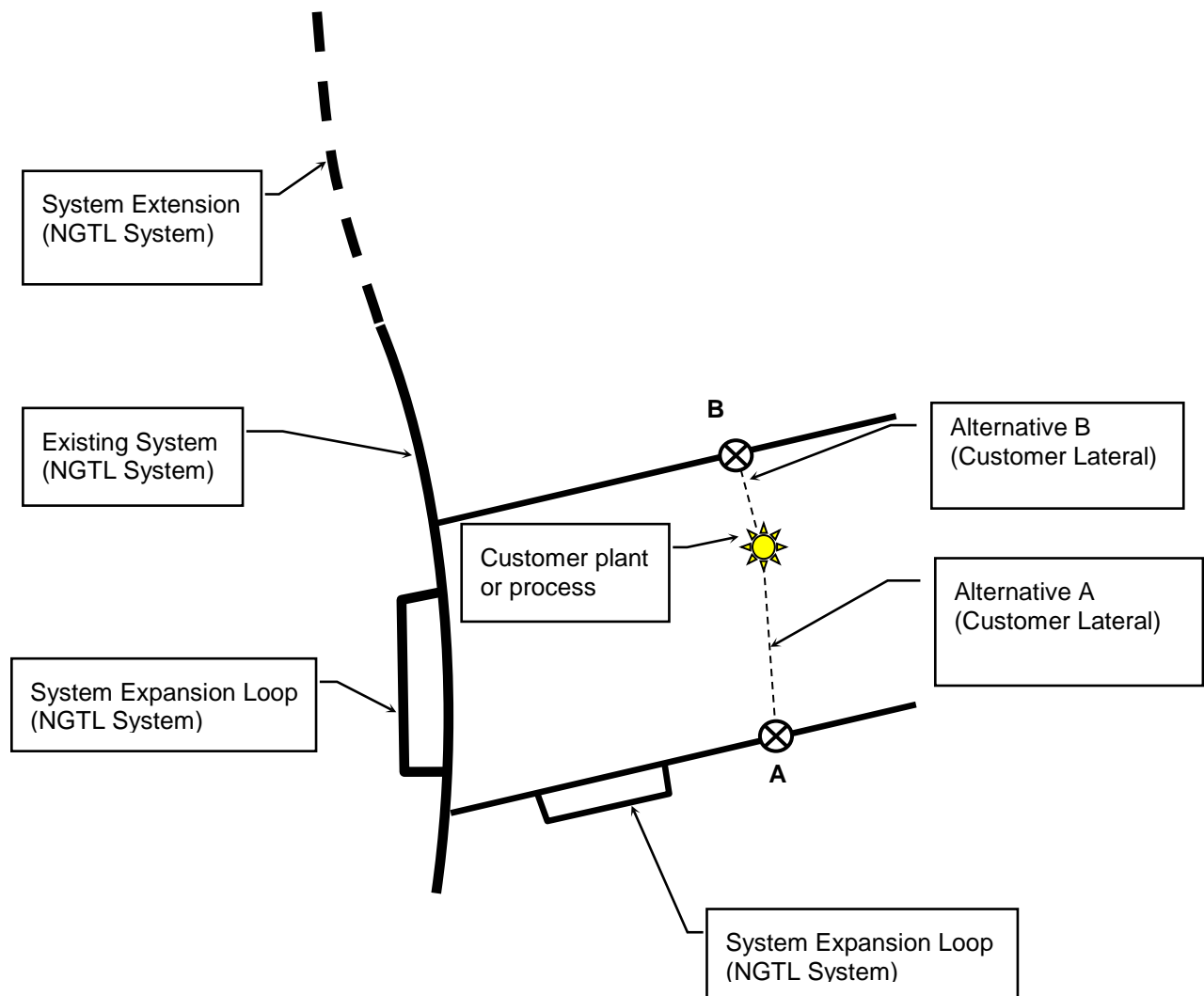
12.If the issue is resolved through the dispute resolution process, the customer executes a contract and NGTL would proceed with the necessary facilities application to the regulator.

Dispute Resolution Process

In the event that there are disagreements related to the optimal tie-in and as a result of the application of the guidelines, NGTL will seek to resolve the issues with the customer. Absent a mutually acceptable resolution, the customer may raise the dispute with the CER or its successor.

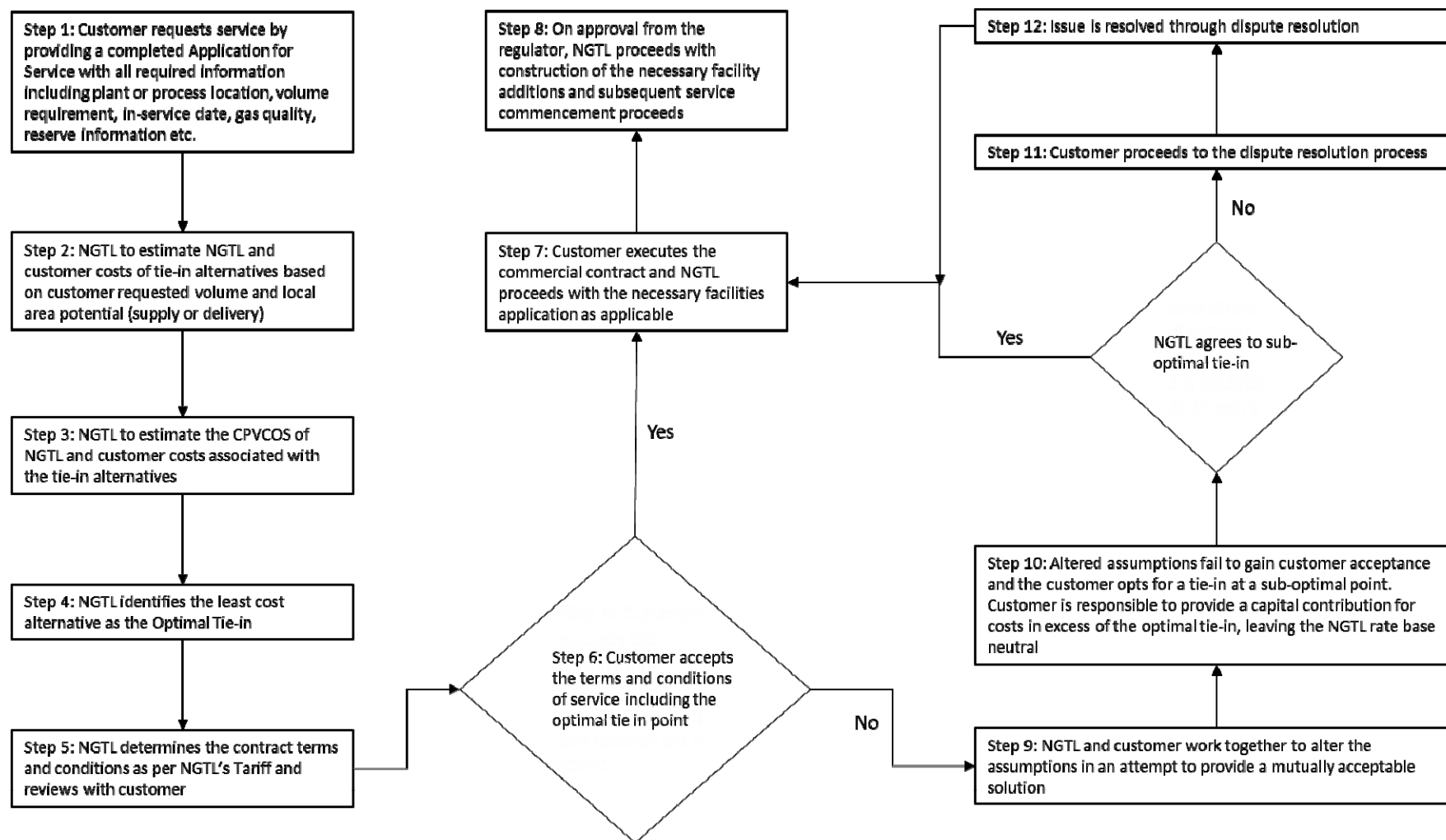
GUIDELINES FOR NEW FACILITIES – Appendix 1

Appendix 1 - Schematic to Aid Definitions



GUIDELINES FOR NEW FACILITIES – Appendix 2

Appendix 2 – Process for Determination of Optimal Tie-in and Associated Accountability



GUIDELINES FOR NEW FACILITIES – Appendix 3

Appendix 3 – Factors Considered in Requiring Longer Contract Terms and in Determining the Application of the Default Tolling Methodology

In the RH-001-2019 Decision and Order TG-001-2020, the CER approved the NGTL Rate Design and Services Settlement (Settlement) and related amendments to the NGTL Tariff.

