



**ATCO Gas and Pipelines Ltd.**

**Cloverbar Hydrogen Lateral Transmission Pipeline Project**

**January 10, 2024**

**Alberta Utilities Commission**

Decision 28555-D01-2024

ATCO Gas and Pipelines Ltd.

Cloverbar Hydrogen Lateral Transmission Pipeline Project

Proceeding 28555

Application 28555-A001

January 10, 2024

Published by the:

Alberta Utilities Commission

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## **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 1.4 kilometres of new 219.1-millimetre high-pressure natural gas pipeline and related above-ground facilities. The new pipeline and facilities are proposed to supply a new hydrogen power plant that is located within the Aurum Industrial Business Park in the city of Edmonton.

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**

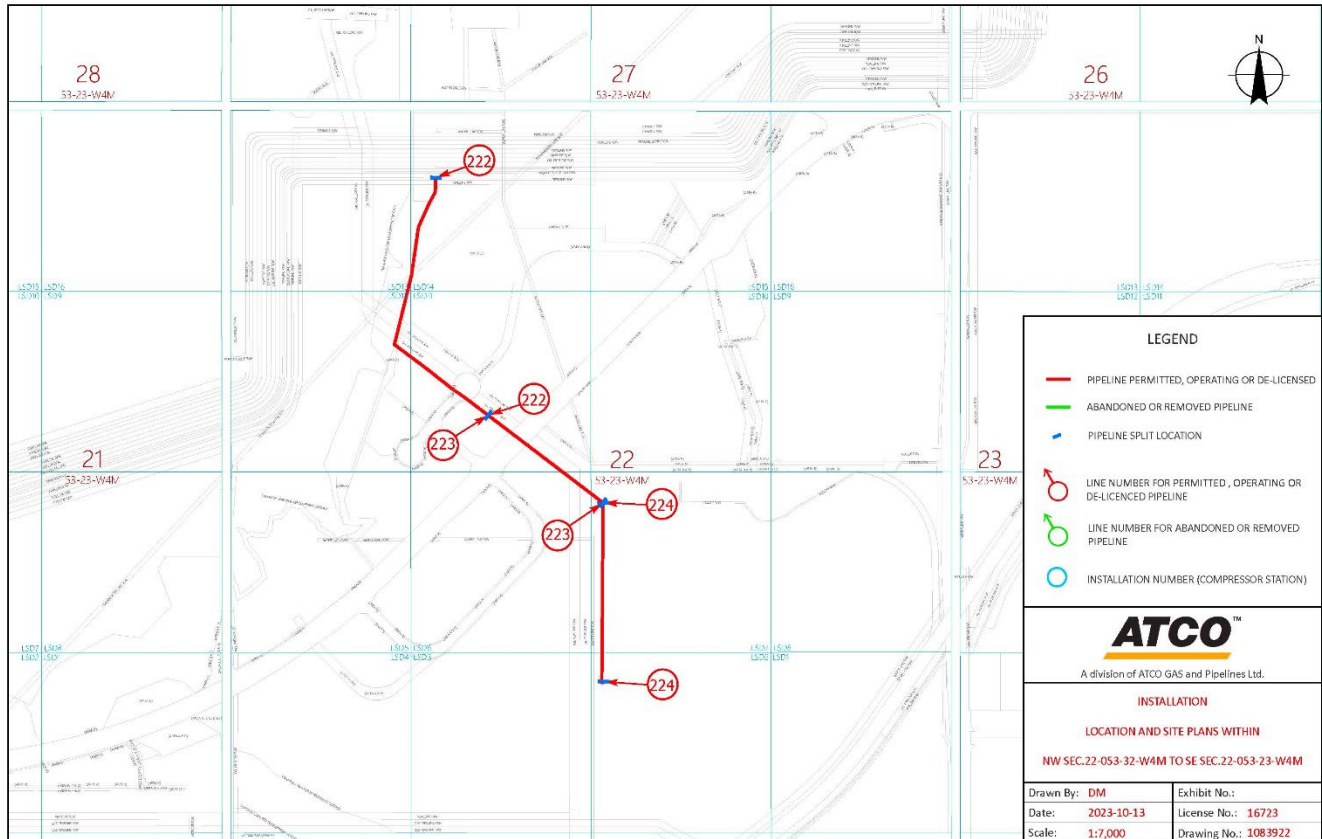
### **2.1 Application details**

3. On October 25, 2023, ATCO filed Application 28555-A001 with the Commission seeking approval of the need for a new pipeline and for the construction and operation of the Cloverbar Hydrogen Lateral Transmission Pipeline (the project), 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 16723:

