



**ATCO Gas and Pipelines Ltd.**

**Pembina-Keephills Transmission Pipeline Project**

**August 6, 2019**

**Alberta Utilities Commission**

Decision 23799-D01-2019

ATCO Gas and Pipelines Ltd.

Pembina-Keeyik Transmission Pipeline Project

Proceeding 23799

Application 23799-A001

August 6, 2019

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## Contents

<b>1</b>	<b>Decision summary .....</b>	<b>1</b>
<b>2</b>	<b>Introduction and background.....</b>	<b>1</b>
2.1	Project description.....	1
2.2	How the Commission assesses applications for new gas utility pipelines.....	2
2.3	Commission process .....	3
<b>3</b>	<b>The integrated Alberta natural gas transmission system.....</b>	<b>4</b>
3.1	Background .....	4
3.2	The Integration Agreement .....	5
3.3	Responsibilities of NGTL and ATCO Pipelines under the Integration Agreement.....	6
3.4	The Alberta System Annual Plan .....	7
3.5	Regulatory approvals under the Integration Agreement .....	7
<b>4</b>	<b>Project need and alternatives.....</b>	<b>7</b>
4.1	Views of ATCO Pipelines.....	7
4.1.1	The need for the pipeline .....	7
4.1.2	Project alternatives.....	10
4.2	Views of the UCA and CCA and responses of ATCO Pipelines.....	12
4.2.1	Project sizing and contributions.....	12
4.2.2	Project utilization to serve the greater Edmonton area .....	16
4.2.3	Regulatory burden on core customers.....	16
4.2.4	Project cost.....	17
4.2.5	Project timing.....	18
4.3	Commission findings .....	18
4.3.1	Project need.....	18
4.3.2	Project cost.....	21
4.3.3	Project timing.....	22
<b>5</b>	<b>Other matters .....</b>	<b>22</b>
5.1	Environmental assessment .....	22
5.2	Consultation .....	23
<b>6</b>	<b>Findings.....</b>	<b>24</b>
<b>7</b>	<b>Decision .....</b>	<b>25</b>

## 1 Decision summary

1. In this decision, the Alberta Utilities Commission considers whether to approve an application by ATCO Gas and Pipelines Ltd. to construct and operate 58.92 kilometres of new high-pressure natural gas pipeline and related above-ground facilities. The new pipeline and facilities are proposed to increase the capacity of the existing pipeline system in Alberta to meet the incremental natural gas demand for electric power generation in the Wabamun area and offer additional supply capacity to the greater Edmonton area.

2. After consideration of the record of the proceeding, and for the reasons in this decision, the Commission finds that approval of the project is in the public interest, having regard to the need for the project and the social, economic and other effects of the project, including its effects on the environment.

## 2 Introduction and background

### 2.1 Project description

3. On August 1, 2018, ATCO Gas and Pipelines Ltd. (ATCO Pipelines) filed Application 23799-A001 with the Commission seeking approval of the need for new pipelines and for the construction and operation of the Pembina-Keephills Transmission Pipeline (the project) from the existing ATCO Pipelines Pembina Transmission System near Drayton Valley to the Wabamun area, pursuant to Section 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act*. The application seeks to add the following new pipelines to Licence 103:

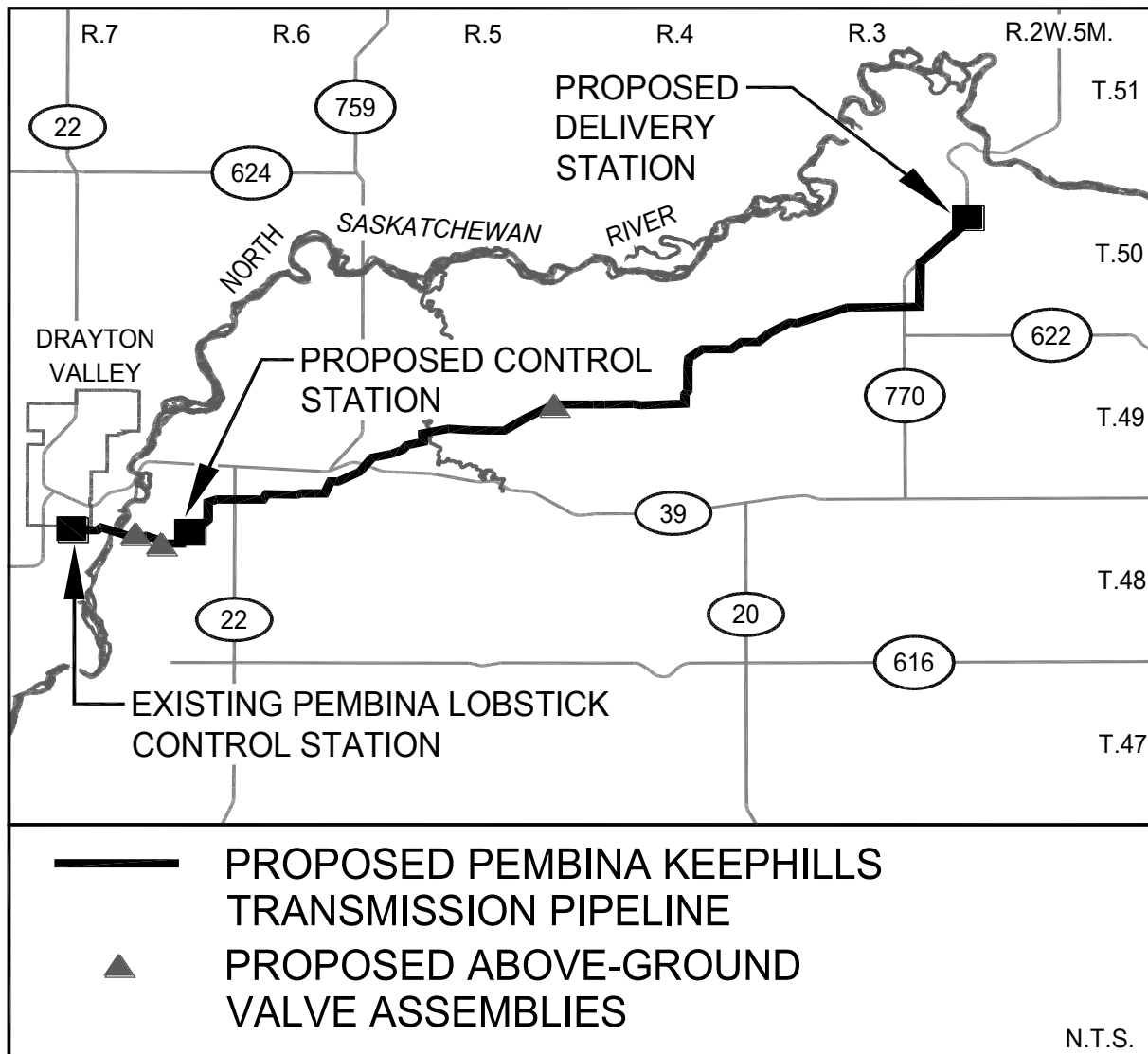
- lines 64 and 65 - 0.84 kilometres of 610-millimetre outside-diameter (OD) pipeline
- lines 66 to 89 - 57.84 kilometres of 762-millimetre OD pipeline
- lines 90 to 92 - 0.24 kilometres of 508-millimetre OD pipeline

4. The proposed project would be constructed from ATCO Pipelines' existing Pembina Lobstick Control Station located in the northwest quarter of Section 28, Township 48, Range 7, west of the Fifth Meridian to a proposed new delivery station to be located in the southeast quarter of Section 25, Township 50, Range 3, west of the Fifth Meridian.

5. ATCO Pipelines also proposed to install a block valve assembly and control station in Legal Subdivision 16, Section 25, Township 48, Range 7, west of the Fifth Meridian. ATCO Pipelines stated that it would apply for a short pipeline lateral to connect this control station to the existing Pembina Transmission System in a future application that would include a noise impact assessment for the proposed control station. ATCO Pipelines stated that the

installation of this control station will facilitate completion of a loop of approximately seven kilometres of the existing 406.4-millimetre Pembina Transmission Pipeline, thereby providing additional capacity to the existing Pembina Transmission Pipeline serving the greater Edmonton area. ATCO Pipelines also proposed to install three above-ground valve assemblies as part of the project.

6. The applied-for route and the proposed facilities are shown in Figure 1.



**Figure 1**

## **2.2 How the Commission assesses applications for new gas utility pipelines**

7. Approval for new gas utility pipelines in Alberta generally follows two separate application processes. One process sets rates to allow the gas utility to recover its prudently incurred costs. In the rates process, the gas utility seeks the Commission's approval for the forecast capital expenditures for new pipeline facilities within the context of a utility rate application pursuant to the *Gas Utilities Act*. In its general rate application, the gas utility

includes a business case for the new pipeline project that describes the need or justification for the new project, the alternatives available to meet that need, and the utility's choice of the best alternative.

8. The Commission's assessment of the business case is economic in nature and includes a cost benefit analysis, supply-demand forecasts, safety and security of supply and rate impact analyses. However, there is generally little consideration of site-specific impacts and, consequently, potentially-affected landowners do not usually participate in the general rate application process.

