# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

1. Provide copies of all interstate pipeline transportation and storage contracts and tariffs utilized during the most recent year. Provide a comparison of the terms of these transportation arrangements with those that were utilized during the five previous calendar years. Provide an explanation of all efforts to ensure that interstate pipeline transportation costs are/were the lowest possible cost.

### **RESPONSE:**

Please see Attachment A, parts 1 through 10, for copies of all current interstate pipeline transportation and storage contracts. Parts 6 and 8 are CONFIDENTIAL. Please see Attachment B for a listing of all URLs accessing the interstate pipeline tariffs for the contracts provided in Attachment A. Please see Attachment C for the costs of these contracts for the previous five years.

TransCanada (a non-affiliate to Columbia Gas of Kentucky) is the successor in interest to Columbia Pipeline Group, of which Columbia Gas Transmission, LLC is a wholly-owned subsidiary. Because many of the contracts and other documents refer to Columbia Gas Transmission, LLC (or "TCO"), these responses will refer to Columbia Gas Transmission, LLC or TCO rather than TransCanada.

The contracts on Tennessee Gas Pipeline and Columbia Gas Transmission, LLC represent negotiated rates bid by the respective pipelines. While the discount rates on Columbia Gas Transmission apply only to the Storage Service Transportation (SST) capacity, they represent Columbia's overall efforts in acquiring capacity at the lowest possible price for its customers for all services provided by Columbia Gas Transmission to Columbia. The capacity costs on CKT while set at the maximum tariff rate are significantly below the available alternative and the results of negotiations between Columbia and Columbia Gas Transmission.

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Service Agreement No. 79921 Revision No. 1

#### FTS-1 SERVICE AGREEMENT

THIS AGREEMENT is made and entered into this 4 day of February, 2013, by and between COLUMBIA GULF TRANSMISSION COMPANY ("Transporter") and COLUMBIA GAS OF KENTUCKY, INC ("Shipper").

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

Section 1. <u>Service to be Rendered</u>. Transporter shall perform and Shipper shall receive the service in accordance with the provisions of the effective FTS-1 Rate Schedule and applicable General Terms and Conditions of Transporter's FERC Gas Tariff, Third 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 herein contained. The maximum obligations 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 the 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. <u>Term</u>. Service under this Agreement shall commence as of February 1, 2013, and shall continue in full force and effect until October 31, 2019. Shipper and Transporter agree to avail themselves of the Commission's pre-granted abandonment authority upon termination of this Agreement, subject to any right of first refusal Shipper may have under the Commission's Regulations and Transporter's Tariff.

Section 3. <u>Rates</u>. Shipper shall pay the charges and furnish the Retainage as described in the abovereferenced Rate Schedule, unless otherwise agreed to by the parties in writing and specified as an amendment to this Service Agreement. Transporter may agree to discount its rate to Shipper below Transporter's maximum rate, but not less than Transporter's minimum rate. Such discounted rate may apply to: (a) specified quantities (contract demand or commodity quantities); (b) specified quantities above or below a certain level or all quantities if quantities exceed a certain level; (c) quantities during specified time periods; (d) quantities at specified points, locations, or other defined geographical areas; (e) that a specified discounted rate will apply in a specified relationship to the quantities actually transported (i.e., that the reservation charge will be adjusted in a specified relationship to quantities actually transported); and (f) production and/or reserves committed by the Shipper.

Section 4. <u>Notices</u>. Notices to Transporter under this Agreement shall be addressed to it at 5151 San Felipe, Suite 2500, Houston, Texas 77056, Attention: Customer Services and notices to Shipper shall be addressed to it at Columbia Gas Of Kentucky, Inc, 200 Civic Center Drive, P. O. Box 117, Columbus, OH 43216 0117, Attention: Thomas Heckathorn, until changed by either party by written notice.

Section 5. <u>Superseded Agreements</u>. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreement(s): FTS-1 No. 79921, Revision No. 0.

COLUMBI	A GAS OF KENTUCKY, INC	COLUM	BIA GULF TRANSMISSION COMPANY
Ву	Yesthi Bam	Ву	Shorry French
Title	VP.	Title	Director Customer Services
Date	2/8/13	Date	2/14/13
Acre	Fatty Neviewid & ma 2/5/2012	3	

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Revision No. 1

#### Appendix A to Service Agreement No. 79921 Under Rate Schedule FTS-1 between Columbia Gulf Transmission Company ("Transporter") and Columbia Gas Of Kentucky, Inc ("Shipper")

		Transportation	Demand		
Begin Date	End Date	<b>、</b>	Transportation Demand Dth/day	Recur	rence rval
February 1, 2013	October 31	-	28.991		12/31
1 esidaly 1, 2010	0000010	, 2010	20,331	1/1~	12/31
		Primary Rece	ipt Points		
Begin	End	Measuring	Measuring	Maximum Daily	Recurrence
<u>Date</u>	Date	Point No.	Point Name	<u>Quantity (Dth/day)</u>	<u>Interval</u>
February 1, 2013	October 31, 2019	2700010	CGT-RAYNE	28,991	1/1 - 12/31
		Primary Delive	ery Points		
Begin	End	Measuring	Measuring	Maximum Daily	Recurrence
Date	<u>Date</u>	<u>Point No.</u>	<u>Point Name</u>	Quantity (Dth/day)	Interval
February 1, 2013	October 31, 2019	801	GULF-LEACH	28,991	1/1 - 12/31

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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.

Transporter and Shipper have mutually agreed to the following maximum or minimum pressure commitments:

Yes X No (Check applicable blank) Transporter and Shipper have mutually agreed to a Regulatory Restructuring Reduction Option pursuant to Section 33 of the General Terms and Conditions of Transporter's FERC Gas Tariff.

Yes X 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 X 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.

COLUMBIA GAS OF KENTUCKY, INC By <u>Verthin Bann</u> Title <u>VP</u> Date <u>JP/13</u>

Paynewed & TMA 2/5/2013

COLL	IMB <b>IA</b> G	ULF TR	ANSMI	SION CO	MPANY
By	M	un	N	TAO MC	n
Title	Dire	ctor	Cust	omer	Services
Date	a	14/13			

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Service Agreement No. 88384 Revision No. 2

FTS SERVICE AGREEMENT

THIS AGREEMENT is made and entered into this <u>35</u><sup>th</sup> day of <u>October</u>, <u>3013</u>, by and between CENTRAL KENTUCKY TRANSMISSION COMPANY ("Transporter") and COLUMBIA GAS OF KENTUCKY, INC ("Shipper").

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

Section 1. <u>Service to be Rendered</u>. 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, First 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. <u>Term</u>. Service under this Agreement shall commence as of November 1, 2013, and shall continue in full force and effect until March 31, 2020. 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.

Section 3. Rates. Shipper shall pay Transporter the charges and furnish Retainage as described in the above-referenced Rate Schedule, unless otherwise agreed to by the parties in writing and specified as an amendment to this Agreement. Transporter may agree to discount its rate to Shipper below Transporter's maximum rate, but not less than Transporter's minimum rate. Such discounted rate may apply to: (a) specified quantities (contract demand or commodity quantities); (b) specified quantities above or below a certain level or all quantities if quantities exceed a certain level; (c) quantities during specified time periods; (d) quantities at specified points, locations, or other defined geographical areas; and (e) that a specified discounted rate will apply in a specified relationship to the quantities actually transported (i.e., that the reservation charge will be adjusted in a specified relationship to quantities actually transported). In addition, the discount agreement may include a provision that if one rate component which was at or below the applicable maximum rate at the time the discount agreement was executed subsequently exceeds the applicable maximum rate due to a change in Transporter's maximum rate so that such rate component must be adjusted downward to equal the new applicable maximum rate, then other rate components may be adjusted upward to achieve the agreed overall rate, so long as none of the resulting rate components exceed the maximum rate applicable to that rate component. Such changes to rate components shall be applied prospectively, commencing with the date a Commission order accepts revised tariff sections. However, nothing contained herein shall be construed to alter a refund obligation under applicable law for any period during which rates, which had been charged under a discount agreement, exceeded rates which ultimately are found to be just and reasonable.

Section 4. <u>Notices</u>. Notices to Transporter under this Agreement shall be addressed to it at 5151 San Felipe, Suite 2500, Houston, Texas 77056, Attention: Customer Services and notices to Shipper shall be addressed to it at Columbia Gas Of Kentucky, Inc, 200 Civic Center Drive, P. O. Box 117, Columbus, OH 43216 0117, Attention: Thomas Heckathorn, until changed by either party by written notice.

Section 5. <u>Superseded Agreements</u>. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreement(s): FTS No. 88384, Revision No. 1.

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COLUMBIA GAS OF KENTUCKY, INC	CENTRAL KENTUCKY, TRANSMISSION COMPANY
By 4frathen Dam	By Cimbrad Bth.
Title VP	Title CS Team Leader
Date 10/05/13	Date 19 17 13
Reviewed by TMA 10/18/2013	

Revision No. 2

#### Appendix A to Service Agreement No. 88384 Under Rate Schedule FTS between Central Kentucky Transmission Company ("Transporter") and Columbia Gas Of Kentucky, Inc ("Shipper")

#### Transportation Demand

Begin	End	Transportation	Recurrence
<u>Date</u>	<u>Date</u>	Demand Dth/day	Interval
November 1, 2013	March 31, 2020	28,000	1/1 - 12/31

### Primary Delivery Points

Desie	End	Schoduling	Scheduling	Measuring	Measuring	Maximum Daily Quantity	Recurrence
Begin	End	Scheduling	Scheduling	measuring	Measuring		Recuirence
<u>Date</u>	<u>Date</u>	Point No.	Point Name	Point No.	Point Name	<u>(Dth/day)</u>	Interval
		<u> </u>	<u></u>			<i>-</i> //	
November 1, 2013	March 31, 2020	805095	LEXINGTON MUTH	805095	LEXINGTON MUTH	28,000	1/1 - 12/31

Minimum Delivery Point Pressure: 1/

Hourly Flow at Delivery Point Commitment/Restriction: 2/

Primary Receipt Points

						Maximum Daily		
Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling <u>Point Name</u>	Measuring Point No.	Measuring <u>Point Name</u>	Quantity ( <u>Dth/day)</u>	Recurrence Interval	
November 1, 2013	March 31, 2020	BYBEE	BYBEE	BYBEE	BYBEE	28,000	1/1 - 12/31	

Minimum Receipt Point Pressure: 1/

1/ If a minimum pressure is not specifically stated, then Transporter's obligation shall be as stated in Section 13 (Delivery Pressure) of the General Terms and Conditions.

2/ If an hourly flow commitment or restriction is not specifically stated, then Transporter's obligation shall be as stated in Section 9 (Operating Conditions) of the General Terms and Conditions.

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 X\_ 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 X 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.

COLUME	BIA GAS OF KENTUCKY, INC
Ву	Heathin Jam
Title	
Date	10/25/13
	_

Revenued & TM 10/18/2013

CENTRA	L KENTUCKY TRANSMISSION COMPANY	
Ву	Unhapt.	
Title	CS Team Leader	
Date	10 11/13	_

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Service Agreement No. 80160 Revision No. 5

#### SST SERVICE AGREEMENT

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_\_, day of \_\_\_\_\_, day of

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

Section 1. <u>Service to be Rendered</u>. Transporter shall perform and Shipper shall receive service in accordance with the provisions of the effective SST 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. <u>Term</u>. Service under this Agreement shall commence as of November 1, 2013, and shall continue in full force and effect until March 31, 2020. 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.

Section 3. Rates. Shipper shall pay Transporter the charges and furnish Retainage as described in the above-referenced Rate Schedule, unless otherwise agreed to by the parties in writing and specified as an amendment to this Service Agreement. Transporter may agree to discount its rate to Shipper below Transporter's maximum rate, but not less than Transporter's minimum rate. Such discounted rate may apply to; (a) specified quantities (contract demand or commodity quantities); (b) specified quantities above or below a certain level or all quantities if quantities exceed a certain level; (c) quantities during specified time periods; (d) quantities at specified points, locations, or other defined geographical areas; (e) that a specified discounted rate will apply in a specified relationship to the quantities actually transported (i.e., that the reservation charge will be adjusted in a specified relationship to quantities actually transported); (f) production and/or reserves committed by the Shipper; and (g) based on a formula including, but not limited to, published index prices for specific receipt and/or delivery points or other agreed-upon pricing points, provided that the resulting rate shall be no lower than the minimum nor higher than the maximum applicable rate set forth in the Tariff. In addition, the discount agreement may include a provision that if one rate component which was at or below the applicable maximum rate at the time the discount agreement was executed subsequently exceeds the applicable maximum rate due to a change in Transporter's maximum rate so that such rate component must be adjusted downward to equal the new applicable maximum rate, then other rate components may be adjusted upward to achieve the agreed overall rate, so long as none of the resulting rate components exceed the maximum rate applicable to that rate component. Such changes to rate components shall be applied prospectively, commencing with the date a Commission order accepts revised tariff sections. However, nothing contained herein shall be construed to alter a refund obligation under applicable law for any period during which rates, which had been charged under a discount agreement, exceeded rates which ultimately are found to be just and reasonable.

Section 4. <u>Notices</u>. Notices to Transporter under this Agreement shall be addressed to it at 5151 San Felipe, Suite 2500, Houston, Texas 77056, Attention: Customer Services and notices to Shipper shall be addressed to it at Columbia Gas Of Kentucky, Inc, 200 Civic Center Drive, P. O. Box 117, Columbus, OH 43216 0117, Attention: Thomas Heckathorn, until changed by either party by written notice.

Section 5. <u>Superseded Agreements</u>. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreement(s): SST No. 80160, Revision No. 4.

COLUMBIA GAȘ OF KENTUCKY, INC	COLUMBIA	GAS TRANSMISSION, LLC
By yeathin Barn	Ву	millin S. mora
Title VP	Title	VP Cut Svcs S Bus Interation
Date 11/1 13	Date	11-1-13
Reviewed & TAR 10/21/2013		

#### Revision No. 5

# Appendix A to Service Agreement No. 80160 Under Rate Schedule SST between Columbia Gas Transmission, LLC ("Transporter") and Columbia Gas Of Kentucky, Inc ("Shipper")

#### Transportation Demand

Begin <u>Date</u>	End <u>Date</u>	Transportation Demand Dth/day	Recurrence Interval
November 1, 2013	March 31, 2020	190,880	10/1 - 3/31
November 1, 2013	March 31, 2020	95,440	4/1 - 9/30

### Primary Receipt Points

				Maximum Daily	
Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling Point Name	Quantity (Dth/day)	Recurrence Interval
November 1, 2013	March 31, 2020	STOR	RP Storage Point TCO	190,880	10/1 - 3/31
November 1, 2013	March 31, 2020	STOR	<b>RP Storage Point TCO</b>	95,440	4/1 - 9/30

#### Primary Delivery Points

Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity (Dth/day) 1/	Minimum Delivery Pressure Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	400137	CKY PAY GAS CONS	142	142		10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	400143	CKY PAY GAS CONS	134	134		10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	400147	CKY PAY GAS CONS	83	83		10/1 - 3/31

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						Maximum Dally Delivery	Design Daily	Minimum Delivery Pressure	
Begin <u>Date</u>	End Date	Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Obligation (Dth/day) 1/	Quantity (Dth/day) 1/	Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	801584	ASHLAND OIL REF.	15,073	1,043	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803264	FULLERTON DP	1,071	888	100	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803423	FLATWOODS	274	274	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803759	DUPONT	335		200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803773	CKY ASHLAND 8TH S	7,726	4,666	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803848	MARKWEST HYDRO	788	49	100	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804193	CALGON	3,143	1,627	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804313	WURTLAND D.P. (EM)	3,719	2,719	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804319	WESTWOOD	1,615	1,615	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804324	ASHBUCKLY RD.	485	257	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804329	GREENUP-UPPER RI	77	30	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804345	<b>GREENUP-LOWER RI</b>	251	198	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804373	GREENUP-UPPER RI	71	71	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804374	GREENUP-CENTER	62	62	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804375	FLATWOODS	139	133	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804379	RACELAND-POPLAR	83	39	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804423	GREENUP CENTER	145	103	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804711	ASH-FRIENDSHIP RD	777	405	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804949	INTERNATIONAL NIC	2,020	272	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805174	CANNONSBURG	343	343	40	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805609	SUMMIT CITY	354	335	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805633	BELHAVEN	212	212	200	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805676	HILLCREST APTS,	137	57	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805815	BRUCE APTS.	36	34	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	814791	AMETEK CORP.	37	16	200	10/1 - 3/31

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Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling Point Name	Measuring <u>Point No.</u>	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity (Dth/day) 1/	Minimum Delivery Pressure Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	838145	Marathon Line U	2,000		260	10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	846041	<b>BIG SANDY ASPHALT</b>	0			10/1 - 3/31
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	400137	CKY PAY GAS CONS	71	71		4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	400143	CKY PAY GAS CONS	67	67		4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	400147	CKY PAY GAS CONS	42	42		4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	801584	ASHLAND OIL REF.	7,537	522	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803264	FULLERTON DP	536	444	100	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803423	FLATWOODS	137	137	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803759	DUPONT	168		200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803773	CKY ASHLAND 8TH S	3,863	2,333	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	803848	MARKWEST HYDRO	394	25	100	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804193	CALGON	1,572	814	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804313	WURTLAND D.P. (EM)	1,860	1,360	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804319	WESTWOOD	808	808	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804324	ASHBUCKLY RD.	243	129	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804329	GREENUP-UPPER RI	39	15	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804345	GREENUP-LOWER RI	126	99	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804373	GREENUP-UPPER RI	36	36	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804374	GREENUP-CENTER	31	31	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804375	FLATWOODS	70	67	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804379	RACELAND-POPLAR	42	20	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804423	GREENUP CENTER	73	52	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804711	ASH-FRIENDSHIP RD	389	203	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	804949	INTERNATIONAL NIC	1,010	136	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805174	CANNONSBURG	172	172	40	4/1 - 9/30

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Begin <u>Date</u>	End <u>Date</u>	Scheduling <u>Point No.</u>	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity (Dth/day) 1/	Minimum Delivery Pressure Obligation (pslg) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805609	SUMMIT CITY	177	168	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805633	BELHAVEN	106	106	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805676	HILLCREST APTS.	69	29	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	805815	BRUCE APTS.	18	17	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	814791	AMETEK CORP.	19	8	200	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	838145	Marathon Line U	1,000		260	4/1 - 9/30
November 1, 2013	March 31, 2020	17-15	COL GAS OF KY 03-15	846041	BIG SANDY ASPHALT	0		·	4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	400139	CKY PAY GAS CONS	159	159		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	400151	CKY PAY GAS CONS	43	43		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803769	LOUISA POD	699	699		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803770	LOUISA	113	112		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803775	LOUISA POD	1,171	1,000		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803782	LANCER	237	237		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	804517	BRANDY KEG CK.	.21	12		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	804767	MARTIN GAS CO.	47	32		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	804954	MIKE LITTLE GAS CO	132	122	50	10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	805682	AMERICAN STANDAR	213	68		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	820005	EAST KENTUCKY PA	796			10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	823289	SOUTH WILLIAMSON	643	519		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	828673	Martin Housing Authori	36	33		10/1 - 3/31
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	400139	CKY PAY GAS CONS	80	80		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	400151	CKY PAY GAS CONS	22	22		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803769	LOUISA POD	350	350		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803770	LOUISA	57	56		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803775	LOUISA POD	586	500		4/1 - 9/30

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Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling <u>Point Name</u>	Measuring Point No.	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity (Dth/day) 1/	Minimum Delivery Pressure Obligation (psig) 1/	Récurrence Interval
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	803782	LANCER	119	119		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	804517	BRANDY KEG CK.	11	6		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	804767	MARTIN GÁS CO.	24	16		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	804954	MIKE LITTLE GAS CO	66	61	50	4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	805682	AMERICAN STANDAR	107	34		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	820005	EAST KENTUCKY PA	398			4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	823289	SOUTH WILLIAMSON	322	260		4/1 - 9/30
November 1, 2013	March 31, 2020	17-16	COL GAS OF KY 03-16	828673	Martin Housing Authori	18	17		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400149	CKY PAY GAS CONS	216	216		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400153	CKY PAY GAS CONS	66	66		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400155	CKY PAY GAS CONS	24	24		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400431	CKY PAY GAS CONS	0			10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	803771	HAROLD-LAYNESVIL	112	112		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	803772	HAROLD-LAYNESVIL	493	493		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	804127	CANEY CK, COMMUN	132	131		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	804779	KNOTT CO, BD, OF E	29	29		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	805686	PIPPA PASSES	12	11		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	814637	ALICE LLOYD COLLE	54	45		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	817722	GREEN MEADOWS D	70	70		10/1 - 3/31
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400149	CKY PAY GAS CONS	108	108		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400153	CKY PAY GAS CONS	33	.33		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400155	CKY PAY GAS CONS	12	12		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	400431	CKY PAY GAS CONS	Ó			4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	803771	HAROLD-LAYNESVIL	56	56		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	803772	HAROLD-LAYNESVIL	247	247		4/1 - 9/30

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Begin Date	End Date	Scheduling Point No.	Scheduling <u>Point Name</u>	Measuring Point No.	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity (Dth/day) 1/	Minimum Delivery Pressure Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	804127	CANEY CK. COMMUN	66	66		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	804779	KNOTT CO. BD. OF E	15	15		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	805686	PIPPA PASSES	6	6		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	814637	ALICE LLOYD COLLE	27	23		4/1 - 9/30
November 1, 2013	March 31, 2020	17-18	COL GAS OF KY 03-18	817722	GREEN MEADOWS D	35	35		4/1 - 9/30
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	400157	CKY PAY GAS CONS	453	453		10/1 - 3/31
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	803570	WALLOW TOOL & DIE	30	18	50	10/1 - 3/31
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	803618	FOSTER D P	58	58	50	10/1 - 3/31
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	805258	CKY-STEPSTONE	3,511	3,000	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	829541	LAKE CARNICO	40,129	24,979	500	10/1 - 3/31
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	400157	CKY PAY GAS CONS	227	227		4/1 - 9/30
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	803570	WALLOW TOOL & DIE	15	9	50	4/1 - 9/30
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	803618	FOSTER D P	29	29	50	4/1 - 9/30
November 1, 2013	March 31, 2020	18-10	ÇOL GAS OF KY 06-10	805258	CKY-STEPSTONE	1,756	1,500	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	829541	LAKE CARNICO	20,065	12,490	500	4/1 - 9/30
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	803523	MAYSVILLE D.P.	6,483	6,000	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	803585	WASHINGTON -HIGH	89	89	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	804451	WASHINGTON - MAIN	1,700	1,700	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	804940	MAYSVILLE EAST TA	53	51	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	805158	GERMANTOWN	276	275	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	834119	MAYSVILLE MATERIA	825		150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	834288	MAYSVILLE INDUSTR	400	200	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	803523	MAYSVILLE D.P.	3,242	3,000	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	803585	WASHINGTON -HIGH	45	45	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	804451	WASHINGTON - MAIN	850	850	150	4/1 - 9/30

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Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity (Dth/day) 1/	Minimum Delivery Pressure Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	804940	MAYSVILLE EAST TA	27	26	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	805158	GERMANTOWN	138	138	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	834119	MAYSVILLE MATERIA	413		150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-11	COL GAS OF KY 06-11	834288	MAYSVILLE INDUSTR	200	100	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	400169	CKY PAY GAS CONS	110	110		10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	400173	CKY PAY GAS CONS	573	573		10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803537	PHILIPS LIGHTING C	197	179	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803599	MT. STERLING D.P.	4,208	4,200	400	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803600	CKY WINCHESTER	7,251	6,823	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803602	PARIS CYNTHIANA	12,008	6,970	275	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	804399	BYBEE POTTERY	27	14	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805233	CIRCUIT COURT	1,069	984	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805460	WINCHESTER RT. 89	5,739	4,371	200	10/1 - <del>3</del> /31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805544	WACO -BYBEE	0	261	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805546	AVON-CLINTONVILLE	407	407	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805776	ATHENS	132	131	250	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805968	YEISER, INC	62	60	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817712	HILLCREST SUBDIVI	136	136	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817714	YORKTOWN MOBILE	53	51	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817715	KERRS MOBILE HOM	24	24	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817716	WAYLAND AVE. D.P.	46	46	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817717	JUDIANA & ROCKWE	210	127	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817718	BOONE VILLAGE	72	72	250	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817719	COUNTRY CLUB HTS	47	47	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817721	UNION CITY D.P.	54	54	150	10/1 - 3/31

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						Maximum Daily Delivery	Design Dailv	Minimum Delivery Pressure	
Beg <b>i</b> n <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Obligation (Dth/day) 1/	Quantity (Dth/day) 1/	Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	820375	LEXINGTON	87,255	83,913	250	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	823283	WINCHESTER FARM	2,000	1,300	200	10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	832885	SOUTHERN HILLS SU	0			10/1 - 3/31
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	400169	CKY PAY GAS CONS	55	55		4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	400173	CKY PAY GAS CONS	287	287		4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803537	PHILIPS LIGHTING C	99	90	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803599	MT. STERLING D.P.	2,104	2,100	400	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803600	CKY WINCHESTER	3,626	3,412	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	803602	PARIS CYNTHIANA	6,004	3,485	275	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	804399	BYBEE POTTERY	14	7	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805233	CIRCUIT COURT	535	492	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805460	WINCHESTER RT. 89	2,870	2,186	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805544	WACO -BYBEE	0	131	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805546	AVON-CLINTONVILLE	204	204	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805776	ATHENS	66	66	250	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	805968	YEISER, INC	31	30	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817712	HILLCREST SUBDIVI	68	68	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817714	YORKTOWN MOBILE	27	26	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817715	KERRS MOBILE HOM	12	12	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817716	WAYLAND AVE. D.P.	23	23	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817717	JUDIANA & ROCKWE	105	64	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817718	BOONE VILLAGE	36	36	250	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817719	COUNTRY CLUB HTS	24	24	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	817721	UNION CITY D.P.	27	27	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	820375	LEXINGTON	43,628	41,957	250	4/1 - 9/30

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						Maximum Daily	Design	Minimum Delivery	
Begin Date	End	Scheduling Point No.	Scheduling Point Name	Measuring <u>Point No.</u>	Measuring Point Name	Delivery Obligation (Dth/day) 1/	Daily Quantity (Dth/day) 1/	Pressure Obligation (psig) 1/	Recurrence Interval
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	823283	WINCHESTER FARM	1,000	650	200	4/1 - 9/30
November 1, 2013	March 31, 2020	18-12	COL GAS OF KY 06-12	832885	SOUTHERN HILLS SU	0			4/1 - 9/30
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	400165	CKY PAY GAS CONS	21	21		10/1 - 3/31
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	400167	CKY PAY GAS CONS	50	50		10/1 - 3/31
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	804301	CKY-IRVINE	3,453	3,453	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	817720	WINSTON D.P. LINE	89	89	150	10/1 - 3/31
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	400165	CKY PAY GAS CONS	11	11		4/1 - 9/30
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	400167	CKY PAY GAS CONS	25	25		4/1 - 9/30
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	804301	CKY-IRVINE	1,727	1,727	150	4/1 - 9/30
November 1, 2013	March 31, 2020	18-13	COL GAS OF KY 06-13	817720	WINSTON D.P. LINE	45	45	150	4/1 - 9/30
November 1, 2013	March 31, 2020	805095	LEXINGTON MUTH	805095	LEXINGTON MUTH	79,547	65,846	250	10/1 - 3/31
November 1, 2013	March 31, 2020	805095	LEXINGTON MUTH	805095	LEXINGTON MUTH	39,774	32,923	250	4/1 - 9/30

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

At Measuring Point No. 829541 during the months of November through March of each year - The Minimum Delivery Pressure Obligation is 750 psig whenever the forecasted low temperature used by Transporter's Gas Control for the Lexington, KY area is 20 degrees F or lower. Regardless of the forecasted temperature, if the actual temperature in the Lexington, KY area should fall below 20 degrees F, Transporter will provide, to the extent operationally feasible, a Minimum Delivery Pressure Obligation of 750 psig. If forecasted low temperature for the Lexington, KY area is above 20 degrees F, the Minimum Delivery Pressure Obligation is 600 psig.

At Measuring Point No. 829541 during the months of April through October of each year - The Minimum Delivery Pressure Obligation is 500 psig. Unless Measuring Point specific Maximum Daily Delivery Obligations (MDDO's) are specified in a separate firm service agreement between Transporter and Shipper, Transporter's aggregate MDDO, under this and any other service agreement between Transporter and Shipper, at the Measuring Points listed above shall not exceed the MDDO quantities set forth above for each Measuring Point. In addition, Transporter shall not be obligated on any day to deliver in total more than the Aggregate Daily Quantities (ADQ's) listed below for each specified Market Area. The Market Area in which each Measuring Point is located is posted on Transporter's EBB and incorporated herein by reference. Any Measuring Point specific MDDO's in a separate firm service agreement between Transporter and Shipper shall be additive both to the Individual MDDO's and DDQ's set forth above and to any applicable ADQ's set forth below. Market Area Number / Market Area Name / ADQ

10 - Cincinnati - 28,490 11 - Aberdeen - 8,133 12 - Lexington - 168,508

13 - Manchester - 3,613

ADQ for Market Areas 10-13 - 174,861

15 - Portsmouth - 15,665

16 - Lancer - 3,178

18 - Kentucky Miscellaneous - 1,197

ADQ for Market Areas 15, 16, and 18 - 16,019

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

Yes X 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.

X 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 X No (Check applicable blank) The MDDOs, ADQs, and/or DDQs set forth in Appendix A to Shipper's Service Agreement No. are incorporated herein by reference.

Yes X\_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.

No (Check applicable blank) This Service Agreement covers offsystem capacity sold pursuant to Section 47 of the General Terms and X Yes 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.

