



## **ATCO Gas and Pipelines Ltd.**

**2017-2018 Unaccounted-For Gas Rider D**

**October 13, 2017**

**Alberta Utilities Commission**

Decision 22889-D01-2017

ATCO Gas and Pipelines Ltd.

2017-2018 Unaccounted-For Gas Rider D

Proceeding 22889

October 13, 2017

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## **1 Introduction**

1. On August 18, 2017, ATCO Gas, a division of ATCO Gas and Pipelines Ltd. filed an application requesting approval of the unaccounted-for gas (UFG) Rider D rate of 0.888 per cent for 2017-2018, effective November 1, 2017. The Rider D rate for 2016-2017 was 1.161 per cent. ATCO Gas also applied to utilize its load balancing deferral account (LBDA), and collect the carbon levy charges associated with the line heater fuel used on its system by way of an associated Rider L.<sup>1</sup>

2. For the reasons that follow, the Commission approves ATCO Gas's UFG Rider D rate as filed, effective November 1, 2017. The Commission finds that the use of the LBDA to recover the expense associated with the carbon levy through Rider L is reasonable and also approves ATCO Gas's request.

3. In reaching the determinations 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 18, 2017, ATCO Gas filed an application with the Commission, seeking approval of the UFG Rider D rate of 0.888 per cent for 2017-2018.

5. On August 21, 2017, the Commission issued a notice of application asking interested parties to register their concerns or support for the application by September 1, 2017. 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 September 7, 2017. ATCO Gas submitted its responses on September 14, 2017.

7. The Commission considers that the record of this proceeding closed on September 14, 2017. 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 22889-X0001, application, paragraphs 1, 3 and 27.

<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 by way of a Rider D. For example, based on the Commission approval of ATCO Gas's proposed Rider D rate of 0.888 per cent, 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 0.888 per cent at the point of delivery.<sup>3</sup> In other words, all retailer and default supply provider customers must effectively buy an extra 0.888 per cent of natural gas in order to zero-balance their receipts and deliveries on the ATCO Gas system.

9. 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>

10. 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 LBDA.<sup>5</sup>

11. Load balancing is part of the physical operation of a gas pipeline system, whereby gas supplies are adjusted to maintain optimum operating pressure in the system. In Order U2008-290,<sup>6</sup> the AUC approved the implementation by ATCO Gas of its retailer service which transferred the responsibility for the distribution system load balancing function from Direct Energy Regulated Services to ATCO Gas, effective October 1, 2008. This implementation included the creation of LBDAs for each of ATCO Gas's north and south service territories.<sup>7</sup> The administration of ATCO Gas's load balancing through a province-wide deferral account was approved by the Commission in Decision 2014-078.<sup>8</sup>

12. In Decision 2014-268, the Commission approved the thresholds for ATCO Gas to file a province-wide Rider L application (\$5 million in the same direction for six consecutive months, or \$10 million in any single month), and ATCO Gas's load balancing methodology, including the calculation of carrying charges, for the province-wide LBDA.<sup>9</sup>

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<sup>3</sup> Exhibit 22889-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> Order U2008-290: ATCO Gas, Retailer Service and Gas Utilities Act – Phase II, Part B Process, Modules 3 & 5, Proceeding 68, Application 1575607-1, September 12, 2008.

<sup>7</sup> Decision 2014-078: ATCO Gas, a division of ATCO Gas and Pipelines Ltd., Application for Administration of a Province-Wide Load Balancing Deferral Account, Proceeding 3005, Application 1610221-1, April 3, 2014, paragraph 9.

<sup>8</sup> Decision 2014-078, paragraph 38.

<sup>9</sup> Decision 2014-268: ATCO Gas and Pipelines Ltd., ATCO Gas North and South Load Balancing Rate Rider Application, Proceeding 3259, Application 1610618-1, September 17, 2014, paragraphs 32-41.

## 4 Discussion

### 4.1 Calculation of Rider D

13. ATCO Gas explained that, consistent with previous Rider D applications, it calculated its Rider D rate using measurement data from the preceding three years, in this case from January 2014 to December 2016. ATCO Gas then averaged the UFG percentages for 2014, 2015 and 2016 to determine the Rider D rate for 2017-2018, as indicated in Table 1:<sup>10</sup>

**Table 1. Annual UFG percentages and the calculation of the proposed 2017-2018 Rider D**

	UFG percentage
2014	1.196
2015	0.908
2016	0.562
Three-year average	0.888

Source: Exhibit 22889-X0001, application, paragraph 6, Table 1.

