

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

December 27, 2019

Re: Performance Based Ratemaking Mechanism

lion M. Sadelli

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, 2018 and ending October 31, 2019.

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

Sincerely,

Andrea M. Fackler

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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

Andrea M. Fackler Manager, Revenue Requirement/Cost of Service T 502-627-3442 F 502-627-3213 andrea.fackler@lge-ku.com

Activity Under LG&E's Performance-Based Ratemaking ("PBR") Mechanism for the PBR Period for the 12 Months Ended October 31, 2019

Attached is a summary of LG&E's activity and the supporting documentation for the PBR mechanism covering the entirety of PBR Year 22 (November 1, 2018, through October 31, 2019) 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, 2020.

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, 2019, LG&E has achieved the following results:

	PBR-GAIF	PBR-TIF	PBR-OSSIF	Total
Nov. 2018	\$1,531,382	\$204,716	\$149,500	\$1,885,598
Dec.	\$493,237	\$204,716	\$0	\$697,953
Jan. 2019	<i>\$654,858</i>	\$204,716	\$0	\$859,574
Qtr. Subtotal	\$2,679,477	\$614,148	\$149,500	\$3,443,125
Feb.	\$191,497	\$204,716	\$0	\$396,213
Mar.	\$108,525	\$204,716	\$0	\$313,241
Apr.	\$113,903	\$204,716	\$0	\$318,619
Qtr. Subtotal	\$413,925	\$614,148	\$0	\$1,028,073

	PBR-GAIF	PBR-TIF	PBR-OSSIF	Total
May	<i>\$66,887</i>	\$204,716	\$0	\$271,603
Jun.	\$257,385	\$204,716	<i>\$0</i>	\$462,101
Jul.	\$210,434	\$204,716	\$0	\$415,150
Qtr. Subtotal	\$534,706	\$614,148	<i>\$0</i>	\$1,148,854
Aug.	\$189,632	\$204,716	\$0	\$394,348
Sep.	\$431,676	\$204,716	\$0	\$636,392
Oct.	\$289,809	\$204,716	\$0	\$494,525
Qtr. Subtotal	\$911,117	\$614,148	\$0	\$1,525,265
Total	\$4,539,225	\$2,456,592	\$149,500	\$7,145,317

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 \$4,539,225.

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.

<u>Composition of Savings by Pipeline</u>: Total savings under the PBR-TIF component of the PBR is \$2,456,592. The portion of savings attributable to Texas Gas under PBR-TIF is \$0. The portion of savings attributable to Tennessee under PBR-TIF is \$2,456,592. 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 \$2,456,592.

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 November 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, 2019. 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 22 were \$7,145,317, and TAGSC was \$114,689,853, which is the sum of \$90,607,727 in AGC and \$24,082,126 in TAAGTC. Therefore, savings as a percentage of TAGSC were 6.23% (\$7,145,317 / \$114,689,853). Hence, all of the savings up to \$3,440,696 (3.0% x \$114,689,853) 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 \$3,704,621 (\$7,145,317 - \$3,440,696), is the subject of the 50% sharing tier.

Therefore, the initial tier of the sliding scale is allocated on a 25/75 basis with \$860,174 (25% x \$3,440,696) being allocated to the Company and \$2,580,522 (75% x \$3,440,696) being allocated to customers. The second tier is subject to sharing on a 50/50 basis with \$1,852,311 (50% x \$3,704,621) being allocated to the Company and \$1,852,310 (50% x \$3,704,621) being allocated to customers. Therefore, the total portion of the savings being retained by customers is \$4,432,832 (\$2,580,522 + \$1,852,310); and the total portion of the savings being allocated to the Company and collected from customers is \$2,712,485 (\$860,174 + \$1,852,311). Therefore, the CSPBR to be collected for the Company from customers by means of the PBRRC (as a part of the GSCC) is \$2,712,485.

The total to be collected for the Company from customers through the GSCC is \$2,712,485. 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, \$932,552 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 \$1,779,933 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.

<u>Labor and Operating and Maintenance ("O&M") Costs</u>: 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 2019.doc

PBR CALCULATIONS FOR THE 12 MONTHS ENDED OCTOBER 31, 2019

PBR-GAIF SUPPORTING CALCULATIONS

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

LOUISVILLE GAS , LECTRIC COMPANY GAIF - CALCULATION OF BGC

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

										ALLOCATION OF A	PV ACCORDING TO	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%	7.88%	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%)			
Nov 18	2,089,944	1,140,000	0	600,600	400,000	4,230,544	0	4,230,544	2,033,622	862,608	1,000,947	333,367	•
Dec 18		945,000	ő	620,620	290,000	2,949,198	ŏ	2,949,196	1,417,678	601,341	697,780	232,397	0
Jan 19		1,255,000	ō	620,620	505,000	3,810,664	8,826	3,801,838	1,827,543	775,195	899,515	299,585	ň
Feb 19		290,000	ō	560,560	0	1,756,524	0	1,758,524	844,381	358,155	415,594	138,414	ň
Mar 19		715,000	ō	400,400	ō	2,470,408	ō	2,470,406	1,187,524	503,716	584,498	194,668	ň
Apr 19		750,000	ō	0	0	1,512,948	0	1,512,948	345,103	148,572	764,493	254,780	ň
May 19		775,000	0	0	0	1,563,409	0	1,563,409	356,614	153,527	789,990	263,278	ň
Jun 19		1,776,638	ō	0	0	2,539,596	0	2,539,596	579,282	249,388	1,283,258	427,668	ő
Jul 19		1,859,297	0	0	620,000	3,887,689	0	3,887,689	886,782	381,771	1,964,449	654,687	o o
Aug 19		1,858,565	0	0	620,000	3,886,933	0	3,886,933	886,609	381,697	1,964,067	654,560	ō
Sep 19		1,764,823	0	0	600,000	3,727,813	0	3,727,813	850,314	366,071	1,883,664	627,764	0
Oct 19		1,857,771	0	0	619,999	3,633,193	0	3,633,193	828,731	356,780	1,835,852	611,830	0
Total	14,524,024	14,987,092	0	2,802,800	3,654,999	35,968,915	8,826	35,980,089	12,044,163	5,138,821	14,084,107	4,692,998	0
Column	14	15	16	17	18	19	20	21	22	23	24	25	
		APV x SAI		APV x SAI		APV x SAI		APV x SAI		APV x SAI		TOTAL	
	SAI	TGT-SL	SAI	TGT-Z1	SAI	TGT-Z4	SAI	TGPL-Z0	SAI	TGPL-Z1		BMGCC	
	TGT-SL	(9X14)	TGT-Z1	(10X18)	TGT-Z4	(11X18)	TGPL-Z0	(12X20)	TGPL-Z1	(13X22)	DAI	(15+17+19+21+23+24)	
Nov 18	\$3.6384	\$7,399,130	\$3,6219	\$3,124,280	\$3,6122	\$3,615,621	\$3.6261	\$1,208,822	\$3.6818	\$0	\$0	\$15,347,853	
Dec 18		\$5,800,288	\$4.0692	\$2,446,977	\$4.0854	\$2,850,710	\$4.0737	\$946,716	\$4,1604	\$0	\$0	\$12,044,691	
Jan 19		\$5,829,679	\$3,1311	\$2,427,213	\$3,1816	\$2,861,897	\$3.1440	\$941,895	\$3,2006	\$0	\$36,530	\$12,097,214	
Feb 19		\$2,263,816	\$2.6560	\$951,260	\$2,7161	\$1,128,795	\$2.6711	\$389,718	\$2.7097	\$0	\$0	\$4,713,589	
Mar 19	\$2.8337	\$3,365,087	\$2.7992	\$1,410,002	\$2.8502	\$1,665,936	\$2.8031	\$545,874	\$2.8481	\$0	\$0	\$6,986,699	
Apr 19	\$2.5164	\$868,417	\$2.4813	\$368,652	\$2.4571	\$1,878,436	\$2.5254	\$643,421	\$2.5683	\$0	\$0	\$3,758,926	
May 19	\$2.4457	\$872,171	\$2.3721	\$364,181	\$2,3044	\$1,820,453	\$2,4302	\$639,818	\$2,4998	\$0	\$0	\$3,696,623	
Jun 19	\$2,3080	\$1,335,824	\$2.2440	\$559,627	\$2,1539	\$2,764,009	\$2.3144	\$989,795	\$2,3685	\$0	\$0	\$5,649,255	
Jul 19		\$1,909,153	\$2.0993	\$801,452	\$2.0851	\$4,056,784	\$2.1558	\$1,411,243	\$2.2214	\$0	\$0	\$8,178,632	
Aug 19		\$1,799,905	\$1.9844	\$749,808	\$1.9217	\$3,774,348	\$1.9933	\$1,304,734	\$2.0985	\$0	\$0	\$7,628,793	
Sep 19		\$1,912,101	\$2.1358	\$781,854	\$2.0449	\$3,851,905	\$2.1944	\$1,377,565	\$2.3484	\$0	\$0	\$7,923,425	
Oct 19	\$2.1477	\$1,779,866	\$1.9431	\$693,259	\$1.8415	\$3,380,721	\$2.0715	\$1,267,408	\$2.2174	\$0	\$0	\$7,121,252	
Total	Ĺ	\$35,135,437		\$14,678,563		\$33,649,615		\$11,646,807		\$0	\$36,530	\$95,146,952	

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

LOUISVILLE GAS A LECTRIC COMPANY GAS ACQUISITION INDEX FACTOR - CALCULATION OF AGC

Column	1	2	3	4	5	6	7 APV	8 COST OF GAS	9	10
_	APV TRANSPORTED UNDER LG&E'S TGT RATE NNS	COST OF GAS TRANSPORTED UNDER LG&E'S RATE NNS	APV TRANSPORTED UNDER LG&E'S TGT RATE FT	COST OF GAS TRANSPORTED UNDER LG&E'S TGT RATE FT	APV TRANSPORTED UNDER LG&E'S TGT RATE STF	COST OF GAS TRANSPORTED UNDER LG&E'S TGT RATE STF	TRANSPORTED UNDER LG&E'S TGPL RATE FT-A	TRANSPORTED UNDER LG&E'S TGPL RATE FT-A	APV TRANSPORTED UNDER OTHER CAPACITY	COST OF GAS TRANSPORTED UNDER OTHER CAPACITY
Nov 18	2,089,944	\$6,543,736	1,140,000	\$3,794,125	0	\$0	600,600	\$1,861,860	400,000	\$1,616,750
Dec 18	1,093,576	\$4,372,270	945,000	\$3,612,450	0	\$0	620,620	\$2,336,734	290,000	\$1,230,000
Jan 19	1,430,044	\$4,306,335	1,255,000	\$3,794,675	0	\$0	620,620	\$1,822,721	505,000	\$1,518,625
Feb 19	905,964	\$2,334,276	290,000	\$745,475	0	\$0	560,560	\$1,442,341	0	\$0
Mar 19	1,355,006	\$3,768,426	715,000	\$2,010,250	0	\$0	400,400	\$1,099,498	0	\$0
Apr 19	762,948	\$1,850,023	750,000	\$1,795,000	0	\$0	0	\$0	0	\$0
May 19	788,409	\$1,858,611	775,000	\$1,771,125	0	\$0	0	\$0	0	\$0
Jun 19	762,960	\$1,630,446	1,776,636	\$3,761,424	0	\$0	0	\$0	0	\$0
Jul 19	1,408,392	\$2,900,948	1,859,297	\$3,788,150	0	\$0	0	\$0	620,000	\$1,279,100
Aug 19	1,408,368	\$2,724,912	1,858,565	\$3,530,049	0	\$0	0	\$0	620,000	\$1,184,200
Sep 19	1,362,990	\$2,808,899	1,764,823	\$3,473,850	0	\$0	0	\$0	600,000	\$1,209,000
Oct 19	1,155,423	\$2,254,962	1,857,771	\$3,349,283	0	\$0	0	\$0	619,999	\$1,227,198
	14,524,024	\$37,353,844	14,987,092	\$35,425,856	0	\$0	2,802,800	\$8,563,154	3,654,999	\$9,264,873

Column 11 12

	TOTAL TRANSPORT GAS	TOTAL GAS COMMODITY COSTS
_	(1+3+5+7+9)	(2+4+6+8+10)
Nov 18	4,230,544	\$13,816,471
Dec 18	2,949,196	\$11,551,454
Jan 19	3,810,664	\$11,442,356
Feb 19	1,756,524	\$4,522,092
Mar 19	2,470,406	\$6,878,174
Apr 19	1.512.948	\$3,645,023
May 19	1,563,409	\$3,629,736
Jun 19	2,539,596	\$5,391,870
Jul 19	3,887,689	\$7,968,198
Aug 19	3,886,933	\$7,439,161
Sep 19	3,727,813	\$7,491,749
Oct 19	3,633,193	\$6,831,443
Total	35.968.915	\$90.607.727

PBR-GAIF CALCULATION OF SAVINGS AND/OR EXPENSES

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

Column	1	2	3
	BGC FROM COL. 25	AGC FROM COL. 11	SAVINGS/ (EXPENSES) (1 - 2)
Nov 18	\$15,347,853	\$13,816,471	\$1,531,382
Dec 18	\$12,044,691	\$11,551,454	\$493,237
Jan 19	\$12,097,214	\$11,442,356	\$654,858
Feb 19	\$4,713,589	\$4,522,092	\$191,497
Mar 19	\$6,986,699	\$6,878,174	\$108,525
Apr 19	\$3,758,926	\$3,645,023	\$113,903
May 19	\$3,696,623	\$3,629,736	\$66,887
Jun 19	\$5,649,255	\$5,391,870	\$257,385
Jul 19	\$8,178,632	\$7,968,198	\$210,434
Aug 19	\$7,628,793	\$7,439,161	\$189,632
Sep 19	\$7,923,425	\$7,491,749	\$431,676
Oct 19	\$7,121,252	\$6,831,443	\$289,809
Total	\$95,146,952	\$90,607,727	\$4,539,225

PBR-GAIF INDICES

PBR-GAIF INDICES TEXAS GAS – ZONE SL

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

	NATURAL GAS WEEK GAS PRICE REPORT 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. 18	\$3.8925	\$3.9127	\$3.1100	\$3.6384
Dec. 18	\$3.9100	\$3.6941	\$4.6700	\$4.0914
Jan. 19	\$3.0150	\$3.0146	\$3.5400	\$3.1899
Feb. 19	\$2.6300	\$2.5634	\$2.8500	\$2.6811
Mar. 19	\$2.9150	\$2.8062	\$2.7800	\$2.8337
Apr. 19	\$2.5320	\$2.4273	\$2.5900	\$2.5164
May 19	\$2.4825	\$2.4146	\$2.4400	\$2.4457
Jun. 19	\$2.2925	\$2.1655	\$2.4600	\$2.3060
Jul. 19	\$2.2280	\$2.1307	\$2.1000	\$2.1529
Aug. 19	\$2.1000	\$2.0303	\$1.9600	\$2.0301
Sep. 19	\$2.3500	\$2.3260	\$2.0700	\$2.2487
Oct. 19	\$2.0850	\$2.0982	\$2.2600	\$2.1477

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

	NATURAL GAS WEEK GAS PRICE REPORT LOUISIANA, GULF	MONTHLY		NATURAL GAS WEEK GAS PRICE REPORT LOUISIANA, GULF	MONTHLY
	COAST, ONSHORE	AVERAGE		COAST, ONSHORE	AVERAGE
11/05/2018	\$3.1500		05/06/2019	\$2.4800	
11/12/2018	\$3.6000		05/13/2019	\$2.4600	
11/19/2018	\$4.2500		05/20/2019	\$2.5100	
11/26/2018	\$4.5700	\$3.8925	05/27/2019	\$2.4800	\$2.4825
12/03/2018	\$4.3800		06/03/2019	\$2.4400	
12/10/2018	\$4.4400		06/10/2019	\$2.2900	
12/17/2018	\$4.1500		06/17/2019	\$2.2300	
12/24/2018	\$3.4800		06/24/2019	\$2.2100	\$2.2925
12/31/2018	\$3.1000	\$3.9100			
			07/01/2019	\$2.2200	
01/07/2019	\$2.7900		07/08/2019	\$2.1500	
01/14/2019	\$2.8200		07/15/2019	\$2.3800	
01/21/2019	\$3.3600		07/22/2019	\$2.2600	
01/28/2019	\$3.0900	\$3.0150	07/29/2019	\$2.1300	\$2.2280
02/04/2019	\$2.8100		08/05/2019	\$2.1000	
02/11/2019	\$2.5200		08/12/2019	\$2.0700	
02/18/2019	\$2.5600		08/19/2019	\$2.1100	
02/25/2019	\$2.6300	\$2.6300	08/26/2019	\$2.1200	\$2.1000
03/04/2019	\$3.0800		09/02/2019	\$2.1900	
03/11/2019	\$3.1100		09/09/2019	\$2.3300	
03/18/2019	\$2.7400		09/16/2019	\$2.5600	
03/25/2019	\$2.7300	\$2.9150	09/23/2019	\$2.5200	
			09/30/2019	\$2.1500	\$2.3500
04/01/2019	\$2.6100				
04/08/2019	\$2.5800		10/07/2019	\$2.1500	
04/15/2019	\$2.6000		10/14/2019	\$2.0200	
04/22/2019	\$2.4500		10/21/2019	\$2.0600	
04/29/2019	\$2.4200	\$2.5320	10/28/2019	\$2.1100	\$2.0850

PBR YEAR TWENTY-TWO PLATTS GAS DAILY MIDPOINT PRICE LOUISIANA/SOUTHEAST, TX. GAS, ZONE SL

Holiday

Saturday/Sunday

J		/EMBER 2018	D	ECEMBER 2018	j	ANUARY 2019		FE	BRUARY 2019		MARCH 2019		APRIL 2019
DAY[MI	DPOINT		MIDPOINT		MIDPOINT	DAY	M	IDPOINT		MIDPOINT		MIDPOINT
1	\$	3.0850	\$	4.3950	\$	-	1	\$	2.7100	\$	2.8450	\$	2.5350
2	\$	3.0900	\$	4.3950	\$	-	2	\$	2.4500	\$	3.2200	\$	2.5850
3	\$	3.0200	\$	4.3950	\$	-	3	\$	2.4500	\$	3.2200	\$	2.5200
4	\$	3.0200	\$	4.3550	\$	-	4	\$	2.4500	\$	3.2200	\$	2.5050
5	\$	3.0200	\$	=	\$	2.5700	5	\$	2.4500	\$	4.1700	\$	2.5300
6	\$	3.3600	\$	•	\$	2.5700	6	\$	2.4500	\$	2.9850	\$	2.4600
7	\$	3.4150	\$	4.2550	\$	2.5700	7	\$	2.4600	\$	2.8850	\$	2.4600
8	\$	3.4350	\$	4.3750	\$	-	8	\$	2.5200	\$	2.8250	\$	2.4600
9	\$	3.5100	\$	4.3750	\$	2.8000	9	\$	2.4750	\$	2.7900	\$	2.5300
10	\$	3.6200	\$	4.3750	\$	2.8050	10	\$	2.4750	\$	2.7900	\$	2.5200
11		3.6200	\$	•	\$	2.8050	11	\$	2.4750	\$	2.7900	\$	2.5550
12		3.6200	\$	4.3250	\$	2.7800	12		•	\$	2.6700	\$	2.5450
13	\$	-	\$	-	\$	2.7800	13	\$	2.5600	\$	2.6500	\$	2.5100
14	353	3.9900	\$	4.0600	\$	2.7800	14	\$	-	\$	2.6850	\$	2.5100
15		4.5300	\$	3.7500	\$	3.3400	15	\$	-	\$	2.7450	\$	2.5100
16	\$	4.5200	\$	3.7500	\$	3.4850	16	\$	2.5150	\$	2.7250	\$	2.4200
17	\$	4.2000	\$	3.7500	\$	3.6500	17	\$	2.5150	\$	2.7250	Š	2.4250
18	\$	4.2000	\$	3.4500	\$	3.4400	18		2.5150	\$	2.7250	\$	2.3700
19	\$	4.2000	\$	3.5000	\$	3.2300	19		2.5150	\$	2.7250	Š	2.3100
20	\$	-	\$	3.3400	\$	3.2300	20	\$	2.5900	\$	2.7600	\$	2.3100
21	\$	4.5300	\$	3.5500	\$	3.2300	21		2.6150	\$	2.7250	\$	2.3100
22	\$	4.5850	\$	3.3400	\$	3.2300	22		2.5900	\$	2.7050	Š	2.3100
		4.5850	\$	3.3400	\$	-	23	\$	2.6250	\$	2.6300	s	2.3500
24		4.5850	\$	3.3400	\$	3.0500	24	\$	2.6250	\$	2.6300	\$	2.2800
25	\$	4.5850	\$	3.3400	\$	3.0650	25		2.6250	\$	2.6300	\$	2.3100
26		4.5850	\$	3.3400	\$	3.0500	26	\$	2.7600	\$	-	Š	2.2700
27	\$	•	\$	3.0450	\$	3.0500	27	\$	2.8600	\$	2.6350	\$	2.3400
28	\$	-	\$	2.9000	\$	3.0500	28	\$	2.8100	\$	2.5200	Š	2.3400
29	\$	4.3600	\$	2.9000	\$	3.0100	29			\$	2.5200	Š	2.3400
30	\$	4.4600	\$	2.9000	\$	2.9200	30			\$	2.5200	Š	2.4000
31			\$	2.9000	\$	2.8750	31			\$	2.5200	•	2.4000
		20 0 10200 0 10								•			
	\$ 10	01.7300	\$	99.7400	\$	75.3650	TOTAL	\$	64.0850	\$	84.1850	\$	72.8200
POSTINGS	4	26		27		25	POSTINGS		25		30	ĺ	30
AVERAGE	\$	3.9127	\$	3.6941	\$	3.0146	AVERAGE	\$	2.5634	\$	2.8062	\$	2.4273

	MAY 2019	JUNE 2019	JULY 2019		A	AUGUST 2019	:	SEF	TEMBER 2019	c	OCTOBER 2019
DAY	MIDPOINT	MIDPOINT	MIDPOINT	DAY	<u> </u>	MIDPOINT		1	MIDPOINT		MIDPOINT
1 \$	2.4050	\$ 2.3000	\$ 2.1250		\$	2.0600	,	\$	2.1000	\$	2.1550
2 \$	2.4550	\$ 2.3000	\$ 2.0750		2 \$	2.1350		\$	2.1000	\$	2.1200
3 \$	2.4400	\$ 2.3000	\$ 2.0700		\$	1.9400	:	\$	2.1000	\$	2.1100
4 \$	2.3900	\$ 2.2400	\$ 2.0550		\$	1.9400		\$	2.2200	\$	2.1050
5 \$	2.3900	\$ 2.2200	\$ 2.0550	!	5 \$	1.9400		\$	2.2300	\$	2.1000
6 \$	2.3900	\$ 2.2100	\$ 2.0550	(\$	1.9300		\$	2.2450	\$	2.1000
7 \$	2.3800	\$ 2.2000	\$ 2.0550		\$	2.0400		\$	2.2950	\$	2.1000
8 \$	2.3600	\$ 2.1450	\$ 2.0550		3 \$	2.0250		\$	2.2950	Š	2.1200
9 \$	2.3900	\$ 2.1450	\$ -		\$	1.9950		\$	2.2950	\$	2.0900
10 \$	2.3900	\$ 2.1450	\$ 2.2000	10	\$	1.9800		\$	2.4350	Š	2.1450
11 \$	2.3800	\$ 2.1750	\$ 2.3550	1	\$	1.9800		\$	2.4100	\$	-
12 \$	2.3800	\$ 2.1800	\$ -	1:	2 \$	1.9800		\$	2.4250	\$	1.9050
13 \$	2.3800	\$ 2.1900	\$ 2.3300	1:	\$	iii		\$	2.4300	Š	1.9050
14 \$	2.4600	\$ 2.1600	\$ 2.3300	14		-		\$	2.4400	\$	1.9050
15 \$	2.4400	\$ 2.1600	\$ 2.3300	15		-		\$	2.4400	Š	2.0100
16 \$	2.4050	\$ 2.1600	\$ 2.2850	10	\$	2.0450		\$	2.4400	Š	1.9700
17 \$	2.4100	\$ 2.1600	\$ 2.2500	1	\$	•		\$	2.6350	s	2.2500
18 \$	2.4300	\$ 2.2150	\$ 2.2000	18	\$	-		\$	2.5900	Š	2.1450
19 \$	2.4300	\$ 2.2100	\$ 2.1800	19		-		\$	2.5150	Š	1.9850
20 \$	2.4300	\$ 2.1950	\$ 2.0950	20		2.0750		\$	-	\$	1.9850
21 \$	2.5300	\$ 2.1350	\$ 2.0950	2	\$	2.1000		\$	_	Š	1.9850
22 \$	2.4700	\$ 2.0250	\$ 2.0950	2:				\$	-	Š	1.9400
23 \$	2.4150	\$ 2.0250	\$ 2.0600	2:	3 \$	2.0400		\$	-	\$	2.1050
24 \$	-	\$ 2.0250	\$ 2.0850	24				\$	2.3050	s	2.1950
25 \$	•	\$ 2.0700	\$ 2.0400	2				\$	-	Š	2.1150
26 \$	() - ()	\$ 2.1050	\$ 2.0600	20				\$	2.3000	\$	2.0500
27 \$, - ,	\$ 2.1500	\$ 2.0250	2		-		\$	2.3050	\$	2.0500
28 \$	-	\$ 2.1400	\$ 2.0250	28	3 \$	-		\$	2.2000	Š	2.0500
29 \$	2.3800	\$ 2.1400	\$ 2.0250	29		2.1000		\$	2.2000	\$	2.2750
30 \$	2.4500	\$ 2.1400	\$ 2.0500	30	\$	2.1200		\$	2.2000	\$	2.4250
31 \$	2.4000		\$ -	3	\$			•		\$	2.5500
TOTAL \$	62.7800	\$ 64.9650	\$ 59.6600	TOTAL	\$	40.6050	1	\$	58.1500	\$	62.9450
POSTINGS	26	30	28	POSTINGS	;	20			25		30
AVERAGE \$	2.4146	\$ 2.1655	\$ 2.1307	AVERAGE	\$	2.0303	;	\$	2.3260	\$	2.0982

PBR-GAIF INDICES TEXAS GAS – ZONE 1

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

	NATURAL GAS WEEK GAS PRICE REPORT 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. 18	\$3.8550	\$3.9507	\$3.0600	\$3.6219
Dec. 18	\$3.8240	\$3.7535	\$4.6300	\$4.0692
Jan. 19	\$2.9650	\$2.9484	\$3.4800	\$3.1311
Feb. 19	\$2.5925	\$2.5754	\$2.8000	\$2.6560
Mar. 19	\$2.8725	\$2.7952	\$2.7300	\$2.7992
Apr. 19	\$2.4480	\$2.4258	\$2.5700	\$2.4813
May 19	\$2.3625	\$2.3639	\$2.3900	\$2.3721
Jun. 19	\$2.1750	\$2.1370	\$2.4200	\$2.2440
Jul. 19	\$2.1240	\$2.1139	\$2.0600	\$2.0993
Aug. 19	\$1.9850	\$1.9881	\$1.9200	\$1.9644
Sep. 19	\$2.1640	\$2.2133	\$2.0300	\$2.1358
Oct. 19	\$1.8425	\$1.8969	\$2.0900	\$1.9431