COLUMBIA GAS	OF KENTUCKY, ING
By	Heather Darn
Title	₩P
Date	11/1/13
Reviewed	by TM 10/31/2013

COLUMBIA

Bv Title Date

GAS TRANSMISSION, LLC	
UP automy fires	-
11-1-18	

#### SERVICE AGREEMENT NO. 80171 CONTROL NO. 2004-05-25-0014

#### **FSS SERVICE AGREEMENT**

THIS AGREEMENT, made and entered into this 11<sup>th</sup> day of October, 2004, by and between;

Columbia Gas Transmission Corporation ("Transporter") AND Columbia Gas Of Kentucky, Ino ("Shipper")

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

<u>Section 1. Service to be Rendered</u>. Transporter shall perform and Shipper shall receive service in accordance with the provisions of the effective FSS Rate Schedule and applicable General Terms and Conditions of Transporter's FERC Gas Tariff, Second 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. Transporter shall store quantities of gas for Shipper up to but not exceeding Shipper's Storage Contract Quantity as 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 Part 284, 223 of Subpart Gof the Commission's regulations. Shipper warrants that service hereunder is being provided on behalf of Shipper.

<u>Section 2. Term</u>. Service under this Agreement shall commence as of November 1, 2004, and shall continue in full force and effect until March 31, 2020. 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.

Section 3. Rates. Shipper shall pay Transporter the charges and furnish the Retainage as described in the above-referenced Rate Schedule, unless otherwise agreed to by the partles in writing and specified as an amendment to this Service Agreement. Transporter may agree to discount its rate to Shipper below Transporter's maximum rate, but not less than Transporter's minimum rate, Such discounted rate may apply to: a) specified quantities (contract demand or commodity quantities); b) specified quantities above or below a certain level or all quantities if quantities exceed a certain level; c) quantities during specified time periods; d) quantities at specified points, locations, or other defined geographical areas; and e) that a specified discounted rate will apply in a specified relationship to the quantities actually transported (i.e., that the reservation charge will be adjusted in a specified relationship to quantities actually transported). In addition, the discount agreement may include a provision that if one rate component which was at or below the applicable maximum rate at the time the discount agreement was executed subsequently exceeds the applicable maximum rate due to a change in Transporter's maximum rate so that such rate component must be adjusted downward to equal the new applicable maximum rate, then other rate components may be adjusted upward to achieve the agreed overall rate, so long as none of the resulting rate components exceed the maximum rate applicable to that rate component. Such changes to rate components shall be applied prospectively, commencing with the date a Commission order accepts revised tariff sheets. However, nothing contained herein shall be construed to alter a refund obligation under applicable law for any period during which rates which had been charged under a discount agreement exceeded rates which ultimately are found to be just and reasonable.

# SERVICE AGREEMENT NO. 80171 CONTROL NO. 2004-05-25-0014

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#### FSS SERVICE AGREEMENT

<u>Section 4.</u> Notices. Notices to Transporter under this Agreement shall be addressed to it at Post Office Box 1273, Charleston, West Virginia 25325-1273, Attention: Manager – Customer Services and notices to Shipper shall be addressed to it at:

Columbia Gas Of Kentucky, Inc 200 Civic Center Drive P, O. Box 117 Columbus, OH 43216-0117 ATTN: Scott Phelps

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until changed by either party by written notice.

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 4 Page 3 of 5

SERVICE AGREEMENT NO. 80171 CONTROL NO. 2004-05-25-0014

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#### **FSS SERVICE AGREEMENT**

Section 5, Superseded Agreements. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreements: FSS 52985.

	Columbia Gas Of Kentucky, Inc
Ву:	Janua DUAR AB/SOM
Name:	Daniel D. Gauito
Title:	Vice President, Energy Supply Services
Date:	10/ 3/04
	Columbia Gas Transmission Corporation
By:	Mut O ach_
Name:	MEEMARL D. WARS-
Title:	UP PREING & VOLVINA MANAGANTENSY
Date:	10-7-04

10-7-04

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KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 4 Page 4 of 5

**Revision No.** Control No. 2004-05-25-0014

# Appendix A to Service Agreement No. 86171

Under Rate Schedule FSS

**Columbia Gas Transmission Corporation** Between (Transporter) Columbia Gas Of Kentucky, Inc

and (Shipper)

. . . . .

. . .

Storage Contract Quantity 9,657,942 Dth

Maximum Dally Storage Quantity 190,880 Dth per day

#### CANCELLATION OF PREVIOUS APPENDIX A

Yes X\_No (Check applicable blank) Transporter and Shipper have mutually agreed to a Regulatory Restructuring Reduction Option pursuani to Section 42 of the General Terms and Conditions of Transporter's FERC Gas Tariff.

Yes X\_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.

Service pursuant to this Appendix A, Revision No. shall be effective from November 1, 2004 through March 31, 2020.

Yes \_X\_No (Check applicable blank) This Appendix A, Revision No. 0 shall cancel and supersede the Previous Appendix A, Revision No. N/A effective as of N/A, to the Service Agreement referenced above.

With the exception of this Appendix A, Revision No. 0 all other terms and conditions of said Service Agreement shall remain in full force and effect.

	Columbia Gas Of Keptuçky, Inc	
By:	- Served 2 WAYS	- AB/BOAH
Name:	Daniel D. Gavito	- 11/2011
Title:		
Date:	10-5-04	_
	Columbia Gas Transmission Corporation	
Ву:	Mulad D Watson	
Name:	MECHARL D. WATSO-	_
Title:	OP Pricing I Volume monogement	
Date:	10-7-04	

#### Revision No. 1

#### Appendix A to Service Agreement No. 80171

#### Under Rate Schedule FSS

Between Columbia Gas Transmission Corporation (Transporter)

And Columbia Gas of Kentucky, Inc. (Shipper)

Storage Contract Quantity

			Maximum Daily Storage
Begin Date	End Date	Storage Contract Quantity (Dth)	Quantity Dth/Day
11/01/2008	03/31/2020	11,264,911	220,880

#### CANCELLATION OF PREVIOUS APPENDIX A

\_\_\_\_Yes \_X\_\_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 \_X\_\_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.

Service pursuant to this Appendix A, Revision No. 1 shall be effective from November 1, 2008 through March 31, 2020.

X Yes \_\_\_\_ No (Check applicable blank) This Appendix A, Revision No. \_\_1\_\_\_ shall cancel and supersede the previous Appendix A, Revision No. \_0\_\_\_\_ effective as of November 1, 2008, to the Service Agreement referenced above.

Yes X No (Check applicable blank) This Service Agreement covers interim capacity sold pursuant to the provisions of General Terms and Conditions Section 4.2(j). Right of first refusal rights, if any, applicable to this interim capacity are limited as provided for in General Terms and Conditions Section 4.2(j).

With the exception of this Appendix A, Revision No. 1 all other terms and conditions of said Service Agreement shall remain in full force and effect.

	Columbia Gas of Kentucky, Inc
By:	marker Whats
Name:	/ Michael D. Watson
Title:	Vice President ————————————————————————————————————
Date:	10-90:03
	APPROVED AS 15 TO FORM TMR 10/30/05
	Columbia Gas Transmission Corporation
By:	Marg of to ste
Name:	C Mark S. Wilke
Title:	Director
Date:	80 _71 08

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 5 Page 1 of 8

81527

2004-05-25-0017

SERVICE AGREEMENT NO. CONTROL NO.

#### **FTS SERVICE AGREEMENT**

THIS AGREEMENT, made and entered into this  $\underline{A8^{\mu}}$  day of  $\underline{Meember}$ ,  $\underline{Jwy}$ , by and between:

Columbia Gas Transmission Corporation ("Transporter") AND Columbia Gas Of Kentucky, Inc ("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, Second 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. Service hereunder shall be provided subject to the provisions of Part 284. 223 of Subpart G of the Commission's regulations. Shipper warrants that service hereunder is being provided on behalf of Shipper.

<u>Section 2. Term</u>. Service under this Agreement shall commence as of April 1, 2005, and shall continue in full force and effect until March 31, 2020. 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.

Section 3. Rates. Shipper shall pay Transporter the charges and furnish Retainage as described in the above-referenced Rate Schedule, unless otherwise agreed to by the parties in writing and specified as an amendment to this Service Agreement. Transporter may agree to discount its rate to Shipper below Transporter's maximum rate, but not less than Transporter's minimum rate. Such discounted rate may apply to; a) specified quantities (contract demand or commodity quantities); b) specified quantities above or below a certain level or all quantities if quantities exceed a certain level; c) quantities during specified time periods; d) quantities at specified points, locations, or other defined geographical areas; and e) that a specified discounted rate will apply in a specified relationship to the quantities actually transported (i.e., that the reservation charge will be adjusted in a specified relationship to quantities actually transported). In addition, the discount agreement may include a provision that if one rate component which was at or below the applicable maximum rate at the time the discount agreement was executed subsequently exceeds the applicable maximum rate due to a change in Transporter's maximum rate so that such rate component must be adjusted downward to equal the new applicable maximum rate, then other rate components may be adjusted upward to achieve the agreed overall rate, so long as none of the resulting rate components exceed the maximum rate applicable to that rate component. Such changes to rate components shall be applied prospectively, commencing with the date a Commission order accepts revised tariff sheets. However, nothing contained herein shall be construed to alter a refund obligation under applicable law for any period during which rates had been charged under a discount agreement exceeded rates which ultimately are found to be just and reasonable.

# SERVICE AGREEMENT NO. 81527 CONTROL NO. 2004-05-25-0017

#### FTS SERVICE AGREEMENT

<u>Section 4.</u> Notices. Notices to Transporter under this Agreement shall be addressed to it at Post Office Box 1273, Charleston, West Virginia 25325-1273, Attention: Manager – Customer Services and notices to Shipper shall be addressed to it at:

Columbia Gas Of Kentucky, Inc 200 Civic Center Drive P. O. Box 117 Columbus, OH 43216-0117 ATTN: Scott Phelps

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until changed by either party by written notice.

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 5 Page 3 of 8

#### SERVICE AGREEMENT NO. 81527 CONTROL NO. 2004-05-25-0017

#### FTS SERVICE AGREEMENT

Section 5. Superseded Agreements. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreements: FTS 38238.

	Columbia Gas @f Kerltucky, Inc
By;	Band BUN 17
Name:	popmilly GAVIS
Title:	VP-C55
Date:	12-17-04
	Columbia Gas Transmission Corporation
By:	man
Name:	T. N. Brasselle
Title:	MGR Customer Services

DEC 2 9 2004

Title:

Date:

# Appendix A to Service Agreement No. 81527

Under Rate Schedule FTS

Between (Transporter) Columbia Gas Transmission Corporation

and (Shipper) Columbia Gas Of Kentucky, Inc

#### Transportation Demand 20,014 Dth/Day

#### Primary Receipt Points

Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Maximum Daily Quantity (Dth/Day)	Minimum Receipt Pressure Obligation (psig) 1/	Hourly Flowrate (Dth/hour) 1/
B9	BROAD RUN-19	B9	· · · ·	20,014		

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Appendix A to Service Agreement No. 81527 Under Rate Schedule FTS Between (Transporter) Columbia Gas Transmission Corporation and (Shipper) Columbia Gas Of Kentucky, Inc

#### Primary Delivery Points

Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Maxímum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity 1/ Aggregate 1/ (Dth/Day) 1/ Daily Quantity 1/	Minimum Delivery Pressure Obligation (psig) 1/	Hourly Flowrate (Dth/hour) 1/	
17-15	COL GAS OF KY 03-15	801584	ASHLAND OIL REF.	1,771				
17-15	COL GAS OF KY 03-15	803264	FULLERTON DP	1,312				
17-15	COL GAS OF KY 03-15	803423	FLATWOODS	405				
17-15	COL GAS OF KY 03-15	803759	DUPONT	0				
17-15	COL GAS OF KY 03-15	803773	CKY ASHLAND 8TH STREET	6,890				
17-15	COL GAS OF KY 03-15	803848	MARKWEST HYDROCARBON	73				
17-15	COL GAS OF KY 03-15	804313	WURTLAND D.P. (EM)	4,017				
17-15	COL GAS OF KY 03-15	804319	WESTWOOD	2,385				
17-15	COL GAS OF KY 03-15	804324	ASHBUCKLY RD.	380				
17-15	COL GAS OF KY 03-15	804329	GREENUP-UPPER RIGGS	45				Stat
17-15	COL GAS OF KY 03-15	804345	GREENUP-LOWER RIGGS	292				KY PSC aff's Data
17-15	COL GAS OF KY 03-15	804373	GREENUP-UPPER RIGGS	105				siC Ca ata R
17-15	COL GAS OF KY 03-15	804374	GREENUP-CENTER RIGGS	91				Case No. Requeste Attachn
17-15	COL GAS OF KY 03-15	804375	FLATWOODS	196				KY PSC Case No. 2018-0025 Staff's Data Requests Set 1 No. Attachment A Part Page 5 of
17-15	COL GAS OF KY 03-15	804379	RACELAND-POPLA R HGTS.	58				. 2018-00253 s Set 1 No. 1 nent A Part 5 Page 5 of 8
17-15	COL GAS OF KY 03-15	804423	GREENUP CENTER	152				)253 lo. 1 art 5 of 8
17-15	COL GAS OF KY	804711	ASH-FRIENDSHIP	598				

Appendix A to Service A	Igreement No. $81527$
Under Rate Schedule	FTS
Between (Transporter)	Columbia Gas Transmission Corporation
and (Shipper)	Columbia Gas Of Kentucky, Inc

#### Primary Delivery Points

Scheduling Point No.	Scheduling Point Name	Measuring Point No.	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day)	Design Daily Quantity Aggregate 1/ (Dth/Day) <sup>1/</sup> Daily Quantity 1/	Minimum Delivery Pressure Obligation (psig) 1/	Hourly Flowrate (Dth/hour) 1/
	03-15		RD.				
17-15	COL GAS OF KY 03-15	805174	CANNONSBURG	277			
17-15	COL GAS OF KY 03-15	805609	SUMMIT CITY	496			
17-15	COL GAS OF KY 03-15	805633	BELHAVEN	313			
17-15	COL GAS OF KY 03-15	805676	HILLCREST APTS.	85			
17-15	COL GAS OF KY 03-15	805815	BRUCE APTS.	50			
17-15	COL GAS OF KY 03-15	814791	AMETEK CORP.	23			

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Appendix A to Service Agreement No. 8/527 Under Rate Schedule FTS Between (Transporter) Columbia Gas Transmission Corporation and (Shipper) Columbia Gas Of Kentucky, Inc

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

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Appendix A to Service Agreement No. 81577Under Rate Schedule FTS Between (Transporter) Columbia Gas Transmission Corporation

and (Shipper) Columbia Gas Of Kentucky. Inc

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 the purposes of listing valid secondary interruptible receipt points and delivery points.

\_\_\_\_Yes \_X\_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 \_X\_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.

Service pursuant to this Appendix A, Revision No. 0 shall be effective April 1, 2005 through March 31, 2020.

\_\_\_\_Yes \_X\_No (Check applicable blank) All Gas shall be delivered at existing points of interconnection within the MDDO's, and/or ADQ's, and/or DDQ's, as applicable, set forth in Transporter's currently effective Rate Schedule \_\_\_\_ Appendix A, Revision No. 0 with Shipper, which for such points set forth are incorporated herein by reference.

With the exception of this Appendix A, Revision No. 0 all other terms and conditions of said Service Agreement shall remain in full force and effect.

	Columbia Gas Of Kentucky, Inc
By:	Kan Sapit
Name:	SANIAL & GANIP
Title:	VP ESS
Date:	18-17-64
	Columbia Gas Transmission Corporation
By:	mis
Name:	T. N. Brasselle
Title:	MGR Customer Services
Date:	DEC 2 9 2004

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1

Attachment A Part 6

CONFIDENTIAL - - FILED UNDER SEAL

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 7 Page 1 of 5

Service Agreement No. 81540 Revision No. 1

#### SST SERVICE AGREEMENT

THIS AGREEMENT is made and entered into this <u>1</u> day of <u>Nov</u> <u>polo</u>, by and between COLUMBIA GAS TRANSMISSION, LLC ("Transporter") and COLUMBIA GAS OF KENTUCKY, INC ("Shipper").

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

Section 1. <u>Service to be Rendered</u>. Transporter shall perform and Shipper shall receive service in accordance with the provisions of the effective SST 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. <u>Term</u>. Service under this Agreement shall commence as of November 1, 2013, and shall continue in full force and effect until March 31, 2020. 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.

Section 3. Rates. Shipper shall pay Transporter the charges and furnish Retainage as described in the above-referenced Rate Schedule, unless otherwise agreed to by the parties in writing and specified as an amendment to this Service Agreement. Transporter may agree to discount its rate to Shipper below Transporter's maximum rate, but not less than Transporter's minimum rate. Such discounted rate may apply to: (a) specified quantities (contract demand or commodity quantities); (b) specified quantities above or below a certain level or all quantities if quantities exceed a certain level; (c) quantities during specified time periods; (d) quantitles at specified points, locations, or other defined geographical areas; (e) that a specified discounted rate will apply in a specified relationship to the quantities actually transported (i.e., that the reservation charge will be adjusted in a specified relationship to quantities actually transported); (f) production and/or reserves committed by the Shipper; and (g) based on a formula including, but not limited to, published index prices for specific receipt and/or delivery points or other agreed-upon pricing points, provided that the resulting rate shall be no lower than the minimum nor higher than the maximum applicable rate set forth in the Tariff. In addition. the discount agreement may include a provision that if one rate component which was at or below the applicable maximum rate at the time the discount agreement was executed subsequently exceeds the applicable maximum rate due to a change in Transporter's maximum rate so that such rate component must be adjusted downward to equal the new applicable maximum rate, then other rate components may be adjusted upward to achieve the agreed overall rate, so long as none of the resulting rate components exceed the maximum rate applicable to that rate component. Such changes to rate components shall be applied prospectively, commencing with the date a Commission order accepts revised tariff sections. However, nothing contained herein shall be construed to alter a refund obligation under applicable law for any period during which rates, which had been charged under a discount agreement, exceeded rates which ultimately are found to be lust and reasonable.

Section 4. <u>Notices</u>. Notices to Transporter under this Agreement shall be addressed to it at 5151 San Felipe, Suite 2500, Houston, Texas 77056, Attention: Customer Services and notices to Shipper shall be addressed to it at Columbia Gas Of Kentucky, Inc, 200 Civic Center Drive, P. O. Box 117, Columbus, OH 43216 0117, Attention: Kent Koch, until changed by either party by written notice.

Section 5. <u>Superseded Agreements</u>. This Service Agreement supersedes and cancels, as of the effective date hereof, the following Service Agreement(s): SST No. 81540, Revision No. 0.

COLUI	MBIA GAS OF KENTUCKY, INC	COLUMBIA	GAS TRANSMISSION, LLC
Ву	4 cathen Bann	Ву	millins. ma
Title	VP.	Title	VP Cust fires > Bus Fritynet
Date	11/1/13	Date	n11112

Reviewel & MA 10/31/2013

Revision No. 1

#### Appendix A to Service Agreement No. 81540 Under Rate Schedule SST between Columbia Gas Transmission, LLC ("Transporter") and Columbia Gas Of Kentucky, Inc ("Shipper")

### Transportation Demand

Begin <u>Date</u>	End Date	Transportation Demand Dth/day	Recurrence Interval
November 1, 2013	March 31, 2020	30,000	10/1 - 3/31
November 1, 2013	March 31, 2020	15,000	4/1 - 9/30

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 7 Page 3 of 5

## Primary Receipt Points

				Maximum Daily	
Begin <u>Date</u>	End <u>Date</u>	Scheduling Point No.	Scheduling Point Name	Quantity <u>(Dth/day)</u>	Recurrence Interval
November 1, 2013	March 31, 2020	STOR	RP Storage Point TCO	30,000	10/1 - 3/31
November 1, 2013	March 31, 2020	STOR	RP Storage Point TCO	15,000	4/1 - 9/30

### Primary Delivery Points

Begin Date	End Date	Scheduling <u>Point No.</u>	Scheduling Point Name	Measuring <u>Point No.</u>	Measuring Point Name	Maximum Daily Delivery Obligation (Dth/day) 1/	Design Daily Quantity <u>(Dth/day) 1/</u>	Minimum Delivery Pressure Obligation ( <u>osig) 1/</u>	Recurrence Interval
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	829541	LAKE CARNICO	30,000			10/1 - 3/31
November 1, 2013	March 31, 2020	18-10	COL GAS OF KY 06-10	829541	LAKE CARNICO	15,000			4/1 - 9/30

#### 1/

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 FERC Gas Tariff is incorporated herein by reference for purposes of listing valid secondary interruptible receipt and delivery points.

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

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 X Yes Section 4 of the General Terms and Conditions of Transporter's FERC Gas Tariff.

Yes X. No (Check applicable blank) The MDDOs, ADQs, and/or DDQs set forth in Appendix A to Shipper's Service Agreement No. are incorporated herein by reference.

Yes X 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.

No (Check applicable blank) This Service Agreement covers offsystem capacity sold pursuant to Section 47 of the General Terms and X Yes 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.

COLUMBIA GAS	
By	yteathin Dawn
Title	VP. ···
Date	11/1 13
Re	Jianed & Pm 10/31/2013

COLUMBIA	GAS TRANSMISSION, LLC
By	millie S. mran
Title	VP Customer Sves ? Bug Integratin
Date	11-1-13

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1

Attachment A Part 8

CONFIDENTIAL - - FILED UNDER SEAL

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 9 Page 1 of 8

August 31, 2011

# THOMAS C. HECKATHORN

COLUMBIA GAS OF KENTUCKY INC P.O. BOX 117 200 CIVIC CENTER DRIVE COLUMBUS,OH,USA-432160117

> RE: Amendment No. 244 to Gas Transportation Agreement Dated November 1, 2004 Service Package No. 46985

Dear THOMAS C. HECKATHORN:

TENNESSEE GAS PIPELINE COMPANY and COLUMBIA GAS OF KENTUCKY INC (COLUMBIA-KY) agree to amend the Agreement effective October 1, 2011, to change the Primary Meters and the associated Meter Quantities as reflected in the Attached Revised Exhibit A.

Except as amended herein, all terms and provisions of the Agreement shall remain in full force and effect as written.

If the foregoing is in accordance with your understanding of the Agreement, please so indicate by signing and returning to my attention both originals of this letter. Upon Tennessee's execution, an original will be forwarded to you for your files.

Should you have any questions, please do not hesitate to contact me at (713) 420-xxxx.

Best regards,

Acct. Rep. Name Sr. Account Representative Transportation Services

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 9 Page 2 of 8

COLUMBIA GAS OF KENTUCKY INC August 31, 2011 Page 2 Contract number: 46985 Amendment number: 244 Amendment effective date: October 1, 2011

ACCEPTED AND AGREED TO This 12 Day of Stormar, 20/1

**TENNESSEE GAS PIPELINE COMPANY** 

By: Millin S. RK MS

Title: Agent and Attorney in Fact

ACCEPTED AND AGREED TO This JUN Day of SAPTENBER, 2011

COLUMBIA GAS OF KENTUCKY INC

eathn Bγ:

Title:  $\sqrt{P}$ 

Appnoved as to form TMA 9/1/2011

### GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

### EXHIBIT A AMENDMENT NO. 244 TO GAS TRANSPORTATION AGREEMENT DATED November 1, 2004 BETWEEN TENNESSEE GAS PIPELINE COMPANY AND COLUMBIA GAS OF KENTUCKY INC

Amendment Effective Date: October 1, 2011

Service Package: 46985

Service Package TQ: 20506 Dth

ENDING DATE	TQ	

BEGINNING DATE	ENDING DATE	METER	METER NAME	INTERCONNECT PARTY	COUNTY	ST	ZONE	R/D	LEG	METER-TQ	
10/1/2011	10/31/2014	020001	BROAD RUN COBB WEST VIRGINIA	COLUMBIA GAS TRANSMISSION CORPORATION	KANAWHA	WV	03	D	100	20506	
10/1/2011	10/31/2014	010668	GRAND ISLE BLOCK 47 DEHYDRATION	BP ENERGY COMPANY	OFFSHORE- FEDERAL 717	OL	OL	R	500	0	KY PS Staff's Da
10/1/2011	10/31/2014	010839	GRAND ISLE BLOCK 43 DEHYRATION	BP ENERGY COMPANY	OFFSHORE- FEDERAL 717	OL	OL	R	500	0	PSC Case No. 2 Data Requests Attachm
10/1/2011	10/31/2014	011057	VERMILION 250 C	EL PASO PRODUCTION OIL	OFFSHORE-	OL	OL	R	500	0	o. 2018-00253 sts Set 1 No. 1 nment A Part 9 Page 3 of 8

				& GAS COMPANY	FEDERAL 705					
10/1/2011	10/31/2014	011091	SOUTH MARSH ISLAND 61 B	CHEVRON U.S.A INC.	OFFSHORE- FEDERAL 707	OL	OL	R	500	0
10/1/2011	10/31/2014	011294	SOUTH PASS BLOCK 77 A	CHEVRON U.S.A INC.	OFFSHORE- FEDERAL 722	OL	OL	R	500	0
10/1/2011	10/31/2014	011413	WEST DELTA BLOCK 34 A DEHYDRATION	FOREST OIL CORPORATION	OFFSHORE- FEDERAL 719	OL	OL	R	500	0
10/1/2011	10/31/2014	011435	GARDEN ISLAND BAY DEHYDRATION	FOREST OIL CORPORATION	PLAQUEMIN ES	LA	OL	R	500	0
10/1/2011	10/31/2014	011970	EUGENE ISLAND 224A	BP AMERICA PRODUCTION COMPANY	OFFSHORE- FEDERAL 709	OL	OL	R	500	0
10/1/2011	10/31/2014	011972	SOUTH MARSH ISLAND 79B	FOREST OIL CORPORATION	OFFSHORE- FEDERAL 707	OL	OL	R	500	0
10/1/2011	10/31/2014	012122	DELTA FARMS	PRIZE OPERATING COMPANY	LAFOURCHE	LA	0L	R	500	0
10/1/2011	10/31/2014	012394	VERMILION 273	SM ENERGY COMPANY	OFFSHORE- FEDERAL 706	OL	OL	R	500	0
10/1/2011	10/31/2014	020999	ZONE L LEG 500 POOLING AREA		PLAQUEMIN ES	LA	OL	R	500	20506

Total Receipt TQ 20506 Total Delivery TQ 20506 -

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Number of Receipt Points: 1 Number of Delivery Points: 1

Other Provisions Permitted By Tariff Under the Applicable Rate Schedule and/or General Terms and Conditions and Pursuant to Article XXXVI of the General Terms and Conditions of Tennessee's FERC Gas Tariff:

Note: Exhibit A is a reflection of the contract and all amendments as of the amendment effective date.

### GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

### EXHIBIT A-1 AMENDMENT NO. 244 SHOWING REQUESTED CHANGES TO GAS TRANSPORTATION AGREEMENT DATED November 1, 2004 BETWEEN TENNESSEE GAS PIPELINE COMPANY AND COLUMBIA GAS OF KENTUCKY INC

Amendment Effective Date: October 1, 2011

Service Package: 46985

Service Package TQ: 20506 Dth

	BEGINNING DA	TE		ENDING DATE	-		TQ				
-			······································								
BEGINNING DATE	ENDING DATE	METER	METER NAME	INTERCONNECT PARTY	COUNTY	ST	ZONE	R/D	LEG	METER-TQ	REQUESTED CHANGE QTY
10/1/2011	10/31/2014	010668	GRAND ISLE BLOCK 47 DEHYDRATION	APACHE CORPORATION	OFFSHO RE- FEDERA L 717	OL	OL	R	500	0	-797
10/1/2011	10/31/2014	010839	GRAND ISLE BLOCK 43 DEHYRATION	APACHE CORPORATION	OFFSHO RE- FEDERA	OL	OL	R	500	0	-954

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					L 717						
10/1/2011	10/31/2014	011057	VERMILION 250 C	CASTEX OFFSHORE, INC.	OFFSHO RE- FEDERA L 705	OL.	OL	R	500	0	-8955
10/1/2011	10/31/2014	011091	SOUTH MARSH ISLAND 61 B	CHEVRON U.S.A INC.	OFFSHO RE- FEDERA L 707	OL	OL	R	500	0	-2108
10/1/2011	10/31/2014	011294	SOUTH PASS BLOCK 77 A	HILCORP ENERGY COMPANY	OFFSHO RE- FEDERA L 722	OL	OL.	R	500	0	-2108
10/1/2011	10/31/2014	011435	GARDEN ISLAND BAY DEHYDRATION	FOREST OIL CORPORATION	PLAQUE MINES	LA	OL	R	500	0	-2827
10/1/2011	10/31/2014	011970	EUGENE ISLAND 224A	APACHE CORPORATION	OFFSHO RE- FEDERA L 709	OL	OL	R	500	0	-1053
10/1/2011	10/31/2014	012122	DELTA FARMS	TEXAS PETROLEUM INVESTMENT COMPANY	LAFOUR CHE	LA	OL	R	500	0	-1704
10/1/2011	10/31/2014	020999	ZONE L LEG 500 POOLING AREA		PLAQUE MINES	LA	OL	R	500	20506	20506

Total Receipt TQ 20506

Total Delivery TQ 0

Number of Receipt Points: 1

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August 31, 2011

Number of Delivery Points: 0

Other Provisions Permitted By Tariff Under the Applicable Rate Schedule and/or General Terms and Conditions and Pursuant to Article XXXVI of the General Terms and Conditions of Tennessee's FERC Gas Tariff:

Note: Exhibit A is a reflection of the contract and all amendments as of the amendment effective date.