- line 222 – 0.65 kilometres of 219.1-millimetre outside-diameter (OD) pipeline
- line 223 – 0.32 kilometres of 219.1-millimetre OD pipeline
- line 224 – 0.41 kilometres of 219.1-millimetre OD pipeline

4. The project would be constructed entirely on private lands from a tap point on ATCO's existing Cloverbar Lateral Transmission Pipeline located in Legal Subdivision 14 of Section 22, Township 53, Range 23, west of the Fourth Meridian to a proposed new delivery station to be located in the southeast quarter of Section 22, Township 53, Range 23, west of the Fourth Meridian.

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



**Figure 1. Pipeline route**

6. ATCO included a project need assessment<sup>1</sup> as part of the application as the need for the project was not previously established.

7. ATCO indicated it conducted public consultation and notification for the project in accordance with Table A1-2 of Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*. ATCO indicated that no concerns were identified during its consultation and notification process and that it obtained confirmation of non-objection from directly and adversely affected landowners.

8. ATCO retained Jacobs Consultancy Canada Inc. to prepare an environmental evaluation report<sup>2</sup> and environmental protection<sup>3</sup> plan for the project. Jacobs asserted that the plan was prepared in accordance with the current best management practices and the *Master Schedule of Standards and Conditions (Government of Alberta 2021)*. Jacobs conducted a desktop review of the area and two site visits, confirming that no watercourses, wetlands, springs, or groundwater wells are in the project footprint area and that the soils within the project area are disturbed. As such, ATCO has confirmed that no *Code of Practice* notifications are required to be submitted to the Alberta Energy Regulator and/or Alberta Environment and Protected Areas.

<sup>1</sup> Exhibit 28555-X0006, 02 - Business case.

<sup>2</sup> Exhibit 28555-X0004, 05 – ATCO\_Cloverbar Hydrogen Lateral\_EE\_17Oct2023.

<sup>3</sup> Exhibit 28555-X0001, 06 - ATCO\_Cloverbar Hydrogen Lateral\_EPP\_17Oct2023.

9. ATCO indicated that the project footprint is located within three provincially identified wildlife areas: Sharp-tailed Grouse Survey Area, Sensitive Raptor Range for bald eagle and Key Wildlife Biodiversity Zone (KWBZ). However, habitat for grouse leks is negligible and the KWBZ restricted activity period is only required on public lands. ATCO has committed to retaining a qualified environmental professional to conduct nest surveys if construction is to occur between the bird nesting period of April 27 to August 9. Outside of the breeding bird nesting period, the habitat in the project area has low potential to support wildlife features. As well, the soils are disturbed and there are no known rare plant species within the project area. ATCO specified that the pipeline installation method will be comprised of a combination of horizontal directional drilling and open-cut construction.

10. The environmental evaluation report evaluated the risk of contamination on site and determined this risk to be low with no documentation of spills or complaints within approximately 300 metres of the project footprint, and similarly, no federal contaminated sites within 300 metres of the project footprint.<sup>4</sup> The environmental protection plan provides guidance for addressing any discovery of suspected contaminated soils and the appropriate response actions for any discovery.<sup>5</sup>

11. The environmental evaluation report notes that noxious weeds were observed in the project area.<sup>6</sup> ATCO has committed to implementing controls to prevent further spread of these observed weed populations by implementing the mitigations provided in the environmental protection plan.

12. The environmental evaluation report concluded that with the implementation of the mitigation measures detailed in the environmental protection plan and with adherence to the applicable regulatory requirements, the potential adverse effects associated with the project are considered to be not significant. Specifically, with the implementation of the contamination contingency planning and weed management planning documented in the environmental protection plan, the project risks are effectively managed to an acceptable level.

