

Gwen R. Pinson
Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40601

December 28, 2018

Re: Performance Based Ratemaking Mechanism

Dear Ms. Pinson:

Louisville Gas and Electric Company ("LG&E") is filing support for LG&E's Performance Based Ratemaking ("PBR") mechanism as approved pursuant to the Order dated June 30, 2015, in Case No. 2014-00476. LG&E encloses herewith an original and ten copies of the PBR mechanism quarterly activity report. This report is a summary of LG&E's activity under the PBR mechanism for the period beginning November 1, 2017 and ending October 31, 2018.

If you have any questions regarding this matter, please contact Clay Murphy, Director of Gas Management, Planning, and Supply at (502) 627-2424.

Sincerely,

Derek A. Rahn

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PUBLIC SERVICE
COMMISSION
Louisville Gas and

Electric Company

State Regulation and Rates 220 West Main Street PO Box 32010 Louisville, Kentucky 40232 www.lge-ku.com

Derek A. Rahn Manager Revenue Requirement T 502-627-4127 F 502-217-4002 derek.rahn@lge-ku.com

Activity Under LG&E's Performance-Based Ratemaking ("PBR") Mechanism for the PBR Period for the 12 Months Ended October 31, 2018

Attached is a summary of LG&E's activity and the supporting documentation for the PBR mechanism covering the entirety of PBR Year 21 (November 1, 2017, through October 31, 2018) of LG&E's gas supply cost PBR mechanism. LG&E is making this annual filing in accordance with the Order in Case No. 2014-00476 dated June 30, 2015. This information has also been used as the basis for the calculation and filing of the applicable PBR Recovery Component ("PBRRC") effective February 1, 2019.

General Discussion: The results for this PBR period cannot and should not be extrapolated for subsequent PBR periods. The results shown in this filing compare the various calculated benchmarks against actual gas costs for each PBR component by month. The actual gas costs and volumes set forth herein do not correspond to the dollars and volumes actually booked and reported by LG&E as purchased gas costs for the period as reported in LG&E's Gas Supply Clause ("GSC"). In order to match actual costs with the appropriate monthly benchmarks, the actual costs and volumes used herein reflect adjustments made to LG&E's costs and volumes, not in the month the adjustments were made and booked, but in the month for which the adjustments were applicable.

Information Required to be Reported: As required by the Commission, the following information is being supplied as a part of this filing.

<u>Calculated Results</u>: During the 12 months ended October 31, 2018, LG&E has achieved the following results:

	PBR-GAIF	PBR-TIF	PBR-OSSIF	Total
Nov. 2017	<i>\$419,557</i>	\$159,432	\$0	\$578,989
Dec.	\$252,222	\$159,432	\$0	\$411,654
Jan. 2018	\$1,111,242	\$159,432	<i>\$381,716</i>	\$1,652,390
Qtr. Subtotal	\$1,783,021	\$478,296	\$381,716	\$2,643,033
Feb.	\$411,142	\$159,432	\$0	\$570,574
Mar.	\$95,290	\$159,432	\$0	\$254,722
Apr.	(\$6,710)	\$166,332	\$0	\$159,622
Qtr. Subtotal	\$499,722	\$485,196	\$0	\$984,918

	PBR-GAIF	PBR-TIF	PBR-OSSIF	Total
May	\$161,223	\$159,432	\$0	\$320,655
Jun.	\$138,894	\$159,432	\$0	\$298,326
Jul.	\$182,920	\$159,432	\$0	\$342,352
Qtr. Subtotal	\$483,037	\$478,296	\$0	\$961,333
Aug.	\$331,489	\$159,432	\$0	\$490,921
Sep.	\$117,033	\$159,432	\$0	\$276,465
Oct.	<i>\$346,478</i>	\$159,432	\$0	\$505,910
Qtr. Subtotal	\$795,000	\$478,296	\$0	\$1,273,296
Total	\$3,560,780	\$1,920,084	\$381,716	\$5,862,580

The supporting calculations are enclosed with this filing.

PBR—Gas Acquisition Index Factor ("GAIF") is an incentive mechanism for gas commodity costs. Under this component, LG&E benchmarks its gas commodity costs against a calculated benchmark representative of the market price of gas by using various industry-accepted price postings. Factors affecting LG&E's performance under this portion of the PBR mechanism are discussed below.

Purchasing Practices and Strategy: LG&E has sought to generate savings under the PBR mechanism by (1) aggressively managing gas supplies to ensure that purchases will be made at less than applicable gas supply indices,(2) purchasing gas at capacity-constrained points at which points natural gas is typically priced at less than the referenced indices, and (3) maximizing the use of LG&E's on-system storage and off-system contract storage by accelerating or deferring injections (or withdrawals) in order to maximize savings under the PBR mechanism. LG&E has not used any financial instruments to date in pursuing its objectives under the PBR mechanism.

<u>Composition of Savings</u>: Total savings under the PBR-GAIF component of the mechanism is \$3,560,780.

PBR – Transportation Index Factor ("TIF") is an incentive mechanism for pipeline transportation costs. With this component, LG&E benchmarks its pipeline transportation costs against the transportation rates filed with the Federal Energy Regulatory Commission ("FERC") by either Texas Gas Transmission, LLC ("Texas Gas") or Tennessee Gas Pipeline Company, LLC ("Tennessee"), as applicable.

<u>Purchasing Practices and Strategy</u>: LG&E has sought to ensure that savings result under the PBR mechanism by (1) aggressively negotiating pipeline discounts, and (2)

releasing pipeline capacity when not required by LG&E to serve its customers. Factors affecting LG&E's performance under this portion of the PBR mechanism are discussed below.

<u>Texas Gas Transmission LLC Rate Case</u>: The rates charged by Texas Gas are final rates and are not being billed subject to refund.

<u>Tennessee Gas Pipeline Company</u>: The rates charged by Tennessee Gas are final rates and are not being billed subject to refund.

Composition of Savings by Pipeline: Total savings under the PBR-TIF component of the PBR is \$1,920,084. The portion of savings attributable to Texas Gas under PBR-TIF is \$6,900. The portion of savings attributable to Tennessee under PBR-TIF is \$1,913,184. On a combined pipeline basis, the portion of savings attributable to any commodity discounts is \$0, and the portion of savings attributable to any demand discounts is \$1,920,084.

PBR – **Off-System Sales Index Factor ("OSSIF")** is an incentive mechanism for off-system sales. LG&E may be in a position to sell natural gas or transportation services or both above cost.

Off-System Sales Activity: LG&E made off-system sales during the PBR period when the opportunity arose to generate savings, and LG&E had natural gas under contract and available for sale. These off-system sales were made to entities which are not affiliated with LG&E. During the period covered by this report, LG&E made off-system sales during the month of January 2018.

PBR Amounts and Demand/Commodity Allocation: Following is a summary of the various PBR components in total for the 12 months ended October 31, 2016. Under the revised sharing mechanism approved by the Commission in its Order dated June 30, 2015, in Case No. 2014-00476, LG&E's share in any savings or expenses is 25% for all savings or expenses up to 3.0% of Total Actual Gas Supply Costs ("TAGSC"), which is the sum of Actual Gas Costs ("AGC") and Total Actual Annual Gas Transportation Costs ("TAAGTC"). For savings (or expenses) in excess of 3.0% of TAGSC, LG&E's share is 50%.

Total savings for PBR Year 21 were \$5,862,580, and TAGSC was \$124,607,779, which is the sum of \$99,669,947 in AGC and \$24,937,832 in TAAGTC. Therefore, savings as a percentage of TAGSC were 4.70% (\$5,862,580 / \$124,607,779). Hence, all of the savings up to \$3,738,233 (3.0% x \$124,607,779) are shared with 25% allocated to LG&E and the remaining 75% being retained by customers as having already been reflected in LG&E's GSCC. The portion of the savings in excess of that amount, or \$2,124,347 (\$5,862,580 - \$3,738,233), is the subject of the 50% sharing tier.

Therefore, the initial tier of the sliding scale is allocated on a 25/75 basis with \$934,558 (25% x \$3,738,233) being allocated to the Company and \$2,803,675 (75% x \$3,738,233) being allocated to customers. The second tier is subject to sharing on a 50/50 basis with \$1,062,174 (50% x \$2,124,347) being allocated to the Company and \$1,062,173 (50% x \$2,124,347) being allocated to customers. Therefore, the total portion of the savings being retained by customers is \$3,865,848 (\$2,803,675 + \$1,062,173); and the total portion of the savings being allocated to the Company and collected from customers is \$1,996,732 (\$934,558 + \$1,062,174). Therefore, the CSPBR to be collected for the Company from customers by means of the PBRRC (as a part of the GSCC) is \$1,996,732.

The total to be collected for the Company from customers through the GSCC is \$1,996,732. This amount must be segregated into its respective commodity (or volumetric) and demand (or fixed) components in order to properly recover the amounts from sales and standby transportation customers. Of this total amount, \$653,930 is to be recovered for the Company from sales and standby transportation customers through the Pipeline Supplier's Demand Component as a demand component. The remaining \$1,342,802 is to be recovered for the Company from sales customers through the GSCC. The calculation of the split as between demand and commodity is set forth as a part of the attached PBR calculations.

Labor and Operating and Maintenance ("O&M") Costs: The PBR mechanism requires that LG&E exclude labor-related or other expenses typically classified as O&M expenses from the determination of any savings or expenses under the PBR mechanism. LG&E is required to report any costs required to implement the PBR mechanism. Inasmuch as such costs cannot be shared between Company and Customer, LG&E has sought to minimize incremental costs. LG&E has not incurred any significant quantifiable costs during the period covered by this report for activity under the PBR mechanism.

pbr_annual_report_psc_4 2018.doc

PBR CALCULATIONS FOR THE 12 MONTHS ENDED OCTOBER 31, 2018

PBR-GAIF SUPPORTING CALCULATIONS

PBR-GAIF CALCULATION OF BENCHMARK GAS COSTS ("BGC")

Column 1 2 3 4 5 6 7 8 9 10 11 12 13

										ALLOCATION OF A	APV ACCORDING TO S	SZFQE%	
	APV	APV	APV		APV			APV - PEFDCQ=	TGT ZONE SL	TGT ZONE 1	TGT ZONE 4	TGPL ZONE 0	TGPL ZONE 1
	TRANSPORTED	TRANSPORTED	TRANSPORTED	APV	TRANSPORTED	TOTAL APV FOR		TOTAL APV FOR	48.07%	20.39%	23.66%	7,68%	0.00%
	UNDER	UNDER	UNDER	TRANSPORTED	UNDER OTHER	SYSTEM SUPPLY	TGT OR TGPL	SYSTEM SUPPLY	22.81%	9.82%	50.53%	16.84%	0.00%
	TGT RATE NNS	TGT RATE FT	TGT RATE STF	UNDER TGPL FT-A	CAPACITY	(1+2+3+4+5)	PEFDCQ	(6-7)	(C, 8 X SZFQE%)	(C. 8 X SZFQE%)	(C. 8 X SZFQE%)	(C. 8 X SZFQE%)	(C. 8 X SZFQE%)
Nov 17	2.413.470	220,000	0	600,060	320,000	3,553,530	0	3,553,530	1,708,182	724,565	840,765	280,018	0
Dec 17	1,929,038	919,721	0	210,016	845,000	3,903,775	3,823	3,899,952	1,874,707	795,200	922,729	307,316	Ō
Jan 18	2,612,654	420,000	0	620,062	288,518	3,941,232	10,616	3,930,616	1,889,447	801,453	929,984	309,732	0
Feb 18		590,000	0	280,028	0	1,619,858	0	1,619,858	778,666	330,289	383,258	127,645	0
Mar 18		560,000	0	120,012	0	1,744,040	0	1,744,040	838,360	355,610	412,640	137,430	0
Apr 18		365,000	0	165,000	60,000	1,983,398	0	1,983,398	452,413	194,770	1,002,211	334,004	Ō
May 18		1,507,000	0	60,000	0	2,177,210	0	2,177,210	496,622	213,802	1,100,144	366,642	ō
Jun 18		1,139,886	0	0	0	2,659,926	0	2,659,926	606,729	261,205	1,344,061	447,931	0
Jul 18		1,848,000	0	620,000	0	3,551,354	0	3,551,354	810,064	348,743	1,794,499	596,048	ō
Aug 18		1,789,625	O	620,000	0	3,980,364	0	3,980,364	907,921	390,872	2,011,276	670,293	0
Sep 18		1,724,342	0	600,000	0	3,785,708	0	3,785,708	863,520	371,757	1,912,918	637,513	Ō
Oct 18	1,786,730	1,725,452	0	320,000	0	3,832,182	0	3,832,182	874,121	376,320	1,938,402	645,339	0
												•	-
Total	18, 194,857	12,809,026	0	4,215,178	1,513,516	36,732,577	14,439	36,718,138	12,100.752	5,164,586	14,590,889	4,861,911	0
													-
Column	14	15	16	17	18	19	20	21	22	23	24	25	
		ADV 0 AL		ADV - CAL		A0V 0 A1		4DV CA1					
		APV x SAI	***	APV x SAI TGT-Z1		APV x SAI		APV x SAI		APV x SAI		TOTAL	
	SAI	TGT-SL	SAI		SAI	TGT-Z4	SAI	TGPL-Z0	SAI	TGPL-Z1		BMGCC	
	TGT-SL	(9X14)	TGT-Z1	(10X16)	TGT-Z4	(11X18)	TGPL-Z0	(12X20)	TGPL-Z1	(13X22)	DAI	(15+17+19+21+23+24)	
Nov 17	\$2,8063	\$4,793,671	\$2,7857	\$2,018,421	\$2,7604	\$2,320,848	\$2,7700	\$775,650	\$2,8355	\$0	\$0	\$9,908,590	
Dec 17	\$2,7951	\$5,239,994	\$2,7704	\$2,203,022	\$2.7703	\$2,556,236	\$2,7403	\$842,138	\$2,8187	\$0	\$12,263	\$10,853,653	
Jan 18		\$6,192,851	\$3,2344	\$2,592,220	\$3,2004	\$2,976,321	\$3,2586	\$1,009,293	\$3,2765	\$0	\$45,887	\$12,816,572	
Feb 18		\$2,271,758	\$2.8964	\$956,649	\$2.8464	\$1,090,906	\$2.8854	\$368,307	\$2,9642	SO	\$0	\$4,687,620	
Mar 18		\$2,148,717	\$2,5228	\$897,133	\$2,4820	\$1,015,920	\$2.5394	\$348,990	\$2,5933	SO	\$0	\$4,410,760	
Apr 18		\$1,188,308	\$2.5886	\$504,182	\$2.5302	\$2,535,794	\$2.6184	\$874,556	\$2,6561	so	\$0	\$5,102,840	
May 18		\$1,340,581	\$2,6565	\$587,965	\$2.4854	\$2,734,298	\$2.6933	\$987,477	\$2,7422	\$0	\$0	\$5,630,321	
Jun 18		\$1,694,109	\$2,7497	\$718,235	\$2,6449	\$3,554,907	\$2.8132	\$1,260,119	\$2,8422	\$0	\$0	\$7,227,370	
Jul 18		\$2,250,682	\$2,7272	\$951,092	\$2,6729	\$4,798,516	\$2.7527	\$1,646,247	\$2,8070	\$0	\$0	\$9,644,537	
Aug 18		\$2,554,073	\$2,7825	\$1,087,601	\$2.7595	\$5,550,122	\$2,7990	\$1,878,150	\$2.8362	\$0	\$0 \$0	\$11,087,946	
Sep 18		\$2,424,678	\$2,7697	\$1,029,655	\$2.7039	\$5,172,339	\$2.8085	\$1,790,455	\$2,8567	\$0	\$0 \$0	\$11,067,946	
Oct 18		\$2,664,148	\$2.9947	\$1,026,005	\$2.9488	\$5,706,189	\$3.0466	\$1,966,090	\$3,0915	\$0	\$0 \$0		
JC(18	93.0476	\$2,004,140	22.0041	51,120,800	WZ. 6-100	55,100,100	00.0400	\$1,000,000	33,0073	20	20	\$11,463,391	
Total		\$34,763,568		\$14,653,141		\$40,010,396		\$13,745,472		\$0	\$59,150	\$103,230,727	

PBR-GAIF CALCULATION OF ACTUAL GAS COSTS ("AGC")

LOUISVILLE GAS AND TRIC COMPANY GAS ACQUISITION INDEX FACTOR - CALCULATION OF AGC

Column	1	2	3	4	5	6	7	8	9	10
							APV	COST OF GAS		
	APV	COST OF GAS	APV	COST OF GAS	APV	COST OF GAS	TRANSPORTED	TRANSPORTED	APV	COST OF GAS
	TRANSPORTED	TRANSPORTED	TRANSPORTED	TRANSPORTED	TRANSPORTED	TRANSPORTED	UNDER LG&E'S	UNDER LG&E'S	TRANSPORTED	TRANSPORTED
	UNDER LG&E'S	TGPL RATE	TGPL RATE	UNDER OTHER	UNDER OTHER					
_	TGT RATE NNS	RATE NNS	TGT RATE FT	TGT RATE FT	TGT RATE STF	TGT RATE STF	FT-A	FT-A	CAPACITY	CAPACITY
Nov 17	2,413,470	\$6,377,476	220,000	\$622,000	0	\$0	600,060	\$1,566,157	320,000	\$923,400
Dec 17	1,929,038	\$5,276,266	919,721	\$2,507,718	0	\$0	210,016	\$606,797	845,000	\$2,210,650
Jan 18	2,612,654	\$7,180,317	420,000	\$1,661,900	0	\$0	620,062	\$1,624,562	288,516	\$1,238,551
Feb 18	749,830	\$2,016,052	590,000	\$1,501,550	0	\$0	280,028	\$758,876	0	\$0
Mar 18	1,064,028	\$2,652,090	560,000	\$1,363,350	0	\$0	120,012	\$300,030	0	\$0
Apr 18	1,393,398	\$3,552,025	365,000	\$953,975	0	\$0	165,000	\$440,050	60,000	\$163,500
May 18	610,210	\$1,607,781	1,507,000	\$3,699,392	0	\$0	60,000	\$161,925	0	\$0
Jun 18	1,520,040	\$4,117,915	1,139,886	\$2,970,561	0	\$0	0	\$0	0	\$0
Jul 18	1,083,354	\$2,881,312	1,848,000	\$4,932,305	0	\$0	620,000	\$1,648,000	0	\$0
Aug 18	1,570,739	\$4,209,581	1,789,625	\$4,877,676	0	\$0	620,000	\$1,649,200	0	\$0
Sep 18	1,461,366	\$3,997,700	1,724,342	\$4,659,294	0	\$0	600,000	\$1,643,100	0	\$0
Oct 18	1,786,730	\$5,151,284	1,725,452	\$4,964,229	0	\$0	320,000	\$1,001,400	0	\$0
	18,194,857	\$49,019,799	12,809,026	\$34,713,950	. 0	\$0	4,215,178	\$11,400,097	1,513,516	\$4,536,101

Column	11	12
	TOTAL	TOTAL
	TRANSPORT	GAS COMMODITY
	GAS	COSTS
_	(1+3+5+7+9)	(2+4+6+8+10)
	_	
Nov 17	3,553,530	\$9,489,033
Dec 17	3,903,775	\$10,601,431
Jan 18	3,941,232	\$11,705,330
Feb 18	1,619,858	\$4,276,478
Mar 18	1,744,040	\$4,315,470
Apr 18	1,983,398	\$5,109, 550
May 18	2,177,210	\$5,469,098
Jun 18	2,659,926	\$7,088,476
Jul 18	3,551,354	\$9,461,617
Aug 18	3,980,364	\$10,736,457
Sep 18	3,785,708	\$10,300,094
Oct 18	3,832,182	\$11,116,913
Total	36,732,577	\$99,669,947

PBR-GAIF CALCULATION OF SAVINGS AND/OR EXPENSES

LOUISVILLE GAS AND LECTRIC COMPANY CALCULATION OF SAVINGS AND EXPENSES UNDER PBR GAS ACQUISITION FACTOR ("GAIF")

Column	1	2	3
	BGC	AGC	SAVINGS/
	FROM	FROM	(EXPENSES)
	COL. 25	COL. 11	(1 - 2)
Nov 17	\$9,908,590	\$9,489,033	\$419,557
Dec 17	\$10,853,653	\$10,601,431	\$252,222
Jan 18	\$12,816,572	\$11,705,330	\$1,111,242
Feb 18	\$4,687,620	\$4,276,478	\$411,142
Mar 18	\$4,410,760	\$4,315,470	\$95,290
Apr 18	\$5,102,840	\$5,109,550	(\$6,710)
May 18	\$5,630,321	\$5,469,098	\$161,223
Jun 18	\$7,227,370	\$7,088,476	\$138,894
Jul 18	\$9,644,537	\$9,461,617	\$182,920
Aug 18	\$11,067,946	\$10,736,457	\$331,489
Sep 18	\$10,417,127	\$10,300,094	\$117,033
Oct 18	\$11,463,391	\$11,116,913	\$346,478
Total	\$103,230,727	\$99,669,947	\$3,560,780

PBR-GAIF INDICES

PBR-GAIF INDICES TEXAS GAS – ZONE SL

LOUISVILLE GAS AND ELECTRIC CALCULATION OF SUPPLY AREA INDICES SAI (TGT-SL)

	NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	PLATTS GAS DAILY AVERAGE LOUISIANA/ SOUTHEAST, TX. GAS, ZONE SL	PLATTS INSIDE FERC's GAS MARKET REPORT LOUISIANA/SOUTHEAST TEXAS GAS, ZONE SL	AVERAGE
Nov. 17	\$2.9200	\$2.8790	\$2.6200	\$2.8063
Dec. 17	\$2.7225	\$2.6929	\$2.9700	\$2.7951
Jan. 18	\$3.5440	\$3.6487	\$2.6400	\$3.2776
Feb. 18	\$2.6750	\$2.4976	\$3.5800	\$2.9175
Mar. 18	\$2.5950	\$2.5340	\$2.5600	\$2.5630
Apr. 18	\$2.6640	\$2.6259	\$2.5900	\$2.6266
May 18	\$2.7125	\$2.6658	\$2.7200	\$2.6994
Jun. 18	\$2.8400	\$2.7766	\$2.7600	\$2.7922
Jul. 18	\$2.7600	\$2.6952	\$2.8800	\$2.7784
Aug. 18	\$2.8775	\$2.8418	\$2.7200	\$2.8131
Sep. 18	\$2.8300	\$2.7936	\$2.8000	\$2.8079
Oct. 18	\$3.1300	\$3.0933	\$2.9200	\$3.0478

CALCULATION OF AVERAGE NATULE GAS WEEK PRICE BY MONTH FOR TEXAS GAS ZONE SL

	NATURAL			NATURAL	
	GAS WEEK	MONITHIN		GAS WEEK	MONETHIN
	LOUISIANA, GULF	MONTHLY		LOUISIANA, GULF	MONTHLY
	COAST, ONSHORE	AVERAGE		COAST, ONSHORE	AVERAGE
11/06/2017	\$2.7200		05/07/2018	\$2.6200	
11/13/2017	\$3.0800		05/14/2018	\$2.6800	
11/20/2017	\$3.0000		05/21/2018	\$2.7300	
11/27/2017	\$2.8800	\$2.9200	05/28/2018	\$2.8200	\$2.7125
12/04/2017	\$2.8300		06/04/2018	\$2.8200	
12/11/2017	\$2.7700		06/11/2018	\$2.7800	
12/18/2017	\$2.6700		06/18/2018	\$2.8800	
12/25/2017	\$2.6200	\$2.7225	06/25/2018	\$2.8800	\$2.8400
01/01/2018	\$2.9600		07/02/2018	\$2.8600	
01/08/2018	\$4.1500		07/09/2018	\$2.7900	
01/15/2018	\$3.6000		07/16/2018	\$2.7600	
01/22/2018	\$3.6200		07/23/2018	\$2.6900	
01/29/2018	\$3.3900	\$3.5440	07/30/2018	\$2.7000	\$2.7600
02/05/2018	\$3.1100		08/06/2018	\$2.7700	
02/12/2018	\$2.6400		08/13/2018	\$2.8900	
02/19/2018	\$2.4600		08/20/2018	\$2.9400	
02/26/2018	\$2.4900	\$2.6750	08/27/2018	\$2.9100	\$2.8775
03/05/2018	\$2.5400		09/03/2018	\$2.8600	
03/12/2018	\$2.6400		09/10/2018	\$2.8100	
03/19/2018	\$2.6300		09/17/2018	\$2.7500	
03/26/2018	\$2.5700	\$2.5950	09/24/2018	\$2.9000	\$2.8300
04/02/2018	\$2.5800		10/01/2018	\$2.9700	
04/09/2018	\$2.6800		10/08/2018	\$3.1200	
04/16/2018	\$2.6700		10/15/2018	\$3.1700	
04/23/2018	\$2.7200		10/22/2018	\$3.2100	
04/30/2019	\$2.6700	\$2.6640	10/29/2018	\$3.1800	\$3.1300

