



**ATCO Gas and Pipelines Ltd.**

**2016-2017 Unaccounted-For Gas Rider D**

**October 17, 2016**

**Alberta Utilities Commission**

Decision 21905-D01-2016

ATCO Gas and Pipelines Ltd.

2016-2017 Unaccounted-For Gas Rider D

Proceeding 21905

October 17, 2016

Published by the:

Alberta Utilities Commission

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## **1 Overview**

1. On August 12, 2016, ATCO Gas, a division of ATCO Gas and Pipelines Ltd., filed an application with the Alberta Utilities Commission requesting approval of an unaccounted-for gas (UFG) Rider D rate of 1.161 per cent for 2016-2017, effective November 1, 2016. The Rider D rate proposed by ATCO Gas is 0.059 per cent less than the Rider D rate approved by the Commission for ATCO Gas for 2015-2016.<sup>1</sup>

2. For the reasons that follow, the Commission approves ATCO Gas's UFG Rider D rate as filed, effective November 1, 2016.

3. In reaching this determination and others contained in this decision, the Commission has considered all relevant materials comprising the record of this proceeding. Accordingly, references in this decision to specific parts of the record are intended to assist the reader in understanding the Commission's reasoning relating to a particular matter and should not be taken as an indication that the Commission did not consider all relevant portions of the record with respect to that matter.

## **2 Procedural summary**

4. On August 12, 2016, ATCO Gas filed an application with the Commission, seeking approval of the UFG Rider D rate of 1.161 per cent for 2016-2017.

5. On August 15, 2016, the Commission issued a notice of application asking interested parties to register their concerns or support for the application by August 29, 2016. The Commission did not receive any statements of intent to participate.

6. The Commission sought further clarification on this application and issued information requests to ATCO Gas on August 31, 2016. ATCO Gas submitted its responses on September 9, 2016.

7. The Commission considers that the record for this proceeding closed on September 9, 2016. The application has been considered by way of a *basic written process* as described in Bulletin 2015-09.<sup>2</sup>

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<sup>1</sup> Exhibit 21905-X0001, application, paragraph 20; Exhibit 21905-X0007, AG-AUC-2016AUG31-002(b).

<sup>2</sup> Bulletin 2015-09, Performance standards for processing rate-related applications, March 26, 2015.

### 3 Background

8. Charges for UFG are recovered in-kind from all shippers on the ATCO Gas distribution system, including the default supply providers.<sup>3</sup> ATCO Gas's north and south systems utilize a three-year calendar average of physical measurement data to determine UFG, a method that was approved for both ATCO Gas North and ATCO Gas South by the Commission in Decision 2009-183.<sup>4</sup>

9. In Decision 2013-380, the Commission approved a single, province-wide UFG rate and Rider D because ATCO Gas was planning to implement a single load balancing deferral account.<sup>5</sup>

### 4 Discussion

#### 4.1 Calculation of Rider D

10. Consistent with the methodology approved by the Commission in prior decisions,<sup>6</sup> ATCO Gas calculated its Rider D rate using measurement data from January 2013 to December 2015. It then averaged the UFG percentages for 2013, 2014 and 2015 to determine the Rider D rate for 2016-2017, as indicated in Table 1:<sup>7</sup>

**Table 1. Annual UFG percentages and the calculation of the proposed 2016-2017 Rider D<sup>8</sup>**

	UFG percentage
2013	1.368
2014	1.198
2015	0.918
Three-year average	1.161

#### 4.2 Compliance with previous Commission directions

11. The Commission provided several directions to ATCO Gas in respect of the Rider D rate in previous decisions. Recently, in Decision 20737-D01-2015, the Commission directed ATCO Gas as follows:

28 ... As variances in UFG will continue over time, the Commission directs ATCO Gas to continue to provide an explanation of any increase in UFG and steps taken to reduce its impact. Accordingly, consistent with Decision 2014-290, the Commission directs ATCO Gas to continue to provide the following in future Rider D applications:

<sup>3</sup> Exhibit 21905-X0001, application, Attachment 2.

<sup>4</sup> Decision 2009-183: ATCO Gas (A Division of ATCO Gas and Pipelines Ltd.), 2009-2010 Unaccounted for Gas Rates – Rider “D,” Proceeding 282, Application 1605369-1, October 23, 2009.

<sup>5</sup> Decision 2013-380: ATCO Gas Rider D Application for Unaccounted for Gas, Proceeding 2796, Application 1609860-1, October 16, 2013, paragraph 25.

<sup>6</sup> Exhibit 21905-X0001, application, paragraphs 1 and 5.

<sup>7</sup> Exhibit 21905-X0001, application, paragraph 7.

<sup>8</sup> Attachment 1, which was included in the application, contained detailed calculations regarding the derivation of the percentages in this table.

- Clear explanations of seasonal UFG differences, measurement corrections and reasons for UFG increases or decreases.
- Information on practices and procedures it has employed to reduce UFG in its future applications.

