

Ms. Linda Bridwell Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40601-8294

December 31, 2020

### Re: Performance Based Ratemaking Mechanism

Dear Ms. Bridwell:

Pursuant to the Commission's Order in Case No. 2014-00476, dated June 30, 2015, and in accordance with the terms of the Commission's March 16, 2020 and March 24, 2020 Orders in Case No. 2020-00085 ("Electronic Emergency Docket Related to the Novel Coronavirus COVID-19") ("COVID-19 Orders"), Louisville Gas and Electric Company ("LG&E") herewith files support for its Performance Based Ratemaking Mechanism ("PBR") for the period beginning November 1, 2019 and ending October 31, 2020. The original filing in paper medium and ten copies of the report will be delivered to the Commission consistent with the COVID-19 Orders.

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. Saddler

Andrea M. Fackler



## JAN 04 2021

PUBLIC SERVICE COMMISSION

Louisville Gas and Electric Company State Regulation and Rates 220 West Main Street PO Box 32010

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### Activity Under LG&E's Performance-Based Ratemaking ("PBR") Mechanism for the PBR Period for the 12 Months Ended October 31, 2020

Attached is a summary of LG&E's activity and the supporting documentation for the PBR mechanism covering the entirety of PBR Year 23 (November 1, 2019, through October 31, 2020) 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, 2021.

**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, 2020, LG&E has achieved the following results:

	PBR-GAIF	PBR-TIF	PBR-OSSIF	Total
Nov. 2019	\$244,801	\$178,784	\$0	\$423,585
Dec.	\$274,132	\$178,784	\$0	\$452,916
Jan. 2020	\$141,133	\$178,784	\$0	\$319,917
Qtr. Subtotal	\$660,066	\$536,352	\$0	\$1,196,418
Feb.	\$69,002	\$178,784	\$0	\$247,786
Mar.	\$93,059	\$178,784	\$0	\$271,843
Apr.	\$184,109	\$178,784	\$0	\$362,893
Qtr. Subtotal	\$346,170	\$536,352	\$0	\$882,522

	PBR-GAIF	PBR-TIF	PBR-OSSIF	Total
May	\$73,674	\$200,484	\$0	\$274,158
Jun.	\$103,737	\$178,784	\$0	\$282,521
Jul.	\$505,796	\$212,884	\$0	\$718,680
Qtr. Subtotal	\$683,207	\$592,152	\$0	\$1,275,359
Aug.	\$696,653	\$178,784	\$0	\$875,437
Sep.	\$511,143	\$178,784	\$0	\$689,927
Oct.	\$933,954	\$178,784	\$0	\$1,112,738
Qtr. Subtotal	\$2,141,750	\$536,352	\$0	\$2,678,102
Total	\$3,831,193	\$2,201,208	\$0	\$6,032,401

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.

For the entirety of the months of December 2019, February 2020, and June through and including October 2020, the *Platts Gas Daily* midpoint postings for "Louisiana - Onshore South, Texas Gas, Zone SL" (currently styled by Platts as "Louisiana/Southeast, Texas Gas, Zone SL") failed to post. This price posting is one of the components of the Supply Area Index for TGT-SL. In accordance with the tariff language "[i]f an index ceases to exist or fails to report, the Company may use a suitable replacement index and report that change to the Commission in the applicable quarterly report." As further outlined in LG&E's report in Case No. 2014-00476, when an index fails to post, "the posting for the proximate zone on the same pipeline may be used as the replacement index." Therefore, LG&E has used the "Louisiana - Onshore South, Texas Gas, Zone 1" (currently styled by Platts as "Louisiana/Southeast, Texas Gas, Zone 1") posting in lieu of daily TGT Zone SL (both published by *Platts Gas Daily*) for the period when it was unavailable.

<u>Purchasing Practices and Strategy</u>: LG&E has sought to generate savings under the PBR mechanism by (1) aggressively managing gas supplies to ensure that purchases will be made at less than applicable gas supply indices, (2) purchasing gas at capacity-constrained points at which points natural gas is typically priced at less than the referenced indices, and (3) maximizing the use of LG&E's on-system storage and off-system contract storage by accelerating or deferring injections (or withdrawals) in order

to maximize savings under the PBR mechanism. LG&E has not used any financial instruments to date in pursuing its objectives under the PBR mechanism.

<u>Composition of Savings</u>: Total savings under the PBR-GAIF component of the mechanism is \$3,831,193.

**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 \$2,201,208. The portion of savings attributable to Texas Gas under PBR-TIF is \$55,800. The portion of savings attributable to Tennessee under PBR-TIF is \$2,145,408. 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 and capacity release activity is \$2,201,208.

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

<u>Off-System Sales Activity</u>: LG&E makes off-system sales when the opportunity arises to generate savings, and LG&E had natural gas under contract and available for sale. These off-system sales are made to entities which are not affiliated with LG&E. During the period covered by this report, LG&E made no off-system sales.

**PBR Amounts and Demand/Commodity Allocation:** Following is a summary of the various PBR components in total for the 12 months ended October 31, 2020. 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 23 were 6,032,401, and TAGSC was 81,847,388, which is the sum of 57,806,087 in AGC and 24,041,301 in TAAGTC. Therefore, savings as a percentage of TAGSC were 7.37% (6,032,401 / 81,847,388). Hence, all of the savings up to 2,455,422 (3.0% x 81,847,388) 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 3,576,979 (6,032,401 - 2,455,422), is the subject of the 50% sharing tier.

Therefore, the initial tier of the sliding scale is allocated on a 25/75 basis with \$613,855 (25% x \$2,455,422) being allocated to the Company and \$1,841,567 (75% x \$2,455,422) being allocated to customers. The second tier is subject to sharing on a 50/50 basis with \$1,788,490 (50% x \$3,576,979) being allocated to the Company and \$1,788,489 (50% x \$3,576,979) being allocated to customers. Therefore, the total portion of the savings being retained by customers is \$3,630,056 (\$1,841,567 + \$1,788,489); and the total portion of the savings being allocated to the Company and collected from customers is \$2,420,345 (\$613,855 + \$1,788,490). Therefore, the CSPBR to be collected for the Company from customers by means of the PBRRC (as a part of the GSCC) is \$2,402,345.

The total to be collected for the Company from customers through the GSCC is \$2,402,345. 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, \$876,616 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 \$1,525,729 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.

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## PBR CALCULATIONS FOR THE 12 MONTHS ENDED OCTOBER 31, 2020

## PBR-GAIF SUPPORTING CALCULATIONS

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

### LOUISVILLE GAS AND ELECTRIC COMPANY GAIF - CALCULATION OF BGC

						6	SAIF - GALCULATIO	N OF BGC					
Column	- X -	2	1		8	6			9	10	11	12	ra
									and the second second		APV ACCORDING TO	SZFQE%	
	APV	APV	APV		APV			APV - PEFDCQ=	TGT ZONE SL	TGT ZONE 1	TGT ZONE 4	TGPL ZONE 0	TGPL ZONE
	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. B X SZFOE%)	C. 8 X SZFQE%	C. 8 X SZFQE%	C. 8 X SZFQE
Nov 19	2,147,138	816,921	D	600,000	585,000	4,129,059	0	4,128,059	1,984,839	841,915	976,935	325,370	
Dec 19	1,269,545	485,000	0	620,000	450,000	2,824,545	0	2,824,545	1,357,759	575,925	668,287	222,574	
Jan 20	539,752	435,000	0	280,000	240.000	1,494,752	0	1,494,752	718,527	304,780	353,858	117,787	
Feb 20	958,140	510,000	0	480,000	α	1,948,140	0	1,948,140	936,471	397,226	460,930	153,513	
Mar 20	878,315	649,291	0	80,000	0	1,605,596	0	1,605,598	771,810	327,381	379,884	128,521	
Apr 20	785,950	710,000	0	60,000	0	1,565,950	0	1,555,950	354,912	152,794	786,222	262,022	
May 20	801,315	745,000	0	180,000	0	1,726,315	0	1,728,315	393,773	169,524	872,307	290,711	
Jun 20	858,760	1,140,000	0	600,000	0	2,408,780	0	2,408,760	549,438	236,540	1,217,147	405,635	
Jul 20	777,728	1,240,000	0	505,000	927,089	3,449,817	0	3,449,617	786,903	338,772	1,743,193	580,949	
Aug 20	1,587,228	1,850,000	0	310,000	0	3,757,228	0	3,757,228	857,024	366,960	1,898,527	632,717	
Sep 20	1,883,637	1,797,994	0	300,000	0	3,781,831	0	3,781,631	882,590	371,356	1,010,858	636,827	
Oct 20	1,839,197	1,860,000	0	350,000	0	3,849,197	0	3,849,197	878,002	377,991	1,944,999	648,205	
Total	13,734,705	12,249,196	0	4,365,000	2,182,089	32,530,990	D	32,530,990	10,452,048	4,463,164	13,212,947	4,402,831	
Column	14	15	16	17	16	19	20	21	22	23	24	25	
		APV x SAL		APV x SAL		APV x SAI		APV & SAL		APV x SAI		TOTAL	
	SAI	TGT-SL	SAI	TGT-Z1	SAL	TGT-Z4	SAL	TGPL-Z0	SAL	TGPL-21		BMGCC	
	TGT-SL	(9X14)	TGT-Z1	(10X18)	TGT-24	(11X18)	TGPL-20	(12X20)	TGPL-Z1	(13X22)	DAI	(15+17+19+21+23+24)	
Nov 19	\$2,4933	\$4,948,799	\$2,4372	\$2,051,915	\$2,4391	\$2,382,842	\$2.4333	\$791,723	52.6449	50	50	\$10,175,279	
Dec 19	\$2,1814	\$2,981,815	\$2,1374	\$1,230,982	\$2,1744	\$1,453,123	\$2,1290	\$473,860	\$2,2294	\$0	50	\$6,119,780	
Jan 20	\$1,9860	\$1,428,995		\$569.565	\$1.9527	5890,588	\$1.9323	\$227,800	\$2,0013	50	50	\$2,934,749	
Feb 20	\$1.7861	\$1,872,631	\$1 7544	\$896,893	\$1,7461	\$804,830	\$1.7738	\$272,301	\$1.8105	\$0	\$0	\$3,446,655	
Mar 20	\$1.5953	\$1,231,268	\$1.5948	\$522,107	\$1.5703	\$596,532	\$1.6345	\$208,799	\$1,7032	\$0	50	\$2,555,708	
Apr 20	\$1.5935	\$585,588	\$1.5488	\$236,342	\$1.5269	\$1,200,482	\$1.5647	\$409,986	\$1.8154	50	50	\$2,412,398	
May 20	\$1.6825	\$652.523		\$275,683	51.6123	\$1,408,421	\$1.6413	\$477,144	\$1,6901	50	50	\$2,821,751	
Jun 20	\$1.5547	\$854,211	\$1.5314	\$362,237	\$1,5181	\$1,847,751	\$1.5397	\$824,556	\$1.5837	\$0	50	\$3,888,755	
Jul 20	\$1,5763	51,240,395		\$526,655	51.5378	\$2,680,682	\$1,5541	\$902,853	\$1.5932	\$0	50	\$5,350,585	
Aug 20	\$1.9876	\$1,703,421	\$1.9423	\$716,631	51,9088	\$3,623,908	\$1 9922	\$1,260,499	\$2,0470	\$0	50	\$7,304,459	
Sep 20	52.0046	51,729,148		\$723,661	51,9301	\$3,668,147	\$2.0643	\$1,314,602	\$2,0855	50	50	\$7,455,558	
Oct 20	\$1,9325	\$1,695,739		\$708,541	\$1.8584	\$3,614,588	\$2.0869	\$1,352,739	\$2.0335	\$0	50	\$7,370,605	
Total		\$20,693,533		\$6,639,193		\$23,969,692		\$5,314,662		50	50	\$\$1,637,280	

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

#### LOUISVILLE GAS AND ELECTRIC COMPANY GAS ACQUISITION INDEX FACTOR - CALCULATION OF AGC

Column	đ	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 19	2,147,138	\$5,155,722	816,921	\$1,984,506	0	\$0	600,000	\$1,412,700	565,000	\$1,377,550
Dec 19	1,269,545	\$2,641,448	485,000	\$1,002,875	0	\$0	620,000	\$1,251,800	450,000	\$949,525
Jan 20	539,752	\$1,034,941	435,000	\$775,425	0	\$0	280,000	\$528,000	240,000	\$455,250
Feb 20	958,140	\$1,651,053	510,000	\$890,400	0	\$0	480,000	\$836,200	0	\$0
Mar 20	876,315	\$1,348,376	649,281	\$989,671	0	\$0	80,000	\$125,600	0	\$1
Apr 20	785,950	\$1,123,464	710,000	\$1,009,725	0	\$0	60,000	\$95,100	0	\$
May 20	801,315	\$1,279,502	745,000	\$1,182,400	0	\$0	180,000	\$286,175	0	50
Jun 20	668,760	\$997,668	1,140,000	\$1,689,750	0	\$0	600,000	\$897,600	0	\$1
Jul 20	777,728	\$1,065,487	1,240,000	\$1,711,200	0	\$0	505,000	\$691,525	927,089	\$1,376,57
Aug 20	1,587,228	\$2,798,556	1,860,000	\$3,270,350	0	\$0	310,000	\$538,900	0	\$1
Sep 20	1,683,637	\$3,106,136	1,797,994	\$3,290,629	0	\$0	300,000	\$547,650	0	\$
Oct 20	1,639,197	\$2,623,101	1,860,000	\$3,147,550	a	\$0	350,000	\$666,000	O	\$
	13,734,705	\$24,825,454	12,249,198	\$20,944,481	a	\$0	4,365,000	\$7,877,250	2,182,089	\$4,158,90

Column	11	12
	TOTAL	TOTAL
	TRANSPORT	GAS COMMODITY
	GAS	COSTS
1.1	(1+3+5+7+9)	(2+4+6+8+10)
Nov 19	4,129,059	\$9,930,478
Dec 19	2,824,545	\$5,845,648
Jan 20	1,494,752	\$2,793,616
Feb 20	1,948,140	\$3,377,653
Mar 20	1,605,596	\$2,463,647
Apr 20	1,555,950	\$2,228,289
May 20	1,726,315	\$2,748,077
Jun 20	2,408,760	\$3,585,018
Jul 20	3,449,817	\$4,844,789
Aug 20	3,757,228	\$6,607,806
Sep 20	3,781,631	\$6,944,415
Oct 20	3,849,197	\$6,436,651
Total	32,530,990	\$57,806,087

### 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 19	\$10,175,279	\$9,930,478	\$244,801
Dec 19	\$6,119,780	\$5,845,648	\$274,132
Jan 20	\$2,934,749	\$2,793,616	\$141,133
Feb 20	\$3,446,655	\$3,377,653	\$69,002
Mar 20	\$2,556,706	\$2,463,647	\$93,059
Apr 20	\$2,412,398	\$2,228,289	\$184,109
May 20	\$2,821,751	\$2,748,077	\$73,674
Jun 20	\$3,688,755	\$3,585,018	\$103,737
Jul 20	\$5,350,585	\$4,844,789	\$505,796
Aug 20	\$7,304,459	\$6,607,806	\$696,653
Sep 20	\$7,455,558	\$6,944,415	\$511,143
Oct 20	\$7,370,605	\$6,436,651	\$933,954
Total	\$61,637,280	\$57,806,087	\$3,831,193

PBR-GAIF INDICES PBR-GAIF INDICES TEXAS GAS – ZONE SL

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

	NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	PLATTS GAS DAILY AVERAGE LOUISIANA/ SOUTHEAST, TX. GAS, ZONE SL	PLATTS INSIDE FERC's GAS MARKET REPORT LOUISIANA/SOUTHEAST TEXAS GAS, ZONE SL	AVERAGE
Nov. 19	\$2.5650	\$2.4950	\$2.4200	\$2.4933
Dec. 19	\$2.1560	\$2.0381 *	\$2.3500	\$2.1814
Jan. 20	\$1.9800	\$1.9381	\$2.0400	\$1.9860
Feb. 20	\$1.8300	\$1.7583 *	\$1.7700	\$1.7861
Mar. 20	\$1.6860	\$1.4000	\$1.7000	\$1.5953
Apr. 20	\$1.6325	\$1.6783	\$1.4700	\$1.5936
May 20	\$1.6725	\$1.6750	\$1.7000	\$1.6825
Jun. 20	\$1.5560	\$1.4982 *	\$1.6100	\$1.5547
Jul. 20	\$1.6675	\$1.6513 *	\$1.4100	\$1.5763
Aug. 20	\$2.1280	\$2.0648 *	\$1.7700	\$1.9876
Sep. 20	\$1.8800	\$1.7437 *	\$2.3900	\$2.0046
Oct. 20	\$1.9700	\$2.0176 *	\$1.8100	\$1.9325

\* *Platts Gas Daily,* Midpoint price for "Louisiana/Southeast, Texas Gas Zone SL" failed to post on any day during the months of December 2019, February 2020, June 2020, July 2020, August, September and October 2020. Texas Gas Zone 1 was used as the replacement index for Texas Gas Zone SL because it was the proximate pipeline zone.

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

	NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	MONTHLY AVERAGE		NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	MONTHLY
11/04/2019	\$2.4600		05/04/2020	\$1.6500	
11/11/2019	\$2.7100		05/11/2020	\$1.7800	
11/18/2019	\$2.6200		05/18/2020	\$1.5800	
11/25/2019	\$2.4700	\$2.5650	05/25/2020	\$1.6800	\$1.6725
					<i>t</i>
12/02/2019	\$2.2800		06/01/2020	\$1.6500	
12/09/2019	\$2.2100		06/08/2020	\$1.6200	
12/16/2019	\$2.1700		06/15/2020	\$1.6000	
12/23/2019	\$2.2200		06/22/2020	\$1.4300	
12/30/2019	\$1.9000	\$2.1560	06/29/2020	\$1.4800	\$1.5560
04/00/0000					
01/06/2020	\$1.9800		07/06/2020	\$1.5500	
01/13/2020	\$2.0000		07/13/2020	\$1.7500	
01/20/2020	\$2.0300		07/20/2020	\$1.7100	
01/27/2020	\$1.9100	\$1.9800	07/27/2020	\$1.6600	\$1.6675
02/03/2020	\$1.8200		00/00/0000	A4 7000	
02/10/2020	\$1.8000		08/03/2020	\$1.7300	
02/17/2020	\$1.7900		08/10/2020	\$2.0700	
02/24/2020	\$1.9100	\$1.8300	08/17/2020	\$2.1300	
02/24/2020	\$1.5100	φ1.0300	08/24/2020	\$2.2900	
03/02/2020	\$1.7600		08/31/2020	\$2.4200	\$2.1280
03/09/2020	\$1.7100		00/07/2020	¢0.0000	
03/16/2020	\$1.8100		09/07/2020	\$2.0600	
03/23/2020	\$1.6000		09/14/2020	\$1.9900	
03/30/2020	\$1.5500	\$1.6860	09/21/2020	\$1.8000	
03/30/2020	\$1.5500	\$1.0800	09/28/2020	\$1.6700	\$1.8800
04/06/2020	\$1.4800		10/05/2020	\$1.3600	
04/13/2020	\$1.6700		10/12/2020	\$1.7000	
04/20/2020	\$1.6300		10/19/2020	\$2.1200	
04/27/2020	\$1.7500	\$1.6325	10/26/2020	\$2.7000	\$1 0700
		+	10/20/2020	φ2.7000	\$1.9700

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

NC	VEMBER 2019	DECEN 201			NUARY 2020		FE	EBRU 202			ARCH 2020		APRIL 2020
DAY	<b>MIDPOINT</b>	MIDF	POINT	M	IDPOINT	DAY	<b>N</b>	/IDPC	DINT	M	IDPOINT		MIDPOINT
1 \$	2.4050	\$.		\$	-	1	\$	-		\$	-	\$	1.5800
2 \$	2.2900	\$-	•	\$	-	2	\$	-		\$	-	\$	1.4950
3\$	2.2900	\$.		\$	-	3	\$	-		\$	-	\$	-
4 \$	2.2900	\$.		\$	-	4	\$	-		\$	-	\$	-
5\$	2.5050	\$.		\$	-	5	\$	-		\$	-	\$	-
6\$	-	\$ -		\$	-	6	\$	-		\$	-	\$	-
7 \$	2.6950	\$.	•	\$	-	7	\$	-		\$	-	\$	-
8\$	=	\$.	-	\$	-	8	\$	-		\$	-	\$	-
9\$	-	\$.	•	\$	-	9	\$	-		\$	-	\$	-
10 \$	-	\$ .		\$	-	10	\$	-		\$	-	S	-
11 \$	-	\$-		\$	-	11	\$	-		\$	-	\$	-
12 \$	2.5850	\$ .	•	\$	-	12		-		\$	-	ŝ	-
13 \$	2.6250	\$ .	-	\$	-	13		-		s	-	ŝ	_
14 \$	2.5600	\$		\$	1.9250	14		-		ŝ	-	s	1.7650
15 \$	2.6000	\$ -		\$	1.9700	15				\$	_	ŝ	1.6300
16 \$	2.5300	\$ .		\$	1.9300	16				\$	-	ŝ	1.6000
17 \$	2.5300	\$ -	-	\$	1.9600	17				ŝ	-	ŝ	1.4500
18 \$	2.5300	\$ .		\$	1.9300	18		-		ŝ	-	ŝ	1.6600
19 \$	_	\$ .		\$	1.9300	19		-		ŝ	-	ŝ	1.6600
20 \$	-	\$ .		\$	1.9300	20				ŝ	-	¢	1.6600
21 \$	_	\$		\$	1.9300	21				¢		¢ ¢	1.6800
22 \$	-	\$.		\$	-	22				ŝ	_	ŝ	1.7750
23 \$	-	\$ .		\$	-	23				ŝ	_	¢	1.8850
24 \$	-	\$ .		ŝ	-	24				\$	_	Ψ ¢	1.0000
25 \$	_	\$ .		ŝ	-	25				¢	_	Ψ	1.7500
26 \$	_	\$.		\$	-	26				¢	-	¢	1.7500
27 \$	-	\$ -		ŝ	-	27				¢		φ Φ	1.7500
28 \$	-	\$.		ŝ	-	28				\$	1.3900	¢ ¢	1.6000
29 \$	-	¢.		¢	-	29				φ \$	1.3900	ф \$	
30 \$	_	\$.		¢	-	30		-		э \$		Տ	1.8000
31	-	\$ -		\$	-	30				- 2	1.3900	Ф	1.7200
51		φ -	•	Φ	-	31				\$	1.4300		
TOTAL \$	32.4350	\$ -		\$	15.5050	TOTAL	\$	-		\$	5.6000	\$	30.2100
POSTINGS	13		0		8	POSTINGS			0		4		18
AVERAGE \$	2.4950	\$-		\$	1.9381	AVERAGE	\$	-		\$	1.4000	\$	1.6783

	MAY 2020	JU 20	NE 20	JI 2	ULY 020				JGUS <sup>-</sup> 2020	т	SEPTE 20		R	ОСТС 202		
DAY	IDPOINT	MID	POINT	MI	POIN	Π	DAY[	MI	DPOII	T	MIC	POIN	<u>π]</u> [	MI	OPOIN	IT]
1 \$ 2 \$	1.6350 1.5850	\$ \$	-	\$ \$	-		1 2	\$ \$	-		\$ \$	-		\$ \$	-	
3\$	1.5850	\$	-	\$	-		3	\$	-		\$	-		\$	-	
4 \$	1.5850	\$	-	\$	-		4	\$	-		\$	-		\$	-	
5\$	1.6000	\$	-	\$	-		5	\$	-		\$	-		\$	-	
6\$	1.8800	\$	-	\$	-		6	\$	-		\$	-		\$	-	
7 \$	1.7800	\$	-	\$	-		7	\$	-		\$	-		\$	-	
8\$	1.7500	\$	÷	\$	-		8	\$	-		\$	-		\$	-	
9\$	-	\$	-	\$	-		9	\$	-		\$	-		\$	-	
10 \$	-	\$	-	\$	-		10	\$	-		\$	-		\$	-	
11 \$	-	\$	-	\$	-		11	\$	-		\$	-		\$	-	
12 \$	-	\$	=	\$	-		12	\$	-		\$	-		\$	-	
13 \$	-	\$	-	\$	-		13	\$	-		\$	-		\$	-	
14 \$	-	\$	-	\$	-		14	\$	-		\$	-		\$	-	
15 \$	-	\$	-	\$	-		15	\$	-		\$	-		\$	-	
16 \$	-	\$	-	\$	-		16	\$	-		\$	-		\$	-	
17 \$	-	\$	H	\$	-		17	\$	-		\$	-		\$	-	
18 \$	-	\$	-	\$	-		18	\$	-		\$	-		\$	-	
19 \$	-	\$	-	\$	-		19	\$	-		\$	-		\$	-	
20 \$	-	\$	-	\$	-		20	\$	-		\$	-		\$	-	
21 \$	-	\$	-	\$	-		21	\$	-		\$	-		\$	-	
22 \$	-	\$	-	\$	-		22	\$	-		\$	-		\$	-	
23 \$	-	\$	-	\$	-		23	\$	Ξ.		\$	-		\$	-	
24 \$	-	\$	-	\$	-		24	\$	-		\$	-		\$	-	
25 \$	-	\$	-	\$	-		25	\$	-		\$	-		\$	-	
26 \$	-	\$	-	\$	-		26	\$	-		\$	-		\$	-	
27 \$	-	\$	-	\$	-		27	\$	-		\$	-		\$	-	
28 \$	-	\$	-	\$	-		28	\$	-		\$	-		\$	-	
29 \$	-	\$	-	\$	1.		29	\$	-		\$	-		\$	-	
30 \$	-	\$	-	\$	-		30	\$	-		\$	-		\$	÷	
31 \$	-			\$	-		31	\$	-					\$	-	
TOTAL \$	13.4000	\$	-	\$	-		TOTAL	\$	-		\$	-		\$	-	
POSTINGS	8		0			0	POSTINGS			0			0			0
AVERAGE \$	1.6750	\$	-	\$	-		AVERAGE	\$	-		\$	-		\$	-	