As part of the comprehensive package of provisions contained in the Settlement, NGTL and its customers agreed that NGTL will apply rolled-in tolling and the rate design as applicable to the existing System as a default methodology for expansions and extensions conditional on an assessment of the degree of integration, nature of service and satisfactory determination that there is no excessive cross-subsidization having regard to project costs and associated contract revenues.

The NGTL Tariff sets out the minimum contract terms applicable to FT-R and FT-D services in various situations (i.e., if no new facilities are required; if new metering facilities are required; and if other facilities are required). These minimum contract terms were agreed to as part of the Settlement, which also provided that NGTL has sole discretion to require longer contract terms. The required minimum contract term is evaluated by NGTL on a case-by-case basis and may be increased to ensure no excessive cross-subsidization having regard to facility costs and associated revenues.

In the RH-001-2019 Decision and Order TG-001-2020, the CER directed NGTL to outline the quantitative and qualitative factors NGTL considers in requiring contract terms longer than the Tariff-defined minimum and determining the application of the default tolling methodology for new facilities. This Appendix was prepared in response to these directions.

Minimum Contract Term

At the time of contracting for FT-R, FT-D2 or FT-D3 service, or at the time of posting an open season for FT-D1 service, NGTL may require a minimum contract term longer than that defined in the Tariff – on a case-by-case basis—based on its informed judgment on a broad range of quantitative and qualitative factors, none of which are determinative or prescriptive. These factors include:

- the scale and scope of proposed facilities, including their associated costs;
- the extent to which proposed project's facilities are more likely to be primarily used by a limited subset of customers;
- the number of customers contracted to use the facilities;
- the incremental revenue generated by the contracts as compared to the incremental costs;
- other factors listed under default tolling methodology with respect to no excessive cross-subsidization;
- financial and capital market circumstances (such as access to capital for NGTL and/or its customers);
- the risk of contract non-renewals; and
- competitive considerations (such as the terms and conditions of service on competing alternatives).

When NGTL exercises its discretion regarding contract term, it may use a range of approaches, including requiring longer primary and/or secondary contract term, or restrictions on secondary contract terms (e.g., limiting transfer availability to a subset of facilities). Generally, NGTL will first address concerns over sufficient cost accountability by requiring longer contract term and/or by

GUIDELINES FOR NEW FACILITIES – Appendix 3

seeking restrictions to the secondary contract term prior to deviating from the default tolling methodology.

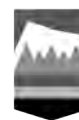
Default Tolling Methodology

When NGTL considers the tolling methodology to be applied to new facilities, it is guided by the requirements of the *CER Act* that tolls must be just and reasonable and not unjustly discriminatory as well as the principles and precedents established through the CER and its predecessor, which are reflected in the criteria defined in the Settlement. NGTL will assess a broad range of factors that relate to the established criteria on a case-by-case basis to determine whether a deviation from the default tolling methodology or an alternative solution such as implementing a surcharge or other forms of additional financial contributions is required. It is expected that such deviations will only occur in unusual circumstances where sufficient cost accountability is not already addressed through the use of longer contract terms.

NGTL's assessment will be based on its informed judgment on quantitative and qualitative factors, none of which are determinative or prescriptive, including:

- The degree to which the proposed facilities would be integrated with the System, including:
 - the extent to which a project can be operated/used independently from the existing NGTL System;
 - the potential number of customers utilizing the facilities over the long term;
 - the physical location of the project relative to the existing NGTL System;
 - the need by existing NGTL System customers for the incremental supply or demand;
 - the extent to which the facilities serve new versus existing markets or supply.
- The nature of the service to be provided using the proposed facilities in relation to the service provided on existing System.
 - Whether the facilities will primarily be used to provide the same service that is available on the existing System.
- No excessive cross-subsidization, which may be guided by an assessment of quantitative and qualitative factors, including:
 - the incremental costs and revenues of the facilities on a net present value basis;
 - the anticipated impact on NGTL System tolls;
 - the financial and credit circumstances of the underpinning customer(s);
 - the term of underpinning contracts terms and toll stability associated with the resulting revenues;
 - the aggregate need for the facilities by other customers on the System; and
 - other benefits to the System and existing customers including, but not limited to:
 - increased utilization of existing facilities;
 - increased connectivity to long-term gas supply;
 - increased connectivity to long-term gas markets;
 - impacts to physical System flows from the proposed facilities that result in a decreased need for fuel or other facilities, or that results in an increase to System reliability and/or improved System operations.

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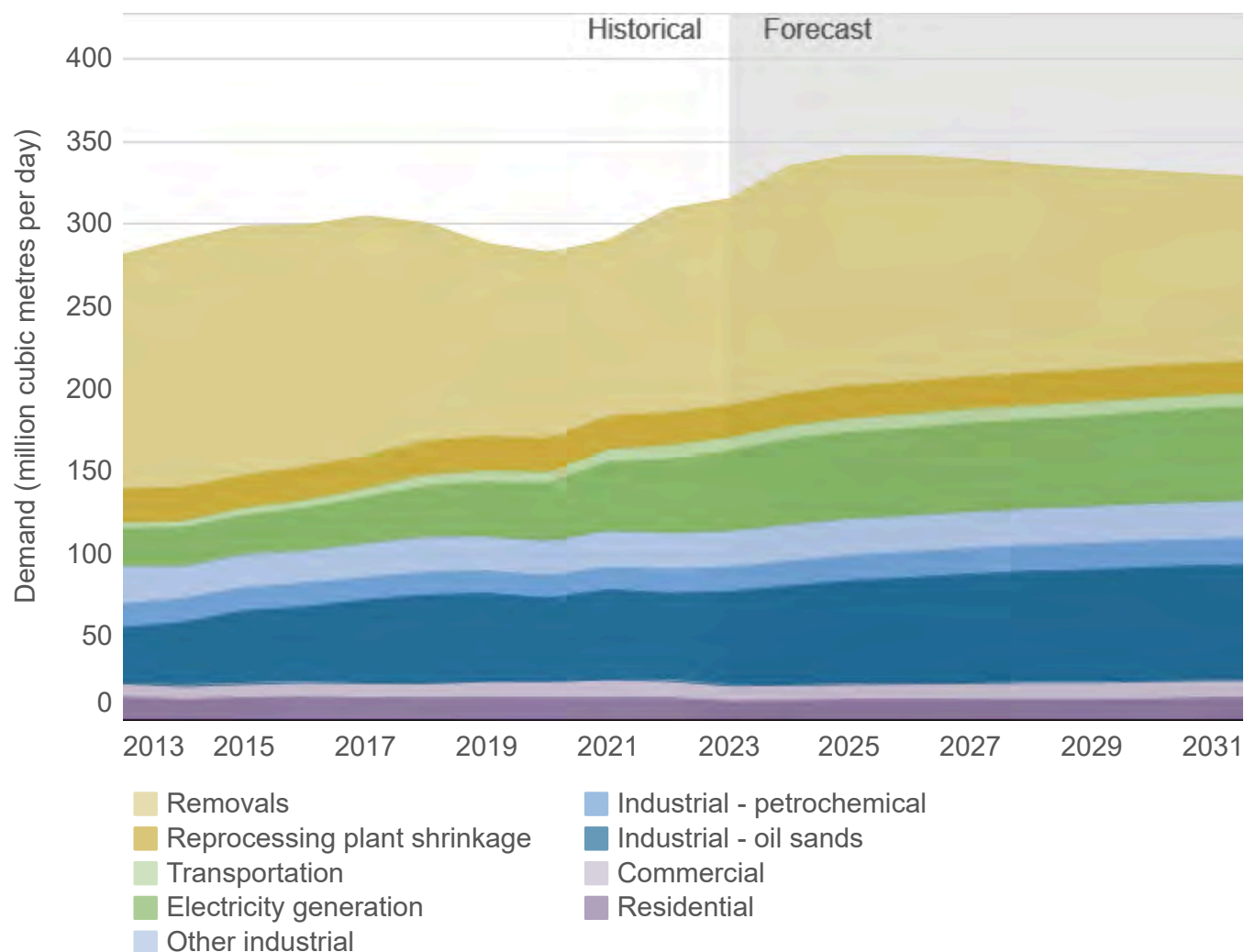


**Alberta
Energy
Regulator**

Natural Gas Demand

Updated June 2024

Figure S5.7 shows marketable gas demand in Alberta by sector and gas available for removal.

