



ATCO Gas and Pipelines Ltd. (South)

**New Construction to Replace a Section of the
Banff Transmission Pipeline**

Town of Canmore

December 18, 2012

The Alberta Utilities Commission

Decision 2012-342: ATCO Gas and Pipelines Ltd. (South)

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Application No. 1608817

Proceeding ID No. 2123

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1 Introduction and background

1. ATCO Gas and Pipelines Ltd. (South) (ATCO) filed an application with the Alberta Utilities Commission (AUC or the Commission) seeking approval for an amendment to Permit and Licence No. 1950 and Permit and Licence No. 15600 pursuant to Section 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act* for the following:

Pertaining to Permit and Licence No. 1950:

- Addition of newly constructed pipeline (Line 121 – 0.16 kilometres of 323.9 millimetre outside-diameter pipe).
- Addition of newly constructed pipeline (Line 122 – 0.09 kilometres of 168.3 millimetre outside-diameter pipe).
- Addition of newly constructed pipeline (Line 123 – 6.2 kilometres of 168.3 millimetre outside-diameter pipe).
- Addition of newly constructed pipeline (Line 124– 0.22 kilometres of 168.3 millimetre outside-diameter pipe).

Pertaining to Permit and Licence No. 15600:

- Addition of newly constructed pipeline (Line 3 – 0.56 kilometres of 114.3 millimetre outside-diameter pipe).
- Mapping amendment of lines 1 and 2 (base map only).

(jointly referred to as “the project”).

1.1 Discussion

1.1.1 Proposed routing and tie-in details

2. ATCO proposed to relocate the existing 168.3 millimetre outside-diameter transmission line in Canmore by constructing approximately 6.2 kilometres of new 168.3 millimetre outside-diameter high-pressure sweet natural gas pipeline in a new alignment bordering the east boundary of Highway 1, outside of the right-of-way. The proposed pipeline would extend from a new valve assembly proposed at the south tie-in at the end of ATCO’s existing 323.9 millimetre outside-diameter Banff loop line in LSD 10-28-24-10-W5M, to a new valve assembly proposed at the north tie-in to the existing 168.3 millimetre outside-diameter Banff transmission line on the northwestern border of Canmore in LSD 8-7-25-10-W5M. In addition, one 168.3 millimetre outside-diameter pipeline lateral extension 220 metres long and one 114.3 millimetre

outside-diameter pipeline lateral extension 560 metres long, are required to reconnect the existing Canmore East and West Gate Station laterals, respectively, to the proposed 168.3 millimetre outside-diameter Banff transmission line. The existing high-pressure pipeline through Canmore would be abandoned in place. A subsequent application would be made to the AUC for line splitting and pipeline abandonment.

3. ATCO stated that the proposed above-ground tie-in valve assemblies at either end of the new 168.3 millimetre outside-diameter pipeline would allow this segment of the Banff transmission line through Canmore to be inspected using in-line inspection tools. Additionally, the proposed 160-metre long 323.9 millimetre outside-diameter pipeline at the south end is necessary to extend the 323.9 millimetre outside-diameter Banff loop line to the south tie-in valve assembly which would allow the 323.9 millimetre outside-diameter Banff loop line to be inspected using in-line inspection tools. The two gate station lateral extensions would be tied-in to the proposed 168.3 millimetre outside-diameter pipeline with above-ground valve assemblies. An existing above-ground mainline isolation valve on the existing 168.3 millimetre outside-diameter Banff transmission line that is located on the Canadian Pacific Railway right-of-way would be removed and relocated to the south tie-in valve assembly to consolidate all above ground facilities at one site. This relocation would require the installation of an additional 90 metres of 168.3 millimetre outside-diameter pipeline from the existing valve site to the south tie-in valve assembly site.

2 Commission process

4. This application was registered as Application No. 1608817 on September 12, 2012.

5. The Commission issued round 1 information requests to ATCO on September 25, 2012, and ATCO responded to the information requests on October 3, 2012. The Commission issued round 2 information requests to ATCO on October 3, 2012, and ATCO responded to the information requests on October 4, 2012.

6. The Commission issued a notice of application on October 11, 2012, to all persons along the right-of-way whose rights may be potentially directly and adversely affected by the application.

7. The Commission issued round 3 information requests to ATCO on November 15, 2012, and ATCO responded to the information requests on November 29, 2012.

8. The Commission received email correspondence from five individuals requesting further information about the project.¹ Upon review of the information provided by ATCO, all individuals withdrew their concerns and filed letters of non-objection with the Commission.²

¹ Exhibits 0038.00.MCFADDEN-2123, 0039.00.HAM-2123, 0043.01.LANTZ-2123, 0045.00.YOON-2123 and 0051.00.ATCO-2123.