PBR-GAIF INDICES TEXAS GAS – ZONE 1

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

	NATURAL GAS WEEK LOUISIANA NORTH	PLATTS GAS DAILY AVERAGE LOUISIANA/ SOUTHEAST, TX. GAS, ZONE 1	PLATTS INSIDE FERC's GAS MARKET REPORT LOUISIANA/SOUTHEAST TEXAS GAS, ZONE 1	AVERAGE
Nov. 19	\$2.4850	\$2.4467	\$2.3800	\$2.4372
Dec. 19	\$2.0640	\$2.0381	\$2.3100	\$2.1374
Jan. 20	\$1.9075	\$1.8956	\$2.0000	\$1.9344
Feb. 20	\$1.7750	\$1.7583	\$1.7300	\$1.7544
Mar. 20	\$1.5760	\$1.5485	\$1.6600	\$1.5948
Apr. 20	\$1.6000	\$1.6103	\$1.4300	\$1.5468
May 20	\$1.6050	\$1.6134	\$1.6600	\$1.6261
Jun. 20	\$1.5260	\$1.4982	\$1.5700	\$1.5314
Jul. 20	\$1.6425	\$1.6513	\$1.3700	\$1.5546
Aug. 20	\$2.0320	\$2.0648	\$1.7300	\$1.9423
Sep. 20	\$1.7525	\$1.7437	\$2.3500	\$1.9487
Oct. 20	\$1.8200	\$2.0176	\$1.7700	\$1.8692

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

	NATURAL GAS WEEK LOUISIANA NORTH	MONTHLY AVERAGE	NATURAL GAS WEEK LOUISIANA NORTH	MONTHLY
11/04/2019	\$2.3600		05/04/2020 \$1.5800	
11/11/2019	\$2.6300		05/11/2020 \$1.7100	
11/18/2019	\$2.5300		05/18/2020 \$1.5400	
11/25/2019	\$2.4200	\$2.4850	05/25/2020 \$1.5900	\$1.6050
	+=	+=	00/20/2020 0000	<b></b>
12/02/2019	\$2.2200		06/01/2020 \$1.6000	
12/09/2019	\$2.1100		06/08/2020 \$1.6000	
12/16/2019	\$2.0900		06/15/2020 \$1.5400	
12/23/2019	\$2.1300		06/22/2020 \$1.4100	
12/30/2019	\$1.7700	\$2.0640	06/29/2020 \$1.4800	\$1.5260
01/06/2020	\$1.9100		07/06/2020 \$1.5300	
01/13/2020	\$1.9600		07/13/2020 \$1.7300	
01/20/2020	\$1.9400		07/20/2020 \$1.6800	
01/27/2020	\$1.8200	\$1.9075	07/27/2020 \$1.6300	\$1.6425
02/03/2020	\$1.7500		08/03/2020 \$1.6900	
02/10/2020	\$1.7600		08/10/2020 \$1.9400	
02/17/2020	\$1.7500		08/17/2020 \$2.0700	
02/24/2020	\$1.8400	\$1.7750	08/24/2020 \$2.1800	
			08/31/2020 \$2.2800	\$2.0320
03/02/2020	\$1.6800			
03/09/2020	\$1.6000		09/07/2020 \$2.0000	
03/16/2020	\$1.6600		09/14/2020 \$1.8300	
03/23/2020	\$1.5400		09/21/2020 \$1.6400	
03/30/2020	\$1.4000	\$1.5760	09/28/2020 \$1.5400	\$1.7525
			• • • • •	
04/06/2020	\$1.4400		10/05/2020 \$1.2200	
04/13/2020	\$1.6400		10/12/2020 \$1.3700	
04/20/2020	\$1.6000		10/19/2020 \$2.0200	
04/27/2020	\$1.7200	\$1.6000	10/26/2020 \$2.6700	\$1.8200

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

N	IOVEMBER 2019	D	ECEMBER 2019	JANUARY 2020		FE	EBRUARY 2020		MARCH 2020			APRIL 2020
DAY	MIDPOINT		MIDPOINT	MIDPOINT	DAY		MIDPOINT		MIDPOINT	1		MIDPOINT
1 \$	2.4050	\$	2.1950	\$ 1.9150	1	\$	1.7150	\$	1.5600		\$	1.5500
2 \$		\$	2.1950	\$ 1.9150	2		1.7150	\$	1.5600		ŝ	1.4700
3 \$	2.2850	\$	2.0750	\$ 1.8800		\$	1.7150	\$	1.5700		ŝ	1.3900
4 \$	2.2850	\$	2.2000	\$ 1.9150	4	\$	1.7350	S	1.6300		\$	1.3800
5\$	2.5350	\$	2.1200	\$ 1.9150	5	\$	1.7400	S	1.6450		\$	1.3800
6\$	2.5850	\$	2.1350	\$ 1.9150	6	\$	1.7550	S	1.6450		S	1.3800
7 \$	2.7300	\$	2.0700	\$ 1.9950	7	\$	1.7750	S	1.5400		\$	1.5750
8 \$	2.6950	\$	2.0700	\$ 1.9750			1.7750	S	1.5400		\$	1.7000
9 \$	2.6100	\$	2.0700	\$ 1.9350	9	\$	1.7750	\$	1.5400		\$	1.7100
10 \$	2.6100	\$	2.0200	\$ 1.8700	10	\$	1.7750	S	1.5250		\$	1.6300
11 \$	2.6100	\$	2.0800	\$ 1.9650	11	\$	1.6900	S	1.6650		\$	1.6300
12 \$	2.6100	\$	2.1200	\$ 1.9650	12		1.7000	S	1.7100		\$	1.6300
13 \$	2.5550	\$	2.0850	\$ 1.9650	13		1.8000	S	1.6150		\$	1.6300
14 \$	2.4650	\$	2.1000	\$ 1.9350	14	\$	1.8050	S	1.7050		\$	1.7000
15 \$	2.5300	\$	2.1000	\$ 1.9900	15	\$	1.7250	S	1,7050		\$	1.6050
16 \$	2.5100	\$	2.1000	\$ 1.9400	16	\$	1.7250	\$	1.7050		\$	1.5400
17 \$	2.5100	\$	2.2050	\$ 1.9700	17	\$	1.7250	\$	1.6650		\$	1.4600
18 \$	2.5100	\$	2.1850	\$ 1.9300	18	\$	1.7250	\$	1.6400		\$	1.6350
19 \$	2.4500	\$	2.1200	\$ 1.9300	19	\$	1.8550	\$	1.4550		\$	1.6350
20 \$	2.3500	\$	2.0800	\$ 1.9300	20	\$	1.9000	\$	1.4650		\$	1.6350
21 \$	2.3550	\$	2.1050	\$ 1.9300	21	\$	1.8650	\$	1.5100		\$	1.6650
22 \$	2.3850	\$	2.1050	\$ 1.8000	22	\$	1.8050	\$	1.5100		\$	1.7600
23 \$	2.4450	\$	2.1050	\$ 1.8250	23	\$	1.8050	\$	1.5100		\$	1.7700
24 \$	2.4450	\$	1.9400	\$ 1.8400	24	\$	1.8050	\$	1.4600		\$	1.7800
25 \$	2.4450	\$	1.8700	\$ 1.7850	25	\$	1.7400	\$	1.5150		\$	1.7100
26 \$	2.3200	\$	1.8700	\$ 1.7850	26	\$	1.7650	\$	1.5000		\$	1.7100
27 \$	2.2200	\$	1.8700	\$ 1.7850	27	\$	1.7700	\$	1.4350		\$	1.7100
28 \$	2.2200	\$	1.6900	\$ 1.8300	28	\$	1.6550	\$	1.3600		\$	1.5750
29 \$	2.2200	\$	1.6900	\$ 1.8400	29	\$	1.6550	\$	1.3600		S	1.7050
30 \$	2.2200	\$	1.6900	\$ 1.8100	30			\$	1.3600		\$	1.6600
31		\$	1.9200	\$ 1.7850	31			\$	1.4000			
TOTAL \$	73.4000	\$	63.1800	\$ 58.7650	TOTAL	\$	50.9900	\$	48.0050		\$	48.3100
POSTINGS	30		31	31	POSTINGS		29		31			30
AVERAGE \$	2.4467	\$	2.0381	\$ 1.8956	AVERAGE	\$	1.7583	\$	1.5485		\$	1.6103

MAY 2020	JUNE 2020	JULY 2020	AUGUST 2020	SEPTEMBER 2020	OCTOBER 2020
DAY MIDPO	INT MIDPOINT	MIDPOINT	DAY MIDPOINT	MIDPOINT	MIDPOINT
1 \$ 1.57	50 \$ 1.4900	\$ 1.5950	1 \$ 1.6400	\$ 2.0600	\$ 1.3500
2 \$ 1.52	00 \$ 1.4600	\$ 1.5100	2 \$ 1.6400	\$ 2.1450	\$ 1.1700
3 \$ 1.52	00 \$ 1.5500	\$ 1.5050	3 \$ 1.6400	\$ 2.1650	\$ 1.0550
4 \$ 1.52	00 \$ 1.7200	\$ 1.5050	4 \$ 1.8300	\$ 2.1350	\$ 1.0550
5 \$ 1.68	50 \$ 1.6550	\$ 1.5050	5 \$ 1.9100	\$ 1.8600	\$ 1.0550
6 \$ 1.90	00 \$ 1.5650	\$ 1.5050	6 \$ 2.0400	\$ 1.8600	\$ 1.5300
7 \$ 1.80	00 \$ 1.5650	\$ 1.6450	7 \$ 2.0000	\$ 1.8600	\$ 1.6100
8 \$ 1.77	00 \$ 1.5650	\$ 1.7450	8 \$ 1.9400	\$ 1.8600	\$ 1.6200
9 \$ 1.64	50 \$ 1.6000	\$ 1.7500	9 \$ 1.9400	\$ 1.9600	\$ 1.1950
10 \$ 1.64	50 \$ 1.6050	\$ 1.7850	10 \$ 1.9400	\$ 1.9450	\$ 1.2600
11 \$ 1.64	50 \$ 1.6200	\$ 1.7200	11 \$ 2.0350	\$ 1.8750	\$ 1.2600
12 \$ 1.64		\$ 1.7200	12 \$ 2.0200	\$ 1.7600	\$ 1.2600
13 \$ 1.57	50 \$ 1.4850	\$ 1.7200	13 \$ 1.9800	\$ 1.7600	\$ 1.7600
14 \$ 1.48	00 \$ 1.4850	\$ 1.7250	14 \$ 2.0350	\$ 1.7600	\$ 1.9250
15 \$ 1.48	00 \$ 1.4850	\$ 1.6700	15 \$ 2.1450	\$ 1.9450	\$ 2.0150
16 \$ 1.53	00 \$ 1.4050	\$ 1.6950	16 \$ 2.1450	\$ 1.8600	\$ 2.1050
17 \$ 1.53	00 \$ 1.3200	\$ 1.6700	17 \$ 2.1450	\$ 1.8350	\$ 2.0600
18 \$ 1.53	00 \$ 1.4400	\$ 1.6650	18 \$ 2.1350	\$ 1.5750	\$ 2.0600
19 \$ 1.64		\$ 1.6650	19 \$ 2.2400	\$ 1.4000	\$ 2.0600
20 \$ 1.71	50 \$ 1.4150	\$ 1.6650	20 \$ 2.2350	\$ 1.4000	\$ 2.2900
21 \$ 1.73		\$ 1.5850	21 \$ 2.2150	\$ 1.4000	\$ 2.6100
22 \$ 1.57	00 \$ 1.4150	\$ 1.6150	22 \$ 2.1600	\$ 1.2550	\$ 2.6550
23 \$ 1.54		\$ 1.6100	23 \$ 2.1600	\$ 1.4000	\$ 2.8250
24 \$ 1.54	00 \$ 1.5000	\$ 1.6050	24 \$ 2.1600	\$ 1.7400	\$ 2.7550
25 \$ 1.54		\$ 1.6600	25 \$ 2.4050	\$ 1.8050	\$ 2.7550
26 \$ 1.54	00 \$ 1.4100	\$ 1.6600	26 \$ 2.3600	\$ 1.6250	\$ 2.7550
27 \$ 1.68		\$ 1.6600	27 \$ 2.2150	\$ 1.6250	\$ 2.9250
28 \$ 1.69	50 \$ 1.3700	\$ 1.6950	28 \$ 2.2800	\$ 1.6250	\$ 2.9050
29 \$ 1.61	00 \$ 1.3700	\$ 1.7000	29 \$ 2.1400	\$ 1.4800	\$ 2.9350
30 \$ 1.61	00 \$ 1.6050	\$ 1.7250	30 \$ 2.1400	\$ 1.3350	\$ 2.8650
31 \$ 1.61	00	\$ 1.7100	31 \$ 2.1400		\$ 2.8650
TOTAL \$ 50.01	50 \$ 44.9450	\$ 51.1900	TOTAL \$ 64.0100	\$ 52.3100	\$ 62.5450
POSTINGS	31 30	31	POSTINGS 31	30	31
AVERAGE \$ 1.61	34 \$ 1.4982	\$ 1.6513	AVERAGE \$ 2.0648	\$ 1.7437	\$ 2.0176

PBR-GAIF INDICES TEXAS GAS – ZONE 4

### LOUISVILLE GAS AND ELECTRIC CALCULATION OF SUPPLY AREA INDICES SAI (TGT-Z4)

	PLATTS INSIDE FERC's	PLATTS	NATURAL	
	GAS MARKET REPORT	GAS DAILY AVERAGE	GAS WEEK	
	APPALACHIA,	APPALACHIA	APPALACHIA	
AVERAGE	LEBANON HUB	LEBANON HUB	LEBANON HUB	
\$2.4391	\$2.4300	\$2.4347	\$2.4525	Nov. 19
\$2.1744	\$2.4000	\$2.0593	\$2.0640	Dec. 19
\$1.9527	\$2.0600	\$1.8931	\$1.9050	Jan. 20
\$1.7461	\$1.7500	\$1.7333	\$1.7550	Feb. 20
\$1.5703	\$1.6400	\$1.5308	\$1.5400	Mar. 20
\$1.5269	\$1.4000	\$1.5882	\$1.5925	Apr. 20
\$1.6123	\$1.6800	\$1.5945	\$1.5625	May 20
\$1.5181	\$1.5600	\$1.4903	\$1.5040	Jun. 20
\$1.5378	\$1.3800	\$1.6258	\$1.6075	Jul. 20
\$1.9088	\$1.7100	\$2.0285	\$1.9880	Aug. 20
\$1.9301	\$2.2800	\$1.7402	\$1.7700	Sep. 20
\$1.8584	\$1.8100	\$2.0027	\$1.7625	Oct. 20

### CALCULATION OF AVERAGE NATURAL GAS WEEK PRICE BY MONTH FOR LEBANON HUB

	NATURAL GAS WEEK APPALACHIA LEBANON HUB	MONTHLY AVERAGE	NATURAL GAS WEEK APPALACHIA LEBANON HUB	MONTHLY AVERAGE
11/04/2019	\$2.3000		05/04/2020 \$1.5500	
11/11/2019	\$2.6100		05/11/2020 \$1.6600	
11/18/2019	\$2.4900		05/18/2020 \$1.5000	
11/25/2019	\$2.4100	\$2.4525	05/25/2020 \$1.5400	\$1.5625
12/02/2019	\$2.2100		06/01/2020 \$1.5900	
12/09/2019	\$2.1500		06/08/2020 \$1.5300	
12/16/2019	\$2.1100		06/15/2020 \$1.5200	
12/23/2019	\$2.1100		06/22/2020 \$1.3700	
12/30/2019	\$1.7400	\$2.0640	06/29/2020 \$1.5100	\$1.5040
- /				
01/06/2020	\$1.9400		07/06/2020 \$1.4800	
01/13/2020	\$1.9500		07/13/2020 \$1.6800	
01/20/2020	\$1.9500		07/20/2020 \$1.6600	
01/27/2020	\$1.7800	\$1.9050	07/27/2020 \$1.6100	\$1.6075
02/03/2020	\$1.7400		08/02/2020 \$1 6200	
02/03/2020	\$1.7400		08/03/2020 \$1.6300 08/10/2020 \$1.8700	
02/10/2020	\$1.7300		08/17/2020 \$1.8700	
02/17/2020	\$1.8100	\$1.7550		
02/24/2020	φ1.0100	φ1.700U	08/24/2020 \$2.1300 08/31/2020 \$2.2900	¢1 0000
03/02/2020	\$1.6500		08/31/2020 \$2.2900	\$1.9880
03/02/2020	\$1.5400		09/07/2020 \$2.0300	
03/16/2020	\$1.6700			
03/23/2020	\$1.5300			
03/23/2020	\$1.3100	¢1 5400		¢4 7700
03/30/2020	φ1.3100	\$1.5400	09/28/2020 \$1.5200	\$1.7700
04/06/2020	\$1.4000		10/05/2020 \$1.1400	
04/13/2020	\$1.6000		10/12/2020 \$1.3100	
04/20/2020	\$1.6300		10/19/2020 \$1.9400	
04/27/2020	\$1.7400	\$1.5925	10/26/2020 \$2.6600	\$1.7625
	+	+	10,20,20,20,000 Q2,0000	ψ1.7020

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

I	NOVEMBER 2019	DI	ECEMBER 2019	J	JANUARY 2020		FE	EBRUARY 2020	MARCH 2020		PRIL 2020
DAY	MIDPOINT		MIDPOINT		MIDPOINT	DAY		MIDPOINT	MIDPOINT	М	IDPOINT
1 \$	2.4000	\$	2.1800	\$	1.9350	1	\$	1.6650	\$ 1.5450	\$	1.5400
2 \$	2.2200	\$	2.1800	\$	1.9350	2	\$	1.6650	\$ 1.5450	\$	1.4750
3 \$	2.2200	\$	2.1000	\$	1.8950	3	\$	1.6650	\$ 1.5450	\$	1.3800
4 \$	2.2200	\$	2.2000	\$	1.9350	4	\$	1.7200	\$ 1.6000	\$	1.3450
5 \$	2.5800	\$	2.1150	\$	1.9350	5	\$	1.7450	\$ 1.6400	\$	1.3450
6 \$	2.6050	\$	2.1350	\$	1.9350	6	\$	1.7400	\$ 1.6250	\$	1.3450
7 \$	2.7600	\$	2.0950	\$	1.9750	7	\$	1.7400	\$ 1.5000	\$	1.5250
8 \$	2.6950	\$	2.0950	\$	1.9700	8	\$	1.7500	\$ 1.5000	\$	1.6550
9 \$	2.5900	\$	2.0950	\$	1.9350	9	\$	1.7500	\$ 1.5000	\$	1.7100
10 \$	2.5900	\$	2.0500	\$	1.8800	10	\$	1.7500	\$ 1.4850	\$	1.6050
11 \$	2.5900	\$	2.0950	\$	1.9450	11	\$	1.6950	\$ 1.6700	\$	1.6050
12 \$	2.6200	\$	2.1050	\$	1.9450	12	\$	1.7050	\$ 1.7200	\$	1.6050
13 \$	2.5600	\$	2.0950	\$	1.9450	13	\$	1.8200	\$ 1.6200	\$	1.6050
14 \$	2.4400	\$	2.1350	\$	1.9400	14	\$	1.8000	\$ 1.7200	\$	1.6850
15 \$	2.5050	\$	2.1350	\$	2.0000	15	\$	1.7050	\$ 1.7200	\$	1.6050
16 \$	2.4750	\$	2.1350	\$	1.9700	16	\$	1.7050	\$ 1.7200	\$	1.5300
17 \$	2.4750	\$	2.2100	\$	1.9600	17	\$	1.7050	\$ 1.6400	\$	1.4600
18 \$	2.4750	\$	2.2300	\$	1.9500	18	\$	1.7050	\$ 1.6150	\$	1.6100
19 \$	2.4200	\$	2.1150	\$	1.9500	19	\$	1.8500	\$ 1.4500	\$	1.6100
20 \$	2.3450	\$	2.0700	\$	1.9500	20	\$	1.8900	\$ 1.5150	\$	1.6100
21 \$	2.3550	\$	2.1000	\$	1.9500	21	\$	1.8300	\$ 1.5200	\$	1.6650
22 \$	2.3600	\$	2.1000	\$	1.7850	22	\$	1.7350	\$ 1.5200	\$	1.7350
23 \$	2.4250	\$	2.1000	\$	1.8000	23	\$	1.7350	\$ 1.5200	\$	1.7550
24 \$	2.4250	\$	1.9400	\$	1.8100	24	\$	1.7350	\$ 1.4700	\$	1.7600
25 \$	2.4250	\$	-	\$	1.7700	25	\$	1.7200	\$ 1.4850	\$	1.6800
26 \$	2.3050	\$	-	\$	1.7700	26	\$	1.7450	\$ 1.4800	\$	1.6800
27 \$	2.2400	\$	1.8650	\$	1.7700	27	\$	1.7550	\$ 1.4150	\$	1.6800
28' \$	2.2400	\$	1.6900	\$	1.8000	28	\$	1.6200	\$ 1.2500	\$	1.5400
29 \$	2.2400	\$	1.6900	\$	1.8000	29	\$	1.6200	\$ 1.2500	\$	1.6850
30 \$	2.2400	\$	1.6900	\$	1.7950	30			\$ 1.2500	\$	1.6150
31		\$	1.9750	\$	1.7500	31			\$ 1.4200		
TOTAL \$	73.0400	\$	59.7200	\$	58.6850	TOTAL	\$	50.2650	\$ 47.4550	\$	47.6450
POSTINGS	30		29		31	POSTINGS		29	31		30
AVERAGE \$	2.4347	\$	2.0593	\$	1.8931	AVERAGE	\$	1.7333	\$ 1.5308	\$	1.5882