N	IOVEMBER 2017	D	ECEMBER 2017	JA	ANUARY 2018		FE	BRUARY 2018	F	MARCH 2018			APRIL 2018
DAY	MIDPOINT		MIDPOINT	<u>N</u>	IIDPOINT	DAY	M	IIDPOINT		MIDPOINT		_	MIDPOINT
1 \$	2.7000	\$	2.8350	\$	3.6750	1	\$	_	\$	2.4500	\$;	2.5800
2 \$	2.6100	\$	2.7450	\$	3.6750	2	\$	-	\$	2.4800	\$;	2.5800
3 \$	2.6300	\$	2.7450	\$	6.8850	3	\$	-	\$	2.5000	\$;	2.5450
4 \$	2.6900	\$	2.7450	\$	6.9050	4	\$	-	\$	2.5000	\$;	2.6100
5 \$	2.6900	\$	2.8300	\$	4.6150	5	\$	-	\$	2.5000	\$;	2.6900
6 9	2.6900	\$	2.8300	\$	2.8350	6	\$	2.7000	\$	2.5400	\$;	2.6550
7 9	2.9500	\$	2.8500	\$	2.8350	7	\$	2.6800	\$	2.6100	\$;	2.6600
8 9	3.0000	\$	2.7200	\$	2.8350	8	\$	2.6000	\$	2.6500	\$;	2.6600
9 9		\$	2.7300	\$	2.7850	9	\$	2.6500	\$	2.5750	\$;	2.6600
10 9		\$	2.7300	\$	2.7950	10	\$	2.5500	\$	2.5750	\$;	-
11 \$		\$	2.7300	\$	2.9950	11	\$	2.5500	\$	2.5750	\$;	2.6400
12 \$	3.0450	\$	2.7150	\$	3.1500	12	\$	2.5500	\$	2.5750	\$;	2.5750
13 \$	3.0450	\$	2.7300	\$	3.8450	13		2.4800	\$	_	\$;	2.5450
14 \$	3.0150	\$	2.5900	\$	3.8450	14	\$	2.5000	\$	2.6700	\$	3	2.6600
15 \$		\$	2.6000	\$	3.8450	15	\$	2.3600	\$	2.5400	\$;	2.6600
16		\$	2.5400	\$	3.8450	16	\$	2.4400	\$	2.5500	\$;	2.6600
17 \$		\$	2.5400	\$	4.4550	17	\$	2.4400	\$	2.5200	\$;	2.7350
18 \$	2.9200	\$	2.5400	\$	3.4600	18	\$	2.4400	\$	2.5200	\$;	2.7000
19 5		\$	_	\$	3.1300	19	\$	2.4400	\$	2.5200	\$;	2.7500
20 \$		\$	2.6800	\$	3.0750	20	\$	2.4400	\$	2.5800	\$;	_
21 \$		\$	2.5700	\$	3.0750	21	\$	2.5100	\$	2.5900	\$;	2.5700
22 \$	2.9550	\$	2.5050	\$	3.0750	22	\$	2.5050	\$	2.6100	\$;	2.5700
23 9		\$	2.5500	\$	-	23	\$	2.4800	\$	2.5000	\$;	2.5700
24 5		\$	2.5500	\$	_	24	\$	2.4200	\$	2.4700	\$;	2.5850
25 9		\$	2.5500	\$	3.4500	25	\$	2.4200	\$	2.4700	\$;	2.6200
26 9	2.8100	\$	2.5500	\$	3.3800	26	\$	2.4200	\$	2.4700	\$;	2.6350
27	2.8100	\$	-	\$	3.3500	27	\$	2.4500	\$	2.4600	\$;	2.6700
28 9	\$ 2.7050	\$	-	\$	3.3500	28	\$	2.4200	\$	2.4750	\$;	2.5800
29 \$		\$	2.9000	\$	3.3500	29			\$	2.5150	\$;	2.5800
30 \$	2.9550	\$	2.9000	\$	-	30			\$	2.5150	\$;	2.5800
31		\$	2.9000	\$	-	31			\$	2.5150	·		
TOTAL S	\$ 86.3700	\$	75.4000	\$	98.5150	TOTAL	\$	57.4450	\$	76.0200	\$	3	73.5250
POSTINGS	30		28		27	POSTINGS		23		30			28
AVERAGE S	2.8790	\$	2.6929	\$	3.6487	AVERAGE	\$	2.4976	\$	2.5340	\$;	2.6259

	MAY 2018		JUNE 2018		JULY 2018		A	UGUST 2018	S	EPTEMBER 2018	(OCTOBER 2018
DAY	MIDPOINT	1	MIDPOINT	<u></u>	MIDPOINT	DAY	М	IDPOINT		MIDPOINT		MIDPOINT
1 \$		\$	2.7600	\$	2.7800	1	-	-	\$	2.8000	\$	2.8350
2 \$		\$	2.7600	\$	2.7800	2	\$	2.7250	\$	2.8000	\$	2.9000
3 \$		\$	2.7600	\$	2.7600	3	\$	2.7050	\$	2.8000	\$	2.9800
4 \$		\$	2.7600	\$	2.7400	4	\$	2.7850	\$	2.8000	\$	3.1000
5 \$		\$	2.7100	\$	2.7400	5	\$	2.7850	\$	2.8300	\$	3.1050
6 \$		\$	2.7000	\$	2.7150	6	\$	2.7850	\$	2.7850	\$	3.0200
7 \$		\$	-	\$	-	7	\$	2.8150	\$	2.7250	\$	3.0200
8 \$		\$	-	\$	-	8	\$	2.8800	\$	2.6650	\$	3.0200
9 \$		\$	-	\$	-	9	\$	2.8900	\$	2.6650	\$	3.1650
10 \$		\$	-	\$	2.7400	10	\$	2.8950	\$	2.6650	\$	3.1800
11 \$		\$	-	\$	2.7150	11	\$	2.8500	\$	-	\$	3.2400
12 \$		\$	-	\$	-	12	\$	2.8500	\$	2.6750	\$	3.0700
13 \$		\$	-	\$	2.7350	13	\$	2.8500	\$	2.7250	\$	3.0550
14 \$		\$	-	\$	2.6850	14		2.8750	\$	2.7300	\$	3.0550
15 \$		\$	2.8000	\$	2.6850	15	\$	2.9400	\$	2.6800	\$	3.0550
16 \$		\$	-	\$	2.6850	16	\$	2.9100	\$	2.6800	\$	3.1500
17 \$		\$	-	\$	2.6650	17	•	-	\$	2.6800	\$	3.2000
18 \$		\$	-	\$	2.6700	18	\$	2.8800	\$	-	\$	3.2250
19 \$		\$	2.8900	\$	2.6450	19	\$	2.8800	\$	2.8500	\$	3.1650
20 \$		\$	2.7850	\$	2.6150	20		2.8800	\$	2.8700	\$	3.1100
21 \$		\$	-	\$	-	21		2.8800	\$	2.8400	\$	3.1100
22 \$		\$	2.8300	\$	-	22	\$	2.8600	\$	2.8550	\$	3.1100
23 \$		\$	2.7500	\$	-	23	\$	2.8700	\$	2.8550	\$	-
24 \$		\$	2.7500	\$	2.6300	24	\$	2.8500	\$	2.8550	\$	3.1700
25 \$		\$	2.7500	\$	2.6350	25	\$	2.8350	\$	2.8900	\$	-
26 \$		\$	2.7800	\$	2.6550	26	\$	2.8350	\$	2.9200	\$	3.1900
27 \$		\$	2.7800	\$	2.6750	27		2.8350	\$	2.9100	\$	-
28 \$		\$	2.8600	\$	2.6800	28	\$	2.8550	\$	2.8900	\$	-
29 \$		\$	-	\$	2.6800	29	\$	-	\$	2.8900	\$	-
30 \$		\$	-	\$	2.6800	30	\$	2.8050	\$	2.8900	\$	3.0650
31 \$	2.7150			\$	-	31	\$	2.7650			\$	3.1300
TOTAL \$	53.3150	\$	44.4250	\$	61.9900	TOTAL	\$	79.5700	\$	78.2200	\$	80.4250
POSTINGS	20		16		23	POSTINGS		28		28		26
AVERAGE \$	2.6658	\$	2.7766	\$	2.6952	AVERAGE	\$	2.8418	\$	2.7936	\$	3.0933

PBR-GAIF INDICES TEXAS GAS – ZONE 1

LOUISVILLE GAD AND ELECTRIC CALCULATION OF SUPPLY AREA INDICES SAI (TGT-Z1)

	NATURAL GAS WEEK LOUISIANA NORTH	PLATTS GAS DAILY AVERAGE LOUISIANA/ SOUTHEAST, TX. GAS, ZONE 1	PLATTS INSIDE FERC's GAS MARKET REPORT LOUISIANA/SOUTHEAST TEXAS GAS, ZONE 1	AVERAGE
Nov. 17	\$2.8775	\$2.8795	\$2.6000	\$2.7857
Dec. 17	\$2.6700	\$2.6811	\$2.9600	\$2.7704
Jan. 18	\$3.4660	\$3.6173	\$2.6200	\$3.2344
Feb. 18	\$2.6075	\$2.5516	\$3.5300	\$2.8964
Mar. 18	\$2.5350	\$2.5334	\$2.5000	\$2.5228
Apr. 18	\$2.5980	\$2.6178	\$2.5500	\$2.5886
May 18	\$2.6475	\$2.6519	\$2.6700	\$2.6565
Jun. 18	\$2.7625	\$2.7765	\$2.7100	\$2.7497
Jul. 18	\$2.6940	\$2.6677	\$2.8200	\$2.7272
Aug. 18	\$2.8300	\$2.8376	\$2.6800	\$2.7825
Sep. 18	\$2.7675	\$2.7817	\$2.7600	\$2.7697
Oct. 18	\$3.0520	\$3.0821	\$2.8500	\$2.9947

CALCULATION OF AVERAGE NATURAL GAS WEEK PRICE BY MONTH FOR TEXAS GAS ZONE 1

	NATURAL		NATURAL	
	GAS WEEK		GAS WEEK	
	LOUISIANA	MONTHLY	LOUISIANA	MONTHLY
	NORTH	AVERAGE	NORTH	AVERAGE
11/06/2017	\$2.6900		05/07/2018 \$2.5600	
11/13/2017	\$3.0400		05/14/2018 \$2.6000	
11/20/2017	\$2.9400		05/21/2018 \$2.6600	
11/27/2017	\$2.8400	\$2.8775	05/28/2018 \$2.7700	\$2.6475
12/04/2017	\$2.7800		06/04/2018 \$2.7300	
12/11/2017	\$2.7400		06/11/2018 \$2.7200	
12/18/2017	\$2.6000		06/18/2018 \$2.8200	
12/25/2017	\$2.5600	\$2.6700	06/25/2018 \$2.7800	\$2.7625
01/01/2018	\$3.0400		07/02/2018 \$2.8100	
01/08/2018	\$4.0100		07/09/2018 \$2.7100	
01/15/2018	\$3.5000		07/16/2018 \$2.6800	
01/22/2018	\$3.4700		07/23/2018 \$2.6200	
01/29/2018	\$3.3100	\$3.4660	07/30/2018 \$2.6500	\$2.6940
02/05/2018	\$2.9600		08/06/2018 \$2.7200	
02/12/2018	\$2.6100		08/13/2018 \$2.8600	
02/19/2018	\$2.4200		08/20/2018 \$2.8900	
02/26/2018	\$2.4400	\$2.6075	08/27/2018 \$2.8500	\$2.8300
03/05/2018	\$2.4700		09/03/2018 \$2.8000	
03/12/2018	\$2.5900		09/10/2018 \$2.7400	
03/19/2018	\$2.5600		09/17/2018 \$2.6900	
03/26/2018	\$2.5200	\$2.5350	09/24/2018 \$2.8400	\$2.7675
04/02/2018	\$2.5200		10/01/2018 \$2.8900	
04/09/2018	\$2.6400		10/08/2018 \$3.0000	
04/16/2018	\$2.6000		10/15/2018 \$3.0800	
04/23/2018	\$2.6300		10/22/2018 \$3.1600	
04/30/2019	\$2.6000	\$2.5980	10/29/2018 \$3.1300	\$3.0520

N	OVEMBER 2017	DE	CEMBER 2017	•	JANUARY 2018		FE	BRUARY 2018	MARCH 2018		APRIL 2018
DAY	MIDPOINT		MIDPOINT		MIDPOINT	DAY		MIDPOINT	MIDPOINT		MIDPOINT
1 \$	2.6800	\$	2.8250	\$	3.7600	1	\$	3.1000	\$ 2.4600	\$	2.5900
2 \$	2.6150	\$	2.7350	\$	3.7600	2	\$	2.9250	\$ 2.4850	\$	2.5900
3 \$	2.6450	\$	2.7350	\$	7.1150		\$	2.7350	\$ 2.4900	\$	2.5750
4 \$	2.6950	\$	2.7350	\$	6.9550	4		2.7350	\$ 2,4900	\$	2.6100
5 \$	2.6950	\$	2.8000	\$	4.7500	5	\$	2.7350	\$ 2.4900	\$	2.6800
6 \$		\$	2.8250	\$	2.8550	6		2.6950	\$ 2.5400	\$	2.6550
7 \$	2.9500	\$	2.8350	\$	2.8550	7		2.6700	\$ 2.6100	\$	2.6500
8 \$	2.9900	\$	2.7050	\$	2.8550	8	\$	2.6150	\$ 2.6500	\$	2.6500
9 \$		\$	2.6650	\$	2.7450	9		2.6350	\$ 2.5700	\$	2.6500
10 \$		\$	2.6650	\$	2.7900		\$	2.5350	\$ 2.5700	\$	2.6200
11 \$		\$	2.6650	\$	2.9700		\$	2.5350	\$ 2.5700	\$	2.5950
12 \$		\$	2.7450	\$	3,1400	12	\$	2.5350	\$ 2.5700	\$	2.5450
13 \$		\$	2.7000	\$	3.8600		\$	2.4700	\$ 2.6850	\$	2.5100
14 \$		\$	2.5850	\$	3.8600		\$	2.4700	\$ 2.6800	\$	2.6400
15 \$		\$	2.5950	\$	3.8600	15	\$	2.3800	\$ 2.5650	\$	2.6400
16 \$		\$	2.5350	\$	3.8600		\$	2.4150	\$ 2.5500	\$	2.6400
17 \$		\$	2.5350	\$	4.5800	17		2.4200	\$ 2.5050	Š	2.7250
18 \$		\$	2.5350	\$	3.4750		\$	2.4200	\$ 2.5050	Š	2.6900
19 \$		\$	2.6300	\$	3.1750		\$	2.4200	\$ 2.5050	\$	2.7400
20 \$		\$	2.6650	\$	3.0750		\$	2.4200	\$ 2.5650	Š	2.6250
21 \$		\$	2.5650	\$	3.0750		\$	2.5100	\$ 2.5850	\$	2.5650
22 \$		\$	2.4850	\$	3.0750		\$	2.5150	\$ 2.6150	\$	2.5650
23 \$		\$	2.5450	\$	3.0000		\$	2.4750	\$ 2.5100	\$	2.5650
24 \$		Š	2.5450	\$	3.2850	24		2.4100	\$ 2.4550	Š	2.5850
25 \$		\$	2.5450	\$	3.4050	25		2.4100	\$ 2.4550	\$	2.6100
26 \$		\$	2.5450	\$	3.3200		\$	2.4100	\$ 2.4550	Š	2.6300
27 \$		\$	2.6450	\$	3.3450		\$	2.4450	\$ 2.4650	\$	2.6400
28 \$		\$	2.7050	\$	3.3450	28		2.4050	\$ 2.4700	\$	2.5850
29 \$		\$	2.9400	\$	3.3450	29		,,	\$ 2.4900	\$	2.5850
30 \$		\$	2.9400	\$	3.3650	30			\$ 2.4900	\$	2.5850
31		\$	2.9400	\$	3.2800	31			\$ 2.4900	•	2.0000
TOTAL \$	86.3850	\$	83.1150	\$	112.1350	TOTAL	\$	71.4450	\$ 78.5350	\$	78.5350
POSTINGS	30		31		31	POSTINGS		28	31		30
AVERAGE \$	2.8795	\$	2.6811	\$	3.6173	AVERAGE	\$	2.5516	\$ 2.5334	\$	2.6178

F	MAY 2018		JUNE 2018		JULY 2018		F	AUGUST 2018	SE	PTEMBER 2018		OCTOBER 2018
DAY	MIDPOINT		MIDPOINT		MIDPOINT	DAY{		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	2.5450	\$	2.7500	\$	2.7600	1	\$	2.7300	\$	2.7950	:	\$ 2.8000
2 \$	2.6450	\$	2.7400	\$	2.7600	2		2.7050	\$	2.7950		2.8750
3 \$	2.6250	\$	2.7400	\$	2.7400	3	\$	2.6900	\$	2.7950		2.9450
4 \$	2.5300	\$	2.7400	\$	2.7200	4	\$	2.7600	\$	2.7950	;	3.0900
5 \$	2.5150	\$	2.7000	\$	2.7200	5	\$	2.7600	\$	2.8300		3.0850
6 \$	2.5150	\$	2.6900	\$	2.6950	6	\$	2.7600	\$	2.7850		2.9700
7 \$	2.5150	\$	2.6850	\$	2.6450	7	\$	2.8100	\$	2.7250		2.9700
8 \$	2.5750	\$	2.7950	\$	2.6450	8	\$	2.8750	\$	2.6650		2.9700
9 \$	2.5800	\$	2.7300	\$	2.6450	9	\$	2.8900	\$	2.6650		3.1450
10 \$	2.5900	\$	2.7300	\$	2.7200	10		2.8900	\$	2.6650		3.1750
11 \$	2.5900	\$	2.7300	\$	2.6950	11	\$	2.8550	\$	2.6600		3.2250
12 \$	2.6300	\$	2.7750	\$	2.7000	12		2.8550	\$	2.6750		3.0550
13 \$	2.6300	\$	2.7500	\$	2.7150	13		2.8550	\$	2.7250		3.0400
14 \$	2.6300	\$	2.7700	\$	2.6650	14		2.8800	\$	2.7300		3.0400
15 \$	2.6900	\$	2.7850	\$	2.6650	15		2.9550	\$	2.6800		3.0400
16 \$	2.7250	\$	2.8650	\$	2.6650	16		2.9200	\$	2.6800		3.1500
17 \$	2.6600	\$	2.8650	\$	2.6450	17		2.8900	\$	2.6800		3.1650
18 \$	2.6050	\$	2.8650	\$	2.6500	18		2.8900	\$	2.8000		3.2200
19 \$	2.6350	\$	2.8750	\$	2.6250	19		2.8900	\$	2.8550		3.1600
20 \$	2.6350	\$	2.7700	\$	2.5850	20		2.8900	\$	2.8800		3.1050
21 \$	2.6350	\$	2.7750	\$	2.6200		\$	2.8900	\$	2.8500		3.1050
22 \$	2.6650	\$	2.8300	\$	2.6200	22	\$	2.8700	\$	2.8400		3.1050
23 \$	2.7400	\$	2.7450	\$	2.6200			2.8650	\$	2.8400		3.1300
24 \$	2.8150	\$	2.7450	\$	2.6100	24	\$	2.8500	\$	2.8400		3.1650
25 \$	2.7950	\$	2.7450	\$	2.6150	25	\$	2.8350	\$	2.9000		3.2650
26 \$	2.7800	\$	2.7650	\$	2.6500		\$	2.8350	\$	2.9300		3.1750
27 \$	2.7800	\$	2.7650	\$	2.6750	27		2.8350	\$	2.9100		3.0700
28 \$	2.7800	\$	2.8350	\$	2.6600	28		2.8550	\$	2.8200		3.0700 3.0700
29 \$	2.7800	\$	2.8700	\$	2.6600		\$	2.8150	\$	2.8200		3.0700 3.0700
30 \$	2.6800	\$	2.8700	\$	2.6600			2.8050	\$	2.8200		
31 \$	2.6950	Ψ	2.0700	\$	2.6500	31		2.7600	Φ	2.0200		
		•	00.0000	,		-			•	00 4700		-
TAL \$		\$	83.2950	\$	82.7000	TOTAL	\$	87.9650	\$	83.4500	;	95.5450
STINGS	31		30		31	POSTINGS		31		30		31
ERAGE \$	2.6519	\$	2.7765	\$	2.6677	AVERAGE	\$	2.8376	\$	2.7817	;	3.0821

PBR-GAIF INDICES TEXAS GAS – ZONE 4

LOUISVILLE GA D ELECTRIC CALCULATION OF S .Y AREA INDICES SAI (TGT-Z4)

	NATURAL GAS WEEK APPALACHIA LEBANON HUB	PLATTS GAS DAILY AVERAGE APPALACHIA LEBANON HUB	PLATTS INSIDE FERC's GAS MARKET REPORT APPALACHIA, LEBANON HUB	AVERAGE
Nov. 17	\$2.8725	\$2.8587	\$2.5500	\$2.7604
Dec. 17	\$2.6500	\$2.6910	\$2.9700	\$2.7703
Jan. 18	\$3.4900	\$3.4711	\$2.6400	\$3.2004
Feb. 18	\$2.6100	\$2.5393	\$3.3900	\$2.8464
Mar. 18	\$2.4700	\$2.4660	\$2.4500	\$2.4620
Apr. 18	\$2.5720	\$2.5787	\$2.4400	\$2.5302
May 18	\$2.4400	\$2.4663	\$2.5500	\$2.4854
Jun. 18	\$2.6550	\$2.6998	\$2.5800	\$2.6449
Jul. 18	\$2.6420	\$2.6366	\$2.7400	\$2.6729
Aug. 18	\$2.7900	\$2.7984	\$2.6900	\$2.7595
Sep. 18	\$2.6900	\$2.7117	\$2.7100	\$2.7039
Oct. 18	\$2.9980	\$3.0623	\$2.7800	\$2.9468

CALCULATION OF AVERAGE NATE FOR LEB

GAS WEEK PRICE BY MONTH

B/ I HUB

	NATURAL		NATURAL	
	GAS WEEK		GAS WEEK	
	APPALACHIA	MONTHLY	APPALACHIA	MONTHLY
	LEBANON HUB	AVERAGE	LEBANON HUB	AVERAGE
11/06/2017	\$2.7100		05/07/2018 \$2.3500	
11/13/2017	\$3.0600		05/14/2018 \$2.3500	
11/20/2017	\$2.9500		05/21/2018 \$2.4500	
11/27/2017	\$2.7700	\$2.8725	05/28/2018 \$2.6100	\$2.4400
12/04/2017	\$2.7100		06/04/2018 \$2.5900	
12/11/2017	\$2.6600		06/11/2018 \$2.6200	
12/18/2017	\$2.6400		06/18/2018 \$2.7200	
12/25/2017	\$2.5900	\$2.6500	06/25/2018 \$2:6900	\$2.6550
01/01/2018	\$3.0400		07/02/2018 \$2.7600	
01/08/2018	\$4.8100		07/09/2018 \$2.6100	
01/15/2018	\$3.3800		07/16/2018 \$2.6500	
01/22/2018	\$3.1500		07/23/2018 \$2.5800	
01/29/2018	\$3.0700	\$3.4900	07/30/2018 \$2.6100	\$2.6420
02/05/2018	\$2.9500		08/06/2018 \$2.7300	
02/12/2018	\$2.6400		08/13/2018 \$2.8300	
02/19/2018	\$2.4100		08/20/2018 \$2.8600	
02/26/2018	\$2.4400	\$2.6100	08/27/2018 \$2.7400	\$2.7900
03/05/2018	\$2.3900		09/03/2018 \$2.7500	
03/12/2018	\$2.4800		09/10/2018 \$2.6700	
03/19/2018	\$2.5300		09/17/2018 \$2.6200	
03/26/2018	\$2.4800	\$2.4700	09/24/2018 \$2.7200	\$2.6900
04/02/2018	\$2.4400		10/01/2018 \$2.7500	
04/09/2018	\$2.7200		10/08/2018 \$2.7900	
04/16/2018	\$2.5500		10/15/2018 \$3.1300	
04/23/2018	\$2.6500		10/22/2018 \$3.1400	
04/30/2019	\$2.5000	\$2.5720	10/29/2018 \$3.1800	\$2.9980

PBR YEAR NINETEEN PLATTS GAS DAILY MIDPOINT PRICE APPALACHIA, LEBANON HUB

	NOVEM	BER	DEC	CEMBER	J	ANUARY		F	EBRUARY	N	MARCH		APRIL
	201	7		2017		2018			2018		2018		2018
r					F			_		 -			
DAY	MIDE	POINT	<u></u>	MIDPOINT	<u>L_</u>	MIDPOINT	DAY	L_	MIDPOINT		MIDPOINT	L	MIDPOINT
1	\$ 2.	6750	\$	2.7500	\$	3.7900	1	\$	3.0450	\$	2.3700	\$	2.5700
2	\$ 2.	6250	\$	2.6800	\$	3.7900	2	\$	2.8700	\$	2.3850	\$	2.5700
3	\$ 2.	6500	\$	2.6800	\$	7.3350	3	\$	2.7400	\$	2.4100	\$	2.5250
4	\$ 2.	6500	\$	2.6800	\$	6.4550	4	\$	2.7400	\$	2.4100	\$	2.5800
5	\$ 2.	6500	\$	2.7900	\$	4.6350	5	\$	2.7400	\$	2.4100	\$	2.7050
6	\$ 2.	6500	\$	2.8200	\$	2.8400	6	\$	2.6850	\$	2.4800	\$	2.7050
7	\$ 2.	9750	\$	2.8500	\$	2.8400	7	\$	2.6800	\$	2.5500	\$	2.6800
8	\$ 2.	9850	\$	2.6850	\$	2.8400	8	\$	2.6400	\$	2.6100	\$	2.6800
9	\$ 3.	0800	\$	2.6250	\$	2.7150	9	\$	2.6400	\$	2.5300	\$	2.6800
10		1300	\$	2.6250	\$	2.7500	10	\$	2.5100	\$	2.4650	\$	2.6100
		0150	\$	2.6250	\$	2.9150	11	\$	2.5100	\$	2.4650	\$	2.5000
12	\$ 3.	0150	\$	2.7250	\$	3.0750	12	\$	2.5100	\$	2.4650	\$	2.4650
13		0150	\$	2.7350	\$	3.6350	13	\$	2.4350	\$	2.6350	\$	2.4100
14		0100	\$	2.5950	\$	3.6350	14	\$	2.4500	\$	2.6200	\$	2.5550
15	\$ 2.	9450	\$	2.5900	\$	3.6350	15	\$	2.3950	\$	2.5150	\$	2.5550
16		0050	\$	2.5400	\$	3.6350	16	\$	2.4150	\$	2.5300	\$	2.5550
17		9450	\$	2.5400	\$	4.0800	17		2.4100	\$	2.4550	\$	2.7800
18		9150	\$	2.5400	\$	3.3100	18	\$	2.4100	\$	2.4550	\$	2.7300
19		9150	\$	2.6350	\$	3.0300	19		2.4100	\$	2.4550	\$	2.7650
20		9150	\$	2.6700	\$	2.8900	20	\$	2.4100	\$	2.4900	\$	2.6200
21		9550	\$	2.6050	\$	2.8900	21		2.5250	\$	2.5450	\$	2.5250
22		9450	\$	2.5050	\$	2.8900	22		2.5400	\$	2.5750	\$	2.5250
23		7550	\$	2.5850	\$	2.9000	23		2.4600	\$	2.4800	\$	2.5250
24		7550	\$	2.5850	\$	3.0700	24		2.3950	\$	2.4200	\$	2.5350
25		7550	\$	2.5850	\$	3.2600	25		2.3950	\$	2.4200	\$	2.5700
26		7550	\$	2.5850	\$	3.0950	26		2.3950	\$	2.4200	\$	2.5550
27		7550	\$	2.6900	\$	3.1000	27		2.3950	\$	2.3850	\$	2.5350
28		6600	\$	2.7800	\$	3.1000	28		2.3500	\$	2.3850	\$	2.4500
29		7600	\$	3.0400	\$	3.1000	29	·		\$	2.3700	\$	2.4500
		9000	\$	3.0400	\$	3.2300	30			\$	2.3700	\$	2.4500
31			\$	3.0400	\$	3.1400	31			\$	2.3700	*	
TOTAL	\$ 85.	7600	\$	83.4200	\$	107.6050	TOTAL	\$	71.1000	\$	76.4450	\$	77.3600
POSTINGS		30		31		31	POSTINGS		28		31		30
AVERAGE	\$ 2.	8587	\$	2.6910	\$	3.4711	AVERAGE	\$	2.5393	\$	2.4660	\$	2.5787