Figure S5.7 Alberta marketable gas available for removals and demand by sector

Demand

In 2023

Demand for natural gas in Alberta increased by 2.3% from 2022, accounting for 60% of marketable production volumes (190.4 million cubic metres per day $10^6 \text{ m}^3/\text{d}$ or 6.8 billion cubic feet per day [Bcf/d]).

In 2023, natural gas demand for oil sands increased by 7.0% and for petrochemicals by 4.4%. Increasing production from oil sands and the commercial start-up of the Inter Pipeline propane dehydrogenation and polypropylene complex boosted demand in these sectors. Moreover, natural gas demand for electricity generation grew by 8% in 2023.

Forecast for 2024 to 2033

Total domestic demand for natural gas in Alberta is estimated to reach $220 \times 10^6 \text{ m}^3/\text{d}$ (7.8 Bcf/d) by 2033, growing at an average annual rate of 1.5%. This growth rate is slower than the previous decade, where demand increased by an annual average of 3.2%.

Gas demand is anticipated to grow over the forecast in the following sectors:

- Oil sands demand is expected to account for 49% of the growth over the forecast, primarily driven by increased demand from oil sands in situ operations.
- Electricity generation is expected to account for 29% of the growth over the forecast. This demand is driven by increases in cogeneration at oil sands facilities and rising demand for power generation.
- Other sectors combined (residential, commercial, non-oil sands industrial, and transportation) will account for the remaining growth in demand. Demand is expected to increase at an annual rate of about 0.8%, driven by economic and population growth and partially offset by energy efficiency gains.

Removals

In 2023

Natural gas removals from Alberta (i.e., transfers to other provinces and exports to the U.S.) increased by 1.3% in 2023, as growth in marketable gas production outweighed domestic use. Moreover, completing the West Path Delivery Program in Alberta and British Columbia has contributed to enhancing connections of the Western Canadian Sedimentary Basin to high-value downstream markets.

Forecast for 2024 to 2033

Removals are estimated to decrease over the forecast period to $106.8 \times 10^6 \text{ m}^3/\text{d}$ (3.8 Bcf/d) by 2033, descending at an average rate of 1.5% annually. This decrease in removals will occur as demand growth is forecast to outpace production growth. Moreover, domestic demand for natural gas is expected to increase as the province will likely increase its consumption of natural gas as a transition fuel to a low carbon economy.

Completing the Coastal Gaslink pipeline in 2023 enhanced the market accessibility of natural gas from Western Canada. Alberta's natural gas is poised to compete for pipeline capacity amid increasing production from British Columbia, where producers stand to gain significantly from increased liquefied natural gas (LNG) export ventures. The anticipated rise in LNG exports and overall improvement in market accessibility are expected to benefit Alberta producers by alleviating infrastructure congestion and enhancing commodity pricing.

Learn more about natural gas pipelines in Alberta in the [Pipelines \(/providing-information/data-and-reports/statistical-reports/st98/pipelines-and-other-infrastructure/pipelines\)](/providing-information/data-and-reports/statistical-reports/st98/pipelines-and-other-infrastructure/pipelines) section.

Learn More

- [Methodology \(/providing-information/data-and-reports/statistical-reports/st98/natural-gas/methodology\)](/providing-information/data-and-reports/statistical-reports/st98/natural-gas/methodology)
- [Data \(https://static.aer.ca/prd/documents/sts/ST98/2024/st98-2024-natural-gas-supplydemand-data.xlsx\)](https://static.aer.ca/prd/documents/sts/ST98/2024/st98-2024-natural-gas-supplydemand-data.xlsx) [XLSX]
- [Natural gas removal permitting \(/providing-information/data-and-reports/statistical-reports/st98/natural-gas/removal-permits\)](/providing-information/data-and-reports/statistical-reports/st98/natural-gas/removal-permits)
- [Pipelines and infrastructure \(/providing-information/data-and-reports/statistical-reports/st98/pipelines-and-other-infrastructure\)](/providing-information/data-and-reports/statistical-reports/st98/pipelines-and-other-infrastructure)

ATCO Energy Systems



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Yellowhead Mainline

Driving substantial growth in Alberta

ATCO Energy Systems

Forward-Looking Information

Certain information provided in this document may be considered forward-looking information.

Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "plan", "expect", "will", "goals", "target", "strategy", "future", "potential" and similar expressions. In particular, forward-looking information in this document includes, but is not limited to, references to: anticipated benefits to be generated by the Yellowhead Mainline project, including driving economic growth, supporting energy, petrochemical, building materials and hydrogen projects, reinforcing Alberta's natural gas network, significant job creation, additional market access for producers, expanded capacity and enhanced efficiency of Alberta's natural gas network, and role in emissions goals; the anticipated size, specifications, route and incremental natural gas delivery capacity of the Yellowhead Mainline project; the expected investments associated with the project and expected contribution to the province's economy and GDP; expectations regarding the Dow Path2Zero Expansion Project, including it being a net-zero project; expectations regarding the Heidelberg Materials' Edmonton Cement Plant project, including the amount of CO₂ to be captured annually; and the expectation that the Yellowhead Mainline project will be on-stream as early as Q4 2027.

Such forward-looking information is considered by management to be reasonable based on the information that is available on the date of this document and the processes used to prepare such information; however, such information does not constitute a guarantee of future performance and no assurance can be given that the information will prove to be correct.

Forward-looking information should not be unduly relied upon. Such information involves a variety of beliefs and assumptions of management,

known and unknown risks and uncertainties, and other factors, which may cause actual results, levels of activity, and achievements to differ materially from those anticipated by such forward-looking information. Actual results could differ materially from those anticipated in the forward-looking information as a result of, among other things: economic and industry conditions; changes in applicable laws, regulations and government policies; regulatory decisions; competitive factors; credit risk; interest rate fluctuations; the availability of labour and supplies; the successful development and execution of projects; the availability of financing; the development and performance of technology and new energy efficient products, services and programs; counterparty risks; the occurrence of unexpected events; global pandemics; geopolitical tensions and wars; and other risk factors, many of which are beyond the management's control.

Due to the interdependencies and correlation of these factors, the impact of any one material assumption or risk on a forward-looking statement cannot be determined with certainty.

Readers are cautioned that the foregoing lists are not exhaustive.

The forward-looking information contained herein reflects management's expectations as of the date of this document and is subject to change after such date.

ATCO Energy Systems disclaims any intention or obligation to update or revise any forward-looking information whether as a result of new information, future events or otherwise, except as required by applicable securities legislation.

Yellowhead Mainline Project is set to expand capacity of Alberta's natural gas network



For more than 100 years, we have been delivering safe, reliable and affordable natural gas. Building on that proud tradition, in May 2024, ATCO Energy Systems announced its largest-ever energy infrastructure project: **the Yellowhead Mainline.**

The Yellowhead Mainline consists of 200-230 kilometres of high-pressure natural gas pipeline and related facilities from the Edson area to northeast of Edmonton, with the ability to deliver more than 1,200 terajoules (or 1.1 billion cubic feet) per day of natural gas.

For comparison, this is the same amount of energy the entire Alberta electric system could deliver at peak demand over the course of a day - the equivalent of approximately 330,000 MWh in electric energy.

The projected investment by ATCO represents the largest single investment in company history and will have significant direct and spin off economic benefits within the province.

It is expected to create roughly 2,000 jobs during construction and provide the energy for projects and operations that will result in more than \$20 billion in investments and associated employment within the province.

Combined with downstream industrial investments it could unlock, the project is estimated to generate, on average, 12,000 jobs and contribute \$1.6 billion to the province's economy per year during construction between 2023-2030.

Once operational, it is estimated that the project will support roughly 23,700 jobs in 2028 and contribute \$3.9 billion gross value-added per year to Alberta's GDP.

The Yellowhead Mainline will connect natural gas supply to key domestic markets and expand the province's natural gas network to ensure a reliable energy supply for Alberta's rapidly growing population and industrial base.