13. ATCO retained Acoustical Consultants Inc. to prepare a noise impact assessment<sup>7</sup> for the delivery station that ATCO has proposed to install at Nova Gas Transmission Ltd.'s (NGTL) customer's site. The project is located within an existing industrial area, which contains a significant number of commercial and industrial properties including a Canadian Pacific Railway mainline. One residential receptor was identified approximately 1.4 kilometres from the proposed delivery station. The nighttime energy equivalent sound level (Leq) from the proposed project in isolation was estimated to be 13.0 dBA (A-weighted decibels) at the lone residential receptor. When combined with the nighttime ambient sound level and the predicted noise level from the approved hydrogen power plant,<sup>8</sup> the total cumulative nighttime level was estimated to be 38.0 dBA, which is less than the Rule 012: *Noise Control* permissible nighttime sound level of 40.0 dBA. No low frequency noise is expected. As such, the assessment concluded that that

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<sup>4</sup> Exhibit 28555-0004, 05 - ATCO\_Cloverbar Hydrogen Lateral\_EE\_17Oct2023, PDF page 12.

<sup>5</sup> Exhibit 28555-X0001, 06 - ATCO\_Cloverbar Hydrogen Lateral\_EPP\_17Oct2023, PDF page 29.

<sup>6</sup> Exhibit 28555-0004, 05 - ATCO\_Cloverbar Hydrogen Lateral\_EE\_17Oct2023, PDF page 17.

<sup>7</sup> Exhibit 28555-X0002, 07 - ATCO\_E-3\_Hydrogen\_Station\_NIA.

<sup>8</sup> Exhibit 28555-X0018, 28555-X0016, Information request - round 1\_000016\_Response, ATCO-AUC-2023NOV20-001.

cumulative noise levels at the residential receptor and all theoretical 1,500 metre receptor locations, are below the Commission's permissible sound levels.

14. ATCO indicated that an application for a *Historical Resources Act* approval has been submitted and that construction will not commence until a clearance has been received.

## 2.2 Commission process

15. Approval for new gas utility pipelines in Alberta generally follows two separate application processes. In the first application process (rates process), in which the gas utility seeks approval of rates to recover its prudently incurred costs, the gas utility requests the Commission's approval of forecast capital expenditures for new pipeline facilities in the context of a general rate application made pursuant to the *Gas Utilities Act*. In its general rate application, the gas utility includes a business case for the proposed new pipeline that describes the need or justification for the project, the alternatives available to meet that need, and the utility's choice of the best alternative to meet the need. In Decision 23799-D01-2019, the Commission described how it assesses the need for new gas utility pipelines proposed in a general rate application:

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.<sup>9</sup>

16. In the second application process (facility process), the gas utility seeks the Commission's approval to construct and operate new pipeline facilities, 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 the facility application, the Commission must first determine if the need or justification for the new gas utility pipeline was identified and approved in the rates process. If so, then the site-specific impacts, in particular any adverse social, economic or environmental effects, of the proposed facilities are assessed to determine if approval of the proposed facilities is in the public interest.

17. 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.

18. The Commission's Rule 007 allows an applicant to apply for approval of both the need and the facilities in a single proceeding. Pursuant to the provisions of Rule 007, 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.

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<sup>9</sup> Decision 23799-D01-2019: ATCO Gas and Pipelines Ltd., Pembina-Keephills Transmission Pipeline Project, Proceeding 23799, Application 23799-A001, August 6, 2019, paragraph 8.



19. In this case, based on the project's timeline requirements, ATCO requested that the project need be considered in the facility proceeding despite it being originally filed as part of ATCO's 2024-2026 general rate application that is currently under consideration by the Commission in Proceeding 28369. The Commission granted the request in Proceeding 28369 on November 7, 2023,<sup>10</sup> and issued a letter in Proceeding 28555 on November 8, 2023.<sup>11</sup>

20. The Commission issued a notice of application for Proceeding 28555 on November 9, 2023. The notice was sent directly to all landowners, occupants, and residents along the proposed route. In addition, the notice was also emailed to the interveners of Proceeding 23869. No submissions in response to the notice were received by the Commission.

