

July 27, 2017

Decision 22786-D01-2017

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

Attention: Sydney Smith, E.I.T.
Project Engineer, Pipelines Engineering

**Pipeline Split, Removal and New Construction in the Fort Saskatchewan Area
Licences 1826 and 13745
Proceeding 22786
Applications 22786-A001 and 22786-A002**

Minor pipeline project application

1. ATCO Gas and Pipelines Ltd. (South) (ATCO), by applications 22786-A001 and 22786-A002 registered on July 5, 2017, 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:

Pertaining to Licence 1826:

- splitting line 71 into lines 71 and 73
- removal of line 73
- addition of newly constructed pipeline (line 74 - 80 metres of 406.4-millimetre outside-diameter pipeline)
- mapping amendment of lines 71 and 21

Pertaining to Licence 13745:

- addition of newly constructed pipeline (line 2 - 30 metres of 168.3-millimetre outside-diameter pipeline)

2. The proposed work is related to the minor split, removal and replacement of existing pipeline, within the original right-of-way, previously constructed and operating in accordance with approvals granted in Licence 1826 and Licence 13745.

3. ATCO stated in order to facilitate the in-line inspection (ILI) of both the 323.9-millimetre and 406.4-millimetre Legal Uncas Transmission Pipelines, a new launch/receiver valve assembly is required. The current location of the line size change is in close proximity to the edge of the Highway 825 road surface. The proposed valve assembly and pipeline installation would move the line size change 80 metres west along the right-of-way in order to minimize potential future conflicts with Alberta Transportation highway expansion work, as well as minimize the length of

access road required. The proposed valve assembly would also incorporate a tie-in for the existing 168.3-millimetre Sturgeon Industrial Park Lateral, as the current tie-in is located within the section of 323.9-millimetre pipeline proposed to be removed. In order to facilitate the necessary ILI upgrades, ATCO proposed to proceed with the installation of approximately 80 metres of 406.4-millimetre pipeline, line 74 of Licence 1826; the removal of approximately 80 metres of 323.9-millimetre pipeline, line 73 of Licence 1826; and the installation of approximately 30 metres of 168.3-millimetre pipeline, line 2 of Licence 13745.

4. ATCO stated that the need for this project has been demonstrated within the business case for the ILI program which was filed under ATCO's 2017-2018 general rate application (GRA) as attachment 7.2, page 36.¹ A decision for the 2017-2018 GRA has not yet been issued. ATCO is responsible for 100 per cent of the actual costs associated with the proposed work.

5. ATCO has considered the following alternatives:

Alternative 1: Do nothing/status quo

6. Alternative 1, which considers maintaining the status quo and not implementing an ILI program, is not a valid alternative, as ATCO stated that it is required per CSA Z662 to have a pipeline integrity management program that provides detailed data regarding the condition of the pipelines, which allows ATCO to work towards preventing pipeline failures.

Alternative 2: Conduct ILI with hot tap launch and receive assemblies

7. Alternative 2 considers conducting ILI utilizing hot tap launch and receive assemblies. With this alternative, ATCO would not be required to modify existing valve assemblies, but rather, would require additional launch and receive piping to be installed either by pipe cut out or hot tap fittings on both sides of each valve assembly. Initial costs are estimated to be similar to the proposed ILI program. However, existing vintage valve assemblies would not be removed and multiple short distance in-line inspection runs would be necessary to inspect the pipelines increasing future ILI costs. Additionally, as the launch and receive assemblies under this alternative are temporary in nature, and in-line inspections are intended to be repeated, subsequent inspections would require repeated capital investment. ATCO considered that this alternative is not cost effective and was dismissed.

Alternative 3: Hydrostatic pressure testing

8. Alternative 3 considers the use of hydrostatic pressure testing (HPT) in place of ILI. HPT is best suited to the identification of critical manufacturing, construction, and corrosion defects, as well as smaller critical cracks below ILI detection thresholds. HPT also proves the strength of the pipeline at the time of testing and can be used to verify the licensed maximum operating pressure of a pipeline segment. While HPT is a method of pipeline inspection, it cannot replace the benefits achieved through ILI. Alternative 3 was dismissed by ATCO for the following reasons:

¹ Exhibit 22786-X0010, ATCO Pipelines Business Case – In-Line Inspection Program – Upgrades, Inspections, & Digs.