² Exhibits 0040.00. MCFADDEN-2123, 0042.00.HAM-2123, 0044.01.LANTZ-2123, 0046.00.YOON-2123 and 0051.00.ATCO-2123.

3 Views of the applicant

3.1 Need for pipeline replacement

9. ATCO stated that the existing 168.3 millimetre outside-diameter Banff transmission line located in the town of Canmore (Canmore) was constructed over 60 years ago and is reaching the end of its useful life. Over time, Canmore has expanded around the pipeline. The pipeline is now situated in the Bow Valley Trail boulevard in the centre of Canmore. As a result, there are several encroachment concerns located along the existing pipeline alignment which ATCO indicated could inhibit the safe operation and maintenance of the pipeline. ATCO concluded that replacing the existing pipeline in its current alignment is also not practicable due to the proximity of existing infrastructure.

10. The Town of Canmore supports ATCO's proposed project to relocate the pipeline from its current location. In its application, ATCO stated that the Town of Canmore has also expressed concerns about safety and future development as the current location of the pipeline is within one of the town's busiest commercial districts and severely limits any potential redevelopment or infrastructure upgrades in the area. ATCO asserts that relocating the proposed pipeline alignment adjacent to the Alberta Transportation Highway 1 right-of-way would mitigate the existing encroachment issues and allow the Town of Canmore to redevelop the area around the existing pipeline.

11. ATCO stated that the risk associated with an aging urban pipeline is a product of the probability of a failure event and the consequences of the failure event. The existing 168.3 millimetre outside-diameter Banff transmission line is not piggable. Therefore, an inline inspection has not been possible. A total of 15 leaks have been documented on the 168.3 millimetre Banff transmission pipeline within the Canmore vicinity. The documented leaks have primarily been the result of corrosion.³ Based on integrity data, collected through inspection programs, ATCO stated the probability of a pipeline failure is considered to be low. However, ATCO considered the serious consequences associated with a pipeline failure in highly developed residential and commercial areas. ATCO stated that as a result, there is higher risk associated with the continued operation of the existing Banff transmission line through the highly-developed area in Canmore in comparison to the planned project. ATCO also submitted that replacing the aging high-pressure pipeline with a new pipeline in a new alignment would help reduce the overall risks associated with reliable gas transmission service to the public.

3.2 Environmental assessment

12. ATCO stated that while the pipeline relocation project in Canmore is outside the category for a conservation and reclamation application, ATCO undertook a comprehensive environmental assessment in accordance with provincial and federal environmental legislation. Draft copies of the following documents were submitted with the application:

- Watercourse Crossings Aquatic Assessment
- *Historical Resources Act* clearance
- Preconstruction Environmental Assessment
- Environmental Protection Plan

³ Exhibit 0023.02.ATCOPIPE-2041, ATCO Pipelines' Responses to Alberta Utilities Commission information request AUC-AP-5b.

13. There are two watercourse crossings that would be affected by the proposed pipeline construction activities. An open cut construction method is proposed for the Cougar Creek crossing and a trenchless method is proposed for a small unnamed creek. An environmental assessment of these two watercourse crossings was submitted with the application as noted above. ATCO stated that the area required for the pipeline right-of-way and construction activities is mostly disturbed public land or land owned by the Town of Canmore. ATCO also submitted that much of the topsoil in the area has been disturbed. Where required to facilitate pipeline construction activities, the topsoil on the right-of-way and workspace would be stripped and stored, and all surface disturbances would be backfilled before the topsoil is returned. During construction, the existing pipeline would be tested for liquids prior to tying in the new 168.3 millimetre outside-diameter pipeline. Any liquids found would be removed and properly disposed of.

3.3 Consultation

14. ATCO stated that they consulted with all stakeholders that could be affected by the project including the Town of Canmore, Alberta Transportation, Alberta Environment and Sustainable Resource Development, Alberta Infrastructure, Alberta Tourism, Parks and Recreation, Alberta Municipal Affairs - Alberta Social Housing Corporation, Canadian Pacific Railway Company, and a number of other landowners and lease holders (occupants), along the right-of-way. ATCO received confirmation of non-objection for the proposed pipeline construction activities from all landowners and occupants potentially affected by this application in accordance with AUC Rule 020: *Rules Respecting Gas Utility Pipelines* (AUC Rule 020) requirements. Correspondence from the Town of Canmore, Alberta Transportation, Alberta Tourism, Parks and Recreation, and Canadian Pacific Railway Company was submitted with the application, as well as copies of signed non-objection documents from stakeholders.