	MAY 2018		JUNE 2018		JULY 2018		ļ	AUGUST 2018	SE	PTEMBER 2018		OCTOBER 2018
DAY	MIDPOINT		MIDPOINT		MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	2.3650	\$	2.6800	\$	2.7450	1	\$	2.6950	\$	2.7500	\$	2.6100
2 \$	2.3950	\$	2.6450	\$	2.7450	2	\$	2.7000	\$	2.7500	\$	2.7650
3 \$	2.3800	\$	2.6450	\$	2.7300	3	\$	2.7050	\$	2.7500	\$	2.9200
4 \$	2.3800	\$	2.6450	\$	2.6950	4	\$	2.7700	\$	2.7500	\$	3.0850
5 \$		\$	2.6550	\$	2.6950	5	\$	2.7700	\$	2.8150	\$	3.0350
6 \$	2.2950	\$	2.6250	\$	2.6650	6	\$	2.7700	\$	2.7700	\$	2.7450
7 \$	2.2950	\$	2.6400	\$	2.5900	7	\$	2.8400	\$	2.6800	\$	
8 \$	2.3550	\$	2.6750	\$	2.5900	8	\$	2.8650	\$	2.6050	\$	2.7450
9 \$	2.3800	\$	2.6000	\$	2.5900	9	\$	2.8800	\$	2.6050	\$	3.0500
10 \$	2.4000	\$	2.6000	\$	2.6850	10	\$	2.8700	\$	2.6050	\$	3,1800
11 \$	2.3850	\$	2.6000	\$	_	11	\$	2.8150	\$	2.6350	\$	3.3000
12 \$	2.3300	\$	2.7000	\$	2.6850	12	\$	2.8150	\$	2.5950	\$	3.0600
13 \$	2.3300	\$	2.6800	\$	2.6750	13		2.8150	\$	2.6350	\$	
14 \$		\$	2.6950	\$	2.6250	14	\$	2.8650	\$	2.6850	\$	
15 \$		\$	2.7500	\$	2.6250	15	\$	2.9100	\$	2.6250	\$	
16 \$		\$	2.7950	\$	2.6250	16		2.8900	\$	2.6250	\$	
17 \$		\$	2.7950	\$	2.6100	17	\$	2.8600	\$	2,6250	\$	3.2150
18 \$		\$	2.7950	\$	2.6700	18	\$	2.8450	\$	2.7900	\$	3.2000
19 \$		\$	2.7900	\$	2.6400	19	\$	2.8450	\$	2.8200	\$	
20 \$		\$	2.7000	\$	2.5500	20		2.8450	\$	2.8000	\$	
21 \$		\$	2.7400	\$	2.5600	21	\$	2.8700	\$	2.7700	\$	3.1400
22 \$		\$	2.7600	\$	2.5600	22		2.8550	\$	2.6900	\$	
23 \$		\$	2.6550	\$	2.5600	23		2.8200	\$	2.6900	\$	
24 \$		\$	2.6550	\$	2.6000	-24		2.8000	Š	2.6900	\$	3.1900
25 \$		\$	2.6550	\$	-	25		2.6800	\$	2.8000	\$	
26 \$		\$	2.6950	\$	2.6250	26		2.6800	\$	2.8450	\$	
27 \$		\$	2.7000	\$	2.6300	27		2.6800	\$	2.8350	\$	
28 \$		\$	2.7650	\$	2.6150	28		2.8150	\$	2.7050	\$	
29 \$		\$	2.8300	\$	2.6150	29	\$	2.7700	\$	2.7050	\$	
30 \$		\$	2.8300	\$	2.6150	30	\$	2.7150	\$	2.7050	\$	
31 \$		•	2.0000	\$	2.6450	31	\$	2.6950	•	2.7000	\$	
				•			•				Ψ	3,1300
TOTAL \$	76.4550	\$	80.9950	\$	76.4600	TOTAL	\$	86.7500	\$	81.3500	\$	94.9300
POSTINGS	31		30		29	POSTINGS		31		30		31
AVERAGE \$	2.4663	\$	2.6998	\$	2.6366	AVERAGE	\$	2.7984	\$	2.7117	\$	3.0623

PBR-GAIF INDICES TENNESSEE – ZONE 0

LOUISVILLE GAS AND LAECRIC COMPANY CALCULATION OF SUPPLY AREA INDICES SAI (TGPL-Z0)

	NATURAL GAS WEEK TEXAS, CENTRAL, ONSHORE	PLATTS GAS DAILY AVERAGE EAST TEXAS, TENNESSEE, ZONE 0	PLATTS INSIDE FERC's GAS MARKET REPORT EAST TEXAS, TENNESSEE, ZONE 0	AVERAGE
Nov. 17	\$2.8675	\$2.8325	\$2.6100	\$2.7700
Dec. 17	\$2.6550	\$2.6460	\$2.9200	\$2.7403
Jan. 18	\$3.6220	\$3.5337	\$2.6200	\$3.2586
Feb. 18	\$2.6025	\$2.5436	\$3.5100	\$2.8854
Mar. 18	\$2.5700	\$2.5481	\$2.5000	\$2.5394
Apr. 18	\$2.6480	\$2.6372	\$2.5700	\$2.6184
May 18	\$2.7300	\$2.6498	\$2.7000	\$2.6933
Jun. 18	\$2.9075	\$2.7720	\$2.7600	\$2.8132
Jul. 18	\$2.7700	\$2.6581	\$2.8300	\$2.7527
Aug. 18	\$2.9100	\$2.8269	\$2.6600	\$2.7990
Sep. 18	\$2.8550	\$2.8005	\$2.7700	\$2.8085
Oct. 18	\$3.1560	\$3.0837	\$2.9000	\$3.0466

CALCULATION OF AVERAGE NATURAL GAS WEEK PRICE BY MONTH FOR GULF COAST ONSHORE - TEXAS

	NATURAL			NATURAL	
	GAS WEEK			GAS WEEK	
	TEXAS,	MONTHLY		TEXAS,	MONTHLY
	CENTRAL, ONSHORE	AVERAGE		CENTRAL, ONSHORE	AVERAGE
	••			•	
11/06/2017	\$2.7100		05/07/2018	\$2.6100	
11/13/2017	\$3.0100		05/14/2018	\$2.6700	
11/20/2017	\$2.9400	_	05/21/2018	\$2,7600	
11/27/2017	\$2.8100	\$2.8675	05/28/2018	\$2.8800	\$2.7300
12/04/2017	\$2.7700		06/04/2018	\$2.9100	
12/11/2017	\$2.7200		06/11/2018	\$2,8800	
12/18/2017	\$2.5600		06/18/2018	\$2.9000	
12/25/2017	\$2.5700	\$2.6550	06/25/2018	\$2.9400	\$2.9075
04/04/0040	©0.4500		07/00/0040	#0.000	
01/01/2018	\$3.1500		07/02/2018	\$2.9000	
01/08/2018	\$4.0900		07/09/2018	\$2.7500	
01/15/2018	\$3.5500		07/16/2018	\$2.7300	
01/22/2018	\$4.0100	40.0000	07/23/2018	\$2.7400	*
01/29/2018	\$3.3100	\$3.6220	07/30/2018	\$2.7300	\$2.7700
02/05/2018	\$2.8700		08/06/2018	\$2.7900	
02/12/2018	\$2.6100		08/13/2018	\$2.9100	
02/19/2018	\$2.4500		08/20/2018	\$2.9600	
02/26/2018	\$2.4800	\$2.6025	08/27/2018	\$2.9800	\$2.9100
03/05/2018	\$2.5000		09/03/2018	\$2.9100	
03/03/2018	\$2.6100		09/10/2018	\$2.8200	
03/12/2018	\$2.6200		09/17/2018	\$2.7800	
03/26/2018	\$2.5500	\$2.5700	09/24/2018	\$2.9100	\$2.8550
03/20/2010	Ψ2.0000	Ψ2.5700	03/24/2010	φ2.5100	φ2.0000
04/02/2018	\$2.5300		10/01/2018	\$2.9800	
04/09/2018	\$2.6800		10/08/2018	\$3.1000	
04/16/2018	\$2.6400		10/15/2018	\$3.2000	
04/23/2018	\$2.6900		10/22/2018	\$3.2600	
04/30/2019	\$2.7000	\$2.6480	10/29/2018	\$3.2400	\$3.1560

PBR YEAR NINETEEN PLATTS GAS DAILY MIDPOINT PRICE EAST TEXAS, TENNESSEE, ZONE 0

1	NOVEMBER 2017	DE	CEMBER 2017	J	IANUARY 2018		FE	BRUARY 2018	ĺ	MARCH 2018	APRIL 2018
DAY	MIDPOINT		MIDPOINT		MIDPOINT	DAY		MIDPOINT		MIDPOINT	MIDPOINT
1 \$	2.6450	\$	2.7950	\$	3.4700	1	\$	3.0100	\$	2.5200	\$ 2.5850
2 \$	2.6450	\$	2.7350	\$	3.4700	2	\$	2.8150	\$	2.5450	\$ 2.5850
3 \$	2.6750	\$	2.7350	\$	6.5650	3	\$	2.7150	\$	2.5500	\$ 2.5500
4 \$	2.6750	\$	2.7350	\$	6.4600	4	\$	2.7150	\$	2.5500	\$ 2.5950
5 \$	2.6750	\$	2.7850	\$	4.2200	5	\$	2.7150	\$	2.5500	\$ 2.6600
6 \$	2.6750	\$	2.7600	\$	2.7700	6	\$	2.6250	\$	2.5550	\$ 2.6100
7 \$	2.8200	\$	2.7550	\$	2.7700	7	\$	2.6300	\$	2.6100	\$ 2.6550
8 \$	2.9200	\$	2.6550	\$	2.7700	8	\$	2.6150	\$	2.6450	\$ 2.6550
9 \$	2.9650	\$	2.6550	\$	2.7250	9	\$	2.6200	\$	2.6300	\$ 2.6550
10 \$	3.0200	\$	2.6550	\$	2.7600	10	\$	2.4650	\$	2.5900	\$ 2.6150
11 \$	2.9750	\$	2.6550	\$	2.9400	11	\$	2.4650	\$	2.5900	\$ 2.6000
12 \$	2.9750	\$	2.6750	\$	3.0900	12	\$	2.4650	\$	2.5900	\$ 2.5850
13 \$		\$	2.6250	\$	3.7150	13	\$	2.4400	\$	2.6650	\$ 2.5550
14 \$	2.9500	\$	2.5500	\$	3.7150	14	\$	2.4900	\$	2,6350	\$ 2.6650
15 \$	2.9050	\$	2.5650	\$	3.7150	15	\$	2.4450	\$	2.5850	\$ 2.6650
16 \$	2.9400	\$	2.5050	\$	3.7150	16	\$	2.4600	\$	2.5650	\$ 2.6650
17 \$		\$	2.5050	\$	4.6000	17	\$	2.4400	\$	2.5350	\$ 2.7150
18 \$	2.8500	\$	2.5050	\$	3.8650	18		2.4400	\$	2.5350	\$ 2.7000
19 \$		\$	2.6250	\$	3.1700	19		2.4400	\$	2.5350	\$ 2.7500
20 \$		\$	2.6300	\$	3.1000	20		2.4400	\$	2.5400	\$ 2.6400
21 \$	2.8650	\$	2.4900	\$	3.1000	21		2.5050	\$	2.5750	\$ 2.6150
22 \$		\$	2.4750	\$	3.1000	22	\$	2.5400	\$	2.5650	\$ 2.6150
23 \$		\$	2.5000	\$	3.0350	23	\$	2.4850	\$	2.5200	\$ 2.6150
24 \$		\$	2.5000	\$	3.2850	24		2.4300	\$	2.4650	\$ 2.6400
25 \$	2.8050	\$	2.5000	\$	3.4200	25	\$	2.4300	\$	2.4650	\$ 2.6800
26 \$		\$	2.5000	\$	3.3700	26	\$	2.4300	\$	2.4650	\$ 2.6800
27 \$	2.8050	\$	2.6100	\$	3.3050	27	\$	2.4750	\$	2.4500	\$ 2.6750
28 \$		\$	2.6600	\$	3,3050	28	\$	2.4750	\$	2.4950	\$ 2.6300
29 \$	2.7850	\$	2.8950	\$	3.3050	29			\$	2.4900	\$ 2.6300
30 \$	2.8950	\$	2.8950	\$	3.3550	30			\$	2.4900	\$ 2.6300
31		\$	2.8950	\$	3.3600	31			\$	2.4900	
TOTAL \$	84.9750	\$	82.0250	\$	109.5450	TOTAL	\$	71.2200	\$	78.9900	\$ 79.1150
POSTINGS	30		31		31	POSTINGS		28		31	30
AVERAGE \$	2.8325	\$	2.6460	\$	3.5337	AVERAGE	\$	2.5436	\$	2.5481	\$ 2.6372

	MAY 2018		JUNE 2018	JULY 2018		ļ	AUGUST 2018	SE	PTEMBER 2018	c	OCTOBER 2018
DAY	MIDPOINT		MIDPOINT	MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	2.5750	\$	2.7950	\$ 2.7750	1	\$	2.7250	\$	2.8800	\$	2.8250
2 \$	2.6850	\$	2.7800	\$ 2.7750	2	\$	2.6900	\$	2.8800	\$	2.9100
3 \$	2.6150	\$	2.7800	\$ 2.7100	3	\$	2.6800	\$	2.8800	\$	3.0000
4 \$	2.5600	\$	2.7800	\$ 2.7500	4	\$	2.7550	\$	2.8800	\$	3.1300
5 \$	2.5300	\$	2.7650	\$ 2.7500	5	\$	2.7550	\$	2.8150	\$	3.0700
6 \$	2.5300	\$	2.7100	\$ 2.7150	6	\$	2.7550	\$	2.8000	\$	2.9850
7 \$	2.5300	\$	2.7150	\$ 2.6600	7	\$	2.7900	\$	2.7350	\$	2.9850
8 \$	2.5800	\$	2.7700	\$ 2.6600	8	\$	2.8300	\$	2.6600	\$	2.9850
9 \$	2.5550	\$	2.7000	\$ 2.6600	9	\$	2.8750	\$	2.6600	\$	3.1200
10 \$	2.5700	\$	2.7000	\$ 2.6700	10	\$	2.8650	\$	2.6600	\$	3.1750
11 \$	2.5950	\$	2.7000	\$ 2.6300	11	\$	2.8200	\$	2.6800	\$	3.2250
12 \$	2.5950	\$	2.7200	\$ 2.6600	12	\$	2.8200	\$	2.7000	\$	3.0550
13 \$	2.5950	\$	2.7300	\$ 2.6650	13	\$	2.8200	\$	2.7400	\$	3.0200
14 \$	2.5950	\$	2.7600	\$ 2.6300	14	\$	2.8550	\$	2.7400	\$	3.0200
15 \$	2.6650	\$	2.7550	\$ 2.6300	15	\$	2.9000	\$	2.6500	\$	3.0200
16 \$	2.6900	\$	2.8350	\$ 2.6300	16	\$	2.8850	\$	2.6500	\$	3.1550
17 \$	2.6750	\$	2.8350	\$ 2.6600	17	\$	2.8600	\$	2.6500	\$	3.1950
18 \$	2.6150	\$	2.8350	\$ 2.6350	18	\$	2.8750	\$	2.7700	\$	3.2350
19 \$	2.6500	\$	2.8600	\$ 2.6150	19	\$	2.8750	\$	2.8250	\$	3.1700
20 \$	2.6500	\$	2.7700	\$ 2.5900		\$	2.8750	\$	2.8850	\$	3.0950
21 \$	2.6500	\$	2.7650	\$ 2.6200	21	\$	2.8750	\$	2.8300	\$	3.0950
22 \$	2.6600	\$	2.7950	\$ 2.6200	22	\$	2.8950	\$	2.8650	\$	3.0950
23 \$	2.7300	\$	2.7550	\$ 2.6200	23	\$	2.8650	\$	2.8650	\$	3.1000
24 \$	2.8050	\$	2.7550	\$ 2.5950	24	\$	2.8500	\$	2.8650	\$	3.1850
25 \$	2.7800	\$	2.7550	\$ 2.5950	25	\$	2.8500	\$	2.9250	\$	3.2350
26 \$	2.7700	\$	2.7550	\$ 2.6350	26		2.8500	\$	2.9250	\$	3.1550
27 \$	2.7700	\$	2.7800	\$ 2.6600	27	\$	2.8500	\$	2.9150	\$	3.0750
28 \$	2.7700	\$	2.8450	\$ 2.6450	28	\$	2.8750	• \$	2.8950	\$	3.0750
29 \$	2.7700	\$	2.8300	\$ 2.6450	29		2.8300	\$	2.8950	\$	3.0750
30 \$	2.6800	\$	2.8300	\$ 2.6450		\$	2.8000	\$	2.8950	\$	3.0350
31 \$	2.7050	·		\$ 2.6500		\$	2.7900	•		\$	3.0950
TOTAL \$	82.1450	\$	83.1600	\$ 82.4000	TOTAL	\$	87.6350	\$	84.0150	\$	95.5950
POSTINGS	31		30	31	POSTINGS		31		30		31
AVERAGE \$	2.6498	\$	2.7720	\$ 2.6581	AVERAGE	\$	2.8269	\$	2.8005	\$	3.0837

PBR-GAIF INDICES TENNESSEE – ZONE 1

CTRIC COMPANY CALCULATION OF SI SAI (TGPL-Z1)

	NATURAL GAS WEEK LOUISIANA, GULF	PLATTS GAS DAILY AVERAGE LOUISIANA/ SOUTHEAST,	PLATTS INSIDE FERC'S GAS MARKET REPORT LOUISIANA/SOUTHEAST, TENNESSEE,	
	COAST, ONSHORE	TENNESSEE, 500 LEG	LOUISIANA, 500 LEG	AVERAGE
Nov. 17	\$2.9200	\$2.9265	\$2.6600	\$2.8355
Dec. 17	\$2.7225	\$2.7237	\$3.0100	\$2.8187
Jan. 18	\$3.5440	\$3.6155	\$2.6700	\$3.2765
Feb. 18	\$2.6750	\$2.6275	\$3.5900	\$2.9642
Mar. 18	\$2.5950	\$2.6148	\$2.5700	\$2.5933
Apr. 18	\$2.6640	\$2.6843	\$2.6200	\$2.6561
May 18	\$2.7125	\$2.7542	\$2.7600	\$2.7422
Jun. 18	\$2.8400	\$2.8765	\$2.8100	\$2.8422
Jul. 18	\$2.7600	\$2.7410	\$2.9200	\$2.8070
Aug. 18	\$2.8775	\$2.8811	\$2.7500	\$2.8362
Sep. 18	\$2.8300	\$2.9100	\$2.8300	\$2.8567
Oct. 18	\$3.1300	\$3.1845	\$2.9600	\$3.0915

CALCULATION OF AVERAGE NATE A GAS WEEK PRICE BY MONTH FOR GULF COAS ANSHORE - LA

	NATURAL			NATURAL	
	GAS WEEK LOUISIANA, GULF	MONTHLY		GAS WEEK LOUISIANA, GULF	MONTHLY
	COAST, ONSHORE	AVERAGE		COAST, ONSHORE	AVERAGE
	COAST, ONSHORE	AVERAGE		COAST, ONSHORE	AVERAGE
11/06/2017	\$2.7200		05/07/2018	\$2.6200	
11/13/2017	\$3.0800		05/14/2018	\$2.6800	
11/20/2017	\$3.0000		05/21/2018	\$2.7300	
11/27/2017	\$2.8800	\$2.9200	05/28/2018	\$2.8200	\$2.7125
12/04/2017	\$2.8300		06/04/2018	\$2.8200	
12/11/2017	\$2.7700		06/11/2018	\$2.7800	
12/18/2017	\$2.6700		06/18/2018	\$2.8800	
12/25/2017	\$2.6200	\$2.7225	06/25/2018	\$2.8800	\$2.8400
01/01/2018	\$2.9600		07/02/2018	\$2.8600	
01/08/2018	\$4.1500		07/09/2018	\$2.7900	
01/15/2018	\$3.6000		07/16/2018	\$2.7600	
01/22/2018	\$3.6200		07/23/2018	\$2.6900	
01/29/2018	\$3.3900	\$3.5440	07/30/2018	\$2.7000	\$2.7600
02/05/2018	\$3.1100		08/06/2018	\$2.7700	
02/12/2018	\$2.6400		08/13/2018	\$2.8900	
02/19/2018	\$2.4600		08/20/2018	\$2.9400	
02/26/2018	\$2.4900	\$2.6750	08/27/2018	\$2.9100	\$2.8775
03/05/2018	\$2.5400		09/03/2018	\$2.8600	
03/12/2018	\$2.6400		09/10/2018	\$2.8100	
03/19/2018	\$2.6300		09/17/2018	\$2.7500	
03/26/2018	\$2.5700	\$2.5950	09/24/2018	\$2.9000	\$2.8300
04/02/2018	\$2.5800		10/01/2018	\$2.9700	
04/09/2018	\$2.6800		10/08/2018	\$3.1200	
04/16/2018	\$2.6700		10/15/2018	\$3.1700	
04/23/2018	\$2.7200		10/22/2018	\$3.2100	
04/30/2019	\$2.6700	\$2.6640	10/29/2018	\$3.1800	\$3.1300

PBR YEAR NINETEEN PLATTS GAS DAILY MIDPOINT PRICE LOUISIANA/SOUTHEAST, TENNESSEE, 500 LEG

1	NOVEMBER 2017	DE	CEMBER 2017	JANUARY 2018		FE	BRUARY 2018	MARCH 2018		APRIL 2018
DAY	MIDPOINT		MIDPOINT	MIDPOINT	DAY		MIDPOINT	MIDPOINT		MIDPOINT
1 \$	2.7250	\$	2.9100	\$ 3.3850	1	\$	3.2100	\$ 2.5950	\$	2.6550
2 \$	2.6400	\$	2.8200	\$ 3.3850	2	\$	2.9650	\$ 2.5950	\$	2.6550
3 \$	2.7100	\$	2.8200	\$ 6.5850	3	\$	2.8800	\$ 2.6050	\$	2.6100
4 \$	2.7400	\$	2.8200	\$ 6,8350	4	\$	2.8800	\$ 2.6050	\$	2.6550
5 \$	2.7400	\$	2.8500	\$ 4.3200	5	\$	2.8800	\$ 2.6050	\$	2.7150
6 \$	2.7400	\$	2.8250	\$ 2.8700	6	\$	2.7400	\$ 2.6300	\$	2.6700
7 \$	2.9650	\$	2.8750	\$ 2.8700	7	\$	2.7300	\$ 2.6750	\$	2.6850
8 \$	2.9950	\$	2.7600	\$ 2.8700	8	\$	2.7250	\$ 2.7000	\$	2.6850
9 \$	3.0800	\$	2.7200	\$ 2.8400	9	\$	2.6900	\$ 2.6650	\$	2.6850
10 \$	3.1250	\$	2.7200	\$ 2.8600	10	\$	2.5650	\$ 2.6500	\$	2.6700
11 \$	3.1050	\$	2.7200	\$ 3.0250	11	\$	2.5650	\$ 2.6500	\$	2.6500
12 \$	3.1050	\$	2.7650	\$ 3.1500	12	\$	2.5650	\$ 2.6500	\$	2.6500
13 \$	3.1050	\$	2.7500	\$ 3.7450	13	\$	2.5450	\$ 2.7400	\$	2.6200
14 \$	3.0800	\$	2.6300	\$ 3.7450	14	\$	2.5450	\$ 2.7450	\$	2.7150
15 \$	3.0200	\$	2.6350	\$ 3.7450	15	\$	2.4750	\$ 2.6400	\$	2.7150
16 \$	3.0500	\$	2.5950	\$ 3.7450	16	\$	2.4850	\$ 2.6200	\$	2.7150
17 \$	2,9900	\$	2.5950	\$ 4.6700	17	\$	2.4750	\$ 2.5600	\$	2.7700
18 \$	2.9900	\$	2.5950	\$ 3.5350	18	\$	2.4750	\$ 2.5600	· \$	2.7550
19 \$		\$	2.6900	\$ 3.2900	19	\$	2.4750	\$ 2.5600	\$	2.8050
20 \$	2.9900	\$	2.7100	\$ 3.1550	20	\$	2.4750	\$ 2,6050	\$	2.6850
21 \$	2.9950	\$	2.5950	\$ 3.1550	21	\$	2.5450	\$ 2.6500	\$	2.6600
22 \$		\$	2.5300	\$ 3.1550	22	\$	2.5700	\$ 2.6550	\$	2.6600
23 \$	2.8550	\$	2.5750	\$ 3.0900	23		2.5350	\$ 2.5850	\$	2.6600
24 \$	2.8550	\$	2.5750	\$ 3.4050	24	\$	2.5000	\$ 2.5400	\$	2.6600
25 \$	2.8550	\$	2.5750	\$ 3.5850	25	\$	2.5000	\$ 2.5400	\$	2.6950
26 \$	2.8550	\$	2.5750	\$ 3.4600	26	\$	2.5000	\$ 2.5400	\$	2.7050
27 \$	2.8550	\$	2.6650	\$ 3.4800	27	\$	2.5350	\$ 2.5550	\$	2.7150
28 \$		\$	2.7200	\$ 3.4800	28	\$	2.5400	\$ 2.5850	\$	2.6700
29 \$	2.8850	\$	2.9400	\$ 3.4800	['] 29			\$ 2.5850	\$	2.6700
30 \$	3.0450	\$	2.9400	\$ 3.5850	30			\$ 2.5850	\$	2.6700
31		\$	2.9400	\$ 3.5800	31			\$ 2.5850		
TOTAL \$	87.7950	\$	84.4350	\$ 112.0800	TOTAL	\$	73.5700	\$ 81.0600	\$	80.5300
POSTINGS	30		31	31	POSTINGS		28	31		30
AVERAGE \$	2.9265	\$	2.7237	\$ 3.6155	AVERAGE	\$	2.6275	\$ 2.6148	\$	2.6843