It will support energy, petrochemical, building materials and hydrogen projects that use natural gas and carbon capture technology to produce products the world demands with lower emissions than previously possible, while also providing a safe and reliable supply of gas to the tens of thousands of new Albertans that put down roots in the province each and every year.

Alberta has recognized that a healthy and competitive natural gas sector is vital to jobs and prosperity of all Albertans and can have a major role in helping meet the growing global demand for reliable and responsible energy. We are excited for the Yellowhead Mainline to become an integral part of the province's energy infrastructure and continue to contribute to a safe and reliable energy supply for our province's growing population and industry.

The Yellowhead Mainline will provide the energy needed to support a growing Alberta economy and increasing population

This project is the largest single investment in ATCO's history

D. Jason Sharpe
President, ATCO Gas and Pipelines Ltd.

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Yellowhead Mainline Project **02**

Project Drivers **03**

Aligning with Alberta's Natural Gas Vision and Strategy **04**

Supporting Industrial Development and Economic Diversification **05**

Putting Albertans to Work and Fueling Economic Growth **06**

Supporting Emissions Reduction **07**

Conclusion **08**

ATCO Energy Systems

For over a century, ATCO has been a steadfast pillar in Alberta, delivering safe, reliable, and cost-effective energy to industry, homes and businesses throughout the province.



01 Our Story

Our story began in 1911 when the Canadian Western Natural Gas, Light, Heat and Power Company started piping natural gas from Bow Island and Turner Valley to southern Alberta communities.

It may appear as an everyday essential service in today's world, but at its inception and to the people we served, it was revolutionary.

Since those early days, ATCO's natural gas and electricity infrastructure has been the cornerstone of Alberta's growth and prosperity.

We've brought heat and light to homes and businesses for the very first time, not just in Alberta, but across the North in remote communities.

Along the way, we've formed strong relationships with numerous Indigenous communities, countless industry and municipal partners, and millions of people, all over the world.





Yellowhead Mainline Project

In May 2024, ATCO Energy Systems announced its largest ever energy infrastructure project: **the Yellowhead Mainline Project.**

This initiative is expected to increase the availability of natural gas and underpins growth in the economy of Alberta through population growth and industrial projects. This will be accomplished by a 200-230 kilometre natural gas pipeline and associated facilities, running from Peers, Alberta, to the northeast Edmonton area.

The Yellowhead Mainline Project allows for a new flow path for natural gas from the producing areas in the northwestern part of the province to the consuming regions in the central part of the province.

Key Facts

Route:	Peers, Alberta to northeast Edmonton area
Length:	200-230 kilometres
Capacity:	Over 1,200 terajoules (1.1 billion cubic feet) per day of natural gas
Target in-service date:	November 2027



Project Benefits

The Yellowhead Mainline Project aims to:

- Expand Alberta's natural gas network to deliver the energy required for Alberta's growing economy.
- Ensure a safe and reliable energy supply for Alberta's growing population and industrial base.
- Connect natural gas production to key domestic markets.

Broader Impact

The Yellowhead Mainline Project will support various industries, including:

- **Energy:** Enabling energy projects that utilize natural gas and carbon capture technology.
- **Petrochemical:** Providing raw materials to expand Alberta's petrochemical sector.
- **Building Materials & Food:** Supporting production with reliable and efficient natural gas.
- **Hydrogen Projects:** Facilitating the creation of lower-emission hydrogen products.

Economic Impact

The Yellowhead Mainline Project isn't just about pipes; it's about economic prosperity, investment and growth.

- **Construction Jobs:** Expected to create approximately 2,000 direct jobs.
- **Local Boost:** Provides an economic boost to local communities.
- **Downstream Investment:** Facilitates significant investment in value-added products like petrochemicals, hydrogen, and other natural gas products.
- **Total Investment:** Expected to enable more than \$20 billion of investment in Alberta, including projects like Dow's Fort Saskatchewan Path2Zero initiative.
- **Market Access:** Provides additional long-term and reliable market access to Western Canada's natural gas producers.
- **Economic Gains:** Generates upstream royalties, tax revenues, and employment, driving sustained economic growth.

Dow's Fort Saskatchewan Path2Zero expansion project aims to establish the world's first integrated ethylene cracker and derivatives site with net-zero scope 1 and 2 greenhouse gas emissions.

03

Project Drivers

The Yellowhead Mainline Project has three key drivers: expanding system capacity, meeting forecast demand for natural gas, and fueling economic development and investment in Alberta.

Expanding System Capacity

The first driver is the need to increase capacity within the Alberta Integrated System. With growing demand and newly signed delivery contracts, the system requires an expansion to accommodate the additional load.

The Yellowhead Mainline Project will boost the system's capacity, ensuring natural gas can flow from producers in the Western Canadian Sedimentary Basin to customers across Alberta, especially in the Greater Edmonton Area.

Meeting Forecast Demand

The second driver is the forecast increase in natural gas demand across Alberta. This growth is fueled by factors such as population increase, industrial development, and the rising need for power generation.

The Alberta Integrated System is expected to handle an additional 1,350 terajoules per day of demand by 2030, over half of which has already been contracted.

Supporting Economic Development

The third driver is Alberta's economic development and investment needs. Alberta's abundant natural gas resources offer significant opportunities for creating value-added products like petrochemicals and hydrogen.

The Yellowhead Mainline Project will support these industries by providing safe, reliable, and cost-effective natural gas transportation services, helping to drive the province's economic growth.

04

Aligning with Alberta's Natural Gas Vision and Strategy

The Alberta Integrated System is expected to handle an additional 1,350 terajoules per day of demand by 2030.

The Yellowhead Mainline Project is closely aligned with Alberta's Natural Gas Vision and Strategy¹, a comprehensive plan released by the Government of Alberta in 2020.

This strategy aims to position the province as a global leader in responsibly sourced natural gas and related products like hydrogen, petrochemicals, and recycled plastics.

Key Goals of the Strategy

- **Boosting Investment:** One of the strategy's key goals is to accelerate investment in Alberta's midstream natural gas infrastructure. This is crucial for enhancing industrial performance and driving growth within the province.
- **Industrial Consumption:** The strategy also highlights the opportunity to increase industrial consumption of natural gas within Alberta. This would help establish a sustainable market and deliver long-term benefits to the province.

How the Yellowhead Mainline Project Supports the Strategy

The Yellowhead Mainline Project is expected to play a vital role in achieving these goals by enabling Alberta to further harness its abundant natural gas resources. It will support the creation of value-added products like petrochemicals and hydrogen, helping to expand these industries.

By providing the much-needed capacity for safe, reliable, and cost-effective natural gas transportation, the Yellowhead Mainline Project ensures that Alberta's natural gas can meet growing demand, which the current Alberta Integrated System cannot accommodate.

The Yellowhead Mainline project plays a key role in Alberta's long-term natural gas strategy and economic future.



05 Supporting Industrial Development and Economic Diversification

The Yellowhead Mainline Project is a key driver of industrial growth and economic diversification in Alberta.

Recognizing Economic Potential

In August 2023, BuildForce Canada released a study titled "Diversifying Alberta's Energy Economy: Economic and Employment Impacts of Proposed Diversification Projects."² Prepared for the Resource Diversification Council, this report highlights the substantial economic benefits of proposed refining and petrochemical projects in Alberta.

The Resource Diversification Council, a non-profit association of industry, postsecondary, and labour leaders, gathered input from major companies like Dow Canada, Inter Pipeline, Keyera, Nova Chemicals, Nutrien, and Pembina Pipeline.

The study points to hundreds of billions in potential Real GDP, tax revenue, and job creation.

The Yellowhead Mainline Project can play a crucial role in unlocking this economic potential.

Economic Benefits

ATCO commissioned Oxford Economics to evaluate the Yellowhead Mainline Project's benefits. Their report found that the project is expected to generate significant economic advantages both during and after construction.

It will facilitate considerable downstream investments, including supporting Dow's Path2Zero project near Fort Saskatchewan and significant growth in industrial, commercial and residential sectors.

The Yellowhead Mainline Project will drive economic growth in Alberta by enabling further natural gas development and industrial investments.

It will boost value-added processing of natural gas, support lower-carbon projects, and drive residential and commercial investments to accommodate a growing population.

ATCO's investment in the Yellowhead Mainline Project is the largest single investment in a natural gas pipeline in its history.

06 Putting Albertans to Work and Fueling Economic Growth

The Yellowhead Mainline Project can create a positive impact on Alberta's economy and job market.