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

	NATURAL GAS WEEK GAS PRICE REPORT		NATURAL GAS WEEK GAS PRICE REPORT	
	LOUISIANA	MONTHLY	LOUISIANA	MONTHLY
	NORTH	AVERAGE	NORTH	AVERAGE
			NORTH	AVEIVAGE
11/05/2018	\$3.0800		05/06/2019 \$2.3600	
11/12/2018	\$3.5900		05/13/2019 \$2.3300	
11/19/2018	\$4.2100		05/20/2019 \$2.4000	
11/26/2018	\$4.5400	\$3.8550	05/27/2019 \$2.3600	\$2.3625
40/00/0040	£4.0400			
12/03/2018	\$4.3100		06/03/2019 \$2.3100	
12/10/2018	\$4.3400		06/10/2019 \$2.1700	
12/17/2018	\$4.0400		06/17/2019 \$2.1400	
12/24/2018	\$3.3700		06/24/2019 \$2.0800	\$2.1750
12/31/2018	\$3.0600	\$3.8240		
	•		07/01/2019 \$2.1000	
01/07/2019	\$2.7300		07/08/2019 \$2.0500	
01/14/2019	\$2.7400		07/15/2019 \$2.2800	
01/21/2019	\$3.3100		07/22/2019 \$2.1800	
01/28/2019	\$3.0800	\$2.9650	07/29/2019 \$2.0100	\$2.1240
00/04/0040	CO 7400		00/05/00/0	
02/04/2019	\$2.7400		08/05/2019 \$1.9700	
02/11/2019	\$2.4900		08/12/2019 \$1.9600	
02/18/2019	\$2.5400		08/19/2019 \$2.0100	
02/25/2019	\$2.6000	\$2.5925	08/26/2019 \$2.0000	\$1.9850
03/04/2019	\$2.9700		09/02/2019 \$1.9900	
03/11/2019	\$3.1400		09/09/2019 \$2.1500	
03/18/2019	\$2.7000		09/16/2019 \$2.3700	
03/25/2019	\$2.6800	\$2.8725		
00/20/2010	Ψ2.0000	Ψ2.0720		CO 4040
04/01/2019	\$2.5600		09/30/2019 \$2.0300	\$2.1640
04/08/2019	\$2.5100		10/07/2019 \$1.8500	
04/15/2019	\$2.5200		***************************************	
04/22/2019	\$2.3500		CONTROL SOCIETY AND CONTRO	
04/29/2019	\$2.3000	\$2.4480	¥ 110-200	04.0405
04/29/2019	φ 2.3000	⊅∠.446 U	10/28/2019 \$2.0100	\$1.8425

PBR YEAR TWENTY-TWO PLATTS GAS DAILY MIDPOINT PRICE LOUISIANA/SOUTHEAST, TX. GAS, ZONE 1

Holiday

Saturday/Sunday

N	IOVEMBER 2018	D	ECEMBER 2018	•	JANUARY 2019		FE	BRUARY		MARCH		APRIL
	2010		2010		2019			2019		2019		2019
DAY	MIDPOINT		MIDPOINT		MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	3.1150	\$	4.3700	\$	3.0700	1	\$	2.7150	\$	2.8450	\$	2.5450
2 \$	3.1250	\$	4.3700	\$	3.0700	2	\$	2.5200	\$	3.1900	\$	2.6000
3 \$	3.0450	\$	4.3700	\$	2.6050	3		2.5200	\$	3.1900	Š	2.5550
4 \$	3.0450	\$	4.3300	\$	2.5250	4	\$	2.5200	\$	3.1900	Š	2.5100
5 \$	3.0450	\$	4.5000	\$	2.5350	5		2.4550	\$	4.1650		2.5300
6 \$	3.3800	\$	4.4950	\$	2.5350	6		2.4700	\$	2.9850	\$	2.4700
7 \$	3.4250	\$	4.2300	\$	2.5350	7		2.4900	\$	2.8850	\$	2.4700
8 \$	3.4650	\$	4.3350	\$	2.5450	. 8		2.5350	\$	2.8250	4	2.4700
9 \$		\$	4.3350	\$	2.7650	9		2.4900	\$	2.7900	Φ.	2.5300
10 \$	3.7150	\$	4.3350	\$	2.7600		\$	2.4900	\$	2.7900	•	2.5300
11 \$	3.7150	\$	4.3600	\$	2.7600		\$	2.4900	\$	2.7900	\$	2.5600
12 \$	3.7150	\$	4.2850	\$	2.7350		\$	2.5950	\$	2.6700	•	2.5400
13 \$	3.8250	\$	4.0050	\$	2.7350	13		2.5750	\$	2.6550	\$	2.5050
14 \$		\$	4.0500	\$	2.7350		\$	2.5050	\$	2.6800	\$	2.5050
15 \$	4.4800	\$	3.7000	\$	3.2650		\$	2.5150	\$	2.7400	\$	2.5050
16 \$	4.4700	\$	3.7000	\$	3.4200	16		2.5200	\$	2.7200	Ψ.	2.4450
17 \$	4.1900	\$	3.7000	\$	3.4900	17		2.5200	\$	2.7200	Φ.	2.4250
18 \$	4.1900	\$	3.4650	\$	3.3600		\$	2.5200	\$	2.7200	Ψ.	2.3800
19 \$	4.1900	\$	3.5050	\$	3.2350		\$	2.5200	\$	2.7150	\$	2.3150
20 \$	4.4650	\$	3.3300	\$	3.2350	20		2.6000	\$	2.7500	\$	2.3150
21 \$	4.5200	\$	3.4650	\$	3.2350	21		2.6200	\$	2.7150	Φ	2.3150
22 \$		\$	3.2750	\$	3.2350		\$	2.6250	\$	2.6950	Φ.	2.3150
23 \$		\$	3.2750	\$	2.9650	23		2.6300	\$	2.6200	Φ.	
24 \$		\$	3.2750	\$	3.0500		\$	2.6300	\$	2.6200	\$	2.3450
25 \$	4.5550	\$	3.2750	\$	3.0600	25		2.6300	\$	2.6200	Ψ.	2.2550 2.2800
26 \$		\$	3.2750	\$	3.0450	26		2.7500	\$	2.6350	a e	2.2550
27 \$		\$	3.0100	\$	3.0450	27		2.8500	\$	2.6200	\$	2.2550
28 \$		\$	2.9350	\$	3.0450	28		2.8100	\$	2.5200	\$	2.3150
29 \$	4.3300	\$	2.9350	\$	3.0050	29		2.0100	\$	2.5300	\$	
30 \$		\$	2.9350	\$	2.9200	30			\$	2.5300	\$	2.3150
31		\$	2.9350	\$	2.8800	31			\$	2.5300	Ф	2.3600
									Ψ	2.5300		
TOTAL \$	118.5200	\$	116.3600	\$	91.4000	TOTAL	\$	72.1100	\$	86.6500	\$	72.7750
POSTINGS	30		31		31	POSTINGS		28		31		30
AVERAGE \$	3.9507	\$	3.7535	\$	2.9484	AVERAGE	\$	2.5754	\$	2.7952	\$	2.4258

	MAY 2019	JUNE 2019	JULY 2019		AUGUST 2019	SE	PTEMBER 2019	Ì	OCTOBER 2019
DAY	MIDPOINT	MIDPOINT	MIDPOINT	DAY[MIDPOINT		MIDPOINT		MIDPOINT
1 5		\$ 2.2650	\$ 2.1550	1		\$	1.9750	\$	1.9200
2 5		\$ 2.2650	\$ 2.0850	2		\$	1.9750	\$	1.9100
	\$ 2.3850	\$ 2.2650	\$ 2.0600		\$ 1.9200	\$	1.9750	\$	
4 3		\$ 2.2100	\$ 2.0400		\$ 1.9200	\$	2.1700	\$	1.8350
	\$ 2.3250	\$ 2.2000	\$ 2.0400		\$ 1.9200	\$	2.2150	\$	
	\$ 2.3250	\$ 2.1800	\$ 2.0400		\$ 1.9100	\$	2.1950	\$	1.7700
7 3		\$ 2.1700	\$ 2.0400	7		\$	2.2450	\$	
8 9		\$ 2.1450	\$ 2.0400		\$ 2.0050	\$	2.2450	\$	1.7550
	\$ 2.3450	\$ 2.1450	\$ 2.1950	9		\$	2.2450	\$	
10		\$ 2.1450	\$ 2.2150		\$ 1.9500	\$	2.3850	\$	
11 3		\$ 2.1350	\$ 2.3500	11		\$	2.4400	\$	
12 3		\$ 2.1500	\$ 2.3150	12		\$	2.4250	\$	
13		\$ 2.1600	\$ 2.2800	13		\$	2.3700	\$	1.6200
14	\$ 2.4300	\$ 2.1350	\$ 2.2800	14		\$	2.3450	\$	
15		\$ 2.1350	\$ 2.2800	15		\$	2.3450	\$	
16		\$ 2.1350	\$ 2.2450	16		\$	2.3450	\$	
17		\$ 2.1350	\$ 2.2100	17		\$	2.5400	\$	
18		\$ 2.1900	\$ 2.2200	18		\$	2.4950	\$	
19		\$ 2.1950	\$ 2.2150	19		\$	2.4200	\$	
20		\$ 2.1700	\$ 2.0850	20		\$	2.2400	\$	
21		\$ 2.1100	\$ 2.0850	21		\$	2.1350	\$	
22 3		\$ 1.9800	\$ 2.0850	22		\$	2.1350	\$	1.8900
23		\$ 1.9800	\$ 2.0550	23		\$	2.1350	\$	
24		\$ 1.9800	\$ 2.0350	24		\$	2.1650	\$	2.1550
25	\$ 2.3350	\$ 2.0300	\$ 2.0000	25		\$	2.2750	\$	2.0650
26		\$ 2.0700	\$ 2.0300	26		\$	2.1600	\$	
27		\$ 2.1150	\$ 1.9650	27		\$	2.0600	\$	
28		\$ 2.1050	\$ 1.9650	28		\$	1.9150	\$	
29		\$ 2.1050	\$ 1.9650		\$ 2.0100	\$	1.9150	\$	
30	120000000000000000000000000000000000000	\$ 2.1050	\$ 1.9750		\$ 2.0200	\$	1.9150	\$	2.3750
31 3			\$ 1.9800	31	\$ 2.0200			\$	2.5550
	\$ 73.2800	\$ 64.1100	\$ 65.5300	TOTAL	\$ 61.6300	\$	66.4000	\$	58.8050
POSTINGS	31	30	31	POSTINGS	31		30		31
AVERAGE S	\$ 2.3639	\$ 2.1370	\$ 2.1139	AVERAGE	\$ 1.9881	\$	2.2133	\$	1.8969

PBR-GAIF INDICES TEXAS GAS – ZONE 4

LOUISVILLE G AND ELECTRIC CALCULATION OF PPLY AREA INDICES SAI (TGT-Z4)

			PLATTS	
	NATURAL GAS WEEKLY	PLATTS	INSIDE FERC's	
	SPOT PRICES	GAS DAILY AVERAGE	GAS MARKET REPORT	
	APPALACHIA	APPALACHIA	APPALACHIA,	
	LEBANON HUB	LEBANON HUB	LEBANON HUB	AVERAGE
N 40	£2.7025	\$2.0E40	¢2,0000	£2 6400
Nov. 18	\$3.7925	\$3.9540	\$3.0900	\$3.6122
Dec. 18	\$3.8280	\$3.7381	\$4.6900	\$4.0854
Jan. 19	\$2.9925	\$3.0123	\$3.5400	\$3.1816
Feb. 19	\$2.6700	\$2.5984	\$2.8800	\$2.7161
Mar. 19	\$2.8975	\$2.8332	\$2.8200	\$2.8502
Apr. 19	\$2.4080	\$2.3933	\$2.5700	\$2.4571
May 19	\$2.3050	\$2.3082	\$2.3000	\$2.3044
Jun. 19	\$2.0775	\$2.0643	\$2.3200	\$2.1539
Jul. 19	\$2.0660	\$2.0894	\$2.0400	\$2.0651
Aug. 19	\$1.9275	\$1.9277	\$1.9100	\$1.9217
Sep. 19	\$2.0840	\$2.0908	\$1.9600	\$2.0449
Oct. 19	\$1.7925	\$1.8521	\$1.8800	\$1.8415

CALCULATION OF AVERAGE NATURAL GAS WEEK PRICE BY MONTH FOR LEL JON HUB

	NATURAL GAS WEEKLY SPOT PRICES			NATURAL GAS WEEKLY SPOT PRICES	
	APPALACHIA	MONTHLY		APPALACHIA	MONTHLY
	LEBANON HUB	AVERAGE		LEBANON HUB	AVERAGE
11/05/2018	\$3.0400		05/06/2019	\$2.3000	
11/12/2018	\$3.4100		05/13/2019	\$2.3000	
11/19/2018	\$4.1800		05/20/2019	\$2.3400	
11/26/2018	\$4.5400	\$3.7925	05/27/2019	\$2.2800	\$2.3050
12/03/2018	\$4.3600		06/03/2019	\$2.2300	
12/10/2018	\$4.3600		06/10/2019	\$2.0900	
12/17/2018	\$3.9900		06/17/2019	\$2.0100	
12/24/2018	\$3.3800		06/24/2019	\$1.9800	\$2.0775
12/31/2018	\$3.0500	\$3.8280			
			07/01/2019	\$2.0300	
01/07/2019	\$2.7300		07/08/2019	\$1.9900	
01/14/2019	\$2.7200		07/15/2019	\$2.1300	
01/21/2019	\$3.3600		07/22/2019	\$2.1500	
01/28/2019	\$3.1600	\$2.9925	07/29/2019	\$2.0300	\$2.0660
02/04/2019	\$2.9900		08/05/2019	\$1.9500	
02/11/2019	\$2.4900		08/12/2019	\$1.9100	
02/18/2019	\$2.5700		08/19/2019	\$1.9600	
02/25/2019	\$2.6300	\$2.6700	08/26/2019	\$1.8900	\$1.9275
03/04/2019	\$3.2600		09/02/2019	\$1.9500	
03/11/2019	\$3.0400		09/09/2019	\$2.1100	
03/18/2019	\$2.6500		09/16/2019	\$2.2800	
03/25/2019	\$2.6400	\$2.8975	09/23/2019	\$2.1300	
			09/30/2019	\$1.9500	\$2.0840
04/01/2019	\$2.5300				• 0000000000000000000000000000000000000
04/08/2019	\$2.5000		10/07/2019	\$1.6900	
04/15/2019	\$2.4900		10/14/2019	\$1.6500	
04/22/2019	\$2.3100		10/21/2019	\$1.7200	
04/29/2019	\$2.2100	\$2.4080	10/28/2019	\$2.1100	\$1.7925

PBR YEAR TWENTY-TWO PLATTS GAS DAILY MIDPOINT PRICE APPALACHIA, LEBANON HUB

N	OVEMBER 2018	D	ECEMBER 2018	JANUARY 2019		FE	BRUARY 2019		MARCH 2019		APRIL 2019
DAY	MIDPOINT		MIDPOINT	MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	3.0600	\$	4.3700	\$ 3.0550	1	\$	2.7050	\$	2.8550	\$	2.5400
2 \$	3.1100	\$	4.3700	\$ 3.0550	2	\$	2.5150	\$	3.7250	\$	2.5700
3 \$	3.0200	\$	4.3700	\$ 2.6100		\$	2.5150	\$	3.7250	\$	2.5350
4 \$	3.0200	\$	4.3250	\$ 2.5000	4		2.5150	\$	3.7250	\$	2.5500
5 \$	3.0200	\$	4.4750	\$ 2.5350	5	\$	2.4550	\$	4.0600	\$	2.5050
6 \$	3.3850	\$	4.4550	\$ 2.5350	6	(5)	2.4750	\$	3.0650	\$	2.4450
7 \$	3.4450	\$	4.2100	\$ 2.5350	7		2.5000	\$	2.9450	\$	2.4450
8 \$	3.4900	\$	4.3200	\$ 2.5450	8		2.5800	\$	2.8150	\$	2.4450
9 \$	3.5650	\$	4.3200	\$ 2.7450	9	25	2.5000	\$	2.7900	\$	2.5250
10 \$	3.7350	\$	4.3200	\$ 2.7300	10	100	2.5000	\$	2.7900	\$	2.5300
11 \$	3.7350	\$	4.3850	\$ 2.7300	11	100	2.5000	\$	2.7900	\$	2.5250
12 \$	3.7350	\$	4.2850	\$ 2.7150	12		2.6100	\$	2.6150	Š	2.5050
13 \$	3.8750	\$	4.0050	\$ 2.7150	13		2.5900	\$	2.6350	\$	2.4650
14 \$	4.0050	\$	4.0550	\$ 2.7150	14	15	2.5150	\$	2.6600	\$	2.4650
15 \$	4.5250	\$	3.7050	\$ 3.2950	15		2.5400	\$	2.7300	\$	2.4650
16 \$	4.3150	\$	3.7050	\$ 3.4250	16		2.5650	\$	2.6950	Š	2.4500
17 \$		\$	3.7050	\$ 3.4750	17		2.5650	\$	2.6950	\$	2.4350
18 \$	4.2000	\$	3.4400	\$ 3.3900	18		2.5650	\$	2.6950	\$	2.3950
19 \$	4.2000	\$	3.4900	\$ 3.3000	19		2.5650	\$	2.7050	\$	2.3100
20 \$	4.4900	\$	3.3100	\$ 3.3000	20		2.6400	\$	2.7300	\$	2.3100
21 \$	4.5100	\$	3.4400	\$ 3.3000	21		2.6300	\$	2.6800	\$	2.3100
22 \$	4.5500	\$	3.2000	\$ 3.3000	22		2.6450	\$	2.6500	\$	2.3100
23 \$		\$	3.2000	\$ 2.9400	23		2.6450	\$	2.5950	\$	2.2500
24 \$		\$	3.2000	\$ 3.0650	24	12.0	2.6450	\$	2.5950	\$	2.1950
25 \$	4.5500	\$	3.2000	\$ 3.1000	25		2.6450	\$	2.5950	\$	2.1950
26 \$		\$	3.2000	\$ 3.0700	26		2.8300	\$	2.6250	\$	2.1900
27 \$	4.2950	\$	2.9800	\$ 3.0700	27	900	2.9400	\$	2.5900	\$	2.2050
28 \$	4.2100	\$	2.9600	\$ 3.0700	28	95.0	2.8600	\$	2.5100	\$	2.2050
29 \$	4.3300	\$	2.9600	\$ 3.4450	29		2.0000	\$	2.5150	\$	2.2050
30 \$	4.3950	\$	2.9600	\$ 3.5950	30			\$	2.5150	\$	2.3100
31		\$	2.9600	\$ 3.5200	31			\$	2.5150	Φ	2.3100
					0.			Ψ	2.5150		
TOTAL \$		\$	115.8800	\$ 93.3800	TOTAL	\$	72.7550	\$	87.8300	\$	71.8000
POSTINGS	30		31	31	POSTINGS		28		31		30
AVERAGE \$	3.9540	\$	3.7381	\$ 3.0123	AVERAGE	\$	2.5984	\$	2.8332	\$	2.3933

	MAY 2019	JUNE 2019	JULY 2019	AUGUST 2019	SEPTEMBER 2019	OCTOBER 2019
DAY	MIDPOINT	MIDPOINT	MIDPOINT	DAY MIDPOINT	MIDPOINT	MIDPOINT
1 \$		\$ 2.1950	\$ 2.0750	1 \$ 2.0250	\$ 1.9300	\$ 1.8000
2 \$	2.3900	\$ 2.1950	\$ 2.0350	2 \$ 2.0450	\$ 1.9300	\$ 1.7950
3 \$		\$ 2.1950	\$ 2.0200	3 \$ 1.8450	\$ 1.9300	\$ 1.8650
4 \$		\$ 2.1450	\$ 1.9800	4 \$ 1.8450	\$ 2.0750	\$ 1.7600
5 \$		\$ 2.1400	\$ 1.9800	5 \$ 1.8450	\$ 2.1200	\$ 1.5600
6 \$		\$ 2.1600	\$ 1.9800	6 \$ 1.8900	\$ 2.1100	\$ 1.5600
7 \$		\$ 2.1350	\$ 1.9800	7 \$ 1.9950	\$ 2.1500	\$ 1.5600
8 \$		\$ 2.0300	\$ 1.9800	8 \$ 1.9900	\$ 2.1500	\$ 1.6100
9 \$	- 2 7 2	\$ 2.0300	\$ 2.1050	9 \$ 1.9400	\$ 2.1500	\$ 1.6750
10 \$		\$ 2.0300	\$ 2.1300	10 \$ 1.8450	\$ 2.3200	\$ 1.6900
11 \$		\$ 2.0900	\$ 2.3050	11 \$ 1.8450	\$ 2.4250	\$ 1.7050
12 \$		\$ 2.1050	\$ 2.3150	12 \$ 1.8450	\$ 2.3300	\$ 1.6050
13 \$		\$ 2.1050	\$ 2.2700	13 \$ 1.9450	\$ 2.2900	\$ 1.6050
14 \$		\$ 2.0400	\$ 2.2700	14 \$ 1.9450	\$ 2.2350	\$ 1.6050
15 \$		\$ 1.9900	\$ 2.2700	15 \$ 1.9300	\$ 2.2350	\$ 1.7650
16 \$		\$ 1.9900	\$ 2.2700	16 \$ 1.9500	\$ 2.2350	\$ 1.9100
17 \$		\$ 1.9900	\$ 2.2000	17 \$ 1.9800	\$ 2.3900	\$ 2.0300
18 \$		\$ 2.1650	\$ 2.2000	18 \$ 1.9800	\$ 2.3500	\$ 1.9100
19 \$		\$ 2.1400	\$ 2.2000	19 \$ 1.9800	\$ 2.3450	\$ 1.6300
20 \$		\$ 2.0950	\$ 2.0600	20 \$ 2.0300	\$ 2.2050	\$ 1.6300
21 \$		\$ 2.0400	\$ 2.0600	21 \$ 2.0450	\$ 1.9500	\$ 1.6300
22 \$		\$ 1.9000	\$ 2.0600	22 \$ 1.9750	\$ 1.9500	\$ 1.9050
23 \$		\$ 1.9000	\$ 2.0550	23 \$ 1.9050	\$ 1.9500	\$ 2.0700
24 \$		\$ 1.9000	\$ 2.0400	24 \$ 1.7950	\$ 1.9950	\$ 2.1700
25 \$		\$ 1.9900	\$ 2.0000	25 \$ 1.7950	\$ 1.9750	\$ 2.1100
26 \$		\$ 2.0400	\$ 2.0500	26 \$ 1.7950	\$ 1.9700	\$ 1.9800
27 \$		\$ 2.0600	\$ 1.9700	27 \$ 1.9450	\$ 1.9300	\$ 1.9800
28 \$		\$ 2.0450	\$ 1.9700	28 \$ 1.9050	\$ 1.7000	\$ 1.9800
29 \$		\$ 2.0450	\$ 1.9700	29 \$ 1.9850	\$ 1.7000	\$ 2.2950
30 \$		\$ 2.0450	\$ 1.9900	30 \$ 1.9600	\$ 1.7000	\$ 2.4350
31 \$	2.2900		\$ 1.9800	31 \$ 1.9600		\$ 2.5900
TOTAL \$	71.5550	\$ 61.9300	\$ 64.7700	TOTAL \$ 59.7600	\$ 62.7250	\$ 57.4150
POSTINGS	31	30	31	POSTINGS 31	30	31
AVERAGE \$	2.3082	\$ 2.0643	\$ 2.0894	AVERAGE \$ 1.9277	\$ 2.0908	\$ 1.8521

PBR-GAIF INDICES TENNESSEE – ZONE 0

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

	NATURAL GAS WEEK GAS PRICE REPORT 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. 18	\$3.8550	\$3.9233	\$3.1000	\$3.6261
Dec. 18	\$3.8360	\$3.7652	\$4.6200	\$4.0737
Jan. 19	\$2.9650	\$2.9369	\$3.5300	\$3.1440
Feb. 19	\$2.6100	\$2.5732	\$2.8300	\$2.6711
Mar. 19	\$2.8425	\$2.8068	\$2.7600	\$2.8031
Apr. 19	\$2.4880	\$2.4682	\$2.6200	\$2.5254
May 19	\$2.4250	\$2.4255	\$2.4400	\$2.4302
Jun. 19	\$2.2625	\$2.1707	\$2.5100	\$2.3144
Jul. 19	\$2.1740	\$2.1527	\$2.1400	\$2.1556
Aug. 19	\$2.0325	\$2.0073	\$1.9400	\$1.9933
Sep. 19	\$2.2600	\$2.2732	\$2.0500	\$2.1944
Oct. 19	\$1.9850	\$2.0295	\$2.2000	\$2.0715

CALCULATION OF AVERAGE NA. FRAL GAS WEEK PRICE BY MONTH FOR TEXAS, CENTRAL, ONSHORE

	NATURAL GAS WEEK			NATURAL GAS WEEK	
	GAS PRICE REPORT			GAS PRICE REPORT	
	TEXAS,	MONTHLY		TEXAS,	MONTHLY
	CENTRAL, ONSHORE	AVERAGE		CENTRAL, ONSHORE	AVERAGE
11/05/2018	\$3.1100		05/06/2019	\$2.4000	
11/12/2018	\$3.6200		05/13/2019	\$2.4300	
11/19/2018	\$4.2000		05/20/2019	\$2.4600	
11/26/2018	\$4.4900	\$3.8550	05/27/2019	\$2.4100	\$2.4250
12/03/2018	\$4.2900		06/03/2019	\$2.3800	
12/10/2018	\$4.3800		06/10/2019	\$2.2700	
12/17/2018	\$3.9900		06/17/2019	\$2.2200	
12/24/2018	\$3.4200		06/24/2019	\$2.1800	\$2.2625
12/31/2018	\$3.1000	\$3.8360			
			07/01/2019	\$2.1600	
01/07/2019	\$2.7800		07/08/2019	\$2.1000	
01/14/2019	\$2.7800		07/15/2019	\$2.3100	
01/21/2019	\$3.2800		07/22/2019	\$2.2000	
01/28/2019	\$3.0200	\$2.9650	07/29/2019	\$2.1000	\$2.1740
02/04/2019	\$2.7100		08/05/2019	\$2.0200	
02/11/2019	\$2.5400		08/12/2019	\$2.0100	
02/18/2019	\$2.5600		08/19/2019	\$2.0600	
02/25/2019	\$2.6300	\$2.6100	08/26/2019	\$2.0400	\$2.0325
03/04/2019	\$2.9500		09/02/2019	\$2.1300	
03/11/2019	\$3.0100		09/09/2019	\$2.2800	
03/18/2019	\$2.7100		09/16/2019	\$2.4400	
03/25/2019	\$2.7000	\$2.8425	09/23/2019	\$2.3800	
			09/30/2019	\$2.0700	\$2.2600
04/01/2019	\$2.5700				7-1-000
04/08/2019	\$2.5500		10/07/2019	\$2.0800	
04/15/2019	\$2.5700		10/14/2019	\$1.8700	
04/22/2019	\$2.3900		10/21/2019	\$1.9400	
04/29/2019	\$2.3600	\$2.4880	10/28/2019	\$2.0500	\$1.9850