MAY 2020	JUNE 2020	JULY 2020	AUGUST 2020	SEPTEMBER 2020	OCTOBER 2020
DAY MIDPOINT	MIDPOINT	MIDPOINT	DAY MIDPOINT	MIDPOINT	MIDPOINT
1 \$ 1.5550 2 \$ 1.4850 3 \$ 1.4850	\$ 1.4800 \$ 1.4650 \$ 1.5300	\$ 1.5900 \$ 1.5000 \$ 1.4450	1 \$ 1.6350 2 \$ 1.6350 3 \$ 1.6350	\$ 2.0300 \$ 2.0650 \$ 2.1200	\$ 1.3350 \$ 1.1600 \$ 1.0200
4 \$ 1.4850 5 \$ 1.7150	\$ 1.7200 \$ 1.6450	\$  1.4450 \$  1.4450	4 \$ 1.7700 5 \$ 1.8800	\$ 2.1800	\$ 1.0200
6 \$ 1.9150	\$ 1.5500	\$ 1.4450	5 \$ 1.8800 6 \$ 1.9200	\$ 1.8850 \$ 1.8850	\$  1.0200 \$  1.4500
7 \$ 1.8050	\$ 1.5500	\$ 1.6300	7 \$ 1.9000	\$ 1.8850	\$ 1.5200
8 \$ 1.7600	\$ 1.5500	\$ 1.7650	8 \$ 1.8500	\$ 1.8850	\$ 1.5650
9 \$ 1.6400	\$ 1.5650	\$ 1.7500	9 \$ 1.8500	\$ 1.9250	\$ 1.1650
10 \$ 1.6400	\$ 1.5700	\$ 1.7750	10 \$ 1.8500	\$ 1.9150	\$ 1.1950
11 \$ 1.6400	\$ 1.5800	\$ 1.6800	11 \$ 1.9250	\$ 1.8800	\$ 1.1950
12 \$ 1.6650	\$ 1.5500	\$ 1.6800	12 \$ 1.9800	\$ 1.7700	\$ 1.1950
13 \$ 1.5850 14 \$ 1.4700	\$  1.4700 \$  1.4700	\$ 1.6800 \$ 1.6450	13 \$ 1.9100	\$ 1.7700	\$ 1.7200
15 \$ 1.4600	\$ 1.4700	\$ 1.6450 \$ 1.6300	14 \$ 2.0200	\$ 1.7700	\$ 1.8900
16 \$ 1.5000	\$ 1.3700	\$ 1.6400	15 \$ 2.1050 16 \$ 2.1050	\$ 1.8950	\$ 2.0300
17 \$ 1.5000	\$ 1.3150	\$ 1.6700	16 \$ 2.1050 17 \$ 2.1050	\$ 1.8800 \$ 1.8450	\$ 2.1050
18 \$ 1.5000	\$ 1.4200	\$ 1.6350	18 \$ 2.1500	\$ 1.5650	\$ 2.0700 \$ 2.0700
19 \$ 1.6200	\$ 1.4150	\$ 1.6350	19 \$ 2.1900	\$ 1.3950	\$ 2.0700 \$ 2.0700
20 \$ 1.7100	\$ 1.4300	\$ 1.6350	20 \$ 2.2100	\$ 1.3950	\$ 2.3200
21 \$ 1.7100	\$ 1.4300	\$ 1.5500	21 \$ 2.2000	\$ 1.3950	\$ 2.6000
22 \$ 1.5300	\$ 1.4300	\$ 1.5900	22 \$ 2.1100	\$ 1.2750	\$ 2.6400
23 \$ 1.4950	\$ 1.5600	\$ 1.5700	23 \$ 2.1100	\$ 1.4200	\$ 2.8450
24 \$ 1.4950	\$ 1.4900	\$ 1.6200	24 \$ 2.1100	\$ 1.7100	\$ 2.7850
25 \$ 1.4950	\$ 1.5300	\$ 1.6450	25 \$ 2.4100	\$ 1.8050	\$ 2.7850
26 \$ 1.4950	\$ 1.4350	\$ 1.6450	26 \$ 2.3550	\$ 1.6200	\$ 2.7850
27 \$ 1.6600	\$ 1.3800	\$ 1.6450	27 \$ 2.2650	\$ 1.6200	\$ 2.9400
28 \$ 1.6900	\$ 1.3800	\$ 1.6800	28 \$ 2.2800	\$ 1.6200	\$ 2.9050
29 \$ 1.5750	\$ 1.3800	\$ 1.7000	29 \$ 2.1400	\$ 1.4850	\$ 2.9050
30 \$ 1.5750	\$ 1.5800	\$ 1.7250	30 \$ 2.1400	\$ 1.3150	\$ 2.8900
31 \$ 1.5750		\$ 1.7100	31 \$ 2.1400		\$ 2.8900
TOTAL \$ 49.4300	\$ 44.7100	\$ 50.4000	TOTAL \$ 62.8850	\$ 52.2050	\$ 62.0850
POSTINGS 31	30	31	POSTINGS 31	30	31
AVERAGE \$ 1.5945	\$ 1.4903	\$ 1.6258	AVERAGE \$ 2.0285	\$ 1.7402	\$ 2.0027

PBR-GAIF INDICES TENNESSEE – ZONE 0

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

	NATURAL GAS WEEK TEXAS, CENTRAL, ONSHORE	PLATTS GAS DAILY AVERAGE EAST TEXAS, TENNESSEE, ZONE 0	PLATTS INSIDE FERC's GAS MARKET REPORT EAST TEXAS, TENNESSEE, ZONE 0	AVERAGE
Nov. 19	\$2.4675	\$2.4323	\$2.4000	\$2.4333
Dec. 19	\$2.0680	\$2.0190	\$2.3000	\$2.1290
Jan. 20	\$1.9125	\$1.8845	\$2.0000	\$1.9323
Feb. 20	\$1.8025	\$1.7588	\$1.7600	\$1.7738
Mar. 20	\$1.6300	\$1.5834	\$1.6900	\$1.6345
Apr. 20	\$1.6000	\$1.5942	\$1.5000	\$1.5647
May 20	\$1.6400	\$1.5939	\$1.6900	\$1.6413
Jun. 20	\$1.5340	\$1.4950	\$1.5900	\$1.5397
Jul. 20	\$1.6525	\$1.6397	\$1.3700	\$1.5541
Aug. 20	\$2.1040	\$2.1026	\$1.7700	\$1.9922
Sep. 20	\$1.8975	\$1.8455	\$2.4500	\$2.0643
Oct. 20	\$2.0550	\$2.2558	\$1.9500	\$2.0869

### CALCULATION OF AVERAGE NATURAL GAS WEEK PRICE BY MONTH FOR TEXAS, CENTRAL, ONSHORE

	NATURAL GAS WEEK TEXAS, CENTRAL, ONSHORE	MONTHLY		NATURAL GAS WEEK TEXAS, CENTRAL, ONSHORE	MONTHLY AVERAGE
11/04/2019	\$2.3800		05/04/2020	\$1.5900	
11/11/2019	\$2.6000		05/11/2020	\$1.7500	
11/18/2019	\$2.5100		05/18/2020	\$1.5600	
11/25/2019	\$2.3800	\$2.4675	05/25/2020	\$1.6600	\$1.6400
				¢1.0000	¢1.0100
12/02/2019	\$2.2000		06/01/2020	\$1.6300	
12/09/2019	\$2.1200		06/08/2020	\$1.6100	
12/16/2019	\$2.0900		06/15/2020	\$1.5700	
12/23/2019	\$2.1300		06/22/2020	\$1.4200	
12/30/2019	\$1.8000	\$2.0680	06/29/2020	\$1.4400	\$1.5340
01/06/2020	\$1.9000		07/06/2020	\$1.5300	
01/13/2020	\$1.9600		07/13/2020	\$1.7400	
01/20/2020	\$1.9500		07/20/2020	\$1.6900	
01/27/2020	\$1.8400	\$1.9125	07/27/2020	\$1.6500	\$1.6525
02/03/2020	\$1.8000		08/03/2020	\$1.7400	
02/10/2020	\$1.7800		08/10/2020	\$2.0100	
02/17/2020	\$1.7800		08/17/2020	\$2.1500	
02/24/2020	\$1.8500	\$1.8025	08/24/2020	\$2.2700	
			08/31/2020	\$2.3500	\$2.1040
03/02/2020	\$1.7000				
03/09/2020	\$1.6200		09/07/2020	\$2.1200	
03/16/2020	\$1.7400		09/14/2020	\$1.9500	
03/23/2020	\$1.5800		09/21/2020	\$1.8300	
03/30/2020	\$1.5100	\$1.6300	09/28/2020	\$1.6900	\$1.8975
04/06/2020	\$1.4600		10/05/2020	\$1.5200	
04/13/2020	\$1.6200		10/12/2020	\$1.7300	
04/20/2020	\$1.5800		10/19/2020	\$2.2100	
04/27/2020	\$1.7400	\$1.6000	10/26/2020	\$2.7600	\$2.0550

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

	NC	2019	DE	CEMBER 2019	J	ANUARY 2020		FI	EBRUARY 2020		MARCH 2020		APRIL 2020
DAY	i i	MIDPOINT]		MIDPOINT		MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1	\$	2,4150	\$	2.1050	\$	1.7900	4	\$	1.7150	\$	1.5950	\$	1.5800
2	\$	2.3200	\$	2.1050	\$	1.7900	2		1.7150	\$	1.5950	S	1.4850
3	\$	2.3200	\$	2.1050	\$	1.8550	3		1.7150	\$	1.5850	S	1.4100
4	\$	2.3200	\$	2.2000	\$	1.9100	4	\$	1.7100	\$	1.6150	\$	1.4000
5	\$	2,5800	\$	2.1200	5	1.9100	5	\$	1.7450	\$	1.6900	\$	1.4000
6	\$	2.6200	\$	2.1400	\$	1.9100	6	\$	1.7400	\$	1.6750	S	1.4000
7	S	2.7000	\$	2.0300	\$	1.9850	7	\$	1.7750	\$	1.5800	S	1.5300
8	\$	2.6650	\$	2.0300	\$	1.9650	8	\$	1.7600	\$	1.5800	S	1.6650
9	\$	2.5700	\$	2.0300	\$	1.9100	9	\$	1.7600	\$	1.5800	S	1.6800
10	\$	2.5700	\$	2.0050	S	1.8950	10		1.7600	\$	1.5400	S	1.5900
11	S	2.5700	\$	2.0950	\$	1.9700	11		1.7050	S	1.7050	S	1.5900
12	\$	2.5700	\$	2.1050	\$	1.9700	12		1.6850	S	1.8000	\$	1.5900
13	\$	2.5350	\$	2.1100	S	1.9700	13		1.7800	\$	1.6700	S	1.5900
14	S	2.4700	\$	2.0650	\$	1.9400	14		1.8150	\$	1.7250	\$	1.6700
15		2.5200	\$	2.0650	S	1.9900	15		1.7450	S	1.7250	\$	1.5750
16		2.4850	\$	2.0650	\$	1.9300	16		1.7450	s	1.7250	\$	1.5300
17		2.4850	\$	2.2100	\$	1.9600	17		1.7450	S	1.6750	S	1.4450
18		2.4850	\$	2.1800	S	1.9000	18		1.7450	\$	1.6500	\$	1.6100
19		2.4500	\$	2.0950	\$	1.9000	19		1.8450	S	1.4750	S	1.6100
20		2.3300	\$	2.0600	\$	1.9000	20		1.9050	\$	1.5000	\$	1.6100
21		2.3550	S	2.1200	5	1.9000	21		1.8650	s	1.5100	S	1.6700
22		2.3650	S	2.1200	\$	1.8400	22		1.7950	\$	1.5100	\$	1.7850
23		2.4150	\$	2.1200	\$	1.8450	23		1.7950	S	1.5100	\$	1.7750
24	\$	2.4150	\$	1.9500	\$	1.8350	24		1.7950	S	1,4900	\$	1.7850
25	\$	2.4150	S	1.8750	\$	1.7850	25		1.7650	\$	1.5650	\$	1.6800
26		2.2850	\$	1.8750	\$	1.7850	26		1.7750	\$	1.5400	\$	1.6800
27	\$	2.1850	\$	1.8850	\$	1.7850	27		1.8050	\$	1.5300	\$	1.6800
28	\$	2.1850	\$	1.6200	\$	1.8350	28	S	1.6500	\$	1.4200	\$	1.5250
29	\$	2.1850	\$	1.6200	\$	1.8750	29	\$	1.6500	S	1.4200	\$	1.6550
30	\$	2.1850	\$	1.6200	\$	1.8050	30	1		\$	1.4200	\$	1.6300
31			\$	1.8650	S	1.7800	31			\$	1.4850		1.0000
TOTAL	\$	72.9700	\$	62.5900	S	58.4200	TOTAL	\$	51.0050	5	49.0850	S	47.8250
POSTINGS		30		31		31	POSTINGS		29		31		30
AVERAGE	\$	2.4323	\$	2.0190	\$	1.8845	AVERAGE	\$	1.7588	\$	1.5834	\$	1.5942

	MAY 2020		INE )20	JULY 2020		,	AUGUST 2020	SE	PTEMBER 2020	(	OCTOBER 2020
DAY	MIDPOINT	MID	OPOINT	MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	1.5650	\$	1.4650	\$ 1.5750	1	\$	1.6500	\$	2.0450	\$	1.7200
2 \$	1.5100	\$	1.4450	\$ 1.5050	2		1.6500	\$	2.1650	\$	1.3150
3 \$	1.5100	\$	1.5500	\$ 1.5000	3		1.6500	\$	2.2600	\$	1.1400
4 \$	1.5100	\$	1.6800	\$ 1.5000	4	\$	1.8400	\$	2.2200	\$	1.1400
5 \$	1.6700	\$	1.6300	\$ 1.5000	5	\$	1.9800	\$	1.9450	\$	1.1400
6 \$	1.8900	\$	1.5600	\$ 1.5000	6	\$	2.0950	S	1.9450	\$	1.6550
7 \$	1.7750	\$	1.5600	\$ 1.6300	7	\$	2.0350	\$	1.9450	\$	1.9700
8 \$	1.7350	\$	1.5600	\$ 1.7450	8	\$	1.9700	\$	1.9450	\$	1.7950
9 \$	1.6400	\$	1.6000	\$ 1.7500	9	\$	1.9700	\$	2.0750	\$	1.5750
10 \$	1.6400	\$	1.5900	\$ 1.8100	10	\$	1.9700	\$	2.0100	\$	1.9050
11 \$	1.6400	\$	1.6150	\$ 1.6950	11	\$	2.0900	\$	1.9550	\$	1.9050
12 \$		\$	1.5800	\$ 1.6950	12	\$	2.0600	\$	1.8900	\$	1.9050
13 \$	1.5500	\$	1.4650	\$ 1.6950	13	\$	2.0000	\$	1.8900	\$	2.2850
14 \$	1.4400	\$	1.4650	\$ 1.7150	14	\$	2.0600	\$	1.8900	\$	2.1250
15 \$	1.4500	\$	1.4650	\$ 1.6600	15	\$	2.2000	\$	2.0700	\$	2.3650
16 \$	1.4300	\$	1.4000	\$ 1.6600	16	\$	2.2000	\$	2.0200	\$	2.2700
17 \$	1.4300	\$	1.3500	\$ 1.6600	17	\$	2.2000	\$	1.9450	\$	2.5350
18 \$	1.4300	\$	1.4350	\$ 1.6450	18	\$	2.2050	\$	1.9050	\$	2.5350
19 \$	1.6650	\$	1.4200	\$ 1.6450	19	\$	2.2800	\$	1.4950	\$	2.5350
20 \$	1.7150	\$	1.4300	\$ 1.6450	20	\$	2.3000	\$	1.4950	\$	2.5500
21 \$	1.7250	\$	1.4300	\$ 1.5500	21	\$	2.2400	\$	1.4950	\$	2.8400
22 \$	1.6000	\$	1.4300	\$ 1.5750	22	\$	2.1700	\$	1.3550	\$	2.8700
23 \$	1.5250	\$	1.5400	\$ 1.5600	23	\$	2.1700	\$	1.4150	\$	2.9050
24 \$	1.5250	\$	1.5150	\$ 1.6400	24	\$	2.1700	\$	1,7500	\$	2.7950
25 \$			1.5350	\$ 1.6500	25	\$	2.4500	\$	1.9550	\$	2.7950
26 \$			1.4200	\$ 1.6500	26		2.3700	\$	1.6950	\$	2.7950
27 \$	1.6700	\$	1.3800	\$ 1.6500	27		2.2650	\$	1.6950	\$	2.9900
28 \$	1.6750	\$	1.3800	\$ 1.6850	28		2.2950	\$	1.6950	\$	2.9200
29 \$	1.6050	\$	1.3800	\$ 1.6900	29		2.2150	\$	1.7250	\$	2.9550
30 \$	1.6050	\$	1.5750	\$ 1.7350	30		2.2150	\$	1.4750	\$	2.8500
31 \$	1.6050			\$ 1.7150	31	\$	2.2150			\$	2.8500
TOTAL \$	49.4100	\$ 44	4.8500	\$ 50.8300	TOTAL	\$	65.1800	\$	55.3650	\$	69.9300
POSTINGS	31		30	31	POSTINGS		31		30		31
AVERAGE \$	1.5939	\$	1.4950	\$ 1.6397	AVERAGE	\$	2.1026	\$	1.8455	\$	2.2558

PBR-GAIF INDICES TENNESSEE – ZONE 1

### LOUISVILLE GAS AND ELECTRIC COMPANY CALCULATION OF SUPPLY AREA INDICES SAI (TGPL-Z1)

	NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	PLATTS GAS DAILY AVERAGE LOUISIANA/ SOUTHEAST, TENNESSEE, 500 LEG	PLATTS INSIDE FERC'S GAS MARKET REPORT LOUISIANA/SOUTHEAST, TENNESSEE, LOUISIANA, 500 LEG	AVERAGE
Nov. 19	\$2.5650	\$2.5297	\$2.5400	\$2.5449
Dec. 19	\$2.1560	\$2.1221	\$2.4100	\$2.2294
Jan. 20	\$1.9800	\$1.9440	\$2.0800	\$2.0013
Feb. 20	\$1.8300	\$1.8016	\$1.8000	\$1.8105
Mar. 20	\$1.6860	\$1.6735	\$1.7500	\$1.7032
Apr. 20	\$1.6325	\$1.6438	\$1.5700	\$1.6154
May 20	\$1.6725	\$1.6679	\$1.7300	\$1.6901
Jun. 20	\$1.5560	\$1.5450	\$1.6500	\$1.5837
Jul. 20	\$1.6675	\$1.6921	\$1.4200	\$1.5932
Aug. 20	\$2.1280	\$2.2129	\$1.8000	\$2.0470
Sep. 20	\$1.8800	\$1.8765	\$2.5000	\$2.0855
Oct. 20	\$1.9700	\$2.1405	\$1.9900	\$2.0335

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

	NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	MONTHLY AVERAGE		NATURAL GAS WEEK LOUISIANA, GULF COAST, ONSHORE	MONTHLY AVERAGE
11/04/2019	\$2.4600		05/04/2020	\$1.6500	
11/11/2019	\$2,7100		05/11/2020	\$1.7800	
11/18/2019	\$2.6200		05/18/2020	\$1.5800	
11/25/2019	\$2.4700	\$2.5650	05/25/2020	\$1.6800	\$1.6725
12/02/2019	\$2.2800		06/01/2020	\$1.6500	
12/09/2019	\$2.2100		06/08/2020	\$1.6200	
12/16/2019	\$2.1700		06/15/2020	\$1.6000	
12/23/2019	\$2.2200		06/22/2020	\$1.4300	
12/30/2019	\$1.9000	\$2.1560	06/29/2020	\$1.4800	\$1.5560
01/06/2020	\$1.9800		07/06/2020	\$1.5500	
01/13/2020	\$2.0000		07/13/2020	\$1.7500	
01/20/2020	\$2.0300		07/20/2020	\$1.7100	
01/27/2020	\$1.9100	\$1.9800	07/27/2020	\$1.6600	\$1.6675
02/03/2020	\$1.8200		08/03/2020	\$1.7300	
02/10/2020	\$1.8000		08/10/2020	\$2.0700	
02/17/2020	\$1.7900		08/17/2020	\$2.1300	
02/24/2020	\$1.9100	\$1.8300	08/24/2020	\$2.2900	
			08/31/2020	\$2.4200	\$2.1280
03/02/2020	\$1.7600				
03/09/2020	\$1.7100		09/07/2020	\$2.0600	
03/16/2020	\$1.8100		09/14/2020	\$1.9900	
03/23/2020	\$1.6000		09/21/2020	\$1.8000	
03/30/2020	\$1.5500	\$1.6860	09/28/2020	\$1.6700	\$1.8800
04/06/2020	¢4.4000		10/05/0000		
04/06/2020	\$1.4800		10/05/2020	\$1.3600	
04/13/2020	\$1.6700		10/12/2020	\$1.7000	
04/20/2020	\$1.6300	<b>#</b> 4 0005	10/19/2020	\$2.1200	
04/27/2020	\$1.7500	\$1.6325	10/26/2020	\$2.7000	\$1.9700

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

	VEMBER 2019		CEMBER 2019	JA	ANUARY 2020		F	EBRUARY 2020	Ν	MARCH 2020		APRIL 2020
DAY	/IDPOINT]	N			MIDPOINT	DAY		MIDPOINT		MIDPOINT		MIDPOINT
1 \$	2.5450	\$	2.2700	\$	1.9700	1	\$	1.7600	\$	1.6550	\$	1.6150
2 \$	2.4400	\$	2.2700	\$	1.9700	2	\$	1.7600	\$	1.6550	\$	1.5250
3 \$	2.4400	\$	2.1850	\$	1.9050	3		1.7600	\$	1.6450	\$	1.4400
4 \$	2.4400	\$	2.2700	\$	1.9900	4	\$	1.7500	\$	1.7500	\$	1.3950
5 \$	2.6200	\$	2.2400	\$	1.9900	5	\$	1.7600	\$	1.7750	\$	1.3950
6 \$	2.7150	\$	2.1950	\$	1.9900	6		1.7800	\$	1.7750	ŝ	1.3950
7 \$	2.7900	\$	2.1150	\$	2.0650	7	\$	1.7950	\$	1.6700	ŝ	1.6100
8 \$	2.7650	\$	2.1150	\$	2.0350	8	\$	1.8150	\$	1.6700	s	1.7350
9 \$	2.6950	\$	2.1150	\$	2.0000	9		1.8150	\$	1.6700	\$	1.7600
10 \$	2.6950	\$	2.0650	\$	1.8900		\$	1.8150	\$	1.6350	ŝ	1.6600
11 \$	2.6950	\$	2.1700	\$	2.0000		\$	1.7250	\$	1.7750	ŝ	1.6600
12 \$	2.6300	\$	2.2100	\$	2.0000		\$	1.7250	\$	1.8800	S	1.6600
13 \$	2.6300	\$	2.1900	\$	2.0000		\$	1.8050	\$	1.7450	\$	1.6600
14 \$	2.5400	\$	2.1650	\$	1.9800		\$	1.8500	\$	1.8550	ŝ	1.7350
15 \$	2.6200	\$	2.1650	\$	2.0350		\$	1.7750	ŝ	1.8550	š	1.6150
16 \$	2.6000	\$	2.1650	\$	1.9850		\$	1.7750	ŝ	1.8550	\$	1.5650
17 \$	2.6000	\$	2.2800	\$	2.0300		\$	1.7750	\$	1.7600	ŝ	1.4950
18 \$	2.6000	\$	2.2700	\$	1.9600		\$	1.7750	\$	1.7300	ŝ	1.6800
19 \$	2.5300	\$	2.1700	\$	1.9600		\$	1.9150	\$	1.5950	ŝ	1.6800
20 \$	2.4300	\$	2.1550	\$	1.9600	20		1.9550	\$	1.5900	s	1.6800
21 \$	2.4200	\$	2.2250	\$	1.9600		\$	1.9150	\$	1.5750	\$	1.7000
22 \$	2.4150	\$	2.2250	\$	1.8650		\$	1.8500	\$	1.5750	\$	1.8250
23 \$	2.5000	\$	2.2250	\$	1.8750	23		1.8500	\$	1.5750	ŝ	1.8250
24 \$	2.5000	ŝ	2.0800	\$	1.8850		\$	1.8500	\$	1.5550	ŝ	1.8250
25 \$	2.5000	\$	2.0200	\$	1.8450		\$	1.8000	\$	1.6250	\$	1.7150
26 \$	2.3950	\$	2.0200	\$	1.8450		\$	1.8100	\$	1.6200	\$	1.7150
27 \$	2.2850	\$	1.9850	\$	1.8450		\$	1.8450	\$	1.5900	\$	1.7150
28 \$	2.2850	\$	1.7350	\$	1.8700		\$	1.7200	\$	1.5450	\$	1.5950
29 \$	2.2850	\$	1.7350	\$	1.8800	29		1.7200	ф \$	1.5450	э \$	1.7650
30 \$	2.2850	\$	1.7350	\$	1.8500	30		1.7200				
31	2.2000	s	2.0200	\$	1.8300	31			\$	1.5450	\$	1.6750
51		φ	2.0200	Φ	1.8300	31			\$	1.5900		
TOTAL \$	75.8900	\$	65.7850	\$	60.2650	TOTAL	\$	52.2450	\$	51.8800	\$	49.3150
POSTINGS	30		31		31	POSTINGS		29		31		30
AVERAGE \$	2.5297	\$	2.1221	\$	1.9440	AVERAGE	\$	1.8016	\$	1.6735	\$	1.6438