### 4.2 Carbon levy charges associated with line heaters

14. ATCO Gas stated that starting January 1, 2017 it will pay a carbon levy of \$1.011 per gigajoule (GJ) on natural gas consumed as fuel during the delivery of natural gas to customers as directed by the Government of Alberta. This includes the line heater fuel that is currently recovered from retailers through Rider D.<sup>11</sup>

15. ATCO Gas explained that it has approximately 670 line heaters in use. The fuel to operate the line heaters is unmetered and a carbon levy will be paid based on the estimated fuel usage. ATCO Gas provided the table below, which shows the monthly estimated line heater fuel usage and carbon levy since January 2017 until June 2017, with an estimated total of \$245,623 for six months of the first half of the year. ATCO Gas estimated the annual costs for the carbon levy on line heaters to be approximately \$700,000 in 2017.<sup>12</sup>

**Table 2. Line heater fuel and carbon levy**

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Total
GJs	74,783	64,048	59,082	41,189	2,866	982	242,951
\$s	75,606	64,753	59,732	41,642	2,898	993	245,623

Source: Exhibit 22889-X0001, application, paragraph 9, Table 2.

<sup>10</sup> Exhibit 22889-X0001, application, paragraphs 4 and 6.

<sup>11</sup> Exhibit 22889-X0001, application, paragraph 7.

<sup>12</sup> Exhibit 22889-X0001, application, paragraphs 8-10.

16. ATCO Gas submitted that there is no approved mechanism to recover these costs and proposed that the carbon levy associated with line heaters be collected through the LBDA. ATCO Gas explained:

10. ... The cost to be collected from the average customer over a year would be minimal. For example, if the carbon levy cost is \$700,000 in 2017 and the estimated customer usage is 258PJ [petajoules] then the resulting cost per GJ would be \$0.003/GJ. Having a separate mechanism to recover these costs would be an inefficient use of resources and an administrative burden. ATCO Gas believes the best way to recover these costs is through an existing rider process.

11. All costs associated with line heater fuel are collected through Rider D as gas in kind. Any deviation from the Rider D collected to the actual UFG calculated is trued up through the LBDA. Since it would not be appropriate to collect carbon levy charges as gas in kind given that the carbon levy is a fee not a volume, ATCO Gas is proposing that the carbon levy associated with line heaters be collected through the LBDA which is collected / remitted in dollars.<sup>13</sup>

17. In response to AG-AUC-2017SEP07-002(a), ATCO Gas indicated that these costs will be paid to the provincial government on a monthly basis and that it will fund carbon levy costs on line heater fuel use through an existing credit facility. The forecast annual expenditures will be factored into the required annual capitalization and financed accordingly, similar to other necessary working capital items.<sup>14</sup>

18. In response to AG-AUC-2017SEP07-002(b) and (c), ATCO Gas further explained that the carbon levy costs on line heater fuel use will be subject to the same carrying charges as all other components in the LBDA. When the LBDA balance exceeds \$5 million in either direction for six consecutive months or \$10 million in one month ATCO Gas will submit an application for a rider associated with the LBDA, Rider L, to recover from or refund the balance to, its customers.<sup>15</sup>

### 4.3 Compliance with previous Commission directions

19. The Commission gave several directions to ATCO Gas in respect of the Rider D rate in previous decisions. Recently, in Decision 21905-D01-2016,<sup>16</sup> it directed ATCO Gas as follows:

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,<sup>17</sup> the Commission directs ATCO Gas to continue to provide the following in future Rider D applications:

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<sup>13</sup> Exhibit 22889-X0001, application, paragraphs 10-11.

<sup>14</sup> Exhibit 22889-X0007, AG-AUC-2017SEP07-002(a).

<sup>15</sup> Exhibit 22889-X0007, AG-AUC-2017SEP07-002(b)-(c).

<sup>16</sup> Decision 21905-D01-2016: ATCO Gas and Pipelines Ltd., 2016-2017 Unaccounted-For Gas Rider D, Proceeding 21905, October 17, 2016.