PBR YEAR TWENTY-TWO PLATTS GAS DAILY MIDPOINT PRICE EAST TEXAS, TENNESSEE, ZONE 0

1	OVEMBER 2018	C	ECEMBER 2018		JANUARY 2019		FE	EBRUARY 2019		MARCH 2019		APRIL 2019
DAY	MIDPOINT		MIDPOINT		MIDPOINT] DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	3.1150	\$	4.3700	\$	3.0200	1	\$	2.7100	\$	2.8500	\$	2.5700
2 \$	3.1500	\$	4.3700	\$	3.0200	2		2.5700	\$	3.1100	\$	2.6250
3 \$	3.1250	\$	4.3700	\$	2.6450		\$	2.5700	\$	3.1100	\$	2.5950
4 \$	3.1250	\$	4.2550	\$		4	1000	2.5700	\$	3.1100	\$	2.5450
5 \$	3.1250	\$	4.4550	\$	2.5750	5		2.4700	\$	4.0500	\$	2.5650
6 \$	3.3550	\$	4.4050	\$	2.5750	6		2.4900	\$	2.9400	Š	2.5200
7 \$	3.4450	\$	4.2150	\$	2.5750		\$	2.4850	\$	2.8850	\$	2.5200
8 \$	3.4450	\$	4.3300	\$		8	\$	2.5200	\$	2.8200	\$	2.5200
9 \$	3.5300	\$	4.3300	9	2.8450	9	10.000	2.4750	\$	2.8250	\$	2.6100
10 \$	3.6850	\$	4.3300	\$			\$	2.4750	\$	2.8250	\$	2.5850
11 \$	3.6850	\$	4.3700	\$	2.7950	11	30.	2.4750	\$	2.8250	\$	2.6050
12 \$	3.6850	\$	4.2900	\$			\$	2.5900	\$	2.6850	\$	2.5800
13 \$	3.7800	\$	4.0950	9			\$	2.5650	\$	2.6800	\$	2.5650
14 \$	3.9800	\$	4.0950	\$			\$	2.5050	\$	2.7050	\$	2.5650
15 \$	4.4700	\$	3.7450	\$		15		2.4900	\$	2.7550	\$	2.5650
16 \$	4.3500	\$	3.7450	\$		16		2.5100	\$	2.7400	\$	2.5200
17 \$	4.1700	\$	3.7450	\$		17	- 15	2.5100	\$	2.7400	\$	2.4500
18 \$	4.1700	\$	3.4650	9			\$	2.5100	\$	2.7400	\$	2.4200
19 \$	4.1700	\$	3.5250	\$		19		2.5100	\$	2.7550	\$	2.3550
20 \$	4.4350	\$	3.3400	\$		20		2.6200	\$	2.8350	\$	2.3550
21 \$		\$	3.5250	\$		21		2.6150	\$	2.7550	\$	2.3550
22 \$		\$	3.3100	3			\$	2.6100	\$	2.7200	\$	2.3550
23 \$	4.4750	\$	3.3100	9		23		2.6150	\$	2.6650	\$	
24 \$		\$	3.3100	9		24		2.6150	•	2.6650	\$	2.3800
25 \$		\$	3.3100	9		25	- 8	2.6150	e e	2.6650	\$	2.2950
26 \$		\$	3.3100	3		26	10.53	2.7600	\$	2.6400	\$	2.2800
27 \$		\$	2.8800	3		27		2.8350	\$	2.6350		2.2700
28 \$	4.1250	\$	2.9800	9		28	10,000	2.7650	Φ	2.5700	\$	2.3600
29 \$		\$	2.9800	9		29	Ψ	2.7000	\$	2.5700	\$	2.3600
30 \$		\$	2.9800	9		30			φ		\$	2.3600
31		\$	2.9800	9		31			, o	2.5700	\$	2.3950
•		•	2.0000	•	2.0430	31			\$	2.5700		
TOTAL \$	117.7000	\$	116.7200	\$	91.0450	TOTAL	\$	72.0500	\$	87.0100	\$	74.0450
POSTINGS	30		31		31	POSTINGS		28		31		30
AVERAGE \$	3.9233	\$	3.7652	\$	2.9369	AVERAGE	\$	2.5732	\$	2.8068	\$	2.4682

	MAY 2019		JUNE 2019		JULY 2019			IGUST 2019	SE	PTEMBER 2019	OCTOBER 2019
DAY	MIDPOINT	N	MIDPOINT	,	MIDPOINT	DAY[M	IDPOINT		MIDPOINT	MIDPOINT
1 \$	2.3900	\$	2.2750	\$	2.1800	1	\$	2.0700	\$	2.0900	\$ 2.0500
2 \$	2.4750	\$	2.2750	\$	2.0800	2	\$	2.1650	\$	2.0900	\$ 2.1150
3 \$	2.4550	\$	2.2750	\$	2.0750	3	\$	1.9600	\$	2.0900	\$ 2.0650
4 \$	2.3950	\$	2.2300	\$	2.1100	4	\$	1.9600	\$	2.1700	\$ 2.0300
5 \$	2.3950	\$	2.2200	\$	2.1100	5	\$	1.9600	\$	2.2400	\$ 2.0100
6 \$	2.3950	\$	2.2450	\$	2.1100	6	\$	1.9900	\$	2.2250	\$ 2.0100
7 \$	2.3800	\$	2.1450	\$	2.1100	7	\$	2.0250	\$	2.2950	\$ 2.0100
8 \$	2.3650	\$	2.1100	\$	2.1100	8	\$	2.0400	\$	2.2950	\$ 1.8650
9 \$	2.4600	\$	2.1100	\$	2.2300	9	\$	1.9550	\$	2.2950	\$ 2.0200
10 \$	2.4300	\$	2.1100	\$	2.2700	10	\$	1.9650	\$	2.4050	\$ 1.9950
11 \$	2.4350	\$	2.1900	\$	2.3600	11	\$	1.9650	\$	2.4600	\$ 1.9650
12 \$	2.4350	\$	2.1800	\$	2.3500	12	\$	1.9650	\$	2.4050	\$ 1.8300
13 \$	2.4350	\$	2.2450	\$	2.3900	13	\$	1.9500	\$	2.3950	\$ 1.8300
14 \$	2.4500	\$	2.1700	\$	2.3900	14	\$	1.9750	\$	2.4100	\$ 1.8300
15 \$	2.4500	\$	2.2000	\$	2.3900	15	\$	1.9600	\$	2.4100	\$ 2.0150
16 \$	2.4250	\$	2.2000	\$	2.2900	16	\$	2.0000	\$	2.4100	\$ 2.0400
17 \$		\$	2.2000	\$	2.2150	17	\$	2.0150	\$	2.5150	\$ 2.1200
18 \$	2.4450	\$	2.2350	\$	2.2400	18	\$	2.0150	\$	2.5350	\$ 2.0550
19 \$		\$	2.2150	\$	2.2250	19	\$	2.0150	\$	2.4250	\$ 1.8600
20 \$		\$	2.2300	\$	2.1250	20	\$	2.0700	\$	2.3300	\$ 1.8600
21 \$	2.5850	\$	2.1500	\$	2.1250	21	\$	2.0800	\$	2.2500	\$ 1.8600
22 \$		\$	2.0250	\$	2.1250	22	\$	2.0100	\$	2.2500	\$ 1.9100
23 \$		\$	2.0250	\$	2.1100	23	\$	2.0150	\$	2.2500	\$ 2.0400
24 \$	2.4050	\$	2.0250	\$	2.0900	24	\$	1.9800	\$	2.2800	\$ 2.1400
25 \$	2.3750	\$	2.1250	\$	2.0650	25	\$	1.9800	\$	2.2850	\$ 2.1200
26 \$		\$	2.1200	\$	2.0250	26	\$	1.9800	\$	2.2450	\$ 2.0150
27 \$		\$	2.1250	\$	1.9300	27	\$	1.9500	\$	2.1450	\$ 2.0150
28 \$	2.3750	\$	2.1550	\$	1.9300	28	\$	1.9600	\$	2.0000	\$ 2.0150
29 \$	2.3750	\$	2.1550	\$	1.9300	29	\$	2.0700	\$	2.0000	\$ 2.2350
30 \$		\$	2.1550	\$	2.0050	30	\$	2.0900	\$	2.0000	\$ 2.4150
31 \$	2.4350			\$	2.0400	31	\$	2.0900			\$ 2.5750
TOTAL \$	75.1900	\$	65.1200	\$	66.7350	TOTAL	\$	62.2250	\$	68.1950	\$ 62.9150
POSTINGS	31		30		31	POSTINGS		31		30	31
AVERAGE \$	2.4255	\$	2.1707	\$	2.1527	AVERAGE	\$	2.0073	\$	2.2732	\$ 2.0295

PBR-GAIF INDICES TENNESSEE – ZONE 1

CALCULATION OF PPLY AREA INDICES SAI (TGPL-Z1)

			PLATTS	
		PLATTS	INSIDE FERC's	
	NATURAL GAS WEEK	GAS DAILY AVERAGE	GAS MARKET REPORT	
	GAS PRICE REPORT	LOUISIANA	LOUISIANA/SOUTHEAST,	
	LOUISIANA, GULF	SOUTHEAST,	TENNESSEE,	
	COAST, ONSHORE	TENNESSEE, 500 LEG	LOUISIANA, 500 LEG	AVERAGE
Nov. 18	\$3.8925	\$4.0030	\$3.1500	\$3.6818
Dec. 18	\$3.9100	\$3.8611	\$4.7100	\$4.1604
Jan. 19	\$3.0150	\$2.9968	\$3.5900	\$3.2006
Feb. 19	\$2.6300	\$2.6191	\$2.8800	\$2.7097
Mar. 19	\$2.9150	\$2.8394	\$2.7900	\$2.8481
Apr. 19	\$2.5320	\$2.5228	\$2.6500	\$2.5683
May 19	\$2.4825	\$2.5168	\$2.5000	\$2.4998
Jun. 19	\$2.2925	\$2.2530	\$2.5600	\$2.3685
Jul. 19	\$2.2280	\$2.2363	\$2.2000	\$2.2214
Aug. 19	\$2.1000	\$2.1355	\$2.0600	\$2.0985
Sep. 19	\$2.3500	\$2.5053	\$2.1900	\$2.3484
Oct. 19	\$2.0850	\$2.1873	\$2.3800	\$2.2174

CALCULATION OF AVERAGE NATURAL GAS WEEK PRICE BY MONTH FOR GULF CO. ONSHORE - LA

	NATURAL GAS WEEK GAS PRICE REPORT LOUISIANA, GULF	MONTHLY		NATURAL GAS WEEK GAS PRICE REPORT LOUISIANA, GULF	MONTHLY
	COAST, ONSHORE	AVERAGE		COAST, ONSHORE	AVERAGE
11/05/2018	\$3.1500		05/06/2019	\$2.4800	
11/12/2018	\$3.6000		05/13/2019	\$2.4600	
11/19/2018	\$4.2500		05/20/2019	\$2.5100	
11/26/2018	\$4.5700	\$3.8925	05/27/2019	\$2.4800	\$2.4825
12/03/2018	\$4.3800		06/03/2019	\$2.4400	
12/10/2018	\$4.4400		06/10/2019	\$2.2900	
12/17/2018	\$4.1500		06/17/2019	\$2.2300	
12/24/2018	\$3.4800		06/24/2019	\$2.2100	\$2.2925
12/31/2018	\$3.1000	\$3.9100			
			07/01/2019	\$2.2200	
01/07/2019	\$2.7900		07/08/2019	\$2.1500	
01/14/2019	\$2.8200		07/15/2019	\$2.3800	
01/21/2019	\$3.3600		07/22/2019	\$2.2600	
01/28/2019	\$3.0900	\$3.0150	07/29/2019	\$2.1300	\$2.2280
02/04/2019	\$2.8100		08/05/2019	\$2.1000	
02/11/2019	\$2.5200		08/12/2019	\$2.0700	
02/18/2019	\$2.5600		08/19/2019	\$2.1100	
02/25/2019	\$2.6300	\$2.6300	08/26/2019	\$2.1200	\$2.1000
03/04/2019	\$3.0800		09/02/2019	\$2.1900	
03/11/2019	\$3.1100		09/09/2019	\$2.3300	
03/18/2019	\$2.7400		09/16/2019	\$2.5600	
03/25/2019	\$2.7300	\$2.9150	09/23/2019	\$2.5200	
personal contraction of the cont			09/30/2019	\$2.1500	\$2.3500
04/01/2019	\$2.6100				
04/08/2019	\$2.5800		10/07/2019	\$2.1500	
04/15/2019	\$2.6000		10/14/2019	\$2.0200	
04/22/2019	\$2.4500	100 MM HAVE TO THE TOTAL	10/21/2019	\$2.0600	
04/29/2019	\$2.4200	\$2.5320	10/28/2019	\$2.1100	\$2.0850

PBR YEAR TWENTY-TWO PLATTS GAS DAILY MIDPOINT PRICE LOUISIANA/SOUTHEAST, TENNESSEE, 500 LEG

	NOVE			CEMBER		JA	NUARY			FEBRUARY		MAF	CH		Al	PRIL
	201	18		2018			2019			2019		20				2019
•			_		_											.010
DAY	MID	POINT	N	IIDPOINT		N	IIDPOINT	DAY	Γ	MIDPOINT		MID	POINT		М	DPOINT
							10 10 10 10 10 10 10 10 10 10 10 10 10 1					-		<u></u>		
1		3.1950	\$	4.4750		\$	3.1200	1	1	2.7600	\$	2	2.8600	\$		2.6300
2		3.2100	\$	4.4750		\$	3.1200	2	. 9		\$	3	3.1050	\$		2.6800
3	25	3.1300	\$	4.4750		\$	2.6800	3	1	2.6250	\$	3	3.1050	\$		2.6350
4		3.1300	\$	4.3800		\$	2.5900	4	. 9	2.6250	\$	3	3.1050	\$		2.5850
		3.1300	\$	4.5900		\$	2.6400	5	1		\$	4	.0800	\$		2.6200
6		3.4400	\$	4.5300		\$	2.6400	6	9	2.5300	\$	3	3.0300	\$		2.5700
7		3.4850	\$	4.3350		\$	2.6400	7	1	2.5350	\$	2	2.9000	\$		2.5700
8		3.5200	\$	4.4450		\$	2.6200	8	1	2.5750	\$	2	2.8450	\$		2.5700
9		3.5650	\$	4.4450		\$	2.8400	9	1	2.5400	\$	2	2.8400	\$		2.6250
10		3.7250	\$	4.4450		\$	2.8350	10	1	2.5400	\$	2	2.8400	\$		2.6300
11	\$ 3	3.7250	\$	4.4850		\$	2.8550	11	9	2.5400	\$	2	2.8400	\$		2.6350
12		3.7250	\$	4.4100		\$	2.8200	12	1		\$		2.7450	\$		2.6100
13	\$ 3	3.8300	\$	4.1200		\$	2.8200	13			\$		2.7250	\$		2.5750
14	\$ 4	.0150	\$	4.1750		\$	2.8200	14	. 9		\$		2.7450	\$		2.5750
15	\$ 4	.4950	\$	3.8150		\$	3.3600	15	9		\$		2.7850	Š		2.5750
16	\$ 4	.5000	\$	3.8150		\$	3.4850	16			\$		2.7850	\$		2.5350
17	\$ 4	.2400	\$	3.8150		\$	3.5650	17			\$		2.7850	š		2.5150
18	\$ 4	.2400	\$	3.5650		\$	3.4200	18			\$		2.7850	Š		2.4650
19	\$ 4	.2400	\$	3.6200		\$	3.2400	19		V2 200 (00 00 00 00 00 00 00 00 00 00 00 00	\$		2.8050	Š		2.3800
20	\$ 4	.5300	\$	3.4650		\$	3.2400	20	- 25		\$		2.8150	Š		2.3800
21	\$ 4	.5950	\$	3.6450		\$	3.2400	21			\$		2.7750	Š.		2.3800
22	\$ 4	.6100	\$	3.4100		\$	3.2400	22			Š		2.7350	\$		2.3800
23	\$ 4	.6100	\$	3.4100		\$	3.0300	23			\$		2.7050	\$		2.4450
24		.6100	\$	3.4100		\$	3.0400	24			\$		2.7050	Š		2.3900
25	\$ 4	.6100	\$	3.4100		\$	3.0500	25			\$		2.7050	\$		2.4250
26	\$ 4	.6100	\$	3.4100		\$	3.0550	26			\$		2.6950	\$		2.4050
27	\$ 4	.2300	\$	3.0400		\$	3.0550	27			\$		2.6900	\$		2.4700
28	\$ 4	.2750	\$	3.0200		\$	3.0550	28			\$		2.6100	\$		2.4700
29	\$ 4	.4000	\$	3.0200		\$	2.9550	29		2000	\$		2.6250	\$		2.4700
30	\$ 4	.4700	\$	3.0200		\$	2.9150	30			\$		2.6250	\$		2.4900
31			\$	3.0200		\$	2.9150	31			\$		2.6250	Φ		2.4900
						•	2.0.00	01			Ψ	-	0230			
TOTAL	\$ 120	.0900	\$	119.6950		\$	92.9000	TOTAL	\$	73.3350	\$	88	3.0200	\$		75.6850
POSTINGS		30		31			31	POSTINGS		28			31			30
AVERAGE	\$ 4	.0030	\$	3.8611		\$	2.9968	AVERAGE	\$	2.6191	\$	2	2.8394	\$		2.5228

	MAY	JUNE	JULY		A	AUGUST	SE	PTEMBER	1	OCTOBER
	2019	2019	2019			2019		2019		2019
DAY	MIDPOINT	MIDPOINT	MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	2.5100	\$ 2.3800	\$ 2.2750		\$	2.1750	\$	2.2600	\$	2.3250
2 \$	2.5650	\$ 2.3800	\$ 2.1900		\$	2.2550	\$	2.2600	\$	2.2800
3 \$	2.5100	\$ 2.3800	\$ 2.2050	3		2.0500	\$	2.2600	\$	2.2650
4 \$	2.4800	\$ 2.3300	\$ 2.1900	4	\$	2.0500	\$	2.3550	\$	2.2350
5 \$	2.4800	\$ 2.3500	\$ 2.1900	5	\$	2.0500	\$	2.4200	\$	2.1950
6 \$	2.4800	\$ 2.3000	\$ 2.1900	6	\$	2.0500	\$	2.4300	\$	2.1950
7 \$	2.4600	\$ 2.2650	\$ 2.1900	7		2.1000	\$	2.5000	\$	2.1950
8 \$	2.4500	\$ 2.2200	\$ 2.1900	8	\$	2.1000	\$	2.5000	\$	2.2250
9 \$	2.5150	\$ 2.2200	\$ 2.3000	9	\$	2.0900	\$	2.5000	\$	2.1750
10 \$	2.4900	\$ 2.2200	\$ 2.3200	10		2.0950	\$	2.6250	\$	2.1950
11 \$	2.4850	\$ 2.2300	\$ 2.4050	11		2.0950	\$	2.6250	\$	2.1600
12 \$	2.4850	\$ 2.2450	\$ 2.4150	12		2.0950	\$	2.6000	\$	1.9650
13 \$	2.4850	\$ 2.2700	\$ 2.3900	13		2.1400	\$	2.5800	\$	1.9650
14 \$	2.5200	\$ 2.2200	\$ 2.3900	14	\$	2.1300	\$	2.5900	\$	1.9650
15 \$	2.5350	\$ 2.2550	\$ 2.3900	15		2.1100	\$	2.5900	\$	2.1900
16 \$	2.5250	\$ 2.2550	\$ 2.3550	16	\$	2.1400	\$	2.5900	\$	2.1900
17 \$	2.5200	\$ 2.2550	\$ 2.2850	17	\$	2.1600	\$	2.7300	\$	2.2450
18 \$	2.5500	\$ 2.3100	\$ 2.3000	18	\$	2.1600	\$	2.7150	\$	2.2300
19 \$	2.5500	\$ 2.3000	\$ 2.2900	19	\$	2.1600	\$	2.6450	\$	2.0800
20 \$	2.5500	\$ 2.2850	\$ 2.1950	20	\$	2.1700	\$	2.5250	\$	2.0800
21 \$	2.6400	\$ 2.2200	\$ 2.1950	21	\$	2.2100	\$	2.5050	\$	2.0800
22 \$	2.5700	\$ 2.1400	\$ 2.1950	22	\$	2.1800	\$	2.5050	\$	2.0400
23 \$	2.5300	\$ 2.1400	\$ 2.2300	23	\$	2.1600	\$	2.5050	\$	2.1750
24 \$	2.5150	\$ 2.1400	\$ 2.2150	24	\$	2.1200	\$	2.5150	\$	2.2150
25 \$	2.5200	\$ 2.1800	\$ 2.1650	25		2.1200	\$	2.5550	\$	2.1850
26 \$	2.5200	\$ 2.2050	\$ 2.1550	26	\$	2.1200	\$	2.5050	\$	2.1100
27 \$	2.5200	\$ 2.2500	\$ 2.1100	27	\$	2.1500	\$	2.4950	\$	2.1100
28 \$	2.5200	\$ 2.2150	\$ 2.1100	28		2.1400	\$	2.4250	\$	2.1100
29 \$	2.5350	\$ 2.2150	\$ 2.1100	29	\$	2.2050	\$	2.4250	\$	2.3500
30 \$	2.5300	\$ 2.2150	\$ 2.1000	30	\$	2.2100	\$	2.4250	\$	2.4600
31 \$	2.4750		\$ 2.0850	31	\$	2.2100			\$	2.6150
TOTAL \$	78.0200	\$ 67.5900	\$ 69.3250	TOTAL	\$	66.2000	\$	75.1600	\$	67.8050
POSTINGS	31	30	31	POSTINGS		31		30		31
AVERAGE \$	2.5168	\$ 2.2530	\$ 2.2363	AVERAGE	\$	2.1355	\$	2.5053	\$	2.1873

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

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub November 2018

				DAI TGT ZONE			CALCULATION	OF DAILY	DAI TGT ZONE 4	4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY		11	(,	(10)
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO	ONES	HIGHER OF		TOTAL
_	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
	******	4 700/			20000	4									OOI. 10 A OOI. 14
1	\$3.1150	1.70%	\$0.4190	\$0.0627	\$3.6506	\$3.0600	1.70%	\$0.4190	\$0.0627	\$3.5946	\$3.6506	\$3.5946	\$3.6506	0	\$0
2	\$3.1250	1.70%	\$0.4190	\$0.0627	\$3.6607	\$3.1100	1.70%	\$0.4190	\$0.0627	\$3.6455	\$3.6607	\$3.6455	\$3.6607	ŏ	\$0
3	\$3.0450	1.70%	\$0.4190	\$0.0627	\$3.5794	\$3.0200	1.70%	\$0.4190	\$0.0627	\$3.5539	\$3.5794	\$3.5539	\$3.5794	Ö	\$0
4	\$3.0450	1.70%	\$0.4190	\$0.0627	\$3.5794	\$3.0200	1.70%	\$0.4190	\$0.0627	\$3.5539	\$3.5794	\$3.5539	\$3.5794	ō	\$0
5	\$3.0450	1.70%	\$0.4190	\$0.0627	\$3.5794	\$3.0200	1.70%	\$0.4190	\$0.0627	\$3.5539	\$3.5794	\$3.5539	\$3.5794	Ŏ	\$0
5	\$3.3800	1.70%	\$0.4190	\$0.0627	\$3.9202	\$3.3850	1.70%	\$0.4190	\$0.0627	\$3.9252	\$3.9202	\$3.9252	\$3.9252	ŏ	\$0
′	\$3.4250	1.70%	\$0.4190	\$0.0627	\$3.9659	\$3.4450	1.70%	\$0.4190	\$0.0627	\$3.9863	\$3.9659	\$3.9863	\$3.9863	0	\$0
8	\$3.4650	1.70%	\$0.4190	\$0.0627	\$4.0066	\$3.4900	1.70%	\$0.4190	\$0.0627	\$4.0321	\$4.0066	\$4.0321	\$4.0321	ő	\$0
9	\$3.5400	1.70%	\$0.4190	\$0.0627	\$4.0829	\$3.5650	1.70%	\$0.4190	\$0.0627	\$4.1084	\$4.0829	\$4.1084	\$4.1084	ō	\$0
10	\$3.7150	1.70%	\$0.4190	\$0.0627	\$4.2609	\$3.7350	1.70%	\$0.4190	\$0.0627	\$4.2813	\$4.2609	\$4.2813	\$4.2813	0	\$0
11	\$3.7150	1.70%	\$0.4190	\$0.0627	\$4.2609	\$3.7350	1.70%	\$0.4190	\$0.0627	\$4.2813	\$4.2609	\$4.2813	\$4.2813	ŏ	\$0
12	\$3.7150	1.70%	\$0.4190	\$0.0627	\$4.2609	\$3.7350	1.70%	\$0.4190	\$0.0627	\$4.2813	\$4.2609	\$4.2813	\$4.2813	ŏ	\$0
13	\$3.8250	1.70%	\$0.4190	\$0.0627	\$4.3728	\$3.8750	1.70%	\$0.4190	\$0.0627	\$4.4237	\$4.3728	\$4,4237	\$4.4237	ő	\$0
14	\$3.9550	1.70%	\$0.4190	\$0.0627	\$4.5051	\$4.0050	1.70%	\$0.4190	\$0.0627	\$4.5560	\$4.5051	\$4.5560	\$4.5560	ő	\$0
15	\$4.4800	1.70%	\$0.4190	\$0.0627	\$5.0392	\$4.5250	1.70%	\$0.4190	\$0.0627	\$5.0850	\$5.0392	\$5.0850	\$5.0850	ŏ	\$0
16	\$4.4700	1.70%	\$0.4190	\$0.0627	\$5.0290	\$4.3150	1.70%	\$0.4190	\$0.0627	\$4.8713	\$5.0290	\$4.8713	\$5.0290	ň	\$0
17	\$4.1900	1.70%	\$0.4190	\$0.0627	\$4.7442	\$4.2000	1.70%	\$0.4190	\$0.0627	\$4.7543	\$4,7442	\$4,7543	\$4.7543	ň	\$0
18	\$4.1900	1.70%	\$0.4190	\$0.0627	\$4.7442	\$4.2000	1.70%	\$0.4190	\$0.0627	\$4.7543	\$4,7442	\$4.7543	\$4.7543	ő	\$0
19	\$4.1900	1.70%	\$0.4190	\$0.0627	\$4.7442	\$4.2000	1.70%	\$0.4190	\$0.0627	\$4.7543	\$4.7442	\$4.7543	\$4.7543	Ô	\$0
20	\$4.4650	1.70%	\$0.4190	\$0.0627	\$5.0239	\$4.4900	1.70%	\$0.4190	\$0.0627	\$5.0494	\$5.0239	\$5.0494	\$5.0494	ő	\$0
21	\$4.5200	1.70%	\$0.4190	\$0.0627	\$5.0799	\$4.5100	1.70%	\$0.4190	\$0.0627	\$5.0697	\$5.0799	\$5.0697	\$5.0799	ŏ	\$0
22	\$4.5550	1.70%	\$0.4190	\$0.0627	\$5.1155	\$4.5500	1.70%	\$0.4190	\$0.0627	\$5.1104	\$5,1155	\$5.1104	\$5.1155	ő	\$0
23	\$4.5550	1.70%	\$0.4190	\$0.0627	\$5.1155	\$4.5500	1.70%	\$0.4190	\$0.0627	\$5.1104	\$5,1155	\$5.1104	\$5.1155	ő	\$0
24	\$4.5550	1.70%	\$0.4190	\$0.0627	\$5.1155	\$4.5500	1.70%	\$0.4190	\$0.0627	\$5.1104	\$5.1155	\$5.1104	\$5.1155	ő	\$0 \$0
25	\$4.5550	1.70%	\$0.4190	\$0.0627	\$5.1155	\$4.5500	1.70%	\$0.4190	\$0.0627	\$5,1104	\$5,1155	\$5,1104	\$5.1155	ő	\$0
26	\$4.5550	1.70%	\$0.4190	\$0.0627	\$5.1155	\$4.5500	1.70%	\$0.4190	\$0.0627	\$5.1104	\$5,1155	\$5.1104	\$5.1155	ŏ	\$0 \$0
27	\$4.1850	1.70%	\$0.4190	\$0.0627	\$4.7391	\$4.2950	1.70%	\$0.4190	\$0.0627	\$4.8510	\$4.7391	\$4.8510	\$4.8510	ő	20
28	\$4.2100	1.70%	\$0.4190	\$0.0627	\$4.7645	\$4.2100	1.70%	\$0.4190	\$0.0627	\$4.7645	\$4.7645	\$4.7645	\$4.7645	ň	\$0 \$0
29	\$4.3300	1.70%	\$0.4190	\$0.0627	\$4.8866	\$4.3300	1.70%	\$0.4190	\$0.0627	\$4.8866	\$4.8866	\$4.8866	\$4.8866	0	\$0 \$0
30	\$4.4050	1.70%	\$0.4190	\$0.0627	\$4.9629	\$4.3950	1.70%	\$0.4190	\$0.0627	\$4.9527	\$4.9629	\$4.9527	\$4.9629	0	\$0
											**************************************		4	v	3 0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub December 2018