29. The Commission also directs ATCO Gas to continue with the direction provided at page 7 of Decision 2008-105 and provide detail with respect to all adjustments showing the reconciliation of prior years' data.<sup>9</sup>

12. The Commission finds that ATCO Gas has complied with these directions in this proceeding. First, ATCO Gas reconciled the 2013 and 2014 data used in this application with the 2013 and 2014 data used in its last Rider D application (ATCO Gas 2015-2016 Rider D application).<sup>10</sup> Second, ATCO Gas provided the following explanation of the seasonal differences in UFG:

ATCO Gas has over 1.2 million delivery points of which the vast majority are read on monthly cycles. ATCO Gas uses cycle billing as the most efficient method for billing large numbers of customers. The DFSS [Daily Forecasting and Settlement System] allocates monthly meter readings to daily flow using daily average temperature as well as other factors such as season and day of week. As a result, the calendarized monthly deliveries reported are calculated estimates and affect the accuracy of UFG on a month to month basis in the shoulder and summer months. ATCO Gas maintains that the accuracy of UFG is more appropriately reviewed over a longer period of, such as a year, to reduce the timing effect of the DFSS estimates.

ATCO Gas designs and builds the distribution system for peak operating conditions. During the shoulder and summer months, systems need to be adjusted to accurately capture measurement during low-flow conditions. The timing of these adjustments is weather dependent as temperature fluctuation is unpredictable. For example, there may be a week of unseasonably warm weather early in the spring, but due to the return to normal temperature immediately following, the seasonal operating plan is not implemented and meters may be under measuring during this period.<sup>11</sup>

13. ATCO Gas also provided details of the aggregated amount of measurement adjustments processed for 2015 of 263 terajoules (TJ). ATCO Gas indicated that in 2015 there were 29 measurement equipment failures, four occurrences of reallocation of measurement, and two sample point changes identified and corrected. ATCO Gas processed three TJ of post final settlement adjustments in 2015.<sup>12</sup>

14. In response to AG-AUC-2016AUG31-001, ATCO Gas provided more information about the large measurement adjustments at one location in the 2013 and 2014 reconciliations. ATCO Gas, in conjunction with ATCO Pipelines, a division of ATCO Gas and Pipelines Ltd., determined that the measurement error was due to incorrect manual inputs in an older version of the software in the flow computer. This error was resolved with an upgrade to the flow computer

<sup>9</sup> Decision 20737-D01-2015: ATCO Gas and Pipelines Ltd., 2015-2016 Rider D Application, Proceeding 20737, October 26, 2015, paragraph 28; Decision 2014-290: ATCO Gas and Pipelines Ltd., Rider D Application for Unaccounted-for Gas, Proceeding 3380, Application 1610790, October 22, 2014; Decision 2008-105: ATCO Pipelines and ATCO Gas, 2008-2009 Unaccounted for Gas and Fuel Gas Rates – Rider “D” and Load Balancing Deferral Account Rider “F,” Proceeding 96, Application 1583677-1, October 28, 2008.

<sup>10</sup> Exhibit 21905-X0001, application, paragraphs 18-19.

<sup>11</sup> Exhibit 21905-X0001, application, paragraphs 9-10.

<sup>12</sup> Exhibit 21905-X0001, application, paragraphs 11-13.

software upgrade in December 2014. ATCO Gas advised the Commission that it has taken the following actions to avoid such large adjustments in the future:

- Software upgrades to the flow computers at 18 stations that had an older version of software installed. The new software does not require any manual inputs.
- Specification of the software to be used by ATCO Pipelines Engineering as part of the Project Approval and Release Completion package, thereby reducing the risk of installing incorrect software.
- Trending station volumes on a monthly and annual basis using a new trending tool in the Measurement and Reporting System, which allows data comparison and early detection of problems.
- Annual comparison of electronic corrector volumes to flow computer volumes at all locations using electronic volume correctors.<sup>13</sup>

15. In response to the first direction in Decision 20737-D01-2015 above, ATCO Gas also identified the following issues that may cause UFG to increase or decrease, as set out in Table 2:

**Table 2. Sources of UFG<sup>14</sup>**

Source	Issue and concern	Impact to UFG
Seasonal operational plans	The timing of when the seasonal operating plan can be implemented is dependent on the weather. In the shoulder months of spring and fall, temperatures can vary significantly and may affect UFG due to timing of the implementation of seasonal operating plan.	Increase or decrease
Equipment failure	Event in which any part of the equipment does not perform according to its operational specifications.	Increase or decrease
Construction	Mixing of heat areas during construction.	Increase
Pipeline leaks	Gas lost to atmosphere.	Increase
Hit lines	Gas lost to atmosphere.	Increase
Unsolicited use	Gas lost to theft.	Increase

16. ATCO Gas noted that it continues to take various additional steps to improve UFG, such as implementing procedures to ensure measurement is accurate during all flow conditions. This involves monitoring and reviewing the measurement equipment for correct meter sizing and replacing where warranted. ATCO Gas has also implemented a program to monitor all regulating stations for low flow conditions, since gas may not be measured accurately at receipt meters if the flow is below the minimum range of the meter. Finally, in conjunction with ATCO Pipelines, ATCO Gas is improving and upgrading measurement equipment, data monitoring, verification of measurement data, seasonal operational adjustments, adjusting sample points and heat areas as necessary.<sup>15</sup>

<sup>13</sup> Exhibit 21905-X0007, AG-AUC-2016AUG31-001, PDF pages 2-4.