9. In a separate application process, the gas utility seeks the Commission's approval to construct and operate the new pipeline, pursuant to the *Pipeline Act* and the *Gas Utilities Act*. The facility application generally focuses on the site-specific impacts of the project. When deciding whether to approve a facility application, the Commission evaluates the justification for the project as configured and its site-specific impacts. The need for the project, including its economic benefits, is weighed or balanced against any adverse social, economic or environmental effects to determine if approval of the proposed project is in the public interest.

10. While gas utilities in Alberta generally follow these two application processes for the approval of new gas utility pipeline projects in the order presented above, there is no statutory requirement that they proceed in this fashion.

11. The Commission's Rule 020: *Rules Respecting Gas Utility Pipelines* allows an applicant to apply for approval of both the need and the facilities in a single proceeding. Pursuant to the provisions of Rule 020, a gas utility can seek approval to construct and operate a new gas utility pipeline under the *Pipeline Act* and the *Gas Utilities Act* without prior approval of the associated forecast capital expenditures. In that case, the Commission would consider the need for the project, the alternatives, and the specific routing, all within the facility proceeding, without approving the forecast rate increases necessary to recover the project's costs.

12. In this proceeding, ATCO Pipelines requested approval of the need for the project and approval to construct and operate the project in order to meet that need.

### **2.3 Commission process**

13. The Commission issued a notice of application on August 22, 2018, in accordance with the requirements of Rule 020: *Rules Respecting Gas Utility Pipelines*.

14. Mr. Greg R. Ulveland filed a statement of intent to participate in this proceeding on behalf of Akorp Developments Inc. ATCO Pipelines subsequently advised the Commission that it had reached a mutual understanding with Mr. Ulveland about how his concerns would be addressed, and that Mr. Ulveland no longer objected to the project.<sup>1</sup>

15. The Office of the Utilities Consumer Advocate (UCA) and the Consumers' Coalition of Alberta (CCA) each sought further information about the project in ATCO Pipelines' 2019-2020 General Rate Application proceeding<sup>2</sup> (Proceeding 23793). In Proceeding 23793, the UCA asked

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<sup>1</sup> Exhibit 23799-X0040, Participant Letter.

<sup>2</sup> Proceeding 23793, ATCO Pipelines 2019-2020 General Rate Application.

for a second round of information requests with respect to certain rate implications of the project.<sup>3</sup> The CCA also requested further process to address the proper scope of that proceeding.<sup>4</sup> The Commission decided to set a process for parties in Proceeding 23793 to provide written submissions on the scope of the general rate application proceeding and any potential participation in Proceeding 23799 (i.e., the current proceeding) that may be warranted to address issues raised by the UCA and the CCA in Proceeding 23793.<sup>5</sup>

16. On November 14, 2018, the Commission issued a ruling on the UCA request finding that “the project, including the business case, should be examined in the facilities proceeding where there is an opportunity to test the need for the project, the timing and the forecast costs.”<sup>6</sup> In response to the ruling, the CCA and the UCA filed their respective statements of intent to participate in this proceeding.

17. On June 25, 2019, the Commission issued Decision 23793-D01-2019,<sup>7</sup> approving placeholder treatment for the project until a determination of the need for and costs of the project are made in this proceeding. ATCO Pipelines was directed to revise its revenue requirement and capital expenditure forecasts in its compliance filing to Decision 23793-D01-2019 to reflect any findings arising from the current proceeding (Proceeding 23799).

### **3 The integrated Alberta natural gas transmission system**

18. In its evidence and submissions, ATCO Pipelines provided a summary of the evolution of the integrated Alberta natural gas transmission system. This information was not contested by the interveners and the AUC considers it to be an accurate summary of historical events. The Commission has included its own summary of this information because it provides relevant context to the application.

#### **3.1 Background**

19. ATCO Pipelines owns and operates a natural gas transmission system, comprising approximately 9,400 kilometres of pipeline located within Alberta that is regulated by the AUC. NOVA Gas Transmission Ltd. (NGTL), a wholly-owned subsidiary of TransCanada Pipelines Limited, owns and operates an extensive natural gas pipeline system comprising approximately 25,000 kilometres of pipeline, associated compression and other facilities, located in Alberta and British Columbia. The NGTL system was originally provincially regulated in Alberta; however, in February 2009, the National Energy Board assumed regulatory oversight of the NGTL system.<sup>8</sup>

20. ATCO Pipelines stated that significant competition, conflict, and procedural/administrative duplication arose between NGTL and ATCO Pipelines during the

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<sup>3</sup> Exhibit 23793-X0040, UCA Letter to AUC.

<sup>4</sup> Exhibit 23793-X0050, CCA Correspondence re Comments on Scope of GTA.

<sup>5</sup> Exhibit 23793-X0051, AUC letter - UCA request for a second round of information requests.

<sup>6</sup> Exhibit 23793-X0056 and Exhibit 23799-X0044, Ruling on a UCA request and CCA motion for further and better responses to IRs, at paragraph 23.

<sup>7</sup> Decision 23793-D01-2019: ATCO Pipelines 2019-2020 General Rate Application, Proceeding 23793, June 25, 2019.

<sup>8</sup> National Energy Board Decision GH-5-2008, February 26, 2009.

development of gas transmission infrastructure in Alberta. In July 2007, the Alberta Energy and Utilities Board (EUB) initiated a proceeding to review these issues.<sup>9</sup> In September 2008, NGTL and ATCO Pipelines announced they had reached an agreement that proposed to integrate their respective systems. As a result of that announcement, the Commission (the successor to the EUB as the provincial gas utility regulator) suspended the review proceeding on October 3, 2008, to grant NGTL and ATCO Pipelines sufficient time to meet with customer representatives to discuss the matter further and to submit the required applications.<sup>10</sup>

21. In April 2009, NGTL and ATCO Pipelines entered into the Alberta System Integration Agreement (Integration Agreement).<sup>11</sup> The Commission approved the integration of the ATCO Pipelines system with NGTL's system on May 27, 2010,<sup>12</sup> and subsequently closed the EUB-initiated review proceeding in October 2011.<sup>13</sup>

### 3.2 The Integration Agreement

22. ATCO Pipelines noted that the goal of integration was to streamline natural gas transmission services and address the following competitive pipeline issues in Alberta that had been identified by the Commission:

- stacked tolls - customers requiring the use of both systems were forced to pay tolls on two different systems
- duplicative terms of service - customers requiring the use of both systems were subject to two tariffs with two different terms and conditions of service
- duplicative regulatory proceedings - dual general rate applications and overlapping regulatory proceedings from two regulatory bodies
- increased system and regulatory costs
- an increased request for risk-adjusted return and decreased revenue forecast
- higher potential for inter-class cost subsidization
- the potential loss of a least-operative perspective<sup>14</sup>

23. ATCO Pipelines stated that the integrated Alberta natural gas transmission system offered customers the benefits of entering into a single contract for transportation services on the integrated Alberta natural gas transmission system, paying a single toll, being subject to one set of terms and conditions and participating in streamlined (fewer) regulatory proceedings.<sup>15</sup> The

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<sup>9</sup> Proceeding 15563, EUB Initiated Review of Competitive Gas Pipeline Issues under Board Jurisdiction.

<sup>10</sup> Proceeding 15563, AUC Letter - Suspension of Process - Oct 3, 08.

<sup>11</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, at paragraph 8.

<sup>12</sup> Decision 2010-228, 2010-2012 Revenue Requirement Settlement and Alberta System Integration, (May 27, 2010) (Alberta Utilities Commission), pages 5, 35 to 42 and 55.

<sup>13</sup> Proceeding 15563, AUC letter of disposition - Competitive Pipeline Review Proceeding, Closure of the Application – October 25, 2011.

<sup>14</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, at paragraph 10.

<sup>15</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, at paragraph 12.



Integration Agreement also resulted in an asset swap arrangement between ATCO Pipelines and NGTL that consolidated pipeline ownership within their respective service area footprints. This arrangement was approved by the Commission in November 2012.<sup>16</sup>

### 3.3 Responsibilities of NGTL and ATCO Pipelines under the Integration Agreement

24. ATCO Pipelines stated that the Integration Agreement provided that ATCO Pipelines and NGTL would each continue to own, operate and be expected to be prudent pipeline operators of their respective system infrastructure. However, the agreement also allocated specific roles to the parties. NGTL assumed the responsibility of the service provider and interface with all customers of the integrated Alberta natural gas transmission system, although an exception was made for ATCO Gas. ATCO Pipelines has responsibility (as an agent for NGTL) to provide the following services for ATCO Gas:

- negotiating new service contracts in accordance with the Alberta system tariff
- negotiating amendments to service contracts in accordance with the Alberta system tariff
- gathering longer term information regarding future gas transportation requirements
- identifying new delivery meter stations
- identifying necessary modifications to existing delivery meter stations
- identifying potential new types of services required
- billing and collections
- determining flows at each interconnection point between ATCO Pipelines and ATCO Gas as required by NGTL for real-time operations planning, for daily supply demand balancing and for after-the-fact billing
- facilitating resolution of contractual or operating disputes or issues that may arise<sup>17</sup>

25. NGTL is responsible for operational planning of the integrated Alberta natural gas transmission system, with co-operation from ATCO Pipelines. ATCO Pipelines stated that it works with NGTL to comply with the regulatory requirements associated with operating and expanding the integrated Alberta natural gas transmission system. Under the Integration Agreement, construction responsibility and infrastructure ownership belong to the party in whose footprint the proposed expansion will be built.<sup>18</sup>

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<sup>16</sup> Decision 2012-310: ATCO Gas and Pipelines Ltd., Asset Swap Application, Application No. 1608166, Proceeding ID No. 1723, November 22, 2012.