		CALCULATION	OF DAILY	DAI TGT ZONE 1			CALCULATION	OF DAILY	DAI TGT ZONE 4	L					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY				
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT		. 0.002	0.002	+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
4	\$4.3700	1,70%	\$0.4190	\$0.0627	\$4.9273	\$4.3700	1.70%	\$0.4190	\$0.0627	\$4.9273	\$4.9273	\$4.9273	\$4,9273	0	\$0
2	\$4.3700	1.70%	\$0.4190	\$0.0627	\$4.9273	\$4.3700	1.70%	\$0.4190	\$0.0627	\$4.9273	\$4.9273	\$4.9273	\$4.9273	ō	\$0
3	\$4,3700	1.70%	\$0.4190	\$0.0627	\$4.9273	\$4.3700	1.70%	\$0.4190	\$0.0627	\$4.9273	\$4.9273	\$4.9273	\$4.9273	ō	\$0
4	\$4.3300	1.70%	\$0.4190	\$0.0627	\$4.8866	\$4.3250	1.70%	\$0.4190	\$0.0627	\$4.8815	\$4.8866	\$4.8815	\$4.8866	ō	\$0
5	\$4.5000	1.70%	\$0,4190	\$0.0627	\$5.0595	\$4.4750	1.70%	\$0.4190	\$0.0627	\$5.0341	\$5.0595	\$5.0341	\$5.0595	0	\$0
6	\$4,4950	1.70%	\$0.4190	\$0.0627	\$5.0544	\$4,4550	1.70%	\$0.4190	\$0.0627	\$5.0137	\$5.0544	\$5.0137	\$5.0544	ō	\$0
7	\$4.2300	1.70%	\$0.4190	\$0.0627	\$4,7849	\$4.2100	1.70%	\$0,4190	\$0.0627	\$4.7645	\$4,7849	\$4.7645	\$4.7849	ō	\$0
8	\$4.3350	1.70%	\$0.4190	\$0.0627	\$4.8917	\$4.3200	1.70%	\$0.4190	\$0.0627	\$4.8764	\$4.8917	\$4.8764	\$4.8917	0	\$0
9	\$4.3350	1.70%	\$0.4190	\$0.0627	\$4.8917	\$4.3200	1.70%	\$0.4190	\$0.0627	\$4.8764	\$4.8917	\$4.8764	\$4.8917	0	\$0
10	\$4.3350	1.70%	\$0.4190	\$0.0627	\$4.8917	\$4.3200	1.70%	\$0.4190	\$0.0627	\$4.8764	\$4.8917	\$4.8764	\$4.8917	0	\$0
11	\$4.3600	1.70%	\$0.4190	\$0.0627	\$4.9171	\$4.3850	1.70%	\$0.4190	\$0.0627	\$4.9425	\$4.9171	\$4.9425	\$4.9425	0	\$0
12	\$4.2850	1.70%	\$0.4190	\$0.0627	\$4.8408	\$4.2850	1.70%	\$0.4190	\$0.0627	\$4.8408	\$4.8408	\$4.8408	\$4.8408	0	\$0
13	\$4.0050	1.70%	\$0.4190	\$0.0627	\$4.5560	\$4.0050	1.70%	\$0.4190	\$0.0627	\$4.5560	\$4.5560	\$4.5560	\$4.5560	0	\$0
14	\$4.0500	1.70%	\$0.4190	\$0.0627	\$4.6017	\$4.0550	1.70%	\$0.4190	\$0.0627	\$4.6068	\$4.6017	\$4.6068	\$4.6068	0	\$0
15	\$3.7000	1.70%	\$0.4190	\$0.0627	\$4.2457	\$3.7050	1.70%	\$0.4190	\$0.0627	\$4.2508	\$4.2457	\$4.2508	\$4.2508	0	\$0
16	\$3.7000	1.70%	\$0.4190	\$0.0627	\$4.2457	\$3.7050	1.70%	\$0.4190	\$0.0627	\$4.2508	\$4.2457	\$4.2508	\$4.2508	0	\$0
17	\$3.7000	1.70%	\$0.4190	\$0.0627	\$4.2457	\$3.7050	1.70%	\$0.4190	\$0.0627	\$4.2508	\$4.2457	\$4.2508	\$4.2508	0	\$0
18	\$3.4650	1.70%	\$0.4190	\$0.0627	\$4.0066	\$3.4400	1.70%	\$0.4190	\$0.0627	\$3.9812	\$4.0066	\$3.9812	\$4.0066	0	\$0
19	\$3.5050	1.70%	\$0.4190	\$0.0627	\$4.0473	\$3.4900	1.70%	\$0.4190	\$0.0627	\$4.0321	\$4.0473	\$4.0321	\$4.0473	0	\$0
20	\$3.3300	1.70%	\$0.4190	\$0.0627	\$3.8693	\$3.3100	1.70%	\$0.4190	\$0.0627	\$3.8489	\$3.8693	\$3.8489	\$3.8693	0	\$0
21	\$3.4650	1.70%	\$0.4190	\$0.0627	\$4.0066	\$3.4400	1.70%	\$0.4190	\$0.0627	\$3.9812	\$4.0066	\$3.9812	\$4.0066	0	\$0
22	\$3.2750	1.70%	\$0.4190	\$0.0627	\$3.8133	\$3.2000	1.70%	\$0.4190	\$0.0627	\$3.7370	\$3.8133	\$3.7370	\$3.8133	0	\$0
23	\$3.2750	1.70%	\$0.4190	\$0.0627	\$3.8133	\$3.2000	1.70%	\$0.4190	\$0.0627	\$3.7370	\$3.8133	\$3.7370	\$3.8133	0	\$0
24	\$3.2750	1.70%	\$0.4190	\$0.0627	\$3.8133	\$3.2000	1.70%	\$0.4190	\$0.0627	\$3.7370	\$3.8133	\$3.7370	\$3.8133	0	\$0
25	\$3.2750	1.70%	\$0.4190	\$0.0627	\$3.8133	\$3.2000	1.70%	\$0.4190	\$0.0627	\$3.7370	\$3.8133	\$3.7370	\$3.8133	0	\$0
26	\$3.2750	1.70%	\$0.4190	\$0.0627	\$3.8133	\$3.2000	1.70%	\$0.4190	\$0.0627	\$3.7370	\$3.8133	\$3.7370	\$3.8133	0	\$0
27	\$3.0100	1.70%	\$0.4190	\$0.0627	\$3.5438	\$2.9800	1.70%	\$0.4190	\$0.0627	\$3.5132	\$3.5438	\$3.5132	\$3.5438	0	\$0
28	\$2.9350	1.70%	\$0.4190	\$0.0627	\$3.4675	\$2.9600	1.70%	\$0.4190	\$0.0627	\$3.4929	\$3.4675	\$3.4929	\$3.4929	0	\$0
29	\$2.9350	1.70%	\$0.4190	\$0.0627	\$3.4675	\$2.9600	1.70%	\$0.4190	\$0.0627	\$3.4929	\$3.4675	\$3.4929	\$3.4929	0	\$0
30	\$2.9350	1.70%	\$0.4190	\$0.0627	\$3.4675	\$2.9600	1.70%	\$0.4190	\$0.0627	\$3.4929	\$3.4675	\$3.4929	\$3.4929	0	\$0
31	\$2.9350	1.70%	\$0.4190	\$0.0627	\$3.4675	\$2.9600	1.70%	\$0.4190	\$0.0627	\$3.4929	\$3.4675	\$3.4929	\$3.4929	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub January 2019

				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 GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY		Vy	17	(10)
	DAILY MIDPOINT TEXAS GAS	= 1=1			+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO	DNES	HIGHER OF		TOTAL
Davi		FUEL RETENTION	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZUNE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$3.0700	1.70%	\$0.4190	\$0.0627	\$3.6048	\$3.0550	1.70%	\$0.4190	\$0.0627	\$3.5895	\$3,6048	*****			
2	\$3.0700	1.70%	\$0.4190	\$0.0627	\$3.6048	\$3.0550	1.70%	\$0.4190	\$0.0627	\$3.5895	\$3.6048 \$3.6048	\$3.5895	\$3.6048	0	\$0
3	\$2.6050	1.70%	\$0.4190	\$0.0627	\$3.1318	\$2.6100	1.70%	\$0.4190	\$0.0627	\$3.1368	\$3.1318	\$3.5895	\$3.6048	0	\$0
4	\$2.5250	1.70%	\$0.4190	\$0.0627	\$3.0504	\$2.5000	1.70%	\$0.4190	\$0.0627	\$3.0249	\$3.0504	\$3.1368 \$3.0249	\$3.1368	0	\$0
5	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$3.0605		\$3.0504	0	\$0
6	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$3.0605	\$3.0605 \$3.0605	\$3.0605	0	\$0
7	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$3.0605	\$3.0605 \$3.0605	\$3.0605	0	\$0
8	\$2.5450	1.70%	\$0.4190	\$0.0627	\$3.0707	\$2.5450	1.70%	\$0.4190	\$0.0627	\$3.0707	\$3.0707	\$3.0707	\$3.0605	0	\$0
9	\$2.7650	1.70%	\$0.4190	\$0.0627	\$3.2945	\$2,7450	1.70%	\$0.4190	\$0.0627	\$3.2742	\$3.2945	\$3.2742	\$3.0707	0	\$0
10	\$2.7600	1.70%	\$0.4190	\$0.0627	\$3.2894	\$2.7300	1.70%	\$0,4190	\$0.0627	\$3.2589	\$3.2894	\$3.2589	\$3.2945	0	\$0
11	\$2.7600	1.70%	\$0.4190	\$0.0627	\$3.2894	\$2.7300	1.70%	\$0.4190	\$0.0627	\$3.2589	\$3.2894	\$3.2589	\$3.2894	0	\$0
12	\$2.7350	1.70%	\$0.4190	\$0.0627	\$3.2640	\$2.7150	1.70%	\$0.4190	\$0.0627	\$3.2437	\$3,2640	\$3.2437	\$3.2894	0	\$0
13	\$2.7350	1.70%	\$0.4190	\$0.0627	\$3.2640	\$2.7150	1.70%	\$0.4190	\$0.0627	\$3.2437	\$3.2640	\$3.2437 \$3.2437	\$3.2640	0	\$0
14	\$2.7350	1.70%	\$0.4190	\$0.0627	\$3.2640	\$2,7150	1.70%	\$0.4190	\$0.0627	\$3.2437	\$3.2640	\$3.2437	\$3.2640	Ü	\$0
15	\$3.2650	1.70%	\$0.4190	\$0.0627	\$3.8032	\$3.2950	1.70%	\$0.4190	\$0.0627	\$3.8337	\$3.8032	\$3.8337	\$3.2640 \$3.8337	Ü	\$0
16	\$3.4200	1.70%	\$0.4190	\$0.0627	\$3.9608	\$3.4250	1.70%	\$0.4190	\$0.0627	\$3.9659	\$3.9608	\$3.9659	\$3.9659	Ü	\$0
17	\$3.4900	1.70%	\$0.4190	\$0.0627	\$4.0321	\$3,4750	1.70%	\$0.4190	\$0.0627	\$4.0168	\$4.0321	\$4.0168	\$4.0321	0	\$0
18	\$3.3600	1.70%	\$0.4190	\$0.0627	\$3.8998	\$3.3900	1.70%	\$0.4190	\$0.0627	\$3.9303	\$3.8998	\$3.9303		0	\$0
19	\$3.2350	1.70%	\$0.4190	\$0.0627	\$3.7726	\$3.3000	1.70%	\$0.4190	\$0.0627	\$3.8388	\$3.7726	\$3.8388	\$3.9303	0	\$0
20	\$3.2350	1.70%	\$0.4190	\$0.0627	\$3.7726	\$3.3000	1.70%	\$0,4190	\$0.0627	\$3.8388	\$3.7726	\$3.8388	\$3.8388	Ü	\$0
21	\$3.2350	1.70%	\$0.4190	\$0.0627	\$3.7726	\$3.3000	1.70%	\$0.4190	\$0.0627	\$3.8388	\$3.7726	\$3.8388	\$3.8388	0	\$0
22	\$3.2350	1.70%	\$0.4190	\$0.0627	\$3,7726	\$3.3000	1.70%	\$0,4190	\$0.0627	\$3.8388	\$3.7726	\$3.8388	\$3.8388	0	\$0
23	\$2.9650	1.70%	\$0.4190	\$0.0627	\$3.4980	\$2.9400	1.70%	\$0.4190	\$0.0627	\$3.4725	\$3,4980	\$3.4725	\$3.8388	0	\$0
24	\$3.0500	1.70%	\$0.4190	\$0.0627	\$3.5844	\$3.0650	1.70%	\$0.4190	\$0.0627	\$3.5997	\$3.5844	\$3.5997	\$3.4980	0	\$0
25	\$3.0600	1.70%	\$0.4190	\$0.0627	\$3.5946	\$3.1000	1.70%	\$0.4190	\$0.0627	\$3.6353	\$3.5946	\$3.6353	\$3.5997	O	\$0
26	\$3.0450	1.70%	\$0.4190	\$0.0627	\$3.5794	\$3.0700	1.70%	\$0.4190	\$0.0627	\$3.6048	\$3.5794	\$3.6048	\$3.6353	0	\$0
27	\$3.0450	1.70%	\$0.4190	\$0.0627	\$3.5794	\$3.0700	1.70%	\$0.4190	\$0.0627	\$3.6048	\$3.5794	\$3.6048	\$3.6048	0	\$0
28	\$3.0450	1.70%	\$0.4190	\$0.0627	\$3.5794	\$3.0700	1.70%	\$0.4190	\$0.0627	\$3.6048	\$3.5794		\$3.6048	0	\$0
29	\$3.0050	1.70%	\$0.4190	\$0.0627	\$3.5387	\$3.4450	1.70%	\$0.4190	\$0.0627	\$3.9863	\$3.5794 \$3.5387	\$3.6048	\$3.6048	0	\$0
30	\$2.9200	1.70%	\$0,4190	\$0.0627	\$3.4522	\$3.5950	1.70%	\$0.4190	\$0.0627	\$4.1389		\$3.9863	\$3.9863	0	\$0
31	\$2.8800	1.70%	\$0.4190	\$0.0627	\$3.4115	\$3.5200	1.70%	\$0.4190	\$0.0627	\$4.0626	\$3.4522 \$3.4115	\$4.1389	\$4.1389	8,826	\$36,530
				23,000	30.1110	90.0200	1.7076	ψ0.413U	φ0.0027	\$4.0626	33.4115	\$4.0626	\$4.0626	0	\$0
														8,826	\$36,530

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub February 2019

		CALCULATION	OF DAILY	DAI TGT ZONE 1	[CALCULATION	OF DAILY	DAI TGT ZONE	4					
	(1) PLATTS GAS DAILY MIDPOINT	(2)	(3)	(4)	(5) (Col. 1/(1-Col.2))	(6) PLATTS GAS	(7)	(8)	(9)	(10) (Col. 6/(1-Col.7))	(11) DAILY	(12) DAI	(13)	(14)	(15)
	TEXAS GAS	CHE	NINIO	NINO	+ Col. 3 + Col. 4	DAILY MIDPOINT	2			+ Col. 8 + Col. 9	FOR ZO	ONES	HIGHER OF		TOTAL
Day		FUEL RETENTION	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE	KETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.7150	1.70%	\$0.4190	\$0.0627	\$3.2437	\$2.7050	1.70%	\$0.4190	\$0.0627	\$3.2335	\$3.2437	\$3.2335	\$3.2437	0	\$0
2	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3.0453	\$3.0402	\$3.0453	ŏ	\$0
3	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3,0453	\$3.0402	\$3.0453	ő	\$0
4	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3.0453	\$3.0402	\$3.0453	ő	\$0
5	\$2.4550	1.70%	\$0.4190	\$0.0627	\$2.9792	\$2.4550	1.70%	\$0.4190	\$0.0627	\$2.9792	\$2.9792	\$2,9792	\$2.9792	0	\$0
6	\$2.4700	1.70%	\$0.4190	\$0.0627	\$2.9944	\$2.4750	1.70%	\$0.4190	\$0.0627	\$2.9995	\$2.9944	\$2.9995	\$2.9995	ő	\$0
7	\$2.4900	1.70%	\$0.4190	\$0.0627	\$3.0148	\$2.5000	1.70%	\$0.4190	\$0.0627	\$3.0249	\$3.0148	\$3.0249	\$3.0249	ő	\$0
8	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$2.5800	1.70%	\$0.4190	\$0.0627	\$3.1063	\$3.0605	\$3,1063	\$3.1063	ő	\$0
9	\$2.4900	1.70%	\$0.4190	\$0.0627	\$3.0148	\$2.5000	1.70%	\$0.4190	\$0.0627	\$3.0249	\$3.0148	\$3.0249	\$3.0249	o o	\$0
10	\$2.4900	1.70%	\$0.4190	\$0.0627	\$3.0148	\$2.5000	1.70%	\$0.4190	\$0.0627	\$3.0249	\$3.0148	\$3.0249	\$3.0249	ő	\$0
11	\$2.4900	1.70%	\$0.4190	\$0.0627	\$3.0148	\$2.5000	1.70%	\$0.4190	\$0.0627	\$3.0249	\$3.0148	\$3.0249	\$3.0249	Õ	\$0
12	\$2.5950	1.70%	\$0.4190	\$0.0627	\$3.1216	\$2.6100	1.70%	\$0.4190	\$0.0627	\$3.1368	\$3.1216	\$3,1368	\$3.1368	ő	\$0
13	\$2.5750	1.70%	\$0.4190	\$0.0627	\$3.1012	\$2.5900	1.70%	\$0.4190	\$0.0627	\$3.1165	\$3.1012	\$3,1165	\$3,1165	ŏ	\$0
14	\$2.5050	1.70%	\$0.4190	\$0.0627	\$3.0300	\$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3.0300	\$3.0402	\$3.0402	Õ	\$0
15	\$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$2.5400	1.70%	\$0.4190	\$0.0627	\$3.0656	\$3.0402	\$3.0656	\$3.0656	ő	\$0
16	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5650	1.70%	\$0.4190	\$0.0627	\$3.0911	\$3.0453	\$3.0911	\$3.0911	ő	\$0
17	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5650	1.70%	\$0.4190	\$0.0627	\$3.0911	\$3.0453	\$3.0911	\$3.0911	ñ	\$0
18	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5650	1.70%	\$0.4190	\$0.0627	\$3.0911	\$3.0453	\$3.0911	\$3.0911	ő	\$0
19	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453	\$2.5650	1.70%	\$0.4190	\$0.0627	\$3.0911	\$3.0453	\$3.0911	\$3.0911	o o	\$0
20	\$2.6000	1.70%	\$0.4190	\$0.0627	\$3.1267	\$2.6400	1.70%	\$0.4190	\$0.0627	\$3.1674	\$3,1267	\$3,1674	\$3.1674	ő	\$0
21	\$2.6200	1.70%	\$0.4190	\$0.0627	\$3.1470	\$2.6300	1.70%	\$0.4190	\$0.0627	\$3.1572	\$3.1470	\$3.1572	\$3.1572	Ô	\$0
22	\$2.6250	1.70%	\$0.4190	\$0.0627	\$3.1521	\$2.6450	1.70%	\$0.4190	\$0.0627	\$3.1724	\$3.1521	\$3,1724	\$3.1724	ő	\$0
23	\$2.6300	1.70%	\$0.4190	\$0.0627	\$3.1572	\$2.6450	1.70%	\$0.4190	\$0.0627	\$3.1724	\$3.1572	\$3,1724	\$3.1724	ň	\$0
24	\$2.6300	1.70%	\$0.4190	\$0.0627	\$3.1572	\$2.6450	1.70%	\$0.4190	\$0.0627	\$3.1724	\$3.1572	\$3.1724	\$3.1724	0	\$0
25	\$2.6300	1.70%	\$0.4190	\$0.0627	\$3.1572	\$2.6450	1.70%	\$0.4190	\$0.0627	\$3.1724	\$3.1572	\$3,1724	\$3,1724	0	\$0
26	\$2.7500	1.70%	\$0.4190	\$0.0627	\$3.2793	\$2.8300	1.70%	\$0.4190	\$0.0627	\$3.3606	\$3.2793	\$3.3606	\$3.3606	ň	\$0
27	\$2.8500	1.70%	\$0.4190	\$0.0627	\$3.3810	\$2.9400	1.70%	\$0.4190	\$0.0627	\$3.4725	\$3,3810	\$3,4725	\$3,4725	ñ	\$0
28	\$2.8100	1.70%	\$0.4190	\$0.0627	\$3.3403	\$2.8600	1.70%	\$0.4190	\$0.0627	\$3.3912	\$3.3403	\$3.3912	\$3.3912	ň	\$0
															40
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub March 2019