MAY 2018	JUNE 2018	JULY 2018	AUGUST 2018	SEPTEMBER 2018	OCTOBER 2018
DAY MIDPO	MIDPOINT	MIDPOINT	DAY MIDPOINT	MIDPOINT	MIDPOINT
1 \$ 2.6		\$ 2.8550	1 \$ 2.7650	\$ 2.8950	\$ 2.9950
2 \$ 2.73		\$ 2.8550	2 \$ 2.7350	\$ 2.8950	\$ 3.1150
3 \$ 2.69	900 \$ 2.8750	\$ 2.8100	3 \$ 2.7350	\$ 2.8950	\$ 3.1600
4 \$ 2.64	•	\$ 2.8100	4 \$ 2.8150	\$ 2.8950	\$ 3.2900
5 \$ 2.69		\$ 2.8100	5 \$ 2.8150	\$ 2.8950	\$ 3.2650
6 \$ 2.69	550 \$ 2.8050	\$ 2.7700	6 \$ 2.8150	\$ 2.8650	\$ 3.1200
7 \$ 2.69		\$ 2.7550	7 \$ 2.8500	\$ 2.8100	\$ 3.1200
8 \$ 2.68		\$ 2.7550	8 \$ 2.9000	\$ 2.7900	\$ 3.1200
9 \$ 2.6		\$ 2.7550	9 \$ 2.9250	\$ 2.7900	\$ 3.2850
10 \$ 2.66		\$ 2.7850	10 \$ 2.9200	\$ 2.7900	\$ 3.3250
11 \$ 2.7		\$ 2.7600	11 \$ 2.9050	\$ 2.8150	\$ 3.3100
12 \$ 2.7	550 \$ 2.8650	\$ 2.7650	12 \$ 2.9050	\$ 2.8650	\$ 3.1400
13 \$ 2.7	550 \$ 2.8500	\$ 2.7600	13 \$ 2.9050	\$ 2.8900	\$ 3.0900
14 \$ 2.7		\$ 2.7100	14 \$ 2.9200	\$ 2.8650	\$ 3.0900
15 \$ 2.7	750 \$ 2.8650	\$ 2.7100	15 \$ 2.9650	\$ 2.7850	\$ 3.0900
16 \$ 2.78	350 \$ 2.9500	\$ 2.7100	16 \$ 2.9600	\$ 2.7850	\$ 3.2000
17 \$ 2.79	500 \$ 2.9500	\$ 2.7100	17 \$ 2.9250	\$ 2.7850	\$ 3.2300
18 \$ 2.72	250 \$ 2.9500	\$ 2.7300	18 \$ 2.9150	\$ 2.9250	\$ 3.2850
19 \$ 2.70	650 \$ 2.9350	\$ 2.6850	. 19 \$ 2.9150	\$ 3.0000	\$ 3.2150
20 \$ 2.70	650 \$ 2.8450	\$ 2.6750	20 \$ 2.9150	\$ 3.0200	\$ 3.2050
21 \$ 2.70	\$ 2.9000 S	\$ 2.7050	21 \$ 2.9250	\$ 2.9400	\$ 3.2050
22 \$ 2.79	500 \$ 2.9050	\$ 2.7050	22 \$ 2.9300	\$ 2,9600	\$ 3.2050
23 \$ 2.80	050 \$ 2.8700	\$ 2.7050	23 \$ 2.9100	\$ 2.9600	\$ 3.1950
24 \$ 2.80	850 \$ 2.8700	\$ 2.6650	24 \$ 2.9050	\$ 2.9600	\$ 3.2450
25 \$ 2.8	750 \$ 2.8700	\$ 2.6700	25 \$ 2.9050	\$ 3.0350	\$ 3.3150
26 \$ 2.80	600 \$ 2.8700	\$ 2.7150	26 \$ 2.9050	\$ 3.0750	\$ 3.2400
27 \$ 2.80	600 \$ 2.8700	\$ 2.7200	27 \$ 2.9050	\$ 3.1150	\$ 3.1200
28 \$ 2.80	600 \$ 2.9350	\$ 2.7300	28 \$ 2.8850	\$ 3.0000	\$ 3.1200
29 \$ 2.86	\$ 2.9600	\$ 2.7300	29 \$ 2.8650	\$ 3.0000	\$ 3.1200
30 \$ 2.80	050 \$ 2.9600	\$ 2.7300	30 \$ 2.8550	\$ 3.0000	\$ 3.1300
31 \$ 2.83	350	\$ 2.7200	31 \$ 2.8200		\$ 3.1750
TOTAL \$ 85.38	800 \$ 86.2950	\$ 84.9700	TOTAL \$ 89.3150	\$ 87.3000	\$ 98.7200
POSTINGS	31 30	31	POSTINGS 31	30	31
AVERAGE \$ 2.75	542 \$ 2.8765	\$ 2.7410	AVERAGE \$ 2.8811	\$ 2.9100	\$ 3.1845

PBR-GAIF INDICES DELIVERY AREA INDEX ("DAI")

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub November 2017

		CALCULATI	ON OF DAI	LY DAI TGT ZON	<u></u>		CALCULATI	ON OF DAIL	Y DAI TGT ZONE	<u> </u>					
_	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY		1010		+ Col. 3 + Col. 4	GAS DAILY	FUEL	1110	N110	+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
D	MIDPOINT	FUEL RETENTION	NNS	NNS COMMODITY	DAILY DAI TGT-1	MIDPOINT	FUEL RETENTION	NNS	NNS COMMODITY	DAILY DAI TGT-4	DAILY DAI TGT-1	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	161-1	RETENTION	DEMAND	COMMODITY	101-1	101-4	RETENTION	DEMAND	COMMODITY	101-4	161-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.6750	1.32%	\$0.4190	\$0.0627	\$3.1925	\$3.1975	\$3.1925	\$3.1975	0	\$0
2	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3.1317	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1317	\$3.1418	\$3.1418	0	\$0
3	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$3.1621	\$3.1671	\$3.1671	0	\$0
4	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3,1671	\$3.2127	\$3.1671	\$3.2127	0	\$0
5	\$2.6950	1.32%	\$0.4190	\$0,0627	\$3.2127	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$3.2127	\$3.1671	\$3.2127	0	\$0°
6	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$3.2127	\$3,1671	\$3.2127	0	\$0
7	\$2.9500	1.32%	\$0,4190	\$0.0627	\$3.4712	\$2.9750	1.32%	\$0.4190	\$0.0627	\$3.4965	\$3:4712	\$3,4965	\$3.4965	0	\$0
8	\$2.9900	1.32%	\$0.4190	\$0.0627	\$3.5117	\$2.9850	1.32%	\$0.4190	\$0.0627	\$3.5066	\$3.5117	\$3.5066	\$3.5117	0	\$0
9	\$3.0800	1.32%	\$0.4190	\$0.0627	\$3.6029	\$3.0800	1.32%	\$0.4190	\$0.0627	\$3.6029	\$3.6029	\$3.6029	\$3.6029	0	\$0
10	\$3.1000	1.32%	\$0.4190	\$0.0627	\$3.6232	\$3.1300	1.32%	\$0.4190	\$0.0627	\$3.6536	\$3.6232	\$3.6536	\$3.6536	0	\$0
11	\$3,0450	1.32%	\$0.4190	\$0.0627	\$3.5674	\$3.0150	1.32%	\$0.4190	\$0.0627	\$3.5370	\$3,5674	\$3.5370	\$3.5674	0	\$0
12	\$3.0450	1.32%	\$0.4190	\$0.0627	\$3.5674	\$3.0150	1.32%	\$0.4190	\$0.0627	\$3.5370	\$3.5674	\$3.5370	\$3.5674	0	\$0
13	\$3.0450	1.32%	\$0.4190	\$0.0627	\$3.5674	\$3.0150	1.32%	\$0.4190	\$0.0627	\$3,5370	\$3.5674	\$3.5370	\$3.5674	0	\$0
14	\$3.0100	1.32%	\$0.4190	\$0.0627	\$3.5320	\$3.0100	1.32%	\$0.4190	\$0.0627	\$3.5320	\$3.5320	\$3.5320	\$3.5320	0	\$0
15	\$2.9750	1.32%	\$0.4190	\$0.0627	\$3.4965	\$2.9450	1.32%	\$0.4190	\$0.0627	\$3.4661	\$3.4965	\$3,4661	\$3.4965	0	\$0
16	\$2.9950	1,32%	\$0.4190	\$0.0627	\$3.5168	\$3.0050	1.32%	\$0.4190	\$0.0627	\$3.5269	\$3.5168	\$3,5269	\$3.5269	0	\$0
17	\$2.9350	1.32%	\$0.4190	\$0.0627	\$3.4560	\$2.9450	1.32%	\$0.4190	\$0.0627	\$3.4661	\$3.4560	\$3.4661	\$3.4661	0	\$0
18	\$2.9250	1.32%	\$0.4190	\$0.0627	\$3,4458	\$2.9150	1.32%	\$0.4190	\$0.0627	\$3.4357	\$3,4458	\$3.4357	\$3.4458	0	\$0
19	\$2.9250	1.32%	\$0.4190	\$0.0627	\$3.4458	\$2.9150	1.32%	\$0.4190	\$0.0627	\$3.4357	\$3.4458	\$3.4357	\$3.4458	0	\$0
20	\$2.9250	1.32%	\$0.4190	\$0.0627	\$3.4458	\$2.9150	1.32%	\$0,4190	\$0.0627	\$3.4357	\$3,4458	\$3,4357	\$3.4458	0	\$0
21	\$2.9400	1.32%	\$0.4190	\$0.0627	\$3.4610	\$2.9550	1.32%	\$0.4190	\$0.0627	\$3.4762	\$3,4610	\$3.4762	\$3.4762	0	\$0
22	\$2.9600	1.32%	\$0.4190	\$0.0627	\$3.4813	\$2.9450	1.32%	\$0.4190	\$0.0627	\$3.4661	\$3,4813	\$3.4661	\$3.4813	0	\$0
23	\$2.8150	1.32%	\$0,4190	\$0.0627	\$3.3344	\$2.7550	1.32%	\$0.4190	\$0.0627	\$3.2736	\$3.3344	\$3.2736	\$3.3344	0	\$0
24	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$2.7550	1.32%	\$0.4190	\$0.0627	\$3.2736	\$3.3344	\$3.2736	\$3.3344	0	\$0
25	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$2.7550	1.32%	\$0.4190	\$0.0627	\$3.2736	\$3.3344	\$3.2736	\$3.3344	0	\$0
26	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$2.7550	1.32%	\$0.4190	\$0.0627	\$3.2736	\$3.3344	\$3.2736	\$3.3344	0	\$0
27	\$2.8150	1,32%	\$0.4190	\$0.0627	\$3.3344	\$2.7550	1.32%	\$0.4190	\$0.0627	\$3,2736	\$3.3344	\$3.2736	\$3.3344	0	\$0
28	\$2.7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$2.6600	1.32%	\$0.4190	\$0.0627	\$3.1773	\$3.2178	\$3,1773	\$3.2178	0	\$0
29	\$2.7850	1.32%	\$0.4190	\$0.0627	\$3.3040	\$2.7600	1.32%	\$0.4190	\$0.0827	\$3.2786	\$3.3040	\$3.2786	\$3.3040	0	\$0
30	\$2.9550	1.32%	\$0.4190	\$0.0627	\$3.4762	\$2.9000	1.32%	\$0.4190	\$0.0627	\$3.4205	\$3.4762	\$3.4205	\$3.4762	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub December 2017

		CALCULATI	ON OF DAI	LY DAI TGT ZONI	E 1		CALCULATI	ON OF DAIL	Y DAI TGT ZONI	E4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY	_			+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT-4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.8250	1.32%	\$0.4190	\$0.0627	\$3.3445	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3445	\$3.2685	\$3.3445	0	\$0
2	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.2533	\$3.1975	\$3.2533	0	\$0
3	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.2533	\$3.1975	\$3,2533	0	\$0
4	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.2533	\$3.1975	\$3.2533	0	\$0
5	\$2.8000	1.32%	\$0.4190	\$0.0627	\$3.3192	\$2.7900	1.32%	\$0.4190	\$0.0627	\$3.3090	\$3.3192	\$3.3090	\$3.3192	0	\$0
6	\$2.8250	1.32%	\$0.4190	\$0.0627	\$3.3445	\$2.8200	1.32%	\$0.4190	\$0.0627	\$3.3394	\$3.3445	\$3.3394	\$3.3445	0	\$0
7	\$2.8350	1.32%	\$0.4190	\$0.0627	\$3.3546	\$2.8500	1.32%	\$0.4190	\$0.0627	\$3.3698	\$3.3546	\$3.3698	\$3.3698	0	\$0
8	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3.2026	\$3.2229	\$3.2026	\$3.2229	0	\$0 \$0
9	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1823	\$3.1418	\$3.1823	0	\$0
10	\$2,6650	1,32%	\$0.4190	\$0.0627	\$3.1823	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1823	\$3,1418	\$3.1823	0	\$0
11	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1823	\$3.1418	\$3.1823	0	\$0
12	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$2.7250	1.32%	\$0.4190	\$0.0627	\$3.2432	\$3.2634	\$3.2432	\$3.2634	0	\$0
13	\$2.7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$3.2178	\$3.2533	\$3.2533	0	\$0
14	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2.5950	1.32%	\$0.4190	\$0.0627	\$3.1114	\$3.1013	\$3.1114	\$3.1114	0	\$0
15	\$2.5950	1.32%	\$0.4190	\$0.0627	\$3.1114	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$3.1114	\$3.1063	\$3.1114	0	\$0
16	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$2.5400	1.32%	\$0.4190	\$0.0627	\$3.0557	\$3.0506	\$3.0557	\$3.0557	0	\$0
17	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$2.5400	1.32%	\$0.4190	\$0.0627	\$3.0557	\$3.0506	\$3.0557	\$3.0557	0	\$0
18	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$2.5400	1.32%	\$0.4190	\$0.0627	\$3.0557	\$3.0506	\$3.0557	\$3.0557	0	\$0
19	\$2.6300	1.32%	\$0.4190	\$0.0627	\$3.1469	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3,1519	\$3.1469	\$3.1519	\$3.1519	0	\$0
20	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6700	1.32%	\$0.4190	\$0.0627	\$3.1874	\$3.1823	\$3.1874	\$3.1874	0	\$0
21	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$2.6050	1.32%	\$0.4190	\$0.0627	\$3.1215	\$3.0810	\$3.1215	\$3.1215	0	\$0
22	\$2.4850	1.32%	\$0.4190	\$0.0627	\$2.9999	\$2.5050	1.32%	\$0.4190	\$0.0627	\$3,0202	\$2.9999	\$3.0202	\$3.0202	0	\$0
23	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$3.0607	\$3.1013	\$3.1013	0	\$0
24	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$3.0607	\$3.1013	\$3.1013	0	\$0
25	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$3.0607	\$3.1013	\$3.1013	0	\$0
26	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$3.0607	\$3.1013	\$3.1013	0	\$0
27	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3.2077	\$3.1621	\$3.2077	\$3.2077	3,823	\$12,263
28	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$2.7800	1.32%	\$0.4190	\$0.0627	\$3.2989	\$3.2229	\$3.2989	\$3.2989	0	\$0
29	\$2.9400	1.32%	*\$0.4190	\$0.0627	\$3.4610	\$3.0400	1.32%	\$0.4190	\$0.0627	\$3.5624	\$3.4610	\$3.5624	\$3.5624	0	\$0
30	\$2.9400	1.32%	\$0.4190	\$0.0627	\$3,4610	\$3.0400	1.32%	\$0.4190	\$0.0627	\$3.5624	\$3.4610	\$3.5624	\$3.5624	0	\$0
31	\$2.9400	1.32%	\$0.4190	\$0.0627	\$3.4610	\$3.0400	1.32%	\$0.4190	\$0.0627	\$3.5624	\$3.4610	\$3.5624	\$3.5624	0	\$0
														3,823	\$12,263

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub January 2018

		CALCULATION	ON OF DAIL	Y DAI TGT ZON	E 1		CALCULATI	ON OF DAIL	LY DAI TGT ZON	E 4 _					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
_	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$3.7600	1.32%	\$0.4190	\$0.0627	\$4.2920	\$3.7900	1.32%	\$0.4190	\$0.0627	\$4.3224	\$4.2920	\$4.3224	\$4.3224	4,566	\$19,736
2	\$3.7600	1.32%	\$0.4190	\$0.0627	\$4.2920	\$3.7900	1.32%	\$0.4190	\$0.0627	\$4.3224	\$4.2920	\$4.3224	\$4.3224	6,050	\$26,151
3	\$7.1150	1.32%	\$0.4190	\$0.0627	\$7.6919	\$7.3350	1.32%	\$0.4190	\$0.0627	\$7.9148	\$7.6919	\$7.9148	\$7.9148	0	\$0
4	\$6.9550	1.32%	\$0.4190	\$0.0627	\$7.5297	\$6.4550	1.32%	\$0.4190	\$0.0627	\$7.0230	\$7.5297	\$7.0230	\$7.5297	0	\$0
5	\$4.7500	1.32%	\$0.4190	\$0.0627	\$5.2952	\$4.6350	1.32%	\$0.4190	\$0.0627	\$5.1787	\$5.2952	\$5.1787	\$5.2952	0	\$0
6	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2.8400	1.32%	\$0.4190	\$0.0627	\$3.3597	\$3.3749	\$3.3597	\$3.3749	0	\$0
7	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2.8400	1.32%	\$0.4190	\$0.0627	\$3.3597	\$3.3749	\$3.3597	\$3.3749	0	\$0
8	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2,8400	1:32%	\$0.4190	\$0.0627	\$3.3597	\$3.3749	\$3.3597	\$3.3749	0	\$0
9	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$2.7150	1.32%	\$0.4190	\$0.0627	\$3.2330	\$3.2634	\$3.2330	\$3.2634	0	\$0
10	\$2.7900	1.32%	\$0.4190	\$0.0627	\$3.3090	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3090	\$3.2685	\$3.3090	0	\$0
11	\$2.9700	1.32%	\$0.4190	\$0.0627	\$3.4914	\$2.9150	1.32%	\$0.4190	\$0.0627	\$3.4357	\$3.4914	\$3.4357	\$3.4914	0	\$0
12	\$3.1400	1.32%	\$0.4190	\$0.0627	\$3.6637	\$3.0750	1.32%	\$0.4190	\$0.0627	\$3.5978	\$3.6637	\$3.5978	\$3.6637	0	\$0
13	\$3.8600	1.32%	\$0.4190	\$0.0627	\$4.3933	\$3.6350	1.32%	\$0.4190	\$0.0627	\$4.1653	\$4.3933	\$4.1653	\$4.3933	0	\$0
14	\$3.8600	1.32%	\$0.4190	\$0.0627	\$4.3933	\$3.6350	1.32%	\$0.4190	\$0.0627	\$4.1653	\$4.3933	\$4.1653	\$4.3933	0	\$0
15	\$3.8600	1.32%	\$0.4190	\$0.0627	\$4,3933	\$3.6350	1.32%	\$0.4190	\$0.0627	\$4,1653	\$4.3933	\$4.1653	\$4.3933	0	\$0
16	\$3.8600	1.32%	\$0.4190	\$0.0627	\$4.3933	\$3.6350	1.32%	\$0.4190	\$0.0627	\$4.1653	\$4.3933	\$4.1653	\$4.3933	0	\$0
17	\$4.5800	1.32%	\$0.4190	\$0.0627	\$5.1230	\$4.0800	1.32%	\$0.4190	\$0.0627	\$4.6163	\$5.1230	\$4.6163	\$5.1230	0	\$0
18	\$3.4750	1.32%	\$0.4190	\$0.0627	\$4.0032	\$3.3100	1.32%	\$0.4190	\$0.0627	\$3.8360	\$4.0032	\$3.8360	\$4.0032	0	\$0
19	\$3.1750	1.32%	\$0.4190	\$0.0627	\$3.6992	\$3.0300	1.32%	\$0.4190	\$0.0627	\$3.5522	\$3.6992	\$3.5522	\$3.6992	0	\$0
20	\$3.0750	1.32%	\$0.4190	\$0.0627	\$3.5978	\$2.8900	1.32%	\$0.4190	\$0.0627	\$3.4104	\$3.5978	\$3.4104	\$3.5978	0	\$0
21	\$3.0750	1.32%	\$0.4190	\$0.0627	\$3.5978	\$2.8900	1.32%	\$0.4190	\$0.0627	\$3,4104	\$3.5978	\$3.4104	\$3.5978	0	\$0
22	\$3.0750	1.32%	\$0.4190	\$0.0627	\$3.5978	\$2.8900	1.32%	\$0.4190	\$0.0627	\$3.4104	\$3.5978	\$3.4104	\$3.5978	0	\$0
23	\$3.0000	1.32%	\$0.4190	\$0.0627	\$3.5218	\$2.9000	1.32%	\$0.4190	\$0.0627	\$3.4205	\$3.5218	\$3.4205	\$3.5218	0	\$0
24	\$3.2850	1.32%	\$0.4190	\$0.0627	\$3.8106	\$3.0700	1.32%	\$0.4190	\$0.0627	\$3.5928	\$3.8106	\$3.5928	\$3.8106	0	\$0
25	\$3.4050	1.32%	\$0.4190	\$0.0627	\$3.9322	\$3.2600	1.32%	\$0.4190	\$0.0627	\$3.7853	\$3.9322	\$3.7853	\$3.9322	0	\$0
26	\$3.3200	1.32%	\$0.4190	\$0.0627	\$3.8461	\$3,0950	1.32%	\$0.4190	\$0.0627	\$3.6181	\$3.8461	\$3.6181	\$3.8461	0	\$0
27	\$3.3450	1.32%	\$0.4190	\$0.0627	\$3.8714	\$3.1000	1.32%	\$0.4190	\$0.0627	\$3.6232	\$3.8714	\$3.6232	\$3.8714	0	\$0
28	\$3.3450	1.32%	\$0.4190	\$0.0627	\$3.8714	\$3.1000	1.32%	\$0.4190	\$0.0627	\$3.6232	\$3.8714	\$3.6232	\$3.8714	0	\$0
29	\$3.3450	1.32%	\$0.4190	\$0.0627	\$3.8714	\$3.1000	1.32%	\$0.4190	\$0.0627	\$3.6232	\$3.8714	\$3.6232	\$3.8714	0	\$0
30	\$3.3650	1.32%	\$0.4190	\$0.0627	\$3.8917	\$3.2300	1.32%	\$0.4190	\$0.0627	\$3.7549	\$3.8917	\$3.7549	\$3.8917	0	\$0
31	\$3.2800	1.32%	\$0.4190	\$0.0627	\$3.8056	\$3.1400	1.32%	\$0,4190	\$0.0627	\$3.6637	\$3.8056	\$3.6637	\$3.8056	0	\$0
														10,616	\$45,887