MAY 2020	JUNE 2020	JULY 2020		GUST SEF 020	TEMBER (	OCTOBER 2020
	T MIDPOINT	MIDPOINT	DAY MI			MIDPOINT
1 \$ 1.640	0 \$ 1.5200	\$ 1.6400	1 \$	1.7500 \$	2.2400 \$	1.3400
2 \$ 1.610	0 \$ 1.5250	\$ 1.5500		1.7500 \$	2.2850 \$	1.1700
3 \$ 1.610	0 \$ 1.5950	\$ 1.5500		1.7500 \$	2.3300 \$	1.0750
4 \$ 1.610	0 \$ 1.7300	\$ 1.5500		1.9450 \$	2.3700 \$	1.0750
5 \$ 1.750	0 \$ 1.6700	\$ 1.5500		2.0550 \$	1.9800 \$	1.0750
6 \$ 1.920	0 \$ 1.6400	\$ 1.5500		2.1650 \$	1.9800 \$	1.5900
7 \$ 1.840	0 \$ 1.6400	\$ 1.6700		2.1650 \$	1.9800 \$	1.8200
8 \$ 1.770	0 \$ 1.6400	\$ 1.7650		2.1350 \$	1.9800 \$	1.8800
9 \$ 1.670	0 \$ 1.6500	\$ 1.7750		2.1350 \$	2.2200 \$	1.5200
10 \$ 1.670	0 \$ 1.6550	\$ 1.7900		2.1350 \$	2.1750 \$	1.8650
11 \$ 1.670	0 \$ 1.6850	\$ 1.7550		2.1600 \$	2.0750 \$	1.8650
12 \$ 1.680	0 \$ 1.6550	\$ 1.7550		2.1500 \$	1.8450 \$	1.8650
13 \$ 1.605	0 \$ 1.5250	\$ 1.7550		2.0550 \$	1.8450 \$	2.1200
14 \$ 1.555		\$ 1.7600		2.1000 \$	1.8450 \$	2.0750
15 \$ 1.525	0 \$ 1.5250	\$ 1.7150		2.2150 \$	2.1050 \$	2.0550
16 \$ 1.585	0 \$ 1.4500	\$ 1.7150		2.2150 \$	2.0800 \$	2.1900
17 \$ 1.585	0 \$ 1.3250	\$ 1.7250		2.2150 \$	1.8850 \$	2.0950
18 \$ 1.585		\$ 1.7050		2.2900 \$	1.6100 \$	2.0950
19 \$ 1.685		\$ 1.7050		2.3600 \$	1.5250 \$	2.0950
20 \$ 1.745		\$ 1.7050		2.3550 \$	1.5250 \$	2.3150
21 \$ 1.775		\$ 1.6200		2.3150 \$	1.5250 \$	2.6450
22 \$ 1.625		\$ 1.6450		2.2500 \$	1.2850 \$	2.7450
23 \$ 1.635		\$ 1.6400		2.2500 \$	1.4300 \$	2.8500
24 \$ 1.635		\$ 1.6800		2.2500 \$	1.7350 \$	2.7900
25 \$ 1.635		\$ 1.7350		2.4800 \$	1.8900 \$	2.7900
26 \$ 1.635		\$ 1.7350		2.4600 \$	1.7600 \$	2.7900
27 \$ 1.720		\$ 1.7350		2.4850 \$	1.7600 \$	2.9300
28 \$ 1.725		\$ 1.7100		2.5400 \$	1.7600 \$	2.9200
29 \$ 1.670	0 \$ 1.4200	\$ 1.7450		2.4900 \$	1.7500 \$	2.9650
30 \$ 1.670		\$ 1.7600		2.4900 \$	1.5200 \$	2.8750
31 \$ 1.670		\$ 1.7650		2.4900	\$	2.8750
TOTAL \$ 51.705	0 \$ 46.3500	\$ 52.4550		\$8.6000 \$	\$56.2950 \$	66.3550
POSTINGS	30	31	POSTINGS	31		
		51	FOSTINGS	31	30	31
AVERAGE \$ 1.667	\$ 1.5450	\$ 1.6921	AVERAGE \$	2.2129 \$	1.8765 \$	2.1405

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

### Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub November 2019

		CALCULATI	ON OF DAIL	LY DAI TGT ZONI	E 1		CALCULATI	ON OF DAIL	Y DAI TGT ZONE	Ξ4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY	EUE			+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	IGI-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT-4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.4050	1.44%	\$0,4190	\$0.0627	\$2.9218	\$2.4000	1.44%	\$0,4190	\$0.0627	\$2,9168	\$2.9218	\$2.9168	\$2.9218	0	\$0
2	\$2.2850	1.44%	\$0.4190	\$0.0627	\$2.8001	\$2.2200	1.44%	\$0.4190	\$0.0627	\$2.7341	\$2.8001	\$2.7341	\$2.8001	0	\$0 \$0
3	\$2.2850	1.44%	\$0.4190	\$0.0627	\$2.8001	\$2.2200	1.44%	\$0,4190	\$0.0627	\$2.7341	\$2.8001	\$2.7341	\$2.8001	0	\$0 \$0
4	\$2.2850	1.44%	\$0.4190	\$0.0627	\$2,8001	\$2.2200	1.44%	\$0,4190	\$0.0627	\$2.7341	\$2.8001	\$2.7341	\$2.8001	0	\$0 \$0
5	\$2.5350	1.44%	\$0.4190	\$0.0627	\$3.0537	\$2.5800	1.44%	\$0.4190	\$0.0627	\$3.0994	\$3.0537	\$3.0994	\$3.0994	0	\$0 \$0
6	\$2.5850	1.44%	\$0.4190	\$0.0627	\$3.1045	\$2.6050	1.44%	\$0.4190	\$0.0627	\$3.1248	\$3.1045	\$3.1248	\$3.1248	0	\$0
7	\$2.7300	1.44%	\$0.4190	\$0.0627	\$3.2516	\$2.7600	1.44%	\$0.4190	\$0.0627	\$3,2820	\$3.2516	\$3.2820	\$3,2820	0	\$0
8	\$2.6950	1.44%	\$0.4190	\$0.0627	\$3.2161	\$2.6950	1.44%	\$0.4190	\$0.0627	\$3.2161	\$3.2161	\$3.2161	\$3.2161	0	\$0
9	\$2.6100	1.44%	\$0.4190	\$0.0627	\$3.1298	\$2.5900	1.44%	\$0.4190	\$0.0627	\$3.1095	\$3.1298	\$3.1095	\$3.1298	0	\$0
10	\$2.6100	1.44%	\$0.4190	\$0.0627	\$3.1298	\$2.5900	1.44%	\$0.4190	\$0.0627	\$3.1095	\$3.1298	\$3.1095	\$3.1298	0	\$0
11	\$2.6100	1.44%	\$0.4190	\$0.0627	\$3.1298	\$2.5900	1.44%	\$0.4190	\$0.0627	\$3.1095	\$3.1298	\$3.1095	\$3.1298	0	\$0
12	\$2.6100	1.44%	\$0.4190	\$0.0627	\$3.1298	\$2.6200	1.44%	\$0.4190	\$0.0627	\$3.1400	\$3.1298	\$3.1400	\$3,1400	0	\$0
13	\$2.5550	1.44%	\$0.4190	\$0.0627	\$3.0740	\$2.5600	1.44%	\$0.4190	\$0.0627	\$3.0791	\$3.0740	\$3.0791	\$3.0791	0	\$0
14	\$2.4650	1.44%	\$0.4190	\$0.0627	\$2.9827	\$2.4400	1.44%	\$0.4190	\$0.0627	\$2.9573	\$2.9827	\$2.9573	\$2.9827	0	\$0
15	\$2.5300	1.44%	\$0.4190	\$0.0627	\$3.0487	\$2.5050	1.44%	\$0.4190	\$0.0627	\$3.0233	\$3.0487	\$3.0233	\$3.0487	0	\$0
16	\$2.5100	1.44%	\$0.4190	\$0.0627	\$3.0284	\$2.4750	1.44%	\$0.4190	\$0.0627	\$2.9929	\$3.0284	\$2.9929	\$3.0284	0	\$0
17	\$2.5100	1.44%	\$0.4190	\$0.0627	\$3.0284	\$2.4750	1.44%	\$0.4190	\$0.0627	\$2.9929	\$3.0284	\$2.9929	\$3.0284	0	\$0
18	\$2.5100	1.44%	\$0.4190	\$0.0627	\$3.0284	\$2.4750	1.44%	\$0.4190	\$0.0627	\$2.9929	\$3.0284	\$2.9929	\$3.0284	0	\$0
19	\$2.4500	1.44%	\$0.4190	\$0.0627	\$2.9675	\$2.4200	1.44%	\$0.4190	\$0.0627	\$2.9371	\$2.9675	\$2.9371	\$2.9675	0	\$0
20	\$2.3500	1.44%	\$0.4190	\$0.0627	\$2.8660	\$2.3450	1.44%	\$0.4190	\$0.0627	\$2.8610	\$2.8660	\$2.8610	\$2.8660	0	\$0
21	\$2.3550	1.44%	\$0.4190	\$0.0627	\$2.8711	\$2.3550	1.44%	\$0.4190	\$0.0627	\$2.8711	\$2.8711	\$2.8711	\$2.8711	0	\$0
22	\$2.3850	1.44%	\$0.4190	\$0.0627	\$2.9015	\$2.3600	1.44%	\$0.4190	\$0.0627	\$2.8762	\$2.9015	\$2.8762	\$2.9015	0	\$0
23	\$2.4450	1.44%	\$0.4190	\$0.0627	\$2.9624	\$2.4250	1.44%	\$0.4190	\$0.0627	\$2.9421	\$2.9624	\$2.9421	\$2.9624	0	\$0
24	\$2.4450	1.44%	\$0.4190	\$0.0627	\$2.9624	\$2.4250	1.44%	\$0.4190	\$0.0627	\$2.9421	\$2.9624	\$2.9421	\$2.9624	0	\$0
25	\$2.4450	1.44% 1.44%	\$0.4190	\$0.0627	\$2.9624	\$2.4250	1.44%	\$0.4190	\$0.0627	\$2.9421	\$2.9624	\$2.9421	\$2.9624	0	\$0
26	\$2.3200		\$0.4190	\$0.0627	\$2.8356	\$2.3050	1.44%	\$0.4190	\$0.0627	\$2.8204	\$2.8356	\$2.8204	\$2.8356	0	\$0
27	\$2.2200	1.44%	\$0.4190	\$0.0627	\$2.7341	\$2.2400	1.44%	\$0.4190	\$0.0627	\$2.7544	\$2.7341	\$2.7544	\$2.7544	0	\$0
28	\$2.2200	1.44% 1.44%	\$0.4190	\$0.0627	\$2.7341	\$2.2400	1.44%	\$0.4190	\$0.0627	\$2.7544	\$2.7341	\$2.7544	\$2.7544	0	\$0
29	\$2.2200		\$0.4190	\$0.0627	\$2.7341	\$2.2400	1.44%	\$0.4190	\$0.0627	\$2.7544	\$2.7341	\$2.7544	\$2.7544	0	\$0
30	\$2.2200	1.44%	\$0.4190	\$0.0627	\$2.7341	\$2.2400	1.44%	\$0.4190	\$0.0627	\$2.7544	\$2.7341	\$2.7544	\$2.7544	0	\$0
														0	\$0

## Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub December 2019

				LY DAI TGT ZONE	the second se		CALCULATI	on of Dail	Y DAI TGT ZONE	≣4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY MIDPOINT	CUC)	MMO	NING	+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
Day		FUEL RETENTION	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	IGI-I	RETENTION	DEMAND	COMMODITY	TGT-1	IGI-4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2.1950	1.44%	\$0.4190	\$0.0627	\$2,7088	\$2.1800	1.44%	\$0.4190	\$0.0627	\$2.6936	\$2,7088	\$2.6936	\$2,7088	0	\$0
2	\$2.1950	1.44%	\$0.4190	\$0.0627	\$2.7088	\$2.1800	1.44%	\$0,4190	\$0.0627	\$2.6936	\$2,7088	\$2.6936	\$2.7088	ŏ	\$0
3	\$2.0750	1.44%	\$0.4190	\$0.0627	\$2.5870	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.5870	\$2.6124	\$2.6124	0	\$0
4	\$2.2000	1.44%	\$0.4190	\$0.0627	\$2.7138	\$2.2000	1.44%	\$0.4190	\$0.0627	\$2.7138	\$2,7138	\$2.7138	\$2.7138	ő	\$0
5	\$2.1200	1.44%	\$0.4190	\$0.0627	\$2.6327	\$2.1150	1.44%	\$0.4190	\$0.0627	\$2.6276	\$2,6327	\$2.6276	\$2.6327	õ	\$0
6	\$2.1350	1.44%	\$0.4190	\$0.0627	\$2.6479	\$2.1350	1.44%	\$0.4190	\$0.0627	\$2.6479	\$2.6479	\$2.6479	\$2.6479	0	\$0
7	\$2.0700	1.44%	\$0.4190	\$0.0627	\$2.5819	\$2.0950	1.44%	\$0.4190	\$0.0627	\$2.6073	\$2.5819	\$2.6073	\$2.6073	õ	\$0
8	\$2.0700	1.44%	\$0.4190	\$0.0627	\$2.5819	\$2.0950	1.44%	\$0.4190	\$0.0627	\$2.6073	\$2.5819	\$2.6073	\$2.6073	0	\$0
9	\$2.0700	1.44%	\$0.4190	\$0.0627	\$2.5819	\$2.0950	1.44%	\$0.4190	\$0.0627	\$2.6073	\$2.5819	\$2.6073	\$2.6073	0	\$0
10	\$2.0200	1.44%	\$0.4190	\$0.0627	\$2.5312	\$2.0500	1.44%	\$0.4190	\$0.0627	\$2.5617	\$2.5312	\$2.5617	\$2.5617	0	\$0
11	\$2.0800	1.44%	\$0.4190	\$0.0627	\$2.5921	\$2.0950	1.44%	\$0.4190	\$0.0627	\$2.6073	\$2.5921	\$2.6073	\$2.6073	0	\$0
12	\$2.1200	1.44%	\$0.4190	\$0.0627	\$2.6327	\$2.1050	1.44%	\$0.4190	\$0.0627	\$2.6175	\$2.6327	\$2.6175	\$2.6327	0	\$0
13	\$2.0850	1.44%	\$0.4190	\$0.0627	\$2.5972	\$2.0950	1.44%	\$0.4190	\$0.0627	\$2.6073	\$2.5972	\$2.6073	\$2.6073	0	\$0
14	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.1350	1.44%	\$0.4190	\$0.0627	\$2.6479	\$2.6124	\$2.6479	\$2.6479	0	\$0
15	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.1350	1.44%	\$0.4190	\$0.0627	\$2.6479	\$2.6124	\$2.6479	\$2.6479	0	\$0
16	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.1350	1.44%	\$0.4190	\$0.0627	\$2.6479	\$2.6124	\$2.6479	\$2.6479	0	\$0
17	\$2.2050	1.44%	\$0.4190	\$0.0627	\$2.7189	\$2.2100	1.44%	\$0.4190	\$0.0627	\$2.7240	\$2.7189	\$2.7240	\$2.7240	0	\$0
18	\$2.1850	1.44%	\$0.4190	\$0.0627	\$2.6986	\$2.2300	1.44%	\$0.4190	\$0.0627	\$2.7443	\$2.6986	\$2.7443	\$2.7443	0	\$0
19	\$2.1200	1.44%	\$0.4190	\$0.0627	\$2.6327	\$2.1150	1.44%	\$0.4190	\$0.0627	\$2.6276	\$2.6327	\$2.6276	\$2.6327	0	\$0
20	\$2.0800	1.44%	\$0.4190	\$0.0627	\$2.5921	\$2.0700	1.44%	\$0.4190	\$0.0627	\$2.5819	\$2.5921	\$2.5819	\$2.5921	0	\$0
21	\$2.1050	1.44%	\$0.4190	\$0.0627	\$2.6175	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.6175	\$2.6124	\$2.6175	0	\$0
22	\$2.1050	1.44%	\$0.4190	\$0.0627	\$2.6175	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.6175	\$2.6124	\$2.6175	0	\$0
23	\$2.1050	1.44%	\$0.4190	\$0.0627	\$2.6175	\$2.1000	1.44%	\$0.4190	\$0.0627	\$2.6124	\$2.6175	\$2.6124	\$2.6175	0	\$0
24	\$1.9400	1.44%	\$0.4190	\$0.0627	\$2.4500	\$1.9400	1.44%	\$0.4190	\$0.0627	\$2.4500	\$2.4500	\$2.4500	\$2.4500	0	\$0
25	\$1.8700 \$1.8700	1.44%	\$0.4190	\$0.0627	\$2.3790	\$0.0000	1.44%	\$0.4190	\$0.0627	\$0.4817	\$2.3790	\$0.4817	\$2.3790	0	\$0
26		1.44%	\$0.4190	\$0.0627	\$2.3790	\$0.0000	1.44%	\$0.4190	\$0.0627	\$0.4817	\$2.3790	\$0.4817	\$2.3790	0	\$0
27	\$1.8700	1.44%	\$0.4190	\$0.0627	\$2.3790	\$1.8650	1.44%	\$0.4190	\$0.0627	\$2.3739	\$2.3790	\$2.3739	\$2.3790	0	\$0
28 29	\$1.6900 \$1.6900	1.44% 1.44%	\$0.4190	\$0.0627	\$2.1964	\$1.6900	1.44%	\$0.4190	\$0.0627	\$2.1964	\$2.1964	\$2.1964	\$2.1964	0	\$0
			\$0.4190	\$0.0627	\$2.1964	\$1.6900	1.44%	\$0.4190	\$0.0627	\$2.1964	\$2.1964	\$2.1964	\$2.1964	0	\$0
30 31	\$1.6900 \$1.9200	1.44% 1.44%	\$0.4190	\$0.0627 \$0.0627	\$2.1964	\$1.6900	1.44%	\$0.4190	\$0.0627	\$2.1964	\$2.1964	\$2.1964	\$2.1964	0	\$0
31	\$1.9200	1.44%	\$0.4190	φU.U627	\$2.4298	\$1.9750	1.44%	\$0.4190	\$0.0627	\$2.4856	\$2.4298	\$2.4856	\$2.4856	0	\$0
														0	\$0

# Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub January 2020

-		CALCULATI	ON OF DAIL	LY DAI TGT ZONE	E 1		CALCULATI	on of Daii	Y DAI TGT ZONE	Ξ4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY	51451			+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
David	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	IGI-I	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.9150	1.44%	\$0.4190	\$0.0627	\$2.4247	\$1,9350	1.44%	\$0.4190	\$0.0627	\$2,4450	\$2,4247	\$2,4450	\$2,4450		
2	\$1.9150	1.44%	\$0.4190	\$0.0627	\$2.4247	\$1.9350	1.44%	\$0.4190	\$0.0627	\$2.4450	\$2.4247	\$2.4450	\$2.4450	0	\$0
3	\$1.8800	1.44%	\$0.4190	\$0.0627	\$2.3892	\$1,8950	1.44%	\$0,4190	\$0.0627	\$2.4044	\$2.3892	\$2.4044	\$2.4044	0	\$0
4	\$1.9150	1.44%	\$0,4190	\$0,0627	\$2.4247	\$1.9350	1.44%	\$0.4190	\$0.0627	\$2.4450	\$2.4247	\$2.4450	\$2.4450	0	\$0 \$0
5	\$1.9150	1.44%	\$0.4190	\$0.0627	\$2.4247	\$1,9350	1.44%	\$0.4190	\$0.0627	\$2.4450	\$2.4247	\$2.4450	\$2.4450	0	\$0
6	\$1.9150	1.44%	\$0.4190	\$0.0627	\$2.4247	\$1.9350	1.44%	\$0,4190	\$0.0627	\$2.4450	\$2,4247	\$2.4450	\$2.4450	0	\$0
7	\$1.9950	1.44%	\$0.4190	\$0.0627	\$2.5058	\$1.9750	1.44%	\$0,4190	\$0.0627	\$2.4856	\$2,5058	\$2.4856	\$2.5058	ŏ	\$0
8	\$1.9750	1.44%	\$0.4190	\$0.0627	\$2.4856	\$1.9700	1.44%	\$0,4190	\$0.0627	\$2.4805	\$2,4856	\$2,4805	\$2.4856	õ	\$0
9	\$1.9350	1.44%	\$0.4190	\$0.0627	\$2.4450	\$1.9350	1.44%	\$0.4190	\$0.0627	\$2.4450	\$2,4450	\$2.4450	\$2.4450	õ	\$0
10	\$1.8700	1.44%	\$0.4190	\$0.0627	\$2.3790	\$1.8800	1.44%	\$0.4190	\$0.0627	\$2.3892	\$2,3790	\$2.3892	\$2.3892	õ	\$0
11	\$1.9650	1.44%	\$0.4190	\$0.0627	\$2.4754	\$1.9450	1.44%	\$0.4190	\$0.0627	\$2.4551	\$2,4754	\$2.4551	\$2.4754	0	\$0
12	\$1.9650	1.44%	\$0.4190	\$0.0627	\$2.4754	\$1.9450	1.44%	\$0.4190	\$0.0627	\$2.4551	\$2,4754	\$2.4551	\$2.4754	ő	\$0
13	\$1.9650	1.44%	\$0.4190	\$0.0627	\$2.4754	\$1.9450	1.44%	\$0.4190	\$0.0627	\$2.4551	\$2.4754	\$2.4551	\$2.4754	0	\$0
14	\$1.9350	1.44%	\$0.4190	\$0.0627	\$2.4450	\$1.9400	1.44%	\$0.4190	\$0.0627	\$2.4500	\$2.4450	\$2.4500	\$2.4500	0	\$0
15	\$1.9900	1.44%	\$0.4190	\$0.0627	\$2.5008	\$2.0000	1.44%	\$0.4190	\$0.0627	\$2,5109	\$2,5008	\$2.5109	\$2.5109	0	\$0
16	\$1.9400	1.44%	\$0.4190	\$0.0627	\$2.4500	\$1.9700	1.44%	\$0.4190	\$0.0627	\$2.4805	\$2.4500	\$2.4805	\$2.4805	0	\$0
17	\$1.9700	1.44%	\$0.4190	\$0.0627	\$2.4805	\$1.9600	1.44%	\$0.4190	\$0.0627	\$2.4703	\$2.4805	\$2.4703	\$2.4805	0	\$0
18	\$1.9300	1.44%	\$0.4190	\$0.0627	\$2.4399	\$1.9500	1.44%	\$0.4190	\$0.0627	\$2.4602	\$2.4399	\$2.4602	\$2.4602	0	\$0
19	\$1.9300	1.44%	\$0.4190	\$0.0627	\$2.4399	\$1.9500	1.44%	\$0.4190	\$0.0627	\$2.4602	\$2.4399	\$2.4602	\$2.4602	0	\$0
20	\$1.9300	1.44%	\$0.4190	\$0.0627	\$2.4399	\$1.9500	1.44%	\$0.4190	\$0.0627	\$2.4602	\$2.4399	\$2.4602	\$2.4602	0	\$0
21	\$1.9300	1.44%	\$0.4190	\$0.0627	\$2.4399	\$1.9500	1.44%	\$0.4190	\$0.0627	\$2.4602	\$2.4399	\$2.4602	\$2.4602	0	\$0
22	\$1.8000	1.44%	\$0.4190	\$0.0627	\$2.3080	\$1.7850	1.44%	\$0.4190	\$0.0627	\$2.2928	\$2.3080	\$2.2928	\$2.3080	0	\$0
23 24	\$1.8250	1.44% 1.44%	\$0.4190	\$0.0627	\$2.3334	\$1.8000	1.44%	\$0.4190	\$0.0627	\$2.3080	\$2.3334	\$2.3080	\$2.3334	0	\$0
24	\$1.8400 \$1.7850	1.44%	\$0.4190 \$0.4190	\$0.0627	\$2.3486	\$1.8100	1.44%	\$0.4190	\$0.0627	\$2.3181	\$2.3486	\$2.3181	\$2.3486	0	\$0
25	\$1.7850	1.44%	\$0.4190	\$0.0627 \$0.0627	\$2.2928 \$2.2928	\$1.7700 \$1.7700	1.44%	\$0.4190	\$0.0627	\$2.2776	\$2.2928	\$2.2776	\$2.2928	0	\$0
20	\$1.7850	1.44%	\$0.4190	\$0.0627	\$2.2928	\$1.7700	1.44%	\$0.4190 \$0.4190	\$0.0627 \$0.0627	\$2.2776	\$2.2928	\$2.2776	\$2.2928	0	\$0
28	\$1,8300	1.44%	\$0.4190	\$0.0627	\$2.3384	\$1.8000	1.44%			\$2.2776	\$2.2928	\$2.2776	\$2.2928	0	\$0
29	\$1.8400	1.44%	\$0.4190	\$0.0627	\$2.3486	\$1.8000	1.44%	\$0.4190 \$0.4190	\$0.0627 \$0.0627	\$2.3080 \$2.3080	\$2.3384	\$2.3080	\$2.3384	0	\$0
30	\$1.8100	1.44%	\$0.4190	\$0.0627	\$2.3181	\$1,7950	1.44%	\$0.4190	\$0.0627	\$2.3029	\$2.3486	\$2.3080	\$2.3486	0	\$0
31	\$1.7850	1.44%	\$0.4190	\$0.0627	\$2.2928	\$1.7500	1.44%	\$0.4190	\$0.0627	\$2.3029	\$2.3181 \$2.2928	\$2.3029	\$2.3181	0	\$0
51	÷1.1000	1.4470	WU. 1100	\$0.00Z1	φ2.2820	ψ1.7500	1.44 70	φ0.4190	<i>Q</i> 0.0027	\$2.2013	\$2.2928	\$2.2573	\$2.2928	0	\$0
														0	\$0

## Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub February 2020

		CALCULATI	on of Dail	Y DAI TGT ZON	E 1		CALCULATI	on of Dail	Y DAI TGT ZONE	Ξ4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY	DAI			(1-1)
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z	ONES	MGHER OF		TOTAL
-	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.7150	1.44%	\$0.4190	\$0.0627	\$2.2218	\$1.6650	1.44%	\$0,4190	\$0.0627	\$2,1710	\$2.2218	\$2,1710	\$2,2218	0	
2	\$1.7150	1.44%	\$0.4190	\$0.0627	\$2.2218	\$1.6650	1.44%	\$0,4190	\$0.0627	\$2.1710	\$2.2218	\$2.1710	\$2.2218	0	\$0
3	\$1.7150	1.44%	\$0,4190	\$0.0627	\$2.2218	\$1.6650	1.44%	\$0,4190	\$0.0627	\$2,1710	\$2.2218	\$2.1710	\$2.2218	0	\$0 \$0
4	\$1.7350	1.44%	\$0.4190	\$0.0627	\$2.2420	\$1,7200	1.44%	\$0,4190	\$0.0627	\$2.2268	\$2.2420	\$2.2268	\$2.2420	ő	\$0
5	\$1.7400	1.44%	\$0.4190	\$0.0627	\$2.2471	\$1,7450	1.44%	\$0,4190	\$0.0627	\$2.2522	\$2.2471	\$2.2522	\$2.2522	0	\$0
6	\$1.7550	1.44%	\$0.4190	\$0.0627	\$2.2623	\$1.7400	1.44%	\$0,4190	\$0.0627	\$2.2471	\$2.2623	\$2.2471	\$2.2623	0	\$0
7	\$1.7750	1.44%	\$0.4190	\$0.0627	\$2.2826	\$1.7400	1.44%	\$0,4190	\$0.0627	\$2.2471	\$2.2826	\$2.2471	\$2.2826	õ	\$0
8	\$1.7750	1.44%	\$0.4190	\$0.0627	\$2.2826	\$1.7500	1.44%	\$0.4190	\$0.0627	\$2.2573	\$2.2826	\$2.2573	\$2.2826	0	\$0
9	\$1.7750	1.44%	\$0.4190	\$0.0627	\$2.2826	\$1.7500	1.44%	\$0.4190	\$0.0627	\$2.2573	\$2.2826	\$2.2573	\$2.2826	0	\$0
10	\$1.7750	1.44%	\$0.4190	\$0.0627	\$2.2826	\$1.7500	1.44%	\$0.4190	\$0.0627	\$2.2573	\$2.2826	\$2.2573	\$2.2826	ő	\$0
11	\$1.6900	1.44%	\$0.4190	\$0.0627	\$2.1964	\$1.6950	1.44%	\$0.4190	\$0.0627	\$2.2015	\$2,1964	\$2.2015	\$2.2015	ů.	\$0
12	\$1.7000	1.44%	\$0.4190	\$0.0627	\$2.2065	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$2.2065	\$2.2116	\$2.2116	0	\$0
13	\$1.8000	1.44%	\$0.4190	\$0.0627	\$2.3080	\$1.8200	1.44%	\$0.4190	\$0.0627	\$2.3283	\$2.3080	\$2.3283	\$2.3283	0	\$0
14	\$1.8050	1.44%	\$0.4190	\$0.0627	\$2.3131	\$1.8000	1.44%	\$0.4190	\$0.0627	\$2.3080	\$2.3131	\$2.3080	\$2.3131	õ	\$0
15	\$1.7250	1.44%	\$0.4190	\$0.0627	\$2.2319	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$2.2319	\$2.2116	\$2.2319	0	\$0
16	\$1.7250	1.44%	\$0.4190	\$0.0627	\$2.2319	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$2.2319	\$2.2116	\$2.2319	0	\$0
17	\$1.7250	1.44%	\$0.4190	\$0.0627	\$2.2319	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$2.2319	\$2.2116	\$2.2319	0	\$0
18	\$1.7250	1.44%	\$0.4190	\$0.0627	\$2.2319	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$2.2319	\$2.2116	\$2.2319	0	\$0
19	\$1.8550	1.44%	\$0.4190	\$0.0627	\$2.3638	\$1.8500	1.44%	\$0.4190	\$0.0627	\$2.3587	\$2.3638	\$2.3587	\$2.3638	0	\$0
20	\$1.9000	1.44%	\$0.4190	\$0.0627	\$2.4095	\$1.8900	1.44%	\$0.4190	\$0.0627	\$2.3993	\$2.4095	\$2.3993	\$2.4095	0	\$0
21	\$1.8650	1.44%	\$0.4190	\$0.0627	\$2.3739	\$1.8300	1.44%	\$0.4190	\$0.0627	\$2.3384	\$2.3739	\$2.3384	\$2.3739	0	\$0
22	\$1.8050	1.44%	\$0.4190	\$0.0627	\$2.3131	\$1.7350	1.44%	\$0.4190	\$0.0627	\$2.2420	\$2.3131	\$2.2420	\$2.3131	0	\$0
23	\$1.8050	1.44%	\$0.4190	\$0.0627	\$2.3131	\$1.7350	1.44%	\$0.4190	\$0.0627	\$2.2420	\$2.3131	\$2.2420	\$2.3131	0	\$0
24	\$1.8050	1.44%	\$0.4190	\$0.0627	\$2.3131	\$1.7350	1.44%	\$0.4190	\$0.0627	\$2.2420	\$2.3131	\$2.2420	\$2.3131	0	\$0
25	\$1.7400	1.44%	\$0.4190	\$0.0627	\$2.2471	\$1.7200	1.44%	\$0.4190	\$0.0627	\$2.2268	\$2.2471	\$2.2268	\$2.2471	0	\$0
26	\$1.7650	1.44%	\$0.4190	\$0.0627	\$2.2725	\$1.7450	1.44%	\$0.4190	\$0.0627	\$2.2522	\$2.2725	\$2.2522	\$2.2725	0	\$0
27	\$1.7700	1.44%	\$0.4190	\$0.0627	\$2.2776	\$1.7550	1.44%	\$0.4190	\$0.0627	\$2.2623	\$2.2776	\$2.2623	\$2.2776	0	\$0
28	\$1.6550	1.44%	\$0.4190	\$0.0627	\$2.1609	\$1.6200	1.44%	\$0.4190	\$0.0627	\$2.1254	\$2.1609	\$2.1254	\$2.1609	0	\$0
29	\$1.6550	1.44%	\$0.4190	\$0.0627	\$2.1609	\$1.6200	1.44%	\$0.4190	\$0.0627	\$2.1254	\$2.1609	\$2.1254	\$2.1609	0	\$0

\$0

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## Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub March 2020

				LY DAI TGT ZONI			CALCULATI	on of Daii	Y DAI TGT ZON	4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY MIDPOINT	FUEL	NNS	NNS	+ Col. 3 + Col. 4	GAS DAILY	FUE	LING		+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
Day		RETENTION		COMMODITY	DAILY DAI TGT-1	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	101-1	RETENTION	DEMAND	COMMODITY	161-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.5600	1.44%	\$0.4190	\$0.0627	\$2.0645	\$1.5450	1.44%	\$0.4190	\$0.0627	\$2.0493	\$2.0645	\$2.0493	\$2.0645	0	\$0
2	\$1.5600	1.44%	\$0.4190	\$0.0627	\$2.0645	\$1.5450	1.44%	\$0.4190	\$0.0627	\$2.0493	\$2.0645	\$2.0493	\$2.0645	0	\$0
3	\$1.5700	1.44%	\$0.4190	\$0.0627	\$2.0746	\$1.5450	1.44%	\$0.4190	\$0.0627	\$2.0493	\$2.0746	\$2.0493	\$2.0746	0	\$0
4	\$1.6300	1.44%	\$0.4190	\$0.0627	\$2.1355	\$1.6000	1.44%	\$0.4190	\$0.0627	\$2.1051	\$2.1355	\$2.1051	\$2.1355	0	\$0
5	\$1.6450	1.44%	\$0.4190	\$0.0627	\$2.1507	\$1.6400	1.44%	\$0.4190	\$0.0627	\$2.1457	\$2.1507	\$2.1457	\$2.1507	0	\$0
6	\$1.6450	1.44%	\$0.4190	\$0.0627	\$2.1507	\$1.6250	1.44%	\$0.4190	\$0.0627	\$2.1304	\$2.1507	\$2.1304	\$2.1507	0	\$0
7	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$2.0442	\$2.0036	\$2.0442	0	\$0
8	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$2.0442	\$2.0036	\$2.0442	0	\$0
9	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$2.0442	\$2.0036	\$2.0442	0	\$0
10	\$1.5250	1.44%	\$0.4190	\$0.0627	\$2.0290	\$1.4850	1.44%	\$0.4190	\$0.0627	\$1.9884	\$2.0290	\$1.9884	\$2.0290	0	\$0
11	\$1.6650	1.44%	\$0.4190	\$0.0627	\$2.1710	\$1.6700	1.44%	\$0.4190	\$0.0627	\$2.1761	\$2.1710	\$2.1761	\$2.1761	0	\$0
12	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$1.7200	1.44%	\$0.4190	\$0.0627	\$2.2268	\$2.2167	\$2.2268	\$2.2268	0	\$0
13	\$1.6150	1.44%	\$0.4190	\$0.0627	\$2.1203	\$1.6200	1.44%	\$0.4190	\$0.0627	\$2.1254	\$2.1203	\$2.1254	\$2.1254	0	\$0
14	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$1.7200	1.44%	\$0.4190	\$0.0627	\$2.2268	\$2.2116	\$2.2268	\$2.2268	0	\$0
15	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$1.7200	1.44%	\$0.4190	\$0.0627	\$2.2268	\$2.2116	\$2.2268	\$2.2268	0	\$0
16	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$1.7200	1.44%	\$0.4190	\$0.0627	\$2.2268	\$2.2116	\$2.2268	\$2.2268	0	\$0
17	\$1.6650	1.44%	\$0.4190	\$0.0627	\$2.1710	\$1.6400	1.44%	\$0.4190	\$0.0627	\$2.1457	\$2.1710	\$2.1457	\$2.1710	0	\$0
18	\$1.6400	1.44%	\$0.4190	\$0.0627	\$2.1457	\$1.6150	1.44%	\$0.4190	\$0.0627	\$2.1203	\$2.1457	\$2.1203	\$2.1457	0	\$0
19	\$1.4550	1.44%	\$0.4190	\$0.0627	\$1.9580	\$1.4500	1.44%	\$0.4190	\$0.0627	\$1.9529	\$1.9580	\$1.9529	\$1.9580	0	\$0
20	\$1.4650	1.44%	\$0.4190	\$0.0627	\$1.9681	\$1.5150	1.44%	\$0.4190	\$0.0627	\$2.0188	\$1.9681	\$2.0188	\$2.0188	0	\$0
21	\$1.5100	1.44%	\$0.4190	\$0.0627	\$2.0138	\$1.5200	1.44%	\$0.4190	\$0.0627	\$2.0239	\$2.0138	\$2.0239	\$2.0239	0	\$0
22	\$1.5100	1.44%	\$0.4190	\$0.0627	\$2.0138	\$1.5200	1.44%	\$0.4190	\$0.0627	\$2.0239	\$2.0138	\$2.0239	\$2.0239	0	\$0
23 24	\$1.5100 \$1.4600	1.44%	\$0.4190 \$0.4190	\$0.0627 \$0.0627	\$2.0138	\$1.5200	1.44%	\$0.4190	\$0.0627	\$2.0239	\$2.0138	\$2.0239	\$2.0239	0	\$0
24	\$1.4000	1.44%	\$0.4190	\$0.0627	\$1.9630	\$1.4700	1.44%	\$0.4190	\$0.0627	\$1.9732	\$1.9630	\$1.9732	\$1.9732	0	\$0
25	\$1.5150	1.44%	\$0.4190	\$0.0627	\$2.0188 \$2.0036	\$1.4850 \$1.4800	1.44% 1.44%	\$0.4190	\$0.0627	\$1.9884	\$2.0188	\$1.9884	\$2.0188	0	\$0
27	\$1.4350	1.44%	\$0.4190	\$0.0627	\$1.9377	\$1.4000	1.44%	\$0.4190 \$0.4190	\$0.0627	\$1.9833	\$2.0036	\$1.9833	\$2.0036	0	\$0
28	\$1.3600	1.44%	\$0.4190	\$0.0627	\$1.8616	\$1,2500	1.44%	\$0.4190	\$0.0627 \$0.0627	\$1.9174	\$1.9377	\$1.9174	\$1.9377	0	\$0
29	\$1.3600	1.44%	\$0.4190	\$0.0627	\$1.8616	\$1.2500	1.44%	\$0.4190	\$0.0627	\$1.7500	\$1.8616	\$1.7500	\$1.8616	0	\$0
30	\$1.3600	1.44%	\$0.4190	\$0.0627	\$1.8616	\$1.2500	1.44%	\$0.4190	\$0.0627	\$1.7500 \$1.7500	\$1.8616 \$1.8616	\$1.7500	\$1.8616	0	\$0
31	\$1.4000	1.44%	\$0.4190	\$0.0627	\$1.9022	\$1.4200	1.44%	\$0.4190	\$0.0627	\$1.9224	\$1.9022	\$1.7500	\$1.8616	0	\$0
51	A1.4000	1.44 /0	ψ0.4130	ψ0.002 <i>1</i>	\$1.50ZZ	Ø1.4200	1.44 70	φ <b>0.</b> 4190	φ0.0627	\$1.9224	\$1.90ZZ	\$1.9224	\$1.9224	0	\$0
														0	\$0

## Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub April 2020

				LY DAI TGT ZONE			CALCULATI	ON OF DAIL	Y DAI TGT ZONI	E 4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY	EUG			+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
Dave	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	101-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.5500	1.44%	\$0.4190	\$0.0627	\$2.0543	\$1,5400	1.44%	\$0,4190	\$0.0627	\$2.0442	\$2.0543	\$2.0442	\$2.0543	0	*0
2	\$1.4700	1.44%	\$0.4190	\$0.0627	\$1.9732	\$1,4750	1.44%	\$0,4190	\$0.0627	\$1.9783	\$1.9732	\$1.9783	\$1.9783	0	\$0 \$0
3	\$1.3900	1.44%	\$0.4190	\$0.0627	\$1.8920	\$1.3800	1.44%	\$0.4190	\$0.0627	\$1.8819	\$1.8920	\$1.8819	\$1.8920	0	\$0 \$0
4	\$1.3800	1.44%	\$0.4190	\$0.0627	\$1.8819	\$1.3450	1.44%	\$0,4190	\$0.0627	\$1.8464	\$1.8819	\$1.8464	\$1.8819	0	\$0
5	\$1.3800	1.44%	\$0.4190	\$0.0627	\$1.8819	\$1.3450	1.44%	\$0.4190	\$0.0627	\$1.8464	\$1,8819	\$1.8464	\$1.8819	ő	\$0
6	\$1.3800	1.44%	\$0.4190	\$0.0627	\$1.8819	\$1.3450	1.44%	\$0,4190	\$0.0627	\$1,8464	\$1.8819	\$1.8464	\$1.8819	0	\$0
7	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$1.5250	1.44%	\$0.4190	\$0.0627	\$2.0290	\$2.0797	\$2.0290	\$2.0797	ő	\$0
8	\$1.7000	1.44%	\$0.4190	\$0.0627	\$2.2065	\$1.6550	1.44%	\$0.4190	\$0.0627	\$2,1609	\$2,2065	\$2.1609	\$2.2065	õ	\$0
9	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$2.2167	\$2.2167	\$2.2167	Ö	\$0
10	\$1.6300	1.44%	\$0.4190	\$0.0627	\$2.1355	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$2.1355	\$2,1101	\$2.1355	õ	\$0
11	\$1.6300	1.44%	\$0.4190	\$0.0627	\$2.1355	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$2.1355	\$2.1101	\$2.1355	0	\$0
12	\$1.6300	1.44%	\$0.4190	\$0.0627	\$2.1355	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$2.1355	\$2.1101	\$2.1355	0	\$0
13	\$1.6300	1.44%	\$0.4190	\$0.0627	\$2.1355	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$2.1355	\$2.1101	\$2.1355	0	\$0
14	\$1.7000	1.44%	\$0.4190	\$0.0627	\$2.2065	\$1.6850	1.44%	\$0.4190	\$0.0627	\$2.1913	\$2.2065	\$2.1913	\$2.2065	0	\$0
15	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$2.1101	\$2.1101	\$2.1101	0	\$0
16	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$2.0442	\$2.0341	\$2.0442	0	\$0
17	\$1.4600	1.44%	\$0.4190	\$0.0627	\$1.9630	\$1.4600	1.44%	\$0.4190	\$0.0627	\$1.9630	\$1.9630	\$1.9630	\$1.9630	0	\$0
18	\$1.6350	1.44%	\$0.4190	\$0.0627	\$2.1406	\$1.6100	1.44%	\$0.4190	\$0.0627	\$2.1152	\$2.1406	\$2.1152	\$2.1406	0	\$0
19	\$1.6350	1.44%	\$0.4190	\$0.0627	\$2.1406	\$1.6100	1.44%	\$0.4190	\$0.0627	\$2.1152	\$2.1406	\$2.1152	\$2.1406	0	\$0
20	\$1.6350	1.44%	\$0.4190	\$0.0627	\$2.1406	\$1.6100	1.44%	\$0.4190	\$0.0627	\$2.1152	\$2.1406	\$2.1152	\$2.1406	0	\$0
21	\$1.6650	1.44%	\$0.4190	\$0.0627	\$2.1710	\$1.6650	1.44%	\$0.4190	\$0.0627	\$2.1710	\$2.1710	\$2.1710	\$2.1710	0	\$0
22	\$1.7600	1.44%	\$0.4190	\$0.0627	\$2.2674	\$1.7350	1.44%	\$0.4190	\$0.0627	\$2.2420	\$2.2674	\$2.2420	\$2.2674	0	\$0
23	\$1.7700	1.44%	\$0.4190	\$0.0627	\$2.2776	\$1.7550	1.44%	\$0.4190	\$0.0627	\$2.2623	\$2.2776	\$2.2623	\$2.2776	0	\$0
24	\$1.7800	1.44%	\$0.4190	\$0.0627	\$2.2877	\$1.7600	1.44%	\$0.4190	\$0.0627	\$2.2674	\$2.2877	\$2.2674	\$2.2877	0	\$0
25	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$1.6800	1.44%	\$0.4190	\$0.0627	\$2.1862	\$2.2167	\$2.1862	\$2.2167	0	\$0
26	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$1.6800	1.44%	\$0.4190	\$0.0627	\$2.1862	\$2.2167	\$2.1862	\$2.2167	0	\$0
27	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$1.6800	1.44%	\$0.4190	\$0.0627	\$2.1862	\$2.2167	\$2.1862	\$2.2167	0	\$0
28	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$2.0797	\$2.0442	\$2.0797	0	\$0
29	\$1.7050	1.44%	\$0.4190	\$0.0627	\$2.2116	\$1.6850	1.44%	\$0.4190	\$0.0627	\$2.1913	\$2.2116	\$2.1913	\$2.2116	0	\$0
30	\$1.6600	1.44%	\$0.4190	\$0.0627	\$2.1660	\$1.6150	1.44%	\$0.4190	\$0.0627	\$2.1203	\$2.1660	\$2.1203	\$2.1660	0	\$0
														0	00
														0	\$0

## Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub May 2020

		CALCULATI		LY DAI TGT ZONE	- 1		0.41.01.0.47			-					
1.57	(4)					(0)			Y DAI TGT ZONE						
	(1) PLATTS	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	GAS DAILY				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	MIDPOINT	FUEL	NNS	ALM O	+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
Dav				NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	101-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$1,5550	1.44%	\$0,4190	\$0.0627	\$2.0594	\$2.0797	\$2.0594	\$2.0797	0	\$0
2	\$1.5200	1.44%	\$0.4190	\$0.0627	\$2.0239	\$1,4850	1.44%	\$0,4190	\$0.0627	\$1.9884	\$2.0239	\$1.9884	\$2.0239	0	\$0
3	\$1.5200	1.44%	\$0.4190	\$0.0627	\$2.0239	\$1,4850	1.44%	\$0.4190	\$0.0627	\$1,9884	\$2.0239	\$1.9884	\$2.0239	0	\$0
4	\$1.5200	1.44%	\$0.4190	\$0.0627	\$2.0239	\$1.4850	1.44%	\$0,4190	\$0.0627	\$1,9884	\$2.0239	\$1.9884	\$2.0239	0	\$0
5	\$1.6850	1.44%	\$0.4190	\$0.0627	\$2.1913	\$1,7150	1.44%	\$0.4190	\$0.0627	\$2.2218	\$2.1913	\$2.2218	\$2.2218	0	\$0 \$0
6	\$1.9000	1.44%	\$0.4190	\$0.0627	\$2.4095	\$1.9150	1.44%	\$0,4190	\$0.0627	\$2.4247	\$2,4095	\$2.4247	\$2.4247	õ	\$0
7	\$1.8000	1.44%	\$0.4190	\$0.0627	\$2.3080	\$1.8050	1.44%	\$0.4190	\$0.0627	\$2.3131	\$2.3080	\$2.3131	\$2.3131	0	\$0
8	\$1.7700	1.44%	\$0.4190	\$0.0627	\$2.2776	\$1,7600	1.44%	\$0.4190	\$0.0627	\$2.2674	\$2.2776	\$2.2674	\$2.2776	0	\$0
9	\$1.6450	1.44%	\$0.4190	\$0.0627	\$2.1507	\$1.6400	1.44%	\$0.4190	\$0.0627	\$2.1457	\$2.1507	\$2.1457	\$2.1507	Ő	\$0
10	\$1.6450	1.44%	\$0.4190	\$0.0627	\$2.1507	\$1.6400	1.44%	\$0.4190	\$0.0627	\$2.1457	\$2.1507	\$2.1457	\$2.1507	õ	\$0
11	\$1.6450	1.44%	\$0.4190	\$0.0627	\$2.1507	\$1.6400	1.44%	\$0,4190	\$0.0627	\$2,1457	\$2,1507	\$2.1457	\$2.1507	õ	\$0
12	\$1.6450	1.44%	\$0.4190	\$0.0627	\$2.1507	\$1.6650	1.44%	\$0.4190	\$0.0627	\$2.1710	\$2.1507	\$2.1710	\$2.1710	ő	\$0
13	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$1.5850	1.44%	\$0.4190	\$0.0627	\$2.0899	\$2.0797	\$2.0899	\$2.0899	0	\$0
14	\$1.4800	1.44%	\$0.4190	\$0.0627	\$1.9833	\$1.4700	1.44%	\$0.4190	\$0.0627	\$1.9732	\$1.9833	\$1.9732	\$1.9833	0	\$0
15	\$1.4800	1.44%	\$0.4190	\$0.0627	\$1.9833	\$1.4600	1.44%	\$0.4190	\$0.0627	\$1.9630	\$1.9833	\$1.9630	\$1,9833	õ	\$0
16	\$1.5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$2.0341	\$2.0036	\$2.0341	0	\$0
17	\$1.5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$2.0341	\$2.0036	\$2.0341	0	\$0
18	\$1.5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$2.0341	\$2.0036	\$2.0341	0	\$0
19	\$1.6400	1.44%	\$0.4190	\$0.0627	\$2.1457	\$1.6200	1.44%	\$0.4190	\$0.0627	\$2.1254	\$2.1457	\$2.1254	\$2.1457	0	\$0
20	\$1.7150	1.44%	\$0.4190	\$0.0627	\$2.2218	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$2.2218	\$2.2167	\$2.2218	0	\$0
21	\$1.7300	1.44%	\$0.4190	\$0.0627	\$2.2370	\$1.7100	1.44%	\$0.4190	\$0.0627	\$2.2167	\$2.2370	\$2.2167	\$2.2370	0	\$0
22	\$1.5700	1.44%	\$0.4190	\$0.0627	\$2.0746	\$1.5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$2.0746	\$2.0341	\$2.0746	0	\$0
23	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.4950	1.44%	\$0.4190	\$0.0627	\$1.9985	\$2.0442	\$1.9985	\$2.0442	0	\$0
24	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.4950	1.44%	\$0.4190	\$0.0627	\$1.9985	\$2.0442	\$1.9985	\$2.0442	0	\$0
25	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.4950	1.44%	\$0.4190	\$0.0627	\$1.9985	\$2.0442	\$1.9985	\$2.0442	0	\$0
26	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.4950	1.44%	\$0.4190	\$0.0627	\$1.9985	\$2.0442	\$1.9985	\$2.0442	0	\$0
27	\$1.6800	1.44%	\$0.4190	\$0.0627	\$2.1862	\$1.6600	1.44%	\$0.4190	\$0.0627	\$2.1660	\$2.1862	\$2.1660	\$2.1862	0	\$0
28	\$1.6950	1.44%	\$0.4190	\$0.0627	\$2.2015	\$1.6900	1.44%	\$0.4190	\$0.0627	\$2.1964	\$2.2015	\$2.1964	\$2.2015	0	\$0
29	\$1.6100	1.44%	\$0.4190	\$0.0627	\$2.1152	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$2.1152	\$2.0797	\$2.1152	0	\$0
30	\$1.6100	1.44%	\$0.4190	\$0.0627	\$2.1152	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$2.1152	\$2.0797	\$2.1152	0	\$0
31	\$1.6100	1.44%	\$0.4190	\$0.0627	\$2.1152	\$1.5750	1.44%	\$0.4190	\$0.0627	\$2.0797	\$2.1152	\$2.0797	\$2.1152	0	\$0
														0	\$0
														0	40

# Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub June 2020

		CALCULAT	ON OF DAI	LY DAI TGT ZONI	E1		CALCULATI	ON OF DAI	Y DAI TGT ZON	E4					
	(1) PLATTS GAS DAILY	(2)	(3)	(4)	(5) (Col. 1/(1-Col.2)) + Col. 3 + Col. 4	(6) PLATTS GAS DAILY	(7)	(8)	(9)	(10) (Col. 6/(1-Col.7)) + Col. 8 + Col. 9	(11) DAILY FOR Z		(13) HIGHER OF	(14)	(15) TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT		NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day		RETENTION		COMMODITY	TGT-1	TGT - ZONE 4		DEMAND		TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1,4900	1.44%	\$0.4190	\$0.0627	\$1.9935	\$1.4800	1.44%	\$0.4190	\$0.0627	\$1,9833	\$1.9935	\$1,9833	\$1,9935	0	\$0
2	\$1.4600	1.44%	\$0.4190	\$0.0627	\$1,9630	\$1.4650	1.44%	\$0,4190	\$0.0627	\$1,9681	\$1.9630	\$1.9681	\$1,9681	0	\$0
3	\$1.5500	1.44%	\$0.4190	\$0.0627	\$2.0543	\$1,5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$2.0543	\$2.0341	\$2,0543	0	\$0
4	\$1.7200	1.44%	\$0.4190	\$0.0627	\$2.2268	\$1,7200	1.44%	\$0,4190	\$0.0627	\$2.2268	\$2,2268	\$2,2268	\$2.2268	0	\$0
5	\$1.6550	1.44%	\$0.4190	\$0.0627	\$2,1609	\$1,6450	1.44%	\$0,4190	\$0.0627	\$2,1507	\$2,1609	\$2,1507	\$2,1609	0	\$0
6	\$1.5650	1.44%	\$0.4190	\$0.0627	\$2.0695	\$1,5500	1.44%	\$0,4190	\$0.0627	\$2.0543	\$2.0696	\$2.0543	\$2,0696	0	\$0
7	\$1.5650	1.44%	\$0.4190	\$0.0627	\$2.0696	\$1,5500	1.44%	\$0,4190	\$0.0627	\$2.0543	\$2.0696	\$2.0543	\$2,0696	õ	\$0
8	\$1.5650	1.44%	\$0.4190	\$0.0627	\$2.0696	\$1.5500	1.44%	\$0.4190	\$0.0627	\$2.0543	\$2.0696	\$2,0543	\$2,0696	D	\$0
9	\$1.6000	1.44%	\$0,4190	\$0.0627	\$2.1051	\$1,5650	1.44%	\$0,4190	\$0.0627	\$2,0696	\$2.1051	\$2.0696	\$2,1051	D	\$0
10	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$1.5700	1.44%	\$0.4190	\$0.0627	\$2,0746	\$2,1101	\$2.0746	\$2.1101	D	\$0
11	\$1.6200	1.44%	\$0.4190	\$0.0627	\$2.1254	\$1.5800	1.44%	\$0.4190	\$0.0627	\$2.0848	\$2,1254	\$2.0848	\$2,1254	D	\$0
12	\$1.5850	1.44%	\$0,4190	\$0.0627	\$2,0899	\$1.5500	1.44%	\$0,4190	\$0,0627	\$2.0543	\$2.0899	\$2,0543	\$2,0899	D	50
13	\$1.4850	1.44%	\$0.4190	\$0.0627	\$1,9884	\$1.4700	1.44%	\$0,4190	\$0.0627	\$1.9732	\$1.9884	\$1,9732	\$1,9884	0	\$0
14	\$1.4850	1.44%	\$0.4190	\$0.0627	\$1.9884	\$1,4700	1.44%	\$0,4190	\$0.0627	\$1,9732	\$1,9884	\$1,9732	\$1.9884	Ď	\$0
15	\$1.4850	1.44%	\$0.4190	\$0.0627	\$1.9884	\$1.4700	1,44%	\$0,4190	\$0.0627	\$1.9732	\$1.9884	\$1.9732	\$1,9884	0	\$0
16	\$1.4050	1.44%	\$0.4190	\$0.0627	\$1.9072	\$1.3700	1.44%	\$0,4190	\$0.0627	\$1.8717	\$1,9072	\$1.8717	\$1,9072	0	\$0
17	\$1.3200	1.44%	\$0.4190	\$0.0627	\$1.8210	\$1.3150	1.44%	\$0.4190	\$0.0627	\$1.8159	\$1.8210	\$1,8159	\$1.8210	0	\$0
18	\$1.4400	1.44%	\$0.4190	\$0.0627	\$1.9427	\$1,4200	1.44%	\$0.4190	\$0.0627	\$1.9224	\$1.9427	\$1.9224	\$1,9427	0	\$0
19	\$1.4200	1.44%	\$0.4190	\$0.0627	\$1.9224	\$1.4150	1.44%	\$0.4190	\$0.0627	\$1.9174	\$1.9224	\$1.9174	\$1,9224	0	\$0
20	\$1.4150	1.44%	\$0.4190	\$0.0627	\$1.9174	\$1.4300	1,44%	\$0.4190	\$0.0627	\$1,9326	\$1,9174	\$1.9326	\$1.9326	D	50
21	\$1.4150	1.44%	\$0.4190	\$0.0627	\$1.9174	\$1,4300	1.44%	\$0.4190	\$0.0627	\$1,9326	\$1,9174	\$1.9326	\$1,9326	D	\$0
22	\$1.4150	1.44%	\$0.4190	\$0,0627	\$1.9174	\$1.4300	1.44%	\$0.4190	\$0.0627	\$1.9326	\$1,9174	\$1.9326	\$1.9326	0	\$0
23	\$1.5400	1.44%	\$0.4190	\$0.0627	\$2.0442	\$1.5600	1.44%	\$0,4190	\$0.0627	\$2,0645	\$2.0442	\$2.0645	\$2.0645	0	\$0
24	\$1.5000	1.44%	\$0.4190	\$0.0627	\$2.0036	\$1.4900	1.44%	\$0.4190	\$0,0627	\$1.9935	\$2.0036	\$1.9935	\$2,0036	D	\$0
25	\$1.5150	1.44%	\$0.4190	\$0.0627	\$2.0188	\$1.5300	1.44%	\$0.4190	\$0.0627	\$2.0341	\$2.0188	\$2.0341	\$2.0341	0	\$0
26	\$1.4100	1.44%	\$0.4190	\$0.0627	\$1,9123	\$1.4350	1.44%	\$0.4190	\$0.0627	\$1.9377	\$1.9123	\$1,9377	\$1.9377	0	\$0
27	\$1.3700	1.44%	\$0.4190	\$0.0627	\$1,8717	\$1.3800	1.44%	\$0,4190	\$0.0627	\$1,8819	\$1.8717	\$1,8819	\$1,8819	ō	\$0
28	\$1.3700	1.44%	\$0.4190	\$0.0627	\$1.8717	\$1.3800	1.44%	\$0.4190	\$0.0627	\$1.8819	\$1,8717	\$1,8819	\$1.8819	0	\$0
29	\$1.3700	1.44%	\$0.4190	\$0.0627	\$1.8717	\$1.3800	1,44%	\$0,4190	\$0.0627	\$1.8819	\$1,8717	\$1.8819	\$1,6819	D	\$0
30	\$1.6050	1.44%	\$0.4190	\$0.0627	\$2.1101	\$1.5800	1.44%	\$0,4190	\$0.0627	\$2.0848	\$2.1101	\$2.0848	\$2.1101	Ö	\$0
														0	\$0

# Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub July 2020

			ON OF DAII	LY DAI TGT ZONI			CALCULATI	ON OF DAIL	Y DAI TGT ZONE	≡ 4					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				. ,
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	IGI-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1.5950	0.35%	\$0.4190	\$0.0627	\$2.0823	\$1.5900	0.35%	\$0.4190	\$0.0627	\$2.0773	\$2.0823	\$2.0773	\$2.0823	0	\$0
2	\$1.5100	0.35%	\$0.4190	\$0.0627	\$1.9970	\$1.5000	0.35%	\$0.4190	\$0.0627	\$1,9870	\$1,9970	\$1.9870	\$1.9970	ŏ	\$0
3	\$1.5050	0.35%	\$0.4190	\$0.0627	\$1.9920	\$1.4450	0.35%	\$0.4190	\$0.0627	\$1.9318	\$1.9920	\$1.9318	\$1,9920	õ	\$0
4	\$1.5050	0.35%	\$0.4190	\$0.0627	\$1.9920	\$1.4450	0.35%	\$0.4190	\$0.0627	\$1.9318	\$1,9920	\$1.9318	\$1.9920	õ	\$0
5	\$1.5050	0.35%	\$0.4190	\$0.0627	\$1.9920	\$1.4450	0.35%	\$0.4190	\$0.0627	\$1.9318	\$1.9920	\$1.9318	\$1.9920	0	\$0
6	\$1.5050	0.35%	\$0.4190	\$0.0627	\$1.9920	\$1.4450	0.35%	\$0.4190	\$0.0627	\$1.9318	\$1.9920	\$1,9318	\$1.9920	0	\$0
7	\$1.6450	0.35%	\$0.4190	\$0.0627	\$2.1325	\$1.6300	0.35%	\$0.4190	\$0.0627	\$2.1174	\$2,1325	\$2.1174	\$2.1325	0	\$0
8	\$1.7450	0.35%	\$0.4190	\$0.0627	\$2.2328	\$1.7650	0.35%	\$0.4190	\$0.0627	\$2.2529	\$2.2328	\$2.2529	\$2.2529	0	\$0
9	\$1.7500	0.35%	\$0.4190	\$0.0627	\$2.2378	\$1.7500	0.35%	\$0.4190	\$0.0627	\$2.2378	\$2.2378	\$2.2378	\$2.2378	0	\$0
10	\$1.7850	0.35%	\$0.4190	\$0.0627	\$2.2730	\$1.7750	0.35%	\$0.4190	\$0.0627	\$2.2629	\$2.2730	\$2.2629	\$2.2730	0	\$0
11	\$1.7200	0.35%	\$0.4190	\$0.0627	\$2.2077	\$1.6800	0.35%	\$0.4190	\$0.0627	\$2.1676	\$2.2077	\$2.1676	\$2.2077	0	\$0
12	\$1.7200	0.35%	\$0.4190	\$0.0627	\$2.2077	\$1.6800	0.35%	\$0.4190	\$0.0627	\$2.1676	\$2.2077	\$2.1676	\$2.2077	0	\$0
13	\$1.7200	0.35%	\$0.4190	\$0.0627	\$2.2077	\$1.6800	0.35%	\$0.4190	\$0.0627	\$2.1676	\$2.2077	\$2.1676	\$2.2077	0	\$0
14	\$1.7250	0.35%	\$0.4190	\$0.0627	\$2.2128	\$1.6450	0.35%	\$0.4190	\$0.0627	\$2.1325	\$2.2128	\$2.1325	\$2.2128	0	\$0
15	\$1.6700	0.35%	\$0.4190	\$0.0627	\$2.1576	\$1.6300	0.35%	\$0.4190	\$0.0627	\$2.1174	\$2.1576	\$2.1174	\$2.1576	0	\$0
16	\$1.6950	0.35%	\$0.4190	\$0.0627	\$2.1827	\$1.6400	0.35%	\$0.4190	\$0.0627	\$2.1275	\$2.1827	\$2.1275	\$2.1827	0	\$0
17	\$1.6700	0.35%	\$0.4190	\$0.0627	\$2.1576	\$1.6700	0.35%	\$0.4190	\$0.0627	\$2.1576	\$2.1576	\$2.1576	\$2.1576	0	\$0
18	\$1.6650	0.35%	\$0.4190	\$0.0627	\$2.1525	\$1.6350	0.35%	\$0.4190	\$0.0627	\$2.1224	\$2.1525	\$2.1224	\$2.1525	0	\$0
19	\$1.6650	0.35%	\$0.4190	\$0.0627	\$2.1525	\$1.6350	0.35%	\$0.4190	\$0.0627	\$2.1224	\$2.1525	\$2.1224	\$2.1525	0	\$0
20	\$1.6650	0.35%	\$0.4190	\$0.0627	\$2.1525	\$1.6350	0.35%	\$0.4190	\$0.0627	\$2.1224	\$2.1525	\$2.1224	\$2.1525	0	\$0
21	\$1.5850	0.35%	\$0.4190	\$0.0627	\$2.0723	\$1.5500	0.35%	\$0.4190	\$0.0627	\$2.0371	\$2.0723	\$2.0371	\$2.0723	0	\$0
22	\$1.6150	0.35%	\$0.4190	\$0.0627	\$2.1024	\$1.5900	0.35%	\$0.4190	\$0.0627	\$2.0773	\$2.1024	\$2.0773	\$2.1024	0	\$0
23 24	\$1.6100 \$1.6050	0.35%	\$0.4190 \$0.4190	\$0.0627 \$0.0627	\$2.0974	\$1.5700	0.35%	\$0.4190	\$0.0627	\$2.0572	\$2.0974	\$2.0572	\$2.0974	0	\$0
24	\$1.6600	0.35%	\$0.4190	\$0.0627	\$2.0923	\$1.6200	0.35%	\$0.4190	\$0.0627	\$2.1074	\$2.0923	\$2.1074	\$2.1074	0	\$0
26	\$1.6600	0.35%	\$0.4190	\$0.0627	\$2.1475 \$2.1475	\$1.6450 \$1.6450	0.35%	\$0.4190	\$0.0627	\$2.1325	\$2.1475	\$2.1325	\$2.1475	0	\$0
20	\$1.6600	0.35%	\$0.4190	\$0.0627	\$2.1475	\$1.6450		\$0.4190	\$0.0627	\$2.1325	\$2.1475	\$2.1325	\$2.1475	0	\$0
28	\$1.6950	0.35%	\$0.4190	\$0.0627			0.35%	\$0.4190	\$0.0627	\$2.1325	\$2.1475	\$2.1325	\$2.1475	0	\$0
20	\$1,6950	0.35%	\$0.4190	\$0.0627	\$2.1827	\$1.6800	0.35%	\$0.4190	\$0.0627	\$2.1676	\$2.1827	\$2.1676	\$2.1827	0	\$0
29	\$1.7000	0.35%	\$0.4190	\$0.0627	\$2.1877 \$2.2128	\$1.7000 \$1.7250	0.35%	\$0.4190	\$0.0627	\$2.1877	\$2.1877	\$2.1877	\$2.1877	0	\$0
31	\$1.7250	0.35%	\$0.4190	\$0.0627	\$2.2128	\$1.7250	0.35%	\$0.4190 \$0.4190	\$0.0627	\$2.2128	\$2.2128	\$2.2128	\$2.2128	0	\$0
31	\$1.7100	0.35%	φ <b>0.4</b> 190	φ0.0027	\$2.1977	φ1./100	0.35%	au.4190	\$0.0627	\$2.1977	\$2.1977	\$2.1977	\$2.1977	0	\$0

### Daily DAt Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub August 2020

		CALCULATI	ON OF DAIL	LY DAI TGT ZON	E1		CALCULAT	ION OF DAI	LY DAI TGT ZON	E4					
	(1) PLATTS GAS DAILY	(2)	(3)	(4)	(5) (Col. 1/(1-Col.2)) + Col. 3 + Col. 4	(6) PLATTS GAS DAILY	(7)	(8)	(9)	(10) (Col. 6/(1-Col.7)) + Col. 8 + Col. 9	(11) DAILY FOR Z		(13) HIGHER OF	(14)	(15) TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT		NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND		TGT-1	TGT - ZONE 4		DEMAND		TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col, 14
1	\$1.6400	0.35%	\$0.4190	\$0.0627	\$2.1275	\$1.6350	0.35%	\$0.4190	\$0.0627	\$2,1224	\$2,1275	\$2.1224	\$2.1275	ō	\$0
2	\$1.6400	0.35%	\$0.4190	\$0.0627	\$2.1275	\$1.6350	0.35%	\$0,4190	\$0.0627	\$2,1224	\$2.1275	\$2.1224	\$2.1275	Ő	\$0
3	\$1.6400	0.35%	\$0.4190	\$0.0627	\$2.1275	\$1,8350	0.35%	\$0,4190	\$0.0627	\$2.1224	\$2.1275	\$2,1224	\$2,1275	Ö	\$0
4	\$1.8300	0.35%	\$0.4190	\$0.0627	\$2,3181	\$1.7700	0.35%	\$0,4190	\$0.0627	\$2.2579	\$2.3181	\$2.2579	\$2.3181	Ö	\$0
5	\$1.9100	0.35%	\$0.4190	\$0.0627	\$2,3984	\$1.8800	0.35%	\$0.4190	\$0.0627	\$2,3683	\$2.3984	\$2.3683	\$2.3984	õ	\$0
6	\$2.0400	0.35%	\$0.4190	\$0.0627	\$2,5289	\$1,9200	0.35%	\$0.4190	\$0.0627	\$2,4084	\$2.5289	\$2.4084	\$2.5289	ů.	\$0
7	\$2.0000	0.35%	\$0.4190	\$0.0627	\$2,4887	\$1,9000	0.35%	\$0.4190	\$0.0627	\$2,3884	\$2,4887	\$2.3884	\$2.4887	õ	\$0
8	\$1.9400	0.35%	\$0.4190	\$0.0627	\$2,4285	\$1.8500	0.35%	\$0,4190	\$0.0627	\$2,3382	\$2,4285	\$2.3382	\$2,4285	0	\$0
9	\$1.9400	0.35%	\$0.4190	\$0.0627	\$2,4285	\$1,8500	0.35%	\$0,4190	\$0.0627	\$2.3382	\$2.4285	\$2,3382	\$2.4285	Ď	\$0
10	\$1.9400	0.35%	\$0.4190	\$0.0627	\$2.4285	\$1.8500	0.35%	\$0,4190	\$0.0627	\$2.3382	\$2,4285	\$2.3382	\$2.4285	ő	\$0
11	\$2.0350	D.35%	\$0.4190	\$0.0627	\$2.5238	\$1.9250	0.35%	\$0,4190	\$0.0627	\$2.4135	\$2.5238	\$2.4135	\$2.5238	D	\$0
12	\$2.0200	0.35%	\$0,4190	\$0.0627	\$2.5088	\$1,9800	0.35%	\$0.4190	\$0.0627	\$2.4687	\$2.5088	\$2.4687	\$2.5088	0	\$0
13	\$1.9800	0.35%	\$0.4190	\$0.0627	\$2,4687	\$1,9100	0.35%	\$0,4190	\$0.0627	\$2,3984	\$2,4687	\$2.3984	\$2.4687	0	\$0
14	\$2.0350	0.35%	\$0.4190	\$0.0627	\$2.5238	\$2.0200	0.35%	\$0.4190	\$0.0627	\$2.5088	\$2.5238	\$2,5088	\$2,5238	0	\$0
15	\$2.1450	0.35%	\$0,4190	\$0.0627	\$2.6342	\$2.1050	0.35%	\$0,4190	\$0.0627	\$2.5941	\$2,6342	\$2,5941	\$2,6342	Ő	\$0
16	\$2.1450	0.35%	\$0.4190	\$0.0627	\$2.6342	\$2.1050	0.35%	\$0.4190	\$0.0627	\$2,5941	\$2.6342	\$2,5941	\$2.6342	õ	\$0
17	\$2.1450	0.35%	\$0.4190	\$0,0627	\$2.6342	\$2.1050	0.35%	\$0.4190	\$0.0627	\$2,5941	\$2.6342	\$2.5941	\$2.6342	ő	\$0
18	\$2.1350	0.35%	\$0.4190	\$0.0627	\$2,6242	\$2.1500	0.35%	\$0,4190	\$0.0627	\$2,6393	\$2.6242	\$2.6393	\$2.6393	0	\$0
19	\$2.2400	0.35%	\$0.4190	\$0.0627	\$2.7296	\$2,1900	0.35%	\$0.4190	\$0.0627	\$2.6794	\$2.7296	\$2.6794	\$2.7296	õ	\$0
20	\$2.2350	0.35%	\$0.4190	\$0.0627	\$2,7245	\$2,2100	0.35%	\$0.4190	\$0.0627	\$2,6995	\$2.7245	\$2,6995	\$2.7245	õ	\$0
21	\$2.2150	0.35%	\$0.4190	\$0.0627	\$2,7045	\$2.2000	0.35%	\$0,4190	\$0.0627	\$2.6894	\$2.7045	\$2.6894	\$2,7045	Ő	\$0
22	\$2.1600	0.35%	\$0.4190	\$0.0627	\$2.6493	\$2.1100	0.35%	\$0,4190	\$0.0627	\$2.5991	\$2.6493	\$2,5991	\$2,6493	Ő	\$0
23	\$2.1600	0.35%	\$0,4190	\$0.0627	\$2.6493	\$2.1100	0.35%	\$0.4190	\$0,0627	\$2.5991	\$2.6493	\$2.5991	\$2,6493	õ	\$0
24	\$2.1600	0.35%	\$0.4190	\$0.0527	\$2,6493	\$2.1100	0.35%	\$0,4190	\$0.0627	\$2.5991	\$2.6493	\$2.5991	\$2.6493	ő	\$0
25	\$2.4050	0.35%	\$0.4190	\$0.0627	\$2,8951	\$2,4100	0.35%	\$0.4190	\$0.0627	\$2.9002	\$2,8951	\$2.9002	\$2.9002	D	\$0
26	\$2.3600	0.35%	\$0.4190	\$0.0627	\$2,8500	\$2.3550	0.35%	\$0.4190	\$0.0627	\$2.8450	52,8500	\$2,8450	\$2.8500	Ő	\$0
27	\$2.2150	0.35%	\$0.4190	\$0.0627	\$2.7045	\$2,2650	0.35%	\$0.4190	\$0.0627	\$2.7547	\$2,7045	\$2.7547	\$2.7547	õ	\$0
28	\$2,2800	0.35%	\$0.4190	\$0,0627	\$2.7697	\$2.2800	0.35%	\$0,4190	\$0.0627	\$2.7697	\$2.7697	\$2.7697	\$2,7697	õ	\$0
29	\$2.1400	0.35%	\$0.4190	\$0.0627	\$2.6292	\$2.1400	0.35%	\$0,4190	\$0.0627	\$2.6292	\$2,6292	\$2.6292	\$2,6292	0	\$0
30	\$2.1400	0.35%	\$0.4190	\$0.0627	\$2.6292	\$2,1400	0.35%	\$0.4190	\$0.0627	\$2.6292	\$2.6292	\$2.6292	\$2,6292	0	\$0
31	\$2.1400	0.35%	\$0.4190	\$0.0627	\$2.6292	\$2.1400	0.35%	\$0,4190	\$0.0627	\$2.6292	\$2.6292	\$2.6292	\$2.6292	D	\$0
														D	\$0

### Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub September 2020

2		CALCULATI	LY DAI TGT ZON	E1		CALCULATI	on of dai		Ξ4						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY	DAI		()	(10)
	GAS DAILY				+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z	ONES	HIGHER OF		TOTAL
	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	TGT-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$2,0600	0.35%	\$0,4190	\$0.0627	\$2.5489	\$2,0300	0.35%	\$0.4190	\$0.0627	\$2.5188	\$2.5489	60 5100	** ****		
2	\$2.1450	0.35%	\$0.4190	\$0.0627	\$2.6342	\$2.0650	0.35%	\$0.4190	\$0.0627	\$2.5540	\$2.6342	\$2.5188 \$2.5540	\$2.5489	0	\$0
3	\$2,1650	0.35%	\$0.4190	\$0.0627	\$2.6543	\$2.1200	0.35%	\$0.4190	\$0.0627	\$2.6091	\$2.6543	\$2.6091	\$2.6342	0	\$0
4	\$2.1350	0.35%	\$0.4190	\$0.0627	\$2.6242	\$2.1800	0.35%	\$0.4190	\$0.0627	\$2.6694	\$2.6243	\$2.6694	\$2.6543 \$2.6694	0	\$0
5	\$1.8600	0.35%	\$0.4190	\$0.0627	\$2.3482	\$1.8850	0.35%	\$0.4190	\$0.0627	\$2.3733	\$2.3482	\$2.3733	\$2.3733	0	\$0
6	\$1.8600	0.35%	\$0.4190	\$0.0627	\$2.3482	\$1.8850	0.35%	\$0.4190	\$0.0627	\$2.3733	\$2.3482	\$2.3733	\$2.3733	0	\$0
7	\$1.8600	0.35%	\$0.4190	\$0.0627	\$2.3482	\$1.8850	0.35%	\$0.4190	\$0.0627	\$2.3733	\$2.3482	\$2.3733	\$2.3733	0	\$0
8	\$1,8600	0.35%	\$0.4190	\$0.0627	\$2.3482	\$1.8850	0.35%	\$0,4190	\$0.0627	\$2.3733	\$2.3482	\$2.3733	\$2.3733	0	\$0
9	\$1.9600	0.35%	\$0.4190	\$0.0627	\$2,4486	\$1,9250	0.35%	\$0,4190	\$0.0627	\$2.4135	\$2.4486	\$2.4135	\$2.4486	0	\$0 \$0
10	\$1.9450	0.35%	\$0.4190	\$0.0627	\$2.4335	\$1.9150	0.35%	\$0.4190	\$0.0627	\$2.4034	\$2.4335	\$2.4034	\$2.4335	0	\$0
11	\$1.8750	0.35%	\$0.4190	\$0.0627	\$2.3633	\$1,8800	0.35%	\$0.4190	\$0.0627	\$2.3683	\$2.3633	\$2.3683	\$2.3683	0	
12	\$1.7600	0.35%	\$0.4190	\$0.0627	\$2.2479	\$1.7700	0.35%	\$0,4190	\$0.0627	\$2.2579	\$2.2479	\$2.2579	\$2.2579	0	\$0 \$0
13	\$1.7600	0.35%	\$0.4190	\$0.0627	\$2.2479	\$1,7700	0.35%	\$0.4190	\$0.0627	\$2.2579	\$2.2479	\$2.2579	\$2.2579	0	\$0
14	\$1.7600	0.35%	\$0.4190	\$0.0627	\$2.2479	\$1.7700	0.35%	\$0.4190	\$0.0627	\$2.2579	\$2.2479	\$2.2579	\$2.2579	0	\$0
15	\$1.9450	0.35%	\$0.4190	\$0.0627	\$2.4335	\$1.8950	0.35%	\$0,4190	\$0.0627	\$2.3834	\$2,4335	\$2.3834	\$2.4335	o	\$0
16	\$1.8600	0.35%	\$0.4190	\$0.0627	\$2.3482	\$1,8800	0.35%	\$0.4190	\$0.0627	\$2.3683	\$2.3482	\$2.3683	\$2.3683	0	\$0
17	\$1.8350	0.35%	\$0.4190	\$0.0627	\$2.3231	\$1.8450	0.35%	\$0.4190	\$0.0627	\$2.3332	\$2.3231	\$2.3332	\$2.3332	0	\$0
18	\$1.5750	0.35%	\$0.4190	\$0.0627	\$2,0622	\$1.5650	0.35%	\$0,4190	\$0.0627	\$2.0522	\$2.0622	\$2.0522	\$2.0622	ő	\$0
19	\$1.4000	0.35%	\$0.4190	\$0.0627	\$1.8866	\$1.3950	0.35%	\$0.4190	\$0.0627	\$1.8816	\$1.8866	\$1.8816	\$1.8866	0	\$0
20	\$1.4000	0.35%	\$0.4190	\$0.0627	\$1.8866	\$1.3950	0.35%	\$0,4190	\$0.0627	\$1.8816	\$1.8866	\$1.8816	\$1.8866	0	\$0
21	\$1.4000	0.35%	\$0.4190	\$0.0627	\$1.8866	\$1.3950	0.35%	\$0.4190	\$0.0627	\$1,8816	\$1,8866	\$1.8816	\$1.8866	õ	\$0
22	\$1.2550	0.35%	\$0.4190	\$0.0627	\$1.7411	\$1.2750	0.35%	\$0.4190	\$0.0627	\$1.7612	\$1,7411	\$1.7612	\$1.7612	0	\$0
23	\$1.4000	0.35%	\$0.4190	\$0.0627	\$1.8866	\$1.4200	0.35%	\$0.4190	\$0.0627	\$1.9067	\$1.8866	\$1.9067	\$1.9067	õ	\$0
24	\$1.7400	0.35%	\$0.4190	\$0.0627	\$2.2278	\$1.7100	0.35%	\$0.4190	\$0.0627	\$2,1977	\$2.2278	\$2.1977	\$2.2278	õ	\$0
25	\$1.8050	0.35%	\$0.4190	\$0.0627	\$2.2930	\$1.8050	0.35%	\$0.4190	\$0.0627	\$2.2930	\$2.2930	\$2.2930	\$2.2930	0	\$0
26	\$1.6250	0.35%	\$0.4190	\$0.0627	\$2.1124	\$1.6200	0.35%	\$0.4190	\$0.0627	\$2.1074	\$2.1124	\$2.1074	\$2.1124	0	\$0
27	\$1.6250	0.35%	\$0.4190	\$0.0627	\$2.1124	\$1.6200	0.35%	\$0.4190	\$0.0627	\$2.1074	\$2.1124	\$2.1074	\$2.1124	0	\$0
28	\$1.6250	0.35%	\$0.4190	\$0.0627	\$2.1124	\$1.6200	0.35%	\$0.4190	\$0.0627	\$2.1074	\$2.1124	\$2.1074	\$2.1124	ō	\$0
29	\$1.4800	0.35%	\$0.4190	\$0.0627	\$1.9669	\$1.4850	0.35%	\$0.4190	\$0.0627	\$1.9719	\$1.9669	\$1.9719	\$1.9719	õ	\$0
30	\$1.3350	0.35%	\$0.4190	\$0.0627	\$1.8214	\$1.3150	0.35%	\$0.4190	\$0.0627	\$1.8013	\$1.8214	\$1.8013	\$1.8214	ō	\$0
														0	\$0

### Daily DAI Calculation for Texas Gas Zone 1 and Appalachia Lebanon-Hub October 2020

			LY DAI TGT ZONI	E1		CALCULATI	on of Daii	Y DAI TGT ZONE	Ξ4						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	PLATTS				(Col. 1/(1-Col.2))	PLATTS				(Col. 6/(1-Col.7))	DAILY				
	GAS DAILY	CUE			+ Col. 3 + Col. 4	GAS DAILY				+ Col. 8 + Col. 9	FOR Z		HIGHER OF		TOTAL
Devi	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	MIDPOINT	FUEL	NNS	NNS	DAILY DAI	DAILY DAI	DAILY DAI	COLUMN 11	DAILY	DOLLARS
Day	161-1	RETENTION	DEMAND	COMMODITY	TGT-1	TGT - ZONE 4	RETENTION	DEMAND	COMMODITY	TGT-4	TGT-1	TGT-4	OR COLUMN 12	PEFDCQ	Col. 13 x Col. 14
1	\$1,3500	0.35%	\$0,4190	\$0.0627	\$1,8364	\$1,3350	0.35%	\$0.4190	\$0.0627	¢4 0044	<b>64 0004</b>	A4 0044	<b>*</b> • • • • •		
2	\$1,1700	0.35%	\$0.4190	\$0.0627	\$1.6558	\$1.1600	0.35%	\$0.4190	\$0.0627	\$1.8214 \$1.6458	\$1.8364 \$1.6558	\$1.8214	\$1.8364	0	\$0
3	\$1.0550	0.35%	\$0.4190	\$0.0627	\$1.5404	\$1.0200	0.35%	\$0.4190	\$0.0627	\$1.5053	\$1.5404	\$1.6458 \$1.5053	\$1.6558	0	\$0
4	\$1.0550	0.35%	\$0.4190	\$0.0627	\$1.5404	\$1.0200	0.35%	\$0.4190	\$0.0627	\$1.5053	\$1.5404	\$1.5053	\$1.5404 \$1.5404	0	\$0
5	\$1.0550	0.35%	\$0.4190	\$0.0627	\$1.5404	\$1.0200	0.35%	\$0.4190	\$0.0627	\$1.5053	\$1.5404	\$1.5053	\$1.5404	0	\$0
6	\$1,5300	0.35%	\$0.4190	\$0.0627	\$2.0171	\$1.4500	0.35%	\$0.4190	\$0.0627	\$1,9368	\$2.0171	\$1.9368	\$2.0171	0	\$0
7	\$1,6100	0.35%	\$0.4190	\$0.0627	\$2.0974	\$1.5200	0.35%	\$0.4190	\$0.0627	\$2.0070	\$2.0974	\$2.0070	\$2.0974	0	\$0
8	\$1.6200	0.35%	\$0.4190	\$0.0627	\$2.1074	\$1,5650	0.35%	\$0,4190	\$0.0627	\$2.0522	\$2.1074	\$2.0522	\$2.1074	0	\$0 \$0
9	\$1.1950	0.35%	\$0.4190	\$0.0627	\$1.6809	\$1,1650	0.35%	\$0,4190	\$0.0627	\$1.6508	\$1,6809	\$1.6508	\$1,6809	0	\$0
10	\$1.2600	0.35%	\$0.4190	\$0.0627	\$1.7461	\$1.1950	0.35%	\$0.4190	\$0.0627	\$1.6809	\$1.7461	\$1.6809	\$1.7461	0	\$0
11	\$1.2600	0.35%	\$0.4190	\$0.0627	\$1.7461	\$1.1950	0.35%	\$0.4190	\$0.0627	\$1.6809	\$1,7461	\$1.6809	\$1.7461	0	\$0
12	\$1.2600	0.35%	\$0.4190	\$0.0627	\$1.7461	\$1.1950	0.35%	\$0.4190	\$0.0627	\$1.6809	\$1,7461	\$1.6809	\$1.7461	ő	\$0
13	\$1.7600	0.35%	\$0.4190	\$0.0627	\$2.2479	\$1,7200	0.35%	\$0.4190	\$0.0627	\$2.2077	\$2.2479	\$2,2077	\$2.2479	Ő	\$0
14	\$1.9250	0.35%	\$0.4190	\$0.0627	\$2.4135	\$1.8900	0.35%	\$0.4190	\$0.0627	\$2.3783	\$2.4135	\$2.3783	\$2.4135	Ő	\$0
15	\$2.0150	0.35%	\$0.4190	\$0.0627	\$2.5038	\$2.0300	0.35%	\$0.4190	\$0.0627	\$2.5188	\$2.5038	\$2.5188	\$2.5188	0	\$0
16	\$2.1050	0.35%	\$0.4190	\$0.0627	\$2.5941	\$2.1050	0.35%	\$0.4190	\$0.0627	\$2.5941	\$2.5941	\$2.5941	\$2,5941	0	\$0
17	\$2.0600	0.35%	\$0.4190	\$0.0627	\$2.5489	\$2.0700	0.35%	\$0.4190	\$0.0627	\$2.5590	\$2.5489	\$2.5590	\$2.5590	0	\$0
18	\$2.0600	0.35%	\$0.4190	\$0.0627	\$2.5489	\$2.0700	0.35%	\$0.4190	\$0.0627	\$2.5590	\$2.5489	\$2.5590	\$2.5590	0	\$0
19	\$2.0600	0.35%	\$0.4190	\$0.0627	\$2.5489	\$2.0700	0.35%	\$0.4190	\$0.0627	\$2.5590	\$2.5489	\$2.5590	\$2.5590	0	\$0
20	\$2.2900	0.35%	\$0.4190	\$0.0627	\$2.7797	\$2.3200	0.35%	\$0.4190	\$0.0627	\$2.8098	\$2.7797	\$2.8098	\$2.8098	0	\$0
21	\$2.6100	0.35%	\$0.4190	\$0.0627	\$3.1009	\$2.6000	0.35%	\$0.4190	\$0.0627	\$3.0908	\$3.1009	\$3.0908	\$3.1009	0	\$0
22	\$2.6550	0.35%	\$0.4190	\$0.0627	\$3.1460	\$2.6400	0.35%	\$0.4190	\$0.0627	\$3.1310	\$3.1460	\$3.1310	\$3.1460	0	\$0
23	\$2.8250	0.35%	\$0.4190	\$0.0627	\$3.3166	\$2.8450	0.35%	\$0.4190	\$0.0627	\$3.3367	\$3.3166	\$3.3367	\$3.3367	0	\$0
24	\$2.7550	0.35%	\$0.4190	\$0.0627	\$3.2464	\$2.7850	0.35%	\$0.4190	\$0.0627	\$3.2765	\$3.2464	\$3.2765	\$3.2765	0	\$0
25	\$2.7550	0.35%	\$0.4190	\$0.0627	\$3.2464	\$2.7850	0.35%	\$0.4190	\$0.0627	\$3.2765	\$3.2464	\$3.2765	\$3.2765	0	\$0
26	\$2.7550	0.35%	\$0.4190	\$0.0627	\$3.2464	\$2.7850	0.35%	\$0.4190	\$0.0627	\$3.2765	\$3.2464	\$3.2765	\$3.2765	0	\$0
27	\$2.9250	0.35%	\$0.4190	\$0.0627	\$3.4170	\$2.9400	0.35%	\$0.4190	\$0.0627	\$3.4320	\$3.4170	\$3.4320	\$3.4320	0	\$0
28	\$2.9050	0.35%	\$0.4190	\$0.0627	\$3.3969	\$2.9050	0.35%	\$0.4190	\$0.0627	\$3.3969	\$3.3969	\$3.3969	\$3.3969	0	\$0
29	\$2.9350	0.35%	\$0.4190	\$0.0627	\$3.4270	\$2.9050	0.35%	\$0.4190	\$0.0627	\$3.3969	\$3.4270	\$3.3969	\$3.4270	0	\$0
30 31	\$2.8650	0.35%	\$0.4190	\$0.0627	\$3.3568	\$2.8900	0.35%	\$0.4190	\$0.0627	\$3.3819	\$3.3568	\$3.3819	\$3.3819	0	\$0
31	\$2.8650	0.35%	\$0.4190	\$0.0627	\$3.3568	\$2.8900	0.35%	\$0.4190	\$0.0627	\$3.3819	\$3.3568	\$3.3819	\$3.3819	0	\$0

\$0

0

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

#### LOUISVILLE GAS AND ELECTRIC COMPANY CALCULATION OF SUPPLY ZONE PRIM GUMPHTY ENTITLEMENT PERCENTAGE FOR TEXAS GAS TRANSMISSION (TGT) AND TENNESSEE GAS PRPELINE COMPANY (TGIN.)

COLUMN			•	2	3	4	5		7	8		10		12	13	14	16	10
			_		WINTER	RISEASON	_		and the second	CITY AND FIRM MAINLINE REC	CEPT POINT CA	PACITY	SUMMER	SEABON		_	-	
CONTRACTE	-	ZÓNE	NOV: 18	DEG 19	JAN. 20	FEB.20	MAR.20	COL 1-5)	ALLOCATION PERCENTAGE*	AP(8. 20	MAY 20	JUN 20	JL1 20	ALIG 20	SEP. 20	OCT 20	COL 8-14)	ALLOCATION PERCENTAGE*
TGT-NNB-2978)		BL A TOTAL	130,734 55,473 0 166,207	130.734 55.473 0 185.207	130.734 55.473 0 109.207	130.754 55,473 0 168,207	150,734 55,473 0 168,207	653,670 277,365 0 931,035	70.21% 29.79% 0.00%	56,899 24,473 0 01,372	56.639 24.473 0 81.572	56,899 24,473 0 81,372	55,889 34,473 0 81.372	56,699 24,473 0 81,372	68,899 24,473 0 81,372	56,899 24,473 0 81(372	171,311 0 569,604	89.02% 30,07% 0,00% 100,00%
1014134991		SI. 1 4 TOTAL	3 60,000 60,000	0 0 000,00 000,00	0 80,000 60,000	0 0 80,000 60,000	0 13 60,000 60,000	0 0 	0,00% 0,00% 100,00% 100,00%	0 00.000 60.000	0 6 80.000 80.000	0 60 000 50 000	0 0 60,000 60,000	0 0 00,000 00,000	0 90,000 90,000	0 00,000 00,000	470,000	0.00% 0.00% 100 00%
TOPL-FT-4-111110		U TOTAL	20,000	20.000	20,000 0 20,000	20,000 D 20,000	20.000 0 20.000	100.000 0 100.000	100,00% 0.00% 100.00%	20,000. 0 20.000	20,000 	20.000 0 20.000	20.000 0 20.000	20.000 0 20.000	20.000	20,000 0 20,000	140,000 0 140,000	100:00% 0.00% 100:02%
COLUMN	it.	10	18	20	21	77	23	24	3	26	27	29	29	30	31	32	33	28
CONTRACTS	WINTER SEASON QUANTITY ENTITLEMENT	ZONE	WINTER ALLOCATION PERCENT 100L TI	TEXAS GAS SEFQE ZONE SL IC.17.2 C.10	TEXAS GAS SZFDE ZDNE 1 (C.17 x C.19)	TEXAS GAS SZFQE ZONE # JC1/ KG100	TENNESSEE SZFOE ZONE 0 (C.17 + C.19)	TENNESSEE SZFCE ZCNE 1 _TC.17 x C.19/	TOTAL	SUMMER SEASON QUANTTY ENTITLEMENT	7045	SUMMER ALLOCATION PERCENT (COL_10)	TEXAB DAS SZECE ZONE SL [C.28] + C.281	TEXAS GAD S2FOE ZONE 1 JC 26 (C.20)	TEXAB DAS SZFQE ZONE & IC-25 2 C 381	TENNESSEE S2FQE 20NE 0 IC26 ( C20)	TENNESSEE SZFDE ZONE 1 (C28 ± C29)	TOTAL
TOT-NN5-29701	20.729,000	81. 1 4	70.21% 20.79% 0.00%	18.405.062	7,810,938	.0.				8,292,000	5L *	09.92% 30.03% 0.00%	5.797.766	2,494,234	D			
707-FT-34951	000,080,0	SL 1	0.00% 0.00% 100.00%	0	w.	0.045.000				12.340,000	SL Y	0.00% 0.00% 100.00%	0	6	12 010,000			
TGPL/FT-A-111110	3,020,000	0	1102 0076- 0.0076				3 02545887 0			4 280,000	0 1	(00.00% 0.00%				000,087.4		
TOTALE	36,300,000			18 (09/062	7.910,930	\$.960 DOG	3,020,000		38 300.000	25.412.000			\$ 707,700	2,494,234	12,840,000	4,280,000	e.	25,412,000
SUPPLY ZONE FIRM QUANTITY	Y ENTITLEMENT PERCENT**			48.07%	20,39%	23,004	7,08%	0.005	100.00%				22.01%	9.62%	50.53%	16.6.99	0.00%	100.00%

T ALLOCATION PERCENTING EQUALS TOTAL ZONE CAPACITY UNDER EACH CONTRACT DIVICED BY TOTAL DAPACITY UNDER EACH CONTRACT.

THE WARDIN SEASON SUPPLY SERVE FRIM QUANTITY EVENTS EVENT FREQUENCIASE IS CALCULAR ON DAVENUE THE TOTAL OF COLLOU.31, 32, 33, OR 24 BY THE TOTAL OF COL. 17, THE SUMMUR EXECUTED COMPTRING OWNERS FRIM QUANTITY EXTERNATION FRAMEWORK AND IN DAVENUE THE TOTAL OF COLLOU.31, 32, 33, 35, 36, 30 BY THE TOTAL OF COLLOU.

## PBR-TIF SUPPORTING CALCULATIONS

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

### LOUBVILLE GAS AND ELECTRIC COMPANY. CALCULATION OF TOTAL ANNUAL BENCHMARK MONTHLY GAS TRANSPORTATION COBTS ("TAEMBTL") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF") 4 5 5 7 8

521.700 534.100			
E State			
\$34,100			
22 23	22	28	25
	+-1/		44
AL COMM	TOTAL C	CALCULATION OF S	SURCHARGE
[14X15] + CITY-	Y-GATE	ACA	
			TOTAL (23x24)
			\$1.059
\$17,406 4	483,498	\$0,0013	\$628
\$15,611 4	433,855		\$554 \$651
		30.0013	\$841
\$25,481 7	707,800	\$0.0013	\$920
			\$965 \$1,477
		\$0,0013	51,612
\$66,953 7.8	859,814	\$0.0013	22,418
			\$2.337 \$2.046
		deloc 1	\$15.529
38 .35	39	40	41
			_
(30X3T) + CITY			URCHARGES
		ACA	TOTAL
			(39x40) \$(
50	0		\$0
50	0	\$0,0013.	.\$0
			\$1 \$1
50	0	\$0.0013	\$1
\$0	0	30.0013	\$1
	0		\$0
	0		30 31
\$0.	0	#0.0012	30
50	0	\$0.0017	\$2
20	ö		\$0
3	(14X(5)+ C) (14X(5)+ C) (20X21) (15+17 \$25,206 \$16,003 \$16,003 \$16,003 \$22,300 \$22,302 \$22,302 \$22,302 \$23,302 \$24,003 \$24,003 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,005 \$24,005 \$25,00	I14X151+         CITY-GATE           (18X151+         DEL/VERY           (20X21)         (15+17+19-21)           2520 316         613,458           315,611         33,655           315,613         508,420           323,302         647,268           323,302         647,268           324,035         1,334,646           344,035         1,334,646           344,033         12,231,505           38         39           AL COMM.         TOTAL           (39X31)+         CITY-GATE           (39X31)+         CITY-GATE           (39X31)+         CITY-GATE           (39X31)+         CITY-GATE           (39X31)+         CITY-GATE           38         39           30         50           30         0           50         0           50         0           50         0           50         0           50         0           50         0           50         0           50         0           50         0           50         0           50<	(14X(5)+         CITV-GATE         4CA           (14X(5)+         DEL/DEPX         ACA           (14X(5)+         DEL/DEPX         ACA           (14X(5)+         DEL/DEPX         ACA           (14X(5)+         DEL/DEPX         ACA           (20X21)         (15+(7+49-21))         CHARGE           (20X31)         (15+(7+40,20))         S0.0013           (20X31)         7/07,800         S0.0013           (20,737)         7/42,891         S0.0013           (20,613)         1,130,466         \$0.0013           (20,737)         7/42,891         \$0.0013           (20,737)         7/42,891         \$0.0013           (20,737)         7/42,891         \$0.0013           (20,737)         7/42,891         \$0.0013           (20,737)         7/42,891         \$0.0013           (20,737)         1,234,505         \$0.0013           (20,737)         (2,24,77,614         \$0.0011

#### LOU:SVILLE GAS AND ELECTRIC COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK MONTHLY GAS TRANSPORTATION COSTS ("TABMGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	42	43	44	45
		NNS		TOTAL
	CALC. OF DIRE		TOTAL	NNS
	CASH	avi bicco	S&DB	BMGTC
MONTH	OUT	OTHER	(9+42+43)	(4+7+44)
NOV. 19	\$0	SO	\$3.146	\$2,475,937
DEC. 19	\$0	\$0	\$2,576	\$2,525,907
JAN. 20	\$0	50	\$1,311	\$2,464,879
FEB. 20	SO	\$0	\$1,895	\$2,338,102
MAR. 20	\$0	\$0	\$1,115	\$2,455,409
APR. 20	\$0	\$0	5624	\$1,254,941
MAY 20	\$0	\$0	\$199	\$788,946
JUN. 20	50	\$0	\$7	\$754,513
JUL. 20	\$0	50	\$1,271	\$840,647
AUG. 20	\$0	SO	\$2,129	\$882,009
SEP. 20	\$0	\$30	\$1,905	\$844,689
OCT. 20	\$0	\$0	\$2,212	\$1,645.659
TOTAL	\$0	\$30	\$18,390	\$19,271,638
COLUMN	46	47	48	49
	F	T BACKHAUL	1	TOTAL FT BACKHAUL
	CALC, OF DIRI		TOTAL S&DB	BMGTC
	CASH-		(25+46+	(13+22+
MONTH	OUT	OTHER	47)	48)
NOV, 19	\$0	\$0	\$1,059	\$277,697
DEC. 19	\$0	\$0	\$629	\$273,599
JAN, 20	\$0	\$0	\$564	\$271,739
FEB. 20	\$0	\$0	\$661	\$258,040
MAR. 20	\$0	\$0	\$641	\$279,707
APR, 20	\$0	\$0	\$920	\$273,721
MAY 20	\$0	\$0	\$965	\$283,266
JUN. 20	\$0	\$0	\$1,477	\$289,710
JUL. 20	\$0	\$0	\$1,612	\$301,811
AUG. 20	\$0	\$0	\$2,418	\$324,935
SEP. 20	\$0	\$0	\$2,337	\$314,378
OCT. 20	\$0	\$0	\$2,046	\$324,563
TOTAL	\$0	\$0	\$15,529	\$3,473,166
COLUMN	50	51	52	53
		STF		TOTAL STF
	CALC. OF DIR	ECT BILLS	TOTAL S&DB	BMGTC
A REPORT OF	CASH-		(41+50+	(29+38+
MONTH	OUT	OTHER	51)	52)
NOV. 19	\$0	\$0	\$0	\$0
DEC. 19	\$0	\$0	\$0	\$0
JAN. 20	\$0	\$0	\$0	\$0
FEB. 20	\$0	\$0	\$0	\$0
MAR. 20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
APR. 20				
MAY 20	\$0	\$0	\$0	SO
JUN. 20	\$0	\$0	\$0	\$0
JUL. 20	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
AUG. 20				
SEP. 20				
OCT. 20	\$0 \$0	\$0 \$0	\$0 50	\$0 \$0

\$0

TOTAL

S0

\$0

\$0

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

COLUMN
--------

	TOTAL
	BM(TGT)
MONTH	(45+49+53)
NOV, 19	\$2,753,634
DEC. 19	\$2,799,506
JAN. 20	\$2,735,618
FEB. 20	\$2,596,142
MAR. 20	\$2,735,116
APR. 20	\$1,528,682
MAY 20	\$1,072,212
JUN. 20	\$1,044,223
JUL. 20	\$1,142,458
AUG. 20	\$1,206,944
SEP. 20	\$1,159,067
OCT. 20	\$1,970,222
TOTAL	\$22,744,804