15. The project was advertised by ATCO in two local newspapers: the Rocky Mountain Outlook and the Canmore Leader. Scanned copies of the advertisements were submitted with the application. ATCO submitted that no complaints were received and that there are no outstanding objections or concerns related to the project. Consultation with First Nations groups was conducted in accordance with the Alberta Environment and Sustainable Resource Development Pre-Consultation Assessment. ATCO consulted with the following First Nations groups: Blood Tribe, Piikani Nation, Siksika Nation, Stoney (Bears paw) Band, Stoney (Chiniki) Band, Stoney (Wesley) Band and the Tsuu T'ina Nation. In its submission, ATCO stated that the requirements of the consultation and notification program were met and that no outstanding objections or concerns remain in regards to the application.

3.4 Determination of pipe size

16. In accordance with the ATCO Pipelines' business case,⁴ ATCO initially stated that based on 20 year long-term growth forecasts for the area, the existing 168.3 millimetre Banff transmission pipeline will be undersized and therefore, the proposed relocated pipeline was initially planned to be increased in size to a 219.1 millimetre outside-diameter pipe which ATCO stated would be adequately sized to meet existing and forecasted demands.

17. ATCO subsequently stated that upon further and more recent analysis, the forecasted gas demand at this time for the Banff transmission system does not support the increased size of the

⁴ Exhibit 0002.00.ATCOPIPE-2041, ATCO Pipelines Business Case: Relocate 168 mm Banff Transmission Pipeline at Canmore Project 2011-3072, page 49.

pipeline from a 168.3 millimetre outside-diameter pipeline to a 219.1 millimetre outside-diameter pipeline. While future pipeline looping along the proposed alignment is not an option due to space constraints, the incremental investment of the pipe size increase at this time is not supported by the Alberta System planning and investment policy.⁵ As a result of an arrangement for operational pipeline integration with NOVA Gas Transmission Ltd. (NGTL), ATCO has adopted NGTL's long-term demand forecast for the Alberta System as specified by the Alberta System Integration Agreement.⁶ ATCO indicated that NGTL's long-term demand forecast for the Banff transmission system suggests a smaller demand growth rate,⁷ resulting in a reduction in pipe size from 219.1 millimetre outside-diameter to 168.3 millimetre outside-diameter.

18. ATCO indicated that the Banff transmission system currently operates at approximately 88 per cent of its capacity⁸ under peak demand conditions. ATCO stated that the demand forecast is sensitive to factors which include population changes, heating fuel selection, end-user energy efficiency and general economic conditions in the region. The demand forecast would also be significantly influenced by new localized gas demand which may result from new or expanded industrial activity. According to NGTL's Facilities Design Methodology Document,⁹ in their annual plan, proposed facilities are usually selected on the basis of lowest cumulative present value cost of service and lowest first year capital cost. However, this NGTL document indicates that a number of alternatives may be comparable when these costs are considered, and that, for practical purposes, when these alternatives are essentially equal based on financial analyses, other relevant factors including operability of the facilities, environmental considerations and land access may more heavily influence alternative selections. The estimated cost of a 219.1 millimetre outside-diameter pipeline relocation at the proposed routing through the town of Canmore is \$12,500,000. The estimated cost of a 168.3 millimetre outside-diameter pipeline relocation at the proposed routing through the town of Canmore is \$12,000,000.

19. In response to AUC information requests, ATCO indicated that there are no specific issues precluding a 219.1 millimetre outside-diameter pipeline replacement based on the NGTL Guidelines for New Facilities.¹⁰ ATCO indicated that a 168.3 millimetre outside-diameter pipeline replacement has been selected because it meets the long-term hydraulic forecast requirements. ATCO also indicated that should it become necessary to improve the Banff transmission pipeline system for future increased capacity reasons, replacing the proposed 168.3 millimetre outside-diameter pipeline is not an option since gas delivery commitments must

⁵ ATCO stated that the "Guidelines for New Facilities" document can be found at the following website: http://www.transcanada.com/customerexpress/docs/ab_industry_committee_ttfp/Guidelines-for-New-Facilities.pdf.

⁶ ATCO Pipelines and NGTL entered into the Alberta System Integration Agreement which resulted in a single rate and services structure for regulated gas transmission service in Alberta. Commencing October 1, 2011, natural gas transportation rates in Alberta are comprised of the ATCO Pipelines cost of service approved by the AUC plus the NGTL cost of service approved by the National Energy Board. AUC approvals were granted in Decision 2010-228: ATCO Pipelines 2010-2012 Revenue Requirement and Alberta System Integration, issued May 27, 2010 and Decision 2011-160: ATCO Pipelines Contract Transition, issued April 20, 2011.

