

Columbia Gas Transmission, LLC

FERC NGA Gas Tariff

Baseline Tariffs

Proposed Effective Date: November 16, 2018

Service Agreement No. 176701 – Antero Resources Corporation

Option Code A

Service Agreement No. 176701  
Revision No. 0

### FTS SERVICE AGREEMENT

THIS AGREEMENT is made and entered into this 31<sup>st</sup> day of July, 2017, by and between COLUMBIA GAS TRANSMISSION, LLC ("Transporter") and ANTERO RESOURCES CORPORATION ("Shipper").

WITNESSETH: That in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

Section 1. Service to be Rendered. Transporter shall perform and Shipper shall receive service in accordance with the provisions of the effective FTS Rate Schedule and applicable General Terms and Conditions of Transporter's FERC Gas Tariff, Fourth Revised Volume No. 1 ("Tariff"), on file with the Federal Energy Regulatory Commission ("Commission"), as the same may be amended or superseded in accordance with the rules and regulations of the Commission. The maximum obligation of Transporter to deliver gas hereunder to or for Shipper, the designation of the points of delivery at which Transporter shall deliver or cause gas to be delivered to or for Shipper, and the points of receipt at which Shipper shall deliver or cause gas to be delivered, are specified in Appendix A, as the same may be amended from time to time by agreement between Shipper and Transporter, or in accordance with the rules and regulations of the Commission.

Section 2. Term. Notwithstanding that Transporter anticipates its WB XPress Project ("Project") shall be placed into service on or about November 1, 2018, this Agreement shall be effective as of the date that all of Transporter's WB XPress Project facilities necessary to provide firm transportation service to Shipper have been deemed by Transporter to be ready for service and FERC has been notified that the Project is complete and is ready to be placed into service ("East Side Actual In-Service Date"), and shall remain in full force and effect for a term of twenty (20) years ("East Side Initial Term") from the Actual In-Service Date. Transporter shall provide Shipper with written notice of the anticipated East Side Actual In-Service Date at least ten (10), and no more than twenty (20), days prior to such date. Pre-granted abandonment shall apply upon termination of this Agreement, subject to any right of first refusal Shipper may have under the Commission's regulations and Transporter's Tariff.

At the end of the East Side Initial Term, Shipper shall have the right to extend the term of this Agreement for up to two (2) successive 5-year terms (each an "Extended Term"), exercisable no later than twelve (12) months prior to the expiration of such East Side Initial Term and first Extended Term, if applicable. Any Extended Term must be for a minimum quantity of 165,000 Dth/d and shall be at the same rates and commercial terms contained herein. Provided, however, if Shipper elects to extend the East Side Initial Term at a quantity less than its applicable East Side

AR

Initial Term quantity, then such reduced quantity for the first Extended Term shall become the maximum quantity for any applicable second Extended Term.



Section 3. Rates. Shipper shall pay Transporter the negotiated rates and furnish retainage as set forth in the Negotiated Rate Letter Agreement attached hereto as Appendix B.

Section 4. Notices. Notices to Transporter under this Agreement shall be addressed to it at 700 Louisiana, Suite 700, Houston, Texas 77002, Attention: Customer Services and notices to Shipper shall be addressed to it at Antero Resources Corporation, 1615 Wynkoop, Denver, CO, 80202, Attention: Alvyn Schopp, until changed by either party by written notice.

Section 5. Superseded Agreements. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreement(s): N/A.

Section 6. Credit Annex. The Credit Support Agreement dated July 11, 2014 included as Attachment C to the WB Xpress Project Precedent Agreement dated July 11, 2014 between Transporter and Shipper is incorporated herein by reference with full force and effect and is made a part of this Service Agreement as though restated herein verbatim.

ANTERO RESOURCES CORPORATION

By  

Title SVP

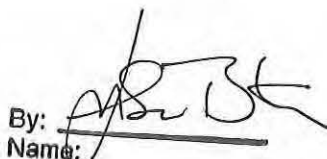
Date 7-27-2017

COLUMBIA GAS TRANSMISSION, LLC

By  

Title Russell A. Mahan  
Vice President

Date 8/24/17

By:   
Name:  
Title:

**Jasmin Bertovic**  
**Vice President**

AR

Revision No. 0

Appendix A to Service Agreement No. 176701  
Under Rate Schedule FTS  
between Columbia Gas Transmission, LLC ("Transporter")  
and Antero Resources Corporation ("Shipper")

Transportation Demand

Begin <u>Date</u>	End <u>Date</u>	Transportation Demand <u>Dth/day</u>	Recurrence <u>Interval</u>
1/	1/	330,000	1/1-12/31

Primary Receipt Points

Begin <u>Date</u>	End <u>Date</u>	Scheduling <u>Point No.</u>	Scheduling <u>Point Name</u>	Measuring <u>Point No.</u>	Measuring <u>Point Name</u>	Maximum Daily Quantity <u>(Dth/day)</u>	Minimum Receipt Pressure Obligation (psig) <u>2/</u>	Recurrence <u>Interval</u>
1/	1/	842867	Braxton	842867	Braxton	330,000		1/1-12/31

AR

Primary Delivery Points

<u>Begin Date</u>	<u>End Date</u>	<u>Scheduling Point No.</u>	<u>Scheduling Point Name</u>	<u>Measuring Point No.</u>	<u>Measuring Point Name</u>	<u>Maximum Daily Delivery Obligation (Dth/day) 2/</u>	<u>Design Daily Quantity (Dth/day) 2/</u>	<u>Minimum Delivery Pressure Obligation (psig) 2/</u>	<u>Recurrence Interval</u>
		LOUDOU	LOUDOUN		LOUDOUN				
1/	1/	N	LNG	837336	LNG to TCO	330,000			1/1-12/31

1/ Per Section 2 of the Service Agreement.