<sup>17</sup> Decision 20737-D01-2015: ATCO Gas and Pipelines Ltd., 2015-2016 Rider D Application, Proceeding 20737, October 26, 2015.



- 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<sup>[18]</sup> and provide details with respect to all adjustments showing the reconciliation of prior years' data.<sup>19</sup>

20. The Commission finds that ATCO Gas has complied with these directions in this proceeding. First, ATCO Gas reconciled the 2014 and 2015 data used in this application with the 2014 and 2015 data used in its last Rider D application (ATCO Gas 2016-2017 Rider D application).<sup>20</sup> Second, ATCO Gas provided the following explanation of the seasonal differences in UFG:

13. ATCO Gas has over 1.2 million delivery points of which the vast majority are read on monthly cycles. Cycle billing is 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.

14. In addition, ATCO Gas designs and builds the distribution system for peak operating conditions. During the shoulder and summer months, the operation of the distribution system needs to be adjusted to ensure accurate measurement during low-flow conditions. The appropriate timing of these adjustments is weather dependent since local temperature fluctuations are unpredictable. For example, there may be a week of unseasonably warm weather early in the spring, but due to the expected return to normal temperatures immediately following, the seasonal operating plan would not be implemented and meters may be under measuring during this period.<sup>21</sup>

21. ATCO Gas also provided details of the aggregated amount of measurement adjustments processed in 2016 of 263 terajoules (TJ). ATCO Gas indicated that in 2016 there were 22 measurement equipment problems, six occurrences of reallocation of measurement, five late meter reads, and two sample point changes identified and corrected. ATCO Gas processed 67 TJ of post final settlement adjustments in 2016.<sup>22</sup>

22. In response to the first direction in Decision 21905-D01-2016 above, ATCO Gas also identified the following issues that may cause UFG to increase or decrease, as set out in Table 3:

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<sup>18</sup> 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>19</sup> Exhibit 22889-X0001, application, paragraphs 22-23.

<sup>20</sup> Exhibit 22889-X0001, application, paragraphs 25-26.

<sup>21</sup> Exhibit 22889-X0001, application, paragraphs 13-14.

<sup>22</sup> Exhibit 22889-X0001, application, paragraphs 15-17.

**Table 3. Sources of UFG**

Source	Issue/Concern
Seasonal operating plans	The timing of when the seasonal operating plan can be implemented is dependant [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 the seasonal operating plan.
Equipment failure	Event in which any part of the equipment does not perform according to its operational specifications.
Construction	Mixing of heat areas during construction. Purging and filling of pipelines.
Pipeline leaks	Gas lost to atmosphere.
Hit lines	Gas lost to atmosphere.
Unsolicited use	Gas lost to theft.
Line heater fuel	Gas used during distribution system delivery.

Source: Exhibit 22889-X0001, application, paragraph 18, Table 3.

23. ATCO Gas noted that it continues to take various additional steps to minimize the UFG amount, such as meter sizing procedures, seasonal operating plans, and by collaborating with ATCO Pipelines. This involves implementing procedures to ensure measurement accuracy in the expected flow conditions. 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>23</sup>

24. In response to AG-AUC-2017SEP07-001(a), ATCO Gas explained that 2016 was not the lowest year of the annual UFG and provided a table for the annual UFG rate since 2000:<sup>24</sup>

**Table 4. Annual UFG rates 2000-2016**

Year	ATCO Gas North UFG	ATCO Gas South UFG	Province-wide UFG
		(%)	
2000	0.757	0.103	
2001	0.926	0.016	
2002	1.482	0.890	
2003	0.996	0.822	
2004	0.684	0.446	
2005	0.753	0.172	
2006	0.008	0.274	
2007	0.431	0.360	
2008	0.474	0.706	
2009	0.700	1.357	

<sup>23</sup> Exhibit 22889-X0001, application, paragraphs 19-22.

<sup>24</sup> Exhibit 22889-X0007, AG-AUC-2017SEP07-001(a).

Year	ATCO Gas North UFG	ATCO Gas South UFG	Province-wide UFG
	(%)		
2010	0.778	1.097	
2011			1.035
2012			0.895
2013			1.368
2014			1.196
2015			0.908
2016			0.562

Source: Exhibit 22889-X0007, AG-AUC-2017SEP07-001(a), Table 1.