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## GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

THIS AGREEMENT is made and entered into as of the 1 day of November, 2014, by and between TENNESSEE GAS PIPELINE COMPANY, L.L.C., a Delaware limited liability company, hereinafter referred to as "Transporter" and COLUMBIA GAS OF KENTUCKY INC., a KENTUCKY CORPORATION, hereinafter referred to as "Shipper." Transporter and Shipper shall collectively be referred to herein as the "Parties."

## ARTICLE I

## DEFINITIONS

- 1.1 TRANSPORTATION QUANTITY shall mean the maximum daily quantity of gas which Transporter agrees to receive and Transport on a firm basis, subject to Article II herein, for the account of Shipper hereunder on each day during the term hereof, as specified on Exhibit A attached hereto. Any limitations on the quantities to be received from each Point of Receipt and/or delivered to each Point of Delivery shall be as specified on Exhibit A attached hereto.
- 1.2 EQUIVALENT QUANTITY shall be as defined in Article I of the General Terms and Conditions of Transporter's FERC Gas Tariff.

## ARTICLE II

## TRANSPORTATION

Transportation Service - Transporter agrees to accept and receive daily on a firm basis, at the Point(s) of Receipt from Shipper or for Shipper's account such quantity of gas as Shipper makes available up to the Transportation Quantity, and to deliver to or for the account of Shipper to the Point(s) of Delivery an Equivalent Quantity of gas.

## ARTICLE III

## POINT(S) OF RECEIPT AND DELIVERY

The Primary Point(s) of Receipt and Delivery shall be those points specified on Exhibit A attached hereto.

## ARTICLE IV

All facilities are in place to render the service provided for in this Agreement.

## ARTICLE V

## QUALITY SPECIFICATIONS AND STANDARDS FOR MEASUREMENT

For all gas received, transported and delivered hereunder the Parties agree to the Quality Specifications and Standards for Measurement as specified in the General Terms and Conditions of Transporter's FERC Gas Tariff Volume No. 1. To the extent that no new measurement facilities are installed to provide service hereunder, measurement operations will continue in the manner in which they have previously been handled. In the event that such facilities are not operated by Transporter or a downstream pipeline, then responsibility for operations shall be deemed to be Shipper's.

## GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

### ARTICLE VI

#### RATES AND CHARGES FOR GAS TRANSPORTATION

6.1 TRANSPORTATION RATES - Commencing upon the effective date hereof, the rates, charges, and surcharges to be paid by Shipper to Transporter for the transportation service provided herein shall be in accordance with Transporter's Rate Schedule FT-A and the General Terms and Conditions of Transporter's FERC Gas Tariff. Except as provided to the contrary in any written or electronic agreement(s) between Transporter and Shipper in effect during the term of this Agreement. Shipper shall pay Transporter the applicable maximum rate(s) and all other applicable charges and surcharges specified in the Summary of Rates in Transporter's FERC Gas Tariff and in this Rate Schedule. Transporter and Shipper may agree that a specific discounted rate will apply only to certain volumes under the agreement. Transporter and Shipper may agree that a specified discounted rate will apply only to specified volumes (MDQ, TQ, commodity volumes, Extended Receipt and Delivery Service Volumes or Authorized Overrun volumes) under the Agreement: that a specified discounted rate will apply only if specified volumes are achieved (with the maximum rates applicable to volumes above the specified volumes or to all volumes if the specified volumes are never achieved); that a specified discounted rate will apply only during specified periods of the year or over a specifically defined period of time; that a specified discounted rate will apply only to specified points, zones, markets or other defined geographical area; and/or that a specified discounted rate will apply only to production or reserves committed or dedicated to Transporter. Transporter and Shipper may agree to a specified discounted rate pursuant to the provisions of this Section 6.1 provided that the discounted rate is between the applicable maximum and minimum rates for this service.

In addition, a discount agreement may include a provision that if one rate component which was at or below the applicable Maximum Rate at the time the discount agreement was executed subsequently exceeds the applicable Maximum Rate due to a change in Transporter's Maximum Rates so that such rate component must be adjusted downward to equal the new applicable Maximum Rate, then other rate components may be adjusted upward to achieve the agreed overall rate, as long as none of the resulting rate components exceed the Maximum Rate applicable to that rate component. Such changes to rate components shall be applied prospectively, commencing with the date a Commission Order accepts revised tariff sheet rates. However, nothing contained herein shall be construed to alter a refund obligation under applicable law for any period during which rates that had been charged under a discount agreement exceeded rates which ultimately are found to be just and reasonable.

- 6.2 INCIDENTAL CHARGES Shipper agrees to reimburse Transporter for any filing or similar fees, which have not been previously paid for by Shipper, which Transporter incurs in rendering service hereunder.
- 6.3 CHANGES IN RATES AND CHARGES Shipper agrees that Transporter shall have the unilateral right to file with the appropriate regulatory authority and make effective changes in (a) the rates and charges applicable to service pursuant to Transporter's Rate Schedule FT-A, (b) the rate schedule(s) pursuant to which service hereunder is rendered, or (c) any provision of the General Terms and Conditions applicable to those rate schedules. Transporter agrees that Shipper may protest or contest the aforementioned filings, or may seek authorization from duly constituted regulatory authorities for such

## GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

adjustment of Transporter's existing FERC Gas Tariff as may be found necessary to assure Transporter just and reasonable rates.

### ARTICLE VII

### BILLINGS AND PAYMENTS

Transporter shall bill and Shipper shall pay all rates and charges in accordance with Articles VII and VIII, respectively, of the General Terms and Conditions of the FERC Gas Tariff.

## ARTICLE VIII

### GENERAL TERMS AND CONDITIONS

This Agreement shall be subject to the effective provisions of Transporter's Rate Schedule FT-A and to the General Terms and Conditions incorporated therein, as the same may be changed or superseded from time to time in accordance with the rules and regulations of the FERC.

### ARTICLE IX

### REGULATION

- 9.1 This Agreement shall be subject to all applicable and lawful governmental statutes, orders, rules and regulations and is contingent upon the receipt and continuation of all necessary regulatory approvals or authorizations upon terms acceptable to Transporter. This Agreement shall be void and of no force and effect if any necessary regulatory approval is not so obtained or continued. All Parties hereto shall cooperate to obtain or continue all necessary approvals or authorizations, but no Party shall be liable to any other Party for failure to obtain or continue such approvals or authorizations.
- 9.2 The transportation service described herein shall be provided subject to Subpart G, Part 284 of the FERC Regulations.

#### ARTICLE X

### RESPONSIBILITY DURING TRANSPORTATION

Except as herein specified, the responsibility for gas during transportation shall be as stated in the General Terms and Conditions of Transporter's FERC Gas Tariff Volume No. 1.

#### ARTICLE XI

#### WARRANTIES

- 11.1 In addition to the warranties set forth in Article XI of the General Terms and Conditions of Transporter's FERC Gas Tariff, Shipper warrants the following:
  - (a) Shipper warrants that all upstream and downstream transportation arrangements are in place, or will be in place as of the requested effective date of service, and that it has advised the upstream and downstream transporters of the receipt and delivery points under this Agreement and any quantity limitations for each point

## GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

as specified on Exhibit "A" attached hereto. Shipper agrees to indemnify and hold Transporter harmless for refusal to transport gas hereunder in the event any upstream or downstream transporter fails to receive or deliver gas as contemplated by this Agreement.

- (b) Shipper agrees to indemnify and hold Transporter harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses (including reasonable attorneys fees) arising from or out of breach of any warranty by Shipper herein.
- 11.2 Transporter shall not be obligated to provide or continue service hereunder in the event of any breach of warranty.

## ARTICLE XII

#### TERM

- 12.1 This contract shall be effective as of 1 November, 2014 and shall remain in force and effect, unless modified as per Exhibit B, until 31 October, 2019 ('Primary Term') and on a month to month basis thereafter unless terminated by either Party upon at least thirty (30) days prior written notice to the other Party; provided, however, that if the Primary Term is less than one year, then notice of termination may be provided via Transporter's Interactive Website; provided further, that if the Primary Term is one year or more, then any rights to Shipper's extension of this Agreement after the Primary Term shall be governed by Article V, Section 4 of the General Terms and Conditions of Transporter's FERC Gas Tariff; and provided further, that if the FERC or other governmental body having jurisdiction over the service rendered pursuant to this Agreement authorizes abandonment of such service, this Agreement shall terminate on the abandonment date permitted by the FERC or such other governmental body.
- 12.2 Any portions of this Agreement necessary to resolve or cash out imbalances under this Agreement as required by the General Terms and Conditions of Transporter's Tariff shall survive the other parts of this Agreement until such time as such balancing has been accomplished; provided, however, that Transporter notifies Shipper of such imbalance not later than twelve months after the termination of this Agreement.
- 12.3 This Agreement will terminate automatically upon written notice from Transporter in the event Shipper fails to pay all of the amount of any bill for service rendered by Transporter hereunder in accord with the terms and conditions of Article VIII of the General Terms and Conditions of Transporter's FERC Gas Tariff.

#### ARTICLE XIII

#### NOTICE

Except as otherwise provided in the General Terms and Conditions applicable to this Agreement, any notice under this Agreement shall be in writing and mailed to the address of the Party intended to receive the same, as follows:

TRANSPORTER: Tennessee Gas Pipeline Company, L.L.C.

## GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

1001 Louisiana Street, Suite 1000 Houston, Texas 77002

Attention: Director, Transportation Services

#### SHIPPER:

NOTICES: COLUMBIA GAS OF KENTUCKY INC. P.O. BOX 117 200 CIVIC CENTER DRIVE COLUMBUS OH USA 43216-0117

- Attention: THOMAS HECKATHORN
- BILLING: COLUMBIA GAS OF KENTUCKY INC. P.O. BOX 117 200 CIVIC CENTER DRIVE COLUMBUS OH USA 43216-0117

#### Attention: THOMAS HECKATHORN

or to such other address as either Party shall designate by formal written notice to the other.

#### ARTICLE XIV

#### ASSIGNMENTS

- 14.1 Either Party may assign or pledge this Agreement and all rights and obligations hereunder under the provisions of any mortgage, deed of trust, indenture, or other instrument which it has executed or may execute hereafter as security for indebtedness. Either Party may, without relieving itself of its obligation under this Agreement, assign any of its rights hereunder to a company with which it is affiliated. Otherwise, Shipper shall not assign this Agreement or any of its rights hereunder, except in accord with Article VI, Section 1 of the General Terms and Conditions of Transporter's FERC Gas Tariff.
- 14.2 Any person which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of either Party hereto shall be entitled to the rights and shall be subject to the obligations of its predecessor in interest under this Agreement.

#### ARTICLE XV

#### MISCELLANEOUS

- 15.1 THE INTERPRETATION AND PERFORMANCE OF THIS CONTRACT SHALL BE IN ACCORDANCE WITH AND CONTROLLED BY THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO THE DOCTRINES GOVERNING CHOICE OF LAW.
- 15.2 If any provision of this Agreement is declared null and void, or voidable, by a court of competent jurisdiction, then that provision will be considered severable at either Party's option; and if the severability option is exercised, the remaining provisions of the Agreement shall remain in full force and effect.

## GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

- 15.3 Unless otherwise expressly provided in this Agreement or Transporter's Gas Tariff, no modification of or supplement to the terms and provisions stated in this Agreement shall be or become effective until Shipper has submitted a request for change through Transporter's Interactive Website and Shipper has been notified through Transporter's Interactive Website of Transporter's agreement to such change.
- 15.4 Exhibits "A" and "B" attached hereto are incorporated herein by reference and made a part hereof for all purposes.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed as of the date first hereinabove written.

TENNESSEE GAS PIPELINE COMPANY, L.L.C. BY: Agent and Attorney-in-Fact

COLUMBIA GAS OF KENTUCKY INC.

BY:

TITLE: V.

DATE: 10-31-14

GAS TRANSPORTATION AGREEMENT (For Use Under FT-A Rate Schedule)

#### EXHIBIT A AMENDMENT NO. 0 TO GAS TRANSPORTATION AGREEMENT DATED November 1, 2014 BETWEEN TENNESSEE GAS PIPELINE COMPANY, L.L.C. AND COLUMBIA GAS OF KENTUCKY INC.

Amendment Effective Date: November 1, 2014

Service Package: 308956-FTATGP

Service Package TQ: 20506 Dth

BEGINNING DATE	ENDING DATE	TQ
11/01/2014	10/31/2019	20506

BEGINNING DATE	ENDING DATE	METER	METER NAME	INTERCONNECT PARTY NAME	COUNTY	ST	ZONE	R/D	LEG	METER-TQ	
11/01/2014	10/31/2019	400459	COL GAS/TGP BROAD RUN COBB WV KANAW	COLUMBIA GAS TRNSM. CORP.	KANAWHA	WV	3	D	100	20506	
11/01/2014	10/31/2019	420999	POOLING PT - 500 LEG - ZONE L	TENNESSEE GAS PIPELINE	FORREST	MS	L	R	500	20506	

Total Receipt TQ 20506

Total Delivery TQ 20506

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 10 Page 7 of 10

Number of Receipt Points: 1

Number of Delivery Points: 1

Other Provisions Permitted By Tariff Under the Applicable Rate Schedule and/or General Terms and Conditions and Pursuant to Article XXXVI of the General Terms and Conditions of Tennessee's FERC Gas Tariff:

Note: Exhibit A is a reflection of the contract and all amendments as of the amendment effective date.

#### **Additional Information**

October 30, 2014

Columbia Gas of Kentucky 290 W. Nationwide Blvd. Columbus, OH 43215

Attention: Michael D. Anderson

RE: Discounted Rate Agreement Rate Schedule FT-A Service Package No. 308956

Dear Michael:

In response to the request of Columbia Gas of Kentucky ("CGKY") and pursuant to Section 5.1 of Tennessee Gas Pipeline Company, L.L.C.'s ("Tennessee") Rate Schedule FT-A, Tennessee hereby agrees to adjust its then applicable Rate Schedule FT-A transportation rates for service provided under the above-referenced gas transportation agreement as follows:

1. a) If CGKY attempts to apply this Discounted Rate Agreement to any volumes and/or to any points not eligible for the discount and thereby fails to pay correctly invoiced and undisputed amounts, then, if such failure is not cured within thirty days of provision of notice by Tennessee to CGKY of such failure, Tennessee shall have the right, in its sole discretion, to immediately terminate this Discounted Rate Agreement with CGKY and/or to assess, from the date of such violation of the terms of this Discounted Rate Agreement, the applicable maximum rate on all transactions occurring under the Service Package for the month(s) in which such limits were exceeded.

b) For the period commencing November 1, 2014, and extending through October 31, 2019, for gas delivered by Tennessee on behalf of CGKY to delivery meters 400459, 460017, 420049, and/or 420079 under the above referenced gas transportation agreement, the applicable Rate Schedule FT-A rates for volumes received by Tennessee from any Zone 1 or Zone L receipt meter will be:

i) A monthly reservation rate equal to the lesser of (i) \$4.5625 per Dth, or (ii) Tennessee's maximum applicable monthly reservation rate.

ii) A daily commodity rate equal to Tennessee's Maximum Applicable Commodity rate.

In addition to the reservation and commodity rates specified above, for deliveries to the "Dominion/TGP Broad Run Cornwell Kan" meter (#420044), CGKY shall pay an incremental daily reservation rate equal to \$0.0605 per Dth/day; provided, however, that CGKY's total obligation for monthly reservation charges and incremental daily reservation charges shall not exceed Tennessee's maximum applicable reservation rate, either on a daily or monthly basis.

Shipper shall also pay ACA, applicable Fuel and Loss Retention (F&LR) and Electric Power Cost Recovery (EPCR) charges and all applicable surcharges specified in Tennessee's currently effective FERC Gas Tariff ("Tariff").

c) Receipts from and/or deliveries to points other than those listed above during the term of this Discounted Rate Agreement shall result in CGKY being assessed Tennessee's maximum reservation rate under Rate Schedule FT-A for the primary path divided by the number of days in the month for the entire gas transportation agreement TQ on the day(s) of such deliveries and Tennessee's maximum daily commodity rates under Rate Schedule FT-A.

2. If any terms of this Discounted Rate Agreement are disallowed by any order, rulemaking, regulation or policy of the Federal Energy Regulatory Commission, Tennessee may immediately terminate this Discounted Rate Agreement. If any terms of this Discounted Rate Agreement are in any way modified by order, rulemaking, regulation or policy of the Federal Energy Regulatory Commission, Tennessee and CGKY may mutually agree to amend this Discounted Rate Agreement in order to ensure that the original commercial intent of the parties is preserved. In the event that the parties cannot achieve mutual agreement, Tennessee reserves the right to immediately terminate this Discounted Rate Agreement.

If CGKY is interested in entering into the Discounted Rate Agreement for firm capacity in accordance with the terms proposed above, please have the authorized representative of CGKY execute this Discounted Rate Agreement, and return to the undersigned. This Discounted Rate Agreement will become binding upon the parties only after it then is accepted and executed by Tennessee's authorized representative on the below "Agreed to and Accepted" portion. One fully executed copy will be returned for your records.

If an executed Discounted Rate Agreement is not returned via mail or facsimile to 713-369-9305 on or before five (5) working days from the date of the Discounted Rate Agreement, then the Discounted Rate Agreement is nullified, and CGKY will be billed Tennessee's maximum reservation and commodity rates under Rate Schedule FT-A.

Sincerely,

Mary Limbaugh Senior Account Manager

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KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 1 Attachment A Part 10 Page 9 of 10

AGREED TO AND ACCEPTED THIS 2 DAY OF 3 , 2014 TENNESSEE GAS PIPELINE COMPA	5
TENNESSEE GAS PIPELINE COMPAI	NY, L.L.C.
Ву:	M. EKo
Name:Sital Mody	-
Vice President, Marketing Title:	_

AGRE	ED TO AND ACCEPTED
THIS 3	DAY OF OCNISER, 2014
COLUME	BIA GAS OF KENTUCKY
	Mul plutze
By:	Mera pust 30
-	

Name: MICHARE D. WATSon Title: V.P.

# Interstate Pipeline Transportation and Storage Tariff URL Addresses

Columbia Gas Transmission, LLC

http://www.columbiapipeinfo.com/infopost/

http://www.hostedtariffs.com/tco/

Columbia Gulf Transmission Company

http://www.hostedtariffs.com/cgt/

Central Kentucky Transmission Company

http://www.hostedtariffs.com/cky/

Tennessee Gas Pipeline Company, L.L.C.

https://pipeline2.kindermorgan.com/Notices/NoticeDetail.aspx?code=TGP&notc\_nbr=350421

# CKY Demand Rates (Paid) Historical Period: 5 Years

Flow	СКТ	ТСО		CGT	TGP		
<u>Month</u>	<u>FTS</u>	SST	<u>FTS</u>	FSS (MDQ)	FSS (SCQ)	FTS-1	FTA
Jun-13	\$0.5090	\$4.1850	\$5.7280	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Jul-13	\$0.5090	\$4.1850	\$5.7280	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Aug-13	\$0.5090	\$4.1850	\$5.7280	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Sep-13	\$0.5090	\$4.1850	\$5.7280	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Oct-13	\$0.5090	\$4.1850	\$5.7280	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Nov-13	\$0.5090	\$4.1850	\$5.7280	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Dec-13	\$0.5090	\$4.1850	\$5.7830	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Jan-14	\$0.5090	\$4.1850	\$5.5220	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Feb-14	\$0.5090	\$4.1850	\$5.9140	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Mar-14	\$0.5090	\$4.1850	\$5.9140	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Apr-14	\$0.5090	\$4.1850	\$5.8530	\$1.5090	\$0.0289	\$4.2917	\$4.6238
May-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Jun-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Jul-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Aug-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Sep-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Oct-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6238
Nov-14	\$0.5090	\$4.1850	\$6.0680	\$1.5090	\$0.0289	\$4.2917	\$4.6028
Dec-14	\$0.5090	\$4.1850	\$5.8610	\$1.5090	\$0.0289	\$4.2917	\$4.6028
Jan-15	\$0.5090	\$4.1850	\$5.8610	\$1.5090	\$0.0289	\$4.2917	\$4.6028
Feb-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Mar-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Apr-15	\$0.5090	\$4.1850	\$6.1090	\$1.5010	\$0.0288	\$4.2917	\$4.6028
May-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Jun-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Jul-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Aug-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Sep-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Oct-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.6028
Nov-15	\$0.5090	\$4.1850	\$6.1310	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Dec-15	\$0.5090	\$4.1850	\$6.0950	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Jan-16	\$0.5090	\$4.1850	\$6.0950	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Feb-16	\$0.5090	\$4.1850	\$6.4200	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Mar-16	\$0.5090	\$4.1850	\$6.4200	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Apr-16	\$0.5090	\$4.1850	\$6.4050	\$1.5010	\$0.0288	\$4.2917	\$4.5823
May-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Jun-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Jul-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Aug-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Sep-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Oct-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.2917	\$4.5823
Nov-16	\$0.5090	\$4.1850	\$6.1900	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Dec-16	\$0.5090	\$4.1850	\$6.1360	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Jan-17	\$0.5090	\$4.1850	\$6.1360	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Feb-17	\$0.5090	\$4.1850	\$6.4280	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Mar-17	\$0.5090	\$4.1850	\$6.4280	\$1.5010	\$0.0288	\$4.1700	\$4.5835

KY PSC Case No. 2018-00253 Staff's Data Requests Sation Kentucky, Inc. KY PSC Case No. 2018-00150 Page 2 of 2 Staff's Order Appendix B Data Requests Set 1 No. 1 Attachment 1-C

# CKY Demand Rates (Paid) Historical Period: 5 Years

Flow CKT			TC	CGT	TGP		
<u>Month</u>	<u>FTS</u>	<u>SST</u>	<u>FTS</u>	FSS (MDQ)	FSS (SCQ)	<u>FTS-1</u>	<u>FTA</u>
Apr-17	\$0.5090	\$4.1850	\$6.3960	\$1.5010	\$0.0288	\$4.1700	\$4.5835
May-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Jun-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Jul-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Aug-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Sep-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Oct-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5835
Nov-17	\$0.5090	\$4.1850	\$6.4890	\$1.5010	\$0.0288	\$4.1700	\$4.5841
Dec-17	\$0.5090	\$4.1850	\$6.3610	\$1.5010	\$0.0288	\$4.1700	\$4.5841
Jan-18	\$0.5090	\$4.1850	\$5.9310	\$1.5010	\$0.0288	\$4.1700	\$4.5841
Feb-18	\$0.5090	\$4.1850	\$6.2250	\$1.5010	\$0.0288	\$4.1700	\$4.5841
Mar-18	\$0.5090	\$4.1850	\$6.2250	\$1.5010	\$0.0288	\$4.1700	\$4.5841
Apr-18	\$0.5090	\$4.1850	\$6.2560	\$1.5010	\$0.0288	\$4.1700	\$4.5841
May-18	\$0.5090	\$4.1850	\$6.2870	\$1.5010	\$0.0288	\$4.1700	\$4.5841
Jun-18	\$0.5090	\$4.1850	\$6.2870	\$1.5010	\$0.0288	\$4.1700	\$4.5841

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

2. Provide copies of all current contracts for commodity supply. Provide a comparison of the terms of these commodity supply arrangements with those that were utilized during the five previous calendar years. Provide an explanation of all efforts to ensure that commodity gas supply costs are/were the lowest possible cost, consistent with security of supply.

## **RESPONSE:**

- A) CONFIDENTIAL Attachment A contains all of the winter Transaction Confirmations for Term Gas Supply for the recent past winter period and the five previous winter periods.
- B) **CONFIDENTIAL** Attachment B is the comparison of the terms of the winter term commodity supply agreements for the past winter period and the 5 previous winter periods. The comparison shows that the last four winter periods were very similar with supplies being purchased at the interconnection between Columbia Transmission (TCO) and Tennessee Pipeline (TGP) at a location named Broad Run. Pricing and volumes are

included in the comparison. The 5<sup>th</sup> and 6<sup>th</sup> winter periods were purchased at the Columbia Gulf Mainline point and the TGP 500 Leg point. Volumes and pricing are included in the comparison. A competitive bidding process was utilized for each winter period and the least cost supplies were selected. Please refer to Set 1 No. 8 for the competitive bidding results and discussion.

C) CONFIDENTIAL Attachment C contains all to the Base Contracts for Purchase and Sale of Natural Gas (NAESB agreements) that govern all the standard contractual conditions that for all of the winter term suppliers in the last 6 winter periods that executed a winter Transaction Confirmation for Term Gas Supply. These are the agreements that are contained in CONFIDENTIAL Attachment A. KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 2

Attachments A, B, and C

CONFIDENTIAL - - FILED UNDER SEAL

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

3. Provide gas supply and capacity contract summaries showing significant contract terms, daily/monthly/annual entitlements, and pricing. Identify any capacity changes (renegotiated and expired agreements, de-contracting, assignment, or long-term release) that took place during the most recent year.

## **RESPONSE:**

- a) Attachment A provides a summary of all of Columbia's system supply gas purchases for the most recent year ending April 30, 2018. Each gas supply purchase is made on a contractual basis. Gas supply purchase terms may range from single or multiple days, up to single month or multiple months in length. The summary lists the term, volumes purchases and pricing.
- b) Please refer the response for Set 1 No. 1 that lists the Company's pipeline and storage capacity contracts for the most recent year and a comparison

of the previous five years. That response will also note any capacity changes over the six year period.

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
May-17	Spot	тсо	P1095251	8,000	\$2.9225
May-17	Spot	тсо	P1095251	8,000	\$3.0225
May-17	Spot	тсо	P1095251	74,400	\$2.9725
May-17	Spot	тсо	P1095251	15,000	\$3.0325
May-17	Spot	тсо	P1092609	6,300	\$3.0700
May-17	Spot	тсо	P1092609	1,000	\$3.0800
May-17	Spot	тсо	P1092609	5,000	\$3.0300
May-17	Spot	тсо	P1092609	12,000	\$3.0600
May-17	Spot	тсо	P1092609	6,000	\$3.0600
May-17	Spot	тсо	P1092609	2,000	\$3.0600
May-17	Spot	тсо	P1092609	28,000	\$2.9100
May-17	Spot	тсо	P1092609	28,000	\$2.9100
May-17	Spot	тсо	P1092609	24,000	\$2.9100
May-17	Spot	тсо	P1080968	5,000	\$3.0250
May-17	Spot	тсо	P1079296	20,000	\$2.8975
May-17	Spot	ТСО	P1079296	20,000	\$2.9225
May-17	Spot	тсо	P1079296	10,000	\$2.8950
May-17	Spot	тсо	P1079296	2,000	\$3.0700
May-17	Spot	ТСО	P1079296	7,500	\$2.9700
May-17	Spot	ТСО	P1079296	16,100	\$2.9700
May-17	Spot	ТСО	P1079296	8,500	\$3.0575
May-17	Spot	ТСО	P1079296	140,000	\$2.9700
May-17	Spot	ТСО	P1079296	15,000	\$2.9625
May-17	Spot	ТСО	P1079296	5,000	\$2.9250
May-17	Spot	ТСО	P1079249	5,000	\$2.9000
May-17	Spot	ТСО	P1079249	5,000	\$2.9000
May-17	Spot	ТСО	P1079249	5,000	\$3.0575
May-17	Spot	тсо	P1078372	1,700	\$2.9600
May-17	Spot	тсо	P1076592	900	\$2.9900
May-17	Spot	тсо	P1076592	700	\$2.9600
May-17	Spot	тсо	P1076592	1,600	\$2.9700
May-17	Spot	тсо	P1076592	20,000	\$2.9200
May-17	Spot	тсо	P1076592	20,000	\$2.9200
May-17	Spot	ТСО	P1073499	10,000	\$3.0775
May-17	Spot	тсо	P1073499	5,000	\$3.0700
May-17	Spot	ТСО	P1073499	600	\$3.0700
May-17	Spot	ТСО	P1073499	3,000	\$3.0525
May-17	Spot	ТСО	P1073499	5,000	\$3.0525
May-17	Spot	тсо	P1071797	5,000	\$2.9500
May-17	Spot	тсо	P1067231	1,800	\$2.9250
May-17	Spot	тсо	P1067231	6,700	\$2.9700
May-17	Spot	тсо	P1067231	10,000	\$3.0525
May-17	Spot	тсо	P1067231	4,300	\$3.0475
May-17	Spot	тсо	P1065954	1,200	\$3.0500
May-17	Spot	тсо	P1065954	7,400	\$2.9650