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub February 2018

		CALCULATION	ON OF DAIL	Y DAI TGT ZON	E_1		CALCULATI	ON OF DAI	Y DAI TGT ZONE	E 4					
_	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS			•	(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY	=			+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI TGT-1	MIDPOINT	FUEL	NNS	NNS COMMODITY	DAILY DAI TGT-4	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	IGI-1	RETENTION	DEMAND	COMMODITY	161-1	TGT - ZONE 4	KÉTENTION	DEMAND	COMMODITY	161-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$3,1000	1.32%	\$0.4190	\$0.0627	\$3.6232	\$3,0450	1.32%	\$0.4190	\$0.0627	\$3.5674	\$3.6232	\$3.5674	\$3.6232	0	\$0
2	\$2.9250	1.32%	\$0.4190	\$0.0627	\$3.4458	\$2.8700	1.32%	\$0.4190	\$0.0627	\$3.3901	\$3.4458	\$3.3901	\$3.4458	0	\$0
3	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$3.2533	\$3.2584	\$3.2584	0	\$0
4	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$3.2533	\$3.2584	\$3.2584	0	\$0
5	\$2.7350	1.32%	\$0.4190	\$0.0627	\$3.2533	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$3.2533	\$3.2584	\$3.2584	0	\$0
6	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3.2026	\$3.2127	\$3.2026	\$3.2127	0	\$0
7	\$2.6700	1.32%	\$0.4190	\$0.0627	\$3.1874	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.1874	\$3.1975	\$3.1975	0	\$0
8	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3.1317	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3.1570	\$3.1317	\$3.1570	\$3.1570	0	\$0 \$0
9	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3.1570	\$3.1519	\$3.1570	\$3.1570	0	\$0
10	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$2.5100	1,32%	\$0.4190	\$0.0627	\$3.0253	\$3.0506	\$3.0253	\$3.0506	0	\$0
11	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$2.5100	1.32%	\$0.4190	\$0.0627	\$3.0253	\$3.0506	\$3.0253	\$3.0506	0	\$0
12	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$2.5100	1.32%	\$0.4190	\$0.0627	\$3.0253	\$3.0506	\$3.0253	\$3.0506	0	\$0
13	\$2.4700	1.32%	\$0.4190	\$0.0627	\$2.9847	\$2.4350	1.32%	\$0.4190	\$0.0627	\$2.9493	\$2.9847	\$2.9493	\$2.9847	0	\$0
14	\$2.4700	1.32%	\$0.4190	\$0.0627	\$2.9847	\$2.4500	1.32%	\$0.4190	\$0.0627	\$2.9645	\$2.9847	\$2.9645	\$2.9847	0	\$0
15	\$2.3800	1.32%	\$0.4190	\$0.0627	\$2.8935	\$2,3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$2.8935	\$2.9087	\$2.9087	0	\$0
16	\$2.4150	1.32%	\$0.4190	\$0.0627	\$2.9290	\$2.4150	1.32%	\$0.4190	\$0.0627	\$2.9290	\$2.9290	\$2.9290	\$2.9290	0	\$0
17	\$2.4200	1.32%	\$0.4190	\$0.0627	\$2.9341	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.9341	\$2.9239	\$2.9341	0	\$0
18	\$2.4200	1.32%	\$0.4190	\$0.0627	\$2.9341	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.9341	\$2.9239	\$2.9341	0	\$0
19	\$2,4200	1.32%	\$0.4190	\$0.0627	\$2.9341	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.9341	\$2.9239	\$2.9341	0	\$0
20	\$2.4200	1.32%	\$0.4190	\$0.0627	\$2.9341	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.9341	\$2.9239	\$2.9341	0	\$0
21	\$2.5100	1.32%	\$0.4190	\$0.0627	\$3.0253	\$2.5250	1.32%	\$0.4190	\$0.0627	\$3.0405	\$3.0253	\$3.0405	\$3.0405	0	\$0
22	\$2.5150	1.32%	\$0.4190	\$0.0627	\$3.0303	\$2.5400	1.32%	\$0.4190	\$0.0627	\$3.0557	\$3.0303	\$3.0557	\$3.0557	0	\$0
23	\$2.4750	1.32%	\$0.4190	\$0.0627	\$2.9898	\$2.4600	1.32%	\$0.4190	\$0.0627	\$2.9746	\$2.9898	\$2.9746	\$2.9898	0	\$0
24	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$2.9239	\$2.9087	\$2.9239	0	\$0
25	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$2.9239	\$2.9087	\$2.9239	0	\$0
26	\$2,4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$2.3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$2.9239	\$2.9087	\$2,9239	0	\$0
27	\$2.4450	1.32%	\$0.4190	\$0.0627	\$2.9594	\$2.3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$2.9594	\$2.9087	\$2.9594	0	\$0
28	\$2.4050	1.32%	\$0.4190	\$0.0627	\$2.9189	\$2.3500	1.32%	\$0.4190	\$0.0627	\$2.8631	\$2.9189	\$2.8631	\$2.9189	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub March 2018

_		CALCULATI	ON OF DAIL	Y DAI TGT ZONE	<u> </u>		CALCULATI	ON OF DAIL	Y DAITGT ZONE	∃ 4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2,4600	1.32%	\$0.4190	\$0.0627	\$2.9746	\$2.3700	1.32%	\$0.4190	\$0.0627	\$2.8834	\$2.9746	\$2.8834	\$2.9746	0	\$0
2	\$2.4850	1.32%	\$0.4190	\$0.0627	\$2.9999	\$2.3850	1.32%	\$0.4190	\$0.0627	\$2.8986	\$2.9999	\$2.8986	\$2.9999	0	\$0
3	\$2.4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$3.0050	\$2,9239	\$3.0050	0	\$0
4	\$2.4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$3.0050	\$2.9239	\$3.0050	0	\$0
5	\$2,4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$3.0050	\$2.9239	\$3.0050	0	\$0
6	\$2.5400	1.32%	\$0.4190	\$0.0627	\$3.0557	\$2.4800	1.32%	\$0.4190	\$0.0627	\$2.9949	\$3.0557	\$2.9949	\$3.0557	0	\$0
7	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$2.5500	1.32%	\$0.4190	\$0.0627	\$3.0658	\$3.1266	\$3.0658	\$3.1266	0	\$0
8	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$3.1671	\$3.1266	\$3.1671	0	\$0
9	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$2.5300	1.32%	\$0.4190	\$0.0627	\$3.0455	\$3.0861	\$3.0455	\$3.0861	0	\$0
10	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$2.4650	1.32%	\$0.4190	\$0.0627	\$2,9797	\$3.0861	\$2.9797	\$3.0861	0	\$0
11	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$2.4650	1.32%	\$0.4190	\$0.0627	\$2.9797	\$3.0861	\$2.9797	\$3.0861	0	\$0
12	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$2.4650	1.32%	\$0.4190	\$0.0627	\$2.9797	\$3.0861	\$2.9797	\$3.0861	0	\$0
13	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3.2026	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$3.2026	\$3.1519	\$3.2026	0	\$0
14	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$3.1975	\$3.1367	\$3.1975	0	\$0
15	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$2.5150	1.32%	\$0.4190	\$0.0627	\$3.0303	\$3.0810	\$3.0303	\$3.0810	0	\$0
16	\$2.5500	1.32%	\$0.4190	\$0.0627	\$3.0658	\$2.5300	1.32%	\$0.4190	\$0.0627	\$3.0455	\$3.0658	\$3.0455	\$3.0658	0	\$0
17	\$2.5050	1.32%	\$0.4190	\$0.0627	\$3.0202	\$2.4550	1.32%	\$0.4190	\$0.0627	\$2.9695	\$3.0202	\$2,9695	\$3.0202	0	\$0
18	\$2.5050	1.32%	\$0.4190	\$0.0627	\$3.0202	\$2.4550	1.32%	\$0.4190	\$0.0627	\$2.9695	\$3.0202	\$2.9695	\$3.0202	0	\$0
19	\$2.5050	1.32%	\$0.4190	\$0.0627	\$3.0202	\$2.4550	1.32%	\$0.4190	\$0.0627	\$2.9695	\$3.0202	\$2.9695	\$3.0202	0	\$0
20	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$2.4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$3.0810	\$3.0050	\$3.0810	0	\$0
21	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$3.1013	\$3.0607	\$3.1013	Ó	\$0
22	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3.1317	\$2.5750	1.32%	\$0.4190	\$0.0627	\$3.0911	\$3.1317	\$3.0911	\$3.1317	0	\$0
23	\$2.5100	1.32%	\$0.4190	\$0.0627	\$3.0253	\$2.4800	1.32%	\$0.4190	\$0.0627	\$2.9949	\$3.0253	\$2.9949	\$3.0253	0	\$0
24	\$2,4550	1.32%	\$0.4190	\$0.0627	\$2.9695	\$2.4200	1.32%	\$0.4190	\$0.0627	\$2,9341	\$2.9695	\$2.9341	\$2.9695	0	\$0
25	\$2,4550	1.32%	\$0.4190	\$0.0627	\$2.9695	\$2.4200	1,32%	\$0.4190	\$0.0627	\$2.9341	\$2,9695	\$2.9341	\$2.9695	0	\$0
26	\$2,4550	1.32%	\$0.4190	\$0.0627	\$2.9695	\$2.4200	1.32%	\$0.4190	\$0.0627	\$2.9341	\$2.9695	\$2.9341	\$2.9695	Ō	\$0
27	\$2,4650	1.32%	\$0.4190	\$0.0627	\$2.9797	\$2.3850	1.32%	\$0,4190	\$0.0627	\$2.8986	\$2,9797	\$2.8986	\$2.9797	ō	\$0
28	\$2.4700	1.32%	\$0.4190	\$0.0627	\$2.9847	\$2.3850	1.32%	\$0,4190	\$0.0627	\$2.8986	\$2.9847	\$2.8986	\$2,9847	Ö	\$0
29	\$2,4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$2.3700	1.32%	\$0.4190	\$0.0627	\$2.8834	\$3.0050	\$2.8834	\$3.0050	ň	\$0
30	\$2,4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$2.3700	1.32%	\$0,4190	\$0.0627	\$2.8834	\$3.0050	\$2.8834	\$3.0050	ő	\$0
31	\$2.4900	1.32%	\$0.4190	\$0.0627	\$3.0050	\$2.3700	1.32%	\$0.4190	\$0.0627	\$2.8834	\$3.0050	\$2.8834	\$3.0050	Ď	\$0 \$0
			,	*******	*				*		*		-5.550	·	
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub April 2018

_		CALCULATION		LY DAITGT ZON			CALCULATI	ON OF DAIL	Y DAI TGT ZONE	₫ 4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY MIDPOINT	FUEL	NNS	NNS	+ Col. 3 + Col. 4 DAILY DAI	GAS DAILY MIDPOINT	FUEL	NNS	NNS	+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
Day		RETENTION		COMMODITY	TGT-1	TGT - ZONE 4			COMMODITY	DAILY DAI TGT-4	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	161-1	RETENTION	DEMAND	COMMODITY	161-1	101 - 20NE 4	RETENTION	DEMAND	COMMODIL	161-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$2,5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$3.1063	\$3.0861	\$3.1063	0	\$0
2	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$3.1063	\$3.0861	\$3.1063	0	\$0
3	\$2.5750	1.32%	\$0.4190	\$0.0627	\$3.0911	\$2,5250	1.32%	\$0.4190	\$0.0627	\$3.0405	\$3.0911	\$3.0405	\$3.0911	0	\$0
4	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$2.5800	1.32%	\$0.4190	\$0.0627	\$3.0962	\$3.1266	\$3.0962	\$3.1266	0	\$0
5	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$3.1975	\$3.2229	\$3.2229	0	\$0
6	\$2.6550	1.32%	\$0.4190	\$0.0627	\$3.1722	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$3.1722	\$3.2229	\$3.2229	0	\$0
7	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.1671	\$3.1975	\$3.1975	0	\$0
8	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.1671	\$3.1975	\$3.1975	0	\$0
9	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.1671	\$3.1975	\$3.1975	0	\$0
10	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3,1266	\$3.1367	\$3.1266	\$3.1367	0	\$0
11	\$2.5950	1.32%	\$0.4190	\$0,0627	\$3.1114	\$2.5000	1.32%	\$0.4190	\$0.0627	\$3.0151	\$3.1114	\$3.0151	\$3.1114	0	\$0
12	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$2.4650	1.32%	\$0.4190	\$0.0627	\$2.9797	\$3.0607	\$2.9797	\$3.0607	0	\$0
13	\$2.5100	1.32%	\$0.4190	\$0.0627	\$3.0253	\$2.4100	1.32%	\$0.4190	\$0.0627	\$2.9239	\$3.0253	\$2.9239	\$3.0253	0	\$0
14	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3.1570	\$2.5550	1.32%	\$0.4190	\$0.0627	\$3.0709	\$3.1570	\$3.0709	\$3.1570	0	\$0
15	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3.1570	\$2.5550	1.32%	\$0.4190	\$0.0627	\$3.0709	\$3.1570	\$3.0709	\$3.1570	0	\$0
16	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3,1570	\$2.5550	1.32%	\$0.4190	\$0.0627	\$3.0709	\$3.1570	\$3.0709	\$3.1570	0	\$0
17	\$2.7250	1.32%	\$0.4190	\$0.0627	\$3.2432	\$2.7800	1.32%	\$0.4190	\$0.0627	\$3.2989	\$3.2432	\$3.2989	\$3.2989	0	\$0
18	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3.2077	\$2.7300	1.32%	\$0.4190	\$0.0627	\$3.2482	\$3.2077	\$3.2482	\$3.2482	0	\$0
19	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$2.7650	1.32%	\$0.4190	\$0.0627	\$3.2837	\$3.2584	\$3.2837	\$3.2837	0	\$0
20	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$3.1418	\$3.1367	\$3.1418	0	\$0
21	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$2.5250	1.32%	\$0.4190	\$0.0627	\$3.0405	\$3.0810	\$3.0405	\$3.0810	0	\$0
22	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$2.5250	1.32%	\$0.4190	\$0.0627	\$3.0405	\$3.0810	\$3.0405	\$3.0810	0	\$0
23	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$2.5250	1.32%	\$0.4190	\$0.0627	\$3,0405	\$3.0810	\$3.0405	\$3.0810	0	\$ 0 ·
24	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2.5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$3.1013	\$3.0506	\$3.1013	0	\$0
25	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$3.1266	\$3.0861	\$3,1266	0	\$0
26	\$2.6300	1.32%	\$0.4190	\$0.0627	\$3.1469	\$2.5550	1.32%	\$0.4190	\$0.0627	\$3,0709	\$3.1469	\$3.0709	\$3.1469	0	\$0
27	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3.1570	\$2,5350	1.32%	\$0.4190	\$0.0627	\$3.0506	\$3.1570	\$3.0506	\$3.1570	0	\$0
28	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2,4500	1.32%	\$0.4190	\$0.0627	\$2.9645	\$3.1013	\$2.9645	\$3.1013	0	\$0
29	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2,4500	1.32%	\$0.4190	\$0.0627	\$2.9645	\$3.1013	\$2.9645	\$3.1013	0	. \$0
30	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2.4500	1.32%	\$0.4190	\$0.0627	\$2.9645	\$3.1013	\$2.9645	\$3.1013	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub May 2018

_		CALCULATI	ON OF DAI	LY DAI TGT ZONI	<u> </u>		CALCULATI	ON OF DAIL	LY DALTGT'ZONI	E 4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
_	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	161-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.5450	1.32%	\$0.4190	\$0.0627	\$3.0607	\$2.3650	1.32%	\$0.4190	\$0.0627	\$2.8783	\$3.0607	\$2.8783	\$3.0607	0	\$0
2	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$3.1621	\$2.9087	\$3.1621	0	\$0
3	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$2.3800	1.32%	\$0.4190	\$0.0627	\$2.8935	\$3.1418	\$2,8935	\$3.1418	0	\$0
4	\$2.5300	1.32%	\$0.4190	\$0.0627	\$3.0455	\$2.3800	1.32%	\$0.4190	\$0.0627	\$2.8935	\$3.0455	\$2.8935	\$3.0455	0	\$0
5	\$2.5150	1.32%	\$0.4190	\$0.0627	\$3.0303	\$2.2950	1.32%	\$0.4190	\$0.0627	\$2.8074	\$3.0303	\$2.8074	\$3.0303	0	\$0
6	\$2.5150	1.32%	\$0.4190	\$0.0627	\$3.0303	\$2.2950	1.32%	\$0.4190	\$0.0627	\$2.8074	\$3.0303	\$2.8074	\$3.0303	0	\$0
7	\$2.5150	1.32%	\$0.4190	\$0.0627	\$3.0303	\$2.2950	1.32%	\$0.4190	\$0.0627	\$2.8074	\$3.0303	\$2.8074	\$3.0303	0	\$0
8	\$2.5750	1.32%	\$0.4190	\$0.0627	\$3.0911	\$2.3550	1.32%	\$0.4190	\$0.0627	\$2.8682	\$3.0911	\$2.8682	\$3.0911	0	\$0
9	\$2.5800	1.32%	\$0.4190	\$0.0627	\$3.0962	\$2.3800	1.32%	\$0.4190	\$0.0627	\$2.8935	\$3.0962	\$2.8935	\$3.0962	0	\$0
10	\$2.5900	1.32%	\$0,4190	\$0.0627	\$3.1063	\$2.4000	1.32%	\$0,4190	\$0.0627	\$2.9138	\$3,1063	\$2,9138	\$3.1063	0	\$0
11	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$2.3850	1.32%	\$0.4190	\$0.0627	\$2.8986	\$3,1063	\$2.8986	\$3.1063	0	\$0
12	\$2.6300	1.32%	\$0.4190	\$0.0627	\$3,1469	\$2.3300	1.32%	\$0.4190	\$0.0627	\$2.8429	\$3,1469	\$2.8429	\$3.1469	0	\$0
13	\$2.6300	1.32%	\$0.4190	\$0.0627	\$3.1469	\$2.3300	1.32%	\$0.4190	\$0.0627	\$2.8429	\$3.1469	\$2.8429	\$3.1469	0	\$0
14	\$2.6300	1.32%	\$0.4190	\$0.0627	\$3.1469	\$2.3300	1.32%	\$0.4190	\$0.0627	\$2.8429	\$3.1469	\$2.8429	\$3.1469	0	\$0
15	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3.2077	\$2.4800	1.32%	\$0.4190	\$0.0627	\$2.9949	\$3.2077	\$2,9949	\$3.2077	0	\$0
16	\$2.7250	1.32%	\$0.4190	\$0.0627	\$3.2432	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3,1013	\$3.2432	\$3.1013	\$3.2432	0	\$0
17	\$2.6600	1.32%	\$0.4190	\$0.0627	\$3.1773	\$2.4950	1.32%	\$0.4190	\$0.0627	\$3.0101	\$3.1773	\$3.0101	\$3.1773	0	\$0
18	\$2.6050	1.32%	\$0.4190	\$0.0627	\$3.1215	\$2.3950	1.32%	\$0.4190	\$0.0627	\$2.9087	\$3.1215	\$2.9087	\$3.1215	0	\$0
19	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$2.4400	1.32%	\$0.4190	\$0.0627	\$2.9543	\$3.1519	\$2.9543	\$3.1519	0	\$0
20	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$2.4400	1.32%	\$0.4190	\$0.0627	\$2.9543	\$3.1519	\$2.9543	\$3.1519	0	\$0
21	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$2.4400	1.32%	\$0.4190	\$0.0627	\$2.9543	\$3.1519	\$2.9543	\$3.1519	0	\$0
22	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.5650	1.32%	\$0.4190	\$0.0627	\$3.0810	\$3.1823	\$3.0810	\$3.1823	0	\$0
23	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$3.2584	\$3.1671	\$3.2584	0	\$0
24	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$3.3344	\$3.2584	\$3.3344	0	\$0
25	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3.2077	\$3.3141	\$3.2077	\$3.3141	0	\$0
26	\$2.7800	1.32%	\$0.4190	\$0.0627	\$3,2989	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$3.2989	\$3.1367	\$3.2989	0	\$0
27	\$2.7800	1.32%	\$0.4190	\$0.0627	\$3.2989	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$3.2989	\$3.1367	\$3.2989	0	\$0
28	\$2.7800	1.32%	\$0.4190	\$0.0627	\$3.2989	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3,1367	\$3,2989	\$3.1367	\$3.2989	0	\$0
29	\$2.7800	1.32%	\$0.4190	\$0.0627	\$3.2989	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$3.2989	\$3.1367	\$3.2989	0	\$0
30	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.5700	1.32%	\$0.4190	\$0.0627	\$3.0861	\$3.1975	\$3.0861	\$3.1975	0	\$0
31	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$2.5700	1.32%	\$0.4190	\$0:0627	\$3.0861	\$3.2127	\$3.0861	\$3.2127	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub June 2018

		CALCULATI	ON OF DAIL	LY DAITGT ZON			CALCULATI	ON OF DAIL	Y DAI TGT ZONE						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Cal. 6/(1-Cal.7))	DAILY		MOUED OF		
	GAS DAILY MIDPOINT	FUEL	NNS	NNS	+ Col. 3 + Col. 4 DAILY DAI	GAS DAILY MIDPOINT	FUEL	NNS	NNS	+ Cal. 8 + Cal. 9 DAILY DAI	DAILY DAI	DAILY DAI	HIGHER OF COLUMN 11	DAILY	TOTAL
Day		RETENTION		COMMODITY					COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 11	PEFDCQ	DOLLARS Col. 13 x Col. 14
Day	101-1	RETENTION	DEMAND	COMMODITI	101-1	101 - 20NL 4	KLIENTION	DEMAND	COMMODITI	1014	101-1	101-4	OR COLUMN 12	PEFDCQ	COI, 13 X COI, 14
1	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.2685	\$3.1975	\$3.2685	0	\$0
2	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$3.2584	\$3.1621	\$3.2584	0	\$0
3	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$3.2584	\$3.1621	\$3.2584	0	\$0
4	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$3.2584	\$3.1621	\$3.2584	0	\$0
5	\$2.7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$2.6550	1.32%	\$0.4190	\$0.0627	\$3.1722	\$3.2178	\$3.1722	\$3.2178	0	\$0
6	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3,2077	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.2077	\$3.1418	\$3.2077	0	\$0
7	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3.2026	\$2.6400	1.32%	\$0.4190	\$0.0627	\$3.1570	\$3.2026	\$3.1570	\$3.2026	0	\$0
8	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$2.6750	1.32%	\$0.4190	\$0.0627	\$3,1925	\$3.3141	\$3.1925	\$3.3141	0	\$0
9	\$2.7300	1.32%	\$0.4190	\$0.0627	\$3.2482	\$2.6000	1.32%	\$0.4190	\$0.0627	\$3.1165	\$3.2482	\$3.1165	\$3.2482	0	\$0
10	\$2.7300	1.32%	\$0.4190	\$0.0627	\$3.2482	\$2.6000	1.32%	\$0.4190	\$0.0627	\$3.1165	\$3.2482	\$3,1165	\$3.2482	0	\$0
11	\$2.7300	1.32%	\$0,4190	\$0.0627	\$3.2482	\$2,6000	1.32%	\$0.4190	\$0.0627	\$3.1165	\$3.2482	\$3,1165	\$3.2482	0	\$0
12	\$2.7750	1.32%	\$0.4190	\$0.0627	\$3.2938	\$2,7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$3.2938	\$3.2178	\$3.2938	0	\$0
13	\$2,7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.2685	\$3.1975	\$3.2685	0	\$0
14	\$2,7700	1.32%	\$0.4190	\$0.0627	\$3.2888	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$3.2888	\$3.2127	\$3.2888	0	\$0
15	\$2.7850	1.32%	\$0.4190	\$0.0627	\$3.3040	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3040	\$3.2685	\$3.3040	0	\$0
16	\$2.8650	1.32%	\$0.4190	\$0.0627	\$3.3850	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$3.3850	\$3.3141	\$3.3850	0	\$0
17	\$2.8650	1.32%	\$0.4190	\$0.0627	\$3.3850	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$3.3850	\$3.3141	\$3.3850	0	\$0
18	\$2.8650	1.32%	\$0.4190	\$0.0627	\$3.3850	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$3.3850	\$3.3141	\$3.3850	0	\$0
19	\$2.8750	1.32%	\$0.4190	\$0.0627	\$3.3952	\$2.7900	1.32%	\$0.4190	\$0.0627	\$3.3090	\$3.3952	\$3.3090	\$3.3952	0	\$0
20	\$2.7700	1.32%	\$0.4190	\$0.0627	\$3.2888	\$2.7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$3.2888	\$3.2178	\$3.2888	0	\$0
21	\$2.7750	1.32%	\$0.4190	\$0.0627	\$3.2938	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$3.2938	\$3.2584	\$3.2938	0	\$0
22	\$2.8300	1.32%	\$0.4190	\$0.0627	\$3,3496	\$2.7600	1.32%	\$0.4190	\$0.0627	\$3.2786	\$3.3496	\$3.2786	\$3.3496	0	\$0
23	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$2.6550	1.32%	\$0.4190	\$0.0627	\$3.1722	\$3.2634	\$3.1722	\$3.2634	0	\$0
24	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$2.6550	1.32%	\$0.4190	\$0.0627	\$3.1722	\$3.2634	\$3.1722	\$3.2634	0	\$0
25	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$2.6550	1.32%	\$0.4190	\$0.0627	\$3.1722	\$3.2634	\$3,1722	\$3.2634	0	\$0
26	\$2,7650	1.32%	\$0.4190	\$0.0627	\$3.2837	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$3.2837	\$3,2127	\$3.2837	0	\$0
27	\$2.7650	1.32%	\$0.4190	\$0.0627	\$3.2837	\$2.7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$3.2837	\$3.2178	\$3.2837	0	\$0
28	\$2.8350	1.32%	\$0.4190	\$0.0627	\$3.3546	\$2.7650	1.32%	\$0.4190	\$0.0627	\$3.2837	\$3.3546	\$3.2837	\$3.3546	0	\$0
29	\$2.8700	1.32%	\$0.4190	\$0.0627	\$3.3901	\$2.8300	1.32%	\$0.4190	\$0.0627	\$3.3496	\$3.3901	\$3.3496	\$3,3901	0	\$0
30	\$2.8700	1.32%	\$0.4190	\$0.0627	\$3.3901	\$2.8300	1.32%	\$0.4190	\$0.0627	\$3.3496	\$3.3901	\$3.3496	\$3.3901	0	\$0
														_	
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub July 2018