<sup>14</sup> Exhibit 21905-X0001, application, paragraph 14.

<sup>15</sup> Exhibit 21905-X0001, application, paragraphs 15-17.



17. In response to AG-AUC-2016AUG31-003(a-b), ATCO Gas confirmed that it expects that UFG resulting from the urban pipeline replacement (UPR) project will decrease when the UPR project is completed in 2018. As such, the full impact on UFG as a result of the project will be included in the UFG rate after the approval and implementation of the 2022 Rider D, which would be based on the rolling average of UFG percentages for 2019, 2020 and 2021.<sup>16</sup>

### Commission findings

18. The Commission has reviewed ATCO Gas's calculation of Rider D and finds that its calculation is consistent with the methodology approved in previous decisions and in particular with Decision 20737-D01-2015. The Commission is therefore satisfied, for the purposes of this application, that ATCO Gas's proposed decrease to Rider D for UFG is reasonable and it approves Rider D at 1.161 per cent, effective November 1, 2016. The Rider D schedule is also approved, and is attached as [Appendix 3](#) to this decision.

19. In approving ATCO Gas's application, the Commission considers that the UFG percentage declined from the 2015-2016 Rider D of 1.220 per cent, and that the applied-for Rider D of 1.161 per cent is within the historical range of the combined UFG rate (0.954-1.220 per cent).<sup>17</sup>

20. The Commission recognizes that all gas distribution pipeline systems have UFG as an element of operating a natural gas distribution system and that because of the numerous factors that impact UFG, the UFG percentage will fluctuate over time.

21. The Commission finds that ATCO Gas has complied with the directions of the Commission in Decision 20737-D01-2015. Specifically, in its application, ATCO Gas explained various measurement adjustments, the seasonal differences in UFG, the reason for changes in UFG, and its efforts to implement operational changes and metering related to UFG.

22. Because of the unpredictable nature of UFG and the need to control UFG through a rigorous monitoring and mitigation program, the Commission remains of the view that it is important for ATCO Gas to track the system UFG, explain any increase in UFG and take steps to reduce its impact. Accordingly, consistent with Decision 20737-D01-2015, the Commission directs ATCO Gas to continue to provide the following in future Rider D applications:

- Clear explanations of seasonal UFG differences, measurement corrections and reasons for UFG increases or decreases.
- Information on practices and procedures it has employed to reduce UFG.

23. The Commission also directs ATCO Gas to continue with the direction found at page 7 of Decision 2008-105 and provide details with respect to all adjustments showing the reconciliation of prior years' data.

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<sup>16</sup> Exhibit 21905-X0007, AG-AUC-2016AUG31-003, PDF pages 6-7.

<sup>17</sup> Exhibit 21905-X0001, application, paragraph 20.

**5 Order**

24. It is hereby ordered that:

- (1) ATCO Gas's unaccounted-for gas rate rider, Rider D, is approved as filed, effective November 1, 2016.

Dated on October 17, 2016.

**Alberta Utilities Commission**

*(original signed by)*

Anne Michaud  
Commission Member

**Appendix 1 – Proceeding participants**

<b>Name of organization (abbreviation)</b> <b>Company name of counsel or representative</b>
ATCO Gas and Pipelines Ltd. (ATCO Gas)

Alberta Utilities Commission
Commission panel A. Michaud, Commission Member
Commission staff M. Peden (Commission counsel) E. Deryabina B. Whyte

**Appendix 2 – Summary of Commission directions**

This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. Because of the unpredictable nature of UFG and the need to control UFG through a rigorous monitoring and mitigation program, the Commission remains of the view that it is important for ATCO Gas to track the system UFG, explain any increase in UFG and take steps to reduce its impact. Accordingly, consistent with Decision 20737-D01-2015, the Commission directs ATCO Gas to continue to provide the following in future Rider D applications:
  - Clear explanations of seasonal UFG differences, measurement corrections and reasons for UFG increases or decreases.
  - Information on practices and procedures it has employed to reduce UFG. .... Paragraph 22
2. The Commission also directs ATCO Gas to continue with the direction found at page 7 of Decision 2008-105 and provide details with respect to all adjustments showing the reconciliation of prior years’ data. .... Paragraph 23

## Appendix 3 – Rate Rider D

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Effective November 1, 2016 to October 31, 2017, by Decision 21905-D01-2016  
This Replaces Rider “D” Previously Effective November 1, 2015

**ATCO GAS AND PIPELINES LTD.**  
**ATCO GAS**  
**RIDER “D” TO DISTRIBUTION ACCESS SERVICE CUSTOMERS FOR**  
**THE RECOVERY OF UNACCOUNTED-FOR GAS (UFG)**

All Retailer and Default Supply Provider Customers utilizing Distribution Access Service for delivering gas off the ATCO Gas distribution system will be assessed a distribution UFG charge of 1.161% at the Point of Delivery. The UFG assessment will be made up “In-Kind” from each Customer Account.