

September 1, 2016

**Decision 21910-D01-2016**

ATCO Gas and Pipelines Ltd. (South)  
7210-42 Street N.W.  
Edmonton, Alberta T6B 3H1

Attention: Konstantin Kaindl, EIT  
Project Engineer, Pipelines Engineering

**Removal and Replacement of a Canal Crossing on the Cardston Transmission Pipeline  
Licence 2354  
Proceeding 21910  
Application 21910-A001**

**Minor pipeline project application**

1. ATCO Gas and Pipelines Ltd. (South) (ATCO), by Application 21916-A001 registered on August 15, 2016, filed an application with the Alberta Utilities Commission under Section 11 of the *Pipeline Act* and Section 4.1 of the *Gas Utilities Act* for the following:

- splitting line 71 into lines 71, 90 and 91
- removal of line 90
- addition of a newly constructed pipeline (line 92 - 0.18 kilometres of 219.1-millimetre outside diameter pipeline)
- facility code amendment to line 71
- line 91 is to be abandoned in place under a separate application when construction is complete

2. The proposed work is related to the minor split, removal and replacement of existing pipe previously constructed and operating in accordance with approvals granted in Licence 2354.

3. ATCO stated that the existing Cardston Transmission Pipeline has become exposed within an irrigation canal. The proposed project is to replace the section of the Cardston Transmission Pipeline that crosses the irrigation canal with a newly constructed pipeline, line 92. Line 90 would be removed and line 91 would be abandoned after the new pipeline is installed. The abandonment of line 91 would be addressed in a subsequent application.

4. ATCO stated that this project was not included as part of ATCO's recent general rate application, Proceeding 21515. A full needs assessment is required for this project as the project does not meet the abbreviated need thresholds outlined in Table 3.1 of Rule 020: *Rules Respecting Gas Utility Pipelines*. A copy of the business case for the Cardston Transmission

Pipeline Replacement<sup>1</sup> was filed with this application to establish the need for the pipeline removal and replacement.

5. ATCO stated the Cardston Transmission Pipeline was exposed in an irrigation canal due to natural erosion. It is a requirement to have a minimum depth of cover of 1.2 metres at a watercourse crossing in accordance with Table 4.9 of CSA Z662-15 *Oil and gas pipeline systems*. In the business case, an alternative considered leaving the existing, exposed, non-compliant segment of the Cardston Transmission system operating in the irrigation canal. That option was dismissed since it is a requirement of CSA Z662-15 for a pipeline to have a minimum depth of cover of 1.2 metres at a water crossing. A second alternative considered was to install engineered cover over the exposed pipeline within the irrigation canal to meet the cover requirements of CSA Z662-15. This alternative was also dismissed because adequate depth of cover cannot be obtained without adverse effects on the irrigation canal. Due to the minimal slope of this irrigation canal, a remediation to accommodate the regulatory depth of cover requirement would unacceptably dam the canal. The Commission accepts that the canal pipeline crossing replacement is required to safely meet the CSA Z662-15 requirements and that the selected alternative is appropriate.

6. ATCO stated the total project cost<sup>2</sup> is estimated to be \$966,000. This includes a capital cost of \$870,000 and removal costs of \$96,000. The installation of the new pipeline crossing the irrigation canal is expected to begin in October 2016, with the removal of the exposed pipeline expected to take place immediately following the new installation.

7. *Historical Resources Act*<sup>3</sup> clearance from Alberta Culture and Tourism for the project was granted on January 28, 2015. An environmental protection plan<sup>4</sup> (EPP) has been prepared for this project. During construction, ATCO will meet the requirements of the Guide for Pipelines Pursuant to the *Environmental Protection and Enhancement Act and Regulations* (Alberta Environment, 1994) and all recommendations included in the EPP. The irrigation canal at the crossing location is designated as a Class C watercourse with a restricted activity period (RAP) of April 1st to July 31st according to the *Alberta Code of Practice for Watercourse Crossings* maps (2006). Construction of the new crossing and removal of the old pipeline is proposed to begin in October 2016, outside of the RAP.

8. ATCO stated that consultation with landowners and occupants for this work has been completed in accordance with Rule 020. Confirmation of non-objection by directly and adversely affected landowners and occupants was obtained by ATCO on June 3, 2016.

9. ATCO has provided information respecting the need, nature and extent of the project. Since the project involves no significant ground disturbance and is within the original right-of-way, the resultant environmental impact of the work has been assessed with no

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<sup>1</sup> Exhibit 21910-X0008, ATCO Pipelines Business Case – Cardston Transmission (219.1mm) Crossing irrigation Canal at 04-15-08-21-W4M-Replacement, 2015-R3631.

<sup>2</sup> Exhibit 21910-X0008, ATCO Pipelines Business Case – Cardston Transmission (219.1mm) Crossing irrigation Canal at 04-15-08-21-W4M-Replacement, 2015-R3631, page 2, paragraph 2 (a).

<sup>3</sup> Exhibit 21910-X0007, ATCO Historic Resources Application P21006.

<sup>4</sup> Exhibit 21910-X0006, ENVIRO MAK INC. – Environmental Protection Plan.

significant impact identified. The landowners and occupants of the affected lands did not object to the project.

10. Based upon the information provided, ATCO has demonstrated that the proposal is of a minor nature, no person other than the landowners and occupants of the land upon which the project takes place will likely be directly affected by the proposal, and no significant adverse environmental impact will be caused by the proposed project.

11. The Commission approves the application. The amended licence is attached.

**Alberta Utilities Commission**

*(original signed by)*

Brian Shand, P. Eng.  
Director, Gas Facilities  
On behalf of the Alberta Utilities Commission