25. ATCO Gas explained that it has experienced comparably low UFG rates in prior years and has found that the value fluctuates quite frequently from year to year due to the inherent “unaccounted” nature of UFG. ATCO Gas was therefore unable to explain the reasons for the current decrease. ATCO Gas noted that decreases in UFG occur when sources of UFG are found and corrected.<sup>25</sup>

### Commission findings

26. The Commission finds that ATCO Gas’s calculation of Rider D is consistent with the methodology approved in previous decisions, and in particular with Decision 21905-D01-2016. The Commission is therefore satisfied, for the purposes of this decision, that ATCO Gas’s proposed Rider D for UFG is reasonable. Rider D is approved at 0.888 per cent, effective November 1, 2017. The Rider D schedule is also approved, and is attached as [Appendix 3](#) to this decision.

27. In approving ATCO Gas’s application, the Commission considers that the UFG percentage declined from the 2016-2017 Rider D of 1.161 per cent, and that the applied-for Rider D of 0.888 per cent is below the historical range of the combined UFG rate (0.954 - 1.220 per cent).

28. 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.

29. The Commission finds that ATCO Gas has complied with the directions of the Commission in Decision 21905-D01-2016. 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.

30. 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 continue to track its system’s UFG, explain any increase in UFG and take steps to reduce its impact. Accordingly, consistent with Decision 21905-D01-2016, the

<sup>25</sup> Exhibit 22889-X0007, AG-AUC-2017SEP07-001(b).

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.

31. 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.

32. With respect to ATCO Gas's proposal to utilize its LBDA and the associated Rider L to collect the carbon levy charges associated with the line heater fuel used on its system, the Commission agrees with ATCO Gas's view that because the carbon levy is a dollar charge by the government of Alberta, it is more suitable to track this expense in a deferral account that tracks dollars.<sup>26</sup> Unlike the UFG Rider D that tracks only the difference in the receipt and delivery volumes of natural gas, the LBDA tracks natural gas purchased and sold by ATCO Gas in order to balance its system, in dollars. The LBDA is therefore a more suitable mechanism to use for tracking the dollars associated with the carbon levy paid by ATCO Gas.

33. The Commission also notes that in the first six months of 2017 the charges associated with the carbon levy on the line heater fuel were approximately \$250,000. An annual charge of \$500,000 to \$700,000 can be easily absorbed into the LBDA which has a significant tolerance zone of \$5 million in either direction for six consecutive months or \$10 million in one month before ATCO Gas is required to recover or refund the balance to its customers.

34. For these reasons, the Commission finds that the use of the LBDA to recover the expense associated with the carbon levy is reasonable and approves ATCO Gas's request.

35. To better monitor the costs associated with the carbon levy, the Commission directs ATCO Gas, in future Rider D applications, to provide a table showing the monthly line heater fuel usage and the associated carbon levy dollars and the difference from the previous year.

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<sup>26</sup> Exhibit 22889-X0001, application, paragraph 11.

## 5 Order

36. It is hereby ordered that:

- (1) ATCO Gas's unaccounted-for gas rate rider, Rider D, is approved as filed, effective November 1, 2017, as set out in Appendix 3 to this decision.
- (2) ATCO Gas's request to utilize its load balancing deferral account, Rider L, to collect the carbon levy charges associated with the line heater fuel used on ATCO Gas's system, is approved.

Dated on October 13, 2017.

### **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 S. Albert (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 continue to track its system’s UFG, explain any increase in UFG and take steps to reduce its impact. Accordingly, consistent with Decision 21905-D01-2016, 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 30
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 31
3. To better monitor the costs associated with the carbon levy, the Commission directs ATCO Gas, in future Rider D applications, to provide a table showing the monthly line heater fuel usage and the associated carbon levy dollars and the difference from the previous year. .... Paragraph 35



## Appendix 3 – Rate Rider D

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Effective November 1, 2017 to October 31, 2018, by Decision 22889-D01-2017  
This Replaces Rider “D” Previously Effective November 1, 2016

### **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 0.888% at the Point of Delivery. The UFG assessment will be made up “In-Kind” from each Customer Account.