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
May-17	Spot	тсо	P1065954	4,600	\$2.9650
May-17	Spot	тсо	P1059911	17,500	\$2.9350
May-17	Spot	тсо	P1059911	10,000	\$3.0300
May-17	Spot	тсо	P1052927	5,000	\$2.9750
May-17	Spot	тсо	P1052927	5,000	\$3.0750
May-17	Spot	тсо	P1052927	5,000	\$3.0725
May-17	Spot	тсо	P1052927	5,000	\$3.0425
May-17	Spot	тсо	P1052927	1,000	\$3.0425
May-17	Spot	тсо	P1052927	10,000	\$3.0400
May-17	Spot	тсо	P1052927	5,000	\$3.0225
May-17	Spot	тсо	P1052927	5,000	\$3.0225
May-17	Spot	тсо	P1052927	4,000	\$3.0225
May-17	Spot	тсо	P1052927	5,000	\$2.9550
May-17	Spot	тсо	P1052927	4,600	\$2.9550
May-17	Spot	тсо	P1052927	17,300	\$2.9725
May-17	Spot	ТСО	P1052927	4,500	\$3.0300
May-17	Spot	ТСО	P1052927	5,000	\$3.0325
May-17	Spot	тсо	P1052927	5,000	\$3.0325
May-17	Spot	тсо	P1052927	2,700	\$2.9600
May-17	Spot	тсо	P1052927	5,000	\$2.9500
May-17	Spot	тсо	P1052927	5,000	\$2.9575
May-17	Spot	тсо	P1052927	5,000	\$2.9250
May-17	Spot	тсо	P1051667	4,800	\$2.9000
May-17	Spot	тсо	P1051667	5,000	\$3.0725
May-17	Spot	тсо	P1051667	5,000	\$2.9500
May-17	Spot	тсо	P1051667	5,000	\$2.9250
May-17	Spot	тсо	P1051667	7,900	\$2.9200
May-17	Spot	тсо	P1051535	5,000	\$2.9600
May-17	Spot	тсо	P1051535	5,000	\$3.0850
May-17	Spot	тсо	P1051535	400	\$2.9550
May-17	Spot	тсо	P1051535	22,800	\$2.9700
May-17	Spot	тсо	P1051535	5,000	\$2.9700
May-17	Spot	тсо	P1051219	10,000	\$3.0775
May-17	Spot	тсо	P1051219	10,000	\$3.0425
May-17	Spot	тсо	P1051219	2,000	\$3.0225
May-17	Spot	тсо	P1051219	10,000	\$2.9575
May-17	Spot	тсо	P1051219	2,000	\$2.9575
May-17	Spot	тсо	P1051219	36,000	\$2.9725
May-17	Spot	тсо	P1051219	12,000	\$3.0525
May-17	Spot	тсо	P1046727	3,600	\$2.9025
, May-17	Spot	тсо	P1043905	2,000	\$2.9575
, May-17	Spot	тсо	P1043905	9,300	\$2.9600
, May-17	Spot	тсо	P1043905	100	\$2.9650
May-17	Spot	тсо	P1043905	3,500	\$2.9600
May-17	Spot	TCO	P1043905	1,400	\$2.9300
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Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
May-17	Spot	тсо	P1043368	13,300	\$3.0300
May-17	Spot	тсо	P1041143	4,800	\$2.9700
May-17	Spot	тсо	P1039484	9,000	\$3.0000
May-17	Spot	тсо	P1039484	1,800	\$2.9600
May-17	Spot	тсо	P1037328	800	\$3.0300
May-17	Spot	тсо	P1037304	20,000	\$3.0225
May-17	Spot	тсо	P1037195	4,300	\$2.9625
May-17	Spot	тсо	P1037195	7,600	\$2.9200
May-17	Spot	тсо	P1036902	10,000	\$2.9850
May-17	Spot	тсо	P1036902	5,000	\$2.9050
May-17	Spot	тсо	P1036902	16,000	\$3.0300
May-17	Spot	тсо	P1036902	16,400	\$2.9200
May-17	Spot	тсо	P1032449	77,500	\$2.9550
May-17	Spot	тсо	P1023846	10,000	\$2.9650
May-17	Long Term	тсо	18-10	8,170	\$3.6700
Jun-17	Spot	тсо	P1095251	300	\$2.6875
Jun-17	Spot	тсо	P1092609	5,000	\$2.7625
Jun-17	Spot	тсо	P1092609	4,000	\$2.7625
Jun-17	Spot	тсо	P1079296	5,000	\$2.7350
Jun-17	Spot	тсо	P1079296	15,000	\$2.6800
Jun-17	Spot	тсо	P1079296	15,000	\$2.6775
Jun-17	Spot	тсо	P1079296	10,000	\$2.6775
Jun-17	Spot	тсо	P1079249	15,000	\$2.8200
Jun-17	Spot	тсо	P1079249	10,000	\$2.7875
Jun-17	Spot	тсо	P1073499	5,000	\$2.7250
Jun-17	Spot	тсо	P1070379	700	\$2.7750
Jun-17	Spot	тсо	P1067231	300,000	\$3.0550
Jun-17	Spot	тсо	P1067231	6,300	\$2.7700
Jun-17	Spot	тсо	P1067231	10,000	\$2.7425
Jun-17	Spot	тсо	P1065954	5,000	\$2.7400
Jun-17	Spot	тсо	P1065954	5,200	\$2.8400
Jun-17	Spot	тсо	P1059911	7,300	\$2.7000
Jun-17	Spot	тсо	P1059911	1,400	\$2.7000
Jun-17	Spot	тсо	P1051535	27,000	\$2.6800
Jun-17	Spot	тсо	P1051535	5,000	\$2.7850
Jun-17	Spot	тсо	P1051535	15,000	\$2.6950
Jun-17	Spot	тсо	P1051535	10,000	\$2.7800
Jun-17	Spot	тсо	P1051535	2,500	\$2.7600
Jun-17	Spot	тсо	P1051535	10,000	\$2.7600
Jun-17	Spot	тсо	P1051219	7,000	\$2.8350
Jun-17	Spot	тсо	P1047485	8,200	\$2.8975
Jun-17	Spot	тсо	P1046727	5,000	\$2.7550
Jun-17	Spot	тсо	P1043905	10,000	\$2.8600
Jun-17	Spot	тсо	P1043368	2,700	\$2.7000
Jun-17	Spot	тсо	P1041143	5,000	\$2.7450

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
Jun-17	Spot	тсо	P1039484	2,500	\$2.8050
Jun-17	Spot	тсо	P1039484	600	\$2.7725
Jun-17	Spot	тсо	P1037304	15,000	\$2.8200
Jun-17	Spot	тсо	P1037304	15,000	\$2.7600
Jun-17	Spot	тсо	P1036902	13,600	\$2.8500
Jun-17	Spot	тсо	P1036902	5,000	\$2.6800
Jun-17	Spot	тсо	P1035548	5,000	\$2.8300
Jun-17	Spot	тсо	P1035548	5,000	\$2.7775
Jun-17	Spot	тсо	P1035548	5,000	\$2.7775
Jun-17	Spot	тсо	P1035548	3,300	\$2.7775
Jun-17	Spot	тсо	P1035548	5,000	\$2.7775
Jun-17	Spot	тсо	P1035548	15,000	\$2.7200
Jun-17	Spot	тсо	P1022275	10,200	\$2.8350
Jun-17	Spot	тсо	P1022275	4,900	\$2.7650
Jun-17	Spot	тсо	P1022275	5,000	\$2.6825
Jun-17	Long Term	тсо	18-10	5,393	\$3.7600
Jul-17	Spot	тсо	P1095251	15,000	\$2.8075
Jul-17	Spot	тсо	P1095251	45,000	\$2.9025
Jul-17	Spot	тсо	P1095251	8,000	\$2.7975
Jul-17	Spot	тсо	P1095251	7,000	\$2.7975
Jul-17	Spot	тсо	P1095251	6,000	\$2.8175
Jul-17	Spot	тсо	P1095251	27,000	\$2.8175
Jul-17	Spot	тсо	P1092609	5,000	\$2.7200
Jul-17	Spot	тсо	P1092609	15,000	\$2.7475
Jul-17	Spot	тсо	P1092609	5,000	\$2.8075
Jul-17	Spot	тсо	P1092609	20,000	\$2.9600
Jul-17	Spot	тсо	P1092609	45,000	\$2.9025
Jul-17	Spot	тсо	P1092609	5,000	\$2.8075
Jul-17	Spot	тсо	P1092609	5,000	\$2.7875
Jul-17	Spot	тсо	P1092609	5,000	\$2.7975
Jul-17	Spot	тсо	P1079296	25,000	\$2.7225
Jul-17	Spot	тсо	P1079296	25,000	\$2.7225
Jul-17	Spot	тсо	P1079296	5,000	\$2.7200
Jul-17	Spot	тсо	P1079296	5,000	\$2.7200
Jul-17	Spot	тсо	P1079296	125,000	\$2.6800
Jul-17	Spot	тсо	P1079296	13,746	\$2.7450
Jul-17	Spot	тсо	P1079296	3,582	\$2.7850
Jul-17	Spot	тсо	P1079296	3,582	\$2.8450
Jul-17	Spot	тсо	P1079296	3,582	\$2.8050
Jul-17	Spot	тсо	P1079296	25,000	\$2.8075
Jul-17	Spot	тсо	P1079296	9,246	\$2.8100
Jul-17	Spot	тсо	P1079296	72,300	\$2.8125
Jul-17	Spot	тсо	P1079296	60,000	\$2.8125
Jul-17	Spot	тсо	P1079296	2,082	\$2.8900
Jul-17	Spot	тсо	P1079296	20,000	\$2.8925

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Jul-17	Spot	TCO	P1079296	700	\$2.8925
Jul-17	Spot	TCO	P1079296	2,082	\$2.9550
Jul-17	Spot	TCO	P1079296	2,082	\$2.9600
Jul-17	Spot	TCO	P1079296	2,082	\$2.9650
Jul-17	Spot	тсо	P1079296	7,746	\$2.9000
Jul-17	Spot	TCO	P1079296	75,828	\$2.9025
Jul-17	Spot	TCO	P1079296	2,082	\$2.8050
Jul-17	Spot	TCO	P1079296	15,500	\$2.8075
Jul-17	Spot	тсо	P1079296	2,082	\$2.7850
Jul-17	Spot	тсо	P1079296	2,082	\$2.7750
Jul-17	Spot	тсо	P1079296	2,082	\$2.7950
Jul-17	Spot	TCO	P1079296	5,164	\$2.8150
Jul-17	Spot	TCO	P1079296	2,614	\$2.8150
Jul-17	Spot	тсо	P1079296	48,300	\$2.8175
Jul-17	Spot	TCO	P1078372	18,000	\$2.7475
Jul-17	Spot	TCO	P1078372	15,000	\$2.7475
Jul-17	Spot	TCO	P1073499	20,000	\$2.9650
Jul-17	Spot	TCO	P1073499	10,000	\$2.8075
Jul-17	Spot	тсо	P1073499	14,700	\$2.8075
Jul-17	Spot	тсо	P1071797	20,000	\$2.7000
Jul-17	Spot	TCO	P1070349	3,000	\$2.8075
Jul-17	Spot	тсо	P1067231	387,500	\$2.8650
Jul-17	Spot	тсо	P1067231	10,800	\$2.7500
Jul-17	Spot	тсо	P1067231	4,000	\$2.9475
Jul-17	Spot	тсо	P1067231	100,000	\$2.8850
Jul-17	Spot	тсо	P1067231	12,800	\$2.9525
Jul-17	Spot	тсо	P1067231	10,700	\$2.9525
Jul-17	Spot	TCO	P1067231	31,000	\$2.9500
Jul-17	Spot	TCO	P1067231	4,000	\$2.8025
Jul-17	Spot	TCO	P1067231	2,500	\$2.7950
Jul-17	Spot	TCO	P1067231	1,500	\$2.7750
Jul-17	Spot	TCO	P1064940	5,000	\$2.7375
Jul-17	Spot	TCO	P1059911	500	\$2.8475
Jul-17	Spot	тсо	P1059911	5,000	\$2.9450
Jul-17	Spot	TCO	P1059911	6,600	\$2.9600
Jul-17	Spot	TCO	P1059911	1,000	\$2.7725
Jul-17	Spot	тсо	P1054533	3,000	\$2.7900
Jul-17	Spot	тсо	P1052927	4,382	\$2.8125
Jul-17	Spot	тсо	P1052927	600	\$2.9600
Jul-17	Spot	тсо	P1052927	5,000	\$2.7875
Jul-17	Spot	тсо	P1051667	15,000	\$2.7500
Jul-17	Spot	тсо	P1051535	15,400	\$2.8475
Jul-17	Spot	тсо	P1051535	19,300	\$2.8925
Jul-17	Spot	тсо	P1051535	5,300	\$2.8925
Jul-17	Spot	тсо	P1051535	6,100	\$2.9600

Flow	Supply		Receipt	Purchase	Purchase
Month	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
Jul-17	Spot	TCO	P1051535	5,000	\$2.8050
Jul-17	Spot	тсо	P1051535	4,000	\$2.7900
Jul-17	Spot	ТСО	P1051219	42,000	\$2.7475
Jul-17	Spot	тсо	P1051219	42,000	\$2.9025
Jul-17	Spot	тсо	P1051219	500	\$2.8075
Jul-17	Spot	ТСО	P1051219	7,000	\$2.7975
Jul-17	Spot	тсо	P1051219	42,000	\$2.8175
Jul-17	Spot	тсо	P1049631	5,000	\$2.7550
Jul-17	Spot	тсо	P1047485	25,000	\$2.7225
Jul-17	Spot	тсо	P1047485	1,700	\$2.7875
Jul-17	Spot	тсо	P1046727	15,000	\$2.7500
Jul-17	Spot	тсо	P1046727	2,800	\$2.9450
Jul-17	Spot	тсо	P1046727	5,000	\$2.9600
Jul-17	Spot	тсо	P1046727	100	\$2.7825
Jul-17	Spot	тсо	P1043905	5,000	\$2.7525
Jul-17	Spot	тсо	P1043905	6,000	\$2.8050
Jul-17	Spot	тсо	P1043905	800	\$2.7950
Jul-17	Spot	тсо	P1043905	3,400	\$2.7750
Jul-17	Spot	тсо	P1037328	1,100	\$2.8000
Jul-17	Spot	тсо	P1037304	3,600	\$2.9675
Jul-17	Spot	тсо	P1037304	15,000	\$2.8850
Jul-17	Spot	тсо	P1036902	1,200	\$2.8125
Jul-17	Spot	тсо	P1030126	12,000	\$2.7475
Jul-17	Spot	тсо	P1022275	2,100	\$2.6750
Jul-17	Spot	тсо	P1022275	3,800	\$2.7825
Jul-17	Spot	тсо	P1022275	8,300	\$2.7875
Jul-17	Spot	тсо	P1022275	10,000	\$2.7875
Jul-17	Spot	тсо	P1022275	10,000	\$2.7975
Jul-17	Long Term	тсо	18-10	4,110	\$3.5700
Aug-17	Spot	тсо	P1095251	10,000	\$2.6775
Aug-17	Spot	тсо	P1095251	700	\$2.6425
Aug-17	Spot	тсо	P1095251	10,000	\$2.6275
Aug-17	Spot	тсо	P1095251	8,000	\$2.6275
Aug-17	Spot	тсо	P1095251	6,000	\$2.8125
Aug-17	Spot	тсо	P1095251	15,000	\$2.8125
Aug-17	Spot	тсо	P1095251	15,000	\$2.8225
Aug-17	Spot	тсо	P1095251	45,000	\$2.7175
Aug-17	Spot	тсо	P1095251	30,000	\$2.7175
Aug-17	Spot	тсо	P1095251	15,000	\$2.7875
Aug-17	Spot	тсо	P1095251	11,600	\$2.7775
Aug-17	Spot	тсо	P1092609	2,800	\$2.7000
Aug-17	Spot	TCO	P1079296	620,000	\$2.7750
Aug-17	Spot	TCO	P1079296	10,000	\$2.7000
Aug-17	Spot	тсо	P1079296	10,000	\$2.7000
Aug-17	Spot	тсо	P1079296	5,000	\$2.6750

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Aug-17	Spot	тсо	P1079296	6,600	\$2.6425
Aug-17	Spot	тсо	P1079296	10,000	\$2.6425
Aug-17	Spot	тсо	P1079296	15,000	\$2.7175
Aug-17	Spot	тсо	P1079296	10,000	\$2.7175
Aug-17	Spot	тсо	P1079296	10,000	\$2.7150
Aug-17	Spot	тсо	P1079296	25,000	\$2.7425
Aug-17	Spot	тсо	P1079296	74,600	\$2.7850
Aug-17	Spot	тсо	P1079296	60,000	\$2.7175
Aug-17	Spot	тсо	P1079296	15,000	\$2.7475
Aug-17	Spot	тсо	P1076592	3,600	\$2.6400
Aug-17	Spot	тсо	P1073499	20,000	\$2.6475
Aug-17	Spot	тсо	P1073499	20,000	\$2.6475
Aug-17	Spot	тсо	P1073499	5,000	\$2.7825
Aug-17	Spot	тсо	P1073499	3,400	\$2.7775
Aug-17	Spot	тсо	P1073499	700	\$2.7150
Aug-17	Spot	тсо	P1071797	5,000	\$2.8200
Aug-17	Spot	тсо	P1071797	5,000	\$2.8200
Aug-17	Spot	тсо	P1071797	5,000	\$2.8200
Aug-17	Spot	тсо	P1070349	5,500	\$2.6775
Aug-17	Spot	тсо	P1070349	6,100	\$2.8000
Aug-17	Spot	тсо	P1067231	5,000	\$2.6875
Aug-17	Spot	тсо	P1067231	150,000	\$2.6700
Aug-17	Spot	тсо	P1067231	10,000	\$2.6325
Aug-17	Spot	тсо	P1067231	2,500	\$2.8200
Aug-17	Spot	тсо	P1067231	1,600	\$2.6850
Aug-17	Spot	тсо	P1065954	9,000	\$2.6775
Aug-17	Spot	тсо	P1065954	5,000	\$2.7850
Aug-17	Spot	тсо	P1063575	20,000	\$2.6500
Aug-17	Spot	тсо	P1059911	900	\$2.7000
Aug-17	Spot	тсо	P1052927	5,500	\$2.6775
Aug-17	Spot	тсо	P1052927	900	\$2.6100
Aug-17	Spot	тсо	P1052927	3,600	\$2.6100
Aug-17	Spot	тсо	P1052927	4,600	\$2.8625
Aug-17	Spot	тсо	P1051667	1,800	\$2.6900
Aug-17	Spot	тсо	P1051667	5,000	\$2.6900
Aug-17	Spot	тсо	P1051667	15,000	\$2.8625
Aug-17	Spot	тсо	P1051535	5,000	\$2.6900
Aug-17	Spot	тсо	P1051535	3,500	\$2.6650
Aug-17	Spot	тсо	P1051535	6,500	\$2.6400
Aug-17	Spot	тсо	P1051535	3,000	\$2.7975
Aug-17	Spot	тсо	P1051219	7,000	\$2.6425
Aug-17	Spot	тсо	P1051219	7,000	\$2.6275
Aug-17	Spot	тсо	P1051219	10,000	\$2.7825
Aug-17	Spot	тсо	P1051219	36,600	\$2.7925
Aug-17	Spot	ТСО	P1051219	6,400	\$2.8125

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Aug-17	Spot	тсо	P1049631	30,000	\$2.6300
Aug-17	Spot	тсо	P1049631	13,200	\$2.6300
Aug-17	Spot	тсо	P1046727	5,000	\$2.6900
Aug-17	Spot	тсо	P1046727	5,000	\$2.6900
Aug-17	Spot	тсо	P1046727	3,200	\$2.6900
Aug-17	Spot	тсо	P1046727	2,600	\$2.6400
Aug-17	Spot	тсо	P1046727	2,200	\$2.7000
Aug-17	Spot	тсо	P1043905	15,000	\$2.6975
Aug-17	Spot	тсо	P1043905	3,400	\$2.8200
Aug-17	Spot	TCO	P1043147	700	\$2.6425
Aug-17	Spot	тсо	P1039484	5,000	\$2.6250
Aug-17	Spot	TCO	P1039484	5,000	\$2.6250
Aug-17	Spot	TCO	P1039484	5,000	\$2.8200
Aug-17	Spot	TCO	P1039484	5,000	\$2.8200
Aug-17	Spot	тсо	P1037328	4,100	\$2.8300
Aug-17	Spot	TCO	P1037304	10,000	\$2.6775
Aug-17	Spot	тсо	P1037304	30,000	\$2.6175
Aug-17	Spot	тсо	P1037304	10,000	\$2.6425
Aug-17	Spot	тсо	P1037304	10,000	\$2.6275
Aug-17	Spot	ТСО	P1037304	10,000	\$2.7175
Aug-17	Spot	тсо	P1037304	10,000	\$2.7425
Aug-17	Spot	тсо	P1037304	9,700	\$2.8075
Aug-17	Spot	TCO	P1037304	5,900	\$2.8475
Aug-17	Spot	TCO	P1037304	10,000	\$2.7825
Aug-17	Spot	TCO	P1037304	10,000	\$2.8125
Aug-17	Spot	TCO	P1037304	10,000	\$2.8625
Aug-17	Spot	TCO	P1037304	10,000	\$2.8125
Aug-17	Spot	TCO	P1037304	10,000	\$2.8225
Aug-17	Spot	TCO	P1037304	30,000	\$2.7175
Aug-17	Spot	TCO	P1037304	10,000	\$2.7875
Aug-17	Spot	TCO	P1037304	10,000	\$2.7775
Aug-17	Spot	TCO	P1037304	10,000	\$2.7475
Aug-17	Spot	TCO	P1037304	10,000	\$2.6775
Aug-17	Spot	TCO	P1037304	15,000	\$2.6775
Aug-17	Spot	TCO	P1037304	5,200	\$2.6775
Aug-17	Spot	TCO	P1037304	10,000	\$2.6775
Aug-17	Spot	TCO	P1037304	6,500	\$2.6775
Aug-17	Spot	TCO	P1037304	49,500	\$2.6175
Aug-17	Spot	TCO	P1037304	5,000	\$2.6000
Aug-17	Spot	TCO	P1036902	4,700	\$2.6450
Aug-17	Spot	TCO	P1030126	5,100	\$2.6400
Aug-17	Spot	TCO	P1030126	1,000	\$2.8200
Aug-17	Spot	TCO	P1022275	2,200	\$2.6300
Aug-17	Spot	TCO	P1022275	5,000	\$2.6425
Aug-17	Long Term	тсо	18-10	3,880	\$3.4800

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Sep-17	Spot	тсо	P1095251	10,000	\$2.7500
Sep-17	Spot	тсо	P1092609	5,000	\$2.6900
Sep-17	Spot	тсо	P1092609	13,300	\$2.7525
Sep-17	Spot	тсо	P1092609	500	\$2.8650
Sep-17	Spot	тсо	P1092609	15,000	\$2.9375
Sep-17	Spot	тсо	P1092609	15,000	\$2.8875
Sep-17	Spot	тсо	P1092609	1,000	\$2.8275
Sep-17	Spot	тсо	P1092609	1,000	\$2.8325
Sep-17	Spot	тсо	P1079353	9,000	\$2.7050
Sep-17	Spot	тсо	P1079353	14,800	\$2.8425
Sep-17	Spot	тсо	P1079353	2,000	\$2.7525
Sep-17	Spot	тсо	P1079296	5,000	\$2.7225
Sep-17	Spot	тсо	P1079296	5,000	\$2.7200
Sep-17	Spot	тсо	P1079296	30,000	\$2.6500
Sep-17	Spot	тсо	P1079296	14,300	\$2.7625
Sep-17	Spot	тсо	P1078697	20,000	\$2.6700
Sep-17	Spot	тсо	P1073499	15,000	\$2.7225
Sep-17	Spot	тсо	P1073499	15,000	\$2.7225
Sep-17	Spot	тсо	P1073499	1,500	\$2.8425
Sep-17	Spot	тсо	P1073499	700	\$2.8625
Sep-17	Spot	тсо	P1070349	4,500	\$2.7000
Sep-17	Spot	тсо	P1067231	6,000	\$2.6600
Sep-17	Spot	тсо	P1067231	7,500	\$2.8700
Sep-17	Spot	тсо	P1052927	1,000	\$2.7050
Sep-17	Spot	тсо	P1052927	12,400	\$2.7100
Sep-17	Spot	тсо	P1052927	4,700	\$2.7625
Sep-17	Spot	тсо	P1052927	1,000	\$2.7625
Sep-17	Spot	тсо	P1051667	12,800	\$2.7100
Sep-17	Spot	тсо	P1051667	1,700	\$2.7525
Sep-17	Spot	тсо	P1051667	2,500	\$2.8725
Sep-17	Spot	тсо	P1051667	2,500	\$2.8725
Sep-17	Spot	тсо	P1051667	19,600	\$2.7650
Sep-17	Spot	тсо	P1051535	20,000	\$2.7600
Sep-17	Spot	ТСО	P1051219	20,000	\$2.7275
Sep-17	Spot	тсо	P1051219	14,000	\$2.7075
Sep-17	Spot	тсо	P1051219	4,700	\$2.8425
Sep-17	Spot	ТСО	P1051219	14,000	\$2.8275
Sep-17	Spot	ТСО	P1051219	14,000	\$2.8325
Sep-17	Spot	тсо	P1051219	28,000	\$2.7525
Sep-17	Spot	тсо	P1046727	40,000	\$2.7050
Sep-17	Spot	тсо	P1043905	7,500	\$2.6400
Sep-17	Spot	тсо	P1043905	7,500	\$2.6400
Sep-17	Spot	тсо	P1043368	200	\$2.7400
Sep-17	Spot	тсо	P1037304	5,000	\$2.8150
Sep-17	Spot	тсо	P1035548	15,000	\$2.6475

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Sep-17	Spot	тсо	P1035548	15,000	\$2.6475
Sep-17	Spot	тсо	P1031037	149,057	\$2.7750
Sep-17	Spot	тсо	P1023238	3,600	\$2.7800
Sep-17	Spot	тсо	P1022275	10,000	\$2.8200
Sep-17	Long Term	тсо	18-10	4,970	\$3.4800
Oct-17	Spot	тсо	P1092609	2,400	\$2.5975
Oct-17	Spot	тсо	P1092609	2,200	\$2.6825
Oct-17	Spot	тсо	P1092609	2,200	\$2.6650
Oct-17	Spot	тсо	P1079296	248,000	\$2.7575
Oct-17	Spot	тсо	P1079296	154,400	\$2.7000
Oct-17	Spot	тсо	P1079296	2,500	\$2.4350
Oct-17	Spot	тсо	P1078697	3,100	\$2.4000
Oct-17	Spot	тсо	P1078697	4,200	\$2.6825
Oct-17	Spot	тсо	P1071797	5,000	\$2.6775
Oct-17	Spot	тсо	P1070349	6,900	\$2.6675
Oct-17	Spot	тсо	P1067231	7,500	\$2.6450
Oct-17	Spot	тсо	P1067231	10,000	\$2.6450
Oct-17	Spot	тсо	P1067231	2,800	\$2.6775
Oct-17	Spot	тсо	P1060039	1,400	\$2.6700
Oct-17	Spot	тсо	P1060039	5,000	\$2.6700
Oct-17	Spot	тсо	P1054533	7,500	\$2.5650
Oct-17	Spot	тсо	P1052927	15,400	\$2.6425
Oct-17	Spot	тсо	P1051535	13,600	\$2.6825
Oct-17	Spot	тсо	P1051219	9,000	\$2.6825
Oct-17	Spot	тсо	P1049631	10,000	\$2.6725
Oct-17	Spot	тсо	P1043905	5,000	\$2.6750
Oct-17	Spot	тсо	P1043368	200	\$2.5000
Oct-17	Spot	тсо	P1043368	5,000	\$2.4600
Oct-17	Spot	тсо	P1043368	600	\$2.5650
Oct-17	Spot	тсо	P1037304	2,500	\$2.4375
Oct-17	Spot	тсо	P1037304	30,000	\$2.7600
Oct-17	Spot	тсо	P1037304	10,000	\$2.7600
Oct-17	Spot	тсо	P1036902	10,000	\$2.6650
Oct-17	Spot	тсо	P1036902	4,300	\$2.6675
Oct-17	Long Term	тсо	18-10	7,881	\$3.4600
Nov-17	Spot	тсо	P1079249	600	\$2.9375
Nov-17	Spot	тсо	P1079249	5,000	\$2.9375
Nov-17	Spot	тсо	P1079249	5,000	\$2.9375
Nov-17	Spot	тсо	P1079249	5,000	\$2.9375
Nov-17	Spot	тсо	P1079249	5,000	\$2.9375
Nov-17	Spot	тсо	P1079249	5,000	\$2.9375
Nov-17	Spot	тсо	P1079249	5,000	\$2.9375
Nov-17	Spot	тсо	P1079249	20,000	\$2.8800
Nov-17	Spot	тсо	P1079249	20,000	\$2.8800
Nov-17	Spot	тсо	P1071797	5,000	\$2.9725

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
Nov-17	Spot	тсо	P1071797	3,600	\$2.7300
Nov-17	Spot	тсо	P1071797	5,000	\$2.6500
Nov-17	Spot	тсо	P1071797	2,500	\$2.7625
Nov-17	Spot	тсо	P1070349	7,500	\$2.9500
Nov-17	Spot	тсо	P1070349	1,400	\$2.9500
Nov-17	Spot	тсо	P1070349	5,000	\$2.8650
Nov-17	Spot	тсо	P1070349	5,000	\$2.8650
Nov-17	Spot	тсо	P1070349	900	\$2.8650
Nov-17	Spot	тсо	P1067231	30,000	\$2.9975
Nov-17	Spot	тсо	P1067231	25,000	\$2.7950
Nov-17	Spot	тсо	P1067231	10,000	\$2.7150
Nov-17	Spot	тсо	P1067231	5,000	\$2.6650
Nov-17	Spot	тсо	P1065954	3,700	\$2.6500
Nov-17	Spot	тсо	P1057831	15,000	\$2.9950
Nov-17	Spot	тсо	P1057831	15,000	\$2.9950
Nov-17	Spot	тсо	P1051667	11,700	\$2.9950
Nov-17	Spot	тсо	P1051667	10,000	\$2.9400
Nov-17	Spot	тсо	P1051667	1,600	\$2.9325
Nov-17	Spot	тсо	P1051667	25,000	\$2.7950
Nov-17	Spot	тсо	P1051667	25,000	\$2.7950
Nov-17	Spot	тсо	P1051667	25,000	\$2.8000
Nov-17	Spot	тсо	P1051667	25,000	\$2.8000
Nov-17	Spot	тсо	P1051535	25,000	\$2.8000
Nov-17	Spot	тсо	P1049631	17,100	\$2.9250
Nov-17	Spot	тсо	P1049631	2,900	\$2.9250
Nov-17	Spot	тсо	P1049631	5,000	\$2.9250
Nov-17	Spot	тсо	P1049631	5,000	\$2.9250
Nov-17	Spot	тсо	P1049631	5,000	\$2.8650
Nov-17	Spot	тсо	P1049631	5,000	\$2.8650
Nov-17	Spot	тсо	P1049631	5,000	\$2.8650
Nov-17	Spot	тсо	P1049631	2,100	\$2.8650
Nov-17	Spot	тсо	P1046727	6,000	\$2.3800
Nov-17	Spot	тсо	P1046727	3,400	\$2.9325
Nov-17	Spot	тсо	P1046727	4,400	\$2.9250
Nov-17	Spot	тсо	P1046727	12,500	\$2.7500
Nov-17	Spot	тсо	P1043905	20,000	\$2.9350
Nov-17	Spot	тсо	P1039484	5,000	\$2.8650
Nov-17	Spot	тсо	P1039484	5,000	\$2.8650
Nov-17	Spot	тсо	P1039484	5,000	\$2.7625
Nov-17	Spot	тсо	P1037304	7,500	\$2.9650
Nov-17	Spot	тсо	P1037304	1,300	\$2.9650
Nov-17	Spot	TCO	P1037304	10,000	\$2.9800
Nov-17	Spot	тсо	P1037304	5,000	\$2.8000
Nov-17	Spot	тсо	P1036902	30,000	\$2.9900
Nov-17	Spot	тсо	P1036902	15,000	\$2.9800