<sup>17</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, pages 13 and 14.

<sup>18</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, pages 4 to 22 of 39.

### **3.4 The Alberta System Annual Plan**

26. ATCO Pipelines stated that both the National Energy Board and the AUC approved the use of the Alberta System Annual Plan as part of the Integration Agreement.<sup>19</sup> It submitted that the Alberta System Annual Plan provides regulators and industry participants with an understanding of how specific facility applications fit into the overall long-term development of the integrated Alberta natural gas transmission system. The annual plan also includes descriptions of NGTL's design assumptions and criteria, as well as the long-term outlook for field deliverability, firm service productive capability, gas deliveries, and proposed facility additions.

27. ATCO Pipelines explained that the Alberta System Annual Plan is guided by two documents: the Guidelines for New Facilities (Guidelines) and the Facilities Design Methodology Document (FDMD). The Guidelines and the FDMD are companion documents describing NGTL and ATCO Pipelines' common approach to facility design arising from integration. The documents guide the type of facility growth that NGTL will pursue moving forward and can be used to assist regulators to determine whether an application is consistent with the Alberta System Annual Plan under the approved Integration Agreement. ATCO Pipelines stated that the Guidelines were agreed to by NGTL and its stakeholders: the members of the Tolls, Tariff, Facilities and Procedures (TTFP) Committee. It added that the Guidelines have been reviewed and considered by the Commission and the National Energy Board on numerous occasions.<sup>20</sup>

### **3.5 Regulatory approvals under the Integration Agreement**

28. ATCO Pipelines stated that regulatory approval of its and NGTL's respective revenue requirements is required under the Integration Agreement. However, only NGTL administers a tariff to customers using the integrated Alberta natural gas transmission system. ATCO Pipelines' responsibility is to establish its revenue requirements, including rate base, and have that approved by the Commission. Once approved, ATCO Pipelines' revenue requirement is charged to NGTL on a monthly basis. The rates paid to NGTL by all customers connected to the integrated Alberta natural gas transmission system are those approved by the National Energy Board in applications filed by NGTL. These rates collect the combined revenue requirements of ATCO Pipelines (as approved by the AUC) and NGTL (as approved by the National Energy Board). As a result, under the integrated Alberta natural gas transmission system ATCO Pipelines no longer administers a tariff for the use of ATCO Pipelines' system.<sup>21</sup>

## **4 Project need and alternatives**

### **4.1 Views of ATCO Pipelines**

#### **4.1.1 The need for the pipeline**

29. ATCO Pipelines stated that the need for the project has not been established previously. ATCO Pipelines provided a business case in its application,<sup>22</sup> which it submitted indicates that

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<sup>19</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, paragraph 20.

<sup>20</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, paragraph 24.

<sup>21</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, paragraphs 27 and 28.

<sup>22</sup> Exhibit 23799-X0002, Pembina-Keeyhill Transmission and Delivery Station- Business Case.

the project is required to support incremental natural gas demand that is driven primarily by electric power generation in the Wabamun area.

30. ATCO Pipelines explained that under the terms of the Integration Agreement, NGTL provides the commercial contract arrangements for service requests from customers of the integrated Alberta natural gas transmission system. ATCO Pipelines stated that Capital Power had submitted an application for service to NGTL, requesting incremental firm transportation delivery service of 200,000 gigajoules per day (GJ/d) in the Genesee area west of Edmonton. ATCO Pipelines also stated that the firm transportation delivery service commitment by Capital Power is staged in four annual increments of 50,000 GJ/day, commencing in 2021, with the incremental firm transportation delivery service amount of 200,000 GJ/d being reached in 2024. It added that this incremental contract is in addition to existing contract demand in the Wabamun area, which is held by several customers and amounts to 61,000 GJ/d.

31. ATCO Pipelines stated that its existing 323.9-millimetre Genesee-Kepphills pipeline serving the Genesee and Wabamun areas does not have sufficient capacity to meet the requested delivery service or the future forecast demands. It also stated that the proposed project is sized for the forecast demand in the region and that demand in the Wabamun area is expected to increase due to the shift from coal-fired generation to gas-fired generation, as shown in Table 1.

**Table 1. Forecast demand in the Wabamun area**

Year	Wabamun area demand forecast (GJ/d)
2019	100,000
2023	528,000
2028	595,000
2033	777,000

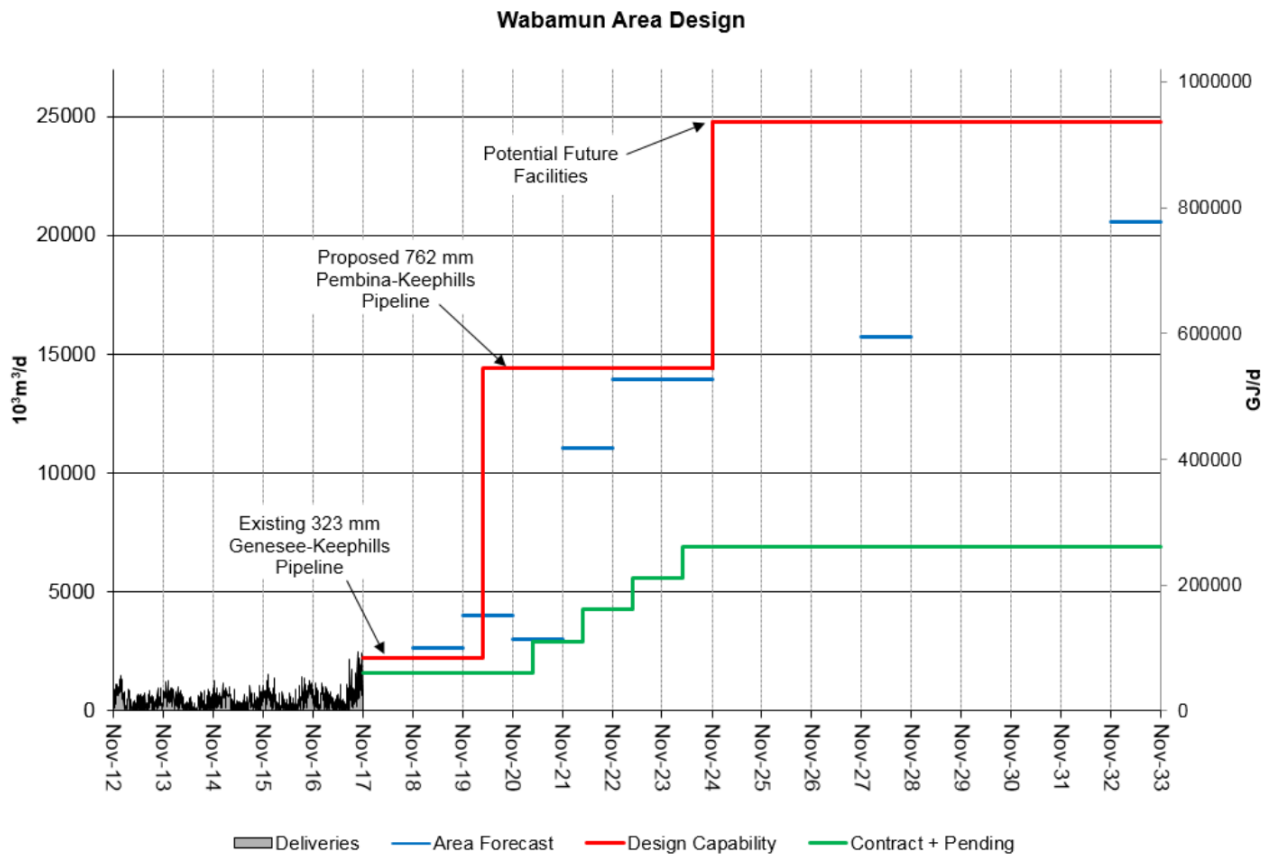
32. ATCO Pipelines indicated that NGTL's facilities design methodology utilizes area forecasts, as opposed to using only contract demands. It stated the Wabamun area forecast developed by NGTL incorporates many factors, including confidential information provided by customers to NGTL, publicly announced plans for generating stations in the area and forecast generation inputs from the Alberta Electric System Operator (AESO). NGTL independently assesses customers' forecast demand and adjusts its area forecast accordingly. It submitted that stakeholder consultations between NGTL, the AESO and the power generators have also taken place to discuss the changing power market conditions.