			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 GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY		17	77	(10)
	DAILY MIDPOINT			201.12	+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO	ONES	HIGHER OF		TOTAL
_	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
	*****				V 4 A . D 100 A . A . D 100 Y	9649-7100-717-717									3011 10 X 001. 14
1	\$2.8450	1.70%	\$0.4190	\$0.0627	\$3.3759	\$2.8550	1.70%	\$0.4190	\$0.0627	\$3.3861	\$3.3759	\$3.3861	\$3.3861	0	\$0
2	\$3.1900	1.70%	\$0.4190	\$0.0627	\$3.7269	\$3.7250	1.70%	\$0.4190	\$0.0627	\$4.2711	\$3.7269	\$4.2711	\$4.2711	Ō	\$0
3	\$3.1900	1.70%	\$0.4190	\$0.0627	\$3.7269	\$3.7250	1.70%	\$0.4190	\$0.0627	\$4.2711	\$3.7269	\$4.2711	\$4.2711	0	\$0
4	\$3.1900	1.70%	\$0.4190	\$0.0627	\$3.7269	\$3.7250	1.70%	\$0.4190	\$0.0627	\$4.2711	\$3.7269	\$4.2711	\$4.2711	Ö	\$0
5	\$4.1650	1.70%	\$0.4190	\$0.0627	\$4.7187	\$4.0600	1.70%	\$0.4190	\$0.0627	\$4.6119	\$4.7187	\$4.6119	\$4.7187	0	\$0
9	\$2.9850	1.70%	\$0.4190	\$0.0627	\$3.5183	\$3.0650	1.70%	\$0.4190	\$0.0627	\$3.5997	\$3.5183	\$3.5997	\$3.5997	0	\$0
,	\$2.8850	1.70%	\$0.4190	\$0.0627	\$3.4166	\$2.9450	1.70%	\$0.4190	\$0.0627	\$3.4776	\$3.4166	\$3.4776	\$3.4776	0	\$0
٥	\$2.8250 \$2.7900	1.70%	\$0.4190	\$0.0627	\$3.3556	\$2.8150	1.70%	\$0.4190	\$0.0627	\$3.3454	\$3.3556	\$3.3454	\$3.3556	0	\$0
10		1.70%	\$0.4190	\$0.0627	\$3.3200	\$2.7900	1.70%	\$0.4190	\$0.0627	\$3.3200	\$3.3200	\$3.3200	\$3.3200	0	\$0
	\$2.7900	1.70%	\$0.4190	\$0.0627	\$3.3200	\$2.7900	1.70%	\$0.4190	\$0.0627	\$3.3200	\$3.3200	\$3.3200	\$3.3200	0	\$0
11	\$2.7900	1.70%	\$0.4190	\$0.0627	\$3.3200	\$2.7900	1.70%	\$0.4190	\$0.0627	\$3.3200	\$3.3200	\$3.3200	\$3.3200	0	\$0
12 13	\$2.6700 \$2.6550	1.70%	\$0.4190	\$0.0627	\$3.1979	\$2.6150	1.70%	\$0.4190	\$0.0627	\$3.1419	\$3.1979	\$3.1419	\$3.1979	0	\$0
14		1.70%	\$0.4190	\$0.0627	\$3.1826	\$2.6350	1.70%	\$0.4190	\$0.0627	\$3.1623	\$3.1826	\$3.1623	\$3.1826	0	\$0
15	\$2.6800 \$2.7400	1.70% 1.70%	\$0.4190 \$0.4190	\$0.0627	\$3.2080	\$2.6600	1.70%	\$0.4190	\$0.0627	\$3.1877	\$3.2080	\$3.1877	\$3.2080	0	\$0
16	\$2.7200	1.70%		\$0.0627	\$3.2691	\$2.7300	1.70%	\$0.4190	\$0.0627	\$3.2589	\$3.2691	\$3.2589	\$3.2691	0	\$0
17	\$2.7200	1.70%	\$0.4190	\$0.0627	\$3.2487	\$2.6950	1.70%	\$0.4190	\$0.0627	\$3.2233	\$3.2487	\$3.2233	\$3.2487	0	\$0
18	\$2.7200	1.70%	\$0.4190 \$0.4190	\$0.0627 \$0.0627	\$3.2487 \$3.2487	\$2.6950	1.70%	\$0.4190	\$0.0627	\$3.2233	\$3.2487	\$3.2233	\$3.2487	0	\$0
19	\$2.7150	1.70%	\$0.4190	\$0.0627	\$3.2487 \$3.2437	\$2.6950	1.70%	\$0.4190	\$0.0627	\$3.2233	\$3.2487	\$3.2233	\$3.2487	0	\$0
20	\$2.7500	1.70%	\$0.4190	\$0.0627	\$3.2437 \$3.2793	\$2.7050 \$2.7300	1.70%	\$0.4190	\$0.0627	\$3.2335	\$3.2437	\$3.2335	\$3.2437	0	\$0
21	\$2.7150	1.70%	\$0.4190	\$0.0627	\$3.2437		1.70%	\$0.4190	\$0.0627	\$3.2589	\$3.2793	\$3.2589	\$3.2793	0	\$0
22	\$2.6950	1.70%	\$0.4190	\$0.0627	\$3.2437 \$3.2233	\$2.6800	1.70%	\$0.4190	\$0.0627	\$3.2080	\$3.2437	\$3.2080	\$3.2437	0	\$0
23	\$2.6200	1.70%	\$0.4190	\$0.0627	\$3.2233 \$3.1470	\$2.6500	1.70%	\$0.4190	\$0.0627	\$3.1775	\$3.2233	\$3.1775	\$3.2233	0	\$0
24	\$2.6200	1.70%	\$0.4190	\$0.0627	\$3.1470 \$3.1470	\$2.5950	1.70%	\$0.4190	\$0.0627	\$3.1216	\$3.1470	\$3.1216	\$3.1470	0	\$0
25	\$2.6200	1.70%	\$0.4190	\$0.0627	\$3.1470	\$2.5950 \$2.5950	1.70%	\$0.4190	\$0.0627	\$3.1216	\$3.1470	\$3.1216	\$3.1470	0	\$0
26	\$2.6350	1.70%	\$0.4190	\$0.0627	\$3.1470 \$3.1623	\$2.6250	1.70%	\$0.4190	\$0.0627	\$3.1216	\$3.1470	\$3.1216	\$3.1470	0	\$0
27	\$2.6200	1.70%	\$0.4190	\$0.0627	\$3.1470	\$2.5900	1.70%	\$0.4190	\$0.0627	\$3.1521	\$3.1623	\$3.1521	\$3.1623	0	\$0
28	\$2.5200	1.70%	\$0.4190	\$0.0627	\$3.0453		1.70%	\$0.4190	\$0.0627	\$3.1165	\$3.1470	\$3.1165	\$3.1470	0	\$0
29	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0453 \$3.0555	\$2.5100 \$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0351	\$3.0453	\$3.0351	\$3.0453	0	\$0
30	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0555 \$3.0555	\$2.5150 \$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3.0555	\$3.0402	\$3.0555	0	\$0
31	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0555	\$2.5150 \$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3.0555	\$3.0402	\$3.0555	0	\$0
-	\$2.5500	1.7076	WU.4130	φ0.0027	\$3.0333	\$2.5150	1.70%	\$0.4190	\$0.0627	\$3.0402	\$3.0555	\$3.0402	\$3.0555	0	\$0
														1510	
													9	0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub April 2019

		CALCULATION	OF DAILY	DAI TGT ZONE 1			CALCULATION	OF DAILY	DAI TGT ZONE	1					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY				
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.5450	1.70%	\$0.4190	\$0.0627	\$3.0707	\$2.5400	1.70%	\$0.4190	\$0.0627	\$3.0656	\$3,0707	\$3.0656	\$3.0707	0	\$0
2	\$2.6000	1.70%	\$0.4190	\$0.0627	\$3,1267	\$2.5700	1.70%	\$0.4190	\$0.0627	\$3.0961	\$3,1267	\$3.0961	\$3.1267	0	\$0
3	\$2.5550	1.70%	\$0.4190	\$0.0627	\$3.0809	\$2.5350	1.70%	\$0.4190	\$0.0627	\$3.0605	\$3.0809	\$3.0605	\$3.0809	ō	\$0
4	\$2.5100	1.70%	\$0.4190	\$0.0627	\$3.0351	\$2.5500	1.70%	\$0.4190	\$0.0627	\$3.0758	\$3.0351	\$3.0758	\$3.0758	0	\$0
5	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0555	\$2.5050	1.70%	\$0.4190	\$0.0627	\$3.0300	\$3.0555	\$3.0300	\$3.0555	0	\$0
6	\$2,4700	1.70%	\$0.4190	\$0.0627	\$2.9944	\$2.4450	1.70%	\$0.4190	\$0.0627	\$2.9690	\$2.9944	\$2.9690	\$2.9944	0	\$0
7	\$2,4700	1.70%	\$0.4190	\$0.0627	\$2.9944	\$2.4450	1.70%	\$0.4190	\$0.0627	\$2.9690	\$2.9944	\$2.9690	\$2.9944	0	\$0 \$0 \$0
8	\$2,4700	1.70%	\$0.4190	\$0.0627	\$2.9944	\$2.4450	1.70%	\$0.4190	\$0.0627	\$2.9690	\$2.9944	\$2.9690	\$2,9944	0	\$0
9	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0555	\$2.5250	1.70%	\$0.4190	\$0.0627	\$3.0504	\$3.0555	\$3.0504	\$3.0555	0	\$0 \$0
10	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0555	\$2.5300	1.70%	\$0.4190	\$0.0627	\$3.0555	\$3.0555	\$3.0555	\$3.0555	0	\$0
11	\$2.5600	1.70%	\$0.4190	\$0.0627	\$3.0860	\$2.5250	1.70%	\$0.4190	\$0.0627	\$3.0504	\$3.0860	\$3.0504	\$3.0860	0	\$0
12	\$2.5400	1.70%	\$0.4190	\$0.0627	\$3.0656	\$2.5050	1.70%	\$0.4190	\$0.0627	\$3.0300	\$3.0656	\$3.0300	\$3.0656	0	\$0
13	\$2.5050	1.70%	\$0.4190	\$0.0627	\$3.0300	\$2.4650	1.70%	\$0.4190	\$0.0627	\$2.9893	\$3.0300	\$2.9893	\$3.0300	0	\$0
14	\$2.5050	1.70%	\$0.4190	\$0.0627	\$3.0300	\$2.4650	1.70%	\$0.4190	\$0.0627	\$2.9893	\$3.0300	\$2.9893	\$3.0300	0	\$0
15	\$2.5050	1.70%	\$0.4190	\$0.0627	\$3.0300	\$2.4650	1.70%	\$0.4190	\$0.0627	\$2.9893	\$3.0300	\$2.9893	\$3.0300	0	\$0
16	\$2.4450	1.70%	\$0.4190	\$0.0627	\$2.9690	\$2.4500	1.70%	\$0.4190	\$0.0627	\$2.9741	\$2.9690	\$2.9741	\$2.9741	0	\$0 \$0 \$0
17	\$2.4250	1.70%	\$0.4190	\$0.0627	\$2.9486	\$2.4350	1.70%	\$0.4190	\$0.0627	\$2.9588	\$2.9486	\$2.9588	\$2.9588	0	\$0
18	\$2.3800	1.70%	\$0.4190	\$0.0627	\$2.9029	\$2.3950	1.70%	\$0.4190	\$0.0627	\$2.9181	\$2.9029	\$2.9181	\$2.9181	0	\$0
19	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.3100	1.70%	\$0.4190	\$0.0627	\$2.8316	\$2.8367	\$2.8316	\$2.8367	0	\$0
20	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.3100	1.70%	\$0.4190	\$0.0627	\$2.8316	\$2.8367	\$2.8316	\$2.8367	0	\$0
21	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.3100	1.70%	\$0.4190	\$0.0627	\$2.8316	\$2.8367	\$2.8316	\$2.8367	0	\$0 \$0
22	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.3100	1.70%	\$0.4190	\$0.0627	\$2.8316	\$2.8367	\$2.8316	\$2.8367	0	\$0
23	\$2.3450	1.70%	\$0.4190	\$0.0627	\$2.8673	\$2.2500	1.70%	\$0.4190	\$0.0627	\$2.7706	\$2.8673	\$2.7706	\$2.8673	0	\$0 \$0
24	\$2.2550	1.70%	\$0.4190	\$0.0627	\$2.7757	\$2.1950	1.70%	\$0.4190	\$0.0627	\$2.7147	\$2.7757	\$2.7147	\$2.7757	0	\$0
25	\$2.2800	1.70%	\$0.4190	\$0.0627	\$2.8011	\$2.2050	1.70%	\$0.4190	\$0.0627	\$2.7248	\$2.8011	\$2.7248	\$2.8011	0	\$0
26	\$2.2550	1.70%	\$0.4190	\$0.0627	\$2.7757	\$2.1900	1.70%	\$0.4190	\$0.0627	\$2.7096	\$2.7757	\$2.7096	\$2.7757	0	\$0
27	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.2050	1.70%	\$0.4190	\$0.0627	\$2.7248	\$2.8367	\$2.7248	\$2.8367	0	\$0
28	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.2050	1.70%	\$0.4190	\$0.0627	\$2.7248	\$2.8367	\$2.7248	\$2.8367	0	\$0
29	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.2050	1.70%	\$0.4190	\$0.0627	\$2.7248	\$2.8367	\$2.7248	\$2.8367	0	\$0
30	\$2.3600	1.70%	\$0.4190	\$0.0627	\$2.8825	\$2.3100	1.70%	\$0.4190	\$0.0627	\$2.8316	\$2.8825	\$2.8316	\$2.8825	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub May 2019

				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 GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY		1000	(,	(10)
	DAILY MIDPOINT	51151	*****		+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR 20	DNES	HIGHER OF		TOTAL
D	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.3700	1.70%	\$0,4190	\$0.0627	\$2.8927	\$2.3400	1.70%	\$0.4190	\$0.0627	\$2.8622	*****				
2	\$2,4100	1.70%	\$0.4190	\$0.0627	\$2.9334	\$2.3900	1.70%	\$0.4190	\$0.0627	\$2.8622 \$2.9130	\$2.8927	\$2.8622	\$2.8927	0	\$0
3	\$2.3850	1.70%	\$0.4190	\$0.0627	\$2.9079	\$2.3400	1.70%	\$0.4190	\$0.0627	\$2.8622	\$2.9334	\$2.9130	\$2.9334	0	\$0
4	\$2.3250	1.70%	\$0,4190	\$0.0627	\$2.8469	\$2.2850	1.70%	\$0.4190	\$0.0627	\$2.8622 \$2.8062	\$2.9079	\$2.8622	\$2.9079	0	\$0
5	\$2.3250	1.70%	\$0.4190	\$0.0627	\$2.8469	\$2,2850	1,70%	\$0.4190	\$0.0627		\$2.8469	\$2.8062	\$2.8469	0	\$0
6	\$2.3250	1.70%	\$0.4190	\$0.0627	\$2.8469	\$2.2850	1.70%	\$0.4190	\$0.0627	\$2.8062	\$2.8469	\$2.8062	\$2.8469	0	\$0
7	\$2.3100	1.70%	\$0.4190	\$0.0627	\$2.8316	\$2.2900	1.70%	\$0.4190	\$0.0627	\$2.8062 \$2.8113	\$2.8469	\$2.8062	\$2.8469	0	\$0
8	\$2.3050	1.70%	\$0.4190	\$0.0627	\$2.8266	\$2.2900	1,70%	\$0.4190	\$0.0627	\$2.8113	\$2.8316	\$2.8113	\$2.8316	0	\$0
9	\$2.3450	1.70%	\$0,4190	\$0.0627	\$2.8673	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.8266	\$2.8113	\$2.8266	0	\$0
10	\$2.3400	1.70%	\$0.4190	\$0.0627	\$2.8622	\$2.2950	1.70%	\$0.4190	\$0.0627		\$2.8673	\$2.8367	\$2.8673	0	\$0
11	\$2.3500	1,70%	\$0.4190	\$0.0627	\$2.8723	\$2.3050	1.70%	\$0.4190	\$0.0627	\$2.8164	\$2.8622	\$2.8164	\$2.8622	0	\$0
12	\$2.3500	1.70%	\$0,4190	\$0.0627	\$2.8723	\$2.3050	1.70%	\$0.4190	\$0.0627	\$2.8266	\$2.8723	\$2.8266	\$2.8723	0	\$0
13	\$2,3500	1.70%	\$0.4190	\$0.0627	\$2.8723	\$2.3050	1.70%	\$0.4190		\$2.8266	\$2.8723	\$2.8266	\$2.8723	0	\$0
14	\$2,4300	1.70%	\$0.4190	\$0.0627	\$2.9537	\$2.3900	1.70%	\$0.4190	\$0.0627	\$2.8266	\$2.8723	\$2.8266	\$2.8723	0	\$0
15	\$2.4100	1.70%	\$0.4190	\$0.0627	\$2.9334	\$2.3750	1.70%	\$0.4190	\$0.0627	\$2.9130	\$2.9537	\$2.9130	\$2.9537	0	\$0
16	\$2.3750	1.70%	\$0.4190	\$0.0627	\$2.8978	\$2.3200	1.70%		\$0.0627	\$2.8978	\$2.9334	\$2.8978	\$2.9334	0	\$0
17	\$2.3750	1.70%	\$0.4190	\$0.0627	\$2.8978	\$2.3200	1.70%	\$0.4190	\$0.0627	\$2.8418	\$2.8978	\$2.8418	\$2.8978	0	\$0
18	\$2.3950	1.70%	\$0.4190	\$0.0627	\$2.9181	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8418	\$2.8978	\$2.8418	\$2.8978	0	\$0
19	\$2.3950	1,70%	\$0.4190	\$0.0627	\$2.9181	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8571	\$2.9181	\$2.8571	\$2.9181	0	\$0
20	\$2.3950	1.70%	\$0.4190	\$0.0627	\$2.9181	\$2.3350 \$2.3350		\$0.4190	\$0.0627	\$2.8571	\$2.9181	\$2.8571	\$2.9181	0	\$0
21	\$2.4600	1.70%	\$0.4190	\$0.0627	\$2.9842		1.70%	\$0.4190	\$0.0627	\$2.8571	\$2.9181	\$2.8571	\$2.9181	0	\$0
22	\$2,4000	1.70%	\$0.4190	\$0.0627	\$2.9232	\$2.4000 \$2.3400	1.70%	\$0.4190	\$0.0627	\$2.9232	\$2.9842	\$2.9232	\$2.9842	0	\$0
23	\$2.3450	1.70%	\$0.4190	\$0.0627	\$2.8673	\$2.2700	1.70%	\$0.4190	\$0.0627	\$2.8622	\$2.9232	\$2.8622	\$2.9232	0	\$0
24	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8571	\$2.2500	1.70%	\$0.4190	\$0.0627	\$2.7910	\$2.8673	\$2.7910	\$2.8673	0	\$0
25	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8571	\$2,2300	1.70%	\$0.4190	\$0.0627	\$2.7706	\$2.8571	\$2.7706	\$2.8571	0	\$0
26	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8571		1.70%	\$0.4190	\$0.0627	\$2.7503	\$2.8571	\$2.7503	\$2.8571	0	\$0
27	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8571	\$2.2300 \$2.2300	1.70%	\$0.4190	\$0.0627	\$2.7503	\$2.8571	\$2.7503	\$2.8571	0	\$0
28	\$2.3350	1.70%	\$0.4190	\$0.0627	\$2.8571		1.70%	\$0.4190	\$0.0627	\$2.7503	\$2.8571	\$2.7503	\$2.8571	0	\$0
29	\$2.3550	1.70%	\$0.4190	\$0.0627	\$2.8774	\$2.2300 \$2.2850	1.70%	\$0.4190	\$0.0627	\$2.7503	\$2.8571	\$2.7503	\$2.8571	0	\$0
30	\$2.4150	1.70%	\$0.4190	\$0.0627	\$2.9385		1.70%	\$0.4190	\$0.0627	\$2.8062	\$2.8774	\$2.8062	\$2.8774	0	\$0
31	\$2.3650	1.70%	\$0.4190	\$0.0627	\$2.9385 \$2.8876	\$2.3600	1.70%	\$0.4190	\$0.0627	\$2.8825	\$2.9385	\$2.8825	\$2.9385	0	\$0
٥.	Ψ2.5050	1.70%	JU.413U	3 0.0027	⊉∠.00/ 0	\$2.2900	1.70%	\$0.4190	\$0.0627	\$2.8113	\$2.8876	\$2.8113	\$2.8876	0	\$0
														0	**
														U	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub June 2019

_		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 GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY				
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
	\$2.2650	1.70%	\$0.4190	\$0.0627	\$2.7859	\$2.1950	1.70%	\$0.4190	\$0.0627	\$2,7147	\$2.7859	\$2,7147	60 7050	_	
2	\$2.2650	1.70%	\$0.4190	\$0.0627	\$2.7859	\$2.1950	1.70%	\$0.4190	\$0.0627	\$2.7147	\$2.7859	\$2.7147	\$2.7859 \$2.7859	0	\$0
2	\$2.2650	1.70%	\$0.4190	\$0.0627	\$2.7859	\$2.1950	1.70%	\$0.4190	\$0.0627	\$2,7147	\$2.7859	\$2.7147	\$2.7859	0	\$0
1	\$2.2100	1.70%	\$0.4190	\$0.0627	\$2.7299	\$2.1450	1.70%	\$0.4190	\$0.0627	\$2.6638	\$2.7299	\$2.6638	\$2.7299	0	\$0 \$0
5	\$2.2000	1.70%	\$0.4190	\$0.0627	\$2.7197	\$2,1400	1.70%	\$0.4190	\$0.0627	\$2.6587	\$2.7197	\$2.6587	\$2.7197	0	\$0 \$0
6	\$2.1800	1.70%	\$0.4190	\$0.0627	\$2.6994	\$2,1600	1.70%	\$0.4190	\$0.0627	\$2.6791	\$2.6994	\$2.6791	\$2.6994	0	\$0 \$0
7	\$2.1700	1.70%	\$0.4190	\$0.0627	\$2.6892	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$2.6892	\$2.6536	\$2.6892	0	\$0 \$0
Ŕ	\$2.1450	1.70%	\$0.4190	\$0.0627	\$2.6638	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$2.6638	\$2.5468	\$2.6638	0	\$0 \$0
ă	\$2.1450	1.70%	\$0.4190	\$0.0627	\$2.6638	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$2.6638	\$2.5468	\$2.6638	0	\$0
10	\$2.1450	1,70%	\$0.4190	\$0.0627	\$2.6638	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$2.6638	\$2.5468	\$2.6638	ŏ	\$0
11	\$2.1350	1.70%	\$0,4190	\$0.0627	\$2.6536	\$2.0900	1.70%	\$0.4190	\$0.0627	\$2.6078	\$2.6536	\$2.6078	\$2.6536	0	\$0
12	\$2,1500	1.70%	\$0.4190	\$0.0627	\$2.6689	\$2,1050	1.70%	\$0.4190	\$0.0627	\$2.6231	\$2.6689	\$2.6231	\$2.6689	ů	\$0
13	\$2.1600	1.70%	\$0.4190	\$0.0627	\$2.6791	\$2.1050	1.70%	\$0.4190	\$0.0627	\$2.6231	\$2.6791	\$2.6231	\$2.6791	ő	\$0
14	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$2,0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$2.6536	\$2.5570	\$2.6536	ō	\$0
15	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$1.9900	1.70%	\$0.4190	\$0.0627	\$2.5061	\$2.6536	\$2.5061	\$2.6536	ō	\$0
16	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$1.9900	1.70%	\$0.4190	\$0.0627	\$2.5061	\$2.6536	\$2.5061	\$2.6536	Ö	\$0
17	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$1.9900	1.70%	\$0.4190	\$0.0627	\$2.5061	\$2.6536	\$2.5061	\$2.6536	0	\$0
18	\$2.1900	1.70%	\$0.4190	\$0.0627	\$2.7096	\$2.1650	1.70%	\$0.4190	\$0.0627	\$2.6841	\$2.7096	\$2.6841	\$2.7096	0	\$0
19	\$2.1950	1.70%	\$0.4190	\$0.0627	\$2.7147	\$2.1400	1.70%	\$0.4190	\$0.0627	\$2.6587	\$2.7147	\$2.6587	\$2.7147	0	\$0
20	\$2.1700	1.70%	\$0.4190	\$0.0627	\$2.6892	\$2.0950	1.70%	\$0.4190	\$0.0627	\$2.6129	\$2.6892	\$2.6129	\$2.6892	0	\$0
21	\$2.1100	1.70%	\$0.4190	\$0.0627	\$2.6282	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$2.6282	\$2.5570	\$2.6282	0	\$0
22	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9000	1.70%	\$0.4190	\$0.0627	\$2.4146	\$2.4959	\$2.4146	\$2.4959	0	\$0
23	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9000	1.70%	\$0.4190	\$0.0627	\$2.4146	\$2.4959	\$2.4146	\$2.4959	0	\$0
24	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9000	1.70%	\$0.4190	\$0.0627	\$2.4146	\$2.4959	\$2.4146	\$2.4959	0	\$0
25	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$1.9900	1.70%	\$0.4190	\$0.0627	\$2.5061	\$2.5468	\$2.5061	\$2.5468	0	\$0
26	\$2.0700	1.70%	\$0.4190	\$0.0627	\$2.5875	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$2.5875	\$2.5570	\$2.5875	0	\$0
27	\$2.1150	1.70%	\$0.4190	\$0.0627	\$2.6333	\$2.0600	1.70%	\$0.4190	\$0.0627	\$2.5773	\$2.6333	\$2.5773	\$2.6333	0	\$0
28	\$2.1050	1.70%	\$0.4190	\$0.0627	\$2.6231	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.6231	\$2.5621	\$2.6231	0	\$0
29	\$2.1050	1.70%	\$0.4190	\$0.0627	\$2.6231	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.6231	\$2.5621	\$2.6231	0	\$0
30	\$2.1050	1.70%	\$0.4190	\$0.0627	\$2.6231	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.6231	\$2.5621	\$2.6231	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub July 2019

		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 GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY				
	DAILY MIDPOINT	NAC 272 000	20-4-20-5	N 900 520	+ Col. 3 + Col. 4	DAILY MIDPOINT	1 00-00-00-00-00-00-00-00-00-00-00-00-00-		SEC MON	+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.1550	1.70%	\$0.4190	\$0.0627	\$2.6740	\$2.0750	1.70%	\$0.4190	\$0.0627	\$2.5926	\$2.6740	\$2.5926	\$2,6740	0	\$0
2	\$2.0850	1.70%	\$0.4190	\$0.0627	\$2.6028	\$2.0350	1.70%	\$0.4190	\$0.0627	\$2.5519	\$2.6028	\$2.5519	\$2.6028	ō	\$0
3	\$2.0600	1.70%	\$0.4190	\$0.0627	\$2.5773	\$2.0200	1.70%	\$0.4190	\$0.0627	\$2.5366	\$2.5773	\$2.5366	\$2.5773	Ô	\$0
4	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.5570	\$2,4959	\$2.5570	0	\$0
5	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2,4959	\$2.5570	\$2,4959	\$2.5570	0	\$0
6	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2,4959	\$2.5570	\$2.4959	\$2.5570	ō	\$0 \$0
7	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2,4959	\$2.5570	\$2.4959	\$2.5570	ō	\$0
8	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.5570	\$2.4959	\$2.5570	0	\$0
9	\$2,1950	1.70%	\$0.4190	\$0.0627	\$2.7147	\$2.1050	1.70%	\$0.4190	\$0.0627	\$2.6231	\$2.7147	\$2.6231	\$2,7147	0	\$0
10	\$2.2150	1.70%	\$0.4190	\$0.0627	\$2.7350	\$2.1300	1.70%	\$0.4190	\$0.0627	\$2.6485	\$2.7350	\$2.6485	\$2.7350	0	\$0
11	\$2.3500	1.70%	\$0.4190	\$0.0627	\$2.8723	\$2.3050	1.70%	\$0.4190	\$0.0627	\$2.8266	\$2.8723	\$2.8266	\$2.8723	0	\$0 \$0 \$0 \$0
12	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.3150	1.70%	\$0.4190	\$0.0627	\$2.8367	\$2.8367	\$2.8367	\$2.8367	0	\$0
13	\$2.2800	1.70%	\$0.4190	\$0.0627	\$2.8011	\$2.2700	1.70%	\$0.4190	\$0.0627	\$2.7910	\$2.8011	\$2.7910	\$2.8011	0	\$0
14	\$2.2800	1.70%	\$0.4190	\$0.0627	\$2.8011	\$2.2700	1.70%	\$0.4190	\$0.0627	\$2.7910	\$2.8011	\$2.7910	\$2.8011	0	\$0
15	\$2.2800	1.70%	\$0.4190	\$0.0627	\$2.8011	\$2.2700	1.70%	\$0.4190	\$0.0627	\$2.7910	\$2.8011	\$2.7910	\$2.8011	0	\$0
16	\$2.2450	1.70%	\$0.4190	\$0.0627	\$2.7655	\$2.2700	1.70%	\$0.4190	\$0.0627	\$2.7910	\$2.7655	\$2.7910	\$2.7910	0	\$0
17	\$2.2100	1.70%	\$0.4190	\$0.0627	\$2.7299	\$2.2000	1.70%	\$0.4190	\$0.0627	\$2.7197	\$2.7299	\$2.7197	\$2.7299	0	\$0 \$0 \$0
18	\$2.2200	1.70%	\$0.4190	\$0.0627	\$2.7401	\$2.2000	1.70%	\$0.4190	\$0.0627	\$2.7197	\$2.7401	\$2.7197	\$2.7401	0	\$0
19	\$2.2150	1.70%	\$0.4190	\$0.0627	\$2.7350	\$2.2000	1.70%	\$0.4190	\$0.0627	\$2.7197	\$2.7350	\$2.7197	\$2.7350	0	\$0
20	\$2.0850	1.70%	\$0.4190	\$0.0627	\$2.6028	\$2.0600	1.70%	\$0.4190	\$0.0627	\$2.5773	\$2.6028	\$2.5773	\$2.6028	0	\$0
21	\$2.0850	1.70%	\$0.4190	\$0.0627	\$2.6028	\$2.0600	1.70%	\$0.4190	\$0.0627	\$2.5773	\$2.6028	\$2.5773	\$2.6028	0	\$0
22	\$2.0850	1.70%	\$0.4190	\$0.0627	\$2.6028	\$2.0600	1.70%	\$0.4190	\$0.0627	\$2.5773	\$2.6028	\$2.5773	\$2.6028	0	\$0
23	\$2.0550	1.70%	\$0.4190	\$0.0627	\$2.5722	\$2.0550	1.70%	\$0.4190	\$0.0627	\$2.5722	\$2.5722	\$2.5722	\$2.5722	0	\$0 \$0 \$0
24	\$2.0350	1.70%	\$0.4190	\$0.0627	\$2.5519	\$2.0400	1.70%	\$0.4190	\$0.0627	\$2.5570	\$2.5519	\$2.5570	\$2.5570	0	\$0
25	\$2.0000	1.70%	\$0.4190	\$0.0627	\$2.5163	\$2.0000	1.70%	\$0.4190	\$0.0627	\$2.5163	\$2.5163	\$2.5163	\$2.5163	0	\$0
26	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$2.0500	1.70%	\$0.4190	\$0.0627	\$2.5672	\$2.5468	\$2.5672	\$2.5672	0	\$0 \$0
27	\$1.9650	1.70%	\$0.4190	\$0.0627	\$2.4807	\$1.9700	1.70%	\$0.4190	\$0.0627	\$2.4858	\$2.4807	\$2.4858	\$2.4858	0	\$0
28	\$1.9650	1.70%	\$0.4190	\$0.0627	\$2.4807	\$1.9700	1.70%	\$0.4190	\$0.0627	\$2.4858	\$2.4807	\$2.4858	\$2.4858	0	\$0
29	\$1.9650	1.70%	\$0.4190		\$2.4807	\$1.9700	1.70%	\$0.4190	\$0.0627	\$2.4858	\$2.4807	\$2.4858	\$2.4858	0	\$0
30	\$1.9750	1.70%	\$0.4190		\$2.4909	\$1.9900	1.70%	\$0.4190	\$0.0627	\$2.5061	\$2.4909	\$2.5061	\$2.5061	0	\$0
31	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.4959	\$2.4959	\$2.4959	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub August 2019