This critical infrastructure will drive economic growth, supporting the industrial, residential and commercial sectors and enhancing Alberta's overall economic health.

Yellowhead Mainline Impact

- During Construction: The project is expected to create around 2,000 direct jobs.

Major Investment

- This significant investment will yield direct and indirect economic benefits across the province, reinforcing Alberta's position as a leader in industrial and economic development.

Unlocked Impact

- The Yellowhead Mainline Project will supply natural gas for various projects and operations by Alberta Integrated System customers, and is projected to lead to over \$20 billion in investments and job creation across the province.
- **Construction Phase:** From 2023 to 2030, the Yellowhead Mainline Project is projected to generate an average of 12,000 jobs and contribute \$1.6 billion annually to Alberta's economy.
- **Long-term Impact:** Once downstream investments are fully operational, they are anticipated to support approximately 23,700 jobs by 2028 and add \$3.9 billion annually to Alberta's GDP.

07

Supporting Emissions Reduction

The Yellowhead Mainline Project plays a crucial role in supporting Alberta's emission reduction goals.

Role in Emissions Reduction

According to Alberta's Emissions Reduction and Energy Development Plan³, natural gas will play a role in emission reductions across various sectors, including:

- Oilsands
- Power Generation
- Industrial Heat
- Hydrogen and Ammonia
- Petrochemicals

These sectors account for over half of Alberta's natural gas demand and continue to grow.

Supporting Lower-Emissions Technology

The Yellowhead Mainline Project will provide essential natural gas to support the development of lower-emissions technologies. Specifically:

- **Dow's Path2Zero Expansion:**
This project aims to create the world's first net-zero emissions integrated ethylene cracker and derivatives site.
- **Heidelberg Materials' Edmonton Cement Plant:**
The Yellowhead Mainline Project will supply natural gas to this plant, which will be the world's first full-scale carbon capture, utilization, and storage (CCUS) project at a cement plant and is expected to capture more than 1 million tonnes of CO₂ annually.

Contribution to Emissions Goals

By enhancing natural gas delivery capacity, the Yellowhead Mainline Project will support these and other initiatives, contributing to Alberta's emissions reduction goals while fostering lower-carbon economic growth.

08

Conclusion

The Yellowhead Mainline Project is a major investment in Alberta's future, designed to meet the rising demand for natural gas and support economic growth across multiple sectors.

Alberta recognizes the importance of a robust and competitive natural gas sector for job creation and overall prosperity. The Yellowhead Mainline Project will not only support local economic growth but also play a key role in meeting the global demand for sustainable energy.

The project is essential for addressing both new contract and forecast natural gas needs in the province. By expanding delivery capacity, the Yellowhead Mainline Project aligns with Alberta's vision for industrial development and population growth. It will enable further natural gas development and investment, ensuring a stable supply from the western production areas to the central consumption regions.

In summary, the Yellowhead Mainline Project strengthens Alberta's infrastructure, boosts economic opportunities, and supports the province's long-term goals for energy and environmental sustainability.

¹ <https://www.alberta.ca/natural-gas-vision-and-strategy>

² energy-getting-alberta-back-to-work-natural-gas-vision-and-strategy-2020 PDF (www.diversification.org)

³ <https://www.alberta.ca/emissions-reduction-and-energy-development-plan>



The Dow Chemical Company

August 27, 2024

Alberta Utilities Commission
Eau Claire Tower
1400, 600 Third Avenue S.W.
Calgary, Alberta T2P 0G5

Attention: Patrick Bain
Director, Yellowhead Mainline Project

Re: ATCO Pipelines (ATCO)
Letter of Support - Yellowhead Mainline Pipeline Project

Dear Patrick,

Dow Inc., through its subsidiaries, provides various materials science solutions for packaging, infrastructure, mobility, and consumer applications. Dow Chemical Canada ULC (Dow), a wholly owned subsidiary of Dow Inc., is a shipper on the NGTL & ATCO Pipeline systems, with facilities directly connected to the ATCO pipeline system. Dow's previously announced Net-Zero Ethylene Cracker Expansion Project (Path2Zero) will be primarily supplied by the Yellowhead Mainline Pipeline.

Dow hereby submits this Letter of Support for ATCO Pipelines' proposed development of the Yellowhead Mainline Project. The new pipeline and associated infrastructure are expected to be significant drivers of low-carbon economic growth in Alberta. The Yellowhead Mainline project will expand the capacity and enhance the efficiency of Alberta's integrated natural gas system, connecting producers to key markets efficiently while delivering the energy required to meet Alberta's growing energy demand.

The Yellowhead Mainline Project is expected to create approximately 2,000 jobs during construction and will provide gas supply for the more than \$20 billion of investment and associated employment in Alberta, Diego Ordonez, President, Dow Canada has stated "Collaboration with government officials, the community of Fort Saskatchewan, our Indigenous neighbors, and the host of partner companies such as ATCO have been key to enabling Dow's investment to move forward."

For communications regarding this matter, please contact Andre Edwards at aedwards1@dow.com

Respectfully,


Dow Chemical Canada ULC
Andre Edwards
Commercial Energy Manager



July 31, 2024

Alberta Utilities Commission
Eau Claire Tower 1400, 600 Third Avenue S.W.
Calgary, AB
T2P0G5

To Whom it May Concern,

RE: Support for ATCO Yellowhead Mainline Expansion Application Need Assessment Application

On behalf of Keyera Corp. (Keyera), I am pleased to provide a letter in support of ATCO's Yellowhead Mainline Expansion Needs Assessment Application.

As one of Canada's largest independent midstream businesses, Keyera plays a crucial role in the processing, transporting, storing, and marketing of natural gas and natural gas liquids. For more than 25 years, we have safely and responsibly developed our infrastructure in key producing areas of Alberta. We are organized into three highly integrated operating segments:

- **Gathering and Processing:** Keyera owns and operates gathering pipelines and processing plants, which collect and process raw natural gas, remove waste products and separate the economic components, primarily natural gas liquids (NGLs), before the sales gas is delivered into long-distance pipeline systems for transportation to end-use markets.
- **Liquids Infrastructure:** Keyera owns and operates a network of facilities for the gathering, processing, storage, and transportation of the by-products of natural gas processing, including, but not limited to, ethane, propane, butane and condensate.
- **Marketing:** Keyera markets a range of products associated with its two infrastructure business lines, primarily propane, butane, condensate, and iso-octane.

Keyera holds approximately 1,300 acres of undeveloped land in the Industrial Heartland region in Fort Saskatchewan, Alberta. These lands are the focus of potential energy -transition business opportunities, including low-carbon industrial

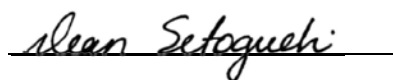
hubs. As a part of the hub development, we are currently working with CN to evaluate the creation of a specialized clean energy rail terminal in the region. Also, in 2023, our 575 km KAPS pipeline system came into service. The system transports NGLs and condensate from northwestern Alberta to Keyera's infrastructure and condensate network in Fort Saskatchewan. We are also an active participant in the Designated Industrial Zone Pilot, a government initiative aimed at establishing an efficient regulatory framework for clustered industrial activities contained within Alberta's Industrial Heartland, with the objective to promote economic development, capital investment and job creation. This context serves to establish Keyera's demonstrable interest and investment in activities in the region. Further to the ongoing work on expansions of our existing facilities in the Industrial Heartland, we are actively evaluating projects suitable for the undeveloped land we own, which will require incremental gas supply. Timely and adequate utility service is critical to attracting investment and will help position the Industrial Heartland, and Alberta, as a competitive world class destination for economic growth and investment.

Keyera asserts that the Yellowhead Mainline Project is necessary for increasing the capacity and efficiency of Alberta's natural gas network and will be integral to the continued growth of energy, petrochemical and hydrogen projects within the Alberta Industrial Heartland; projects which support Alberta's objectives as outlined in the provincial *Natural Gas Vision and Strategy*¹. We believe the proposed Yellowhead Mainline Project can be an economic contributor and provides gas supply for the more than \$20 billion of investment and associated employment projected for the Industrial Heartland region.

Market forecasts and world events call for an increasing global need for reliable sources of energy. Alberta is uniquely positioned to answer this demand by successfully realizing opportunities which extend the value chain of our natural gas resources in collaboration with industry, Indigenous partners, and governments. The ATCO Yellowhead Mainline Expansion Project is such an opportunity and Keyera is pleased to provide our support. We encourage the Alberta Utilities Commission to approve the project's need assessment application.