⁷ Exhibit 0052.00.ATCO-2123, Round 3 response to AUC-ATCO-7(a).

⁸ Exhibit 0052.00.ATCO-2123, Round 3 response to AUC-ATCO-7(b).

⁹ http://www.transcanada.com/customerexpress/docs/ab_regulatory_facilities/Facilities-Design-Methodology-Document.pdf

¹⁰ The NGTL Guidelines for New Facilities and the NGTL Facilities Design Methodology Document are companion documents describing the NGTL and ATCO approach to facility design arising from integration of the NGTL and ATCO pipeline systems. The link to the NGTL Guidelines for New Facilities Document is filed in Exhibit 52 in this proceeding.

be maintained continuously and looping the proposed 168.3 millimetre outside-diameter Banff transmission pipeline through the Canmore region would be very challenging due to space constraints. ATCO indicated that if additional capacity is required, additional looping of the Banff transmission pipeline system upstream of Canmore would be the most likely option taken in order to provide adequate pressure to ensure sufficient gas supply to Banff.

3.5 Proposed timing of project

20. ATCO stated that construction of the new 168.3 millimetre outside-diameter pipeline and associated tie-ins is scheduled to take place from November to December 2012. Station tie-ins and abandonment of the existing 168.3 millimetre outside-diameter pipeline is proposed for spring/summer 2013. Final reclamation activities for the new construction would also be completed in the spring/summer of 2013.

4 Findings

21. The Commission considered ATCO's submission that a participant involvement program has been conducted and that there are no outstanding public or industry objections or concerns.

22. Due to the nature of the application, a notice of application was issued. Five individuals expressed concerns and possible objections to the project resulting from the notice of application. ATCO provided them with additional information and the individuals subsequently withdrew their objection. A hearing was not required as the Commission considered that its decision or order would not directly and adversely affect the rights of a person pursuant to Section 9 of the *Alberta Utilities Commission Act*.

23. The Commission considered that ATCO retained experienced environmental consultants to assist ATCO in conducting a pre-construction environmental assessment and in finalizing its pipeline watercourse crossing design plan. The Commission's findings that with implementation of the mitigation measures described in the application, and timing of construction to avoid bird nesting and fish habitat, any potential environmental effects of the proposed project will be adequately mitigated.

24. The Commission finds that the project is necessary to replace a pipeline that is more than sixty years old and has been subject to 15 leaks in the area. The existing pipeline is located in a highly-developed residential and commercial area that has been subject to right-of-way encroachments. ATCO submitted that replacement of the pipeline in its current location would not alleviate the encroachment concerns and is not practical due to proximity of existing infrastructure. The Commission considers that the need for a pipeline replacement and relocation to a new alignment has been established.

25. The Commission observes that the Banff transmission system currently operates at approximately 88 per cent of capacity under peak demand conditions and that the load forecast is subject to considerable variability. In addition, the estimated cost of a 219.1 millimetre outside-diameter pipeline relocation is very similar at \$12,500,000 in comparison to \$12,000,000 for a 168.3 millimetre outside-diameter pipeline, and looping the proposed 168.3 millimetre outside-diameter Banff transmission pipeline through the Canmore region would be very challenging due to space constraints. ATCO stated that there were no specific issues precluding a 219.1 millimetre outside-diameter pipeline based upon the NGTL Guidelines for New Facilities

document. As such, it appears to the Commission that installing a 219.1 millimetre outside-diameter replacement pipeline as initially contemplated by ATCO in the business case in the 2012 Final Revenue Requirement application would be more prudent than installing a 168.3 millimetre outside-diameter replacement pipeline. If ATCO wishes to modify its application for a 219.1 millimetre outside-diameter pipeline, the Commission would be prepared to give such an application update expeditious consideration.

26. The Commission has reviewed the application and has determined that it meets the requirements as stipulated in AUC Rule 020.

27. Based on the foregoing, the Commission considers the proposed project to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

5 Decision

28. Pursuant to Section 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act*, the Commission approves the amendment to Permit and Licence No. 1950, and grants ATCO the amended permit and licence as set out in Appendix 1– Gas Utility Pipeline – New Construction – Permit and Licence No. 1950 – December 18, 2012 (Appendix 1 will be distributed separately).

29. Pursuant to Section 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act*, the Commission approves the amendment to Permit and Licence No. 15600, and grants ATCO the amended permit and licence as set out in Appendix 2 – Gas Utility Pipeline – New Construction – Permit and Licence No. 15600 – December 18, 2012 (Appendix 2 will be distributed separately).

Dated on December 18, 2012.

The Alberta Utilities Commission

(original signed by)

Neil Jamieson
Commission Member