33. ATCO Pipelines stated that the Wabamun area is home to approximately 4,500 megawatts of generating capacity from coal-fired plants, which represents approximately 28 per cent of the total 16,157 megawatt generating capacity in Alberta or roughly 38 per cent of Alberta's peak internal load of 11,697 megawatts that was established on January 11, 2018. The substantial concentration of Alberta's electricity generation in the Wabamun area has led to the development of significant electrical transmission infrastructure to transport generated electricity from this area. ATCO Pipelines stated that over the longer term, it expects that, from the perspective of new electricity generation, brownfield sites such as Wabamun would have

significant development advantages over greenfield sites due to lower development costs and existing electrical transmission infrastructure.

34. ATCO Pipelines proposed an in-service date of the second quarter of 2020 for the project. It stated that the Capital Power contract commencement date is April 1, 2021, and that the customer will have the ability to flow interruptible delivery volumes between the project in-service date and the contract commencement date when upstream pipeline capacity is available.

35. ATCO Pipelines stated that the current delivery capacity of its existing 323.9-millimetre Genesee-Kepphills pipeline is 84,105 GJ/d (79.7 MMcf/d), as shown in Figure 2.<sup>23</sup>



**Figure 2 – Wabamun Area Design**

36. In Figure 2, the blue “Area Forecast” line represents forecast peak demand associated with peak daily power demand in the Wabamun area. The green “Contract+Pending” line represents the total amount of contracts executed by customers. The red “Design Capability” line represents the respective total capacity of the existing pipeline and the proposed project, and two pipelines with potential future facilities. ATCO Pipelines stated that the potential future facilities are not currently required and, therefore, they were not included in the project’s scope. ATCO

<sup>23</sup> Exhibit 23799-X0030, Lic 103 - Install Lines 64 - 92 - Round 1 IR Response, ATCO-AUC-2018AUG22-003; and Exhibit 23799-X0002, Pembina-Kepphills Transmission and Delivery Station- Business Case, Figure 2, page 10.

Pipelines also stated that potential future projects would only be triggered when supported by customer commitments for incremental contracts.

37. ATCO Pipelines noted that the NGTL Western Alberta system that provides gas supply to the Pembina-Keephills Transmission Pipeline is a 762-millimetre pipeline. It stated that NGTL has adequate capacity on its Western Alberta system to deliver natural gas to meet the contracted demands on the proposed project. However, ATCO Pipelines also stated that the upstream NGTL system would require capacity upgrades to accommodate the full Pembina-Keephills design capacity.

38. ATCO Pipelines submitted that the proposed project meets the extension criteria guidelines under NGTL's Guidelines for New Facilities<sup>24</sup> and that NGTL has reviewed and supports the project.

#### **4.1.2 Project alternatives**

39. ATCO Pipelines stated in its business case<sup>25</sup> that the project was selected because it had the least cost, based on its 20-year cumulative present value revenue requirement (CPVRR) of \$189.980 million, and was the most effective means to meet the long-term forecast gas demand requirements shown in Table 1 above. ATCO Pipelines also considered three alternatives to the project, as described below.

##### **Alternative 1: Do nothing/status quo**

40. Alternative 1, doing nothing and maintain the status quo, was dismissed by ATCO Pipelines because doing nothing would not address the need under Capital Power's firm transportation delivery contract with NGTL.

##### **Alternative 2: Hinton-Wabamun supply build**

41. In Alternative 2, ATCO Pipelines considered constructing a pipeline to source gas from ATCO Pipelines' Hinton-Wabamun Transmission Pipeline system, as an alternative to gas being supplied by the Pembina system. This alternative would consist of approximately 125 kilometres of new 762-millimetre/610-millimetre pipeline construction from ATCO Pipelines' existing Carrot Creek Interconnect with NGTL to the same new delivery station that is proposed for the project. Of the 125 kilometres of 762-millimetre/610-millimetre pipeline, 73 kilometres would loop ATCO Pipelines' existing 273-millimetre Hinton-Wabamun Transmission Pipeline. Alternative 2 would also include the future installation of incremental compression for the new 762-millimetre/610-millimetre pipeline. This alternative was rejected by ATCO Pipelines because it was more costly than the least cost alternative.

##### **Alternative 3: 610-millimetre Pembina-Keephills build with compression**

42. Alternative 3 considered the construction of approximately 59 kilometres of new 610-millimetre pipeline in the same route that ATCO Pipelines proposed for the project. The new 610-millimetre pipeline would have start and end locations identical to those proposed for

<sup>24</sup> Exhibit 23799-X0043, ATCO Information Response to AUC - Round 2, ATCO-AUC-2018OCT10-001(j), pages 6, 7 and 43 to 97.

<sup>25</sup> Exhibit 23799-X0002, Business Case.

the project, and identical tie-ins to ATCO Pipelines' existing pipelines. However, ATCO Pipelines stated that additional long-term facilities may be required. It stated that based on NGTL's current demand forecast for the area, the future addition of a compressor station at or near the control station site proposed for the project would be required, due to the higher pressure losses associated with the 610-millimetre pipeline when compared to the proposed 762-millimetre line. In addition to compression, a further pipeline extension in the Wabamun area consisting of approximately 30 kilometres of 508-millimetre pipeline would be needed and an expansion of ATCO Pipelines' existing Pembina system, consisting of the installation of approximately 12 kilometres of 610-millimetre pipeline, would be required. ATCO Pipelines stated that the incremental future pipeline expansion requirements associated with Alternative 3 would be identical to the future pipeline requirements associated with the project. This alternative was rejected by ATCO Pipelines because it was more costly than the least cost alternative. ATCO Pipelines added that compressors are subject to unplanned maintenance due to equipment failure and, therefore, the proposed project would have greater reliability than this alternative because the 610-millimetre pipeline required compression.

43. ATCO Pipelines stated in a project update letter<sup>26</sup> that it completed a confidential bid process for the project. As a result of that process, the forecast cost of the project materially changed from the previous cost estimate of \$156,855,200 to an estimate of \$230,000,000. ATCO Pipelines also indicated that it re-evaluated the project and the two alternatives, based on updated pipeline construction costs. The revised cost estimates are summarized in the revised Table 2 below. ATCO Pipelines clarified that there were no changes to the scope or timing of the alternatives identified in the business case: only the estimated costs of the project and two alternatives were updated.

**Table 2. Alternatives considered to meet Wabamun area forecast demand**

Alternative	Description	First Year with Capital Additions	First Year Capital (\$)	Long Term Capital (\$)	20Yr CPVRR (\$)
Project	762 mm Pembina-Keeyhill pipeline	2019	217,254,000	144,388,000	271,861,000
2	Hinton-Wabamun build	2019	434,343,000	117,445,000	430,710,000
3	610 mm Pembina-Keeyhill pipeline	2019	179,140,000	228,378,000	275,816,000

44. The Commission asked ATCO Pipelines to provide a description of the project scope to build a pipeline solely to meet the Capital Power firm transportation delivery contract demand of 200,000 GJ/day, including an analysis of any subsequent project requirements that would be needed to meet the subsequent demand forecasts if they materialized. ATCO Pipelines responded that a 406.4-millimetre pipeline would be required initially to accommodate 200,000 GJ/d of firm transportation delivery service.<sup>27</sup> However, to meet the area forecast deliveries as early as 2022, a 610-millimetre pipeline loop of the initial 406.4-millimetre pipeline would then be

<sup>26</sup> Exhibit 23799-X0055, ATCO Pipelines Project Update.

<sup>27</sup> Exhibit 23799-X0043, ATCO Pipelines Information Response to AUC - Round 2, page 4.

required. This option was not considered by ATCO Pipelines to be feasible because building a pipeline to meet only firm transportation delivery contract demand would lead to inefficient and more costly development of the transmission system over time, which would potentially conflict with the AUC's policy against proliferation.<sup>28</sup> ATCO Pipelines also stated that planning facilities using a reasonable forecast of anticipated demand is the common and accepted practice for ensuring adequate capacity to the core customers represented by the CCA and the UCA.<sup>29</sup>

## **4.2 Views of the UCA and CCA and responses of ATCO Pipelines**

### **4.2.1 Project sizing and contributions**

45. The UCA stated that the proposed project is driven by a single customer for natural gas deliveries to the Genesee power plants operated by Capital Power. The UCA expressed concern that there is no definitive evidence of a need to serve other loads in the area beyond the contract demand quantity and, therefore, the project would have a detrimental effect on rates unless there were further, upfront customer capital contributions. The UCA submitted that the project should either be made subject to further offsetting capital contributions or be rejected.<sup>30</sup>

46. The UCA submitted that ATCO Pipelines refused to provide any information in regard to the proposed facilities being put into service as part of rate base, with no financial contribution collected from (or ownership stake by) the contract customer.<sup>31</sup> The CCA also stated that the project should require a 100 per cent customer contribution to ensure that the costs of the project are not paid by residential natural gas customers.<sup>32</sup>

47. The UCA stated that the Wabamun area consists of three power plants. However, two of these plants (Sundance and Keephills) are being served by the Tidewater Pioneer Pipeline and the remaining plant, Genesee, is where the project terminates. It noted that TransAlta plans to convert the Sundance and Keephills power plants from coal-fired to natural gas-fired. As a result, the UCA expressed the view that the Tidewater Pioneer Pipeline appears directly linked to most or all of the supply needed by the Sundance and Keephills power plants.