		CALCULATION	OF DAILY	DAI TGT ZONE 1			CALCULATION	OF DAILY	DAI TGT ZONE 4	<u> </u>					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY				
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZC		HIGHER OF		TOTAL
	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
4	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.0250	1.70%	\$0.4190	\$0.0627	\$2.5417	\$2.5621	\$2.5417	\$2.5621	0	*^
2	\$2.0750	1.70%	\$0.4190	\$0.0627	\$2.5926	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.5926	\$2.5621	\$2.5926	0	\$0 \$0
3	\$1.9200	1.70%	\$0.4190	\$0.0627	\$2.4349	\$1.8450	1.70%	\$0.4190	\$0.0627	\$2.3586	\$2.4349	\$2.3586	\$2.4349	0	\$0
4	\$1.9200	1.70%	\$0.4190	\$0.0627	\$2.4349	\$1.8450	1.70%	\$0.4190	\$0.0627	\$2.3586	\$2,4349	\$2.3586	\$2.4349	ŏ	\$0
5	\$1.9200	1.70%	\$0.4190	\$0.0627	\$2.4349	\$1.8450	1.70%	\$0.4190	\$0.0627	\$2.3586	\$2,4349	\$2.3586	\$2.4349	0	\$0
6	\$1.9100	1.70%	\$0.4190	\$0.0627	\$2.4247	\$1.8900	1.70%	\$0.4190	\$0.0627	\$2.4044	\$2,4247	\$2.4044	\$2,4247	ŏ	\$0 \$0
7	\$2.0200	1.70%	\$0.4190	\$0.0627	\$2.5366	\$1.9950	1.70%	\$0.4190	\$0.0627	\$2.5112	\$2.5366	\$2.5112	\$2.5366	ŏ	\$0
8	\$2.0050	1.70%	\$0.4190	\$0.0627	\$2.5214	\$1.9900	1.70%	\$0.4190	\$0.0627	\$2.5061	\$2.5214	\$2.5061	\$2.5214	ŏ	\$0
9	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2.4909	\$1.9400	1.70%	\$0.4190	\$0.0627	\$2.4553	\$2.4909	\$2.4553	\$2,4909	ň	\$0
10	\$1.9500	1.70%	\$0.4190	\$0.0627	\$2.4654	\$1.8450	1.70%	\$0.4190	\$0.0627	\$2.3586	\$2.4654	\$2.3586	\$2.4654	ň	\$0
11	\$1.9500	1.70%	\$0.4190	\$0.0627	\$2.4654	\$1.8450	1.70%	\$0.4190	\$0.0627	\$2.3586	\$2,4654	\$2.3586	\$2.4654	ŏ	\$0
12	\$1.9500	1.70%	\$0.4190	\$0.0627	\$2.4654	\$1.8450	1.70%	\$0.4190	\$0.0627	\$2.3586	\$2.4654	\$2.3586	\$2.4654	ŏ	\$0
13	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2,4909	\$1.9450	1.70%	\$0.4190	\$0.0627	\$2.4603	\$2,4909	\$2.4603	\$2.4909	ő	\$0
14	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2.4909	\$1.9450	1.70%	\$0,4190	\$0.0627	\$2,4603	\$2,4909	\$2.4603	\$2.4909	ň	\$0
15	\$1.9600	1.70%	\$0.4190	\$0.0627	\$2,4756	\$1.9300	1.70%	\$0.4190	\$0.0627	\$2,4451	\$2.4756	\$2.4451	\$2.4756	ň	\$0
16	\$2.0150	1.70%	\$0.4190	\$0.0627	\$2.5315	\$1.9500	1.70%	\$0,4190	\$0.0627	\$2,4654	\$2.5315	\$2.4654	\$2.5315	ñ	\$0
17	\$2.0350	1.70%	\$0.4190	\$0.0627	\$2.5519	\$1,9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.5519	\$2.4959	\$2.5519	Ô	\$0
18	\$2.0350	1.70%	\$0.4190	\$0.0627	\$2.5519	\$1,9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.5519	\$2.4959	\$2.5519	ñ	\$0
19	\$2.0350	1.70%	\$0.4190	\$0.0627	\$2.5519	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.5519	\$2.4959	\$2.5519	ŏ	\$0
20	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$2.5621	\$2.5468	\$2.5621	ŏ	\$0
21	\$2.0700	1.70%	\$0.4190	\$0.0627	\$2.5875	\$2.0450	1.70%	\$0,4190	\$0.0627	\$2.5621	\$2.5875	\$2.5621	\$2.5875	ō	\$0
22	\$2.0350	1.70%	\$0,4190	\$0.0627	\$2.5519	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2,4909	\$2.5519	\$2,4909	\$2.5519	ō	\$0
23	\$1,9850	1.70%	\$0.4190	\$0.0627	\$2.5010	\$1.9050	1.70%	\$0.4190	\$0.0627	\$2,4196	\$2.5010	\$2,4196	\$2.5010	0	\$0
24	\$1.9400	1.70%	\$0.4190	\$0.0627	\$2.4553	\$1.7950	1.70%	\$0.4190	\$0.0627	\$2.3077	\$2.4553	\$2.3077	\$2.4553	ō	\$0
25	\$1.9400	1.70%	\$0.4190	\$0.0627	\$2.4553	\$1.7950	1.70%	\$0.4190	\$0.0627	\$2.3077	\$2.4553	\$2.3077	\$2.4553	0	\$0
26	\$1.9400	1.70%	\$0.4190	\$0.0627	\$2.4553	\$1.7950	1.70%	\$0.4190	\$0.0627	\$2.3077	\$2.4553	\$2.3077	\$2.4553	0	\$0
27	\$1.9850	1.70%	\$0.4190	\$0.0627	\$2.5010	\$1.9450	1.70%	\$0.4190	\$0.0627	\$2.4603	\$2.5010	\$2.4603	\$2.5010	0	\$0
28	\$1.9700	1.70%	\$0.4190	\$0.0627	\$2.4858	\$1.9050	1.70%	\$0.4190	\$0.0627	\$2,4196	\$2.4858	\$2.4196	\$2,4858	0	\$0
29	\$2.0100	1.70%	\$0.4190		\$2.5265	\$1.9850	1.70%	\$0.4190	\$0.0627	\$2.5010	\$2.5265	\$2.5010	\$2.5265	Ŏ	\$0
30	\$2.0200	1.70%	\$0.4190		\$2.5366	\$1.9600	1.70%	\$0.4190	\$0.0627	\$2.4756	\$2.5366	\$2.4756	\$2.5366	0	\$0
31	\$2.0200	1.70%	\$0.4190	\$0.0627	\$2.5366	\$1.9600	1.70%	\$0.4190	\$0.0627	\$2.4756	\$2.5366	\$2.4756	\$2.5366	0	\$0
														0	\$0

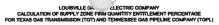
Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub September 2019

			OF DAILY	DAI TGT ZONE 1			CALCULATION	OF DAILY	DAI TGT ZONE 4	\$					
	(1) PLATTS GAS	(2)	(3)	(4)	(5) (Col. 1/(1-Col.2))	(6) PLATTS GAS	(7)	(8)	(9)	(10) (Col. 6/(1-Col.7))	(11) DAILY	(12) DAI	(13)	(14)	(15)
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO	DNES	HIGHER OF		TOTAL
	TEXAS GAS	FUEL	NNS		DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZUNE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2.4909	\$1.9300	1.70%	\$0.4190	\$0.0627	\$2,4451	\$2,4909	\$2,4451	\$2.4909	0	**
2	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2.4909	\$1.9300	1.70%	\$0.4190	\$0.0627	\$2,4451	\$2.4909	\$2,4451	\$2,4909	ŏ	\$0
3	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2.4909	\$1.9300	1.70%	\$0.4190	\$0.0627	\$2,4451	\$2,4909	\$2.4451	\$2.4909	ő	\$0
4	\$2.1700	1.70%	\$0.4190	\$0.0627	\$2.6892	\$2.0750	1.70%	\$0.4190	\$0.0627	\$2,5926	\$2.6892	\$2.5926	\$2.6892	ů	\$0
5	\$2.2150	1.70%	\$0.4190	\$0.0627	\$2.7350	\$2.1200	1.70%	\$0.4190	\$0.0627	\$2.6384	\$2.7350	\$2.6384	\$2.7350	Ö	\$0
6	\$2.1950	1.70%	\$0.4190	\$0.0627	\$2.7147	\$2,1100	1.70%	\$0,4190	\$0.0627	\$2.6282	\$2.7147	\$2.6282	\$2.7147	ŏ	\$0
7	\$2.2450	1.70%	\$0.4190	\$0.0627	\$2.7655	\$2.1500	1.70%	\$0.4190	\$0.0627	\$2.6689	\$2.7655	\$2.6689	\$2.7655	0	\$0
8	\$2.2450	1.70%	\$0.4190	\$0.0627	\$2.7655	\$2.1500	1.70%	\$0,4190	\$0.0627	\$2.6689	\$2.7655	\$2.6689	\$2.7655	0	\$0
9	\$2.2450	1.70%	\$0.4190	\$0.0627	\$2.7655	\$2.1500	1.70%	\$0.4190	\$0.0627	\$2.6689	\$2.7655	\$2.6689	\$2.7655	0	\$0 \$0
10	\$2.3850	1.70%	\$0.4190	\$0.0627	\$2.9079	\$2.3200	1.70%	\$0.4190	\$0.0627	\$2.8418	\$2,9079	\$2.8418	\$2.7033	0	\$0
11	\$2,4400	1.70%	\$0.4190	\$0.0627	\$2.9639	\$2,4250	1.70%	\$0,4190	\$0.0627	\$2.9486	\$2.9639	\$2.9486	\$2.9639	0	\$0
12	\$2.4250	1.70%	\$0.4190	\$0.0627	\$2.9486	\$2.3300	1.70%	\$0.4190	\$0.0627	\$2.8520	\$2.9486	\$2.8520	\$2.9486	ŏ	\$0
13	\$2.3700	1.70%	\$0.4190	\$0.0627	\$2.8927	\$2.2900	1.70%	\$0.4190	\$0.0627	\$2.8113	\$2.8927	\$2.8113	\$2.8927	0	\$0
14	\$2.3450	1.70%	\$0.4190	\$0.0627	\$2.8673	\$2.2350	1.70%	\$0,4190	\$0.0627	\$2.7554	\$2.8673	\$2.7554	\$2.8673	ŏ	\$0
15	\$2.3450	1.70%	\$0.4190	\$0.0627	\$2.8673	\$2.2350	1.70%	\$0,4190	\$0.0627	\$2.7554	\$2.8673	\$2.7554	\$2.8673	0	\$0
16	\$2.3450	1.70%	\$0.4190	\$0.0627	\$2.8673	\$2.2350	1.70%	\$0.4190	\$0.0627	\$2.7554	\$2.8673	\$2.7554	\$2.8673	ŏ	\$0
17	\$2.5400	1.70%	\$0.4190	\$0.0627	\$3.0656	\$2.3900	1.70%	\$0.4190	\$0.0627	\$2.9130	\$3.0656	\$2.9130	\$3.0656	,	\$0
18	\$2.4950	1.70%	\$0.4190	\$0.0627	\$3.0198	\$2.3500	1.70%	\$0.4190	\$0.0627	\$2.8723	\$3.0198	\$2.8723	\$3.0198	0	\$0 \$0
19	\$2.4200	1.70%	\$0.4190	\$0.0627	\$2.9436	\$2.3450	1.70%	\$0.4190	\$0.0627	\$2.8673	\$2.9436	\$2.8673	\$2.9436	ŭ	\$0
20	\$2.2400	1.70%	\$0.4190	\$0.0627	\$2.7604	\$2,2050	1.70%	\$0.4190	\$0.0627	\$2.7248	\$2.7604	\$2.7248	\$2.7604	0	\$0
21	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$1.9500	1.70%	\$0.4190	\$0.0627	\$2.4654	\$2.6536	\$2.4654	\$2.6536	ŏ	\$0
22	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$1.9500	1.70%	\$0.4190	\$0.0627	\$2.4654	\$2.6536	\$2.4654	\$2.6536	0	\$0
23	\$2.1350	1.70%	\$0.4190	\$0.0627	\$2.6536	\$1.9500	1.70%	\$0,4190	\$0.0627	\$2.4654	\$2.6536	\$2.4654	\$2.6536	0	\$0
24	\$2.1650	1.70%	\$0.4190	\$0.0627	\$2.6841	\$1.9950	1.70%	\$0.4190	\$0.0627	\$2.5112	\$2.6841	\$2.5112	\$2.6841	0	\$0
25	\$2.2750	1.70%	\$0.4190	\$0.0627	\$2,7960	\$1.9750	1.70%	\$0.4190	\$0.0627	\$2,4909	\$2.7960	\$2.4909	\$2.7960	0	\$0
26	\$2.1600	1.70%	\$0.4190	\$0.0627	\$2.6791	\$1.9700	1.70%	\$0.4190	\$0.0627	\$2.4858	\$2.6791	\$2.4858	\$2.6791	0	\$0
27	\$2.0600	1.70%	\$0.4190	\$0.0627	\$2.5773	\$1,9300	1.70%	\$0.4190	\$0.0627	\$2,4451	\$2.5773	\$2.4451			\$0
28	\$1.9150	1.70%	\$0.4190	\$0.0627	\$2,4298	\$1,7000	1.70%	\$0.4190	\$0.0627	\$2.2111	\$2.4298	\$2.2111	\$2.5773	0	\$0
29	\$1.9150	1.70%	\$0.4190	\$0.0627	\$2,4298	\$1.7000	1.70%	\$0.4190	\$0.0627	\$2.2111	\$2.4298	\$2.2111	\$2.4298		\$0
30	\$1.9150	1.70%	\$0.4190	\$0.0627	\$2.4298	\$1.7000	1.70%	\$0.4190	\$0.0627	\$2.2111	\$2.4298	\$2.2111	\$2.4298	0	\$0
					V	V	0 70	40.4100	\$3.502 1	92.2111	42.4230	Ψ 2.2111	\$2.4298	0	\$0
														0	\$0

Daily DAI Calculation for Texas Gas Zone 1 and Appalachia/Lebanon Hub October 2019

		CALCULATION	OF DAILY	DAI TGT ZONE 1			CALCULATION	OF DAILY	DAI TGT ZONE						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS GAS				(Col. 1/(1-Col.2))	PLATTS GAS				(Col. 6/(1-Col.7))	DAILY				
	DAILY MIDPOINT				+ Col. 3 + Col. 4	DAILY MIDPOINT				+ Col. 8 + Col. 9	FOR ZO		HIGHER OF		TOTAL
_	TEXAS GAS	FUEL	NNS	NNS	DAILY DAI	APPALACHIA	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	ZONE 1	RETENTION	DEMAND	COMMODITY	TGT-1	LEBANON HUB	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.9200	1.70%	\$0.4190	\$0.0627	\$2,4349	\$1.8000	1.70%	\$0.4190	\$0.0627	\$2.3128	\$2,4349	\$2.3128	\$2.4349	0	\$0
2	\$1.9100	1.70%	\$0.4190	\$0.0627	\$2,4247	\$1.7950	1.70%	\$0,4190	\$0.0627	\$2.3077	\$2,4247	\$2.3077	\$2.4247	ō	\$0
3	\$1.9200	1.70%	\$0.4190	\$0.0627	\$2,4349	\$1.8650	1.70%	\$0.4190	\$0.0627	\$2.3790	\$2,4349	\$2.3790	\$2,4349	ō	\$0
4	\$1.8350	1.70%	\$0.4190	\$0.0627	\$2.3484	\$1.7600	1.70%	\$0.4190	\$0.0627	\$2.2721	\$2.3484	\$2,2721	\$2,3484	0	\$0
5	\$1.7700	1.70%	\$0.4190	\$0.0627	\$2.2823	\$1.5600	1.70%	\$0.4190	\$0.0627	\$2.0687	\$2.2823	\$2.0687	\$2.2823	0	\$0
6	\$1.7700	1.70%	\$0.4190	\$0.0627	\$2.2823	\$1.5600	1.70%	\$0.4190	\$0.0627	\$2.0687	\$2.2823	\$2.0687	\$2.2823	0	\$0
7	\$1.7700	1.70%	\$0.4190	\$0.0627	\$2.2823	\$1.5600	1.70%	\$0.4190	\$0.0627	\$2.0687	\$2.2823	\$2.0687	\$2.2823	0	\$0
8	\$1.7550	1.70%	\$0.4190	\$0.0627	\$2.2671	\$1.6100	1.70%	\$0.4190	\$0.0627	\$2.1195	\$2.2671	\$2.1195	\$2.2671	0	\$0
9	\$1.7350	1.70%	\$0.4190	\$0.0627	\$2.2467	\$1.6750	1.70%	\$0.4190	\$0.0627	\$2.1857	\$2.2467	\$2.1857	\$2.2467	0	\$0
10	\$1.7950	1.70%	\$0.4190	\$0.0627	\$2.3077	\$1.6900	1.70%	\$0.4190	\$0.0627	\$2.2009	\$2.3077	\$2.2009	\$2.3077	0	\$0
11	\$1.7650	1.70%	\$0.4190	\$0.0627	\$2.2772	\$1.7050	1.70%	\$0.4190	\$0.0627	\$2.2162	\$2.2772	\$2.2162	\$2.2772	0	\$0
12	\$1.6200	1.70%	\$0.4190	\$0.0627	\$2.1297	\$1.6050	1.70%	\$0.4190	\$0.0627	\$2.1145	\$2.1297	\$2.1145	\$2.1297	0	\$0
13	\$1.6200	1.70%	\$0.4190	\$0.0627	\$2.1297	\$1.6050	1.70%	\$0.4190	\$0.0627	\$2.1145	\$2.1297	\$2.1145	\$2.1297	0	\$0
14	\$1.6200	1.70%	\$0.4190	\$0.0627	\$2.1297	\$1.6050	1.70%	\$0.4190	\$0.0627	\$2.1145	\$2.1297	\$2.1145	\$2.1297	0	\$0
15	\$1.7400	1.70%	\$0.4190	\$0.0627	\$2.2518	\$1.7650	1.70%	\$0.4190	\$0.0627	\$2.2772	\$2.2518	\$2.2772	\$2.2772	0	\$0
16	\$1.8700	1.70%	\$0.4190	\$0.0627	\$2.3840	\$1.9100	1.70%	\$0.4190	\$0.0627	\$2.4247	\$2.3840	\$2.4247	\$2.4247	0	\$0
17	\$2.0450	1.70%	\$0.4190	\$0.0627	\$2.5621	\$2.0300	1.70%	\$0.4190	\$0.0627	\$2.5468	\$2.5621	\$2.5468	\$2.5621	0	\$0
18	\$1.9400	1.70%	\$0.4190	\$0.0627	\$2.4553	\$1.9100	1.70%	\$0.4190	\$0.0627	\$2.4247	\$2.4553	\$2.4247	\$2.4553	0	\$0
19	\$1.7150	1.70%	\$0.4190	\$0.0627	\$2.2264	\$1.6300	1.70%	\$0.4190	\$0.0627	\$2.1399	\$2.2264	\$2.1399	\$2.2264	0	\$0
20	\$1.7150	1.70%	\$0.4190	\$0.0627	\$2.2264	\$1.6300	1.70%	\$0.4190	\$0.0627	\$2.1399	\$2.2264	\$2.1399	\$2.2264	0	\$0
21	\$1.7150	1.70%	\$0.4190	\$0.0627	\$2.2264	\$1.6300	1.70%	\$0.4190	\$0.0627	\$2.1399	\$2.2264	\$2.1399	\$2.2264	0	\$0
22	\$1.8900	1.70%	\$0.4190	\$0.0627	\$2.4044	\$1.9050	1.70%	\$0.4190	\$0.0627	\$2.4196	\$2.4044	\$2.4196	\$2.4196	0	\$0
23	\$2.0550	1.70%	\$0.4190	\$0.0627	\$2.5722	\$2.0700	1.70%	\$0.4190	\$0.0627	\$2.5875	\$2.5722	\$2.5875	\$2.5875	0	\$0
24	\$2.1550	1.70%	\$0.4190	\$0.0627	\$2.6740	\$2.1700	1.70%	\$0.4190	\$0.0627	\$2.6892	\$2.6740	\$2.6892	\$2.6892	0	\$0
25	\$2.0650	1.70%	\$0.4190	\$0.0627	\$2.5824	\$2.1100	1.70%	\$0.4190	\$0.0627	\$2.6282	\$2.5824	\$2.6282	\$2.6282	0	\$0
26	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.4959	\$2.4959	\$2.4959	0	\$0
27	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.4959	\$2.4959	\$2.4959	0	\$0
28	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$1.9800	1.70%	\$0.4190	\$0.0627	\$2.4959	\$2.4959	\$2.4959	\$2.4959	0	\$0
29	\$2.2250	1.70%	\$0.4190	\$0.0627	\$2.7452	\$2.2950	1.70%	\$0.4190	\$0.0627	\$2.8164	\$2.7452	\$2.8164	\$2.8164	0	\$0
30	\$2.3750	1.70%	\$0.4190	\$0.0627	\$2.8978	\$2.4350	1.70%	\$0.4190	\$0.0627	\$2.9588	\$2.8978	\$2.9588	\$2.9588	0	\$0
31	\$2.5550	1.70%	\$0.4190	\$0.0627	\$3.0809	\$2.5900	1.70%	\$0.4190	\$0.0627	\$3.1165	\$3.0809	\$3.1165	\$3.1165	0	\$0
														0	\$0

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



COLUMN			10	2	3		5	6	7	8	0	10	11	12	13	14	15	10
									LATERAL	CAPACITY AND FRM MARLINE R	ECEIPT POINT CA	PACITY						
			90100		WINTER	REASON							SUMMER.	SEASON				
								(SUM OF	ALLOCATION								(8UM OF	ALLOCATION
CONTRACTS	_	ZONE	NOV, 18	DEC.18	JAN, 19	FEB. 10	MAR, 19	COL, 1-5)	PERCENTAGE*	APR, 19	MAY 19	JUN, 19	JUL, 10	AUG, 19	SEP, 19	OCT. 19	COL, 8-14)	PERCENTAGE*
TGT-NNS-29781		SI.	130,734	130,734 55,473	130,734 55,473	130,734 55,473	130,734 55,473	653,670 277,365	70.21% 29.79%	56,899 24,473	56,899 24,473	56,899 24,473	56,899 24,473	56,899 24,473	58,899 24,473	50,899 24,473	398,293 171,311	69.92%
		TOTAL	188,207	186,207	186,207	186,207	188,207	931,035	0.00%	81,372	81,372	81,372	81,372	81,372	61,372	81,372	569.604	100.00%
		IOTAL	180207	100,207	100,207	100201	100,407	501,500	100.00 10	U1.012	0,2,1	01,072	01,212	01,072	0,2/2	012012	300,004	100.00%
TGT-FT-34951		SL.	0	0	0	0	0	0	0.00%	0	0	0	0	0	0	0	0	0.00%
		1	000,00	000,000	000,000	000,00	000,000	300,000	0,00%	00,000	000,000	000,000	000,000	000,000	000,000	00,000	420,000	0.00%
		TOTAL	80,000	000,000	000,000	000,000	000,00	300,000	100.00%	00.000	000,00	000,000	00.000	000.00	80,000	000,000	420,000	100.00%
			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%
TGPL-FT-A-111110		1	0	0	0	0	0	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	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	WINTER SEASON QUANTITY ENTITLEMENT	ZONE	WINTER ALLOCATION PERCENT (COL. 7)	TEXAS GAS SZFOE ZONE SL (C.17 x C.19)	TEXAS GAS 82FGE 20NE 1 (C.17 x C.19)	TEXAS GAS SZFQE ZONE 4 (C.17 x C.19)	TENNESSEE SZFQE ZONE 0 (C,17 x C,10)	TENNESSEE SZFQE ZONE 1 (C.17 x C.19)	TOTAL	SUMMER SEASON QUANTITY ENTITLEMENT	ZONE	SUMMER ALLOCATION PERCENT (COL. 16)	TEXAS GAS SZFQE ZONE SL (C.28 x C.28)	TEXAS GAS 8ZFQE ZONE 1 (C.28 x C.28)	TEXAS GAS 82FQE ZONE 4 (C.26 x C.28)	TENNESSEE SZFQE ZONE 0 (C.28 x C.28)	TENNESSEE SZFQE ZONE 1 (C.26 x C.28)	TOTAL
CONTRACTS	Entition	2011	1004,77	30111 401101	101111111111111111111111111111111111111	101111111111111111111111111111111111111	14111	101111111111111111111111111111111111111						-			-	
TGT-NNS-29781	26.220.000	8L 1 4	70.21% 29.79% 0.00%	18,409,082	7,810,938	•				8.292,000	8L 1 4	69.92% 30.06% 0.00%	5,797,766	2,494,234	0			
TGT-FT-34951	9.000,000	8L 1 4	0.00% 0.00% 100.00%	0	0	000,000,0				12,840,000	8L 1 4	0.00% 0.00% 100.00%	0	0	12,840,000			
TGPL-FT-A-111110	3,020,000	0	100.00%				3,020,000 0			4.280.000	0	100.00%				4,280,000 0		
TOTALS	38,300,000			18.409,062	7,810,938	9,000,000	3.020.000	0	38,300,000	25,412,000			5.797,766	2,494,234	12,840,000	4,280,000	0	25,412,000
SUPPLY ZONE FRM QUA	ANTITY ENTITLEMENT PERCENT**			48.07%	20.39%	23.06%	7.88%	0.00%	100.00%				22.81%	9.82%	50.53%	10.84%	0.00%	100,00%

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

[&]quot;THE WINTER SEASON SUPPLY ZONE FRM QUANTITY ENTITLEMENT PERCENTAGE IS CALCULATED BY DIVIDING THE TOTAL OF COL. 20, 21, 22, 22, OR 24 BY THE TOTAL OF COL. 17,
"THE SURMACE SEASON SUPPLY ZONE FRM QUANTITY ENTITLEMENT PERCENTAGE IS CALCULATED BY DIVIDING THE TOTAL OF COL. 20, 30, 31, 32, OR 33 BY THE TOTAL OF COL. 26.