		CALCULATI	ON OF DAIL	Y DAI TGT ZONE	<u> 1</u>		CALCULATI	ON OF DAI	LY DAI TGT ZONE	E 4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR ZO		. HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
				** ***											
1	\$2.7600	1.32%	\$0.4190	\$0.0627	\$3.2786	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$3.2786	\$3.2634	\$3.2786	0	\$0
2	\$2.7600	1.32%	\$0.4190	\$0.0627	\$3.2786	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$3.2786	\$3.2634	\$3.2786	0	\$0
3	\$2.7400	1.32%	\$0.4190	\$0.0627	\$3.2584	\$2.7300	1.32%	\$0.4190	\$0.0627	\$3.2482	\$3.2584	\$3.2482	\$3.2584	0	\$0
4	\$2.7200	1.32%	\$0.4190	\$0.0627	\$3.2381	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$3.2381	\$3.2127	\$3.2381	0	\$0
5	\$2.7200	1.32%	\$0.4190	\$0.0627	\$3.2381	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$3,2381	\$3.2127	\$3.2381	0	\$0
6	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$3.2127	\$3.1823	\$3.2127	0	\$0 \$0
7	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$3.1621	\$3.1063	\$3.1621	0	
8	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$3.1621	\$3,1063	\$3.1621	0	\$0
9	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.5900	1.32%	\$0.4190	\$0.0627	\$3.1063	\$3.1621	\$3.1063	\$3.1621	0	\$0
10	\$2.7200	1.32%	\$0.4190	\$0.0627	\$3.2381	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3,2026	\$3.2381	\$3.2026	\$3.2381	0	\$0
11	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$0.0000	1.32%	\$0.4190	\$0.0627	\$0.4817	\$3.2127	\$0.4817	\$3.2127	0	\$0
12	\$2.7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3.2026	\$3.2178	\$3.2026	\$3.2178	0	\$0
13	\$2,7150	1.32%	\$0.4190	\$0.0627	\$3.2330	\$2.6750	1.32%	\$0.4190	\$0.0627	\$3.1925	\$3.2330	\$3.1925	\$3.2330	0	\$0
14	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1823	\$3.1418	\$3,1823	0	\$0
15	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6250	1.32%	\$0,4190	\$0.0627	\$3.1418	\$3.1823	\$3.1418	\$3.1823	0	\$0
16	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1823	\$3.1418	\$3.1823	0	\$0
17	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$3,1621	\$3.1266	\$3.1621	0	\$0
18	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6700	1.32%	\$0.4190	\$0.0627	\$3.1874	\$3.1671	\$3.1874	\$3,1874	0	\$0
19	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$2.6400	1,32%	\$0.4190	\$0.0627	\$3.1570	\$3.1418	\$3.1570	\$3.1570	0	\$0
20	\$2.5850	1.32%	\$0.4190	\$0.0627	\$3.1013	\$2.5500	1.32%	\$0.4190	\$0.0627	\$3.0658	\$3.1013	\$3.0658	\$3.1013	0	\$0
21	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3,1367	\$2.5600	1.32%	\$0.4190	\$0.0627	\$3.0759	\$3.1367	\$3.0759	\$3.1367	0	\$0
22	\$2.6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$2.5600	1.32%	\$0.4190	\$0.0627	\$3.0759	\$3.1367	\$3.0759	\$3.1367	0	\$0
23	\$2,6200	1.32%	\$0.4190	\$0.0627	\$3.1367	\$2.5600	1.32%	\$0.4190	\$0.0627	\$3.0759	\$3.1367	\$3.0759	\$3.1367	0	\$0
24	\$2,6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$2.6000	1.32%	\$0.4190	\$0.0627	\$3.1165	\$3,1266	\$3.1165	\$3.1266	0	\$0
25	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3,1317	\$0.0000	1.32%	\$0.4190	\$0.0627	\$0.4817	\$3.1317	\$0.4817	\$3.1317	0	\$0
26	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3,1418	\$3.1671	\$3.1418	\$3.1671	0	\$0 \$0
27	\$2.6750	1.32%	\$0.4190	\$0.0627	\$3.1925	\$2.6300	1.32%	\$0.4190	\$0.0627	\$3.1469	\$3.1925	\$3.1469	\$3.1925	0	\$0
28	\$2.6600	1.32%	\$0.4190	\$0.0627	\$3.1773	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3.1317	\$3.1773	\$3.1317	\$3.1773	Ō	\$0
29	\$2.6600	1.32%	\$0.4190	\$0.0627	\$3.1773	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3.1317	\$3.1773	\$3.1317	\$3.1773	ō	\$0
30	\$2.6600	1.32%	\$0.4190	\$0.0627	\$3.1773	\$2.6150	1.32%	\$0.4190	\$0.0627	\$3.1317	\$3.1773	\$3.1317	\$3.1773	ō	\$0
31	\$2.6500	1.32%	\$0.4190	\$0.0627	\$3.1671	\$2.6450	1.32%	\$0.4190	\$0.0627	\$3.1621	\$3.1671	\$3,1621	\$3.1671	Ō	\$0
															•
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub August 2018

	CALCULATION OF DAILY DAI TGT ZONE 1						CALCULATION OF DAILY DAI TGT ZONE 4								
-	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY			_	+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2,7300	1.32%	\$0.4190	\$0.0627	\$3.2482	\$2,6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$3.2482	\$3.2127	\$3.2482	0	\$0
ż	\$2,7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$2,7000	1.32%	\$0.4190	\$0.0627	\$3.2178	\$3.2229	\$3.2178	\$3.2229	ő	\$0
3	\$2,6900	1.32%	\$0,4190	\$0.0627	\$3.2077	\$2.7050	1.32%	\$0,4190	\$0.0627	\$3.2229	\$3.2077	\$3,2229	\$3,2229	Õ	\$0
4	\$2,7600	1.32%	\$0,4190	\$0.0627	\$3.2786	\$2,7700	1.32%	\$0.4190	\$0.0627	\$3.2888	\$3.2786	\$3.2888	\$3.2888	Ō	\$0
5	\$2.7600	1.32%	\$0,4190	\$0.0627	\$3.2786	\$2,7700	1,32%	\$0.4190	\$0.0627	\$3.2888	\$3,2786	\$3.2888	\$3.2888	Õ	\$0
6	\$2.7600	1.32%	\$0,4190	\$0.0627	\$3.2786	\$2,7700	1.32%	\$0,4190	\$0.0627	\$3.2888	\$3.2786	\$3.2888	\$3.2888	ō	\$0 \$0
7	\$2.8100	1.32%	\$0,4190	\$0.0627	\$3.3293	\$2.8400	1.32%	\$0.4190	\$0.0627	\$3,3597	\$3.3293	\$3.3597	\$3,3597	Ō	\$0
8	\$2.8750	1.32%	\$0,4190	\$0.0627	\$3.3952	\$2.8650	1.32%	\$0.4190	\$0.0627	\$3.3850	\$3.3952	\$3.3850	\$3.3952	Ō	\$0
9	\$2.8900	1.32%	\$0,4190	\$0.0627	\$3,4104	\$2.8800	1.32%	\$0.4190	\$0.0627	\$3,4002	\$3,4104	\$3,4002	\$3,4104	Ō	\$0
10	\$2,8900	1.32%	\$0,4190	\$0.0627	\$3.4104	\$2,8700	1.32%	\$0,4190	\$0.0627	\$3.3901	\$3,4104	\$3.3901	\$3,4104	0	\$0
11	\$2.8550	1,32%	\$0,4190	\$0.0627	\$3.3749	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$3.3749	\$3.3344	\$3.3749	. 0	\$0
12	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$3.3749	\$3.3344	\$3.3749	ō	\$0
13	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$3.3749	\$3.3344	\$3,3749	Ō	\$0
14	\$2,8800	1.32%	\$0.4190	\$0.0627	\$3,4002	\$2.8650	1.32%	\$0.4190	\$0.0627	\$3,3850	\$3.4002	\$3.3850	\$3.4002	Ō	\$0
15	\$2,9550	1,32%	\$0.4190	\$0.0627	\$3,4762	\$2.9100	1.32%	\$0.4190	\$0.0627	\$3,4306	\$3.4762	\$3,4306	\$3,4762	0	\$0
16	\$2.9200	1.32%	\$0,4190	\$0.0627	\$3.4408	\$2.8900	1.32%	\$0.4190	\$0.0627	\$3.4104	\$3,4408	\$3.4104	\$3.4408	0	\$0
17	\$2,8900	1.32%	\$0,4190	\$0.0627	\$3,4104	\$2.8600	1.32%	\$0.4190	\$0.0627	\$3.3800	\$3.4104	\$3.3800	\$3.4104	0	\$0
18	\$2.8900	1,32%	\$0.4190	\$0.0627	\$3,4104	\$2.8450	1.32%	\$0.4190	\$0.0627	\$3.3648	\$3.4104	\$3.3648	\$3.4104	0	\$0
19	\$2.8900	1.32%	\$0,4190	\$0.0627	\$3.4104	\$2.8450	1.32%	\$0.4190	\$0.0627	\$3.3648	\$3.4104	\$3.3648	\$3.4104	0	\$0
20	\$2,8900	1.32%	\$0.4190	\$0.0627	\$3,4104	\$2.8450	1.32%	\$0.4190	\$0.0627	\$3.3648	\$3.4104	\$3.3648	\$3.4104	0	\$0
21	\$2.8900	1.32%	\$0.4190	\$0.0627	\$3.4104	\$2.8700	1.32%	\$0.4190	\$0.0627	\$3.3901	\$3.4104	\$3.3901	\$3.4104	0	\$0
22	\$2.8700	1.32%	\$0.4190	\$0.0627	\$3.3901	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$3.3901	\$3.3749	\$3.3901	0	\$0
23	\$2.8650	1.32%	\$0.4190	\$0.0627	\$3.3850	\$2.8200	1.32%	\$0.4190	\$0.0627	\$3.3394	\$3.3850	\$3.3394	\$3.3850	0	\$0
24	\$2.8500	1.32%	\$0.4190	\$0.0627	\$3.3698	\$2.8000	1.32%	\$0.4190	\$0.0627	\$3.3192	\$3.3698	\$3.3192	\$3.3698	0	\$0
25	\$2.8350	1.32%	\$0.4190	\$0.0627	\$3.3546	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.3546	\$3,1975	\$3.3546	0	\$0
26	\$2.8350	1.32%	\$0.4190	\$0.0627	\$3.3546	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.3546	\$3.1975	\$3.3546	0	\$0
27	\$2.8350	1.32%	\$0.4190	\$0.0627	\$3.3546	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.3546	\$3.1975	\$3.3546	0	\$0
28	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$3.3749	\$3.3344	\$3.3749	0	\$0
29	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$2.7700	1.32%	\$0.4190	\$0.0627	\$3.2888	\$3.3344	\$3.2888	\$3.3344	0	\$0
30	\$2.8050	1.32%	\$0.4190	\$0.0627	\$3.3242	\$2.7150	1.32%	\$0.4190	\$0.0627	\$3.2330	\$3.3242	\$3.2330	\$3.3242	0	\$0
31	\$2.7600	1.32%	\$0.4190	\$0.0627	\$3.2786	\$2.6950	1.32%	\$0.4190	\$0.0627	\$3.2127	\$3.2786	\$3.2127	\$3.2786	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub September 2018

	CALCULATION OF DAILY DAI TGT ZONE 1						CALCULATION OF DAILY DAI TGT ZONE 4								
_	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY	E1.1			+ Col. 3 + Col. 4	GAS DAILY	Euc.	NN 10	1110	+ Col. 8 + Col. 9	FOR ZO		HIGHER OF	D.4.11.14	TOTAL
D	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	161-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3141	\$3.2685	\$3.3141	0	\$0
2	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3141	\$3.2685	\$3.3141	0	\$0
3	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3141	\$3.2685	\$3.3141	0	\$0
4	\$2.7950	1.32%	\$0.4190	\$0.0627	\$3.3141	\$2.7500	1.32%	\$0.4190	\$0.0627	\$3.2685	\$3.3141	\$3.2685	\$3.3141	0	\$0
5	\$2.8300	1.32%	\$0.4190	\$0.0627	\$3,3496	\$2.8150	1.32%	\$0.4190	\$0.0627	\$3.3344	\$3.3496	\$3.3344	\$3.3496	0	\$0
6	\$2.7850	1.32%	\$0.4190	\$0.0627	\$3.3040	\$2.7700	1.32%	\$0.4190	\$0.0627	\$3.2888	\$3.3040	\$3,2888	\$3.3040	0	\$0
7	\$2.7250	1.32%	\$0.4190	\$0.0627	\$3.2432	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$3.2432	\$3.1975	\$3.2432	0	\$0
8	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6050	1.32%	\$0.4190	\$0.0627	\$3.1215	\$3.1823	\$3.1215	\$3.1823	0	\$0
9	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6050	1.32%	\$0.4190	\$0.0627	\$3.1215	\$3.1823	\$3.1215	\$3.1823	0	\$0
10	\$2.6650	1.32%	\$0.4190	\$0.0627	\$3.1823	\$2.6050	1,32%	\$0.4190	\$0.0627	\$3.1215	\$3.1823	\$3.1215	\$3.1823	0	\$0
11	\$2.6600	1.32%	\$0.4190	\$0.0627	\$3.1773	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$3.1773	\$3.1519	\$3.1773	0	\$0
12	\$2.6750	1.32%	\$0.4190	\$0.0627	\$3.1925	\$2.5950	1.32%	\$0.4190	\$0.0627	\$3.1114	\$3.1925	\$3.1114	\$3.1925	0	\$0
13	\$2.7250	1,32%	\$0.4190	\$0.0627	\$3.2432	\$2.6350	1.32%	\$0.4190	\$0.0627	\$3.1519	\$3.2432	\$3.1519	\$3.2432	0	\$0
14	\$2.7300	1.32%	\$0.4190	\$0.0627	\$3.2482	\$2.6850	1.32%	\$0.4190	\$0.0627	\$3.2026	\$3.2482	\$3.2026	\$3.2482	0	\$0
15	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1975	\$3.1418	\$3.1975	0	\$0
16	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1975	\$3.1418	\$3,1975	0	\$0
17	\$2.6800	1.32%	\$0.4190	\$0.0627	\$3.1975	\$2.6250	1.32%	\$0.4190	\$0.0627	\$3.1418	\$3.1975	\$3.1418	\$3.1975	0	\$0
18	\$2.8000	1.32%	\$0.4190	\$0.0627	\$3.3192	\$2.7900	1.32%	\$0.4190	\$0.0627	\$3.3090	\$3.3192	\$3.3090	\$3.3192	0	\$0
19	\$2.8550	1.32%	\$0.4190	\$0.0627	\$3.3749	\$2.8200	1.32%	\$0.4190	\$0.0627	\$3.3394	\$3.3749	\$3.3394	\$3.3749	0	\$0
20	\$2.8800	1.32%	\$0.4190	\$0.0627	\$3.4002	\$2.8000	1.32%	\$0.4190	\$0.0627	\$3.3192	\$3.4002	\$3.3192	\$3.4002	0	\$0
21	\$2.8500	1.32%	\$0.4190	\$0.0627	\$3.3698	\$2.7700	1.32%	\$0.4190	\$0.0627	\$3.2888	\$3.3698	\$3.2888	\$3.3698	0	\$0
22	\$2.8400	1.32%	\$0.4190	\$0.0627	\$3.3597	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3.2077	\$3.3597	\$3.2077	\$3.3597	0	\$0
23	\$2.8400	1.32%	\$0.4190	\$0.0627	\$3.3597	\$2.6900	1.32%	\$0,4190	\$0.0627	\$3.2077	\$3.3597	\$3.2077	\$3.3597	0	\$0
24	\$2.8400	1.32%	\$0.4190	\$0.0627	\$3,3597	\$2.6900	1.32%	\$0.4190	\$0.0627	\$3.2077	\$3.3597	\$3.2077	\$3.3597	0	\$0
25	\$2.9000	1.32%	\$0.4190	\$0.0627	\$3.4205	\$2.8000	1.32%	\$0.4190	\$0.0627	\$3.3192	\$3.4205	\$3.3192	\$3.4205	0	\$0
26	\$2.9300	1.32%	\$0.4190	\$0.0627	\$3.4509	\$2.8450	1.32%	\$0.4190	\$0.0627	\$3.3648	\$3.4509	\$3.3648	\$3.4509	0	\$0
27	\$2.9100	1.32%	\$0.4190	\$0.0627	\$3.4306	\$2.8350	1.32%	\$0.4190	\$0.0627	\$3.3546	\$3,4306	\$3.3546	\$3.4306	0	\$0
28	\$2.8200	1.32%	\$0.4190	\$0.0627	\$3.3394	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$3.3394	\$3.2229	\$3.3394	0	\$0
29	\$2.8200	1.32%	\$0.4190	\$0.0627	\$3.3394	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$3.3394	\$3.2229	\$3.3394	0	\$0
30	\$2.8200	1.32%	\$0.4190	\$0.0627	\$3.3394	\$2.7050	1.32%	\$0.4190	\$0.0627	\$3.2229	\$3.3394	\$3.2229	\$3.3394	0	\$0
														0	\$0

	CALCULATION OF DAILY DAI TGT ZONE 1						CALCULATION OF DAILY DAI TGT ZONE 4								
_	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Cal. 1/(1-Cal.2))	PLATTS				(Cal. 6/(1-Cal.7))	DAILY				
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
_	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI		COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.8000	1,32%	\$0.4190	\$0.0627	\$3.3192	\$2.6100	1.32%	\$0.4190	\$0.0627	\$3.1266	\$3.3192	\$3.1266	\$3.3192	0	\$0
2	\$2.8750	1.32%	\$0.4190	\$0.0627	\$3.3952	\$2.7650	1.32%	\$0.4190	\$0.0627	\$3.2837	\$3.3952	\$3.2837	\$3.3952	ō	\$0
3	\$2.9450	1.32%	\$0,4190	\$0.0627	\$3,4661	\$2.9200	1.32%	\$0.4190	\$0.0627	\$3,4408	\$3,4661	\$3,4408	\$3,4661	Ō	\$0
4	\$3.0900	1.32%	\$0.4190	\$0.0627	\$3.6130	\$3.0850	1.32%	\$0.4190	\$0.0627	\$3.6080	\$3.6130	\$3.6080	\$3.6130	Ō	\$0
5	\$3.0850	1.32%	\$0.4190	\$0.0627	\$3.6080	\$3.0350	1.32%	\$0.4190	\$0.0627	\$3.5573	\$3,6080	\$3.5573	\$3.6080	0	\$0
6	\$2.9700	1.32%	\$0.4190	\$0.0627	\$3,4914	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$3,4914	\$3,2634	\$3,4914	0	\$0
7	\$2.9700	1.32%	\$0.4190	\$0.0627	\$3.4914	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$3.4914	\$3.2634	\$3.4914	0	\$0
8	\$2.9700	1.32%	\$0.4190	\$0.0627	\$3.4914	\$2.7450	1.32%	\$0.4190	\$0.0627	\$3.2634	\$3.4914	\$3,2634	\$3.4914	0	\$0
9	\$3.1450	1.32%	\$0.4190	\$0.0627	\$3.6688	\$3.0500	1.32%	\$0.4190	\$0.0627	\$3.5725	\$3.6688	\$3.5725	\$3.6688	0	\$0
10	\$3,1750	1.32%	\$0.4190	\$0.0627	\$3.6992	\$3.1800	1.32%	\$0.4190	\$0.0627	\$3.7042	\$3.6992	\$3,7042	\$3.7042	0	\$0
11	\$3.2250	1.32%	\$0.4190	\$0.0627	\$3.7498	\$3.3000	1.32%	\$0.4190	\$0.0627	\$3.8258	\$3.7498	\$3.8258	\$3.8258	0	\$0
12	\$3.0550	1.32%	\$0.4190	\$0.0627	\$3.5776	\$3.0600	1.32%	\$0.4190	\$0.0627	\$3.5826	\$3,5776	\$3.5826	\$3.5826	0	\$0
13	\$3.0400	1.32%	\$0.4190	\$0.0627	\$3.5624	\$3.0800	1.32%	\$0.4190	\$0.0627	\$3.6029	\$3.5624	\$3.6029	\$3.6029	0	\$0
14	\$3.0400	1.32%	\$0.4190	\$0.0627	\$3.5624	\$3.0800	1.32%	\$0.4190	\$0.0627	\$3.6029	\$3.5624	\$3.6029	\$3.6029	0	\$0
15	\$3,0400	1.32%	\$0.4190	\$0.0627	\$3.5624	\$3.0800	1.32%	\$0,4190	\$0.0627	\$3.6029	\$3.5624	\$3.6029	\$3.6029	0	\$0
16	\$3.1500	1.32%	\$0.4190	\$0.0627	\$3.6738	\$3.1400	1.32%	\$0.4190	\$0.0627	\$3,6637	\$3.6738	\$3.6637	\$3.6738	0	\$0
17	\$3.1650	1.32%	\$0.4190	\$0.0627	\$3,6890	\$3.2150	1.32%	\$0.4190	\$0.0627	\$3.7397	\$3.6890	\$3.7397	\$3.7397	0	\$0
18	\$3,2200	1.32%	\$0.4190	\$0.0627	\$3.7448	\$3.2000	1.32%	\$0.4190	\$0.0627	\$3.7245	\$3.7448	\$3.7245	\$3.7448	0	\$0
19	\$3.1600	1.32%	\$0.4190	\$0.0627	\$3.6840	\$3.1200	1.32%	\$0.4190	\$0.0627	\$3.6434	\$3.6840	\$3.6434	\$3.6840	0	\$0 \$0
20	\$3.1050	1.32%	\$0.4190	\$0.0627	\$3.6282	\$3.1400	1.32%	\$0.4190	\$0.0627	\$3.6637	\$3.6282	\$3.6637	\$3.6637	0	\$0
21	\$3.1050	1.32%	\$0.4190	\$0.0627	\$3.6282	\$3.1400	1.32%	\$0.4190	\$0.0627	\$3.6637	\$3.6282	\$3.6637	\$3.6637	0	\$0 \$0
22	\$3.1050	1.32%	\$0.4190	\$0.0627	\$3.6282	\$3.1400	1.32%	\$0.4190	\$0.0627	\$3.6637	\$3.6282	\$3.6637	\$3.6637	0	\$0
23	\$3.1300	1.32%	\$0.4190	\$0.0627	\$3.6536	\$3.1800	1.32%	\$0.4190	\$0.0627	\$3.7042	\$3.6536	\$3,7042	\$3.7042	0	\$0
24	\$3.1650	1.32%	\$0.4190	\$0.0627	\$3.6890	\$3.1900	1.32%	\$0.4190	\$0,0627	\$3.7144	\$3.6890	\$3.7144	\$3.7144	0	\$0
25	\$3.2650	1.32%	\$0.4190	\$0.0627	\$3.7904	\$3,2800	1.32%	\$0.4190	\$0.0627	\$3.8056	\$3.7904	\$3.8056	\$3.8056	0	\$0
26	\$3.1750	1,32%	\$0.4190	\$0.0627	\$3.6992	\$3,2050	1.32%	\$0.4190	\$0.0627	\$3.7296	\$3.6992	\$3.7296	\$3.7296	0	\$0
27	\$3.0700	1.32%	\$0.4190	\$0.0627	\$3.5928	\$3.0950	1.32%	\$0.4190	\$0.0627	\$3.6181	\$3.5928	\$3.6181	\$3.6181	0	\$0
28	\$3.0700	1.32%	\$0.4190	\$0.0627	\$3.5928	\$3.0950	1.32%	\$0.4190	\$0.0627	\$3.6181	\$3.5928	\$3.6181	\$3.6181	0	\$0
29	\$3.0700	1.32%	\$0.4190	\$0.0627	\$3.5928	\$3.0950	1.32%	\$0.4190	\$0.0627	\$3.6181	\$3.5928	\$3.6181	\$3.6181	0	\$0
30	\$3.0500	1.32%	\$0.4190	\$0.0627	\$3.5725	\$3.0850	1.32%	\$0.4190	\$0.0627	\$3.6080	\$3.5725	\$3.6080	\$3.6080	0	\$0
31	\$3.1150	1.32%	\$0.4190	\$0.0627	\$3.6384	\$3.1300	1.32%	\$0.4190	\$0.0627	\$3.6536	\$3.6384	\$3.6536	\$3.6536	0	\$0
					•									0	\$0

PBR-GAIF CALCULATION OF SUPPLY ZONE FIRM QUANTITY ENTITLEMENT PERCENTAGE ("SZFQEP")

LOUISVALE GAS A GOMPANY CALCULATION OF SUPPLY ZONE FRIGHT SHITTLEMENT PERCENTAGE FOR TEXAS GAS TRANSMISSION (101) AND TENNESSEE GAS PPELINE COMPANY (10PL)

COLUMN			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
									LATERAL C	APACITY AND FIRM MAINLINE R	ECEPT POINT CA	, PACITY						
					WINTE	RSEASON							SUMMER	SEASON				
								(SUM OF	ALLOCATION								ISUM OF	ALLOCATION
CONTRACTS	_	ZONE	NOV 17	DEC.17	JAN, 18	FEB. 18	MAR. 18	COL, 1-5)	PERCENTAGE*	APR 18	MAY 18	JUN. 1B	JUL. 18	AUO, 16	SEP. 18	OCT. 18	COL. 8-14)	PERCENTAGE*
TGT-NNS-29781		. SL	130,734	130,734	130.734	130,734	130.734	653 670	70 21%	56,899	56,899	56,899	50,699	56,890	56,899	56,899	398,293	69 92%
		1	55.473	55,473	55,473	55.473	55,473	277.365	29.79% 0.00%	24.473	24.473	24,473	24.473	24.473	24,473	24,473	171.311	30.08%
		TOTAL	186.207	188.207	180 207	180,207	188.207	931,035	100 00%	81.372	81,372	81.372	61,372	81.372	81.372	81.372	569,604	100.00%
TGT-FT-34951		SL			٥	0	0		0.00%	a	0	٥	0		0	0		0.00%
		ï	Ö	ŏ	ō	ō	õ	ō	0.00%	ŏ	ă	ŏ	Ď	Ď	ă	ñ	ň	0,00%
		41	60,000	60,000	80,000	60,000	80,000	300,000	100 00%		69,000	000,000	80.000	80,000	60,000	60,000	420,000	100.00%
		TOTAL.	60,000	60,000	80.000	80.000	60,000	300,000	100 00%	60,000	60,000	000,00	80.000	80,000	60.000	60,000	420,000	100.00%
TGPL-FT-A-111110		0	20,000	20,000	20,000	20,000	20,000	100,000	100 00%	20,000	20,000	20.000	20,000	20,000	20,000	20,000	140.000	100.00%
			0		0	0	D.	0	0,00%		0	0	0	0	0	0	0	0.00%
		TOTAL	20,000	20,000	20.000	20,000	20.000	100,000	100.00%	20,000	20,000	20.000	20,000	20.000	20,000	20.000	140,000	100.00%
COLUMN	17 WNTER	18	19	20	21	22 TEXAS GAS	23 TENNESSEE	24 TENNESSEE	25	28 SUMMER	27	28	20 Texas gas	30	31	32	33	34
	SEASON		WINTER	TEXAS GAS SZFQE	TEXAS GAS 87FOE	SZFQE	SZFQE	SZFQE		SEASON		SUMMER	SZFQE	TEXAS GAS SZFQE	YEXAS GAS SZFQE	TENNESSEF. SZFQE	TENNESSEE SZFQE	
	QUANTITY		PERCENT	ZONE SL	ZONE 1	ZONE 4	ZONE 0	ZONE 1		QUANTITY		PERCENT	ZONE SL	ZONE 1	ZONE 4	ZONE 0	ZONE 1	
CONTRACTS	ENTITLEMENT	ZONE	(COL. 7)	(C.17 x C,19)	(C,17 x C.19)	(C.17 x C,19)	[C.17 x C.19]	(C.17 x C.19)	TOTAL	ENTITLEMENT	ZONE	(COL, 16)	(C.25 x C.28)	(C,26 x C,28)	(C.28 x C.28)	(C 26 x C 28)	(C.28 x C.28)	TOTAL
TOT-NNS-29781	26,220,000	SL 1	70 21% 20 70% 0 00%	18,409,062	7,810 938	0				8.292.000	SL 1	69.92% 30.08% 0.00%	5,797,768	2.494.234	0			
TGT-FT-34951	9,060,000	SL 1	0,00% 0.00% 100.00%	o	0	9,060,000				12.840,000	SL 1 4	0.00% 0.00% 100.00%	0	0	12,840,000			
TGPL-FT-A-111110	3,020,000	0	100.00% 0.00%				3.020.000 0			4,280,000	0	100.00% 0.00%				4,280.000 D		
TOTALS	38,300,000			18,409,062	7,610,938	9,060,000	3,020,000		38,300,000	25.412.000			5,797,766	2.494,234	12,840,000	4.280.000	0	25,412,000
SUPPLY ZONE FIRM QUA	NTITY ENTITLEMENT PERCENT"			48.07%	20.39%	23 66%	7 88%	0.00%	100 00%				22.61%	9.82%	50.53%	18 84%	9.00%	100.00%

^{*} ALLOCATION PERCENTAGE EQUALS TOTAL ZONE CAPACITY UNDER EACH CONTRACT DIVIDED BY TOTAL CAPACITY UNDER EACH CONTRACT.