48. The CCA stated that the option of constructing the project with a reduced diameter at this time and reducing the cost to supply the current contract demand, was not considered by ATCO Pipelines and NGTL. The CCA explained its view that the conversion to gas-fired generation by other generators in the vicinity of Wabamun appears scheduled for several years in the future. It argued that if power generators convert to gas-fired operation in the future and additional pipeline capacity that may not be available from a reduced diameter pipeline is then required, it would be common for another smaller diameter pipeline to be installed at that time as a looped line to the project. The CCA considered that, in this scenario, the risk to general customers would be minimized or perhaps even eliminated.<sup>33</sup>

49. ATCO Pipelines responded that the UCA's evidence demonstrated a fundamental misunderstanding of the originating principles and operation of the integrated Alberta natural gas

<sup>28</sup> Exhibit 23799-X0079, ATCO Pipelines Round 4 IR Responses to UCA Requests, page 95.

<sup>29</sup> Exhibit 23799-X0108, ATCO Pipelines Reply Argument, page 12.

<sup>30</sup> Exhibit 23799-X0086, Evidence of Patrick Bowman on behalf of the UCA - Proceeding 23799.

<sup>31</sup> Exhibit 23799-X0086, Evidence of Patrick Bowman on behalf of the UCA - Proceeding 23799, page 11.

<sup>32</sup> Exhibit 23799-X0102, CCA Argument – 23799, page 10.

<sup>33</sup> Exhibit 23799-X0102, CCA Argument – 23799, page 13.

transmission system and of the underpinning contractual arrangement. ATCO Pipelines stated that both the National Energy Board and the Commission approved the use of the Alberta System Annual Plan as part of the Integration Agreement between NGTL and ATCO Pipelines.<sup>34</sup> It emphasized that NGTL follows the methodology set out in the FDMD, as informed by the Guidelines. ATCO reiterated that the Guidelines establish the criteria required for NGTL to extend, or as in these circumstances, expand the overall transmission system, as well as the criteria used to determine whether associated costs will be directly attributable to the customer.<sup>35</sup>

50. ATCO Pipelines highlighted the following excerpt from the Guidelines that addresses the criteria for facility extensions:<sup>36</sup>

***Extension Facilities***

Extension facilities are those facilities which connect new or incremental supply or markets to the NGTL System.

**Extension Facilities Criteria**

<b>NGTL/AP Builds, Owns and Operates</b>	<b>NGTL/AP Does Not Build, Own and Operate</b>
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.

The determination of whether NGTL/AP will construct the extension facility will depend on whether or not the majority of the criteria as described in the table above are met.

51. ATCO Pipelines elaborated on the regulatory status of the Guidelines in its response to an information request from the UCA, stating as follows:<sup>37</sup>

While the current Guidelines for New Facilities have not been directly approved by the AUC or NEB, the relevant principles and definitions have generally been accepted and were endorsed by the AUC in Decision 2000-06 (pages 61-62). Furthermore, the Guidelines are agreed to and adopted by the members of the TTFP and were developed in collaboration with the TTFP and its predecessors prior to the Integration Agreement. The

<sup>34</sup> Decision GH-5-2008 Decision, (February 26, 2009) (National Energy Board); and Decision 2010-228, 2010-2012 Revenue Requirement Settlement and Alberta System Integration, (May 27, 2010) (Alberta Utilities Commission), supra note 2 [Decision 2010-228].

<sup>35</sup> Exhibit 23799-X0095, Attachment 1, ATCO Pipelines Rebuttal Evidence, pages 4 to 19.

<sup>36</sup> Exhibit 23799-X0043, ATCO Information Response to AUC - Round 2, ATCO-AUC-2018OCT10-001(j), pages 6, 7 and 43 to 97.

<sup>37</sup> Exhibit 23799 X0064, ATCO Pipelines Information Response Round 3 to UCA, PDF page 15.



Guidelines were then updated at the time of commercial integration between AP and NGTL to recognize the application of the Guidelines to the integrated NGTL/AP System, NGTL's transition to NEB regulation, and the current Alberta System Rate Design.

The Integration Agreement, which was approved by the AUC, includes the Alberta System Design practices used by NGTL for both AP and NGTL which relies on the Guidelines.

52. ATCO Pipelines stated that under the Integration Agreement, NGTL is responsible for the overall system design and for applying the criteria to decide if and when new facilities should be constructed. The facility design process includes a determination of whether the project is a customer lateral or a mainline extension. ATCO Pipelines explained in its rebuttal evidence how this aspect of the NGTL criteria had been applied in its development of the project:<sup>38</sup>

85. At Page 5, the Bowman Evidence states: "AP indicates that it expects that all deliveries shown in the Wabamun Area Forecast (i.e., including hypothetical future loads that may help support the rationale for the project) can be achieved without new customer laterals, suggesting that future loads are also primarily if not entirely tied to the Genesee station". Mr. Bowman's conclusion in this regard is incorrect as it is based solely on his unexplained definition or understanding of the term "customer lateral". A general description of laterals used in NGTL's Guidelines for New Facilities is: "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". This definition of "customer lateral" was applied to AP's response to ATCO-UCA-2019JAN23-004(b): "AP anticipates that the delivery volumes associated with the area forecast can be achieved without new customer laterals".

86. As such, the Pembina-Keeyhill pipeline is not a customer lateral as defined by the NGTL Guidelines for New Facilities. Likewise, the 30 km of 508 mm pipeline that would extend from the terminus of the Pembina-Keeyhill pipeline to the Lake Wabamun area (identified in the Business Case as a potential future project to meet area forecast demands) is not a customer lateral, as defined by the NGTL Guidelines for New Facilities. While, at this time, AP anticipates that the delivery volumes associated with the area forecast in ATCO-AUC-2018AUG22-003(a) can be achieved without new customer laterals, as that term is defined in the NGTL Guidelines for New Facilities, that does not preclude pipelines that do not conform to that definition being built to fulfill area demand.

53. ATCO Pipelines explained that NGTL is proceeding with the extension of the regulated system and has directed ATCO Pipelines to build the extension because it falls within ATCO Pipelines' footprint. It stated that facilities meeting the extension facilities criteria are put into service as part of rate base.

54. In response to suggestions from the UCA and the CCA that a financial contribution be provided by the customer, ATCO Pipelines stated that NGTL is responsible for customer contracting and, therefore, contractual elements such as contributions are the responsibility of NGTL, as regulated by the National Energy Board. It added that contributions are necessary only

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<sup>38</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, pages 33 to 34.

when new facilities do not meet the criteria in the Guidelines. ATCO Pipelines also stated that if the UCA or the CCA has an issue with the Guidelines as they relate to contributions, they need to address those concerns to the National Energy Board and not indirectly as part of an ATCO Pipelines facilities application.<sup>39</sup>

55. In response to the UCA's position that the Tidewater Pioneer Pipeline could serve most or all of the supply needed by the Sundance and Keephills power plants, ATCO Pipelines indicated that TransAlta's Sundance and Keephills power plants can consume up to 175-MMcf/d through fuel blending, and up to 700-MMcf/d once fully converted to natural gas. ATCO Pipelines stated that the announced contracted capacity of the Tidewater Pioneer Pipeline is 130-MMcf/d, with the potential to expand to 440-MMcf/d. ATCO Pipelines submitted that even assuming the potential expansion volumes of the Tidewater Pioneer Pipeline will be required, 260-MMcf/d (approximately 280,000 GJ/d) of uncontracted natural gas demand remains, as required for the TransAlta power plants when those are fully converted from coal to gas. ATCO Pipelines further noted that TransAlta's investor presentation<sup>40</sup> indicated that two or more pipelines would be secured to minimize the risk of supply disruptions and to provide diversified access to natural gas.

56. To further demonstrate the need for increased gas supply in the Wabamun area, ATCO Pipelines filed a letter of support from Capital Power as an attachment to its rebuttal evidence.<sup>41</sup> In the letter, Capital Power indicated that the Genesee coal-fired power plants will require about 130,000-GJ/d of natural gas deliverability by 2020, and roughly 310,000-GJ/d of natural gas deliverability at full conversion. In addition, the volume of natural gas required for the Genesee power plants is expected to grow to almost 500,000-GJ/d when the Genesee 4 and Genesee 5, fully permitted combined cycle natural gas-fired facilities, are built. Capital Power stated that once converted to natural gas, the existing and new units at the Genesee site are expected to be long-term assets that Capital Power intends to operate well into the foreseeable future.