PBR-TIF SUPPORTING CALCULATIONS

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

LOUISVILLE GAS ECTRIC COMPANY
CALCULATION OF TOTAL ANNUAL BENCHMARK MICHAPPLY GAS TRANSPORTATION COSTS ("TABMGTC")
FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN 1 2 3 4 5 6 7 8 9

			CAL	CULATION OF BASI	TARIFF RATES			CALCULATION OF S	URCHARGES
	_	NNS C	EMAND CHARGES	3	NNS COM	AODITY CHARGES		ACA	
	_	DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	ACA	TOTAL
MONTH	DAYS	CHARGE	DEMAND	(1)(2)(3)	CHARGE	DELIVERIES	(5x6)	CHARGE	(8x8)
40V. 18	30	\$0.4190	184,900	\$2,324,193	\$0.0614	2,468,782	\$151,583	\$0.0013	\$3,210
DEC. 18	31	\$0.4190	184,900	\$2,401,686	\$0.0614	1,393,968	\$85,590	\$0.0013	\$1,81
JAN, 19	31	\$0,4190	184,900	\$2,401,666	\$0.0814	1,802,949	\$110,701	\$0.0013	\$2,34
FEB. 19	28	\$0,4190	184,900	\$2,169,247	\$0.0614	1,490,542	\$91,519	\$0.0013	\$1,93
MAR. 19	31	\$0.4190	184,900	\$2,401,686	\$0.0614	1,635,777	\$100,437	\$0.0013	\$2,12
APR. 19	30	\$0.4190	97,440	\$1,224,821	\$0.0614	181,838	\$11,185	\$0.0013	\$23
MAY 19	31	\$0.4190	60,000	\$779,340	\$0.0614	106,519	\$6,540	\$0.0013	\$13
JUN, 19	30	\$0.4190	60,000	\$754,200	\$0.0614	556,192	\$34,150	\$0.0013	\$72
JUL. 19	31	\$0,4190	60,000	\$779,340	\$0.0614	1,140,719	\$70,040	\$0.0013	\$1,48
AUG. 19	31	\$0,4190	60,000	\$779,340	\$0.0614	1,185,608	\$72,797	\$0.0013	\$1,54
SEP. 19	30	\$0,4190	60,000	\$754,200	\$0.0614	1,180,712	\$72,496	\$0.0013	\$1,53
OCT. 19	31	\$0.4190	117,020	\$1,519,973	\$0.0614	1,248,037	\$76,506	\$0.0013	\$1,62
OTAL	385		1,438,960	\$18,289,652		14,389,843	\$883,524		\$18,70

COLUMN 10

	CALCULATION OF TEXAS GAS RATE FT PORTION OF BMGTC		
	CALCULATION OF BASE TARIFF RATES	TOTAL COMM.	TOTAL CALCULATION OF SURCHARGES
FT DEMAND CHARGES	FT BACKHAUL COMMODITY CHARGES	(14X15) +	CITY-GATE ACA
201111	CLASSIC CLASSIC TARGET TARGET TARGET TARGET TARGET TARGET TARGET		

	9	FT	DEMAND CHARGES				FT	BACKHAUL COM	MODITY CHARGES				(14X15) +	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	(16X17) + (18X19) +	DELIVERY	ACA	TOTAL
MONTH	DAYS	CHARGE	DEMAND	(10x11x12)	CHARGE	DELIVERIES	CHARGE	DELIVERIES	CHARGE	DELIVERIES	CHARGE	DELIVERIES	(20X21)	(15+17+19+21)	CHARGE	(23x24)
NOV. 18	30	\$0.1374	60,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	1,133,844	\$40,818	1,133,844	\$0.0013	\$1,474
DEC. 18	31	\$0.1374	60,000	\$255,584	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	939,897	\$33,836	939,897	\$0.0013	\$1,222
JAN. 19	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	1,248,223	\$44,938	1,248,223	\$0.0013	\$1,623
FEB. 19	28	\$0.1374	60,000	\$230,832	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	288,434	\$10,384	288,434	\$0.0013	\$375
MAR. 19	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	711.139	\$25,601	711,139	\$0.0013	\$924
APR, 19	30	\$0.1374	60,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	745,950	\$26,854	745,950	\$0.0013	\$970
MAY 19	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	770,815	\$27,749	770,815	\$0.0013	\$1,002
JUN. 19	30	\$0.1374	60,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	1,767,070	\$63,615	1,767,070	\$0.0013	\$2,297
JUL. 19	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	1,849,287	\$66,574	1,849,287	\$0.0013	\$2,404
AUG. 19	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	1,848,559	\$66,548	1,848,559	\$0.0013	\$2,403
SEP. 19	30	\$0.1374	60,000	\$247,320	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0,0360	1.755,318	\$63,191	1,755,318	\$0.0013	\$2,282
OCT. 19	31	\$0.1374	60,000	\$255,564	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	1,847,770	\$68,520	1,847,770	\$0.0013	\$2,402
TOTAL	365		720,000	\$3,009,080		0		0		0		14,908,306	\$536,626	14,906,306		\$19,378

COLUMN 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41

						C	ALCULATION O	OF TEXAS GAS RAT	E STF PORTION C	OF BMGTC						
							CALCULATIO	ON OF BASE TARIF					TOTAL COMM.	TOTAL	CALCULATION OF	SURCHARGES
		STF	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	(28x27x28)	CHARGE	DELVERIES	CHARGE	DELIVERIES	CHARGE	DELIVERIES	CHARGE	DELIVERIES	(36X37)	(31+33+35+37)	CHARGE	(39x40)
NOV. 18	30	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0380	0	\$0	0	\$0.0013	\$0
DEC. 18	31	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
JAN, 19	31	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
FEB. 19	28	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
MAR. 19	31	\$0.4252	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
APR, 19	30	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
MAY 19	31	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
JUN. 19	30	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
JUL. 19	31	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
AUG. 19	31	\$0.1647	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
SEP. 19	30	\$0.1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
OCT. 19	31	\$0,1847	0	\$0	\$0.0528	0	\$0.0508	0	\$0.0398	0	\$0.0360	0	\$0	0	\$0.0013	\$0
20211				**									**	_		
TOTAL	365		0	\$0		0		U		0		D	\$0	0		\$0

COLUMN	42	43	44	45
		1010		Yorki
	011 0 05 010	NNS	TOTAL	TOTAL
	CALC. OF DIRE	CIBILLS	SADB	NNS BMGTC
MONTH	OUT	OTHER	(9+42+43)	(4+7+44)
NOV. 18	\$0	\$0	\$3,210	\$2,478,988
DEC. 18	\$0	\$0	\$1.812	\$2,489,068
JAN, 19	\$0	\$0	\$2,344	\$2,514,711
FEB. 19	\$0	\$0	\$1,938	\$2,262,704
MAR. 19	\$0	\$0	\$2,127	\$2,504,230
APR. 19	\$0	\$0	\$236	\$1,236,222
MAY 19	\$0	\$0	\$139	\$788,019
JUN. 19	\$0	\$0	\$723	\$789,073
JUL. 19	\$0	\$0	\$1,483	\$850,863
AUG. 19 SEP. 19	\$0 \$0	\$0	\$1,541 \$1,535	\$853,678
OCT. 19	\$0	\$0 \$0	\$1,535	\$828,231 \$1,598,099
TOTAL	\$0	\$0	\$18,708	\$19,191,884
COLUMN	46	47	48	49
		T BACKHAUL		TAL FT BACKHAUL
	CALC. OF DIRE	ECT BILLS	TOTAL SADB	BMGTC
	CASH-		(25+46+	(13+22+
MONTH NOV. 18	OUT _	OTHER \$0	\$1,474	\$289.612
DEC. 18	\$0	\$0	\$1,222	\$290.622
JAN, 19	\$0	\$0	\$1,623	\$302,123
FEB. 19	\$0	\$0	\$375	\$241,591
MAR. 19	\$0	\$0	\$924	\$282,089
APR. 19	\$0	\$0	\$970	\$275,144
MAY 19	\$0	\$0	\$1,002	\$284,315
JUN. 19	so	\$0	\$2,297	\$313,232
JUL. 19	\$0	\$0	\$2,404	\$324,542
AUG. 19	\$0	\$0	\$2,403	\$324,515
SEP. 19	so	\$0	\$2,282	\$312,793
OCT, 19	\$0	\$0	\$2,402	\$324,486
TOTAL	\$0	\$0	\$19,378	\$3,565,064
COLUMN	50	51	52	53
		STF		TOTAL STF
	CALC. OF DIR		TOTAL S&DB	BMGTC
	CASH-	LOIDALO	(41+50+	(29+38+
MONTH	OUT	OTHER	51)	52)
NOV. 18	\$0	\$0	\$0	\$0
DEC. 18	\$0	\$0	\$0	\$0
JAN. 19	\$0	\$0	\$0	\$0
FEB. 19	\$0	\$0	\$0	\$0
MAR. 19	\$0	\$0	\$0	\$0
APR. 19	\$0	\$0	\$0	\$0
MAY 19 JUN. 19	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
JUN. 19 JUL. 19	\$0	\$0	\$0	\$0
AUG. 19	\$0	\$0	\$0 \$0	\$0
SEP. 19	\$0 \$0	\$0	\$0	\$0
OCT. 19	\$0	\$0	\$0	\$0
TOTAL	\$0	\$0	\$0	\$0

LOUISVILLE GAS LECTRIC COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK MONTHLY GAS TRANSPORTATION COSTS ("TABMGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN 54

	TOTAL
	BM(TGT)
MONTH	(45+49+53)
NOV. 18	\$2,768,598
DEC. 18	\$2,779,690
JAN. 19	\$2,816,834
FEB. 19	\$2,504,295
MAR. 19	\$2,786,319
APR. 19	\$1,511,386
MAY 19	\$1,070,334
JUN. 19	\$1,102,305
JUL. 19	\$1,175,405
AUG. 19	\$1,178,193
SEP. 19	\$1,141,024
OCT. 19	\$1,922,585
TOTAL	\$22,756,948

LOUISVILLE GAS ECTRIC COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK MUNTHLY GAS TRANSPORTATION COSTS (TABMGTC') FOR PBR TRANSPORTATION INDEX FACTOR (TIF')

Column C	COLUMN	55	56	57	58	59	60	61	62	63	84	65	66	67
Transport Performance Pe					CALCULATION OF	TENNESSEE GAS	PIPELINE FT-	SERVICE (ZONE O	PORTION OF BMC	этс				
SCHAME SCHAME SCHOOL S		ET A TOME	CALC	CULATION OF BASI	TARIFF RATES	014140000V0U40	-	5000 40 ##	CALCULATI		GES AND DIRE	CT BILLS		
Section Columbia		DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	EPCR AUJU	TOTAL		TOTAL			PI-A ZN-0
March 19	MONTH				CHARGE					CHARGE		OTHER		
Section Sect										\$0,0013	\$780	50	\$14.780	
AM 18		\$15.2714		\$305,428	\$0.0183	620,000		\$0.0233						
Fig. 19														
MAK 19	FEB. 19		20,000		\$0.0183	560,000						\$0		
APR 18		\$15.2714			\$0.0183	400,000					\$520	\$0	\$9,840	
MAY 19 11-1714 2-000 120-435 80-018 0 80 80 80-018 10 80 80-018 10 80 80-018 10 80 80 80-018 10 80 80-018 10 80-018	APR. 19	\$15.2714	20,000	\$305,428	\$0.0183	0	\$0	\$0.0199	\$0	\$0.0013	\$0	\$0		
March 18		\$15.2714	20,000	\$305,428				\$0.0199	\$0	\$0.0013	\$0	\$0	\$0	\$305,428
ALT 18				\$305,428	\$0.0183		\$0	\$0.0199	\$0				\$0	
SEP 19													\$0	\$305,428
Column St 12714 20,000 \$3.965,428 \$0.0183 \$0 \$50 \$50.019 \$50 \$50.011 \$50 \$50.015	AUG. 19	\$15.2714	20,000						\$0			\$0	\$0	\$305,428
Column		\$15.2714	20,000	\$305,428										
Column St. S	OCT. 19	\$15.2714	20,000	\$305,428	\$0.0183	0	\$0	\$0.0199	\$0	\$0.0013	\$0	\$0	\$0	\$305,428
CALCULATION OF BASET TABLE THAN SURVICE COVER 1) PORTION OF BASET THAN SURVICE COVER 1) PORTI	TOTAL		240,000	\$3,665,136		2,800,000	\$51,240		\$65,240		\$3,640	\$0	\$68,880	\$3,785,256
CALCULATION OF BASET TABLE THAN SURVICE COVER 1) PORTION OF BASET THAN SURVICE COVER 1) PORTI	COLUMN	68	69	70	71	72	73	74	75	76	77	78	70	80
Part												1.0		•
Character Char		****	CAL	CULATION OF BAS	E TARIFF RATES	TENNESSEE GAS	PIPELINE FT	SERVICE (ZONE 1	CALCULAT	ON OF SURCHAR	GES AND DIRE	CTBILLS		TOTAL
Column C		FT-A ZONE	1 DEMAND CHAR	GES	FT-A ZONE 1 C	OMMODITY CHAR		EPCR ADJU	STMENT	ACA			TOTAL S&DB	
COLUMN S1 CARDE		DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	EPCR	TOTAL				(75+	BMGTC
NOCH 18		CHARGE	DEMAND	(68x69)		DELIVERIES	(71x72)		(72x74)	CHARGE	(72x76)	OTHER	77 + 78)	(70+73+79)
April		\$10.4387	0	\$0		0	\$0		\$0	\$0.0013	\$0	\$0	\$0	\$0
FEB. 19 \$10.4387 0 \$0 \$0 \$0.0153 0 \$0 \$0 \$0.0153 0 \$0 \$0.0103 \$0 \$0.00013 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0														\$0
MAR: 10 \$10.4387 0 \$0 \$0 \$0.0153 0 \$0 \$0.01013 \$0 \$0.0013 \$0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0												\$0	\$0	\$0
APR 10 \$10.4587 0 \$0 \$0 \$0.0153 0 \$0 \$0.01055 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0		\$10.4387		\$0	\$0.0153		\$0	\$0.0193	\$0	\$0.0013	\$0	\$0	\$0	\$0
MAY16 \$10.4387 0 \$0 \$0 \$0.0153 0 \$0 \$0.0155 \$0 \$0.0151 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0														\$0
JUL 19 \$10.4587 0 \$0 \$0.0153 0 \$0 \$0.0155 0 \$0 \$0.0155 0 \$0 \$0.0155 \$0.0155 \$0 \$0.0155 \$		\$10.4387		\$0			\$0		20			\$0	\$0	20
JUL 19 \$10.4397 0 \$0 \$0.00153 0 \$0 \$0.0165 5 \$0 \$0.01013 \$0 \$0 \$0 \$0.050 \$0.0013 \$0 \$0 \$0 \$0.0013 \$0.0010 \$0.0013 \$0.0010 \$0.0				\$0			30		\$0			\$0	\$0	
AUG. 19 \$10.4397 0 \$0 \$30.1013 0 \$0 \$50.1015 0 \$0 \$0.0015 \$0.0015 \$0.														\$0
SEP 10				30					50			30	30	\$0
CCLUMN B1 B2 B3 B4 B5 B6 B7 B8 B6 D0 D1 D7 D7 D7 D7 D7 D7 D7				\$0					80					30
COLUMN S1 S2 S3 S4 S5 S6 S7 S5 S6 S9 90 91 92 93 94 95 95 95 95 95 95 95													\$0	\$0 \$0
COLUMN B1 B2 B3 B4 B5 B6 B7 B6 B9 D0 D1 D2 D3						_								
CALCULATION OF BANES TABLE? RATES TOTAL	TOTAL		0	\$0		0	\$0		\$0		\$0	\$0	\$0	\$0
CALCULATION OF BASE TARREE RATES TATA TOTAL FLATONE 2 CEMANO TOTAL TOTAL TOTAL COMMODITY CHARGES FLATONE 2 CEMANO TOTAL COMMODITY CHARGES FLATONE 2 CEMANO TOTAL COMMODITY CHARGES COMMODITY CHARGES TOTAL COMMODITY CHARGES	COLUMN	81	82	83	84	85	86	87	88	89	90	91	92	93
CALCULATION OF BASE TARREE RATES TATA TOTAL FLATONE 2 CEMANO TOTAL TOTAL TOTAL COMMODITY CHARGES FLATONE 2 CEMANO TOTAL COMMODITY CHARGES FLATONE 2 CEMANO TOTAL COMMODITY CHARGES COMMODITY CHARGES TOTAL COMMODITY CHARGES					CALCULATION OF	TENNESSEE GAS	PIPELINE ET.	A SERVICE (ZONE :	2) PORTION OF RM	GTC				
DEMAND CONTRACT TOTAL COMMODITY CHARGE COMMODITY CHARGE CHA			CAL	CULATION OF BAS	E TARIFF RATES				CALCULAT	TION OF SURCHAE	RGES AND DIR	ECT BILLS		
MONTH		FT-A ZONE	2 DEMAND CHAR	GES	ET-A ZONE 2 C	OMMODITY CHAR	RGES	EPCR ADJU	STMENT	ACA			TOTAL SEDO	
NOV.18 \$ \$5.4047 0 \$0 \$0.0018 0 \$0 \$0.0012 \$0 \$0.0013 \$0 \$0 \$0 \$0.0012 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0 \$0.0013 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0					TIALONELL									BMGTC
DEC. 18			CONTRACT		COMMODITY	CITY-GATE							(88 +	
JAN. 19			DEMAND	(81x82)	COMMODITY	DELIVERIES	(84x85)	CHARGE	(85x87)	CHARGE	(85x89)		(88 ÷ 90 ÷ 91)	
FEB. 19		\$5,4047	DEMAND 0	(81x82) \$0	COMMODITY CHARGE \$0.0018	DELIVERIES 0	(84x85) \$0	\$0.0012	(85x87) \$0	\$0.0013	(85x89) \$0	\$0	(88 ÷ 90 ÷ 91) \$0	\$0
MAR. 19		\$5.4047 \$5.4047	DEMAND 0 0	(61x82) \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018	DELIVERIES 0 0	(84x85) \$0 \$0	\$0.0012 \$0.0012	(85x87) \$0 \$0	\$0.0013 \$0.0013	(85x89) \$0 \$0	\$0 \$0	(88 + 90 + 91) \$0 \$0	\$0 \$0
APR 19		\$5.4047 \$5.4047 \$5.4047	DEMAND 0 0	(81x82) \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0	(84x85) \$0 \$0 \$0	\$0.0012 \$0.0012 \$0.0012	(85x87) \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0	\$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0	\$0 \$0 \$0
MAY 19	FEB. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047	0 0 0 0	(81x82) \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0	\$0 \$0 \$0 \$0 \$0	\$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012	(85x87) \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0
JUN. 19 \$5.4047 0 \$0 \$0,0016 0 \$0 \$0,0010 \$0 \$0,0013 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	FEB. 19 MAR. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	0 0 0 0 0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0	\$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012	(85x87) \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0
AUG. 19 \$5.4047 0 \$0 \$0 \$0.0018 0 \$0 \$0.0010 \$0 \$0.0013 \$0.0013 \$0 \$0.0013 \$0.0013 \$0 \$0.0013 \$0.00	FEB. 19 MAR. 19 APR. 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	DEMAND 0 0 0 0 0	(81x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0	\$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0
AUG. 19 \$5.4047 0 \$0 \$0 \$0.0018 0 \$0 \$0.0010 \$0 \$0.0013 \$0.0013 \$	FEB. 19 MAR. 19 APR. 19 MAY 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	DEMAND 0 0 0 0 0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0
OCT. 19 \$5.4047 0 \$0 \$0 \$0.0018 0 \$0 \$0.0010 \$0 \$0.0013 \$0 \$0 \$0 \$0 TOTAL 0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 COLUMN 94 95 TOTAL 50TAL 8M(TGPL) (67+80+96) NOV. 18 (3134) \$3331,034 OEC. 18 (31,030) \$330,098 JAN. 19 \$391 \$332,417 FEB. 19 (\$191) \$329,261 MARR. 19 (\$257) \$322,231 APR. 19 \$2,428 \$307,656 MAY 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$3861) \$304,547 SEP. 19 (\$540) \$304,888 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 MAY 19 JUN. 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	0 0 0 0 0 0 0	(81x82)	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0,0012 \$0,0012 \$0,0012 \$0,0012 \$0,0010 \$0,0010 \$0,0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
TOTAL 95 COLUMN 94 95 TOTAL TOTAL BM(TGPL) (67+80+93+94) (97+80+93+94)	FEB. 19 MAR. 19 APR. 19 MAY 19 JUN. 19 JUL. 19 AUG. 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	DEMAND 0 0 0 0 0 0	(81x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
MONTH S&DB TOTAL BM(TGPL) NOV. 18 (\$134) \$331.034 DEC. 18 (\$1,030) \$330.996 JAN. 19 \$391 \$332,417 FEB. 19 (\$191) \$322,261 MAR. 19 (\$257) \$322,331 APR, 10 \$2,428 \$307,656 MAY 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$881) \$304,547 SEP. 19 (\$3540) \$306,488 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 MAY 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	(88+ 90+91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
MONTH S8DB (8134) S301 S331.034 DEC. 18 (\$1.030) S302.477 FEB. 19 (\$191) \$329.281 MAR. 19 (\$257) \$322.331 APR. 19 \$2.428 \$307.856 MAY 19 \$0 \$305.428 JUL. 19 \$2 \$305.430 AUG. 19 (\$381) \$30.4547 SEP. 19 (\$324) \$300.488 OCT. 19 (\$3.274) \$302.154	FEB. 19 MAR. 19 APR. 19 MAY 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	(88+ 90+91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
MONTH S8DB (8134) S301 S331.034 DEC. 18 (\$1.030) S302.477 FEB. 19 (\$191) \$329.281 MAR. 19 (\$257) \$322.331 APR. 19 \$2.428 \$307.856 MAY 19 \$0 \$305.428 JUL. 19 \$2 \$305.430 AUG. 19 (\$381) \$30.4547 SEP. 19 (\$324) \$300.488 OCT. 19 (\$3.274) \$302.154	FEB. 19 MAR. 19 APR. 19 MAY 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19	\$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047 \$5,4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
TOTAL S&DB S&DB (\$7+80+93+94) NOV. 18	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
MONTH S&DB (67+80+93+94) NOV. 18 (8130) \$330,908 DEC. 18 (\$1,030) \$330,908 JAN. 19 \$391 \$332,417 FEB. 19 (\$191) \$322,261 MAR. 19 (\$257) \$322,331 APR, 19 \$2,428 \$307,856 MAY 19 \$0 \$305,428 JUN. 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$881) \$304,547 SEP. 10 (\$540) \$304,688 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
NOV. 16 (\$134) \$331.034 DEC. 18 (\$1,030) \$330.996 JAN. 19 \$391 \$332,417 FEB. 19 (\$191) \$329.261 MAR. 19 (\$257) \$322.331 APR. 10 \$2,428 \$307.859 MAY 10 \$0 \$305.428 JUL. 10 \$2 \$305.430 AUG. 10 (\$881) \$304.547 SEP. 10 (\$35,274) \$302.154	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
DEC. 18 (\$1,030) \$330,096 JAN. 19 \$391 \$332,417 FEB. 19 (\$191) \$329,281 MAR. 19 (\$257) \$322,331 APR. 10 \$2,428 \$307,856 MAY 10 \$0 \$305,428 JUN. 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$881) \$304,547 SEP. 19 (\$540) \$304,888 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND O O O O O O O O O O O O O O O O O O	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
JAN. 19 \$391 \$332,417 FEB. 19 (\$191) \$329,261 MAR. 19 (\$257) \$322,331 APR. 19 \$2,428 \$307,059 MAY 19 \$0 \$305,428 JUL. 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$881) \$304,547 SEP. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUN. 19 JUN. 19 JUL. 19 SEP. 19 OCT. 19 TOTAL COLUMN	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
FEB. 19 (\$191) \$329.261 MAR. 19 (\$257) \$322.331 APR. 19 \$2.428 \$307.858 MAY 19 \$0 \$305.428 JUN. 19 \$0 \$305.428 JUL. 19 \$2 \$305.430 AUG. 10 (\$881) \$304.547 SEP. 19 (\$540) \$304.888 OCT. 19 (\$3,274) \$302.154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OOT. 19 TOTAL COLUMN MONTH NOV. 18	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
MAR. 10 (\$257) \$322.331 APR, 10 \$2.428 \$307.559 MAY 10 \$0 \$305.428 JUN. 10 \$0 \$305.428 JUL. 10 \$2 \$305.430 AUG. 10 (\$881) \$304.547 SEP. 10 (\$340) \$304.888 OCT. 19 (\$3,274) \$302.154	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUN. 19 JUL. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
APR, 19 \$2,428 \$307,656 MAY 19 \$0 \$305,428 JUN. 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$881) \$304,547 SEP. 19 (\$540) \$304,888 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
MAY 19 \$0 \$305.428 JUN. 19 \$0 \$305.428 JUL. 19 \$2 \$305.430 AUG. 10 (\$881) \$304.547 SEP. 10 (\$540) \$304.888 OCT. 19 (\$3,274) \$302.154	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
JUN. 19 \$0 \$305,428 JUL. 19 \$2 \$305,430 AUG. 19 (\$881) \$304,547 SEP. 19 (\$540) \$304,888 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19 MAR. 19	\$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
JUL 19 \$2 \$305,430 AUG, 10 (\$881) \$304,547 SEP. 19 (\$540) \$304,888 OCT, 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 JAN. 19 FEB. 19 MAR. 19 APR. 19	\$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4047 \$5.4041 \$5.4047 \$5.404	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
AUG. 10 (\$881) \$304,547 SEP. 19 (\$540) \$304,888 OCT, 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19 APR. 19	\$5.4047 \$5.4047	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
SEP. 19 (\$540) \$304,886 OCT. 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 JUN. 19 JUN. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19 MAR. 19 APR. 19 MAP. 19	\$5.4047 \$5.404	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
OCT, 19 (\$3,274) \$302,154	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 JUL. 19	\$5.4047 \$5.404	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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TOTAL (\$3,486) \$3,781,770	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19	\$5.4047 \$5.404	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
	FEB. 19 MAR. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19 OCT. 19 TOTAL COLUMN MONTH NOV. 18 DEC. 18 JAN. 19 FEB. 19 APR. 19 APR. 19 JUL. 19 JUL. 19 JUL. 19 AUG. 19 SEP. 19	\$5.4047 \$5.404	DEMAND 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(61x82) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	COMMODITY CHARGE \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018 \$0.0018	DELIVERIES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(84x85) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	CHARGE \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0012 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010 \$0.0010	(85x87) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013 \$0.0013	(85x89) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	(88 + 90 + 91) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$