If you have any questions, please do not hesitate to contact our Director of Government Policy and Regulatory Advocacy, Ben Coleman, at 403 718 7921 or via email at ben_coleman@keyera.com.

Dean Setoguchi
President & CEO



¹ [Natural Gas Vision and Strategy \(alberta.ca\)](https://www.alberta.ca/natural-gas-vision-and-strategy.aspx)



July 31, 2024

Alberta Utilities Commission
Eau Claire Tower
1400, 600 3 Avenue S.W.
Calgary, Alberta T2P 0G5

Re: Letter of Support for the ATCO Pipelines Yellowhead Mainline Project

Plains Midstream Canada (Plains) expresses our support for the ATCO Pipelines Yellowhead Mainline Project (Yellowhead Project). This project is a crucial step toward meeting the growing energy demands of Alberta while ensuring a sustainable and reliable supply of natural gas.

The Yellowhead Project will enhance the access to reliable energy sources, enabling increased transportation of natural gas from Peers, Alberta to the Fort Saskatchewan area. This project is not only vital for addressing the energy needs of Alberta but also for supporting the overall economic development of the region.

Our support is based on several key factors:

Economic Growth: The project will drive additional midstream and downstream investments, create numerous job opportunities, both directly and indirectly, benefiting local businesses and contributing to the economic vitality of the heartland area.

Energy Security: By adding pipeline capacity to Alberta, the project will help ensure a stable and reliable supply of natural gas, which is essential for both residential and industrial use.

Environmental Considerations: We appreciate ATCO Pipelines' commitment to implementing environmentally responsible practices throughout the construction and operation of the new pipeline.

Community Benefits: The project includes plans to engage with local communities, address concerns, and provide support for community initiatives, demonstrating ATCO Pipelines' commitment to being a good neighbour and contributing positively to the regions it serves.

We believe that the ATCO Pipelines Yellowhead Mainline Project will bring considerable benefits to Fort Saskatchewan and the broader region. We encourage the support of the Yellowhead Project and look forward to seeing the positive impacts.

Sincerely,

Braden Purkis

Braden Purkis (Aug 1, 2024 15:36 MDT)

Braden Purkis
VP, NGL Commercial Assets
Plains Midstream Canada ULC

Suite 1400, 607 8 Avenue S.W. Calgary, Alberta, Canada T2P 0A7
Telephone: 403-298-2100 Fax: 403-233-0399 Toll Free: 1-866-343-5182
www.plains.com



Heidelberg Materials

Heidelberg Materials Northwest Region

Edmonton Cement Plant
12640 Inland Way NW
Edmonton, AB T5V 1K2
Phone (780) 420-2664

August 14, 2024

ATCO Pipelines
10035 105 Street,
Edmonton, Alberta
T5J 2V6

Subject: Support for ATCO Yellowhead Mainline Project

Dear Marcy Hafer,

We are writing to express our support for the Yellowhead Mainline project initiated by ATCO, which is currently undergoing the regulatory process with the Alberta Utilities Commission (AUC). The Yellowhead Mainline project promises to bring numerous economic benefits to our community. The construction phase alone is expected to create additional job opportunities, potentially benefiting local companies and contributing to the overall economic vitality of the region.

ATCO's reputation as in the region is well-established, and there is confidence in their ability to construct and operate the pipeline responsibly and sustainably. The project's commitment to safety and environmental standards aligns with our own sustainability vision and long-term strategy.

Furthermore, the additional natural gas supply provided by the Yellowhead Mainline project is positioned to help catalyze significant economic growth opportunities. In particular, the supply will be instrumental for the success of our Carbon Capture, Utilization, and Storage (CCUS) project at our Edmonton cement plant, which stands to benefit significantly from this initiative.

The job creation associated with the Yellowhead project, as well as downstream projects in the region, will have a significant beneficial impact on our community. These jobs will stimulate local businesses and services, creating a ripple effect on the regional economy.

We support the Yellowhead Mainline project and respectfully request that the Alberta Utilities Commission to recognize the project's potential and grant the necessary approvals.

Sincerely,

David Blackley

Vice President Special Projects – Northwest Region
Heidelberg Materials North America

July 31, 2024

Re: McCain Foods - Letter of Support for ATCO Yellowhead Mainline Project

To whom it may concern,

McCain Foods Ltd, and its subsidiaries (collectively “McCain”), is a Canadian leader in the food industry, with over 20,000 employees globally and more than 225 employees in southern Alberta along with decades of operational experience in Alberta. McCain is actively working to expand our French fry processing plant in Coaldale, Alberta and are expecting that the expanded operation will come online in 2025.

This letter is to express support for an approval of the ATCO Yellowhead Mainline project by the Alberta Utilities Commission. This project would provide incremental natural gas delivery capacity to enhance the reliability of Alberta’s natural gas network. If approved, the project would expand the capacity for gas supply in Alberta, including for our operations and expansion thereof. Additionally, it would carry with it numerous other benefits to the local area including but not limited to economic benefits as well as 2,000+ jobs during construction.

Sincerely,

Charlie Angelakos



July 30, 2024

ATCO Gas & Pipelines Ltd.

909 – 11th Avenue S.W.
Calgary, Alberta T2R 1L8

Re: Letter of Support for the Yellowhead Mainline Project

Dear Sir/Madam,

The Explorers and Producers Association of Canada (EPAC) is pleased to express its formal support for the Yellowhead Mainline project, which ATCO Gas & Pipelines Ltd. (ATCO) intends to submit for approval to the Alberta Utilities Commission (AUC).

The Yellowhead Mainline project is an important development that increases capacity into the Edmonton and Heartland region while also enhancing the reliability and efficiency of Alberta's natural gas transmission system. This project will address the rising natural gas demand in the Edmonton and Heartland areas, which are crucial for both residential and industrial growth. Notably, the increased natural gas supply will also support projects designed to reduce emissions, such as the DOW Fort Saskatchewan Path2Zero project, which represents a significant step towards a more sustainable energy future for Alberta.

The economic benefits of this project are significant. The construction phase of the Yellowhead Mainline project will create approximately 2,000 jobs, benefiting local companies and contributing to the economic vitality of Alberta. The jobs created through the project itself and related projects in the region are expected to have a substantial positive impact on our community.

ATCO is a respected and trusted company in the region, with over 100 years of experience in the pipeline industry. ATCO manages an extensive pipeline network in Alberta and has a strong track record of safety and reliability. Their commitment to safety and operational excellence ensures that the Yellowhead Mainline will be responsibly and safely operated.

The Yellowhead Mainline project will connect growing natural gas production in Alberta to rising demand in the Edmonton and Heartland areas. This connection is vital for facilitating economic growth and ensuring that new industrial projects, including emissions reduction projects, have the necessary supply to proceed. The increased natural gas supply will support both new upstream and downstream investments, fostering further economic development and prosperity for Alberta.

EPAC represents seventy-eight members who are independent oil and gas producers. Our members have a vested interest in the success and reliability of the natural gas infrastructure,



and we believe that the Yellowhead Mainline project is important for sustaining and enhancing our industry's contributions to the province.

EPAC supports ATCO's initiative and encourages the AUC to approve the need for the Yellowhead Mainline project. This project is important and beneficial to the continued economic development of Alberta.

Sincerely,

A handwritten signature in blue ink that reads "Tristan Goodman". The signature is fluid and cursive, with a long horizontal flourish at the end.

Tristan Goodman
President and CEO
The Explorers and Producers Association of Canada



“Adding Value in Alberta Using Natural Gas”

August 19, 2024

ATCO Pipelines
909 - 11 Ave SW,
Calgary AB Canada T2R 1L8

Attention: Patrick Bain
Director, Yellowhead Mainline Project

Dear Patrick,

Re: ATCO Pipelines (AP)
Letter of Support - Yellowhead Mainline Project

Industrial Gas Consumers Association of Alberta (“IGCAA”) was established in 1988 and represents ten large industrial companies that consume over 2.0 bcf/d of natural gas in locations throughout Alberta and are engaged in many of the major sectors of Alberta’s economy, including the energy, agricultural and manufacturing industries. IGCAA's associate members provide a wide range of services that support the upstream oil and natural gas industry.