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
Nov-17	Spot	тсо	P1036902	5,000	\$2.8650
Nov-17	Spot	тсо	P1030126	5,400	\$2.9700
Nov-17	Spot	тсо	P1030126	1,800	\$2.9700
Nov-17	Spot	тсо	P1022275	30,000	\$2.9125
Nov-17	Spot	тсо	P1002252	3,000	\$2.9125
Nov-17	Short Term	тсо	B9	174,000	\$2.3800
Nov-17	Long Term	тсо	18-10	20,168	\$3.1400
Dec-17	Spot	тсо	P1098560	1,700	\$2.5100
Dec-17	Spot	тсо	P1079296	40,000	\$2.4375
Dec-17	Spot	тсо	P1079296	20,000	\$2.3800
Dec-17	Spot	тсо	P1079249	18,500	\$2.8400
Dec-17	Spot	тсо	P1079249	20,000	\$2.6000
Dec-17	Spot	тсо	P1076592	1,500	\$2.7200
Dec-17	Spot	тсо	P1076592	5,000	\$2.6650
Dec-17	Spot	тсо	P1076592	7,700	\$2.6300
Dec-17	Spot	тсо	P1073499	6,000	\$2.9000
Dec-17	Spot	тсо	P1070349	30,000	\$2.7150
Dec-17	Spot	тсо	P1070349	5,000	\$2.6600
Dec-17	Spot	тсо	P1067231	25,500	\$2.7100
Dec-17	Spot	тсо	P1067231	18,000	\$2.6150
Dec-17	Spot	тсо	P1067231	15,000	\$2.6175
Dec-17	Spot	тсо	P1067231	39,200	\$2.4600
Dec-17	Spot	тсо	P1067231	1,600	\$2.4600
Dec-17	Spot	тсо	P1067231	19,200	\$2.4600
Dec-17	Spot	тсо	P1065954	2,000	\$2.6450
Dec-17	Spot	тсо	P1059650	5,200	\$2.5475
Dec-17	Spot	тсо	P1059650	800	\$2.5475
Dec-17	Spot	тсо	P1054533	8,300	\$2.5000
Dec-17	Spot	тсо	P1051667	9,000	\$2.6550
Dec-17	Spot	тсо	P1051667	10,000	\$2.6550
Dec-17	Spot	тсо	P1051535	4,500	\$2.5475
Dec-17	Spot	тсо	P1051535	3,000	\$2.5475
Dec-17	Spot	тсо	P1049631	5,200	\$2.6650
Dec-17	Spot	тсо	P1049631	10,000	\$2.6200
Dec-17	Spot	тсо	P1046727	15,000	\$2.7000
Dec-17	Spot	тсо	P1046727	1,000	\$2.6550
Dec-17	Spot	тсо	P1043905	1,200	\$2.6650
Dec-17	Spot	тсо	P1043905	400	\$2.5425
Dec-17	Spot	тсо	P1043368	3,400	\$2.6750
Dec-17	Spot	тсо	P1043368	5,600	\$2.5100
Dec-17	Spot	тсо	P1043147	300	\$2.5475
Dec-17	Spot	тсо	P1037328	3,000	\$2.5900
Dec-17	Spot	тсо	P1037328	4,600	\$2.5900
Dec-17	Spot	тсо	P1037304	4,300	\$2.7200
Dec-17	Spot	тсо	P1036902	10,300	\$2.6450

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
Dec-17	Spot	тсо	P1023238	700	\$2.5050
Dec-17	Spot	тсо	P1002252	1,400	\$2.6625
Dec-17	Spot	тсо	P1002252	1,100	\$2.5875
Dec-17	Spot	TCO	P1002252	2,500	\$2.5425
Dec-17	Short Term	TCO	B9	186,000	\$2.8500
Dec-17	Long Term	TCO	18-10	41,065	\$3.6100
Jan-18	Spot	TCO	P1079296	30,000	\$3.0550
Jan-18	Spot	TCO	P1079296	18,700	\$3.0025
Jan-18	Spot	тсо	P1079249	1,700	\$2.9200
Jan-18	Spot	тсо	P1078887	4,800	\$2.7000
Jan-18	Spot	тсо	P1078756	8,000	\$3.3900
Jan-18	Spot	тсо	P1073499	5,000	\$2.8150
Jan-18	Spot	тсо	P1067231	4,385	\$3.4600
Jan-18	Spot	тсо	P1067231	5,000	\$3.5250
Jan-18	Spot	тсо	P1067231	13	\$3.0000
Jan-18	Spot	тсо	P1067231	19,800	\$3.0725
Jan-18	Spot	тсо	P1065954	500	\$3.1500
Jan-18	Spot	тсо	P1060039	30,000	\$3.0850
Jan-18	Spot	ТСО	P1060039	30,000	\$3.0750
Jan-18	Spot	ТСО	P1059911	2,900	\$3.1700
Jan-18	Spot	ТСО	P1051667	30,000	\$2.9500
Jan-18	Spot	ТСО	P1051535	5,000	\$3.4000
Jan-18	Spot	ТСО	P1051535	6,000	\$2.9450
Jan-18	Spot	ТСО	P1046727	6,000	\$3.1500
Jan-18	Spot	тсо	P1043905	2,700	\$2.9150
Jan-18	Spot	тсо	P1043905	6,400	\$3.0750
Jan-18	Spot	тсо	P1043905	1,300	\$3.1650
Jan-18	Spot	ТСО	P1039484	300	\$2.9450
Jan-18	Spot	тсо	P1037304	5,000	\$3.5250
Jan-18	Spot	тсо	P1037304	30,000	\$2.9650
Jan-18	Spot	тсо	P1037304	8,700	\$2.9450
Jan-18	Spot	тсо	P1030126	2,000	\$3.5300
Jan-18	Short Term	тсо	B9	186,000	\$2.4600
Jan-18	Long Term	тсо	18-10	55,902	\$3.2200
Feb-18	Spot	тсо	P1079297	500	\$2.2725
Feb-18	Spot	тсо	P1079296	5,000	\$2.3750
Feb-18	Spot	тсо	P1078887	10,000	\$2.3200
Feb-18	Spot	тсо	P1078756	7,300	\$2.5400
Feb-18	Spot	тсо	P1078756	1,500	\$2.5400
Feb-18	Spot	тсо	P1078756	5,000	\$2.3750
Feb-18	Spot	тсо	P1078756	20,000	\$2.2000
Feb-18	Spot	тсо	P1078372	5,300	\$2.3450
Feb-18	Spot	тсо	P1076592	5,000	\$3.0225
Feb-18	Spot	тсо	P1076592	100	\$2.6950
Feb-18	Spot	тсо	P1076592	2,700	\$2.4300
	-				

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Feb-18	Spot	тсо	P1076592	7,500	\$2.3800
Feb-18	Spot	тсо	P1076592	5,000	\$2.3650
Feb-18	Spot	TCO	P1073499	5,000	\$2.3525
Feb-18	Spot	TCO	P1071797	5,000	\$2.3500
Feb-18	Spot	TCO	P1067231	4,496	\$2.2900
Feb-18	Spot	TCO	P1065954	10,000	\$2.3700
Feb-18	Spot	тсо	P1064940	5,000	\$2.7875
Feb-18	Spot	тсо	P1064940	15,000	\$2.4150
Feb-18	Spot	тсо	P1064940	7,700	\$2.3325
Feb-18	Spot	TCO	P1059650	15,000	\$2.4125
Feb-18	Spot	TCO	P1059650	15,600	\$2.4150
Feb-18	Spot	TCO	P1059650	4,500	\$2.2725
Feb-18	Spot	тсо	P1051667	5,000	\$3.0225
Feb-18	Spot	TCO	P1051667	500	\$2.5350
Feb-18	Spot	TCO	P1049631	4,800	\$2.2775
Feb-18	Spot	тсо	P1046727	5,000	\$3.0225
Feb-18	Spot	тсо	P1046727	5,000	\$2.5450
Feb-18	Spot	тсо	P1046727	15,000	\$2.4125
Feb-18	Spot	тсо	P1046727	15,000	\$2.4200
Feb-18	Spot	тсо	P1046727	5,000	\$2.3700
Feb-18	Spot	TCO	P1046727	18,000	\$2.2950
Feb-18	Spot	тсо	P1046727	1,300	\$2.3200
Feb-18	Spot	тсо	P1043905	1,100	\$2.6950
Feb-18	Spot	тсо	P1043905	3,800	\$2.6950
Feb-18	Spot	тсо	P1043905	5,000	\$2.4300
Feb-18	Spot	TCO	P1043368	400	\$2.2750
Feb-18	Spot	TCO	P1039484	5,000	\$3.0325
Feb-18	Spot	TCO	P1039484	15,000	\$2.6825
Feb-18	Spot	TCO	P1039484	15,000	\$2.6800
Feb-18	Spot	TCO	P1039484	10,000	\$2.6050
Feb-18	Spot	тсо	P1039484	5,000	\$2.6050
Feb-18	Spot	тсо	P1039484	5,000	\$2.5250
Feb-18	Spot	тсо	P1039484	5,000	\$2.5350
Feb-18	Spot	тсо	P1039484	5,000	\$2.5350
Feb-18	Spot	TCO	P1039484	5,000	\$2.3800
Feb-18	Spot	TCO	P1037304	5,000	\$2.4050
Feb-18	Spot	TCO	P1037304	5,600	\$2.2950
Feb-18	Spot	TCO	P1037161	67,200	\$3.3200
Feb-18	Spot	тсо	P1036902	10,000	\$2.8850
Feb-18	Spot	тсо	P1036902	5,000	\$2.8850
Feb-18	Spot	TCO	P1036902	2,300	\$2.8250
Feb-18	Spot	тсо	P1036902	5,000	\$2.5775
Feb-18	Spot	тсо	P1036902	5,000	\$2.3800
Feb-18	Spot	тсо	P1036902	17,600	\$2.3000
Feb-18	Spot	тсо	P1023238	2,700	\$2.8350

Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	Rate
Feb-18	Spot	тсо	P1023238	2,200	\$2.5475
Feb-18	Spot	тсо	P1023238	600	\$2.2750
Feb-18	Spot	тсо	P1008216	14,900	\$3.0525
Feb-18	Spot	тсо	P1002252	600	\$2.3650
Feb-18	Short Term	TCO	B9	168,000	\$3.2800
Feb-18	Long Term	TCO	18-10	36,702	\$4.0400
Mar-18	Spot	TCO	P1092609	15,000	\$2.3825
Mar-18	Spot	TCO	P1079296	500	\$2.3300
Mar-18	Spot	тсо	P1079249	5,000	\$2.5600
Mar-18	Spot	тсо	P1078756	5,000	\$2.3725
Mar-18	Spot	тсо	P1078697	15,000	\$2.3900
Mar-18	Spot	тсо	P1073499	5,000	\$2.5025
Mar-18	Spot	тсо	P1070349	5,000	\$2.3750
Mar-18	Spot	тсо	P1067231	26	\$2.3700
Mar-18	Spot	тсо	P1067231	608	\$2.3600
Mar-18	Spot	тсо	P1067231	3,807	\$2.3600
Mar-18	Spot	тсо	P1065954	3,000	\$2.5650
Mar-18	Spot	тсо	P1064940	28,200	\$2.3975
Mar-18	Spot	ТСО	P1059650	9,300	\$2.3800
Mar-18	Spot	ТСО	P1059650	5,700	\$2.3800
Mar-18	Spot	ТСО	P1051667	10,000	\$2.4600
Mar-18	Spot	ТСО	P1051667	7,500	\$2.3750
Mar-18	Spot	ТСО	P1043368	15,000	\$2.3900
Mar-18	Spot	ТСО	P1043147	3,600	\$2.3900
Mar-18	Spot	ТСО	P1039484	4,800	\$2.3900
Mar-18	Spot	ТСО	P1037304	5,586	\$2.4600
Mar-18	Spot	ТСО	P1037304	10,000	\$2.4600
Mar-18	Spot	ТСО	P1022275	6,000	\$2.3750
Mar-18	Short Term	ТСО	B9	186,000	\$2.3100
Mar-18	Long Term	ТСО	18-10	30,812	\$3.0700
Apr-18	Spot	ТСО	P1092609	5,000	\$2.5625
Apr-18	Spot	ТСО	P1092609	5,000	\$2.5625
Apr-18	Spot	ТСО	P1092609	5,000	\$2.5625
Apr-18	Spot	тсо	P1092609	5,000	\$2.5625
Apr-18	Spot	ТСО	P1079297	100	\$2.4800
Apr-18	Spot	тсо	P1079296	5,000	\$2.5350
Apr-18	Spot	тсо	P1079296	15,000	\$2.4975
Apr-18	Spot	тсо	P1079296	2,500	\$2.4975
Apr-18	Spot	тсо	P1079296	20,000	\$2.4775
Apr-18	Spot	тсо	P1079296	20,000	\$2.4775
Apr-18	Spot	тсо	P1079296	3,500	\$2.6200
Apr-18	Spot	тсо	P1078887	26,000	\$2.4700
Apr-18	Spot	тсо	P1078756	6,300	\$2.6225
Apr-18	Spot	тсо	P1078756	200	\$2.6225
Apr-18	Spot	тсо	P1078697	5,000	\$2.6300
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Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Type</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Apr-18	Spot	TCO	P1078697	7,200	\$2.5625
Apr-18	Spot	TCO	P1078372	8,700	\$2.6300
Apr-18	Spot	TCO	P1078372	11,100	\$2.6300
Apr-18	Spot	тсо	P1078372	5,200	\$2.4975
Apr-18	Spot	тсо	P1078372	10,000	\$2.6300
Apr-18	Spot	тсо	P1078372	9,600	\$2.5150
Apr-18	Spot	тсо	P1074621	150,000	\$2.4925
Apr-18	Spot	тсо	P1073499	6,400	\$2.4900
Apr-18	Spot	тсо	P1073499	5,000	\$2.4750
Apr-18	Spot	тсо	P1073499	5,000	\$2.4750
Apr-18	Spot	тсо	P1073499	8,200	\$2.4750
Apr-18	Spot	тсо	P1071797	73,800	\$2.6025
Apr-18	Spot	тсо	P1071797	45,000	\$2.6025
Apr-18	Spot	тсо	P1070349	4,500	\$2.5150
Apr-18	Spot	тсо	P1070349	45,000	\$2.5150
Apr-18	Spot	ТСО	P1067231	180,000	\$2.5100
Apr-18	Spot	ТСО	P1067231	10,600	\$2.6225
Apr-18	Spot	ТСО	P1067231	7,100	\$2.5975
Apr-18	Spot	тсо	P1067231	50,000	\$2.5500
Apr-18	Spot	тсо	P1067231	15,000	\$2.5050
Apr-18	Spot	тсо	P1065954	40,000	\$2.5500
Apr-18	Spot	тсо	P1064940	15,800	\$2.5100
Apr-18	Spot	тсо	P1059650	1,500	\$2.4775
Apr-18	Spot	тсо	P1059650	14,500	\$2.4400
Apr-18	Spot	тсо	P1059650	13,300	\$2.5400
Apr-18	Spot	тсо	P1059650	5,000	\$2.6200
Apr-18	Spot	тсо	P1059650	3,300	\$2.6200
Apr-18	Spot	тсо	P1059650	15,000	\$2.5150
Apr-18	Spot	тсо	P1052927	6,300	\$2.4900
Apr-18	Spot	тсо	P1052927	20,000	\$2.6775
Apr-18	Spot	тсо	P1052927	5,100	\$2.6200
Apr-18	Spot	тсо	P1052927	7,900	\$2.6200
Apr-18	Spot	тсо	P1051667	240,000	\$2.4925
Apr-18	Spot	тсо	P1051667	5,000	\$2.6125
Apr-18	Spot	тсо	P1051667	1,500	\$2.6125
Apr-18	Spot	тсо	P1051667	10,000	\$2.6225
Apr-18	Spot	тсо	P1051539	5,000	\$2.5625
Apr-18	Spot	тсо	P1051535	15,000	\$2.6250
Apr-18	Spot	тсо	P1051535	15,000	\$2.6250
Apr-18	Spot	тсо	P1051535	15,000	\$2.6250
Apr-18	Spot	тсо	P1051535	15,000	\$2.6250
, Apr-18	Spot	тсо	P1051535	10,000	\$2.6200
, Apr-18	Spot	тсо	P1049631	5,000	\$2.6300
Apr-18	Spot	тсо	P1043905	10,000	\$2.5025
Apr-18	Spot	тсо	P1043905	600	\$2.6300
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Flow	Supply		Receipt	Purchase	Purchase
<u>Month</u>	<u>Туре</u>	<u>Pipeline</u>	<u>Point</u>	<u>Qty (Dth)</u>	<u>Rate</u>
Apr-18	Spot	тсо	P1043905	15,000	\$2.5300
Apr-18	Spot	тсо	P1039484	150,000	\$2.4925
Apr-18	Spot	тсо	P1037304	10,000	\$2.5900
Apr-18	Spot	тсо	P1037304	12,000	\$2.5900
Apr-18	Spot	тсо	P1037304	11,900	\$2.6100
Apr-18	Spot	тсо	P1037304	7,800	\$2.5975
Apr-18	Spot	тсо	P1037304	12,800	\$2.5625
Apr-18	Spot	тсо	P1037304	20,000	\$2.5625
Apr-18	Spot	тсо	P1037304	10,000	\$2.5625
Apr-18	Spot	тсо	P1036902	10,000	\$2.6025
Apr-18	Spot	тсо	P1036902	21,700	\$2.6225
Apr-18	Spot	тсо	P1036902	5,000	\$2.5000
Apr-18	Spot	тсо	P1032449	2,010	\$2.4900
Apr-18	Spot	тсо	P1029484	7,500	\$2.5975
Apr-18	Spot	тсо	P1029484	5,400	\$2.5625
Apr-18	Spot	тсо	P1002252	400	\$2.6275
Apr-18	Long Term	тсо	18-10	25,126	\$3.2000

KY PSC Case No. 2018-00253 Staff's Order Appendix B Data Requests Set 1 No. 4 Respondent: Michael D. Anderson

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

4. Provide Columbia's storage arrangements; state the maximum daily injection and withdrawal rates and the decline in deliverability that occurs as gas is withdrawn.

#### **RESPONSE:**

a) The company has a firm storage service (FSS) contract with Columbia Gas Transmission, LLC (TCO). The storage contract quantity (SCQ) is 11,294,911 Dth's. Please refer to the response to Set 1 No. 1 for a copy of the actual FSS contract. The maximum daily withdrawal quantity (MDWQ) is 220,880 Dth/Day and the maximum daily injection quantity (MDIQ) is 90.119 Dth/Day. The referenced MDIQ is applicable for the months of May through August. In all other months the MDIQ is reduced based on the provisions contained in TCO's FERC-approved tariff. b) The FSS withdrawal table below outlines the decline in deliverability that occurs as gas is withdrawn from the FSS account.

# FSS Withdrawal Limitations

% of SCQ in Inventory	MDWQ as a % of MDSQ (*)
100% to 30%	100%
Less than 30% to 20%	80%
Less than 20% to 10%	65%
Less than 10% to 0%	50%

(\*) MDSQ stands for Maximum Daily Storage Quantity

KY PSC Case No. 2018-00253 Staff's Order Appendix B Data Requests Set 1 No. 5 Respondent: Michael D. Anderson

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

5. Provide the capacity of any peaking arrangements.

## **RESPONSE:**

The Company does not have any peaking arrangements.

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

6. Provide a copy of any written procedures in use by Columbia for nominations and dispatching.

#### **RESPONSE:**

a) All of Columbia's nominations originate from Columbia's proprietary gas management system called GasSource. Once the gas supplies are purchased and entered into GasSource, the schedulers nominate those gas supplies on the appropriate pipeline contracts. The nominations are then sent to the various pipeline companies via Electronic Data Interchange (EDI). Each pipeline has their own rules and regulations based on their specific pipeline tariffs. In addition, Columbia also has firm, no notice storage service that balances customer demand with Columbia's and customers flowing gas nominations without a need to schedule additional supplies from storage. During the winter periods purchased gas supplies, both term supplies and daily (spot) purchases are nominated pursuant to the interstate pipeline tariffs and when additional gas supplies are required to serve demand, gas is automatically delivered to Columbia utilizing our contracted firm no notice storage service. Attachment A is Columbia's scheduling procedures utilized by its schedulers. This attachment provides scheduling time frames, internet links to the various pipelines the Company holds contracts with, pipeline contract numbers and scheduling instructions.

- b) Attachment B is a GasSource Overview document that details the various aspects and functions of GasSource.
- c) Attachment C is the Portfolio Management Policy. This policy identifies planning activities that facilitate the proper management and use of gas supplies, transportation, and storage assets to ensure safe and reliable service to our firm customers.

# **CKY Scheduling Procedures**

#### Nomination Deadlines - Central Time:

Timely: 1:00 PM (next day)

Evening: 6:00 PM (next day)

Intraday 1: 10:00 PM (same day)

Intraday 2: 2:30 PM (same day)

Intraday 3: 7:00 PM (same day)

#### Pipelines and EBB's:

Central Kentucky Transmission (CKT), EBB Navigates (http://www.columbiapipeinfo.com/cpginfopost/) Columbia Gulf Transmission (CGT), EBB Navigates (http://www.columbiapipeinfo.com/cpginfopost/) Columbia Gas Transmission (TCO), EBB Navigates (http://www.columbiapipeinfo.com/cpginfopost/) Tennessee Gas Pipeline (TGP), EBB Dart (http://pipeline.kindermorgan.com/StaticContentManager.aspx?control=ngpl)

#### Pipeline Contracts:

CKT K# 88384 Receipt point ByBee Delivery point Muth Farms CGT K# 79921 Receipt point 2700010 Delivery point 801 TCO K# 81527 Receipt point B9 Delivery point 17-15 TCO K# 80160 Receipt point Storage Delivery point various CKY citygates TCO K# 81540 Receipt point Storage Delivery point various CKY citygates TGP K# 308956 Receipt point 420999 Delivery point 400459

#### **GasSource Nominations:**

Log on to GasSource

Nominations use "Scheduling Obligations" screen for gas day scheduling

Pick "detail" where there is a remaining volume to be scheduled

Next screen pick "nom" or "link nom" (Link nom is used when more than one pipeline is used to deliver gas)

Nomination screen enter: transportation contract number, upstream contract, delivery point and calculate fuel and save.

Link Nomination choose flow path update transportation contract number, upstream contract, delivery point and calculate fuel and save.

Next go to EDI Transmission screen

Select dates that apply to nomination and retrieve data (note: never send multiply days to TGP)

Next pick nomination and pipeline from drop downs

Check mark nominations to be sent

**Click on Send Nominations** 

Close screen and open EDI Transmission Summary

Follow EDI status that it was sent to Pipeline and received back from pipeline

If there were errors you will need to fix those and resend corrections via EDI to pipeline

Log on to Pipeline EBB's to verify nominations were processed correctly

Prepared:	November 30, 2012	Updated:	August 21, 2017	By: B. Ranney			
Process Documentation: W/Supply Purchase Services/Procedure Manual							
SPS Electron	nic File Location:	W/Procure/Supply Purchase Services/Final Drafts					
SPS Hard C	opy File Location:	SPS Files Pr	ocess Manual				

# **Introduction/Description**

This is a general overview of the GasSource system and how it is used by the analyst when reconciling Payable and Receivable invoices. GasSource is a transaction-based purchase/sales system used by NGD. It has multiple modules that accommodate supply purchases, transportation, Off-system sales and Capacity Release transactions. Below is a snapshot showing each of the tabular functional areas (modules) in GasSource as well as a very brief explanation of each of the functional areas.



A. Administration – Used to set up system user accesses as well as business partner maintenance and setup (which include suppliers, transportation/storage service providers)

and NAESB contracts. Numerous pipeline tariff (FERC) rates and published indices are set up and housed/addressed in this module.

- B. Contracts This module serves as a contract repository from which many of the purchase and transportation costs are initiated. Supply purchase and transportation contracts are set up to include start/end dates, term purchase rates/indices, pipeline/storage MDQ / SCQs, discount terms/rates, receipt/delivery points, etc.
- C. Trading Trades/deals are agreed to and completed (terms/date, volume/rate, receipt/delivery points)
- D. Scheduling Purchases and sales transportation is scheduled on specific pipeline contracts.
- E. Usage and Flow Balancing agreements are identified and pipeline imbalances are tracked.
- F. Capacity Management Pipeline capacity is released/recalled and capacity utilization is monitored.
- G. Accounting Process control is the point from which most GasSource processes are triggered via "batch" run or manual process. Payable and receivable invoices are generated and accounting closing processes are triggered within the accounting process control area. The reconciliation analyst is the primary user in the GasSource Accounting module.

H. Reports – Closing reports, Receivable invoices, Payable Invoice reports, Month to Date Deal Cost reports, and numerous other Accounting, Scheduling, Trading and user reports are created and printed in this GasSource module.



# ENERGY SUPPLY SERVICES POLICY

## TITLE: PORTFOLIO MANAGEMENT

#### **EFFECTIVE DATE: JUNE 1, 2010**

#### 1. Purpose

The purpose of this policy is to identify those planning activities that facilitate the proper management and use of current supply, transportation, storage and peaking assets of each of the Columbia Distribution Companies (Columbia Gas of Kentucky, Inc., Columbia Gas of Maryland, Inc., Columbia Gas of Ohio, Inc., Columbia Gas of Pennsylvania, Inc., and Columbia Gas of Virginia, Inc.) to ensure safe and reliable service to firm customers at the best possible cost considering various operational issues. This includes:

- Individual company analyses
- Purchasing the proper amount and type of supply predicated on planning scenarios for varying weather conditions
- Use or potential release of transportation assets
- Use or potential release of storage assets
- Use of peaking assets
- Consideration of Pipeline Scheduling Point, contract or POD specific issues

#### 2. <u>Scope of Process</u>

This process provides for the establishment of guidelines to be utilized by Supply Planning in the development and recommendation of supply plans to be used in carrying out the responsibility of providing safe and reliable service to firm customers at the best possible cost. Included in this process are the following monthly and/or seasonal activities:

- Monthly Planning
- Term Analysis
- Exchange Analysis
- Capacity Release
- Hedge Analysis
- Financial Analysis
- Regulatory Analysis

This information shall be provided to the VP ESS and Directors for review and approval.

# 3. <u>Responsibility</u>

The overall responsibility of this process belongs to the Supply Planning Section of the Energy Supply Services Department.

#### 4. Activities

The activities listed below represent the basic requirements of this process. The frequency of these activities may vary from time to time based on the current information requirements of Energy Supply Services or other NiSource organizations requiring input from the Supply Planning Process. Other activities may be undertaken from time to time in response to individual Columbia Distribution Company requirements.

#### 4.1 Monthly Planning

A series of supply purchase options shall be developed on a monthly basis to provide input into the monthly decision process related to the purchase of supply, use of pipeline transportation assets, storage assets, peaking assets and any other supply or capacity assets available to each Columbia Distribution Company. These monthly supply options shall be developed individually for each Columbia Distribution Company. The timing of the Monthly Planning process will be consistent with the needs of the Gas Procurement function. From the supply purchase options developed, a Recommended Purchase Plan shall be presented to ESS Management for approval around the 20<sup>th</sup> of the month prior to gas flow.

Each month the SENDOUT<sup>®</sup> Model (or other tool) shall be updated to include current assumptions for key inputs, including: Price Forecast as determined by the Price Committee (consisting of Manager of Economic Analysis, Manager of Supply Planning and Natural Gas Trader), First of Month Storage Level, Available Pipeline and Storage Capacity, etc. The Recommended Plan will typically consist of the results of the Normal Weather Scenario and shall include Planned Purchases for Term and Spot Supplies, Planned Usage of Transportation Assets, Planned Usage of Storage Assets, Planned Usage of Peaking Assets, Potential Capacity Release, etc.

For each winter month (November through March) the Monthly Process shall develop additional supply plans for Warmer & Colder Weather Scenarios. These plans will be developed and considered to ensure reliable service and adherence to pipeline tariff and contractual provisions under a wide range of differing weather conditions. The Recommended Plan may incorporate the results from these alternate Weather Scenarios as needed for this protection. Differing Price Scenarios shall also be developed and considered to test the Recommended Plan for reasonableness should prices vary measurably from the base price forecast. These alternate price scenarios shall consist of a High Price Forecast and Low Price Forecast determined by the Price Committee The Recommended Plan shall be considered under these alternative price conditions. The Recommended Plan may include the results from the Price Scenarios as needed to ensure reasonable cost to firm customers.

Storage utilization ranges shall be developed and provided for consideration in day to day operations. These ranges shall consist of Fast Withdrawal/Inject and Slow Withdrawal/Inject Scenarios. This information shall be provided as part of the End of Month Storage Projection developed twice weekly.