### **3 Project need, alternatives and cost**

#### **3.1 The need for the pipeline**

21. ATCO provided a business case in its application which indicated that the project is required in order to supply the natural gas requirements of a hydrogen power plant facility.

22. ATCO explained that a customer has applied to NGTL requesting firm transportation delivery of 75,000 gigajoules per day (GJ/d) of natural gas for its power plant. ATCO<sup>12</sup> stated that the need for the project is established as it stems from the executed service agreement between NGTL and NGTL's customer. As such, ATCO has proposed to install a pipeline lateral, tap and riser, measurement station and associated supervisory control and data acquisition (SCADA) equipment in order to meet the energy requirements of NGTL's customer. The proposed pipeline would tie into ATCO's existing 762.3-millimetre high-pressure Cloverbar lateral pipeline, and deliver natural gas to the new delivery station located at the customer's site. ATCO indicated that the project provided the best efficiency from an overall industry perspective.

23. ATCO proposed to commence construction of the pipeline in February 2024, in order to meet NGTL's customer's planned facility startup date of April 1, 2024.

#### **3.2 Project alternatives**

24. ATCO stated in its business case that the project was selected because it was the only alternative that could meet the delivery pressure requirements of its customer. Nevertheless, ATCO considered three other alternatives to the project, as described below.

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

25. Alternative 1, maintaining the status quo, was dismissed by ATCO because doing nothing would not address the need under the executed firm transportation delivery contract between NGTL and NGTL's customer.

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<sup>10</sup> Proceeding 28369, Exhibit 28369-X0129, AUC letter – Cloverbar Hydrogen Delivery Installation Project.

<sup>11</sup> Exhibit 28555-0012, Transfer of Cloverbar Hydrogen Lateral Transmission Pipeline Installation Project from Proceeding 28369 to Proceeding 28555.

<sup>12</sup> In April 2009, NGTL and ATCO Pipelines entered into the Alberta System Integration Agreement which offered its customers the benefits of entering into a single contract for transportation services, on the integrated Alberta natural gas transmission system.

***Alternative 2: Delivery via Ardrossan Transmission Pipeline***

26. In Alternative 2, ATCO considered constructing a pipeline to source gas from ATCO's 508-millimetre Ardrossan Transmission Pipeline. This alternative would consist of installing a new delivery station located in the northeast quarter of Section 11, Township 58, Range 22, west of the Fourth Meridian, and approximately 0.6 kilometres of new 219.1-millimetre pipeline extending to NGTL's customer facility. This alternative was rejected by ATCO because the delivery pressure was inadequate to meet the need of its customer.

***Alternative 3: Delivery via Bittern Lake to Redwater Transmission Pipeline***

27. Alternative 3 considered constructing a pipeline to source gas from ATCO's 273.1-millimetre Bittern Lake to Redwater Transmission Pipeline. This alternative would consist of installing a new delivery station located in the northeast quarter of Section 11, Township 58, Range 22, west of the Fourth Meridian, and approximately 0.6 kilometres of new 219.1-millimetre pipeline extending to NGTL's customer facility. This alternative was rejected by ATCO because the delivery pressure was inadequate to meet the need of NGTL's customer.

**3.3 Project cost**

28. ATCO estimated the total project cost to be approximately \$13,618,000, of which NGTL's customer would pay \$10,600,000 through a contribution in aid of construction (CIAC). As a result, the total net cost to ATCO would be approximately \$3,018,000. ATCO estimated the operation and maintenance cost of the project to be approximately one per cent of the total capital cost. The capital cost breakdown for the project is shown in Table 1.

29. ATCO stated that given the other alternatives were not feasible, and that the proposed project provided the best efficiency, an economic assessment and cost comparison of the alternatives were not considered. In addition, the net cost to ATCO remained the same for all the alternatives considered given that NGTL's customer would be funding the difference through a CIAC.