2/ Application of MDDOs, DDQs and ADQs, minimum pressure and/or hourly flowrate shall be as follows:

---

The Master List of Interconnects ("MLI") as defined in Section 1 of the General Terms and Conditions of Transporter's Tariff is incorporated herein by reference for purposes of listing valid secondary interruptible receipt points and delivery points.

☐ Yes ☒ No (Check applicable blank) Transporter and Shipper have mutually agreed to a Regulatory Restructuring Reduction Option pursuant to Section 42 of the General Terms and Conditions of Transporter's FERC Gas Tariff.

☐ Yes ☒ No (Check applicable blank) Shipper has a contractual right of first refusal equivalent to the right of first refusal set forth from time to time in Section 4 of the General Terms and Conditions of Transporter's FERC Gas Tariff.

☐ Yes ☒ No (Check applicable blank) All gas shall be delivered at existing points of interconnection within the MDDOs, ADQs and/or DDQs, as applicable, set forth in Transporter's currently effective Rate Schedule ☐ Service Agreement No. ☐ Appendix A with Shipper, which are incorporated herein by reference.

☐ Yes ☒ No (Check applicable blank) This Service Agreement covers interim capacity sold pursuant to the provisions of General Terms and Conditions Section 4. Right of first refusal rights, if any, applicable to this interim capacity are limited as provided for in General Terms and Conditions Section 4.

☐ Yes ☒ No (Check applicable blank) This Service Agreement covers offsystem capacity sold pursuant to Section 47 of the General Terms and Conditions. Right of first refusal rights, if any, applicable to this offsystem capacity are limited as provided for in General Terms and Conditions Section 47.

AR

ANTERO RESOURCES CORPORATION

By Mark D. May  
Title SVP  
Date 7-27-2017

*[Handwritten mark]*

COLUMBIA GAS TRANSMISSION, LLC

By R. Mah  
Title Russell A. Mahan  
Date 8/24/17

*TS*

By: [Signature]  
Name:  
Title:  
Jasmin Bertovic  
Vice President

AR



October 25, 2018

Antero Resources Corporation  
1615 Wynkoop  
Denver, CO 80202  
Attn: Steve Woodward

RE: FTS Agreement No. 176701  
Amended and Restated Negotiated Rate Letter Agreement

Dear Steve:

This Amended and Restated Negotiated Rate Letter Agreement between Columbia Gas Transmission, LLC ("Transporter" or "TCO") and Antero Resources Corporation ("Shipper") shall set forth the applicable rates, calculations thereof, and other rate provisions associated with the transportation service provided by Transporter to Shipper pursuant to the above-referenced FTS Service Agreement. Transporter and Shipper may be referred to individually as a "Party" or collectively as the "Parties".

Shipper and Transporter hereby agree:

1. The "Negotiated Reservation Rates" during the Initial Term for the transportation service provided shall be those rates and terms agreed upon as set forth in Attachment A-1 attached hereto.
2. As a result of the operation of the Daily Demand Rate adjustment mechanism set forth in Paragraph 2 of the Negotiated Rate Letter Agreement executed by and between the Parties and dated July 31, 2017, attached hereto as Attachment A-2, the Daily Demand Rate set forth therein is hereby increased \$0.0248 ("Daily Demand Rate Increase"). The Daily Demand Rate Increase is included in the Daily Demand Rates set forth in Attachment A-1 attached hereto. The Daily Demand Rates agreed upon as set forth in Attachment A-1 are no longer subject to adjustment pursuant to the Daily Demand Rate adjustment mechanism.
3. Transporter will provide a listing of all costs and expenses incurred by Transporter to complete the Project, in the same detail and by the same categories in which the estimated Project costs were provided, to Shipper within thirteen (13) months of the actual in-service date. Shipper shall have a one-time right, to be exercised no later than six (6) months after the date that Transporter provides such costs and expenses to Shipper to review Transporter's books and records as reasonably necessary to verify the Project costs used in the calculation of the Daily Demand Rate adjustment mechanism described above (the "Right to Review").
4. All capitalized terms used but not defined herein shall have the meanings given them in FTS Service Agreement No. 176701.

5. This Amended and Restated Negotiated Rate Letter Agreement replaces and supersedes the Negotiated Rate Letter Agreement between the Parties dated July 31, 2017.