#### 4.2 <u>Term Analysis</u>

Annually a Term Analysis shall be developed in early spring to determine the amount of Term Supply required for the upcoming winter season. The Term Analysis shall be developed individually for each Columbia Distribution Company. A Design Day Balance shall be developed based on the most recent Peak Day Forecast and currently available capacities to determine the amount of Required FTS. The Required FTS, inclusive of pipeline fuel, shall determine the amount of Term Supply. The Term Supply shall be fully available for January and depending on the results of the seasonal analysis may be reduced in other winter months equal to the supply required on the 2<sup>nd</sup> Design Day.

Weather scenarios (Normal, Warmer & Colder Weather Scenarios) shall be developed to ensure reliable service and adherence to pipeline tariff and contractual provisions under differing weather conditions. These scenarios will incorporate November 1<sup>st</sup> beginning storage inventory levels of 98-99%. The Term Analysis shall include a schedule showing the seasonal balance for each weather scenario.

The Term Analysis shall also include a Monthly "Swing Analysis" based on the selected Term Supply to ensure adequate supply flexibility. The Swing Analysis shall be based on 1 in 10 Risk Minimum Demands and will compare this demand to the Forecasted Supply to determine the Swing Requirement. The Swing Requirement should be considered in selecting the Term Level.

# 4.3 Exchange Analysis

Recognizing the incentive sharing mechanisms specific to each Columbia Distribution Company, annually an Exchange Analysis shall be developed in early spring to determine the level of potential seasonal exchange activity, if any. The supply levels to be used in this analysis shall be those determined in the annual Term Analysis. The Exchange Analysis shall be developed individually for each Columbia Distribution Company.

The Colder Weather supply plan from the Term Analysis shall be used in developing the potential seasonal exchange level and to determine the potential timing of an exchange. The Colder Weather Supply Plan is used to ensure reliable service to firm customers.

#### 4.4 <u>Capacity Release</u>

A Capacity Release Analysis for each season shall be developed in early spring for summer releases and in early fall for winter releases. A complete year shall be developed and evaluated in each analysis. The Capacity Release Analysis shall be developed individually for each Columbia Distribution Company.

The Capacity Release Analysis shall be based on the most recent Peak Day Forecast and Colder Weather supply plan. Any capacity in excess of the Peak Day Forecast of firm demand shall be available for release on a Non-Recallable basis. Recallable capacity shall be determined based on the estimated firm demands associated with the 5<sup>th</sup> coldest day for each month.

# 4.5 <u>Hedge Analysis</u>

As needed, a Hedge Analysis shall be developed, typically annually, for each Columbia Distribution Company. Depending on the specifics of the individual approved Hedging Plan, the Hedge Analysis determines the volume to be hedged for the upcoming 2 or 3 hedge periods.

#### 4.6 <u>Financial Plan</u>

Financial Plan(s) shall be developed in accordance with the requirements of Financial Planning Process providing purchase, storage and cost information for the Financial Planning Process. The Financial Plan shall be developed individually for each Columbia Distribution Company.

The SENDOUT<sup>®</sup> Model (or other tool) shall be updated to include current assumptions for key inputs, including: Price Forecast (NYMEX date as suggested by the Financial Planning Section), First of Month Storage Level, Available Pipeline and Storage Capacity, etc.

# 4.7 <u>Regulatory Analysis</u>

Regulatory Analyses shall be developed for various regulatory needs providing purchase, storage and cost information, etc. These analyses include GCR, PGA, 1307f filings, Strategic Gas Supply Plans, COH Long Term Forecast Report, CGV Five Year Forecast, etc. These analyses shall be developed as needed and shall be developed individually for each Columbia Distribution Company.

The SENDOUT<sup>®</sup> Model (or other tool) shall be updated to include current assumptions for key inputs, including: Price Forecast, First of Month Storage Level, Available Pipeline and Storage Capacity, etc.

Approved By:

Michael D. Watson Vice President, Energy Supply Services

JUNE 15 2010

Date

KY PSC Case No. 2018-00253 Staff's Order Appendix B Data Requests Set 1 No. 7 Respondent: Michael D. Anderson

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

7. If Columbia has utilized gas marketing/trading organizations to obtain gas supplies over the last five years, indicate which organizations were so employed, gas volumes purchased, prices, terms, and current contractual arrangements between Columbia and these marketing firms.

#### **RESPONSE:**

Columbia has not employed any outside gas marketing/ trading organization in asset management arrangements to obtain gas supplies over the last five years.

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

8. Provide a summary of the bidding/Request for Proposal process for gas supply for the last five years, providing the original bid documents, a listing of the suppliers that were contacted, the responses to the request for bid, the evaluation process that led to the selection of a supplier, and any written procedures that exist for this activity.

#### **RESPONSE:**

1) Each year Columbia issues a Request for Proposal (RFP) to numerous potential suppliers for winter term supply volumes. The RFP is normally sent out in June of each year and the responses are required on a specific date the following July. The responses are then summarized and reviewed. The least cost supply is selected and then the Transaction Confirmations (TC) are negotiated. If by chance, a required receipt point receives no bids or the bids are deemed unacceptable, the traders continue to solicit bids directly from suppliers until an acceptable bid is received. A TC is negotiated. This is the same process that was used for the past five years.

- 2) **CONFIDENTIAL** Attachment A contains the requested documents for the past 5 years. Included in Attachment A for each year is: the email text that was sent out to each supplier, the sample TC for winter term supply, the RFP Bid sheet, the list of suppliers that received the RFP and finally the summary of the bids received.
- Attachment B is an internal Request for Proposal Policy that describes the procedure used for the RFP process.

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 8

Attachment A

CONFIDENTIAL - - FILED UNDER SEAL



# ENERGY SUPPLY SERVICES POLICY

#### TITLE: REQUEST FOR PROPOSAL – GAS SUPPLIES

**EFFECTIVE DATE: JUNE 1, 2010** 

#### 1. Purpose

The purpose of this Procedure is to provide a description of those processes that Energy Supply Services ("ESS") will follow with regard to the implementation of seasonal Requests for Proposals ("RFP") that are carried out for the purpose of securing reliable contracts for firm gas supply at the best cost possible to meet customer requirements of a firm nature. These procedures and processes are written to cover the RFP process for gas supply contracts carried out by ESS for Columbia Gas of Kentucky, Columbia Gas of Maryland, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, and Columbia Gas of Virginia, together referred to herein as the Columbia LDCs or LDCs. In its implementation of the RFP process, it is ESS policy to operate in accordance with rules established by the Federal Energy Regulatory Commission ("FERC"), Orders and Rules related to the subject of gas procurement from State regulatory commissions in the states in which the Columbia LDCs operate, and other pertinent NiSource and ESS policies.

#### 2. Introduction and General Description of the Seasonal RFP

The seasonal RFP is completed each year by the Gas Procurement Section of ESS ("Procurement") with the objective of contracting for the firm gas supply requirements for the next annual period (November through October). An RFP is used herein is an invitation for gas suppliers to submit proposals to deliver and sell gas supply to the LDCs at a specified price, volume, and location.

The RFP process will generally begin in April, following the completion of the Term Analysis study for each company, conducted by the Supply Planning Section of ESS ("Planning"). Planning will complete and provide a Term Analysis to Gas Procurement by mid April of each year. The Term Analysis details the firm capacity requirements and any required peaking services that are needed for each LDC. Most contracts resulting from the RFP will be of three months in length, to cover the core of the winter period (December through February). However, this does not preclude longer term arrangements that might be acquired at advantageous prices or an Asset Management Arrangement ("AMA") from being negotiated for shorter or longer periods of time.

# 3. Identifying Suppliers Selected to Receive an Invitation to Bid

Each year an RFP supplier mailing list is developed by Gas Procurement. The primary reason that a supplier is included on the RFP mailing list is that they are a reliable and active trading partner with one or more of the Columbia LDCs. An active trading partner is one involved with selling gas to the Columbia LDCs or purchasing Off System Sales products from the LDCs, and in some cases purchasing released capacity from the LDCs. The list of invitees begins with a review of the previous year's list of suppliers that received an RFP. The Gas Traders including the Manager of Energy Trading ("Traders") within Procurement review each supplier on the list to determine if they are still an active trading partner and that the contact information (company name, changes brought about by mergers, etc.) is accurate. The Traders will then contact each supplier to confirm that they wish to participate in the upcoming RFP process. If there was no contact or activity with the supplier during the past year, the supplier may be removed from the list. In addition, if a new company has emerged and becomes an active trading partner, that company may be added to the list. All proposed changes to the mailing list are reviewed and approved by the Director, Gas Management Services ("Director"). All RFP suppliers on the mailing list will be in good credit standing based on approval of the Credit Relationship Manager.

#### 4. Timing of Invitations to Bid and RFP Documents

Once the RFP supplier invitation list is complete and Planning's Term Analysis is received and reviewed, the RFP's are developed. All RFP's will be emailed, generally by mid May, to each supplier on the mailing list. The email will contain an explanation of the process, a description of the RFP attachments and the bid response due date, which is generally the second week of June. Specific emailing and bid due dates will be selected each year. The RFP attachments include a sample Transaction Confirmation for each type of supply and AMA requested, and the Official Bid Sheet for the supplier to complete. The Director will review the email and documents and provide approval for the process to be initiated. The email will also contain the Traders contact information for any questions, clarifications and a notation to request additional historical data, for each specific AMA for which a supplier wishes to provide a bid.

# 5. Questions from Potential Bidders

The Traders are the primary contacts for the potential bidders and will respond to questions and requests for clarification regarding the RFP. In responding to questions and requests, the Traders may require and obtain assistance from other ESS employees, such as Schedulers to address specific pipeline and operational questions, the Manager, Contracts and Scheduling for contractual questions, or the Director for policy matters. The Traders will respond to questions in person, over the telephone, via an instant message service or via email. If additional information is required to complete a bid, such as historical usage data for a potential AMA bid, interested bidders are instructed to contact the Trader. The Trader will coordinate with the appropriate Gas Scheduler, to send out a standard historical data set to each bidder that indicates an interest in bidding on the AMA.

Bidders will be instructed to send their bids directly to the Traders via email on a bid sheet as provided by ESS, which will have been included in the original RFP email. Bids received by the Traders will be entered into a spreadsheet that combines all bid responses for comparison purposes. All RFP documents will be saved to a specific location on the Gas Procurement computer drive. All bids shall then be reviewed by the Director and Traders for the purpose of selecting the winning bids. All bids and related information provided by the Bidders shall be considered confidential. Documents containing proprietary information should include a "Confidential" notation.

Winning bids will be determined by giving consideration to the following key factors: price, sufficient quantity of volume bid, diversity of suppliers, and past experience with specific suppliers for specific services. As a guideline for supply diversification, Suppliers may be held to 25% of the Columbia LDC RFP daily requirement. The Director will provide approval to the Traders to proceed with final negotiations and the preparation of the executable Transaction Confirmation ("TC"). Suppliers that are incumbents, that is, had won a contract in the prior years RFP process, that have performed well, and that submit a bid for the same contract again in the current RFP, may be provided the opportunity to match the lowest bid for the equivalent receipt point and volume that they held the year before. One on one negotiation of contract language at any time during the process will be limited to non-critical elements within the TC. Once the TC's are finalized, and both parties are in agreement to all terms and conditions, the TC's will be routed, to the Traders, the Manager, Contracts and Scheduling and to the Legal Department for final signoff on the TC's sign-off cover sheet, prior to being executed by the Director.

#### 6. Separation of Columbia LDC's

Each Columbia LDC's gas supply requirements will be contracted for under separate supplier agreements. If supplies to be contracted for pursuant to the RFP process are similar in nature, that is, the point of delivery, the term, and the major contractual conditions are the same, then ESS will ensure that the supplies are contracted for by the LDCs in a manner that provides equivalent costs and risks to the extent possible given the variables, such as quantity contracted for, that exist between the LDCs. This may be implemented by having more than one LDC contract with the same supplier for gas to be delivered at the point in question under the same terms and conditions, or it may be implemented by having the LDCs contract with suppliers in a manner designed to balance price or other terms in an equitable manner among the LDCs. All costs paid for gas purchased under an LDC's agreement with a supplier will be paid for solely by the LDC that purchased the gas. No contracts held in one LDC's name will be used for the purposes of serving another LDC unless the supply from the contract is officially sold to the LDC that uses the supply by way of a contractual transaction. Gas supply that is nominated and purchased by one Columbia LDC under an RFP contract cannot be commingled with the gas purchases of another Columbia LDC for delivery, accounting, or payment purposes. Furthermore, the decision to contract for and to purchase gas supply will be based on the operational supply and demand requirements of each individual LDC, not on the combined or potential capability of other LDC capacity assets.

# 7. SSO and SCO Auction

A Standard Service Offer ("SSO") auction was conducted for Columbia Gas of Ohio ("COH") for the first time in February 2010, to be implemented April 2010, based on the Public Utilities Commission of Ohio ("PUCO") Opinion and Order dated December, 2, 2009 and the subsequent Tariff approval order dated January 13, 2010. The 2011 SSO auction and the 2012 Standard Choice offer ("SCO") will be conducted following procedures similar to those utilized for the 2010 auction. Both the SSO and potential SCO result in the contracting for nearly all of COH's firm gas supply requirements. As a result, any involvement by COH in the Seasonal RFP process defined by this Policy will likely be very limited. The auction is further defined in detail by COH's tariff and extensive direction provided by on a COH website.

# 8. Electronic Trading Platform

The transparency of market based gas pricing has increased due in part to the electronic trading platform(s) ("ETPs"). ETPs can be dynamic trading platforms that provide for liquid trading for nearly all of the pipeline interconnect points at which CDC holds firm capacity and for which ESS manages the seasonal RFP process. Use of such trading platforms could replace all or a portion of the Seasonal RFP process for fulfilling the supply purchase requirements for the core winter months. Executing a contract on an ETP is a firm service commitment and the price would be at the then current market based price. Transactions on ETPs are well documented and can be downloaded directly to the Columbia LDCs' gas management system ("GasSource") for pipeline nominations. If approved by the Vice President, ESS, such ETPs may be utilized to replace some or all of the Seasonal RFP process.

Approved By:

Mićhael D. Watson Vice President, Energy Supply Services

JUNE 15, 2010

Date

KY PSC Case No. 2018-00253

Staff's Order Appendix B Data Requests Set 1 No. 9 Respondent: Alan Catron

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

9. Provide a copy of Columbia's most recent gas supply plan and a written description of its gas supply planning process.

#### **RESPONSE:**

Please see **CONFIDENTIAL** Attachment A for the Company's most recent supply plan for summer 2018.

Columbia's principal supply objective is to secure and deliver competitively priced, reliable gas supplies for its firm sales service customers. In completing this objective, Columbia is cognizant of the affordability of gas costs for its customers. Therefore, Columbia seeks to strike a balance between the impact of gas costs on customers and its obligation to provide reliable gas supplies to its firm sales service customers whenever they require gas service under a wide range of weather conditions.

The monthly planning process is utilized to determine how Columbia should manage its gas supply activity each month to minimize gas costs for its customers while maintaining system reliability. On a monthly basis, Columbia updates its projection of future gas prices over the near term and incorporates additional information, including storage levels and reliability considerations, into the SENDOUT® model. Columbia considers three design weather scenarios in the development of its least cost supply plan: 1 in 10 colder, normal, and 1 in 10 warmer. These scenarios are developed to capture the uncertainties related to winter demand. For the summer, Columbia develops only a normal weather demand scenario. Columbia then conducts analyses utilizing the SENDOUT® model, considering transportation customer supply and demand activity, updated storage levels, and prices to determine the level of flowing supplies and storage activity needed to serve system demand requirements.

The monthly planning analysis helps identify term and spot market purchase requirements, swing gas requirements, capacity release, and operational targets for storage. Upon completion of the monthly planning analysis, Columbia conducts an internal meeting where the results of the analysis are presented and discussed, and a purchasing strategy is developed for the forthcoming month. KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 9

Attachment A

CONFIDENTIAL - - FILED UNDER SEAL

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

10. Provide a narrative description of any supply-planning computer models currently being used by Columbia, or being considered for future use.

#### **RESPONSE:**

Columbia's basic analytical supply planning tool is SENDOUT®, a PCbased decision support modeling system, provided by ABB of Atlanta, Georgia. SENDOUT® uses the technique of linear programming, a proven mathematical "global optimization" method, to determine the least cost gas supply. SENDOUT® provides a solution to the problem of choosing and scheduling gas supply quantities to flow time-dependently through a gas supply and transportation/storage network.

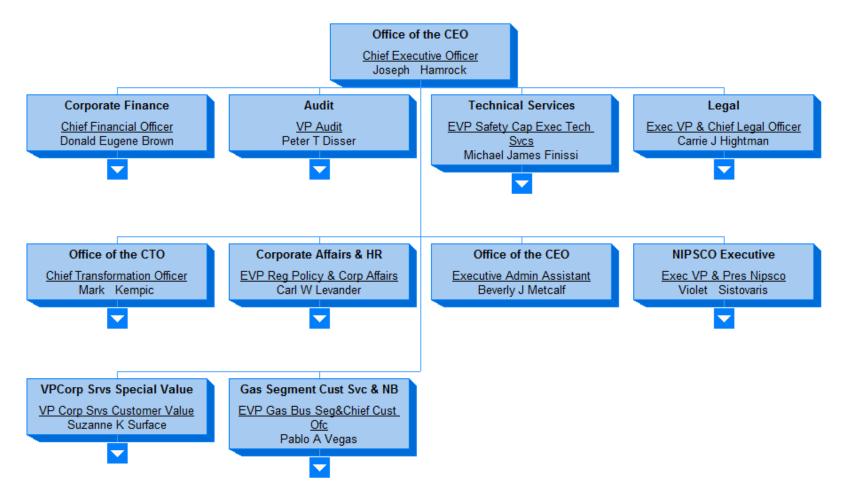
Columbia uses SENDOUT® to model geographic demand regions and their operational gas flow limitations. SENDOUT® recognizes demand, capacities, constraints, and time dependent variables in determining a costeffective supply. SENDOUT® provides solutions to balance supply and demand under colder, normal, and warmer scenarios. Columbia utilizes SENDOUT® for both long-term strategic planning and short-term operational planning. Long-term planning is generally conducted over a five-year time horizon and is utilized to assure adequacy of supply and evaluate supply options to meet changing customer demand. Short-term operational planning utilizes SENDOUT® to develop a best cost scheduling priority over short-term periods up to one year in length. SENDOUT® is widely used within the natural gas industry.

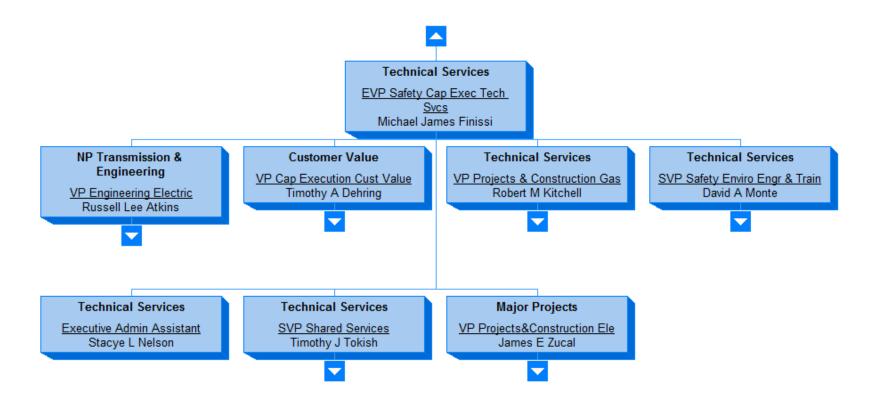
# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

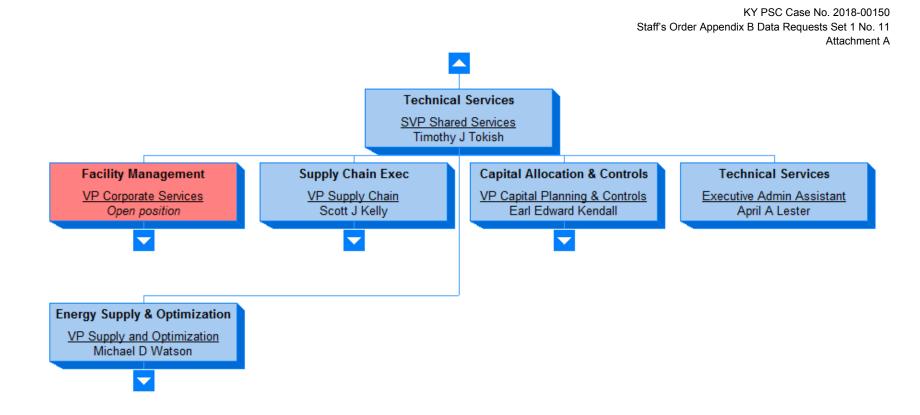
11. Provide organization charts of the overall corporate organization and of the gas planning, gas purchasing, and gas operations functions. Describe any changes that have occurred in the corporate, gas planning and purchasing, and gas operations organizations in the last five years, and any changes that are underway or contemplated within the next five years.

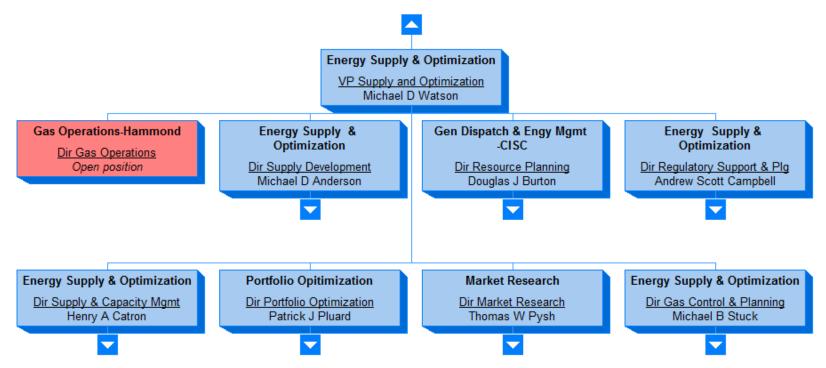
#### **RESPONSE:**

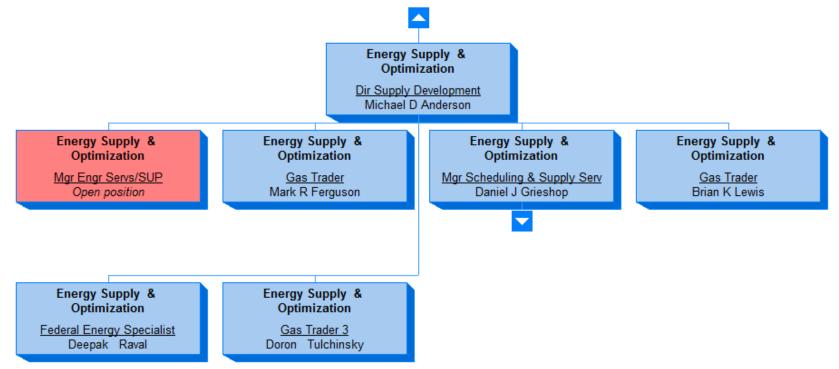
The current organization charts of the corporate organization and of the gas planning, gas purchasing, and gas operations functions are attached as Attachment A The Energy Supply and Optimization organization ("ES&O") of NiSource is charged with carrying out the gas planning, gas purchasing, and gas operations functions for Columbia Gas of Kentucky, Inc. ("Columbia"). At various times during the last five years, parts of the organization reported to different Vice-Presidents but at all times these Vice-Presidents reported to the same Sr. Vice President. As part of a larger corporate reorganization in 2015, the ES&O organization was expanded to include a team of employees that perform a similar function for the Northern Indiana Public Service Company, an affiliate company of Columbia. Since 2015, all ES&O functions have reported to one Vice-President. The ES&O organization is neither presently undergoing any changes nor are any planned at this time.

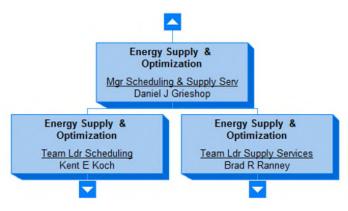




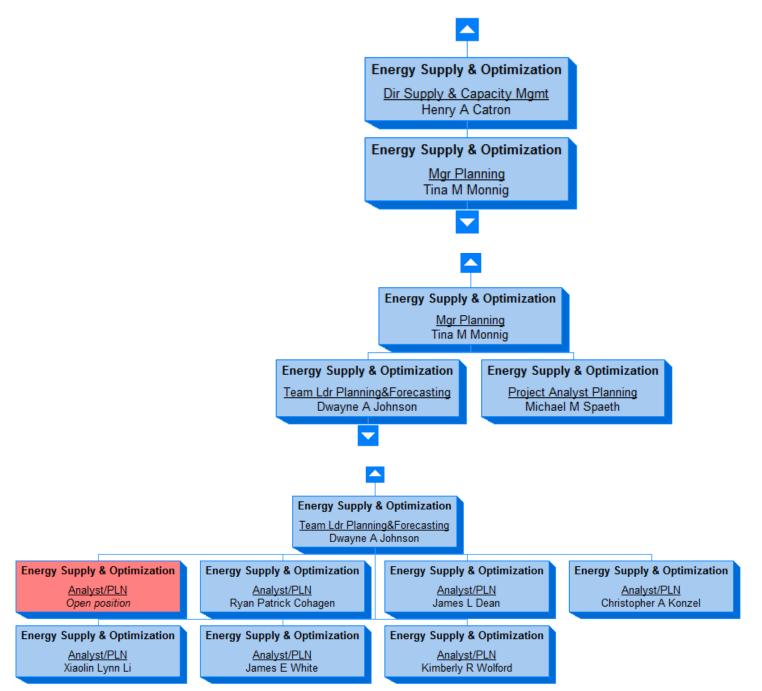


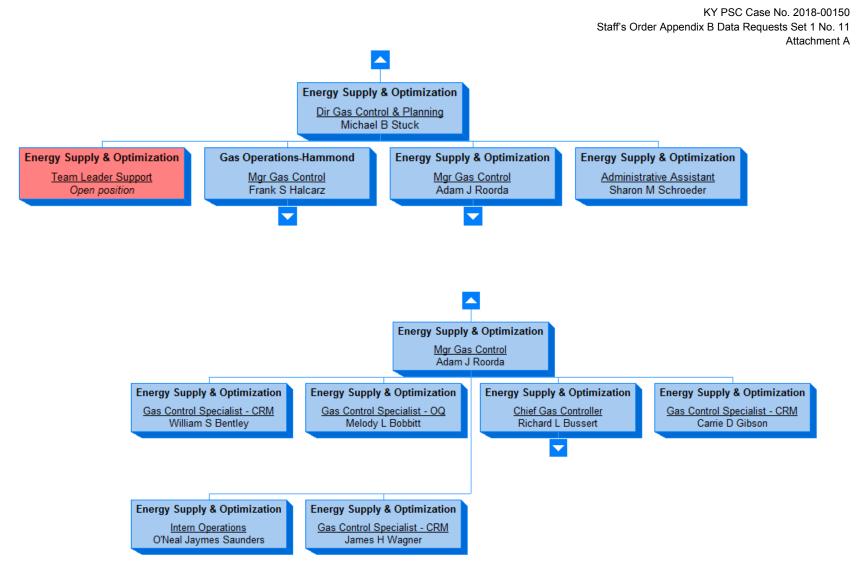


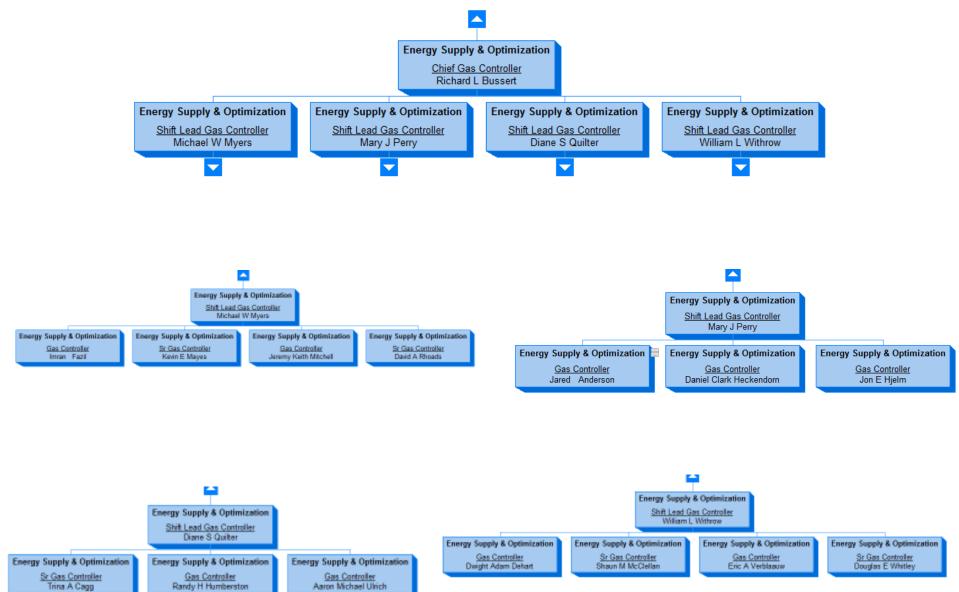












KY PSC Case No. 2018-00253 Staff's Order Appendix B Data Requests Set 1 No. 12 Respondent: Michael D. Watson

# COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

12. Provide job descriptions of the personnel working in the gas planning, gas

purchasing, and gas operations functions.

#### **RESPONSE:**

Please see Attachments A through J.

# Title: Gas Controller

# Job Summary

Under direct supervision of the Shift Lead or Chief Gas Controller, monitors and controls all available supply and operating data on an instantaneous basis on behalf of the NiSource Gas Distribution (NGD) companies; performing actions as necessary to ensure safe implementation of "best-cost supply purchases" and operating strategies.