**Table 1. Project capital costs (\$000)<sup>13</sup>**

	Engineering	Materials	Land	Construction	AFUDC*	Total
2023	680	2,250	110	100	88	3,228
2024	300	240	3,020	6,742	88	10,390
<b>Total</b>	<b>980</b>	<b>2,490</b>	<b>3,130</b>	<b>6,842</b>	<b>176</b>	<b>13,618</b>

\*Allowance for funds used during construction

<sup>13</sup> Exhibit 28555-X0006, 02 - Business case, Table 1.

## 4 Commission findings

### 4.1 Application

30. 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.

31. The Commission has reviewed the application and has determined that it meets the information requirements of Rule 007. The Commission finds that ATCO's participant involvement program also meets the requirement of Rule 007 and accepts that there are no outstanding public or industry objections or concerns.

32. The Commission finds that the environmental information required for the application has been sufficiently addressed within the environmental evaluation. The Commission accepts the evaluation's conclusion that there will be no significant impacts on the environment given that the project is entirely on disturbed land, that horizontal directional drilling will be used for construction, and that ATCO has committed to follow the recommendations presented in the environmental protection plan in order to reduce the risk of adverse environmental impacts associated with construction and operation of the project. The Commission also accepts ATCO's commitment to having a qualified environmental professional conduct nest surveys if construction is to occur between the bird nesting period of April 27 to August 9. The Commission is satisfied that this evaluation of contamination risk and the provisions for contingency planning for undocumented instances of contamination will reduce the risk posed by contamination to an acceptable level.

33. The Commission notes that noxious weeds were observed in the project area<sup>14</sup> and that ATCO has committed to implementing controls to prevent further spread of these observed weed populations.<sup>15</sup> The mitigations provided in the environmental protection plan for controlling the observed noxious weeds are reasonable and effective in controlling weeds and reducing weed risks to an acceptable level.

34. The Commission finds that the noise impact assessment was completed in accordance with Rule 012. The Commission accepts that the project's predicted noise level is below the permissible sound level and no mitigation is required.

### 4.2 Project need

35. As described in Rule 007, 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.

36. The Commission has reviewed the application and finds that ATCO's business case supports the need for the project given an executed firm transportation delivery agreement exists between NGTL and NGTL's customer in the Edmonton area. Accordingly, the Commission

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<sup>14</sup> Exhibit 28555-0004, 05 - ATCO\_Cloverbar Hydrogen Lateral\_EE\_17Oct2023, PDF page 17.

<sup>15</sup> *Ibid.* PDF page 14.

finds that ATCO has demonstrated there is a need for the project and that ATCO's considered alternatives are not feasible in delivering natural gas to NGTL's customer.

37. Based on the foregoing, the Commission considers that there is a need for the proposed 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*.

#### 4.2.1 Project cost

38. The Commission's role in this proceeding is to assess the need for the proposed pipeline and to determine whether approval of ATCO's 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. In this capacity, the Commission's task is not to determine whether the proposed costs are prudent but rather, the Commission considers the 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.

39. ATCO estimated the capital cost of the project to be \$13,618,000. ATCO stated that NGTL's customer would supply a CIAC in the amount of \$10,600,000, which would result in a net cost to ATCO in the amount of \$3,018,000.

40. ATCO indicated that it did not conduct a cost comparison and economic assessment of the evaluated alternatives because none of them were feasible for meeting the natural gas needs of NGTL's customer. In addition, ATCO stated, regardless of the alternative, NGTL's customer would pay a contribution (CIAC) to cover the cost difference between the overall cost of the project and ATCO's portion.

41. The Commission finds that the project is the only viable option and will provide the most effective means of delivering natural gas to NGTL's customer.

42. 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.

## 5 Decision

43. Pursuant to Section 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act*, the Commission approves the installation of 1.4 kilometres of new 219.1-millimetre high-pressure natural gas pipeline (lines 222, 223 and 224) and grants ATCO Gas and Pipelines Ltd. the amended licence as set out in Appendix 1 – Gas Utility Pipeline Licence 16723 (Appendix 1 will be distributed separately).

Dated on January 10, 2024.

### Alberta Utilities Commission

*(original signed by)*

Douglas A. Larder, KC  
Vice-Chair

*(original signed by)*

Matthew Oliver, CD  
Commission Member