57. Capital Power also stated that 10 large coal plants are located in the greater Wabamun/Keephills/Genesee area and noted that its Genesee operation comprises only three of those plants. It submitted that many of these plants will eventually be converted or repowered to natural gas fuel and natural gas demand within the region could be significant and in need of many pipeline supply options. Capital Power further stated that the immediate requirement to increase the use of natural gas at the existing units is driven by the coal phase-out decision that was made as part of Alberta's Climate Leadership Plan, under which the Genesee units and all other existing coal generating units must cease coal generation by 2030. Capital Power stated that the Alberta Government has subsequently expressed support for the conversion of the existing coal units to natural gas as a cost effective and efficient way of repurposing existing facilities and reducing carbon emissions from the power generation sector, given the lower emissions intensity of natural gas relative to coal.

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<sup>39</sup> Exhibit 23799-X0095, Attachment 1, ATCO Pipelines Rebuttal Evidence, pages 20 to 21.

<sup>40</sup> Exhibit 23799-X0095, Attachment 1, ATCO Pipelines Rebuttal Evidence, page 32.

<sup>41</sup> Exhibit 23799-X0100, Attachment 5.

#### 4.2.2 Project utilization to serve the greater Edmonton area

58. The UCA stated that there is no prospect that the proposed project will serve natural gas demand in the city of Edmonton or the greater Edmonton area, and that the project plans to serve power generators in the Wabamun area instead.<sup>42</sup> The CCA stated that the project is not required to supply natural gas at this time or in the foreseeable future, and that ATCO Pipelines did not file updated load projections in this proceeding to substantiate its position that the project was needed. The CCA submitted that the sole justification for the project appeared to be to supply the current contracted demand for one power generator and some potential future generating demand. It concluded that the project is a single purpose pipeline to supply the current and potential future demand to power generators in the Wabamun area, with no near-term requirement to provide service to general system customers. It argued that future potential demand should be discounted.<sup>43</sup>

59. In response, ATCO Pipelines stated that the project includes the installation of a proposed control station that will connect the proposed project to the existing Pembina pipeline system, effectively forming a seven kilometre loop. This looped section can potentially provide increased delivery capability to the greater Edmonton area, as the supply into the existing Pembina pipeline can be increased through the control station and ultimately flow to the Edmonton area. It submitted that the proposed project is therefore able to serve the contracted and forecast loads in the Wabamun area and potentially offer additional supply capacity to the greater Edmonton area as a whole when upstream supply is available.<sup>44</sup> ATCO Pipelines confirmed, however, that the project is primarily driven by increased demand for power generation purposes in the Wabamun area.

#### 4.2.3 Regulatory burden on core customers

60. The UCA stated that the project is a risky venture underwritten by captive downstream customers such as those it represents.<sup>45</sup> The CCA stated that approving the project going into ATCO Pipelines' revenue requirement would result in an undue and unjustified burden on residential customers due to the terms of the ATCO Pipelines-NGTL integration agreement. It submitted that this would result in 50 per cent of the revenue requirement for the pipeline being assigned to the residential customer base.<sup>46</sup> It argued that Alberta customers should not have to shoulder the risk and rate increases from the project.

61. ATCO Pipelines responded that the cost of the project is not underwritten by any single customer group, and in particular not the group represented by the UCA or the CCA, which is served by local distribution companies. ATCO Pipelines stated that project costs will be allocated for recovery from all shippers contracted on the integrated Alberta natural gas transmission system. It explained that the revenue requirement of the project is equally split between receipt customers and delivery customers on the integrated Alberta natural gas transmission system. The revenue requirement allocated to delivery customers is further allocated to Group 1, Group 2, and Group 3 customers. Group 1 customers hold delivery contracts at border locations. Industrial delivery customers hold Group 2 contracts.

<sup>42</sup> Exhibit 23799-X0086, Evidence of Patrick Bowman on behalf of the UCA - Proceeding 23799, page 6.

<sup>43</sup> Exhibit 23799-X0102, CCA Argument – 23799, pages 5 to 7.

<sup>44</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, page 34.

<sup>45</sup> Exhibit 23799-X0086, Evidence of Patrick Bowman on behalf of the UCA - Proceeding 23799, page 11.

<sup>46</sup> Exhibit 23799-X0102, CCA Argument – 23799, page 11.

ATCO Pipelines stated that the UCA and the CCA represent residential and commercial customers served by local distribution companies that hold Group 3 contracts. It clarified that the gas co-op customers and municipal gas utility customers, many of which the UCA represents, do not hold FT-D3 contracts with NGTL and will not be affected at all by the revenue requirement of the project being allocated to the FT-D3 rate.<sup>47 48</sup> It added that NGTL develops and applies to the National Energy Board for the rates paid by all customers connected to the integrated Alberta natural gas transmission system. It reiterated that these rates seek to collect the revenue requirement of ATCO Pipelines, which is approved by the AUC, and the revenue requirement of NGTL, which is approved by the National Energy Board.

62. The UCA stated that the current project is projected to cost \$230 million, which drives a revenue requirement in the early years of the project in the order of \$23 million per year. In response, ATCO Pipelines stated that the combined ATCO Pipelines/NGTL revenue requirement of \$23 million per year would result in an incremental 0.2 cents/GJ/day to the current rate of 22.4 cents/GJ/day for Group 3 customers. In addition, the \$23 million represents the highest annual recovery, which declines continually thereafter.

63. ATCO Pipelines stated that the members of NGTL's TTFP Committee have assessed the costs of the project and its effect on rates in the context of NGTL's annual plan. It explained that the TTFP Committee is made up of customers and stakeholders that represent themselves directly, or are represented by an industry group such as the Canadian Association of Petroleum Producers or the Industrial Gas Consumers Association of Alberta, and that TTFP membership is open to all customers and stakeholders. It submitted that, on this basis, those parties that are contractually bound and will be directly responsible for payment of the revenue requirement have had an opportunity to assess the project and its effect on rates. ATCO Pipelines stated that none of those parties registered concerns with the project.<sup>49</sup> It also stated that the contractual arrangements with Capital Power protect ATCO Pipelines and ratepayers from any potential stranded costs due to project cancellation.

#### **4.2.4 Project cost**

64. The CCA questioned the accuracy of ATCO Pipelines' project cost estimate, and stated that estimates for the Tidewater Pioneer Pipeline had unit costs of \$75,000 per inch OD-kilometre, while ATCO Pipelines estimated \$130,000 per inch OD-kilometre for the project. The CCA also stated that it was unable to accept a 73 per cent increase in the installed cost per inch OD-kilometre for the project as compared to the Tidewater Pioneer Pipeline, especially since the location of both pipelines appeared to have very similar terrain. The CCA expressed reservations regarding the accuracy of the forecast cost of the project, and stated it believed the revised \$230 million estimate was excessive and, therefore, the forecast revenue requirements for the years after 2020 could be overstated if the revenue requirement was not adjusted for the actual cost of the project.<sup>50</sup>

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<sup>47</sup> Exhibit 23799-X0095, Attachment 1, ATCO Pipelines Rebuttal Evidence, page 35.

<sup>48</sup> Exhibit 23799-X0108, AP Reply Argument, page 11.

<sup>49</sup> Exhibit 23799-X0095, ATCO Pipelines Rebuttal Evidence, pages 35 and 36.

<sup>50</sup> Exhibit 23799-X0102, CCA Argument – 23799, at page 7.

65. ATCO Pipelines responded that no evidence about the details or accuracy of the Tidewater Pioneer Pipeline cost information cited by the CCA had been provided, and that ATCO Pipelines' cost estimates were derived from a third-party competitive bid process.

#### **4.2.5 Project timing**

66. The CCA stated that it agreed with ATCO Pipelines' statement in another proceeding that the project would not likely be in service in 2019, and that ATCO Pipelines' interim revenue requirement should be the subject of a review in a compliance filing in Proceeding 23793.<sup>51</sup>

67. ATCO Pipelines acknowledged that the in-service date for the project has changed from 2019 to 2020. It stated that this adjustment could be accommodated with a direction from the Commission that ATCO Pipelines update the date in a compliance filing in ATCO Pipelines' current general rate application.<sup>52</sup>

### **4.3 Commission findings**

#### **4.3.1 Project need**

68. The Commission has considered the evidence and arguments of all the parties in respect of the need for the project, including the questions raised regarding supply and demand and the potential risk to Alberta ratepayers. This project application arose from a request for service made to NGTL by a delivery customer in the Wabamun area. In accordance with the provisions of the Integration Agreement between NGTL and ATCO Pipelines, NGTL determined that inadequate capacity in the area requires mainline improvements to meet the service request. In these circumstances, the Integration Agreement directs NGTL to assess the capacity design requirements on a long-term basis utilizing area demand forecasts in accordance with the Guidelines and the FDMD. The mainline project falls within ATCO Pipelines' footprint, as established in the Integration Agreement. Therefore, ATCO Pipelines has prepared and submitted the facility application for the Commission's review.

69. As described in Rule 020, the need for the project can be assessed by the Commission through a general rate application or a facility application, whichever comes before the Commission first. In this instance, the project need is being assessed in the facility application as previously discussed in this decision.