[&]quot;THE WINTER SEASON SUPPLY ZONE FRIM QUANTITY ENTITLEMENT PERCENTAGE IS CALCULATED BY DIVIDING THE TOTAL OF COL. 21, 22, 23, OR 24 BY THE TOTAL OF COL. 17.
"THE SUMMER SEASON SUPPLY ZONE FRIM QUANTITY ENTITLEMENT PERCENTAGE IS CALCULATED BY DIVIDING THE TOTAL OF COL. 28, 30, 31, 32, OR 33 BY THE TOTAL OF COL. 26.

PBR-TIF SUPPORTING CALCULATIONS

PBR-TIF CALCULATION OF BENCHMARK GAS TRANSPORTATION COSTS ("BMGTC")

25

COLUMN 1 2 3 4 5 8 7 8 9

			CAL	CULATION OF BAS	E TARIFF RATES			CALCULATION OF S	URCHARGES
		NNS C	EMAND CHARGES	S	NNS COM	JODITY CHARGE	s	ACA	
	-	DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	ACA	TOTAL
MONTH	DAYS	CHARGE	DEMAND	(1x2x3)	CHARGE	DELIVERIES	(5x6)	CHARGE	(6x8
NOV. 17	30	\$0,4190	184,900	\$2,324,193	\$0.0814	2,573,504	\$158,013	\$0.0013	\$3,346
DEC. 17	31	\$0.4190	184,900	\$2,401,868	\$0.0614	2,380,950	\$144,982	\$0,0013	\$3,069
JAN. 18	31	\$0.4190	184,900	\$2,401,866	\$0.0614	3,301,224	\$202,695	\$0,0013	\$4,292
FEB. 18	28	\$0.4190	184,900	\$2,189,247	\$0.0814	1,031,278	\$63,320	\$0.0013	\$1,341
MAR. 18	31	\$0.4190	184,900	\$2,401,868	\$0.0614	1,405,503	\$88,298	\$0.0013	\$1,827
APR. 18	30	\$0.4190	97,440	\$1,224,821	\$0.0614	1,147,227	\$70,440	\$0.0013	\$1,491
MAY 18	31	\$0.4190	60,000	\$779,340	\$0.0614	21,708	\$1,333	\$0.0013	\$28
JUN, 18	30	\$0.4190	60,000	\$754,200	\$0.0614	963,626	\$59,167	\$0.0013	\$1,25
JUL. 18	31	\$0,4190	60,000	\$779,340	\$0.0614	950,019	\$58,331	\$0,0013	\$1,23
AUG. 18	31	\$0.4190	60,000	\$779,340	\$0,0614	1,517,797	\$93,193	\$0,0013	\$1.973
SEP. 18	30	\$0,4190	60,000	\$754,200	\$0.0614	1,549,951	\$95,167	\$0,0013	\$2.015
OCT. 18	31	\$0.4190	117,020	\$1.519,973	\$0.0814	1,982,298	\$121,713	\$0.0013	\$2.57
OTAL	365		1,438,980	\$18,289,652		18,805,083	\$1,154,632		\$24,447

COLUMN 10

COLUMN 26

						CALCULATION O							TOTAL COMM.	TOTAL	CALCULATION OF SE	URCHARGE
	_	FTD	EMAND CHARGES				F1	BACKHAUL COMMO	DDITY CHARGES				(14X15) +	CITY-GATE	ACA	
	· -	DEMAND	CONTRACT	TOTAL	SL COMM.	SL CITY-GATE	Z1 COMM.	Z1 CITY-GATE	Z3 CОММ.	Z3 CITY-GATE	Z4 COMM.	Z4 CITY-GATE	(16X17) + (18X19) +	DELIVERY	ACA	TOTA
MONTH	DAYS	CHARGE	DEMAND	(10x11x12)	CHARGE	DELIVERIES	CHARGE	DELIVERIES	CHARGE	_DELIVERIES	CHARGE	DELIVERIES	(20X21)	(15+17+19+21)	CHARGE	(23x24
NOV, 17	30	\$0.1374	60,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0.0398	- 0	\$0,0360	218,350	\$7,880	218,350	\$0.0013	\$28
DEC. 17	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	912,823	\$32.862	912.823	\$0.0013	\$1,18
JAN. 18	31	50.1374	80,000	\$255,584	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0350	410,850	\$15,008	416,850	\$0.0013	\$54
FEB. 18	28	\$0.1374	80,000	\$230,832	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	585,575	\$21,081	585,575	\$0.0013	\$76
MAR. 18	31	\$0.1374	80.000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	555,804	\$20,009	555,804	\$0.0013	\$72
APR. 18	30	\$0.1374	60,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	382,267	\$13,042	382,267	\$0.0013	\$47
MAY 18	31	\$0.1374	80,000	\$255,564	\$0.0528	0	\$0,0508	0	\$0.0398	0	\$0.0360	1.495.732	\$53,848	1,495,732	\$0.0013	\$1,94
JUN. 18	30	\$0.1374	60,000	\$247,320	\$0,0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	1,131,398	\$40,730	1.131.396	\$0,0013	\$1,47
JUL. 18	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	1,834,171	\$68,030	1,834,171	\$0.0013	\$2,38
AUG. 18	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0,0398	0	\$0.0360	1,776,220	\$63,944	1,776,220	\$0.0013	\$2,30
SEP. 16	30	\$0,1374	80,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0,0398	0	\$0.0360	1,711,423	\$61,611	1,711,423	\$0.0013	\$2,22
OCT. 18	31	\$0.1374	00,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	1,712,535	\$81,651	1,712,535	\$0.0013	\$2,22
OTAL	385		720,000	\$3.009,060		0		0		0		12,713,148	\$457,672	12,713,148		\$16,52

						C/		F TEXAS GAS RAT		F BMGTC						
							CALCULATIO	N OF BASE TARIFF	RATES			_	TOTAL COMM.	TOTAL	CALCULATION OF S	URCHARGES
			DEMAND CHARGES					STF COMMODIT	Y CHARGES				(30X31) •	CITY-GATE	ACA	
	_	DEMAND	CONTRACT	TOTAL	SL COMM.	SL CITY-GATE	Z1 COMM.	Z1 CITY-GATE	Z3 COMM.	Z3 CITY-GATE	Z4 COMM.	Z4 CITY-GATE	(32X33) + (34X35) +	DELIVERY	ACA	TOTAL
MONTH	DAYS	CHARGE	DEMAND	(26x27x28)	CHARGE	DELIVERIES	CHARGE	DELIVERIES	CHARGE	DELIVERIES	CHARGE	DELIVERIES	(36X37)	(31+33+35+37)	CHARGE	(39x40)
NOV. 17	30	\$0.4252	0	\$0	\$0.052B	0	\$0.0508	0	\$0.0398		\$0.0360	0	\$0	Ó	\$0,0013	\$0
DEC. 17	31	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
JAN. 18	31	\$0.4252	٥	\$0	\$0.0528	0	\$0.0508	0	\$0,0398	0	50.0360	0	\$0	0	\$0,0013	\$0
FEB. 18	28	\$0.4252	0	\$0	\$0,0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	0	\$0	0	\$0.0013	\$0
MAR. 18	31	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
APR. 18	30	\$0.1847	0	\$0	\$0.0528	0	\$0,0508	0	\$0.0398	0	\$0.0380	0	\$0	0	\$0.0013	50
MAY 18	31	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0,0013	\$0
JUN, 18	30	\$0.1847	0	50	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0,0013	\$0
JUL. 18	31	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	0	\$0	0	\$0.0013	\$0
AUG. 18	31	\$0.1647	0	50	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	0	\$0	0	\$0,0013	\$0
SEP. 18	30	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0,0013	\$0
OCT. 18	31	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	0	\$0	0	\$0.0013	\$0
TOTAL	385		0	\$0		0	*	0		0		0	\$0	0		\$0

LOUISVILLE GAS AP. AC COMPANY
CALCULATION OF TOTAL ANNUAL BENCHMARK NOW. AS STANSPORTATION COSTS ("TABMGTC")
FOR PBR TRANSPORTATION INDEX FACTOR ("IF")

COLUMN	42	43	44	45
		NNS	-	TOTAL
	CALC. OF OIRE	CT BILLS	TOTAL	NNS
	CASH-		S&DB	BMGTC
MONTH NOV. 17	<u>our</u>	OTHER	(9+42+43)	(4+7+44)
DEC. 17	\$0 \$0	\$0 \$0	\$3,346 \$3,069	\$2,485,552 \$2,549,697
JAN. 18	\$0	\$0 \$0	\$4,292	\$2,608,653
FEB. 18	\$0	\$0	\$1,341	\$2,233,908
MAR. 18	\$0	50	\$1.827	\$2,489,791
APR, 18	\$0	\$99	\$1,590	\$1,298,851
MAY 18	\$0	\$0	\$28	\$780,701
JUN. 18	\$0	\$0	\$1,253	\$814,620
JUL. 18	\$0	\$0	\$1,235	\$638,906
AUG. 18	\$0 \$0	50	\$1,973	\$874.506
SEP, 18 OCT, 18	\$0 \$0	\$0 \$0	\$2,015 \$2,577	\$851,382 \$1,644,263
OC 1. 16	30	•0	92.311	\$1,044,203
TOTAL	\$0	\$99	\$24,548	\$19,468,830
COLUMN	48	47	48	49
		+ # + 607.711.0		
	CALC. OF DIRE	T BACKHAUL	TOTAL S&DB	AL FT BACKHAUL BMGTC
	CASH-	CI BILLS	(25+48+	(13+22+
MONTH	OUT	OTHER	47)	48)
NOV. 17	\$0	\$0	\$284	\$255,484
DEC. 17	\$0	\$0	\$1,187	\$269,613
JAN. 18	\$0	\$0	\$542	\$271,112
FEB. 18	\$0	\$0	\$761	\$252,674
MAR. 18 APR. 18	\$0 \$0	\$0 \$0	\$723 \$471	\$276,296 \$260,833
MAY 18	\$0 \$0	\$0 5 0	\$471 \$1.945	\$260,833 \$311,355
JUN. 18	\$0	\$0	\$1,471	\$289,521
JUL. 18	\$0	\$0	\$2,385	\$323,979
AUG. 18	\$0	\$0	\$2,309	\$321.817
SEP. 18	\$0	80	\$2,225	\$311,158
OCT, 18	\$0	\$0	\$2,226	\$319,441
TOTAL	\$0	\$0	\$16,529	\$3,483,261
COLUMN	50	51	52	53
		STF		TOTAL STF
	CALC. OF DIRE		TOTAL S&DB	BMGTC
	CASH-		(41+50+	(29+38+
MONTH	out	OTHER	51)	52)
NOV. 17	\$0	\$0	\$0	\$0
DEC. 17	\$0 \$0	\$0	\$0	50
JAN. 18 FEB. 18	. \$0	\$0 \$0	\$0 \$0	\$0 \$ 0
MAR. 18	\$0	\$0 \$0	\$0 \$0	\$0
APR. 18	\$0	\$0 \$0	\$0	5 0
MAY 18	\$ 0	\$0	\$0	\$0
JUN. 18	\$0	\$0	\$0	\$0
JUL. 18	20	\$0	50	50
AUG. 18	80	\$0	\$0	\$0
SEP. 18	\$0	\$0	\$0	50
OCT. 18	50	\$0	50	\$0
TOTAL	\$0	\$0	\$0	\$0

LOUISVILLE GAS A GIC COMPANY
CALCULATION OF TOTAL ANNUAL BENOHMARK 1000 - 100 - 100 TAST RANSPORTATION COSTS (TABMGTC')
FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN 54

	TOTAL
	8M(TGT)
MONTH	(45+49+53)
NOV. 17	\$2,741.016
DEC. 17	\$2,839,310
JAN. 18	\$2,879,765
FEB. 18	\$2,486.582
MAR. 18	\$2,768.087
APR. 18	\$1,557.684
MAY 18	\$1,092,056
JUN. 18	\$1,104,141
JUL. 18	\$1,182,885
AUG. 18	\$1,198,323
SEP. 18	\$1,162,538
OCT. 18	\$1,963,704
TOTAL	\$22,952,091

LOUISVILLE GAS A: HIC COMPANY

CALCULATION OF TOTAL ANNUAL BENCHMARK I. ANNUAL SENSE TRANSPORTATION COSTS ("TABMGTC")

FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

									,				
COLUMN	55	56	57	58	59	60	61	62	63	64	65	68	67
				CALCULATION OF	TENNESSEE GAS	PIPELINE FT-A	SERVICE (ZONE)	D) PORTION OF BMO	этс				
		CALC	CULATION OF BAS	F TARIFF RATES				CALCULATI	ON OF SURCHAP	IGES AND DIRE	CTBILLS		TOTAL
		E O DEMAND CHAR	GES TOTAL _	FT-A ZONE 0 C	OMMODITY CHAR	GES	EPCR ADJU		ACA			TOTAL S&DB	FT-A ZN-0
MONTH	DEMAND CHARGE	CONTRACT	(55x58)	COMMODITY	CITY-GATE DELIVERIES	TÖTAL (58x59)	EPCR CHARGE	TOTAL (59x61)	ACA CHARGE	TOTAL (59x63)	OTHER	(82 + 84 + 65)	BMGTC (57+60+68)
NOV. 17	\$15.5974	20,000	\$311,946	\$0.0186	600,000	\$11,160	\$0.0201	\$12,060	\$0.0013	\$780	\$0	\$12,840	\$335,948
DEC. 17	\$15.5974	20,000	\$311,948	\$0.0188	209,995	\$3,906	\$0.0201	\$4,221	\$0.0013	\$273	\$0	\$4,494	\$320,348
JAN. 18 FEB. 18	\$15.5974 \$15.5974	20,000 20,000	\$311,948 \$311,946	\$0.0186 \$0.0186	620,000 280,000	\$11,532 \$5,208	\$0.0201 \$0.0201	\$12,462 \$5,628	\$0.0013 \$0.0013	\$806 \$384	\$0 \$0	\$13.268 \$5,992	\$338,748
MAR. 18	\$15.5974 \$15.5974	20,000	\$311,948	\$0.0186	120,000	\$2.232	\$0.0201	\$3,028 \$2.412	\$0.0013	\$354 \$156	\$0 \$0	\$5,992 \$2,568	\$323,148 \$316,746
APR. 18	\$15.5974	20,000	\$311,948	\$0.0188	164,835	\$3,066	\$0.0233	\$3,841	\$0.0013	\$214	\$0	\$4,055	\$319,069.
MAY 18	\$15.5974	20,000	\$311,948	\$0.0186	59,940	\$1,115	\$0.0233	\$1,398	\$0.0013	\$78	\$0	\$1,474	\$314,537
JUN. 18	\$15.5974 \$15.5974	20,000 20,000	\$311,948 \$311,948	\$0.0186 \$0,0186	0 619,380	\$0 \$11,520	\$0.0233	\$0 \$14,432	\$0,0013 \$0,0013	\$0 \$805	\$0 \$0	\$0 *45.227	\$311,948
JUL. 18 AUG. 18	\$15.5974	20,000	\$311,948	\$0.0188	619.380	\$11,520	\$0.0233 \$0.0233	\$14,432	\$0.0013	\$805	\$0	\$15,237 \$15,237	\$338,705 \$338,705
SEP. 18	\$15.5974	20,000	\$311,948	\$0.0188	599.400	\$11,149	\$0.0233	\$13,966	\$0.0013	\$779	\$0	\$14,745	\$337,842
OCT, 18	\$15.5974	20,000	\$311,948	\$0.0188	319,680	\$5,946	\$0.0233	\$7,448	\$0.0013	\$416	\$0	\$7,864	\$325,758
TOTAL		240.000	\$3,743,376		4.212.810	\$78,354		\$92,298		\$5,476	\$0	\$97,774	\$3,919,504
10.4E		240,000	55,745,576		4.212,010	010.004		382,280		93,470	40	397,774	93,818,504
COLUMN	68	69	70	71	72	73	74	75	76	77	78	79	80
					TENEROSES 01.0								
		CALC	ULATION OF BAS	E TADIES DATES	TENNESSEE GAS	PIPELINE F 1-F	SERVICE (ZONE	1) PORTION OF BMC	ON OF SURCHAF	CES AND DIDE	CTRILLS		TOTAL
	FT-A ZON	E 1 DEMAND CHAR	GES	FT-A ZONE 1 C	OMMODITY CHÂR	GES	EPCR ADJU	ISTMENT	ACA	OLO MIND DINE	O I BILLO	TOTAL S&DB	FT-A ZN-1
	DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	EPCR	TOTAL	ACA	TOTAL		(75 +	BMGTC
MONTH	CHARGE _	DEMAND	(88x69)	CHARGE	DELIVERIES	(71×72)	CHARGE	(72x74)	CHARGE	(72x76)	OTHER _	77 + 78)	(70+73+79)
NOV. 17 DEC. 17	\$10.8623 \$10.8623	0	\$0 \$0	\$0.0156 \$0.0156	0	\$0 \$0	\$0.0167 \$0.0167	\$0 \$0	\$0,0013 \$0.0013	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
JAN. 18	\$10.6823	ŏ	\$0	\$0.0156	ŏ	\$0	30.0167	\$0	\$0.0013	SO.	\$0	\$0	\$0
FEB. 18	\$10.6623	ō	\$0	\$0.0156	0	\$0	\$0.0187	\$0	\$0.0013	\$0	\$0	\$0	30
MAR. 18	\$10.6623	ō	\$0	\$0.0156	0	\$0	\$0.0167	\$0	\$0.0013	so	\$0	\$0	\$0
APR, 18 MAY 18	\$10.6623 \$10.6623	0	\$0 \$0	\$0.0156 \$0.0156	0	\$0 \$0	\$0.0193 \$0,0193	\$0 \$0	\$0.0013 \$0.0013	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
JUN. 18	\$10.6623	ŏ	\$0	\$0.0156	0	\$0	\$0.0193	\$0	\$0.0013	\$0	\$0 \$0	\$0	\$0
JUL. 18	\$10.6623	ō	30	\$0.0156	Ō	50	\$0.0193	\$0	\$0.0013	\$0	\$0	\$0	\$0
AUG. 18	\$10.8623	0	\$0	\$0.0156	ō	\$0	\$0.0193	\$0	\$0.0013	\$0	\$0	\$0	\$0
SEP. 18 OCT. 18	\$10.6623 \$10.6823	0	\$0 \$0	\$0.0156 \$0.0156	0	\$0 \$0	\$0.0193 \$0.0193	\$0 \$0	\$0.0013 \$0.0013	\$0 \$0	\$0 \$ 0	\$0 \$0	\$0 \$0
	\$10.0025	-		60.6100			00.0183		50.0010				
TOTAL		0	50		0	\$0		\$0		\$0	\$0	\$0	\$0
COLUMN	81	82	83	84	85	88	87	88	. 89	90	91	92	93
				CALCULATION OF	TENNESSEE GAS	PIPELINE ET-A	SERVICE (ZONE :	2) PORTION OF BMC	STC.				
	- FT 1 7011	CALC	ULATION OF BAS	E TARIFF RATES	OMMODITY CHAR		EPCR ADJU	CALCULATI	ON OF SURCHAR	RGES AND DIRE	CTBILLS		TOTAL
	DEMAND	E 2 DEMAND CHAR CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL -	EPCR ADJU	TOTAL	ACA ACA	TOTAL		TOTAL S&DB (88 +	FT-A ZN-2 BMGTC
MONTH	CHARGE	DEMAND	(81x82)	CHARGE	DELIVERIES	(84x85)	CHARGE	(85x87)	CHARGE	(85x89)	OTHER	90 + 91)	(83+86+92)
NOV. 17	\$5.5224	0	\$0	\$0,0021	0	\$0	\$0.0010	\$0	\$0.0013	\$0	30	\$0	\$0
DEC. 17	\$5.5224	0	\$0	\$0.0021	0	\$0	\$0.0010	\$0	\$0.0013	\$0	\$0	\$0	\$0
JAN. 18 FEB. 18	\$5.5224 \$5.5224	0	\$0 \$0	\$0,0021 \$0,0021	0	\$0 \$0	\$0.0010 \$0.0010	\$0 \$0	\$0.0013 \$0.0013	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
MAR. 18	\$5.5224	ŏ	\$0	50.0021	ŏ	so	\$0.0010	\$0	\$0.0013	\$0	\$0	\$0	\$0
APR. 18	\$5.5224	Ō	\$0	\$0,0021	0	\$0	\$0.0012	\$0	\$0.0013	\$0	\$0	\$0	\$0
MAY 18	\$5.5224	0	\$0	\$0.0021	Ō	\$0	\$0.0012	\$0	\$0.0013	\$0	\$0	\$0	\$0
JUN. 18 JUL. 18	\$5.5224 \$5.5224	0	\$0 \$0	\$0.0021 \$0.0021	0	\$0 \$0	\$0,0012 \$0,0012	\$0 \$0	\$0.0013 \$0.0013	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
AUG. 18	\$5.5224 \$5.5224	0	\$0	\$0.0021	0	\$0 \$0	\$0.0012	\$0 \$0	\$0.0013	\$0 \$0	\$0	\$0	\$0 \$0
SEP. 18	\$5.5224	ŏ	\$0	\$0.0021	Ď	\$0	\$0.0012	\$0	\$0.0013	\$0	\$0	\$0	so
OCT, 18	\$5.5224	0	\$0	\$0.0021	0	\$0	\$0.0012	\$0	\$0.0013	\$0	\$0	\$0	\$0
TOTAL		0	\$0		0	\$0		so		\$0	\$0	\$0	\$0
ant that	•												
COLUMN	94	95											
	TOTAL	TOTAL BM(TGPL)											
MONTH	S&D8	(87+80+93+94)											
NOV. 17	\$858	\$336,606											
DEC 17 JAN. 18	\$1,728 (\$3,038)	\$322.074 \$333.710											
FEB. 18	(\$524)	\$322,624											
MAR. 18	(\$360)	\$318,388											
APR. 18	(\$2.047)	\$317,022											
MAY 18	(\$1.248)	\$313,289											
JUN. 18	(\$526) \$384	\$311,422 \$330,000											
JUL. 18 AUG. 18	\$384 (\$983)	\$339,089 \$337,722											
SEP. 18	\$23	\$337,865											
OCT. 18	(\$7,744)	\$318,014											
TOTAL	(\$7,744) (\$13,679)	\$318,014 \$3,905,825											

LOUISVILLE GAS A NO COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK INCOMES 43A TRANSPORTATION COSTS ("TABMGTC") FOR PBR TRANSPORTATION INDEX FACTOR CTIE")

COLUMN	96	97	96	99	
	SUMMARY	OF PIPELINE BENC	HMARKS		
	TOTAL	TOTAL			
	BM(TGT)	BM(TGPL)	TOTAL	TABMGTC	
MONTH	COL, 54	COL, 95	BM(PPL)*	(96+97+98)	*THER
NOV. 17	\$2,741,016	\$338,606	\$0	\$3,077.022	REQU
DEC, 17	\$2,839,310	\$322,074	\$0	\$3,161,384	OTHE
JAN. 18	\$2,879,765	\$333,710	\$0	\$3,213,475	THER
FEB. 18	\$2,488,582	\$322.624	\$0	\$2,809,206	HASE
MAR, 18	\$2,768,087	\$318,388	\$0	\$3,082,475	
APR. 18	\$1,557,684	5317,022	\$0	\$1,874,706	
MAY 18	\$1,092.056	\$313,289	\$0	\$1,405,345	
JUN. 18	\$1,104,141	\$311,422	\$0	\$1,415,563	
JUL. 18	\$1,182,885	\$339,089	\$0	\$1,501,974	
AUG. 18	\$1,198,323	\$337,722	\$0	\$1,534,045	
SEP. 18	\$1,102,530	3337,865	\$0	\$1,500,403	
OCT, 18	\$1,963,704	\$318,014	\$0	\$2,281,718	
TOTAL	\$22,952,091	\$3,905.625	\$0	\$26,857,916	

THERE WERE NO TRANSACTIONS WHICH REQUIRED LG&E TO USE PIPELINE SERVICES OTHER THAN THOSE IT HAD UNDER CONTRACT. THEREFORE, NO PROXY PIPELINE BENCHMARK HAS BEEN CALCULATED.