Gas Controllers are required to interact with personnel from other NiSource companies/departments, Local Distribution Companies (LDCs), pipelines serving various NiSource markets, and with Supply and Optimization personnel pertinent to the gas management and control activities of the NiSource local distribution companies (LDCs).

# Principal Duties and Responsibilities

- Learn and understand basic pipeline physics and equipment
- Monitors all available pipeline flow and market requirement data
- Maintains situational awareness of all markets within assigned Area of Responsibility (AoR)
- Complies with, and champions all Gas Control policies and procedures
- Determines and maintains a balanced pipeline system by coordinating flow changes in discretionary pipeline supplies, exchanges, storage and peak shaving operations
- Implements measures consistent with the best-cost purchasing and operating strategies of the LDCs
- Performs in a shift environment on a 24-hour per day, 7-day per week basis
- Ascertains problems involved in gas operations; contacts personnel who can supply information and assistance; analyzes and evaluates data; determines solution; initiates changes within jurisdiction; recommends changes in operations or strategy
- Confers with gas control personnel of pipeline companies, other distribution companies and with Commercial Operations personnel
- Complies with Federal and State regulations as set forth by the Department of Transportation.
- Communicates with internal partners and external stakeholders in various forms (Email, Sametime, phone, etc.) to keep them advised of operating conditions
- Acknowledges and responds to all alarm conditions on the NGD SCADA system and security systems installed at NGD facilities
- Logs information received during shift, answers operating questions, advises Shift Lead / Chief of changes from normal, monitors weather conditions, and notifies management of emergencies
- Works with Supply and Optimization partners, LDCs, and pipeline personnel to achieve the optimum dispatch of available supplies and disposition of imbalances
- Generates timely reports needed to reconcile pipeline and peaking invoice statements
- Provides relief with pertinent details to ensure success

# Knowledge, Skills and Abilities

# Required for Selection:

- Able to develop and maintain effective working relationships with people
- Demonstrated ability to work well in team environment and to provide guidance when needed

- Able to make decisions with less than accurate or incomplete information
- Able to meet DOT operator qualification criteria within an 18 month timeframe
- Adaptable to shift work and able to work extended hours
- Able to distinguish colors
- Able to learn new information quickly
- Adept and comfortable with the use of computer technology and complex systems
- Strong organization and dependable time management skills
- Able to be responsive during critical operating situations on 7 day x 24 hour basis

#### Preferred for Selection:

- Knowledge of pipeline (interstate, intrastate, and / or LDC) operations and systems
- Prior experience with Supervisory, Control, and Data Acquisition (SCADA) systems
- Familiarity with spreadsheet application usage
- Demonstrated experience/knowledge evaluating historical data and trends for the purposes of evaluating cause and effect of said data

# Education/Work Experience

#### Required for Selection:

- Associate degree in a technical field or equivalent work experience
- Prior work experience which required technical as well as interpersonal skills

#### Preferred for Selection:

- BS degree in a technical field
- Experience working a rotating shift

# Additional Information:

• This position is subject to random drug testing

# **Planning Analyst**

Job Code: 103005

#### **Job Description**

#### **Responsibilities**

#### Job Summary

Develop and maintain the daily generated reports like the Gas Operations Outlook (GOO) and Storage Activity Report (STAR), includes on-call coverage. Determine on a routine basis: the need for modifying system supply purchases, revenue generation opportunities, ability to provide banking and balancing services and storage activity and inventory levels for planning and operational purposes. Develop and maintain the SENDOUT database. Develop the monthly and seasonal review of assets available for optimization initiatives including capacity release, parks and loans, and off-system sales. Develop information used in NiSource's Regulatory and Financial Planning processes. Develop and maintain daily demand forecasts and data associated with daily forecasting.

#### Principal Duties and Responsibilities:

- Model and monitor the impact of various real and proposed regulatory and new service scenarios and make recommendations to CO management.
- Present information and make recommendations to CO, Supply and Optimization and NGD personnel regarding the optimum daily dispatch of available supplies, including peaking assets, and disposition of supply/demand imbalances.
- Provide on-call coverage to ensure supply/demand is properly balanced on weekends and holidays as needed.
- Monitor throughput, storage activity and storage/peaking inventories and use seasoned judgment to address problems/concerns.
- Develop accurate conclusions from quantitative analysis of recent historic throughput data to discern need for adjustments to NGD daily demand forecasts used for supply management purposes.
- Develop SENDOUT reports and analyses in support of Trading Floor activities, including monthly optimal usage of the gas portfolio assets, storage projections, term analysis, hedge study, etc. Present and defend analysis to CO management.
- Develop SENDOUT reports and analyses in support of Regulatory items, including GCRs, SGSP, etc.
- Monitor gas supplies from suppliers for both system supply and end-users; provide input and feedback to Trading Floor and Operations.
- Determine the monthly & seasonal NGD gas portfolio assets available for capacity release, parks & loans and offsystem sales.
- Develop the 5 year optimal usage plan for NGD gas portfolio assets for Financial Planning purposes.
- Represent NiSource to external partners, customers and regulatory bodies.
- Develop and implement accurate, timely reports required by CO, other departments, the NGD, and regulatory bodies.
- Consult and lead the development and monitoring of data and data collection systems related to weather, demand, purchases, and other related variables that influence gas supply and demand.
- Stay abreast of applicable industry trends and changes via participation on industry sponsored committees and development/administration of industry-wide surveys.
- Ensure adequacy and functionality of software systems, IT applications and data warehouses that contain/provide information critical to supply management and NGD operations.
- Develop and publish Gas Operations Outlook operating guide.
- Develop and publish Winter Operations Reviews after conclusion of each winter for the NGDC.
- Review dispatch estimates of daily pipeline deliveries and reconcile differences with pipeline counterparts.
- Develop testimony & responses to data requests as assigned.

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#### Knowledge, Skills and Abilities:

#### Required for Selection:

- Understands complex concepts and relationships
- Recognizes strategic implications of problems and issues
- Fosters team commitment
- Effectively shares expertise and experience with others
- Draws accurate conclusions from quantitative and qualitative information
- Drives for results in carrying out assignments
- Works well in a team environment or independently
- Understands and interpret contracts, agreements and tariffs
- Excellent oral, written and listening communication skills

#### Preferred for Selection:

- Advanced computer skills in various CO applications
- Experience working on project teams
- Knowledge of supply and capacity planning processes
- Knowledge of pipeline and/or LDC tariffs
- Experience with regulatory initiatives/proceedings

#### Education/Work Experience:

#### Required for Selection:

- BS/BA in a quantitative discipline or equivalent experience
- 1+ years work experience in natural gas supply industry

#### Preferred for Selection:

• 2+ years professional work experience

#### Other:

- Ability to travel
- Ability to work outside of normal business hours

Title:	Shift Lead Gas Controller
Company:	12
Location (city, state):	Columbus, OH
Department Name:	Energy Supply & Optimization
Reports To:	Chief Gas Controller
FLSA Status:	Exempt
Supervises:	Multiple Employees
# Open Positions:	

**Purpose/Job Summary:** Oversees a team of shift workers in the Gas Control function and monitors customer demand and flowing/available gas supplies on an instantaneous basis, on behalf of the NiSource Gas Distribution Companies (NGD).

## **Key Results:**

- Administers and performs the actions necessary to ensure safe implementation of bestcost supply purchase and operating strategies.
- Interacts with personnel from other NiSource companies/departments, other LDCS, those pipelines serving the NiSource LDCs and with Commercial Operations personnel pertinent to the gas management and control activities of the NiSource LDCs.

## Principle Duties/ Essential Responsibilities:

- Develops and recommends methods, measures, and standards for monitoring Gas Controllers to improve individual performance.
- Supervises a Gas Control team to ensure safe, reliable and cost effective management of the Gas Control function.
- Ensures his/her shift is adequately staffed on a day to day basis.
- Ensures that conduct of his/her shift controllers are in compliance with policies and procedures.
- Evaluates the performance and training of his/her Gas Controller team.
- Monitors all available pipeline flow and market requirement data as needed.
- Leads his/her team of shift Controllers in maintaining a balanced pipeline system by coordinating flow changes in discretionary pipeline supplies, exchanges, storage and peak shaving operations.
- Leads his/her team of shift Controllers ensuring adherence to best cost purchasing and operating strategies of NGD.
- Performs in a 24-hour per day, 7-day per week work environment on a shift basis.
- Ascertains problems involved in gas operations; contacts personnel who can supply information and assistance; analyzes and evaluates data; determines solution; initiates

changes within jurisdiction; recommends changes in operations or strategy.

- Confers with gas control personnel of pipeline companies, other distribution companies and other Commercial Operations personnel.
- Assists Chief Controller as needed in communicating with internal and external customers to keep them advised of operating conditions.
- Leads his/her team of shift Controllers to ensure appropriate responds to all "alarm" conditions on the NGD pipeline systems and facilities that are transmitted to Gas Control via SCADA or other systems.
- Works with Chief Controllers and SCADA Support personnel in the implementation, operation and maintenance of SCADA and related support tools that facilitate Gas Control functions.
- Ensures his/her team implements those standards for gas controllers allowing for consistency and uniformity in the application of gas control processes.
- Coaches other team members in the development of their skills and promotes teamwork concept within the gas control function.
- On an as needed basis, logs information received during shift; answers operating questions; advises supervision of abnormal conditions; monitors weather conditions; notifies management of emergencies.
- Performs all Supervisory responsibilities within the function
- Assumes the responsibilities of Chief Gas Controller as needed.

## Selection Criteria: Key Work Experiences/Technical & Functional Skills

**Required for Selection:** 

- Able to meet DOT qualification criteria.
- Adaptable to shift work and able to work extended hours as needed.
- Must be able to remain calm during emergency situation and work effectively under stress.
- Adept and comfortable with the use of computer technology and complex systems.
- Must be able to pass DOT random drug testing.
- Must be able to distinguish colors.
- Demonstrated ability to manage people and processes in a professional manner.
- Able to be responsive to critical operating situations on 7 x 24 basis.
- Strong organization and dependable time management skills.
- Able to make decisions with less than accurate or incomplete information.
- Qualified on all Areas of Responsibility for NGD.

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## **Preferred for Selection:**

- Knowledge of and experience with pipeline (interstate, intrastate or LDC) operations and system(s).
- Demonstrated ability to work well in team environment
- Proficient in spreadsheet application usage.
- Proficient in SCADA

#### **Education:**

#### **Required for Selection:**

- BS/BA degree or equivalent work experience.
- Must have satisfied NiSource Gas Controller training requirements.
- 5 year minimum operational experience within NiSource Gas Control.

## **Additional Information:**

**General/Transferable Competencies**:

- Required for selection:
- Ability to collaborate to meet common business objectives.
- Excellent written, verbal and interpersonal skills.
- Strong ability to coach and develop.
- Able to identify and deal with conflict.
- Self-motivated, relationship builder.
- Proven judgement and decision-making abilities.
- Results driven.
- Strong work ethic

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# **Chief Gas Controller**

Date: October 6, 2016

## **Responsibilities**

#### Job Summary:

Oversees the gas control function and monitors customer demand and flowing/available gas supplies on an instantaneous basis, as needed, on behalf of the NiSource local distribution companies (LDC's). Administers and performs the actions necessary to ensure safe implementation of each LDC's best-cost supply purchase and operating strategies. Interacts with personnel from other NiSource companies/departments, other LDC's, those pipelines service the NiSource LDC's and with CO personnel pertinent to the gas management and control activities of the NiSource LDC's.

#### **Principal Duties and Responsibilities:**

- Leads Gas Control personnel to ensure safe reliable and cost effective management of flowing supplies and distribution system operations.
- Monitors all available pipeline flow and market requirement data as needed.
- Determines and manages a balanced pipeline system, via use of discretionary pipeline supplies, exchanges, storage and peak shaving operations while ensuring maintenance of adequate distribution system pressure levels.
- Manages and ensures overall Gas Controller adherence to best cost purchasing and operating strategies of NGD
- Manages in a 24-hour per day, 7-day per week work environment on a shift basis as needed.
- Ascertains problems involved in gas operations; contacts personnel who can supply information and assistance; analyzes and evaluates data; determines solution; initiates changes within jurisdiction; recommends changes in operations or strategy.
- Confers with gas control personnel of pipeline companies, other distribution companies and with CO personnel.
- Ensures Gas Controller compliance with all applicable policies/procedures.
- Communicates with internal and external customers, as needed, to keep them advised of operating conditions.
- Ensures Gas Controller compliance with NGD Alarm Management Plan.
- Communicates and implements standards for Gas Controllers to ensure consistency and uniformity in the application of gas control processes.
- Coaches team members in the development of their skills and promotes teamwork concept within the Gas Control function.
- On an as needed basis, logs information received during shift; answers operating questions; advises supervisor of changes from normal; monitors weather conditions; notifies management of emergencies.
- Generates timely reports needed to reconcile pipeline and peaking invoice statements as needed.
- Performs all Supervisory responsibilities within the function.

#### Qualifications

#### Knowledge, Skills and Abilities:

#### **Required for Selection:**

- Excellent planning, organizational, verbal and written communication skills
- Ability to lead effectively under normal, emergency and contingency situations
- Have knowledge of, or ability to learn, fluid dynamic and thermodynamic concepts including pressures, flows, and gas laws
- Possess intermediate to advanced PC skills; proficiency in Microsoft Office
- Must be able to interpret Federal and State regulation and rules and apply them as necessary to operations
- Acts with integrity at all times, especially when interacting with team members and regulatory personnel
- Ability to explain advanced concepts in a way that a person with minimal gas or mechanical background can understand and become competent at controlling pipeline operations
- Self-starter who takes initiative to proactively find and solve problems
- Fosters teamwork amongst Gas Control and supporting departments
- Focuses on providing innovative solutions to the root cause of problems
- Embraces diversity and values the perspectives of all stakeholders
- Must have the ability to distinguish colors

#### **Preferred for Selection:**

- Experience in both the State and Federal regulatory arena
- Firm understanding of engineering principles, especially as they relate to natural gas
- Knowledge of and/or experience with Supervisory Control and Data Acquisition (SCADA) systems
- Demonstrated management and/or leadership experience

#### Education/Work Experience:

#### **Required for Selection:**

• BS/BA degree or equivalent industry work experience.

#### **Preferred for Selection:**

- Possess a working understanding of the State and Federal Regulatory requirements and gas energy markets
- 5+ years of work experience in a gas utility or related industry

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#### Job Title: Dir Supply & Capacity Planning

#### Job ID: 911498

#### Responsibilities

Ensures effective planning for and management of the resources and assets required by and available to each of the affiliated Columbia local distribution companies (LDC) to ensure safe, reliable, cost effective service to customers and to enhance the value of those assets to customers and shareholders. The Director interacts with LDC, gas marketer, producer, pipeline, internal stakeholder and third party service provider personnel pertinent to the administration and operation of the LDC's supply and capacity assets. The Director oversees various regulatory activities and initiatives of the Columbia LDCs that pertain to supply and capacity planning. Activities of this area include various functions related to supply and pipeline capacity planning, daily balancing of the LDCs assets with expected demand, various daily demand forecasting functions, invoice generation, and invoice review and approval.

#### Principal Duties

- Develops policies that promote and provide for the safe and reliable delivery of natural gas at competitive prices at pipeline receipt points under multiple planning scenarios.
- Recommends long-term contractual commitments for gas supply, pipeline capacity and peaking assets.
- Anticipates changes in the industry and adjusts appropriate practices/services.
- Determines and evaluates strategic issues. Directs the development of recommendations of strategic alternatives and related strategic plans.
- Directs contacts with suppliers, pipelines, LDCs, marketers, customers and others who
  provide or receive services.
- Directs and encourages development of new services and programs that enhance services and their value for the LDCs' customers and shareholders.
- Testifies and/or acts as witness before state regulatory agencies.
- Directs economic and technical studies related to various regulatory filings.
- Directs economic and technical studies to determine optimum supply/capacity/peaking portfolios in support of each LDC's service, reliability and cost goals in meeting their future years; design day and design winter season firm service obligations.
- Directs economic and technical studies to determine the optimum use of supply/capacity/peaking assets for each LDC for current daily, monthly and seasonal operations. Ensures adherence to contract/tariff limits and maximizes stakeholder value.
- Directs activities related to the development of the Design Day Forecast and Daily Operational Forecasts for each LDC.
- Directs the review and approval of all transportation and gas supply invoices from pipelines and gas suppliers.
- Directs the generation of invoices related to off system sales.
- Oversees and encourages the development and maintenance of computer systems and or improved technology capable of ensuring and/or enhancing processes and operations.
- Supervises the activities of Managers/Team Leaders in the functional area.
- Identifies the strengths and leadership capabilities among employees, and provides them with challenges and opportunities that enhance skills.
- Performs supervisory functions such as performance evaluations in accordance with established policies and procedures.

- Fosters teamwork among personnel and other business units that are committed to organizational goals.
- Motivates and involves others to make changes and improvements.
- Represents the department, the Company and the LDCs to external and internal counterparts.
- Recommends and implements change to policies and procedures to make supply operations more cost effective and efficient.
- Directs the development of multi-year projections of the usage and costs of the LDCs' supply/capacity/peaking portfolios for Financial Planning.
- Provides input into the design of the LDCs' Choice and GTS programs, including capacity assignment. Provisions, Supplier delivery requirements, and relevant tariff development.
- Other duties as may be required.

## Selection Criteria

## Required for Selection:

- Proven analytical skills
- Strong understanding of financial concepts
- Strong leadership capability
- Broad knowledge of natural gas industry and pipeline infrastructure
- Ability to direct, review and assess quantitative analyses
- Ability to resolve complex problems and manage conflicting issues
- Strong written and oral communication skills
- Strong organizational / time management skills
- Learns new information quickly
- Ability to exercises independent judgment and initiate solutions
- Strong project management skills
- Handles multiple demands and competing priorities
- High degree of honesty, integrity and strong work ethic
- Capable of building a highly motivated, productive team
- Awareness of own strengths and weaknesses, and impact of interpersonal characteristics on others
- Ability to influence and collaborate to build effective relationships with internal and external business partners
- Experience testifying before regulatory agencies
- Knowledge of federal and state regulatory tariffs/processes/practices and significance of operating in a highly regulated industry
- Ability to recognize strategic implications of problems and issues

## Preferred for Selection:

- Forecasting experience
- Knowledge of pipeline operations as they relate to gas distribution supplies, LDC and pipeline tariffs, gas supply and its transportation and storage operations
- Knowledgeable about pipeline cost structures for transportation and storage capacity
- Proven understanding of factors that can reduce costs and increase profitable opportunities for the LDCs
- Works well in team environment
- Knowledgeable about computer technologies used by department
- Coaching skills

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- Managerial and supervisory experience Change management skills •
- •

# Job Description - Director Gas Control & Planning

## Job Summary:

Ensures that the management of the pressure and flow of natural gas supplies to each of the affiliated Columbia local distribution companies (LDC) on a day to day and within-day basis, as made possible by a Supervisory Control and Data Acquisition (SCADA) system, is conducted in a manner that ensures continuous, reliable service to customers and in compliance with industry standards and applicable regulatory requirements. Directs the Gas Control Section, consisting of a Manager, Team Leader, Specialists, Gas Controllers and an Administrative Assistant that provide and support services to the LDCs through active, productive direction. The Director interacts with LDC, gas marketer, producer, pipeline, LDC customer and third party service provider personnel pertinent to the operation of the LDCs; gas management/flow activities. The Director oversees support from his Section regarding various regulatory activities and initiatives of the Columbia LDCs. The activities of this Section include the functions of gas operations/gas control and the remote monitoring/control of LDC assets, invoice review and approval and verification of natural gas supply/operations for the LDCs as made possible via SCADA.

## **Principal Duties and Responsibilities:**

- Develops and implements policies that promote and provide for the reliable delivery of natural gas on a continuous basis in a manner consistent with LDC tariffs and compliant with applicable industry standards and requirements inclusive of regulations specific to Gas Control and/or SCADA operations.
- Determines and evaluates strategic and operational issues. Recommends alternatives and develops/implements associated plans.
- Anticipates changes in the industry and strategically adjusts Gas Control practices/services to meet such changes.
- Represents the department, the Company and the LDCs to external and internal counterparts as needed.
- Directs contacts and business relationships with suppliers, pipelines, LDCs, customers and others who provide or receive Gas Control services.
- Directs the negotiation of contracts with third party service providers.
- Determines the need for engaging peaking services/assets inclusive of their operation from a remote location, i.e. Gas Control, often times within a very limited time frame.
- Directs the real-time, continuous monitoring of flowing supplies, gas pressures and other factors critical to safe, uninterrupted service, within applicable parameters and entitlements, via a Supervisory Control and Data Acquisition (SCADA) system.
- Directs relationships with internal and external service providers responsible for SCADA system operability.
- Oversees and encourages the development and maintenance of computer systems and or improved technology, like SCADA, capable of ensuring and/or enhancing Gas Control processes and operations.
- Plans for emergency events that could impact gas supply reliability to customers.

- Supervises the activities of a Manager and Team Leader in the functional area.
- Identifies the strengths and leadership capabilities among employees and provides them with challenges and opportunities that enhance their skills.
- Performs supervisory functions, such as performance evaluations in, accordance with established policies and procedures.
- Fosters teamwork among Gas Control personnel and other business units that are committed to achieving organizational goals.
- Motivates and involves others to make changes and to operate in a spirt of continuous improvement, in the process striving to be in concert with business objectives and vision of the LDCs.
- Oversees the development and implementation of processes that assure that actions and decisions made by on-duty Gas Controllers are documented and preserved in a manner consistent with applicable industry standards/requirements.
- Directs the operation of LDC owned peaking assets for purposes of production or replenishment of supply and the review and approval of invoices from third party service providers and suppliers of replenishment volumes at such assets.
- Oversees the implementation of practices and activities that provide for a safe and secure work environment.

# Knowledge, Skills and Abilities:

# **Required for Selection:**

- Strong Leadership Capability
- Broad knowledge of natural gas industry
- Ability to direct, review and assess quantitative analyses
- Ability to resolve complex problems and manage conflicting issues
- Strong written and oral communication skills
- Strong organizational / time management skills
- Ability to learn and assimilate new information quickly
- Exercises independent judgment and initiate solutions
- Adept and comfortable with the use of office-based computer technology
- Proven analytical skills
- Develops effective working relationships
- Handles multiple demands and competing priorities
- Ability to travel

## **Preferred for Selection:**

- Work experience resulting in knowledge of pipeline operations as they relate to gas distribution supplies, LDC and pipeline tariffs, gas supply and its transportation on pipeline and distribution systems
- Knowledge of federal and state regulatory processes/practices and the significance of operating in a highly regulated industry
- Works well in team environment
- Knowledgeable about computer technologies used by Gas Control and Gas Operations

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- Recognize strategic implications of problems and issues
- Coaching skills
- Managerial and supervisory experience

# **Education/Work Experience:**

## **Required for Selection:**

- BS/BA or equivalent experience
- 5 years gas industry experience
- 3 years gas utility experience

# **Preferred for Selection:**

- Master's degree or some post-graduate studies
- 3 years recent gas supply or gas transportation experience

#### **Job Description**

Title:	Supply Services Analyst
Company:	NiSource Corporate Services Co
Location (city, state):	Columbus, OH
Department Name:	Supply Development
Reports To:	Brad Ranney
Salary Range:	
Job Scope Level:	
FLSA Status:	Salaried Exempt
Supervises:	0
# Open Positions:	0

#### **Purpose/Job Summary:**

To support Supply and Optimization activity on pipeline and storage capacity assets for six Local Gas Distribution Companies with the responsibility of managing the financial compliance of pipeline tariffs/regulations and contractual agreements, as well as the reporting of historical performance and forecasted objectives.

#### Key Results:

- Accurate financial execution of Contractual Agreements
- Efficient initiation of supplier contracts
- Accurate reporting and projections of Supply & Optimization Data
- Maintaining departmental compliance with Sarbanes Oxley (SOX)

#### Principle Duties/ Essential Responsibilities:

- Develop incentive revenue financial projections by applying knowledge of tariff sharing programs and historic information. Present projections and supporting assumptions senior management
- Manage execution of capacity Asset Management Agreements
- Compile and prepare current and historical Supply & Optimization data reports for internal and external customers such as the Federal Energy Regulatory Commission (FERC) and the various NGD State Regulatory Commissions
- Manage Local Gas Supplier contracting process which includes the initial Contract Execution for new producers, Contract Assignment to allow Producer to Producer

transaction, Gas Transportation Contracts as well as Contract Terminations and Amendments

- Ensure corporate compliance with the quarterly Sarbanes Oxley Act (SOX) testing requirements and produce accurate financial reporting by monitoring business risks and evaluating internal control structure
- Reconcile all purchase invoices (Supply and Transportation Service) utilizing knowledge of term supply contracts, current pipeline contracts and tariffs, pipeline volume allocations statements, capacity release transactions as well as trade confirmations
- Analyze and resolve counterparty invoice discrepancies by verifying contract compliance (contract language interpretations) and confirming quantities to pipeline reported volume allocations as well as any variable cost pricing calculations (transportation reimbursement) defined in the purchase contract
- Advise and provide support documentation to Regulatory Accounting for any regulatorytype costs shown on pipeline invoices
- Initiate and manage new NAESB (North American Energy Standards Board) contracts including coordinating and negotiating legal exceptions and amendments to the standard contract
- Review annual term gas purchase contracts and transportation agreements confirming accuracy with contract language and proper contract set up within GasSource
- Other duties as assigned

## Selection Criteria: Key Work Experiences/Technical & Functional Skills

- 1-3 years of finance, auditing or project management experience
- Must have a strong understanding of database management and ability to query data in Access, Cognos & Excel
- Must possess experience interpreting and applying tariff and contractual provisions
- Proven ability to be self-sufficient and self-motivated
- Strong Organizational and Planning skills
- Must be able to handle multiple tasks in a fast paced business environment
- Proven ability to communicate technical information
- Ability to work cooperatively with staff and partners within a matrix organization
- Must have flexibility for occasional travel, as needed

#### **Competencies:**

- Attention to Detail
- Building Partnerships
- Driving for Results
- Information Monitoring

#### **Education:**

- Associates or Bachelors degree in a Business discipline preferred
- Work experience within the utility industry preferred

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# **Job Description**

Job Title:	Director Gas Control
Job ID:	916046
Location:	OH-Columbus

Regular/Temporary:

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Regular

Switch to Internal View

#### Responsibilities Job Summary:

Ensures that the management of the pressure and flow of natural gas supplies to each of the affiliated Columbia local distribution companies (LDC) on a day to day and within-day basis, as made possible by a Supervisory Control and Data Acquisition (SCADA) system, is conducted in a manner that ensures continuous, reliable service to customers and in compliance with industry standards and applicable regulatory requirements. Directs the Gas Control Section, consisting of a Manager, Team Leader, Specialists, Gas Controllers and an Administrative Assistant that provide and support services to the LDCsthrough active, productive direction. The Director interacts with LDC, gas marketer, producer, pipeline, LDC customer and third party service provider personnel pertinent to the operation of the LDCs¿ gas management/flow activities. The Director oversees support from his Section regarding various regulatory activities and initiatives of the Columbia LDCs. The activities of this Section include the functions of gas operations/gas control and the remote monitoring/control of LDC assets, invoice review and approval and verification of natural gas supply/operations for the LDCs as made possible via SCADA.

#### Principal Duties and Responsibilities:

- Develops and implements policies that promote and provide for the reliable delivery of natural gas on a continuous basis in a manner consistent with LDC tariffs and compliant with applicable industry standards and requirements inclusive of regulations specific to Gas Control and/or SCADA operations.
- Determines and evaluates strategic and operational issues. Recommends alternatives and develops/implements associated plans.
- Anticipates changes in the industry and strategically adjusts Gas Control practices/services to meet such changes.
- Represents the department, the Company and the LDCs to external and internal counterparts as needed.
- Directs contacts and business relationships with suppliers, pipelines, LDCs, customers and others who provide or receive Gas Control services.
- Directs the negotiation of contracts with third party service providers.
- Determines the need for engaging peaking services/assets inclusive of their operation from a remote location, i.e. Gas Control, often times within a very limited time frame.
- Directs the real-time, continuous monitoring of flowing supplies, gas pressures and other factors critical to safe, uninterrupted service, within applicable parameters and entitlements, via a Supervisory Control and Data Acquisition (SCADA) system.
- Directs relationships with internal and external service providers responsible for SCADA system operability.
- Oversees and encourages the development and maintenance of computer systems and or improved technology, like SCADA, capable of ensuring and/or enhancing Gas Control processes and operations.
- Plans for emergency events that could impact gas supply reliability to customers.
- Supervises the activities of a Manager and Team Leader in the functional area.

- Identifies the strengths and leadership capabilities among employees and provides them with challenges and opportunities that enhance their skills.
- Performs supervisory functions, such as performance evaluations in, accordance with established policies and procedures.
- Fosters teamwork among Gas Control personnel and other business units that are committed to achieving organizational goals.
- Motivates and involves others to make changes and to operate in a spirt of continuous improvement, in the process striving to be in concert with business objectives and vision of the LDCs.
- Oversees the development and implementation of processes that assure that actions and decisions made by on-duty Gas Controllers are documented and preserved in a manner consistent with applicable industry standards/requirements.
- Directs the operation of LDC owned peaking assets for purposes of production or replenishment of supply and the review and approval of invoices from third party service providers and suppliers of replenishment volumes at such assets.
- Oversees the implementation of practices and activities that provide for a safe and secure work environment.