70. The Commission considers that it is important in this proceeding to make the distinction between a mainline improvement and a customer lateral since, under the Integration Agreement, that determination affects the cost and facility ownership administration. The Commission accepts ATCO Pipelines' assessment that the proposed project has been designed and sized to serve the long-term area demand forecast for the project area, which was determined on the basis of multiple information sources that include discussions with customers and AESO forecasts. The Commission considers the proposed project to be a mainline improvement rather than a customer lateral, since the project is driven by a forecast of multiple customer projects. In that situation, the NGTL methodology indicates that project costs are to be recovered from all

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<sup>51</sup> Exhibit 23799-X0102, CCA Argument – 23799, at page 8.

<sup>52</sup> Exhibit 23799-X0108, AP Reply Argument, at page 8.

shippers contracted on the integrated Alberta natural gas transmission system rather than by requiring a customer-specific contribution as recommended by the UCA.

71. The Commission notes that both the National Energy Board and the AUC approved the use of the Alberta System Annual Plan as part of the Integration Agreement between NGTL and ATCO Pipelines. The Commission accepts that the methodology utilized in the demand assessment for the project is consistent with the NGTL processes and procedures that were approved as part of the Integration Agreement. The Commission finds that NGTL followed the Alberta System Annual Plan criteria when it determined that an expansion of the overall transmission system is needed, as well as the criteria that determine whether associated costs are to be directly attributed to a customer.

72. The Commission understands that the electric power generation industry in Alberta is going through a significant transformation due to changes in provincial and federal legislation, policies, and initiatives. The Commission accepts that these changes are the primary impetus for the coal-to-gas conversions of coal-fired power plants in the Wabamun area. The Commission notes, in this respect, that it has approved applications within the last year by TransAlta Corporation, to convert Sundance Power Plant units 3, 4, 5 and 6,<sup>53</sup> Keeyik Power Plant units 1 and 2<sup>54</sup> and Keeyik Power Plant Unit 3,<sup>55</sup> from coal-fired power plants to natural gas-fired power plants. The Commission has also approved an application filed by Capital Power to construct and operate two new natural gas-fired generation units - Genesee 4 and Genesee 5.<sup>56</sup> An extension to complete the construction of Genesee 4 and Genesee 5 was granted by the Commission in Decision 23963-D01-2018.<sup>57</sup>

73. The Commission asked ATCO Pipelines to clarify whether its demand forecast had evolved as a result of the *Carbon Tax Repeal Act*, which repealed the *Climate Leadership Act* on June 4, 2019.<sup>58</sup> ATCO Pipelines responded that the demand forecast has not changed, and that long-term gas supply and demand forecasts are not affected by the *Carbon Tax Repeal Act*.<sup>59</sup>

74. The Commission considers that the need for this project is based on forecast demand in the Wabamun area. The Commission observes that there are 10 existing coal-fired power plants and three approved but not yet constructed natural gas-fired power plants in the Wabamun (Wabamun/Keeyik/Genesee) area. Capital Power has signed a firm delivery contract with NGTL for 200,000 GJ/day. As indicated above, many of these existing coal-fired plants have received approval from the Commission to be converted to natural gas-fired power plants and, therefore, the Commission is satisfied that increased demand for natural gas in the Wabamun area is expected to be significant.

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<sup>53</sup> Decision 23807-D01-2018, TransAlta Corporation Coal-to-Gas Conversion of Sundance Power Plant Units 3, 4, 5 and 6, December 21, 2018.

<sup>54</sup> Decision 23808-D01-2018, TransAlta Corporation Coal-to-Gas Conversion of Keeyik Power Plant Units 1 and 2, December 21, 2018.

<sup>55</sup> Decision 23809-D01-2019, TransAlta Corporation Coal-to-Gas Conversion of Keeyik Power Plant Unit 3, February 8, 2019.

<sup>56</sup> Power Plant Approval U2014-287, Proceeding 2996, Application 1610202, August 12, 2014.

<sup>57</sup> Decision 23963-D01-2018, Capital Power, Genesee Generating Station Units 4 and 5 Time Extension, December 11, 2018.

<sup>58</sup> Exhibit 23799-X0112, AUC information request round 5 to ATCO.

<sup>59</sup> Exhibit 23799-X0113, AP Response to AUC Round 5 Information Requests.

75. In assessing the validity of the area demand forecasts provided in this proceeding, the Commission has considered the UCA's argument that the Tidewater Pioneer Pipeline appears directly linked to most or all of the natural gas supply needed by the Sundance and Keeyhill power plants. The Commission notes that the capacity of the Tidewater Pioneer Pipeline is 130-MMcf/d, with potential to expand to 440-MMcf/d, and that the Sundance and Keeyhill power plants could consume up to 700-MMcf/d when fully converted to natural gas. ATCO Pipelines indicated that even if the potential expansion volumes of the Tidewater Pioneer Pipeline were to be utilized, additional natural gas supply of 260-MMcf/d (approximately 280,000 GJ/d) would be needed to supply these two power plants when they are fully converted to natural gas. The Commission also finds TransAlta's statement, in its March 2018 investor presentation, that two or more pipelines will be secured to minimize the risk of any supply disruptions, and to provide diversified access to natural gas to be relevant.<sup>60</sup> In the Commission's view, this is further evidence of reasonably foreseeable, significant demand for natural gas from multiple customers in the Wabamun area.

76. NGTL and ATCO Pipelines' Wabamun area forecast incorporated demand projections from information provided by customers to NGTL, from publicly announced coal-to-gas conversion plans for coal-fired generating stations in the Wabamun area and from forecast generation inputs from the AESO. The Commission recognizes that the Wabamun area forecast demand for natural gas is heavily influenced by electric power generation in the Wabamun area. The Commission accepts that NGTL and ATCO Pipelines have reasonably identified forecast demands in the Wabamun area that support the project design and pipeline sizing, and that the approach utilized by NGTL and ATCO Pipelines is consistent with the Integration Agreement and area design criteria established under that agreement. The Commission has considered and accepts the explanation provided by ATCO Pipelines that its demand forecast is not changed by the *Carbon Tax Repeal Act*.

77. The Commission notes that one of the concerns expressed by the UCA and the CCA was that the project was for the benefit of a single customer and there was no clearly established need to serve other electric generation loads in the area. They submitted that the project would have a detrimental effect on rates unless there was a further up-front customer contribution. As discussed earlier in this decision, the Commission is persuaded that the project will provide a benefit to more than the customer that signed a firm transportation delivery contract. The Commission accepts that the project has also been designed to address the forecast demand for additional electric generation demand that includes other coal-fired power plants in the Wabamun area that are in the process of being converted to natural gas, and to provide potential additional supply capacity to the greater Edmonton area following the future installation of a control station that will provide additional capacity to the existing Pembina Transmission Pipeline from the proposed project.

78. The Commission is satisfied that the cost of the project is not underwritten by a single customer group: it will be recovered from all customers connected to the integrated Alberta natural gas transmission system. The revenue requirement of the project will be divided equally between all receipt customers and delivery customers that pay the rates that will satisfy the combined revenue requirements of ATCO Pipelines and NGTL. The Commission considers it to be relevant that no shippers on the integrated Alberta natural gas transmission system, such as

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<sup>60</sup> Exhibit 23799-X0098, Attachment 3, TransAlta March 2018 Investor Presentation, page 32.

producers and industrial customers, objected to the project or its cost treatment by NGTL. The Commission concludes that the project is not expected to be underwritten only by captive downstream customers and, in that regard, the Commission acknowledges that the National Energy Board is responsible for approving NGTL's toll design and associated rates.

79. The Commission finds that ATCO Pipelines' business case supports the need for the project, given the incremental firm transportation delivery service request made to NGTL and the forecast demand in the Wabamun area as shown in Table 1 of this decision, which the Commission accepts. The Commission considers that utilizing long-term area demand forecasts and economic comparison criteria for planning and development purposes is more likely to provide the lowest cost of service to customers, while reducing the potential for avoidable environmental impacts associated with numerous shorter-term proposals that ultimately result in a proliferation of pipelines and associated facilities. Accordingly, the Commission finds that ATCO Pipelines has demonstrated there is a need for the project and that ATCO Pipelines' Alternative 1 - doing nothing and maintaining the status quo - is not an acceptable course of action.

#### 4.3.2 Project cost

80. The Commission's role in this proceeding is to assess the need for the proposed pipeline and to determine whether approval of ATCO Pipelines' preferred alternative is in the public interest. An important component of the Commission's assessment of the project is the costs for the alternatives assessed by ATCO Pipelines. In this capacity, the Commission's task is not to determine whether the proposed costs are prudent; assessment of the ultimate prudence of the costs expended by ATCO Pipelines on this project, if approved, takes place within the context of a subsequent general rate application. Rather, the Commission considers estimated project costs to assess the reasonableness of the alternatives proposed as part of its overall assessment of whether approval of the preferred alternative is in the public interest.

81. ATCO Pipelines originally estimated the capital cost of the project at \$156.8 million. After it filed the application in this proceeding, ATCO Pipelines completed a competitive bid process for the project. As a result of that process, ATCO Pipelines revised the project cost estimate to \$230 million,<sup>61</sup> assuming an in-service date in 2019. The increase in forecast project cost is primarily attributed to higher mainline pipeline construction costs. Following the revision to project costs, ATCO Pipelines also re-evaluated the alternatives given its updated understanding of pipeline construction costs.