IGCAA members are shippers on the NGTL and ATCO Pipeline System and have a vital interest in the Yellowhead Mainline Project.

IGCAA hereby submits a Letter of Support for ATCO Pipelines proposed development of the Yellowhead Mainline Project. The new pipeline infrastructure is expected to be a significant driver of lower-carbon economic growth in Alberta. The Yellowhead Mainline project will expand the capacity and enhance the efficiency of the province’s natural gas network, connecting natural gas producers to key markets and delivering the energy required for Alberta’s growing energy demand.

The project is expected to create approximately 2,000 jobs during construction and will provide gas supply for the more than \$20 billion of investment and associated employment in Alberta, including the Dow Fort Saskatchewan Path 2 Zero project. Diego Ordonez, President, Dow Canada has stated “Collaboration with government officials, the community of Fort Saskatchewan, our Indigenous neighbors, and the host of partner companies such as ATCO have been key to enabling Dow’s investment to move forward.”

For communications regarding this matter, please contact Wilfred Barke at wilf@igcaa.ca.

All of which is respectfully submitted.

INDUSTRIAL GAS CONSUMERS ASSOCIATION OF ALBERTA

Original signed by

Wilfred Barke
Executive Director

CC. Andre Edwards -Dow; Marcy Hafer – ACTO Pipelines

Wilfred Barke- Executive Director, Telephone: 403 804 5546 Email: wilf@igcaa.ca Web: www.IGCAA.ca

Unit 162, 305-4625 Varsity Drive NW, Calgary, AB, T3A 0Z9



July 29th 2024

ATCO Pipelines
7210 42 Street NW
Edmonton, AB T6B 3H1

To whom it may concern,

Alberta's Industrial Heartland Association (AIHA) is proud to write in support of the Yellowhead Mainline Project. We are grateful that ATCO continues to support the development of new business and expansion of existing industrial activity in the Heartland with visionary infrastructure projects. The Yellowhead Mainline Project will create jobs, enable billions in new investment and drive Alberta's Hydrogen roadmap and Natural Gas vision and Strategy.

The Industrial Heartland- Designated Industrial Zone (IH-DIZ) is the first designated industrial land use area recognized by municipal and provincial authorities in the province. The zone is based on an existing industrial cluster that has been in development since the 1960s, and now incorporates over \$45 billion in existing industrial assets. While the assets include some refining capacity, the majority of new capital investments are based on the transformation of natural gas and natural gas liquids (NGLs) into chemical products for domestic use and export. The region's enduring advantage for business attraction has relied on availability of comparatively low-cost, abundant feedstocks for use at these facilities. While natural gas production shifts to more productive and distant fields such as the Montney Basin, projects like the Yellowhead Mainline will help maintain Alberta's Industrial Heartland's competitive position for years to come.

AIHA has more active files than ever before in its 25-year history. In addition to substantial interest in hydrogen production for export (Six publicly announced projects under study), AIHA is engaged with companies involved in battery material manufacturing, novel protein creation, decarbonized power generation, data centres, chemical and plastics production, biofuel production and more. These activities all rely on access to natural gas at competitive prices. Proposed at 1 billion cubic feet per day, the Yellowhead Mainline will ensure that there is sufficient natural gas supply to the region to foster significant economic growth.

The proposed Yellowhead Mainline Project achieves two key goals for the IH-DIZ and AIHA. First, the Project enables reliable access to natural gas, thereby supporting a key regional advantage. Second, the Project has the potential to achieve the needed regulatory approvals in time to support the array of projects currently under study in the region today.

We fully support the development of the Yellowhead Mainline and look forward to celebrating its completion with the entire region.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Plamondon".

Mark Plamondon
Executive Director



The Capital Investment Destination

IndustrialHeartland.com



August 15, 2024

ATCO Gas & Pipelines Ltd.
909-11 Ave SW
Calgary, AB T2R 1L8

To Whom it May Concern:

Subject: Letter of Support for the Yellowhead Mainline Project

On behalf of Economic Developers Alberta (EDA), I am writing to express our support for the ATCO Pipelines Yellowhead Mainline Project. As Alberta's premier professional organization dedicated to advancing economic development, EDA is keenly aware of the critical role that infrastructure projects play in fostering economic growth and development across the province.

The Yellowhead Mainline Project represents a significant advancement in our province's energy infrastructure. With a 200-kilometer high-pressure pipeline, this project will deliver natural gas more efficiently to the Industrial Heartland, alleviating the current bottlenecks and inefficiencies in the system. This enhanced capacity is essential for accommodating Alberta's expanding gas needs and will bolster the province's ability to support new businesses and growth areas.

The benefits of the Yellowhead Mainline Project include:

1. **Enhanced System Resiliency:** By providing a more direct route for natural gas, the project will significantly increase the resiliency of our energy system, ensuring more reliable service across Alberta.
2. **Economic Growth:** The project represents a \$2+ billion capital investment, underscoring its scale and importance. This investment is anticipated to spur substantial economic activity.
3. **Job Creation:** The pipeline construction will generate approximately 2,000 jobs, contributing to the local economy and providing valuable employment opportunities for Albertans.



4. **Support for Major Investments:** The Yellowhead Mainline Project will support the new DOW Path2Zero facility, a \$9 billion capital investment that will create 500 full-time jobs upon completion. This alignment with large-scale projects demonstrates the project's potential to catalyze further economic development.
5. **Downstream Energy Demand:** The project is poised to stimulate additional investments in downstream energy demand, which will benefit the broader economic landscape across the province.

EDA's mission is "To provide leadership to advance economic development as a profession; enhance the professional development of its members; and support Alberta communities in fostering sustainable community economic prosperity." In alignment with our mission, we recognize that the Yellowhead Mainline Project aligns with our goals by enhancing Alberta's economic infrastructure and creating significant opportunities for growth and development across various sectors.

We wholeheartedly support the Yellowhead Mainline Project and commend ATCO Pipelines for its commitment to advancing Alberta's energy infrastructure. We look forward to seeing the positive impacts this project will undoubtedly have on our province's economy and communities.

Please do not hesitate to reach out if there is any additional support EDA can provide as this pivotal project moves forward.

Thank you for your attention to this important matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amanda Mercer'.

Amanda Mercer, Chair
Economic Developers Alberta



August 1, 2024

ATCO Pipelines
7210 42 Street NW
Edmonton, AB T6B 3H1

Subject: Letter of Support for ATCO's Yellowhead Mainline Project

To whom it may concern,

I am writing to express Edmonton Global's strong support for ATCO's Yellowhead Mainline Project. Edmonton Global is the investment and trade agency for the Edmonton region, representing 14 municipalities that have come together to support the radical transformation of our region's economy. One of our priority sectors is clean energy – with a strong focus on the hydrogen opportunity. Alberta's clean energy value proposition is founded on the ability of our region to produce low-cost, low carbon hydrogen from Alberta's plentiful natural gas resources, coupled with our world-class expertise in CO₂ capture, utilization and storage (CCUS). Edmonton Global is also a partner in the Edmonton Region Hydrogen Hub and we are working with partners to build a strong ecosystem that allows the province to remain a leading producer of low-cost, clean hydrogen while also growing demand for hydrogen across a range of sectors.

The Yellowhead Mainline project sends a powerful signal to investors that Alberta is continuing to support the development of new business and expansion of existing industrial activity in the Edmonton region with visionary infrastructure projects. The Yellowhead Mainline Project will create jobs, enable billions in new investment and drive Alberta's Hydrogen roadmap and Natural Gas vision and Strategy. For example, we anticipate that the vast majority of the 2000 construction jobs associated with the project will come from the communities that comprise the Edmonton region, with further employment coming from the many projects that this infrastructure will catalyze.

This critical infrastructure also demonstrates that Canada's path to net zero greenhouse gas emissions truly does run through the Edmonton region. We have demonstrated Alberta, and the Edmonton region in particular, is the home to world leading, large-scale industrial decarbonization projects. The Yellowhead Mainline project will not only enable Dow's Path2Zero Project, but it will also allow our region to attract investment in other projects to decarbonize hydrogen, chemicals, cement and steel production. This



infrastructure will help to ensure our region, and Alberta more generally, capitalizes on this \$100 billion economic opportunity for Canada.