PBR-TIF CALCULATION OF ANNUAL ACTUAL GAS TRANSPORTATION COSTS ("AAGTC")

LOUISVILLE GAS AN CECTRIC COMPANY CALCULATION OF TOTAL ACTUAL ANNUAL GAS TRANSPORTATION COSTS ("TAAGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	1	2	3
			TOTAL ANNUAL
			ACTUAL GAS
	ACTUAL PIPELINE	ACTUAL ANNUAL	TRANSPORTATION
	TRANSPORTATION	GAS TRANSPORT.	COSTS ("TAAGTC")
MONTH	COSTS - TEXAS GAS	COSTS - TENNESSEE	(1 + 2)
 -			
NOV. 17	\$2,741,016	\$177,174	\$2,918,190
DEC. 17	\$2,839,310	\$162,642	\$3,001,952
JAN. 18	\$2,879,765	\$174,278	\$3,054,043
FEB. 18	\$2,486,582	\$163,192	\$2,649,774
MAR. 18	\$2,766,087	\$156,956	\$2,923,043
APR. 18	\$1,550,784	\$157,590	\$1,708,374
MAY 18	\$1,092,056	\$153,857	\$1,245,913
JUN. 18	\$1,104,141	\$151,990	\$1,256,131
JUL. 18	\$1,162,885	\$179,657	\$1,342,542
AUG. 18	\$1,196,323	\$178,290	\$1,374,613
SEP. 18	\$1,162,538	\$178,433	\$1,340,971
OCT. 18	\$1,963,704	\$158,582	\$2,122,286
TOTAL	\$22,945,191	\$1,992,641	\$24,937,832

PBR-TIF CALCULATION OF SAVINGS AND/OR EXPENSES

LOUISVILLE GAS AN SECTRIC COMPANY CALCULATION OF SAVINGS AND EXPENSES UNDER PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	1	2	3
			SAVINGS (EXPENSE)
	TABMGTC	TAAGTC	(1 - 2)
NOV. 17	\$3,077,622	\$2,918,190	\$159,432
DEC. 17	\$3,161,384	\$3,001,952	\$159,432
JAN. 18	\$3,213,475	\$3,054,043	\$159,432
FEB. 18	\$2,809,206	\$2,649,774	\$159,432
MAR. 18	\$3,082,475	\$2,923,043	\$159,432
APR. 18	\$1,874,706	\$1,708,374	\$166,332
MAY 18	\$1,405,345	\$1,245,913	\$159,432
JUN. 18	\$1,415,563	\$1,256,131	\$159,432
JUL. 18	\$1,501,974	\$1,342,542	\$159,432
AUG. 18	\$1,534,045	\$1,374,613	\$159,432
SEP. 18	\$1,500,403	\$1,340,971	\$159,432
OCT. 18	\$2,281,718	\$2,122,286	\$159,432
TOTAL	\$26,857,916	\$24,937,832	\$1,920,084

PBR-TIF TARIFF SHEETS

PBR-TIF TEXAS GAS TARIFF SHEETS RATE NNS

Effective On: April 1, 2015

Currently Effective Maximum Transportation Rates (\$ per MMBtu) For Service Under Rate Schedule NNS

7 0	Base Tariff Rates
Zone SL	
Daily Demand	0.1800
Commodity	0.0253
Overrun	0.2053
Zone 1	
Daily Demand	0.2782
Commodity	0.0431
Overrun	0.3213
Zone 2	
Daily Demand	0.3088
Commodity	0.0460
Overrun	0.3548
Zone 3	-
Daily Demand	0.3543
Commodity	0.0490
Overrun	0.4033
Zone 4	
Daily Demand	0.4190
Commodity	0.0614
Overrun	0.4804

The above rates shall be increased to include the ACA unit charge pursuant to Section 6.9[7] of the General Terms and Conditions.

Notes:

- The maximum reservation charge component of the maximum firm volumetric capacity release rate shall be the applicable maximum daily demand rate herein pursuant to Section 6.16 of the General Terms and Conditions.

PBR-TIF TEXAS GAS TARIFF SHEETS RATE FT

Section 4.1 Currently Effective Rates - FT Version 7.0.0

Fourth Revised Volume No. 1 Effective On: April 1, 2015

Currently Effective Maximum Daily Demand Rates (\$ per MMBtu) For Service Under Rate Schedule FT

Currently Effective Rates [1]

SL-SL	0.0794
SL-1	0.1552
SL-2	0.2120
SL-3	0.2494
SL-4	0.3142
1-1	0.1252
1-2	0.1820
1-3	0.2194
1-4	0.2842
2-2	0.1332
2-3	0.1705
2-4	0.2334
3-3	0.1181
3-4	0.1810
4-4	0.1374

Minimum Rates: Demand \$-0-

Backhaul rates equal forward haul rates from Zone SL to zone of delivery; provided, however, that intra-zone rates shall apply to intra-zone transportation, whether such intra-zone transportation is forward haul or backhaul.

[1] Currently Effective Rates are equal to the Base Tariff Rates.

Notes:

- The maximum reservation charge component of the maximum firm volumetric capacity release rate shall be the applicable maximum daily demand rate herein pursuant to Section 6.16 of the General Terms and Conditions.

Section 4.1 Currently Effective Rates - FT Version 7.0.0

Currently Effective Maximum Commodity Rates (\$ per MMBtu) For Service Under Rate Schedule FT

	Base Tariff Rates
SL-SL	0.0104
SL-1	0.0355
SL-2	0.0399
SL-3	0.0445
SL-4	0.0528
1-1	0.0337
1-2	0.0385
1-3	0.0422
1-4	0.0508
2-2	0.0323
2-3	0.0360
2-4	0.0446
3-3	0.0312
3-4	0.0398
4-4	0.0360

The above rates shall be increased to include the ACA unit charge pursuant to Section 6.9[7] of the General Terms and Conditions.

Minimum Rates: Commodity minimum base rates are presented in Section 4.12.

Backhaul rates equal forward haul rates from Zone SL to zone of delivery; provided, however, that intrazone rates shall apply to intra-zone transportation, whether such intra-zone transportation is forward haul or backhaul.

PBR-TIF TENNESSEE TARIFF SHEETS RATE FT-A

Eleventh Revised Sheet No. 14 Superseding Tenth Revised Sheet No. 14

RATES PER DEKATHERM

FIRM TRANSPORTATION RATES RATE SCHEDULE FOR FT-A

Base Reservation Rates					DELIVER	Y ZONE			
	RECEIPT ZONE	0	L	1	2	3	4	5	6
	0 L	\$5.5411	\$4.9193	\$11.5794	\$15.5758	\$15.8514	\$17.4175	\$18.4879	\$23.1959
	1	\$8.3417	*	\$7.9962	\$10.6413	\$15.0745	\$14.8460	\$16.7429	\$20.5878
	2	\$15.5759		\$10.5774	\$5.5014	\$5.1427	\$6.5803	\$9.0504	\$11.6830
	3	\$15.8514		\$8.3784	\$5.5458	\$4.0009	\$6.1457	\$11.1149	\$12.8437
	4	\$20.1259		\$18.5544	\$7.0708	\$10.7456	\$5.2598	\$5.6884	\$8.1265
	5	\$23.9973		\$16.8625	\$7.4172	\$8.9748	\$5.8432	\$5.4810	\$7.1353
	6	\$27.7603		\$19.3678	\$13.3296	\$14.6845	\$10.3726	\$5.4568	\$4.7237
Daily Base									
Reservation Rate 1/					DELIVER	Y ZONE			
	RECEIPT								
	ZONE	0	L	1	2	3	4	5	6
	0	\$0.1822		\$0.3807	\$0.5121	\$0.5211	\$0.5726	\$0.6078	\$0.7626
	L		\$0.1617						
	1	\$0.2742		\$0.2629	\$0.3499	\$0.4956	\$0,4881	\$0.5505	\$0.6769
	2	\$0.5121		\$0.3478	\$0.1809	\$0.1691	\$0.2163	\$0.2975	\$0.3841
	3	\$0.5211		\$0.2755	\$0.1823	\$0.1315	\$0.2021	\$0.3654	\$0.4223
	4	\$0.6617		\$0.6100	\$0.2325	\$0.3533	\$0.1729	\$0.1870	\$0.2672
	5	\$0.7890		\$0.5544	\$0.2439	\$0.2951	\$0.1921	\$0.1802	\$0.2346
	6	\$0.9127		\$0.6367	\$0.4382	\$0.4828	\$0.3410	\$0.1794	\$0.1553
Maximum Reservation									
Rates 2 /, 3 /					DELIVER	Y ZONE			
	RECEIPT ZONE	0	L	1	2	3	4	5	6
	0	\$5.5627		\$11.6010	\$15.5974	\$15.8730	\$17.4391	\$18.5095	\$23.2175
	Ĺ	+3.20-	\$4.9409		T	,	, - · · · · • • •	÷	
	1	\$8.3633	* ·- ·- -	\$8.0178	\$10.6629	\$15.0961	\$14.8676	\$16.7645	\$20,6094
		\$15.5975		\$10.5990	\$5.5230	\$5.1643	\$6.6019	\$9.0720	\$11.7046
		\$15.8730		\$8.4000	\$5.5674	\$4.0225	\$6.1673	\$11.1365	\$12.8653
		\$20.1475		\$18.5760	\$7.0924	\$10.7672	\$5.2814	\$5.7100	\$8.1481
		\$24.0189		\$16.8841	\$7.4388	\$8.9964	\$5.8648	\$5.5026	\$7.1569
		\$27.7819		\$19.3894	\$13.3512	\$14.7061	\$10.3942	\$5.4784	\$4.7453

Notes:

- 1/ Applicable to demand charge credits and secondary points under discounted rate agreements.
- 2/ Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of \$0.0000.
- 3/ Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of \$0.0216.

Issued: September 29, 2017
Effective: November 1, 2017
Docket No. RP17-1118-000
Accepted: October 26, 2017

Thirteenth Revised Sheet No. 15
Superseding
Twelveth Revised Sheet No. 15

RATES PER DEKATHERM

COMMODITY RATES RATE SCHEDULE FOR FT-A

Base DELIVERY ZONE Commodity Rates RECEIPT----ZONE 0 L 1 3 5 6 \$0.0115 \$0.0177 \$0.0219 \$0.2668 \$0.2546 n \$0.0032 \$0.3030 \$0.0012 L 1 \$0.0042 \$0.0081 \$0.0147 \$0.0179 \$0.2269 \$0.2313 \$0.2641 2 \$0.0087 \$0.0012 \$0.0028 \$0.0734 \$0.0167 \$0.1178 \$0.1305 3 \$0.0026 \$0.0002 \$0.0207 \$0.0169 \$0.0982 \$0.1358 \$0,1482 \$0.0087 \$0.0105 \$0.0250 \$0.0205 \$0.0454 \$0.1041 \$0.0642 5 \$0.0284 \$0.0256 \$0.0100 \$0.0118 \$0.0639 \$0.0633 \$0 0787 6 \$0.0346 \$0.0300 \$0.0143 \$0.0163 \$0.0984 \$0.0533 \$0.0324 Minimum Commodity Rates 1/, 2/ DELIVERY ZONE RECEIPT-----ZONE 0 L 1 2 3 4 \$0.0032 \$0.0115 \$0.0177 \$0.0219 \$0.0250 \$0.0284 \$0.0346 \$0.0012 L \$0.0042 \$0.0081 \$0.0147 \$0.0179 1 \$0.0210 \$0.0256 \$0.0300 2 \$0.0167 \$0.0087 \$0.0012 \$0.0028 \$0.0056 \$0.0100 \$0.0143 3 \$0.0207 \$0.0169 \$0.0026 \$0.0002 \$0.0081 \$0.0118 \$0.0163 4 \$0.0250 \$0.0205 \$0.0087 \$0.0105 \$0.0028 \$0.0046 \$0.0092 5 \$0.0284 \$0.0256 \$0.0100 \$0.0118 \$0.0046 \$0.0046 \$0,0066 \$0.0346 \$0.0300 \$0.0143 \$0.0163 \$0.0086 \$0.0041 \$0.0020 Maximum **DELIVERY ZONE** Commodity Rates 1/, 2/, 3/ RECEIPT---------ZONE Ω 2 3 L 1 4 5 6 \$0.0124 \$0.0041 \$0.0186 \$0.0228 \$0.2677 \$0.2555 \$0.3039 \$0.0021 \$0.0051 \$0.0090 \$0.0156 \$0.0188 \$0.2278 1 \$0.2322 \$0.2650 2 \$0.0176 \$0.0096 \$0.0021 \$0.0037 \$0.0743 \$0.1187 \$0.1314 3 \$0,0035 \$0.0011 \$0.0216 \$0.0178 \$0.0991 \$0.1367 \$0.1491 \$0.0214 \$0.0114 \$0.0259 \$0.0096 4 \$0.0463 \$0.0651 \$0.1050 5 \$0.0293 \$0.0265 \$0.0109 \$0.0127 \$0.0648 \$0.0642 \$0.0796

Notes:

1/ Rates stated above exclude the ACA Surcharge as revised annually and posted on the FERC website at http://www.ferc.gov on the Annual Charges page of the Natural Gas section. The ACA Surcharge is incorporated by reference into Transporter's Tariff and shall apply to all transportation under this Rate Schedule as provided in Article XXIV of the General Terms and Conditions.

\$0.0309

\$0.0152

\$0.0172

\$0.0993

\$0.0542

\$0.0333

2/ The applicable F&LR's and EPCR's, determined pursuant to Article XXXVII of the General Terms and Conditions, are listed on Sheet No. 32.

6

\$0.0355

3/ Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of \$0.0009.

Issued: September 27, 2016 Docket No. RP16-1251-000 Effective: November 1, 2016 Accepted: October 13, 2016

FUEL AND EPCR

F&LR 1/, 2/, 3/, 4/	RECEIPT				DELIVERY	ZONE			
	ZONE	0	L	1	2	3	4	5	6
	0	0.51%	0.26%	1.54%	2.28%	2.86%	3.33%	3.75%	4.44%
	1 2	0.63% 2.33%	0.2070	1.12% 1.19%	1.92% 0.25%	2.31% 0.46%	2.82% 0.85%	3.41% 1.43%	3.88% 1.93%
	3	2.86%		2.31%	0.46%	0.14%	1.17%	1.69%	2.20%
	4 5	3.33% 3.88%		2.62% 3.41%	1.19% 1.44%	1.41% 1.69%	0.48% 0.72%	0.73% 0.71%	1.24% 0.91%
	6	4.63%		4.02%	1.93%	2.20%	1.17%	0.57%	0.30%

Broad Run Expansion Project - Market Component (Z3-Z1): 5/ 4.76%

EPCR 3/, 4/	RECEIPT		DELIVERY ZONE									
	ZONE	0	L	1	2	3	4	5	6			
	0 L	\$0.0039	\$0.0013	\$0.0151	\$0.0233	\$0.0290	\$0.0350	\$0.0398	\$0.0477			
	1	\$0.0053	40.002	\$0.0105	\$0.0193	\$0.0236	\$0.0293	\$0.0359	\$0,0412			
	2	\$0.0233		\$0.0113	\$0.0012	\$0.0034	\$0.0076	\$0.0138	\$0.0190			
	3	\$0.0290		\$0.0236	\$0,0034	\$0.0000	\$0.0111	\$0.0164	\$0.0219			
	4	\$0.0350		\$0.0271	\$0.0113	\$0.0137	\$0.0036	\$0.0063	\$0.0118			
	5	\$0.0398		\$0.0359	\$0.0138	\$0.0164	\$0.0062	\$0.0061	\$0.0082			
	6	\$0.0477		\$0.0412	\$0.0190	\$0.0219	\$0.0110	\$0.0046	\$0.0017			

Broad Run Expansion Project - Market Component (Z3-Z1): 5/ \$0.0308

Issued: July 13, 2018 Docket No. RP18-977-000 Effective: October 10, 2018 Accepted: August 14, 2018

^{1/} Included in the above F&LR is the Losses component of the F&LR equal to 0.10%.

^{2/} For service that is rendered entirely by displacement and for gas scheduled and allocated for receipt at the Dracut, Massachusetts receipt point, Shipper shall render only the quantity of gas associated with Losses of 0.10%.

^{3/} The F&LR's and EPCR's listed above are applicable to FT-A, FT-BH, FT-G, FT-GS, and IT.

^{4/} The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.

^{5/} The incremental F&LR and EPCR set forth above are applicable to a Shipper(s) utilizing capacity on the Broad Run Expansion Project — Market Component facilities, from any receipt point(s) to any delivery point(s) located on the project's transportation path. Any service provided to a Shipper(s) outside the project's transportation path shall be subject to the greater of the incremental F&LR and EPCR for the project or the applicable F&LR and EPCR for the applicable receipt(s) and delivery point(s) as shown in the rate matrices above.

FUEL AND EPCR

F&LR 1/, 2/, 3/, 4/			DELIVERY ZONE										
	RECEIPT ZONE	0	L	1	2	3	4	5	6				
	0	0.51%	0.26%	1.54%	2.28%	2.86%	3.33%	3.75%	4.44%				
	1	0.63%	0.2070	1.12%	1.92%	2.31%	2.82%	3.41%	3.88%				
	2	2.33%		1.19%	0.25%	0.46%	0.85%	1.43%	1.93%				
	3	2.86%		2.31%	0.46%	0.14%	1.17%	1.69%	2.20%				
	4	3.33%		2.62%	1.19%	1.41%	0.48%	0.73%	1.24%				
	5	3.88%		3.41%	1.44%	1.69%	0.72%	0.71%	0.91%				
	6	4.63%		4.02%	1.93%	2.20%	1 17%	0.57%	0.30%				

EPCR 3/, 4/	RECEIPT		DELIVERY ZONE									
***************************************	ZONE	0	L	1	2	3	4	5	6			
	0 L	\$0.0039	\$0.0013	\$0.0151	\$0.0233	\$0.0290	\$0.0350	\$0.0398	\$0.0477			
	1	\$0.0053	70.000	\$0.0105	\$0.0193	\$0.0236	\$0.0293	\$0.0359	\$0.0412			
	2	\$0.0233		\$0.0113	\$0.0012	\$0.0034	\$0.0076	\$0.0138	\$0.0190			
	3	\$0.0290		\$0.0236	\$0.0034	\$0.0000	\$0.0111	\$0.0164	\$0.0219			
	4	\$0.0350		\$0.0271	\$0.0113	\$0.0137	\$0.0036	\$0.0063	\$0.0118			
	5	\$0.0398		\$0.0359	\$0.0138	\$0.0164	\$0.0062	\$0.0061	\$0.0082			
	6	\$0.0477		\$0.0412	\$0.0190	\$0.0219	\$0.0110	\$0.0046	\$0.0017			

Issued: March 1, 2018 Effective: April 1, 2018

Docket No. RP18-531-000 Accepted: March 29, 2018

^{1/} Included in the above F&LR is the Losses component of the F&LR equal to 0.10%.

^{2/} For service that is rendered entirely by displacement and for gas scheduled and allocated for receipt at the Dracut, Massachusetts receipt point, Shipper shall render only the quantity of gas associated with Losses of 0.10%.

The F&LR's and EPCR's listed above are applicable to FT-A, FT-BH, FT-G, FT-GS, and IT.
 The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.

Twelfth Revised Sheet No. 32 Superseding Eleventh Revised Sheet No. 32

FUEL AND EPCR

F&LR 1/, 2/, 3/, 4/	beceim.		DELIVERY ZONE										
	RECEIPT ZONE	0	L	1	2	3	4	5	6				
	0	0.42%	0.18%	1.42%	2.15%	2.64%	3.16%	3.57%	4.25%				
	1 2 3 4 5	0.54% 2.19% 2.64% 3.16% 3.70% 4.43%	0.10%	1.02% 1.09% 2.18% 2.48% 3.24% 3.84%	1.80% 0.17% 0.37% 1.08% 1.31% 1.80%	2.18% 0.37% 0.06% 1.30% 1.56% 2.07%	2.67% 0.75% 1.06% 0.39% 0.63% 1.06%	3.24% 1.31% 1.54% 0.63% 0.62% 0.48%	3.70% 1.80% 2.07% 1.13% 0.81% 0.21%				

EPCR 3/, 4/	DECEMBE.		DELIVERY ZONE									
	RECEIPT ZONE		L	1	2	3	4	5	6			
	0 L	\$0.0034	\$0.0011	\$0.0130	\$0.0201	\$0.0250	\$0.0302	\$0.0344	\$0.0412			
	1 2 3	\$0.0046 \$0.0201 \$0.0250	70.002	\$0.0091 \$0.0098 \$0.0204	\$0.0167 \$0.0010 \$0.0030	\$0.0204 \$0.0030 \$0.0000	\$0.0253 \$0.0065 \$0.0096	\$0.0310 \$0.0120 \$0.0142	\$0.0356 \$0.0164 \$0.0189			
	4 5 6	\$0.0302 \$0.0344 \$0.0412		\$0.0234 \$0.0310 \$0.0356	\$0.0097 \$0.0120 \$0.0164	\$0.0118 \$0.0142 \$0.0189	\$0.0031 \$0.0054 \$0.0095	\$0.0054 \$0.0053 \$0.0040	\$0.0102 \$0.0071 \$0.0014			

Issued: March 1, 2017 Effective: April 1, 2017

Docket No. RP17-501-000 Accepted: March 27, 2017

^{1/} Included in the above F&LR is the Losses component of the F&LR equal to 0.01%.

^{2/} For service that is rendered entirely by displacement and for gas scheduled and allocated for receipt at the Dracut, Massachusetts receipt point, Shipper shall render only the quantity of gas associated with Losses of 0.01%.

The F&LR's and EPCR's listed above are applicable to FT-A, FT-BH, FT-G, FT-GS, and IT.

The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.

FERC ACA UNIT CHARGE EFFECTIVE OCTOBER 1, 2017

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, D.C. 20426

FY 2016 GAS ANNUAL CHARGES CORRECTION FOR ANNUAL CHARGES UNIT CHARGE June 26, 2017

The annual charges unit charge (ACA) to be applied to in fiscal year 2018 for recovery of FY 2017 Current year and 2016 True-Up is **\$0.0013** per Dekatherm (Dth). The new ACA surcharge will become effective October 1, 2017.

The following calculations were used to determine the FY 2017 unit charge:

2017 CURRENT:

Estimated Program Cost \$61,436,000 divided by 47,684,694,955 Dth = 0.0012883798

2016 TRUE-UP:

Debit/Credit Cost (\$1,395,864) divided by 46,556,886,468 Dth = (0.0000299819)

TOTAL UNIT CHARGE = 0.0012583879

If you have any questions, please contact Norman Richardson at (202)502-6219 or e-mail at Norman.Richardson@ferc.gov.

FERC ACA UNIT CHARGE EFFECTIVE OCTOBER 1, 2018

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, D.C. 20426

FY 2017 GAS ANNUAL CHARGES CORRECTION FOR ANNUAL CHARGES UNIT CHARGE June 26, 2018

The annual charges unit charge (ACA) to be applied to in fiscal year 2019 for recovery of FY 2018 Current year and 2017 True-Up is **\$0.0013** per Dekatherm (Dth). The new ACA surcharge will become effective October 1, 2018.

The following calculations were used to determine the FY 2018 unit charge:

2018 CURRENT:

Estimated Program Cost \$66,791,000 divided by 49,985,774,086 Dth = 0.0013362002

2017 TRUE-UP:

Debit/Credit Cost (\$316,993) divided by 47,717,356,257 Dth = (0.0000066431)

TOTAL UNIT CHARGE = 0.0013295571

If you have any questions, please contact Raven A. Rodriguez at (202)502-6276 or e-mail at Raven.Rodriguez@ferc.gov.

PBR-OSSIF SUPPORTING CALCULATIONS

PBR-OSSIF CALCULATION OF OFF-SYSTEM SALES REVENUE ("OSREV"), OUT-OF-POCKET COSTS ("OOPC"), AND NET REVENUE ("NR")

LOUISVILLE GAS AND SECTRIC COMPANY CALCULATION OF NET REVENUE UNDER PBR OFF-SYSTEM SALES INDEX FACTOR ("OSSIF")

COLUMN	1	2	3	. 4	5	6	7
	OFF-SYSTEM		Ol	UT OF POCKET COSTS	S ("OOPC")		NET
	SALES REVENUE	GAS	TRANSPORT	STORAGE	OTHER	TOTAL	REVENUE ("NR")
	("OSREV")	COSTS ("GC")	COSTS ("TC")	COSTS ("SC")	COSTS	OOPC	(1 - 6)
NOV. 17	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DEC. 17	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JAN. 18	\$1,908,327	\$1,526,611	\$0	\$0	\$0	\$1,526,611	\$381,716
FEB. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAR. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
APR. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAY 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JUN. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JUL. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AUG. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SEP. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OCT. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTALS	\$1,908,327	\$1,526,611	\$0	\$0	\$0	\$1,526,611	\$381,716

CSPBR CALCULATION OF COMPANY SHARE OF PERFORMANCE-BASED RATEMAKING SAVINGS OR EXPENSES

LOUISVILLE GAS AND COMPANY CALCULATION OF COMPANY SHARE OF PBR SAVINGS OR EXPENSES (CSPBR)

(1)	(2)	(3)	(4)		(5)	(6)	(7)
Total	Gas Supply Cost Po	erformance-Based			Benchmarked Gas	Costs	PTAGSC
			Demand/0 Alloo	Commodity ation			
			Demand	Commodity			(Col. 3 / 6)
Gas Acquisition Ind GAIF	ex Factor				Actual Gas Costs		
Demand	. \$0		0.00%				
Commodity	\$3,560,780			60.74%			
Total		\$3,560,780			AGC	\$99,669,947	
Transportation Inde	x Factor				Actual Transportation Costs		
Demand	\$1,920,084		32.75%				
Commodity	\$0			0.00%			
Total		\$1,920,084			TAAGTC	\$24,937,832	
Off-System Sales In OSSIF	ndex Factor						
Demand	\$0						
Commodity	\$381,716			6.51%			
Total		\$381,716					
Total All PBR Facto	ors				Total Actual Gas Supply Costs		
Demand	\$1,920,084						
Commodity	\$3,942,496						
TPBRR		\$5,862,580	32.75%	67.25%	TAGSC	\$124,607,779	4.70%

LOUISVILLE GAS AN :CTRIC COMPANY CALCULATION OF COMPANY SHARE OF PBR SAVINGS OR EXPENSES (CSPBR)

25175 Company/Customer Charing	Total PBR Results (TPBRR)	Company Sharing Company	Customer Sharing Percentage	Customer Portion	Company Portion	Total
25/75 Company/Customer Sharing Up to 3.0% of TAGSC	\$3,738,233	25%	75%	\$2,803,675	\$934,558	\$3,738,233
50/50 Company/Customer Sharing in Excess of 3.0% of TAGSC	\$2,124,347	50%	50%	\$1,062,173	\$1,062,174	\$2,124,347
	\$5,862,580			\$3,865,848	\$1,996,732	\$5,862,580
Portion of Company Savings Attributable to De Portion of Company Savings Attributable to Co		32.75% 67.25%			\$653,930 \$1,342,802	
Total Company Portion of Savings	•	100.00%		CSPBR	\$1,996,732	