82. To assess the project cost against the alternatives, ATCO Pipelines calculated the cumulative present value of revenue requirements (CPVRR) over a 20-year period for the project and for the two alternatives, which took into account the operating and maintenance costs and the incremental fuel costs associated with compression. The analysis showed that the proposed project was the least cost solution to meet the contract and forecast demands, which is summarized in Table 2 above.<sup>62</sup>

83. The CPVRR for the project is \$271.9 million, which is significantly lower than Alternative 2 at \$430.7 million and slightly lower than Alternative 3 at \$275.8 million. The

<sup>61</sup> Exhibit 23799-X0055, ATCO Pipelines Project Update.

<sup>62</sup> Exhibit 23799-X0055, ATCO Pipelines Project Update, page 5.



proposed project is preferable to Alternative 2 based on a consideration of costs. Given the relatively small difference in costs between the proposed project and Alternative 3, either option could potentially be selected based on cost alone; however, the project is the lowest cost.

84. In an information request, the Commission asked ATCO Pipelines to provide an estimate of the cost of a pipeline sized to supply only the contract demand of 200,000 GJ/day. In response, ATCO Pipelines provided a cost for a 406-millimetre Pembina-Keeyhill pipeline and a 610-millimetre pipeline loop to meet forecast deliveries occurring as soon as 2022. The CPVRR was estimated at \$292.7 million on an adjusted basis.<sup>63</sup>

85. The CCA challenged the reasonableness of ATCO Pipelines' forecast cost for its preferred alternative as compared to the forecast costs for the Tidewater Pioneer Pipeline. Specifically, the CCA asserted that the forecast installed cost per inch OD-kilometre for the project would be 73 per cent higher than the same unit cost for the Tidewater Pioneer Pipeline. The Commission acknowledges the significant difference in forecast installed cost per inch OD-kilometre for the two projects, but relies on the fact that the updated cost information originates from a competitive bid process and, therefore, accepts the forecast cost estimates as reasonable.

86. The economic analysis demonstrates that the proposed project is the least cost option to meet the contract and forecast demands. The Commission accepts that the proposed project has the lowest 20-year CPVRR, and is expected to provide the lowest cost of service with higher reliability. The Commission finds that the project will provide the most cost effective means of meeting the forecast long-term demand requirements in the area, when compared to alternatives 2 and 3 considered by ATCO Pipelines.

87. In finding the forecast capital cost of the project to be reasonable, the Commission makes no determination regarding the final regulatory treatment and prudence of the costs or the associated rate implications.

### **4.3.3 Project timing**

88. ATCO Pipelines revised the proposed in-service date for the project to the second quarter of 2020. The Commission accepts this estimate and directs ATCO Pipelines to advise the Commission of any material change in the timing of the project.

## **5 Other matters**

### **5.1 Environmental assessment**

89. ATCO Pipelines retained CH2M Hill Energy Canada Ltd. (now Jacobs Engineering) to complete a conservation and reclamation report<sup>64</sup> (C&R) for the project. The C&R includes detailed information regarding the existing environmental and land-use conditions of the proposed project site, and the anticipated environmental impacts and recommended mitigation plans. ATCO Pipelines stated that it submitted the C&R to the Alberta Energy Regulator on

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<sup>63</sup> Exhibit 23799-X0044, ATCO Information Response to AUC – Round 2, ATCO-AUC-2018OCT10-001(c). The estimate provided in the information response was increased by 33 per cent, consistent with the increase to costs for Alternatives 2 and 3 associated with the update.

<sup>64</sup> Exhibit 23799-X0012, Conservation and Reclamation Report.

May 29, 2018. ATCO Pipelines confirmed that it would comply with the recommendations and mitigation measures set out in the C&R, and with the Alberta Energy Regulator requirements resulting from the Alberta Energy Regulator's review and approval of the C&R application.

90. ATCO Pipelines stated that the project route crosses a number of water bodies including the North Saskatchewan River, Buck Lake Creek and Modeste Creek, and crosses a number of wetlands, unnamed watercourse crossings and unclassified drainage crossings. ATCO Pipelines confirmed that it would comply with the code of practice under the *Water Act* for all watercourse, wetland and drainage crossings.

91. ATCO Pipelines stated that based on requirements issued by Alberta Culture and Tourism, a field survey program and historical resource impact assessment was completed by Jacobs Engineering and submitted to Alberta Culture and Tourism on April 26, 2018. ATCO Pipelines received *Historical Resources Act* approval on July 20, 2018. ATCO Pipelines has indicated that it will comply with all conditions of that approval. ATCO Pipelines also confirmed that a post-construction reclamation assessment will be completed after the project is constructed.

92. ATCO Pipelines stated that the proposed delivery station will be located within an existing industrial site and will not contain any control/pressure regulation facilities and, therefore, a noise impact assessment will not be completed. The proposed control station is required in order to connect the proposed project to the existing Pembina Transmission system. ATCO Pipelines also stated that this control station would require a short pipeline lateral for which it will file a separate application that will include a noise impact assessment for the proposed control station. ATCO Pipelines submitted that the three proposed above-ground valve assemblies do not require a noise impact assessment as they will be flow-through valves with no control/pressure regulation facilities.

## 5.2 Consultation

93. ATCO Pipelines stated that the majority of the proposed project and related facilities are located on private land, and that it has completed public consultation and notification in accordance with Rule 020. Consultation included holding an open house, personal consultation and obtaining confirmation of non-objection from all directly affected residents and landowners. Consultation also included personal consultation with all residents and landowners within 100 metres of the project, and delivery of project notification packages to all residents and landowners within 200 metres of the proposed pipeline route. ATCO Pipelines indicated that in April 2018, it sent industry notifications to all operators of licensed pipelines within 1.6 kilometres of the proposed pipeline route.

94. ATCO Pipelines stated that it has submitted disposition applications, including a *Provincial Parks Act* disposition application, to Alberta Environment and Parks in relation to the portion of the proposed pipeline that would be located on Crown land. ATCO Pipelines confirmed that it will comply with all conditions of dispositions issued by Alberta Environment and Parks.

95. ATCO Pipelines stated that on January 19, 2018, it filed for a First Nation Consultation determination from the Aboriginal Consultation Office, and that First Nation Consultation commenced on January 22, 2018, with Paul First Nation, Sunchild First Nation and

O'Chiese First Nation. ATCO Pipelines indicated that it received a Consultation Adequacy Assessment<sup>65</sup> (under FNC201800367) from the Aboriginal Consultation Office on April 10, 2018.

96. ATCO Pipelines stated that as part of the C&R application process, the Alberta Energy Regulator issued a public notice of application<sup>66</sup> on its website on May 30, 2018. The notice stated that the deadline for submitting statements of concern in relation to the project was June 29, 2018. ATCO Pipelines confirmed that no statements of concern were received and there are no outstanding objections or concerns related to the project.

## 6 Findings

97. When deciding whether approval of the project is in the public interest, the Commission is required by Section 17 of the *Alberta Utilities Commission Act* to have regard for the project's social and economic effects, and the effects of the project on the environment.

98. The Commission has reviewed the application and has determined that it meets the information requirements of Rule 020.

99. The Commission accepts that ATCO Pipelines conducted a participant involvement program in accordance with Rule 020 and finds that the participant involvement was adequate.

100. The Commission has reviewed the C&R for the project and notes that ATCO Pipelines has committed to implement all recommendations and mitigation plans in the C&R. In addition, ATCO Pipelines has committed to complying with the code of practice under the *Water Act* for all watercourse, drainage and wetland crossings. Having regard for the assessment and recommendations in the C&R, the code of practice requirements and the commitments made by ATCO Pipelines, the Commission finds that the potential environmental impacts of the project are sufficiently mitigated.

101. The Commission finds that noise-related information regarding the proposed delivery station and the three proposed above-ground valve assemblies in the application submitted by ATCO fulfills the requirements of Rule 012: Noise Control.

102. Based on the foregoing, the Commission considers that there is a need for the Pembina-Keeyhill Transmission Pipeline Project and it is in the public interest to approve the construction and operation of the project in accordance with Section 17 of the *Alberta Utilities Commission Act*.

103. ATCO Pipelines is directed to revise its revenue requirement and capital expenditures forecasts in its compliance filing to Decision 23793-D01-2019 to reflect the Commission's findings in this proceeding.

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<sup>65</sup> Exhibit 23799-X0009, AER Adequacy Assessment Decision.

<sup>66</sup> Exhibit 23799-X0011, AER Public Notice of Application.

## 7 Decision

104. Pursuant to sections 3.1(2) and 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act*, the Commission approves the application and grants to ATCO Pipelines the amended licence as set out in Appendix 1 – Gas Utility Pipeline Licence 103 – August 6, 2019 (Appendix 1 will be distributed separately).

Dated on August 6, 2019.

### Alberta Utilities Commission

*(original signed by)*

Henry van Egteren  
Panel Chair

*(original signed by)*

Kristi Sebalj  
Commission Member

*(original signed by)*

Neil Jamieson  
Commission Member