The project will also significantly enhance that ability of our region to serve global markets with clean energy resources is also export. For example, approximately 50 per cent of the \$100 billion economic opportunity is associated with our ability to produce commodities like low carbon ammonia for Asian markets. While natural gas production shifts to more productive and distant fields such as the Montney Basin, projects like the 200-kilometer Yellowhead Mainline will help maintain the Edmonton region's competitive position for years to come.

In addition to clean energy, Edmonton Global works to attract investment in a range of sectors, including cleantech manufacturing, life sciences, food and agriculture, technology, transportation and global logistics. Access to low-cost natural gas is enabling all these sectors. Proposed at 1 billion cubic feet per day, the 36-inch diameter Yellowhead Mainline pipeline will ensure that there is sufficient natural gas supply to the region to foster significant economic growth.

Edmonton Global is fully supportive of the development of the Yellowhead Mainline is happy to speak further about the merits of this project and its completion in a timely manner.

Sincerely,

A handwritten signature in blue ink, appearing to read 'MB', with a horizontal line underneath.

Malcolm Bruce, MSM, ICD.D
CEO, Edmonton Global



CALGARY CHAMBER OF COMMERCE
AMPERSAND EAST SUITE 410, 112 4 AVE SW, CALGARY, AB T2P 0H3
403 750 0400 | CALGARYCHAMBER.COM

September 4, 2024

Subject: Letter of support for the Yellowhead Mainline Project

To Whom it May Concern;

On behalf of the Calgary Chamber of Commerce, I would like to express our strong support for the Yellowhead Mainline pipeline project—an important addition to our natural gas infrastructure in Alberta. This initiative promises emissions reductions, as well as significant economic benefits for our province, including job creation and substantial investment across the energy value chain.

Alberta's storied legacy as a global energy pioneer continues to evolve, solidifying its role as a leader in the ongoing energy transition. By expanding system capacity within the province's intra-provincial pipeline system, the Yellowhead Mainline project will unlock additional domestic markets for Western Canada's natural gas producers, creating tax and royalty revenue that will benefit all Albertans, while also increasing the availability of low-cost natural gas to incent future industrial investment. Critically, the project will also help drive economic growth and facilitate investment in low-carbon technologies and products including carbon capture, hydrogen, petrochemicals and building materials—industries that are central to the province's plans to diversify its economy.

While many of the jobs and much of the capital investment associated with this project will be centered in Alberta's Industrial Heartland, the indirect economic benefits the pipeline unlocks will be shared by businesses across the province—including within Calgary.

The Calgary Chamber of Commerce's vision is a net-zero world in which Alberta's energy industry is competitive and is a leader in innovation and emissions reduction technology—a world in which our province is a global leader. We believe that this project can play an important role in advancing these outcomes.

Warm regards,

Ruhee Ismail-Teja

Vice President, Policy and External Affairs
Calgary Chamber of Commerce

ABOUT THE CALGARY CHAMBER OF COMMERCE

The Calgary Chamber of Commerce exists to help businesses reach their potential. As the convenor and catalyst for a vibrant, inclusive and prosperous business community, the Chamber works to build strength and resilience among its members and position Calgary as a magnet for talent, diversification and opportunity. As an independent, non-profit, non-partisan organization founded in 1891, we build on our history to serve and advocate for businesses of all sizes, in all sectors across the city.



September 9, 2024

Alberta Utilities Commission
1400, 600 3 Ave SW
Calgary, Alberta
T2P 0G5

Dear Alberta Utilities Commission,

On behalf of the Business Council of Alberta (BCA), I am writing to you in support of ATCO's upcoming Yellowhead Mainline natural gas pipeline project regulatory application.

BCA is a non-partisan policy organization whose 135 chief executive members are proud to represent the majority of Alberta's private sector investment, job creation, exports, and research and development.

The Edmonton and Industrial Heartland areas are brimming with economic potential. Proposed petrochemical, hydrogen, and carbon capture and storage projects put this region at the forefront of Alberta's next wave of major project development. The province stands to benefit from billions of dollars in capital investment, tens of thousands of construction and facility operation jobs, and an infusion of service-supporting government revenues.

However, this massive economic potential will be limited by a forecasted shortfall in capacity to efficiently and cost-effectively move more natural gas from Northwest Alberta directly to the Edmonton/Fort Saskatchewan area. A failure to enable timely access to natural gas service will hinder the vast economic potential of the region—and therefore Alberta's long-term prosperity.

BCA believes that the Yellowhead Mainline project can fill this vital gap. As such, we ask that you consider the significant shared benefits of the proposed Yellowhead Mainline when assessing the need for this project.

We thank you for considering our request.

Yours truly,

A handwritten signature in black ink, appearing to read "Adam Legge".

Adam Legge
President



OFFICE OF THE MAYOR

August 28, 2024

ATCO Pipelines
7210 42 Street NW
Edmonton, AB T6B 3H1

Subject: Letter of support for the Yellowhead Mainline Project

On behalf of Sturgeon County, we would like to express our support for the proposed Yellowhead Mainline Project. We are deeply appreciative of ATCO's continued support of new businesses and the expansion of existing industrial activity in the region through visionary infrastructure projects. The Yellowhead Mainline Project will create jobs, enable billions in new investment, and drive Alberta's Hydrogen Roadmap and Natural Gas Vision and Strategy.

Sturgeon County, as part of the Designated Industrial Zone (IH-DIZ), will be home to several new capital investments focused on the production of chemical products as well as low-carbon hydrogen and power generation. The region's competitive advantage for business attraction relies on the availability of low-cost, abundant feedstocks for these facilities. As natural gas production shifts to more productive and distant fields such as the Montney Basin, projects like the Yellowhead Mainline will help maintain the County's competitive position.

Sturgeon County continues to engage with global investors exploring projects in decarbonized power generation, hydrogen and blue ammonia production, data centers, chemical and plastics production, biofuel production, and more. These projects depend on access to natural gas and are poised to fuel a provincial and global transition to a low-carbon economy. With 1 billion cubic feet per day in capacity, the Yellowhead Mainline will ensure sufficient natural gas supply to the region, fostering a sustainable future that supports the province's traditional oil and gas industry.

The timing of the proposed Yellowhead Mainline Project supports several projects already announced for the region, as well as those currently studying future opportunities. We fully support the development of the Yellowhead Mainline and the economic development opportunities it will bring.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alanna Hnatiw'.

Alanna Hnatiw
Mayor

C: Honourable Dale Nally, MLA for Morinville-St. Albert
Shane Getson, MLA for Lac Ste. Anne-Parkland
Sturgeon County Council
Reegan McCullough, Chief Administrative Officer, Sturgeon County

9613 100 Street, Morinville, AB T8R 1L9 sturgeoncounty.ca





August 30, 2024

Greg Caldwell
Director of Utility Hydrogen Strategy and Decarbonization
ATCO Energy Systems

Dear Mr. Caldwell,

Support for ATCO's Yellowhead Mainline

Strathcona County is pleased to offer this letter of support for the construction of ATCO's Yellowhead Mainline Project. This project presents a valuable opportunity to benefit our region economically, while also supporting future growth potential and ensuring energy stability.

The Yellowhead Mainline project will provide important economic benefits for the region and Alberta, particularly through job creation during the construction phase. Local companies stand to benefit from these opportunities, ensuring a positive impact on our community and economy. Additionally, the project's potential of additional natural gas supply is key to enabling future industrial growth that will enable future downstream industries. This increase in capacity will help sustain the county's growth and contribute to the long-term economic prosperity of the area.

The expansion of natural gas infrastructure will not only support ongoing and future development projects but will also strengthen our ability to attract new investments in key sectors such as energy and petrochemicals. The anticipated downstream projects facilitated by this pipeline will bring further job creation and business opportunities, further reinforcing Strathcona County's role as a vibrant and growing hub in Alberta.

We also acknowledge ATCO's established reputation as a reliable company that has delivered critical infrastructure projects across Alberta and here in Strathcona County. ATCO's commitment to safety, innovation, and community engagement gives us confidence that the Yellowhead Mainline project will be completed successfully, and in a manner that addresses local concerns.

In conclusion, Strathcona County fully supports ATCO's efforts with the Yellowhead Mainline Project, and we look forward to the economic and developmental opportunities it will bring to our region.

Sincerely,

A handwritten signature in black ink, appearing to read "Rod Frank, JD".

Rod Frank, JD
Mayor
Strathcona County

OFFICE OF THE MAYOR
2001 Sherwood Drive
Sherwood Park, Alberta, T8A 3W7
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