#### Knowledge, Skills and Abilities:

#### Required for Selection:

- Strong Leadership Capability
- Broad knowledge of natural gas industry
- Ability to direct, review and assess quantitative analyses
- Ability to resolve complex problems and manage conflicting issues
- Strong written and oral communication skills
- Strong organizational / time management skills
- Ability to learn and assimilate new information quickly
- Exercises independent judgment and initiate solutions
- Adept and comfortable with the use of office-based computer technology
- Proven analytical skills
- Develops effective working relationships
- Handles multiple demands and competing priorities
- Ability to travel

#### Preferred for Selection:

- Work experience resulting in knowledge of pipeline operations as they relate to gas distribution supplies, LDC and pipeline tariffs, gas supply and its transportation on pipeline and distribution systems
- Knowledge of federal and state regulatory processes/practices and the significance of operating in a highly regulated industry
- Works well in team environment
- Knowledgeable about computer technologies used by Gas Control and Gas Operations
- Recognize strategic implications of problems and issues
- Coaching skills
- Managerial and supervisory experience

#### Education/Work Experience:

#### **Required for Selection:**

- BS/BA or equivalent experience
- 5 years gas industry experience

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• 3 years gas utility experience

### Preferred for Selection:

- Master's degree or some post-graduate studies
- 3 years recent gas supply or gas transportation experience

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## **Job Description**

Job Title:	Manager Gas Control	
Job ID:	919446	
Location:	OH-Columbus	
Full/Part Time:		Full-Time
Regular/Temporary:		Regular

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Switch to Internal View

### Responsibilities Purpose:

Manages the gas control center and its 24/7 related activities and SCADA systems for Columbia LDCs and ensures the safe, reliable, economical and compliant operation of the Columbia¿s pipeline systems.

#### **Essential Responsibilities:**

- Manages gas control activities to maintain gas system integrity while effectively interfacing with gas supply stakeholders
  - o Directly manages the Chief Gas Controller
  - Oversees the scheduling of Shift Lead Gas Controllers and Gas Controllers to assure proper staffing and in compliance with applicable regulations.
  - Works collaborativelywith suppliers, pipelines, LDCs, marketers, gas customers and supporting departments (i.e. other ES&O departments, GSO, Industrial Billing, I&C, etc) in support of the gas management and control activities.
  - Assures the integrity of data, equipment, systems and facilities pertinent to SCADA system operations.
  - Works with internal and external business partners ensuring continuous SCADA system operability, which is critical for Gas Control to keep within pipeline delivery entitlements, monitoring safe & reliable pipeline system.
  - Provides expertise pertaining to the optimal use of gas supplies and pipeline capacity contracts in meeting customer demand.
  - Manages flowing supply and associated pipeline or LDC facilities to ensure safe and reliable delivery of gas to the LDCs customers.
  - Manages introduction of on system supplies (LNG, Propane/Air, Underground Storage) to system operations and manages LDCs; services to customers with large, highly variable demand for natural gas.
  - Develops emergency plans and participates in regional contingency planning groups that are designed to address gas supply reliability to customers.
  - Ensures Gas Control compliance under all federal, state and company mandated programs.
  - Collaborates with field operations during emergency conditions to protect life, property and system integrity while minimizing supply interruptions.
  - Is responsible to ensure Gas Control personnel are trained under the Gas Control training programs and qualified under the DOT Operator Qualification (OQ) program.
  - Develops and maintains a Gas Control Evacuation and Recovery Plan and ensures that the plan and affected employees are subject to periodic testing.
- Develops and drives process improvement initiatives & best practices including working with business partners on cross functional issues impacting gas control
- Performance management of the gas control center including developing and monitoring performance indicators, communicating performance, and coaching Chief Controller and Shift Lead Gas Controllers.
- Oversight of training & development for Gas Control employees including the development and implementation of training and development activities.

- Models and monitors the impacts of various existing and proposed state and federal regulatory proceedings and new service scenarios.
- Recommends and implements change to policies and procedures to make operations more cost effective, efficient and responsive to critical operating situations or needs and to ensure that companys Gas Control operations are in compliance with all applicable state and federal standards.
- Provides the oversight in the annual reviews of the companys Control Room Management Plan and Alarm Management Plan
- Collaborates with business partners on developing and executing Control Room Team Training and Exercises
- Oversees and supports the development of computer systems capable of enhancing Gas Control processes and operations.
- Is a liaison for the Gas Control and company business partners for projects that may have an impact on Gas Control and/or system operations.
- Delivers results in key financial, customer, employee, and process elements of the above responsibilities
- Effectively engages and develops work group
- Contributes to broader organizational team success

### Qualifications

Required Knowledge, Skills, and Abilities:

- Proven Leadership Capability
- Broad knowledge of natural gas industry
- Ability to direct, review and assess quantitative analyses
- Ability to resolve complex problems and manage conflicting issues
- Strong written and oral communication skills
- Strong organizational / time management skills
- Learns new information quickly
- Exercises independent judgment and initiate solutions
- Proven analytical skills
- Develops effective working relationships
- Handles multiple demands and competing priorities

#### Preferred Knowledge, Skills, and Abilities:

- Engineering degree
- Understanding of pipeline hydraulics to proactively recognize problems and implement solutions
- Adept and comfortable with the use of real time computer technology (SCADA)
- Detailed knowledge of Columbia¿s systems
- Experience with hydraulic modeling software
- Experience with instrumentation & controls
- Experience with the OSIsoft PI software
- Data Management Experience
- Leadership experience in a 24/7 (shift work) environment
- Demonstrated ability to coach others in their development
- Experience with developing interactive computer based training
- Experience with OQ & Control Room Management
- Proven track record of continuous improvement
- Experience with / Knowledge of gas supply

Education and Experience

KY PSC Case No. 2018-00253 Staff's Data Requests Set 1 No. 12 Attachment I Page 3 of 3

- BS/BA or equivalent experience required
- 10 years gas utility experience preferred
- 5 years experience in relevant operations role(s) preferred

View

## **Job Description**

Job Title:	Gas Control Specialist - SCADA/CRM	
Job ID: Location:	920526 OH-Columbus	
Full/Part Time:		Full-Time
Regular/Temporary	<i>r</i> :	Regular
Return to Previous	Page	Switch to Internal

#### Introduction

Oversees and updates the gas controller Control Room Management Program including facilitating the Fatigue Mitigation training. Oversees the development and maintenance of the Commercial Operations Alarm Management Plan. Oversees the development and maintenance of SCADA displays, databases and reporting mechanisms. Acts as liaison with Information Technology and Corporate Security in Cyber security. Champions Change Management for Gas Control. Liaisons with Real Time Systems (RTS) and Technical Support (TS) to develop and maintain SCADA applications and functionality which ensure business continuity.

### Responsibilities

Principal Duties and Responsibilities are as follows:

- Reviews and evaluates NGD Control Room Management Program for effectiveness, completeness and to ensure that it meets regulatory requirements.
- Reviews and evaluates NGD Alarm Management Plan for effectiveness, completeness and to ensure that it meets regulatory requirements.
- Develops standards, specifications and guidelines pertinent to CRM. Keeps abreast of regulations and maintains an up-to-date knowledge of industry best practices, industry standards and changes and updates the NGD CRM Plan as appropriate.
- Interprets applicable codes and regulations prevalent within the industry.
- Participates and fulfills a critical role during PHMSA CRM audits; representing the company¿s CRM plan.
- Serves as liaison with other departments to incorporate their responsibilities in the CRM plan.
- Responsible for the documentation and retention of records regarding compliance with CRM, fatigue training and fatigue risk mitigation.
- Implements, and periodically reviews and updates, based on actual experiences, an alarm management plan; identifies any deficiencies in need of being addressed.
- Monitors the volume and content of general alarm activity directed to each controller at least once per year, reports findings and maintains records for audit purposes.
- Trains / educates controllers and supervisors about fatigue mitigation and recognizing the effects of fatigue.
- May be requested to fill in as a gas controller to provide support on an as-needed basis.
- Adjusts readily to multiple demands, shifting priorities and unexpected events in a fast paced and challenging environment.
- Develops and updates SCADA displays including database changes.
- Provides training on SCADA/SCADAweb as needed.
- Monitors cyber security issues/regulations and makes recommendations to Gas Control Management.
- Facilitates change management processes such as: 1) establishing/ensuring communications processes between the control room and operating management and associated field personnel when: a) physical changes to pipe equipment or pipe configuration are being planned or implemented; b) emergency conditions exist and c) making changes that impact control room operations; 2) ensuring Gas Control¿s participation in planning processes prior to implementation of significant pipeline hydraulic or configuration changes; c) ensuring that

requests for SCADA and SCADA RTU changes include an analysis of impact to distribution system operations.

- Acts as liaison to RTS and Technical Support
- Implements, periodically reviews and updates Gas Controller Training Guide.
- Incorporates pertinent operating experience/¿lessons learned¿ by Gas Control personnel, in actual operations or training processes, into Gas Control¿s procedures related to CRM if/as needed.
- Monitors the volume and content of general alarm activity directed to each Gas Controller at least once per year, reports findings and maintains records for audit purposes.
- Trains/educates Gas Controllers and supervisors on SCADA upgrades/enhancements.
- Remains current on information related to, and assures Gas Control¿s compliance in its conduct of business with applicable tariffs, contracts, interruption plans, regulatory requirements, operational plans, receipt and delivery obligations and MAOPs for each of the Columbia companies.
- Provides remedial training identified in the OQ Plan to Gas Control personnel if/as needed.
- Provides daily/monthly reports to Gas Control Management as required.
- As directed, assumes other departmental duties.

### Qualifications

### Knowledge, Skills and Abilities:

#### Required for Selection:

- Understands complex concepts and relationships
- Recognizes strategic implications of problems and issues
- Fosters team commitment
- Effectively shares expertise and experience with others
- Draws accurate conclusions from quantitative information
- Drives for results in carrying out assignments.
- Knowledge of Control Room Management regulations
- Knowledge of Operator Qualification regulations
- Able to meet Gas Controller DOT qualification criteria
- Must be qualified on all Areas of Responsibility for NGD
- Must be able to pass DOT random drug testing
- Must be able to distinguish colors

#### Preferred for Selection:

- Advanced computer skills in various CO applications
- Experience working on project teams.
- Expert user on SCADA interfaces, tables and architecture.

#### **Education/Work Experience:**

#### Required for Selection:

- BS/BA in a quantitative discipline or equivalent experience
- 5+ years work experience in natural gas supply industry
- Must have satisfied NiSource Gas Controller training requirements.

### Preferred for Selection:

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• 10+ years professional work experience

## COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

13. Provide copies of reports or internal audits or reviews of any aspect of the supply function conducted within the last five years. Include reports prepared by Columbia and outside auditors.

### **RESPONSE:**

- a) There have been no internal audit reports or reviews prepared by Columbia or by outside auditors in the last five years. However, Columbia has established controls and policies that govern the trading practices of the Gas Supply and Optimization department, to ensure accuracy and prudency for all gas supply transactions.
- b) Columbia's Credit department exercises trading oversight over the Energy Supply and Optimization department, by establishing credit limits for all trading partners and suppliers. The Credit department also controls the trading limits on WEBICE, the internet based trading system that Columbia utilizes for many transactions.

- c) Columbia strictly follows and adheres to the Sarbanes Oxley ("SOX") accounting rules, controls, and testing procedures. Attachment A provides the General SOX Testing Description.
- d) Columbia maintains an Energy Supply and Optimization Risk Management Policy. Attachment B is a copy of the current risk management policy. This policy is reviewed by the Gas Traders annually and an acknowledgement is signed by each Gas Trader. This policy also sets controls and limits on all gas trading activity.

### **GENERAL SOX TESTING** (Quarterly, Semi-Annual or Annual testing frequency)

- DATA INTREGITY Transactions to be booked (estimated) are not accurate or missing resulting in over/under stated expenses and liabilities.
  - Quarterly Screen shots confirming that all trades (purchases, sales, exchanges, capacity management fees) in GasSource have been finalized ("completed" or "voided" status) prior to preparing the month end closing report (of estimated gas costs). Also confirm with the scheduling group that capacity releases as well as imbalance totals have been finalized.
    - As part of their daily/monthly routine, the traders and schedulers work together to ensure that all gas purchases are scheduled to the appropriate LDC. Each trade that is entered in GasSource (in Approved or Completed status) is automatically generated in the scheduling model of GasSource and displayed as "Scheduling Obligation". At month end, all deals should be completed (or voided) and the remaining to be scheduled volumes should equal -0-, indicating that all deals have been scheduled and that purchase volume and scheduled volume are in agreement. Trading and scheduling would resolve any discrepancies between purchase and scheduled volume (balance not equal to -0-).
  - Numerous GasSource system reports and data queries are compared to the month end closing report totals forwarded to general accounting. The items include the following:
    - Quarterly Capacity release closing entries vs system query of capacity release activity
    - Quarterly Incremental purchase totals vs Off-system sales purchase cost total
    - Quarterly Index pricing on term deals with volume greater than 150,000 Dth
    - Quarterly Index pricing on spot deals with volume greater than 150,000 Dth
    - Quarterly Month end supply purchase estimates (prices) are reasonable relative to market prices
    - Annual Sample spot purchase confirms are verified against estimated purchase costs (volume / rate).

### GasSource System Access and Account Classification assignment

- Semi-Annual review of GasSource system access and separation of duties (via GasSource roles)
- Annual review of account class codes shown in GasSource
  - The account classification values shown in GasSource and displayed on the payable invoices (Supplier/Transportation) are not editable fields (fixed data fields), therefore, the account classification values shown on the closing reports will not change unless additional cost elements are required.
- Payment Approvals
  - Sample testing of payable invoices to verify that the payments are consistent with the company disbursement policy (i.e. invoice approval levels)



### POLICY SUBJECT: Energy Supply & Optimization Risk Management Policy

EFFECTIVE DATE: March 12, 2012

REVISED DATE: December 13, 2017

### Overview

The Energy Supply & Optimization ("ES&O") group within NiSource Inc. (together with its subsidiaries, "NiSource") recognizes that certain risks are incidental to gas supply and power supply portfolio management operations. ES&O's general philosophy is to avoid unnecessary risk, and it is the policy of ES&O to identify, manage, monitor and limit, to the extent practicable, any risks associated with business activities approved by senior management.

ES&O Management is expected to manage commodity risk to acceptable levels as specified by the NiSource Risk Management Committee ("RMC"), the <u>NiSource Corporate Commodity Risk</u> <u>Management Policy</u> ("Corporate Risk Policy"), and this Energy Supply & Optimization Risk Management Policy (this "Policy"). ES&O's management is expected to understand fully the extent to which their decisions and actions expose NiSource to commodity risk and may not engage in activities that expose NiSource to risks beyond acceptable levels. The choice of risk management strategies is limited to those reviewed and approved by the RMC and in accordance with the Corporate Risk Policy. Members of the Enterprise Risk Management ("ERM") team should be consulted with any risk management policy questions or issues.

Prior review and approval by the Deputy General Counsel, Commercial, the NiSource Chief Risk Officer, and Corporate Compliance is required to authorize entering into any commodity forward, swap or futures transaction of a type that has not been previously identified, classified and included in <u>Commodity Futures Trading Commission ("CFTC") Transaction Classification List</u> found on the MySource website.

ES&O may not enter into a swap transaction required to be reported to a swap data repository under the CFTC's regulations if the NiSource Company is to be the reporting party. Exceptions to this Policy must be reviewed and approved by the Deputy General Counsel, Commercial, the NiSource Chief Risk Officer and Corporate Compliance prior to execution of the transaction. This restriction does not apply to swap transactions which qualify for the Trade Option Exemption under CFTC rules.

The following terms used in this Policy have the meanings as defined in the <u>Corporate Risk</u> <u>Policy</u>, including:

- swap
- forward contract
- commodity future
- future

- trade option ("TO")
- over the counter ("OTC").

Under the CFTC's rules, some contracts for physical delivery can meet the requirements of a "swap" and thereby trigger reporting and other regulatory obligations. ES&O is responsible for establishing process documentation to provide guidance on the commodity transactions approved under this policy and the regulatory treatment for such transactions. The definition of a "swap" and the exclusions from that term under the Commodity Exchange Act can be complicated. Employees should consult with the Director of Enterprise Risk Management or the Deputy General Counsel, Commercial if there is any question about whether a transaction falls within the definition of a "swap".

Subject to the terms of this Policy or with the prior approval of the RMC, ES&O may enter into swap transactions for the purpose of hedging commercial commodity risk for those retail commodity programs approved by the applicable state(s) regulatory agency for which the costs of that hedge will be allocate. Swap transactions may also be entered into for the purpose of implementing commodity hedging programs designed to mitigate the volatility in commodity costs if approved by the applicable state regulatory agency for a NiSource operating company.

Taking risks unrelated to NiSource's normal business activities is a violation of this Policy. Employees shall immediately report any known or suspected breach of risk management policies, strategies or guidelines to their immediate supervisor, to the Chief Risk Officer or to a member of the RMC. All ES&O employees have been advised that any violation of this Policy is grounds for discipline, up to and including dismissal.

This Policy has been reviewed and approved by the RMC. ES&O must seek approval from the RMC prior to any material modification of this Policy.

### A. Policy Guidelines

This Policy is intended to provide authority and broad guidance to ES&O within approved risk parameters. The following stipulates risk management principles, practices and policies with which ES&O must comply:

Operate a disciplined program to manage decision-making and transaction execution and settlement while understanding, monitoring, and managing risks.

Monitor and control counterparty risk management in conjunction with the <u>Corporate</u> <u>Credit Risk Management Policy</u>.

Monitor, track and report forward contracts, futures and swap transactions and other hedging activities in a timely, accurate and complete manner and in accordance with all applicable laws, rules and regulations.

Comply in all respects with applicable trading laws, rules and regulations.

Authorize designated employees with the requisite skills and experience to transact and manage risks, and process and monitor transactional activities.

NiSource will not voluntarily provide transactional information to an index producer and/or data aggregator either directly (providing data) or indirectly (the counterparty providing the NiSource name as part of its data submission). The discretionary submission of any transactional information is strictly prohibited. Information required to be disclosed by law will be provided.

This Policy covers all transactions that could be submitted as verifiable data in the construction and publication of market indices. Any question on the application of this Policy to a particular transaction should be directed to the Chief Risk Officer or to the Legal Department for further review. No employee may execute transactions on behalf of NiSource or its subsidiaries, except as permitted by the <u>Corporate Accountability Policy</u>.

### B. Organizational Responsibilities

The objective of ES&O is to effectively manage the gas and power portfolio of assets. This includes procurement of natural gas in addition to optimization of the gas asset portfolio and the electric generation fleet. ES&O will utilize strategies and maintain risk levels that are consistent with this Policy and the corporate risk policies. In each instance, ES&O will also comply with the laws and regulations applicable to the jurisdictions that NiSource operates within.

ES&O, as directed by the RMC, will be responsible for maintaining this Policy. This Policy and any exhibits attached hereto shall also define the extent of ES&O's risk management activities.

ES&O will submit to ERM its plans for using any new or unique swap transactions or other instruments that are not already covered in Section C of this Policy, including the swap instruments' relevance to hedging risk, and any accounting and tax implications, including how the instrument will be tracked and measured for hedge effectiveness. ERM, in conjunction with the Deputy General Counsel, Commercial, and Corporate Compliance, will summarize each plan for utilization of these new instruments for review and approval by the RMC. Deviations from the approved plans will require RMC approval.

The RMC shall have direct and unrestricted access to all ES&O records, contracts, bids, price offers and financial analysis to identify and quantify risk. ES&O shall maintain and retain all records documenting each transaction in accordance with any recordkeeping requirements promulgated by the CFTC. At a minimum, ES&O shall create and retain the following data for all energy related transactions:

Controlling transaction numbers Which exchange the trade was executed on, if any Commodity, trade date, purchase or sale, volume, price, month of delivery Transaction description and comments (for unique information) Approval signature/notation (if necessary) Relationship to hedging (accounting, tax, and underlying physical) Any other documentation necessary to support accounting and reporting requirements Any other documentation required by any applicable laws, rules and regulations.

ES&O shall ensure that its brokers and electronic exchange trading platforms for exchange traded and OTC instruments are provided documentation listing traders authorized by ES&O. All ES&O employees engaged in risk management related activities must acknowledge in writing, receipt and understanding of this Policy and certain Corporate Policies, which include:

NiSource Corporate Commodity Risk Policy;

- <u>NiSource Credit Risk Management Policy;</u>
- <u>Anti-Fraud Policy;</u>
- <u>CFTC No. 1 Futures and Swap Execution, Clearing and Identification;</u>
- CFTC No. 2 Futures and Swap Recordkeeping Requirements;
- CFTC No. 3 Futures and Swap Data Reporting;
- <u>CFTC No. 4 Anti-Fraud, Anti-Manipulation, Anti-Disruptive Practices, and Anti-Evasion</u> <u>Provisions</u>.

ES&O will trade financial instruments only with brokers and counterparties approved in accordance with established NiSource corporate credit policies and procedures.

In the event employees engaged in transactional activities are reassigned, move to a different business unit, or leave ES&O, thus losing their authorization, ES&O will notify the Chief Risk Officer and all brokers and counterparties by phone as soon as commercially possible and within 48 hours by written notification. It is the responsibility of ES&O to insure that adequate safeguards are in place to prevent unauthorized transactions from any source.

NiSource shall comply fully with all laws, rules and regulations governing swap transactions. Any NiSource employee authorized to transact energy swap transactions and any individual who supervises the activities of those employees shall not actively trade for his/her own account or the account of any non-NiSource parties in the energy commodities markets in which NiSource entities participate. This includes members of ERM and other corporate risk groups, members of the RMC, and all employees engaged in risk management related functions at ES&O.

ES&O will manage all material financial exposure NiSource assumes as a result of any normal business activities, including risk management required by regulatory bodies. The choice of risk management strategies is limited to those described in annual plans reviewed and approved by the RMC.

NiSource may only trade in U.S. dollar denominated energy markets, including regulated futures and options exchanges. Entering into swap transactions in the OTC market, other than swaps which meet the definition of a trade option under the CFTC's regulations, or entering into a non-dollar denominated energy commodity transaction requires the prior approval of the RMC.

NISOURCE'S's Chief Financial Officer or the Chief Financial Officer's designated representative shall monitor all activity to ensure that ES&O does not breach the policy outlined by the <u>Corporate</u> <u>Risk Policy</u> and this Policy. ES&O shall maintain and retain all records documenting each transaction in accordance with any recordkeeping requirements promulgated by the CFTC. ES&O management will be responsible for ensuring that all transactions are recorded on a timely and accurate basis.

C. ES&O Approved Commodity F	Risk Management Instruments
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Use of any instrument, trade, currency or market not specifically identified is prohibited.		
	be conducted in US Dollars.	
Physical Transaction	Natural gas and electricity (including physical contracts with embedded options) as well as related storage and transportation purchases and sales are authorized—as bundled or unbundled transactions—according to the commercial needs of NISOURCE and their customers. For all such transactions, the term will not exceed five (5) years unless first approved by the RMC.	
	Physical transactions are considered OTC instruments if the transaction is not offered on a Contract Market or Derivatives Transaction Execution Facility. All physical transactions should be reviewed individually to determine classification as a forward or swap. See additional <u>CFTC trading guidance materials</u> for more information.	
Exchange traded / cleared futures contracts (including Exchange of Futures for Physicals [EFPs])	Natural gas and electricity contracts will comply with the state approved plan.	
Standard MISO	Electricity transactions where MISO is the counterparty related to load	
Transactions	and supply optimization.	
Emission Allowances	Purchase and/or sale of emission allowances	
Renewable Energy Credits (RECS)	Transactions related to the purchase or sale of energy credits necessary to meet certain customer or tariff obligations.	
Over-the-Counter (OTC) Swaps	Over the counter instruments are <u>not</u> authorized unless executed pursuant to a specific plan approved by the RMC. Only swaps (including physical transactions with optionality) meeting the definition of a trade option are authorized. For such transactions, the term will not exceed the applicable terms specified herein.	
Options	Exchange-traded natural gas, electricity, weather, and volumetric options are authorized.	
Spreads	Time spreads (including, without limitation, park and loan gas transactions and day-ahead/real-time electricity swaps) and location spreads are authorized, so long as the individual positions making up the transaction are consistent with the preceding terms and conditions. For such transactions, the term will not exceed the terms specified above for physical transactions.	

## D. Controls

Control Framework	
Authority	<ul> <li>All NiSource personnel authorized to engage in risk management activities will have appropriate experience, skill level, and degree of specialization. These personnel include specialists who manage risks, their supervisors, and those responsible for processing, controlling, and reconciling risk management activities.</li> <li>All NiSource personnel authorized to commit NiSource to transactions will be designated in writing by the Chief Financial Officer of NiSource. This information will be communicated to brokers that have been approved by the RMC. All such authorized employees will have signed one or more documents acknowledging receipt of and agreement to comply with this Policy, certain Corporate Policies, and all other relevant business unit trading policy documents before authorization is granted. All signatory agreements will be kept on file at ES&amp;O and renewed annually.</li> </ul>
Transactional Controls	<ul> <li>Unless otherwise specified in this Policy, ES&amp;O will be required to maintain a risk policy and procedures document that includes specific control mechanisms related to managerial oversight and responsibilities and defining the extent of NiSource risk management activities and limitations, and performance measurement. Such documentation will be reviewed and approved by ERM. Any subsequent changes to aforementioned documentation must be revised and approved by ERM.</li> <li>At minimum, such controls and procedures will ensure that: ES&amp;O will review and verify daily financial position reports. ES&amp;O Management is responsible for the implementation and management of the risk controls.</li> </ul>
	ERM shall monitor NiSource's risk management activities for compliance with this Policy and the <u>Corporate Risk Policy</u> and report any breaches of such policies to the Chairman of the RMC.
Legal Review	All documentation establishing brokerage accounts, exchange documents, master agreements and transaction confirmation formats must be reviewed and approved by the NiSource Legal Department. ES&O shall consult with the NiSource Legal Department and Corporate Compliance with respect to regulatory reporting requirements associated with energy trading.
Policy Compliance	ERM will work with the internal and external auditors to monitor NiSource's compliance with <u>Corporate</u> policies. The RMC will review compliance issues as the need arises.

## E. Trading Limits and Authorities

Position Guidelines	Any hedging programs must adhere to the guidelines established within either the hedging plan document or hedge schedule that has been submitted to the applicable state utility regulatory commission.
Term Limits	Subject to the term (duration) limits delineated by market and contract (refer to "Approved Instruments,") only the RMC may grant exceptions. The RMC may approve a transaction that exceeds a term of five (5) years, so long as its term is no longer than ten (10) years.
Breaches and Exceptions	If any of the above limits are breached, ES&O will notify ERM within 24 hours of the transaction(s) and/or market conditions leading to the breach and document the actions taken or proposed to resolve the breach. The RMC must approve exceptions to the above limits, or if the RMC cannot meet in a timely manner, then the Chief Risk Officer can authorize an exception. The RMC will be notified of any breaches or exceptions at its next scheduled meeting.

# F. Monitoring and Reporting Systems

Accountability	ERM will determine the sufficiency and timeliness of information to monitor risk compliance. ERM shall have the responsibility to monitor the processes used by NiSource when engaged in financial trading and to insure that these processes are in compliance with the standards as listed within this Policy as well as the standards required by internal and external audit. ERM must assure the RMC that operations are being performed within established guidelines and all activity is being properly recorded. This is accomplished through the distribution of reports on at least a monthly basis as well as periodic meetings with the RMC. Working with ES&O, ERM will define any additional reporting requirements with respect to content and frequency of reporting.
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## G. Audit

proc Aud the disc coul main	lit of ES&O's compliance with risk management policies and cedures will be conducted as deemed necessary or as instructed by the lit Committee and reported to the RMC and to the Audit Committee of NiSource Board. All audit findings, including compliance with and crepancies from these policies as well as any other irregularity which Id expose NiSource to financial or legal liability, will be documented and ntained as part of NiSource's records for the length of time prescribed NiSource's record retention policy, indicating management action
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### Employee Agreement and Signature Page

All ES&O officers and employees with risk management responsibilities are required to read the following policies in their entirety and on an annual basis sign the agreement in the paragraph below.

- ES&O Risk Management Policy
- NiSource Corporate Commodity Risk Management Policy
- NiSource Credit Risk Management Policy
- <u>NiSource Anti-Fraud Policy</u>
- <u>CFTC No. 1 Futures and Swap Execution, Clearing and Identification</u>
- CFTC No. 2 Futures and Swap Recordkeeping Requirements
- <u>CFTC No. 3 Futures and Swap Data Reporting</u>
- <u>CFTC No. 4 Anti-Fraud, Anti-Manipulation, Anti-Disruptive Practices, and Anti-Evasion Provisions</u>

Your signature represents that you fully understand and will strictly follow all of the Policy terms, controls and principles set forth in this agreement. By signing this agreement, you agree to communicate any business concern you have, including any irregularity you suspect, regarding risk management activities immediately to your immediate supervisor, the Chief Risk Officer, or another appropriate person designated in the above policies. Any failure to strictly follow the terms and expectations set forth in this agreement may result in disciplinary action up to and including dismissal.

No transactions are permitted to be executed by an employee until the employee and the employee's supervisor has signed this agreement and provided a copy to the Chief Risk Officer. The Chief Risk Officer will notify ES&O and Human Resources of any failure to comply with this requirement.

Employee Name:

Employee Title:

Employee Signature:

Supervisor Name:

Supervisor Title:

Supervisor Signature:

Date:

KY PSC Case No. 2018-00253 Staff's Order Appendix B Data Requests Set 1 No. 14 Respondent: Michael D. Anderson

## COLUMBIA GAS OF KENTUCKY, INC. RESPONSE TO THE COMMISSION STAFF'S DATA REQUESTS DATED MAY 16, 2018

14. Provide a copy of Columbia's strategic plan with primary emphasis on gas procurement, transmission, delivery, expansion and inclusive of any significant related capital expenditures.

**RESPONSE:** Columbia's gas procurement plans are focused on obtaining the least cost reliable supply for its customers. The strategy is guided by the policies and procedures provided in prior responses.