LOUISVILLE GAS ____ECTRIC COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK MONTHLY GAS TRANSPORTATION COSTS ("TABMGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	96	97	98	99
		OF PIPELINE BENC	HMARKS	
	TOTAL	TOTAL		
	BM(TGT)	BM(TGPL)	TOTAL	TABMGTC
MONTH	COL. 54	COL. 95	BM(PPL)*	(96+97+98)
NOV. 18	\$2,768,598	\$331,034	\$0	\$3,099,632
DEC. 18	\$2,779,690	\$330,996	\$0	\$3,110,886
JAN. 19	\$2,818,834	\$332,417	\$0	\$3,149,251
FEB. 19	\$2,504,295	\$329,261	\$0	\$2,833,556
MAR. 19	\$2,788,319	\$322,331	\$0	\$3,108,650
APR. 19	\$1,511,368	\$307,856	\$0	\$1,819,222
MAY 19	\$1,070,334	\$305,428	\$0	\$1,375,782
JUN. 19	\$1,102,305	\$305,428	\$0	\$1,407,733
JUL. 19	\$1,175,405	\$305,430	\$0	\$1,480,835
AUG. 19	\$1,178,193	\$304,547	\$0	\$1,482,740
SEP. 19	\$1,141,024	\$304,888	\$0	\$1,445,912
OCT, 19	\$1,922,585	\$302,154	\$0	\$2,224,739
TOTAL	\$22,756,948	\$3,781,770	\$0	\$26,538,718

"THERE WERE NO TRANSACTIONS WHICH REQUIRED LOSE 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 AND ÉLECTRIC COMPANY CALCULATION OF TOTAL ACTUAL ANNUAL GAS TRANSPORTATION COSTS ("TAAGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN 1 2 3

MONTH	ACTUAL PIPELINE TRANSPORTATION COSTS - TEXAS GAS	ACTUAL ANNUAL GAS TRANSPORT. COSTS - TENNESSEE	TOTAL ANNUAL ACTUAL GAS TRANSPORTATION COSTS ("TAAGTC") (1 + 2)
NOV. 18	\$2,768,598	\$126,318	\$2,894,916
DEC. 18	\$2,779,690	\$126,280	\$2,905,970
JAN. 19	\$2,816,834	\$127,701	\$2,944,535
FEB. 19	\$2,504,295	\$124,545	\$2,628,840
MAR. 19	\$2,786,319	\$117,615	\$2,903,934
APR. 19	\$1,511,366	\$103,140	\$1,614,506
MAY 19	\$1,070,334	\$100,712	\$1,171,046
JUN. 19	\$1,102,305	\$100,712	\$1,203,017
JUL. 19	\$1,175,405	\$100,714	\$1,276,119
AUG. 19	\$1,178,193	\$99,831	\$1,278,024
SEP. 19	\$1,141,024	\$100,172	\$1,241,196
OCT. 19	\$1,922,585	\$97,438	\$2,020,023
TOTAL	\$22,756,948	\$1,325,178	\$24,082,126

PBR-TIF CALCULATION OF SAVINGS AND/OR EXPENSES

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

COLUMN	1	2	3
	TABMGTC	TAAGTC	SAVINGS (EXPENSE) (1 - 2)
NOV. 18	\$3,099,632	\$2,894,916	\$204,716
DEC. 18	\$3,110,686	\$2,905,970	\$204,716
JAN. 19	\$3,149,251	\$2,944,535	\$204,716
FEB. 19	\$2,833,556	\$2,628,840	\$204,716
MAR. 19	\$3,108,650	\$2,903,934	\$204,716
APR. 19	\$1,819,222	\$1,614,506	\$204,716
MAY 19	\$1,375,762	\$1,171,046	\$204,716
JUN. 19	\$1,407,733	\$1,203,017	\$204,716
JUL. 19	\$1,480,835	\$1,276,119	\$204,716
AUG. 19	\$1,482,740	\$1,278,024	\$204,716
SEP. 19	\$1,445,912	\$1,241,196	\$204,716
OCT. 19	\$2,224,739	\$2,020,023	\$204,716
TOTAL	\$26,538,718	\$24,082,126	\$2,456,592

PBR-TIF TARIFF SHEETS

PBR-TIF TEXAS GAS TARIFF SHEETS RATE NNS

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

	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.

Minimum Rate: Demand \$-0-; Commodity - Zone SL 0.0163

Zone 1 0.0186 Zone 2 0.0223 Zone 3 0.0262 Zone 4 0.0308

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

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.

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

RATES PER DEKATHERM

FIRM TRANSPORTATION RATES RATE SCHEDULE FOR FT-A

Base									
Reservation Rates					DELIVER	RY ZONE			
	ZONE				~	3			
	ZONE	0	L	1	2	3	4	5	6
	0	\$5.4269		\$11.3406	\$15,2546	\$15.5246	\$17.0584	\$18.1067	\$22.7176
	Ĺ	401.120	\$4.8178	4-1-0	410.10	400.02.0	417,0001	410.1007	\$22.7170
	1	\$8.1697	25	\$7.8313	\$10.4219	\$14.7637	\$14.5399	\$16.3977	\$20.1633
	2	\$15.2547		\$10.3593	\$5.3879	\$5.0367	\$6.4446	\$8.8638	\$11.4421
	3	\$15.5246		\$8.2056	\$5.4314	\$3.9184	\$6.0190	\$10.8858	\$12.5789
	4	\$19.7110		\$18.1718	\$6.9250	\$10.5240	\$5.1514	\$5.5711	\$7.9589
	5 6	\$23.5025 \$27.1880		\$16.5148 \$18.9685	\$7.2643 \$13.0548	\$8.7898 \$14.3818	\$5.7227	\$5.3680	\$6.9882
	0	\$27.1880		\$18.9685	\$13.0548	\$14.3618	\$10.1587	\$5.3443	\$4.6263
Daily Base									
Reservation Rate 1/					DELIVER	Y ZONE			
	RECEIPT								
	ZONE	0	L	1	2	3	4	5	6
	0	\$0.1784		\$0.3728	\$0.5015	\$0.5104	\$0.5608	\$0.5953	\$0.7469
	L	4012101	40 1504	4 0.00	40.2022		40.0000	40.3333	\$0.7403
*	1	\$0.2686	\$0.1584	\$0.2575	\$0.3426	\$0.4854	\$0.4780	40 F201	40 5500
	2	\$0.5015		\$0.2373	\$0.1771	\$0.4656	\$0.2119	\$0.5391 \$0.2914	\$0.6629
	3	\$0.5104		\$0.2698	\$0.1786	\$0.1288	\$0.1979	\$0.3579	\$0.3762 \$0.4136
	4	\$0.6480		\$0.5974	\$0.2277	\$0.3460	\$0.1694	\$0.1832	1.5
	5	\$0.7727		\$0.5430	\$0.2388	\$0.2890	\$0.1881	\$0.1765	\$0.2617 \$0.2297
	6	\$0.8939		\$0.6236	\$0.4292	\$0.4728	\$0.3340	\$0.1757	\$0.2297
	•	40.000		40.020		400	40.00.0	40.17.57	40.1321
Maximum Reservation									
Rates 2/, 3/					DELIVER'	Y ZONE			
*************************	RECEIPT	_							
	ZONE	0	L	1	2	3	4	5	6
	•	AF 4427		+11 2F74	A1 F 3744	#1 F F414	*** ATEO	***************************************	
	0 L	\$5.4437	\$4.8346	\$11.3574	\$15.2714	\$15.5414	\$17.0752	\$18.1235	\$22.7344
	1	\$8.1865	34.0340	\$7.8481	\$10.4387	\$14.7805	\$14.5567	#16 A1AF	#30 1001
		\$15.2715		\$10.3761	\$5.4047	\$5.0535	\$6.4614	\$16.4145 \$8.8806	\$20.1801 \$11.4589
		\$15.5414		\$8.2224	\$5.4482	\$3.9352	\$6.0358	\$10.9026	\$11.4569 \$12.5957
	2000	\$19.7278		\$18.1886	\$6.9418	\$10.5408	\$5.1682	\$5.5879	\$7.9757
		\$23.5193		\$16.5316	\$7.2811	\$8.8066	\$5.7395	\$5.3848	\$7.0050
	6	\$27.2048		\$18.9853	\$13.0716	\$14.3986	\$10.1755	\$5.3611	\$4.6431

Notes:

Applicable to demand charge credits and secondary points under discounted rate agreements.

- Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of 2/ \$0.0000.
- Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of \$0.0168.

Issued: September 27, 2018 Effective: November 1, 2018

Docket No. RP15-990-002 Accepted: November 1, 2018

Twelfth Revised Sheet No. 14 Superseding Eleventh Revised Sheet No. 14

RATES PER DEKATHERM

FIRM TRANSPORTATION RATES RATE SCHEDULE FOR FT-A

Reservation Rates	RECEIP	-	DELIVERY ZONE									
	ZONE	0	L	1	2	3	4	5	6			
	0	\$5.5411	************	\$11.5794	\$15.5758	\$15.8514	\$17.4175	\$18.4879	\$23.195			
	L		\$4.9193					•	,			
	1	\$8.3417		\$7.9962	\$10.6413	\$15.0745	\$14.8460	\$16.7429	\$20.587			
	2	\$15.5759 \$15.8514		\$10.5774 \$8.3784	\$5.5014	\$5.1427 \$4.0009	\$6.5803	\$9.0504	\$11.683			
	4	\$20.1259		\$18.5544	\$5.5458 \$7.0708	\$10.7456	\$6.1457	\$11.1149	\$12.843			
	5	\$23.9973		\$16.8625	\$7.4172	\$8.9748	\$5.2598	\$5.6884	\$8.126			
	6	\$27.7603		\$19.3678	\$13.3296	\$14.6845	\$5.8432 \$10.3726	\$5.4810 \$5.4568	\$7.135 \$4.723			
Dally Base												
Reservation Rate 1/	RECEIPT		DELIVERY ZONE									
	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						• 20110 - 000			
	1	\$0.2742		\$0.2629	\$0.3499	\$0.4956	\$0.4881	40 FF0F				
	2	\$0.5121		\$0.3478	\$0.1809	\$0.1691	\$0.2163	\$0.5505 \$0.2975	\$0.6769			
	3	\$0.5211		\$0.2755	\$0.1823	\$0.1315	\$0.2021	\$0.3654	\$0.3841			
	4	\$0.6617		\$0.6100	\$0.2325	\$0.3533	\$0.1729	\$0.3654	\$0.4223 \$0.2672			
	5	\$0.7890		\$0.5544	\$0.2439	\$0.2951	\$0.1921	Visitate .				
	6	\$0.9127		\$0.6367	\$0.4382	\$0.4828	\$0.3410	\$0.1802 \$0.1794	\$0.2346 \$0.1553			
laximum Reservation												
tates 2/, 3/					DELIVER	ZONE						
	RECEIPT ZONE	0	L	1	2	3	4	5	6			
	0	\$5.5579		\$11.5962	\$15.5 92 6	\$15.8682	\$17,4343	\$18.5047				
	Ľ	40.00.0	\$4.9361	7-2.0504	7-0.00-0	7.5.000	747.7373	\PUC.014	\$23.2127			
	ī	\$8.3585	+	\$8.0130	\$10.6581	\$15.0913	\$14.8628	\$16.7597	\$20,6046			
	2	\$15.5927		\$10.5942	\$5.5182	\$5.1595	\$6.5971	\$9.0672				
		15.86R2		¢8 3952	45 5626	\$4.0177	\$6 162E	411.1012	\$11.6998			

Notes:

Applicable to demand charge credits and secondary points under discounted rate agreements.

\$15.8682

\$20.1427

\$24.0141

\$27.7771

3

Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of 2/

\$18.5712

\$16.8793

\$19.3846

\$8.3952

\$5.5626

\$7.0876

\$7,4340

\$13.3464

\$4.0177

\$8.9916

\$14.7013

\$10.7624

\$6.1625

\$5.2766

\$5.8600

\$10.3894

Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions 3/ of \$0.0168.

Issued: September 26, 2018 Effective: November 1, 2018 \$12.8605

\$8.1433

\$7.1521

\$5.7052

\$5.4978

\$5.4736

\$11.1317

RATES PER DEKATHERM

COMMODITY RATES RATE SCHEDULE FOR FT-A

\$0.0124

\$0.0169

\$0.0632

\$0.0969

\$0.0626

\$0.0528

\$0.0776

\$0.0323

Base DELIVERY ZONE Commodity Rates RECEIPT----ZONE 0 L 1 2 3 5 6 \$0,0177 \$0.0219 \$0,0032 \$0.0115 0 \$0.2613 \$0.2494 \$0.2968 L \$0,0012 \$0.0042 \$0.0081 \$0.0147 \$0,0179 \$0.2222 \$0.2266 \$0, 2587 2 \$0.0167 \$0.0087 \$0.0012 \$0.0028 \$0.0719 \$0.1153 \$0, 1278 3 \$0,0207 \$0.0169 \$0,0026 \$0.0002 \$0.0961 \$0.1330 \$0, 1452 \$0.0087 \$0.0105 4 \$0.0250 \$0.0205 \$0.0445 \$0.0629 \$0.1019 \$0.0284 \$0.0256 \$0.0100 \$0.0118 \$0.0626 \$0.0620 \$0,0770 \$0.0163 6 \$0.0346 \$0.0300 \$0.0143 \$0.0963 \$0.0522 \$0.0317 Minimum DELIVERY ZONE Commodity Rates 1/, 2/ RECEIPT-----ZONE 0 1 3 5 6 \$0.0177 \$0,0032 \$0.0115 \$0,0219 n \$0.0250 \$0.0284 \$0.0346 L \$0.0012 \$0.0042 \$0.0081 \$0.0147 \$0,0179 \$0.0210 \$0.0256 \$0,0300 2 \$0.0167 \$0.0087 \$0.0012 \$0.0028 \$0.0056 \$0.0100 \$0,0143 \$0.0026 \$0.0002 3 \$0.0207 \$0.0169 \$0.0081 \$0,0118 \$0.0163 \$0.0087 \$0.0105 4 \$0.0250 \$0.0205 \$0.0028 \$0.0046 \$0.0092 5 \$0.0284 \$0.0256 \$0.0100 \$0.0118 \$0,0046 \$0.0046 \$0.0066 \$0.0143 \$0.0163 6 \$0.0346 \$0,0300 \$0.0086 \$0.0041 \$0.0020 Maximum DELIVERY ZONE Commodity Rates 1/, 2/, 3/ RECEIPT----ZONE 0 L 1 3 6 0 \$0,0038 \$0.0121 \$0.0183 \$0.0225 \$0.2500 \$0,2619 \$0.2974 \$0.0018 L \$0.0153 \$0,0048 \$0.0087 \$0.0185 1 \$0,2228 \$0.2272 \$0.2593 \$0.0093 \$0,0018 \$0,0034 \$0.0173 \$0.0725 \$0.1159 \$0.1284 \$0,0032 \$0.0008 \$0.0175 3 \$0,0213 \$0.0967 \$0.1336 \$0.1458 \$0.0093 \$0.0111 4 \$0.0256 \$0.0211 \$0.0451 \$0.0635 \$0.1025

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.

\$0.0262

\$0.0306

\$0.0106

\$0.0149

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.

\$0.0290

\$0.0352

3/ Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of \$0.0006.

Issued: September 27, 2018 Effective: November 1, 2018 Docket No. RP15-990-002 Accepted: November 1, 2018

RATES PER DEKATHERM

COMMODITY RATES RATE SCHEDULE FOR FT-A

Base Commodity Rates		_			DELIVERY ZO	ONE			
	ZONE	0	L	1	2	3	4	5	6
	0 L	\$0.0032	\$0.0012	\$0.0115	\$0.0177	\$0.0219	\$0.2668	\$0.2546	\$0.303
	1	\$0.0042	40.000	\$0.0081	\$0.0147	\$0.0179	\$0.2269	AA 2212	40.000
	2	\$0.0167		\$0.0087	\$0.0012	\$0.0028	\$0.0734	\$0.2313 \$0.1178	\$0.264
	3	\$0.0207		\$0.0169	\$0.0026	\$0.0002	\$0.0982	\$0.1178	\$0.130
	4	\$0.0250		\$0.0205	\$0.0087	\$0.0105	\$0.0454		\$0.148
	5	\$0.0284		\$0.0256	\$0.0100	\$0.0118	\$0.0639	\$0.0642	\$0.104
	6	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0984	\$0.0633 \$0.0533	\$0.0787 \$0.0324
Minimum									
Commodity Rates 1/, 2/					DELIVERY ZO	NE			
	RECEIPT								
	ZONE	0	L	1	2	3	4	5	6
					***********				•
	0	\$0.0032		\$0.0115	\$0.0177	\$0.0219	\$0.0250	\$0.0284	\$0.0346
	· L	•	\$0.0012		•		40.0200	40.0204	\$0.0346
	1	\$0.0042		\$0.0081	\$0.0147	\$0.0179	\$0.0210	\$0.0256	\$0.0300
8	2	\$0.0167	× .	\$0.0087	\$0.0012	\$0.0028	\$0.0056	\$0.0256	
	3	\$0.0207		\$0.0169	\$0.0026	\$0.0002	\$0.0081	\$0.0100	\$0.0143
	4	\$0.0250		\$0.0205	\$0.0087	\$0.0105	\$0.0028	\$0.0016	\$0.0163
	Ś	\$0.0284		\$0.0256	\$0.0100	\$0.0118	\$0.0046	\$0.0046	\$0.0092
	6	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0086	\$0.0041	\$0.0066 \$0.0020
1aximum									
Commodity Rates 1/, 2/, 3/	/ RECEIPT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		D	ELIVERY ZO	NE			
	ZONE	0	L	1	2	3	.4	5	6
	0	\$0.0038	+0.0016	\$0.0121	\$0.0183	\$0.0225	\$0.2674	\$0.2552	\$0.3036
	Ļ	40 0040	\$0.0018	40 0007	40 01 P3	40.0105			
	1 2	\$0.0048		\$0.0087 \$0.0093	\$0.0153	\$0.0185	\$0.2275	\$0.2319	\$0.2647
	3	\$0.0173 \$0.0213		\$0.0093	\$0.0018 \$0.0032	\$0.0034 \$0.0008	\$0.0740	\$0.1184	\$0.1311
	4			\$0.0175	\$0.0032	\$0.0008	\$0.0988	\$0.1364	\$0.1488
	5	\$0.0256 \$0.0290		\$0.0211	\$0.0093	\$0.0111	\$0.0460	\$0.0648	\$0.1047
	6	\$0.0352		\$0.0202	\$0.0108	\$0.0124	\$0.0645	\$0.0639	\$0.0793
	0	みひ.ひろつん		\$U.U3U0	40.0143	\$0.0103	\$0.0990	\$0.0539	\$0.0330

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.
 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.
- Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of \$0.0006.

FUEL AND EPCR

F&LR 1/, 2/, 3/, 4/	RECEIPT		DELIVERY ZONE									
	ZONE	0	L	1	2	3	4	5	6			
	0	0.46%	0.17%	1.71%	2.68%	3.32%	3.86%	4.36%	5.18%			
	1	0.62%	0.27.70	1.21%	2.17%	2.71%	3.25%	3.95%	4.51%			
	2	2.61%		1.30%	0.16%	0.41%	0.88%	1.57%	2.18%			
	3	3.32%		2.64%	0.41%	0.02%	1.27%	1.89%	2.52%			
	4	3.86%		3.01%	1.29%	1.56%	0.43%	0.73%	1.35%			
	5	4.56%		3.95%	1.57%	1.89%	0.72%	0.72%	0.95%			
	6	5.46%		4.72%	2.18%	2.52%	1.26%	0.55%	0.21%			

Broad Run Expansion Project - Market Component (Z3-Z1): 5/ 4.62%

EPCR 3/, 4/	RECEIPT ZONE		DELIVERY ZONE								
		0	L	1	2	3	4	5	6		
	0 L 1 2	\$0.0033 \$0.0045 \$0.0199	\$0.0011	\$0.0129 \$0.0090 \$0.0097	\$0.0199 \$0.0165 \$0.0010	\$0.0248 \$0.0202 \$0.0029	\$0.0299 \$0.0251 \$0.0065	\$0.0340 \$0.0307 \$0.0118	\$0.0408 \$0.0353 \$0.0162		
	3 4 5 6	\$0.0248 \$0.0299 \$0.0340 \$0.0408		\$0.0202 \$0.0231 \$0.0307 \$0.0353	\$0.0029 \$0.0096 \$0.0118 \$0.0162	\$0.0000 \$0.0117 \$0.0140 \$0.0187	\$0.0095 \$0.0031 \$0.0053 \$0.0094	\$0.0140 \$0.0054 \$0.0052 \$0.0040	\$0.0187 \$0.0101 \$0.0070 \$0.0014		

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

Issued: March 5, 2019 Effective: April 1, 2019

^{1/} Included in the above F&LR is the Losses component of the F&LR equal to -0.04%.

^{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 0.00%.

^{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.

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. Included in the above F&LR is the Losses component of the F&LR equal to -0.04%.

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%	3.41%	3.88%			
	3	2.86%		2.31%	0.46%	0.14%	0.85% 1.17%	1.43% 1.69%	1.93% 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 ZONE	DELIVERY ZONE									
			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 2 3 4 5	\$0.0053 \$0.0233 \$0.0290 \$0.0350 \$0.0398	4	\$0.0105 \$0.0113 \$0.0236 \$0.0271 \$0.0359	\$0.0193 \$0.0012 \$0.0034 \$0.0113 \$0.0138	\$0.0236 \$0.0034 \$0.0000 \$0.0137 \$0.0164	\$0.0293 \$0.0076 \$0.0111 \$0.0036 \$0.0062	\$0.0359 \$0.0138 \$0.0164 \$0.0063 \$0.0061	\$0.0412 \$0.0190 \$0.0219 \$0.0118 \$0.0082		
	6	\$0.0398		\$0.0359	\$0.0138	\$0.0164	\$0.0062	\$0.0061 \$0.0046			

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

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.

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

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.

FERC ACA UNIT CHARGE EFFECTIVE OCTOBER 1, 2019

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, D.C. 20426

FY 2019 GAS ANNUAL CHARGES CORRECTION FOR ANNUAL CHARGES UNIT CHARGE June 18, 2019

The annual charges unit charge (ACA) to be applied to in fiscal year 2020 for recovery of FY 2019 Current year and 2018 True-Up is \$0.0013 per Dekatherm (Dth). The new ACA surcharge will become effective October 1, 2019.

The following calculations were used to determine the FY 2019 unit charge:

2019 CURRENT:

Estimated Program Cost \$72,947,000 divided by 56,271,363,511 Dth = 0.0012963432

2018 TRUE-UP:

Debit/Credit Cost (\$1,595,692) divided by 49,876,999,197 Dth = (0.0000319925)

TOTAL UNIT CHARGE = 0.0012643507

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

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

COLUMN	1	2	3	4	5	6	7
	OFF-SYSTEM		Ol	JT OF POCKET COST	S ("OOPC")		NET
	SALES REVENUE	GAS	TRANSPORT	STORAGE	OTHER	TOTAL	REVENUE ("NR")
-	("OSREV")	COSTS ("GC")	COSTS ("TC")	COSTS ("SC")	COSTS	OOPC	(1 - 6)
NOV. 18	\$455,500	\$306,000	\$0	\$0	\$0	\$306,000	\$149,500
DEC. 18	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JAN. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FEB. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAR. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
APR. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAY 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JUN. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JUL. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AUG. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SEP. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OCT. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTALS	\$455,500	\$306,000	\$0	\$0	\$0	\$306,000	\$149,500

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

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

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

	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 50/50 Company/Customer Sharing in Excess of 3.0% of TAGSC	\$3,440,696	25%	75%	\$2,580,522	\$860,174	\$3,440,696
	\$3,704,621	50%	50%	\$1,852,310	\$1,852,311	\$3,704,621
	\$7,145,317		19	\$4,432,832	\$2,712,485	\$7,145,317
				×		
Portion of Company Savings Attributable to De Portion of Company Savings Attributable to Co	34.38% 65.62%			\$932,552 \$1,779,933		
Total Company Portion of Savings		100.00%		CSPBR	\$2,712,485	

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

(1)	(2)	(3)	(4)		(5)	(6)	(7)
Total (Gas Supply Cost Pe	erformance-Base	Demand/Co	ommodity	Benchmarked	d Gas Costs	PTAGSC
			Alloca Demand	Commodity			(Col. 3 / 6)
Gas Acquisition In GAIF	dex Factor			Commodity	Actual Gas Costs		(001. 07 0)
Demand	\$0		0.00%				
Commodity Total	\$4,539,225	\$4,539,225		63.53%	AGC	\$90,607,727	
Transportation Inc	lex Factor				Actual Transporta	tion Costs	
Demand Commodity Total	\$2,456,592 \$0	\$2,456,592	34.38%	0.00%	TAAGTC	\$24,082,126	
Off-System Sales OSSIF	Index Factor		*				
Demand Commodity Total	\$0 \$149,500	\$149,500		2.09%			
Total All PBR Fac Demand Commodity	tors \$2,456,592 \$4,688,725			-	Total Actual Gas	Supply Costs	
TPBRR		\$7,145,317	34.38%	65.62%	TAGSC	\$114,689,853	6.23%