- HPT is a destructive test method that identifies critical defects through test failure.
- HPT will not identify near critical or less significant defects that have the potential to fail.
- HPT would not provide data for use in predictive failure models.
- Complete system outages are required to complete an HPT inspection.

Alternative 4: Direct assessment program

9. Alternative 4 considers the use of direct assessment in place of ILI. ATCO stated that a direct assessment program, accompanied by an above-ground electronic survey is best suited to the identification of corrosion associated with coating anomalies. After completion of a survey, analysis is performed, followed by verification digs. Direct assessment does not require any upgrades prior to inspection, and is therefore less costly than the proposed program and Alternative 2. While direct assessment is a method of pipeline inspection, it cannot replace the benefits achieved through ILI. Direct assessment can form a critical component of an overall pipeline integrity management program to provide indications of potential corrosion through the identification of coating anomalies and close interval analysis of the pipeline cathodic protection system. ATCO considered that where possible, direct assessment should be considered to provide indications on systems that cannot be made capable for ILI due to system or technology restrictions, and not in replacement of ILI. Alternative 4 was dismissed by ATCO for the circumstances of this pipeline.

10. ATCO retained CH2M Hill Ltd. to complete a wetland classification and delineation assessment due to the project's proximity to a Class III wetland. Using this wetland information, ATCO prepared an environmental protection plan² (EPP) for this project. Detailed information regarding the existing environmental and land-use conditions of the proposed project site and the anticipated environmental impacts, including mitigation plans, is detailed in the EPP. ATCO committed that all recommendations included in the EPP would be implemented.

11. ATCO stated that, through desktop assessment and field verification, CH2M Hill Ltd. has confirmed that the proposed valve assembly is not within the Class III wetland boundaries and no permanent disturbance to the wetland will occur. However, CH2M identified that a portion of the proposed temporary workspace is within the wetland. Therefore, in accordance with the *Alberta Water Act*, and the *Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body*, notification was submitted to the Alberta Energy Regulator on June 16, 2017.

12. ATCO stated that this project does not require a historical resources impact assessment since the proposed work area is not referenced in the latest edition of Alberta Culture and Tourism's listing of historic resources.

² Exhibit 22786-X0003, General Environmental Protection Plan – Valve Assembly Upgrade at Sturgeon Industrial Park Tie-In within 16-17-55-22-W4M.

13. ATCO noted that the pipeline would be tested for liquids prior to removal activities and any liquids found would be removed and properly disposed of. The topsoil would be stripped and stored and all surface disturbances would be backfilled before the topsoil is returned.

14. ATCO stated that consultation with landowners and occupants for this work has been completed in accordance with Rule 020: *Rules Respecting Gas Utility Pipelines*. Confirmation of non-objection by directly and/or adversely affected landowners was obtained by ATCO on May 17, 2017. Construction of the proposed pipeline and related valve assembly is proposed to start in October 2017.

15. ATCO has provided information respecting the need, nature and extent of the project. The Commission accepts that ATCO has demonstrated the need for this specific project and demonstrated that the selected alternative is appropriate for the Legal Uncas Transmission Line project, but makes no finding with respect to the overall GRA business case. Since the project involves limited ground disturbance and is within the original right-of-way, the resultant environmental impact of the work has been assessed with no significant impact identified. The landowners and occupants of the affected lands did not object to the project.

16. 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.

17. The Commission approves the application. In approving the application, however, the Commission makes no determination regarding the regulatory treatment of the costs of the assets to be removed, retired or abandoned pursuant to the application, the costs incurred in carrying out these activities, or the associated rate implications. The amended licences are attached to this decision.

Alberta Utilities Commission

(original signed by)

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

Attachments