Accepted and agreed to this 25 day of October, 2018

Antero Resources Corporation

By: 

Title: SVP

Date: 10-25-2018

Columbia Gas Transmission, LLC

By:  

Title: Russell A. Mahan

Vice President

Date: 10/26/18

By:  

Title: Jasmin Bertovic

Vice President

Date: \_\_\_\_\_



**Attachment A-1**

**NEGOTIATED RESERVATION RATES**

<b>Primary Receipt Point(s)*</b>	<b>Primary Delivery Point(s)*</b>	<b>Transportation Demand (Dth/day)</b>	<b>Term</b>	<b>Daily Demand Rate**</b>	<b>Daily Commodity Rate**</b>	<b>Rate Schedule</b>
Braxton (meter no.842867)	Dominion Cove Point Pipeline (meter no. LOUDOUN)	330,000 Dth/day	20 years from the East Side Actual In-Service Date	\$.5248	\$0.00	FTS

**\* Shipper shall have full secondary receipt and delivery point access, pursuant to the terms and conditions of TCOs FERC Gas Tariff, at no incremental charge.**

**\*\* In addition, Shipper shall pay all applicable demand and commodity surcharges specified under the applicable Rate Schedule FTS, as such may change from time to time, with the exception of the Capital Cost Recovery Mechanism (CCRM) or any substantially similar successor surcharge thereto that seeks to recover TCO's capital investment to modernize its interstate transmission system.**

**In addition to the rates above, Shipper shall pay the fuel retention applicable to Rate Schedule FTS, as such may change from time to time.**

## Attachment A-2

2. Shipper's "Daily Demand Rates" as set forth in the Attachment B-1 shall be adjusted as follows:

To the extent Actual Project Costs (as defined below) exceed Estimated Project Costs (as defined below), Shipper's Daily Demand Rate shall be multiplied by the Capital Cost Overrun Factor ("CCO Factor"). The CCO Factor shall be equal to  $1 + [(CCO/EPC) \times 50\%]$ . In no event shall the CCO Factor exceed 1.100.

To the extent Actual Project Costs (as defined below) are less than Estimated Project Costs (as defined below) Shipper's Daily Demand Rate shall be multiplied by the Capital Cost Underrun Factor ("CCU Factor"). The CCU Factor shall be equal to  $1 - [(CCU/EPC) \times 50\%]$ .

Any such adjustment to Shipper's Daily Demand Rate shall be effective prospectively beginning as soon as administratively feasible, but no later than the second anniversary date of the East Side Actual In-Service Date and shall remain in effect for the balance of the Initial Term and any Extended Term Service.

"Actual Project Costs" or APC shall mean, subject to any limits on costs as set forth below, all costs and expenses incurred by TCO, including trailing costs up to twelve months subsequent to the Actual In-Service Date, to complete the Project in the manner contemplated by this Precedent Agreement, including but not limited to (a) all costs and expenses incurred for the engineering, design, permitting, construction, pipeline and equipment procurement, installation and start-up of the Project facilities, including all compression costs, (b) all costs and expenses incurred for environmental, right-of-way, legal, consultant, construction management, and regulatory activities, (c) all direct and allocated internal overhead and administrative costs, and (d) an allowance for funds used during construction ("AFUDC") computed in accordance with regulations of the FERC. TCO shall maintain books and records reasonably necessary for Shipper to verify the APC. The Parties acknowledge that TCO's formal books and records that conform with the FERC and accounting policies and guidelines may not match the APC used to determine Shipper's adjusted Daily Demand Rate. TCO will provide this amount, in the same detail and by the same categories in which the Estimated Project Cost were provided, to Shipper within thirteen (13) months of the Actual In-Service Date.

"Capital Cost Overrun" or "CCC" shall be an amount in U.S. dollars equal to the difference between the Actual Project Costs and the Estimated Project Costs, if Actual Project Costs exceed Estimated Project Costs.

"Capital Cost Underrun" or "CCU" shall be an amount in U.S. dollars equal to the difference between the Actual Project Costs and the Estimated Project Costs, if Actual Project Costs are less than Estimated Project Costs.

"Estimated Project Costs" or "EPC" shall mean all costs and expenses that are projected to be incurred by TCO to complete the Project in the manner contemplated by WB Xpress Project Precedent Agreement dated July 11, 2014 between TCO and Shipper, including but not limited to (a) all costs and expenses projected to be incurred for the engineering, design, permitting, construction, pipeline and equipment procurement, installation and start-up of the Project facilities, including all compression costs, (b) all costs and expenses projected to be incurred for environmental, right-of-way, legal, consultant, construction management, and regulatory activities, (c) all direct and allocated internal overhead and administrative costs, (d) AFUDC computed in accordance with the regulations of the FERC, and (e) a contingency amount equal to at least 10% of the total of (a) and (b). For purposes of determining the adjustment to Shipper's Daily Demand Rate pursuant to this provisions the Parties agree that the Estimated Project Costs shall be equal to \$696,000,000 the amount which was presented

to and approved by NiSource Inc.'s board of directors ("Board") for authorization of the Project on March 24, 2015.