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#### LOU/SVILLE GAS AND ELECTRIC COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK MONTHLY GAS TRANSPORTATION COSTS ("TABMGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	55	56	57	58	59	60	61	62	63	64	65	66	67
				CALCULATION OF	TENNESSEE GAS	PIPELINE FT-A	SERVICE ZONE	PORTION OF BMG	TC				
		CALC	ULATION OF BASE	TARIFF RATES		-		CALCULATI	ON OF SURCHAR	GES AND DIRE	CT BILLS	RANU ALDO	TOTAL
6	DEMAND	0 DEMAND CHARG	TOTAL	COMMODITY	CITY-GATE	TOTAL	EPCR ADJU EPCR	TOTAL	ACA	TOTAL		TOTAL S&DB (62 +	FT-A ZN-0 BMGTC
MONTH	CHARGE	DEMAND	(55x56)	CHARGE	DELIVERIES	(58x59)	CHARGE	(59x61)	CHARGE	(59x63)	OTHER	64 + 65)	(57+60+66)
NOV. 19	\$13,9761	20,000	\$279,522	\$0.0184	500,000	\$11,040	\$0.0199	\$11,940	\$0.0013	\$780	\$0	\$12,720	\$303,282
DEC. 19	\$13,9761	20,000	\$279,522	\$0.0184	620,000	\$11,408	\$0.0199	\$12,338	\$0.0013	\$806	\$0	\$13,144	\$304,074
JAN. 20	\$13.9761	20,000	\$279,522	\$0.0184	280,000	\$5,152	\$0.0199	\$5,572	\$0.0013	\$364	\$0	\$5,936	\$290,610
FEB. 20	\$13.9761	20,000	\$279,522	\$0.0184	480,000	\$8,832	\$0.0199	\$9,552	\$0.0013	\$624	\$0	\$10,176	\$298,530
MAR. 20	\$13.9761	20,000	\$279,522	\$0.0184	80,000	\$1,472	\$0.0199	\$1,592	\$0.0013	\$104	\$0	\$1,696	\$282,690
APR. 20	\$13.9761	20,000	\$279,522	\$0.0184	60,000	\$1,104	\$0.0120	\$720	\$0.0013	\$78	\$0	\$798	\$281,424
MAY 20 JUN, 20	\$13.9761 \$13.9761	20,000 20,000	\$279,522 \$279,522	\$0.0184 \$0.0184	180,000 320,000	\$3,312 \$5,686	\$0.0120 \$0.0120	\$2,160 \$3,840	\$0.0013 \$0.0013	\$234 \$416	\$0 \$0	\$2,394 \$4,256	\$285,228 \$289,666
JUL. 20	\$13.9761	20,000	\$279,522	\$0.0184	320,000	\$5,686	\$0.0120	\$4,060	\$0.0013	\$416	\$0	\$4,256 \$4,522	\$289,666
AUG. 20	\$13.9761	20,000	\$279,522	\$0.0184	50,000	\$920	\$0.0120	\$600	\$0.0013	\$65	\$0	\$665	\$281,107
SEP. 20	\$13,9761	20,000	\$279,522	\$0.0184	292,200	\$5,377	\$0.0120	\$3,506	\$0.0013	\$380	\$0	\$3,886	\$288,785
OCT. 20	\$13,9761	20,000	\$279,522	\$0.0184	335,000	\$6,182	\$0.0120	\$4,032	\$0.0011	\$370	\$0	\$4,402	\$290,106
DTAL		240,000	\$3,354,264		3,638,200	\$66,943		\$59,932		\$4,663	\$0	\$64,595	\$3,485,802
OLUMN	68	69	70	71	72	73	74	75	76	77	78	79	80
				CALCULATION OF	TENNESSEE GAS	PIPEI INF FT.4	SERVICE ZONE	PORTION OF BMG	STC				
		CALC	ULATION OF BASE	TARIFF RATES				CALCULAT	ION OF SURCHAP	GES AND DIRE	CT BILLS		TOTAL
		1 DEMAND CHAR	GES	FT-A ZONE 1 C	OMMODITY CHAR		EPCR ADJU	STMENT	ACA			TOTAL S&DB	FT-A ZN-1
2	DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	EPCR	TOTAL	ACA	TOTAL		(75+	BMGTC
MONTH	CHARGE \$9.5541	DEMAND	(68x69) \$0	CHARGE \$0.0154	DELIVERIES	(71x72) \$0	CHARGE \$0.0165	(72x74) \$0	CHARGE \$0.0013	(72x76) \$0	OTHER \$0	<u>77 + 78)</u> \$0	(70+73+79) \$0
VOV. 19 DEC. 19	\$9.5541 \$9.5541	0	\$0 \$0	\$0.0154	0	\$0	\$0.0165	50	\$0.0013	\$0	50	\$0 \$0	50
JAN. 20	\$9.5541	0	\$0	\$0.0154	0	\$0	\$0.0165	\$0	\$0.0013	\$0	\$0	\$0	50
EB. 20	\$9.5541	õ	\$0	\$0.0154	0	\$0	\$0.0165	\$0	\$0.0013	\$0	\$0	\$0	\$0
AR. 20	\$9.5541	0	\$0	\$0.0154	0	\$0	\$0.0165	\$0	\$0.0013	\$0	\$0	\$0	50
APR. 20	\$9.5541	0	\$0	\$0.0154	0	\$0	\$0.0099	\$0	\$0.0013	\$0	\$0	\$0	50
MAY 20	\$9.5541	0	\$0 \$0	\$0.0154	280,000	\$0 \$4,312	\$0.0099 \$0.0099	\$0 \$2,772	\$0.0013 \$0.0013	\$0 \$364	\$0 \$0	\$0 \$3,136	\$0 \$7,448
UN. 20	\$9.5541 \$9.5541	0	\$0 \$0	\$0.0154 \$0.0154	280,000	\$4,312 \$2,541	\$0,0099	\$2,772 \$1,633	\$0.0013	\$304 \$215	\$0 \$0	\$3,135	\$7,448
JUL. 20 AUG. 20	\$9.5541	0	\$0	\$0.0154	260,000	\$4,004	\$0,0099	\$2,574	\$0.0013	\$338	\$0 \$0	\$2,912	\$4,389
SEP. 20	\$9.5541	0	\$0	\$0.0154	7,800	\$120	\$0,0099	\$77	\$0.0013	\$10	\$0	\$87	\$207
CT. 20	\$9.5541	ō	\$0	\$0.0154	14,000	\$216	\$0.0099	\$136	\$0.0011	\$15	\$0	\$153	\$369
TAL		0	\$0		726,800	\$11,193		\$7,194		\$942	\$0	\$8,135	\$19,329
DLUMN	81	82	83	84	85	86	87	88	89	90	91	92	93
				CALCULATION OF	TENNESSEE GAS	PIPELINE FT-	A SERVICE (ZONE)	2) PORTION OF BMC	GTC		OT DILLO		20711
	FT-A ZONE	E 2 DEMAND CHAR	CULATION OF BASI		OMMODITY CHAR	GES	EPCR ADJU	ISTMENT	ION OF SURCHAR ACA	GES AND DIRE	GIBILLS	TOTAL S&DB	TOTAL FT-A ZN-2
	DEMAND	CONTRACT	TOTAL	COMMODITY	CITY-GATE	TOTAL	EPCR	TOTAL	ACA	TOTAL		(88 +	BMGTC
MONTH	CHARGE	DEMAND	(81x82)	CHARGE	DELIVERIES	(84x85)	CHARGE	(85x87)	CHARGE	(85x89)	OTHER	90 + 91)	(83+86+92)
NOV. 19	\$4.9480	0	\$0	\$0.0019	0	\$0	\$0.0010	\$0	\$0.0013	\$0	\$0	\$0	\$0
DEC. 19	\$4.9480	0	\$0	\$0.0019	0	\$0	\$0.0010	\$0	\$0.0013	\$0	\$0	\$0	\$0
JAN. 20	\$4.9480 \$4.9480	0	\$0 \$0	\$0.0019 \$0.0019	C	\$0 \$0	\$0.0010 \$0.0010	\$0 \$0	\$0.0013 \$0.0013	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
FEB. 20 MAR. 20	\$4,9480	0	50	\$0.0019	0	50	\$0.0010	\$0	\$0.0013	50	50	\$0	50
APR. 20	\$4,9480	0	\$0	\$0.0019	0	50	\$0.0006	\$0	\$0.0013	\$0	\$0	\$0	\$0
MAY 20	\$4,9480	0	50	\$0.0019	o	\$0	\$0.0005	\$0	\$0.0013	\$0	\$0	\$0	\$0
JUN. 20	\$4,9480	0	SO	\$0,0019	0	\$0	\$0.0006	\$0	\$0.0013	\$0	\$0	\$0	\$0
JUL. 20	\$4.9480	0	\$0	\$0.0019	0	\$0	\$0.0006	\$0	\$0.0013	SO	\$0	\$0	\$0
G. 20	\$4.9460	0	\$0	\$0.0019	0	\$0	\$0.0006	\$0	\$0.0013	50	\$0	\$0	\$0
P. 20 T. 20	\$4.9480 \$4.9480	0	\$0 \$0	\$0.0019 \$0.0019	0	\$0 \$0	\$0.0005 \$0.0005	\$0 \$0	\$0.0013 \$0.0011	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
AL	-1.0400	0	\$0	90.0010	0	\$0		\$0		\$0	\$0	\$0	\$0
0111401		05											
COLUMN	94	95 TOTAL											
	TOTAL	BM(TGPL)											
MONTH	S&DB	(67+80+93+94)											
IOV. 19	\$40	\$303,322											
DEC. 19 JAN. 20	\$160 (\$2,648)	\$304,234 \$287,962											
FEB. 20	(\$2,048) (\$678)	\$297,852											
		\$282 580											
MAR. 20 APR. 20	(\$110) (\$301)	\$282,580 \$281,123											
MAR, 20	(\$110)	\$281,123											
MAR. 20 APR. 20 MAY 20 JUN. 20	(\$110) (\$301) (\$210) (\$114)	\$281,123 \$285,018 \$297,000											
MAR. 20 APR. 20 MAY 20 JUN. 20 JUL. 20	(\$110) (\$301) (\$210) (\$114) (\$214)	\$281,123 \$285,018 \$297,000 \$294,475											
MAR. 20 APR. 20 MAY 20 JUN. 20 JUL. 20 AUG. 20	(\$110) (\$301) (\$210) (\$114) (\$214) (\$350)	\$281,123 \$285,018 \$297,000 \$294,475 \$287,673											
MAR. 20 APR. 20 MAY 20 JUN. 20 JUL. 20 AUG. 20 SEP. 20	(\$110) (\$301) (\$210) (\$114) (\$214) (\$350) (\$63)	\$281,123 \$285,018 \$297,000 \$294,475 \$287,673 \$268,929											
AR. 20 PR. 20 MAY 20 UN. 20 IUL. 20 UG. 20	(\$110) (\$301) (\$210) (\$114) (\$214) (\$350)	\$281,123 \$285,018 \$297,000 \$294,475 \$287,673											
R. 20 R. 20 Y 20 N. 20 L. 20 5. 20 P. 20	(\$110) (\$301) (\$210) (\$114) (\$214) (\$350) (\$63)	\$281,123 \$285,018 \$297,000 \$294,475 \$287,673 \$268,929											

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#### LOUISVILLE GAS AND ELECTRIC COMPANY CALCULATION OF TOTAL ANNUAL BENCHMARK MONTHLY GAS TRANSPORTATION COSTS ("TABMGTC") FOR PRIN TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	96	97	98	99
	SUMMARY	OF PIPELINE BENCI	IMARKS	
	TOTAL	TOTAL		
	BM(TGT)	BM(TGPL)	TOTAL	TABMGTC
MONTH	COL 54	COL. 95	BM(PPL)*	(96+97+98)
NOV. 19	\$2,753,634	\$303,322	\$0	\$3,056,956
DEC. 19	\$2,799,506	\$304.234	\$0	\$3,103,740
JAN. 20	\$2,736,618	\$287,962	50	\$3,024,580
FEB. 20	\$2,596,142	\$297.852	\$0	\$2,893,994
MAR. 20	\$2,735,116	\$282,580	\$0	\$3,017,696
APR. 20	\$1,528,652	\$281,123	\$0	\$1,809,785
MAY 20	\$1.072,212	\$285,018	\$0	\$1,357,230
JUN. 20	\$1,044,223	\$297,000	\$0	\$1,341,223
JUL. 20	\$1,142,458	\$294,475	\$0	\$1,436,933
AUG. 20	\$1,206,944	\$287.673	50	\$1,494,617
SEP. 20	\$1,159,067	\$288,929	\$0	\$1,447,996
OCT. 20	\$1,970,222	\$287,537	\$0	\$2.257,759
TOTAL	\$22,744,804	\$3,497,705	so	\$26,242,509

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

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

### LOUISVILLE GAS AND ELECTRIC COMPANY CALCULATION OF TOTAL ACTUAL ANNUAL GAS TRANSPORTATION COSTS ("TAAGTC") FOR PBR TRANSPORTATION INDEX FACTOR ("TIF")

COLUMN	1	2	3
	ACTUAL PIPELINE	ACTUAL ANNUAL	TOTAL ANNUAL ACTUAL GAS TRANSPORTATION
	TRANSPORTATION	GAS TRANSPORT.	COSTS ("TAAGTC")
MONTH	COSTS - TEXAS GAS	COSTS - TENNESSEE	(1 + 2)
NOV. 19	\$2,753,634	\$124,538	\$2,878,172
DEC. 19	\$2,799,506	\$125,450	\$2,924,956
JAN. 20	\$2,736,618	\$109,178	\$2,845,796
FEB. 20	\$2,596,142	\$119,068	\$2,715,210
MAR. 20	\$2,735,116	\$103,796	\$2,838,912
APR. 20	\$1,528,662	\$102,339	\$1,631,001
MAY 20	\$1,050,512	\$106,234	\$1,156,746
JUN. 20	\$1,044,223	\$118,216	\$1,162,439
JUL. 20	\$1,108,358	\$115,691	\$1,224,049
AUG. 20	\$1,206,944	\$108,889	\$1,315,833
SEP. 20	\$1,159,067	\$110,145	\$1,269,212
OCT. 20	\$1,970,222	\$108,753	\$2,078,975
TOTAL	\$22,689,004	\$1,352,297	\$24,041,301

## 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
8	TABMGTC	TAAGTC	SAVINGS (EXPENSE) (1 - 2)
NOV. 19	\$3,056,956	\$2,878,172	\$178,784
DEC. 19	\$3,103,740	\$2,924,956	\$178,784
JAN. 20	\$3,024,580	\$2,845,796	\$178,784
FEB. 20	\$2,893,994	\$2,715,210	\$178,784
MAR. 20	\$3,017,696	\$2,838,912	\$178,784
APR. 20	\$1,809,785	\$1,631,001	\$178,784
MAY 20	\$1,357,230	\$1,156,746	\$200,484
JUN. 20	\$1,341,223	\$1,162,439	\$178,784
JUL. 20	\$1,436,933	\$1,224,049	\$212,884
AUG. 20	\$1,494,617	\$1,315,833	\$178,784
SEP. 20	\$1,447,996	\$1,269,212	\$178,784
OCT. 20	\$2,257,759	\$2,078,975	\$178,784
TOTAL	\$26,242,509	\$24,041,301	\$2,201,208

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

20110 2	0.0220
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

### **Texas Gas Transmission, LLC** FERC NGA Gas Tariff Fourth Revised Volume No. 1 Effective On: April 1, 2015

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

### Currently Effective Rates [1]

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

Minimum Rates: Demand \$-0-

- Backhaul rates equal forward haul rates from Zone SL to zone of delivery; provided, however, that intra-zone rates shall apply to intra-zone transportation, whether such intra-zone transportation is forward haul or backhaul.
- [1] Currently Effective Rates are equal to the Base Tariff Rates.

### Notes:

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

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

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

DELIVERY TONE

1	В	а	s	e				
	-					2	2	

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	-		
Res	ervation	Rates	

eservation Rates	DECETOT				DELIVE	RYZONE			
	ZONE	0	L	1	2	3	4	5	6
	0	\$4.8571	\$4,3119	\$10.1498	\$13.6529	\$13.8945	\$15.2673	\$16.2055	\$20.3323
	1	\$7,3119	\$4.5115	\$7.0090	\$9.3276	\$13,2135	\$13.0132	\$14.6759	\$18.0462
	1.53	\$13.6530 \$13.8945		\$9.2716 \$7.3440	\$4.8222 \$4.8611	\$4.5078 \$3.5070	\$5.7679 \$5.3870	\$7.9331 \$9.7428	\$10.2407 \$11.2581
		\$17.6413 \$21.0347		\$16.2638 \$14.7807	\$6.1979 \$6.5015	\$9.4190 \$7.8669	\$4.6105 \$5.1218	\$4.9861 \$4.8044	\$7.1232 \$6.2544
	6	\$24,3333		\$16,9768	\$11,6840	\$12.8717	\$9.0920	\$4.7831	\$4.1405

#### Daily Base

Reservation Rate 1/

Reservation Rate 1/	DECEID	ECEIPT								
	ZONE	0	L	1	2	3	4	5	6	
	0	\$0.1597		\$0.3337	\$0.4489	\$0.4568	\$0.5019	\$0.5328	\$0.6685	
	L		\$0.1418							
	1	\$0.2404		\$0.2304	\$0.3067	\$0.4344	\$0.4278	\$0.4825	\$0.5933	
	2	\$0.4489		\$0.3048	\$0.1585	\$0.1482	\$0.1896	\$0.2608	\$0.3367	
	3	\$0.4568		\$0.2414	\$0.1598	\$0.1153	\$0.1771	\$0.3203	\$0.3701	
	4	\$0.5800		\$0.5347	\$0.2038	\$0.3097	\$0.1516	\$0.1639	\$0.2342	
	5	\$0.6916		\$0.4859	\$0.2137	\$0.2586	\$0.1684	\$0.1580	\$0.2056	
	6	\$0.8000		\$0.5581	\$0.3841	\$0.4232	\$0.2989	\$0.1573	\$0.1361	

Maximum Reservation Rates 2/, 3/

ates 2/, 3/	RECEIP	DELIVERY ZONE							
	ZONE	the second second	L	1	2	3	4	5	6
	0 L	\$4.8752	\$4.3300	\$10.1679	\$13.6710	\$13,9126	\$15.2854	\$16.2236	\$20.3504
	1	\$7.3300	a second	\$7.0271	\$9.3457	\$13.2316	\$13.0313	\$14.6940	\$18,0643
		\$13.6711		\$9.2897	\$4.8403	\$4.5259	\$5.7860	\$7.9512	\$10,2588
	3	\$13.9126		\$7.3621	\$4.8792	\$3.5251	\$5.4051	\$9.7609	\$11,2762
	4	\$17.6594		\$16.2819	\$6.2160	\$9.4371	\$4.6286	\$5.0042	\$7.1413
	5	\$21.0528		\$14.7988	\$6.5196	\$7.8850	\$5.1399	\$4.8225	\$6.2725
	6	\$243514		\$16.9949	\$11,7021	\$12,8898	\$9.1101	\$4.8012	\$4,1586

#### Notes:

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A pplicable to demand charge credits and secondary points under discounted rate agreements. 1/

21 Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of \$0.0000.

Includes a per Dth charge for the PS/GHGS urcharge Adjustment per Article XXXVIII of the General Terms and Conditions 3/ of\$0.0181.

#### Fifteenth Revised Sheet No. 14 Superseding Fourteenth Revised Sheet No. 14

### RATES PER DEKATHERM

#### FIRM TRANSPORTATION RATES RATE SCHEDULE FOR FT-A

Base Reservation Rates	DECEIM		DELIVERY ZONE									
	RECEIPT ZONE	0	L	1	2	3	4	5	6			
	0	\$4.9656		\$10.3766	\$13.9580	\$14.2050	\$15.6084	\$16.5676	\$20.7866			
	L		\$4.4083									
	1	\$7.4753		\$7.1656	\$ <b>9.536</b> 0	\$13.5088	\$13.3040	\$15.0039	\$18.4494			
	2	\$13.9581		\$9.4788	\$4.9299	\$4.6086	\$5.8968	\$8.1104	\$10.4695			
	3	\$14.2050		\$7.5081	\$4.9697	\$3,5853	\$5.5074	\$9.9605	\$11.5097			
	4	\$18.0356		\$16.6272	\$6.3364	\$9.6295	\$4.7135	\$5.0976	\$7.2824			
	5	\$21.5048		\$15.1110	\$6.6468	\$8.0427	\$5.2363	\$4.9117	\$6.3942			
	6	\$24.8770		\$17.3562	\$11.9451	\$13.1593	\$9.2952	\$4.8900	\$4.2331			

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Daily Base 

ation Rate 1/	RECEIPT	DELIVERY ZONE									
	ZONE	0	L	1	2	3	4	5	6		
	0	\$0.1633		\$0.3411	\$0.4589	\$0.4670	\$0.5132	\$0.5447	\$0.6834		
	1 2 3	\$0.2458 \$0.4589 \$0.4670	\$0.1449	\$0.2356 \$0.3116 \$0.2468	\$0.3135 \$0.1621 \$0.1634	<b>\$0.4441</b> <b>\$0.1515</b> <b>\$0.1179</b>	\$0.4374 \$0.1939 \$0.1811	\$0.4933 \$0.2666 \$0.3275	\$0.6066 \$0.3442 \$0.3784		
	4 5 6	\$0.5930 \$0.7070 \$0.8179		\$0.5466 \$0.4968 \$0.5706	\$0.2083 \$0.2185 \$0.3927	\$0.3166 \$0.2644 \$0.4326	\$0.1550 \$0.1722 \$0.3056	\$0.1676 \$0.1615 \$0.1608	\$0.2394 \$0.2102 \$0.1392		

### Maximum Reservation

Rates 2 /, 3 /	RECEIPT				DELIVER	RY ZONE			
	ZONE	0	L	1	2	3	4	5	6
	0	\$4.9837	\$4.4264	\$10.3947	\$13.9761	\$14.2231	\$15.6265	\$16.5857	\$20.8047
	1	\$7.4934	<b>34.4204</b>	\$7.1837	\$9.5541	\$13.5269	\$13.3221	\$15.0220	\$18.4675
	2	\$13.9762 \$14.2231		\$9.4969 \$7.5262	\$4.9480 \$4.9878	\$4.6267 \$3.6034	\$5.9149 \$5.5255	\$8.1285 \$9.9786	\$10.4876 \$11.5278
	4 5	\$18.0537 \$21.5229		\$16.6453 \$15.1291	\$6.3545 \$6.6649	\$9.6476 \$8.0608	\$4.7316 \$5.2544	\$5.1157 \$4.9298	\$7.3005 \$6.4123
	6	\$24.8951		\$17.3743	\$11.9632	\$13.1774	\$9.3133	\$4.9081	\$4.2512

#### Notes:

Applicable to demand charge credits and secondary points under discounted rate agreements. 1/

- 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 3/ of \$0.0181.

### Fourteenth Revised Sheet No. 14 Superseding Thirteenth Revised Sheet No. 14

#### RATES PER DEKATHERM

#### FIRM TRANSPORTATION RATES RATE SCHEDULE FOR FT-A

Base Reservation Rates	RECEIPT	DELIVERY ZONE									
	ZONE	0	L	1	2	3	4	5	6		
	0 L	\$4,9656	\$4,4083	\$10,3766	\$13.9580	\$14.2050	\$15.6084	\$16.5676	\$20.7866		
	1 2 3 4 5 6	\$7.4753 \$13.9581 \$14.2050 \$18.0356 \$21.5048 \$24.8770		\$7.1656 \$9.4788 \$7.5081 \$16.6272 \$15.1110 \$17.3562	\$9.5360 \$4.9299 \$4.9697 \$6.3364 \$6.6468 \$11.9451	\$13.5088 \$4.6086 \$3.5853 \$9.6295 \$8.0427 \$13,1593	\$13.3040 \$5.8968 \$5.5074 \$4.7135 \$5.2363 \$9.2952	\$15.0039 \$8.1104 \$9.9605 \$5.0976 \$4.9117 \$4.8900	\$18.4494 \$10.4695 \$11.5097 \$7.2824 \$6.3942 \$4.2331		

Daily Base

Reservation Rate 1/ -- R 

DECEID	-			DELIVE	RY ZONE			
ZONE	. 0	L	1	- 2	3	4	5	6
0 L	\$0.1633		\$0.3411	\$0.4589	\$0.4670	\$0.5132	\$0.5447	\$0.6834
1 2 3	\$0.2458 \$0.4589 \$0.4670	\$0.1449	\$0.2356 \$0.3116 \$0.2468	\$0.3135 \$0.1621 \$0.1634	\$0.4441 \$0.1515 \$0.1179	\$0.4374 \$0.1939 \$0.1811	\$0.4933 \$0.2666 \$0.3275	\$0.6066 \$0.3442 \$0.3784
4 5 6	\$0.5930 \$0.7070 \$0.8179		\$0.5466 \$0.4968 \$0.5706	\$0.2083 \$0.2185 \$0.3927	\$0.3166 \$0.2644 \$0.4326	\$0.1550 \$0.1722 \$0.3056	\$0.1676 \$0.1615 \$0.1608	\$0.2394 \$0.2102 \$0.1392

STANCON TONE

#### Maximum Reservation

Ra	tes	2/	, 3	1	
					-
_					DF

1, 3/	RECEIPT	DELIVERY ZONE									
	ZONE	0	L	1	2	3	4	5	6		
	0	\$4.9824	\$4.4251	\$10.3934	\$13.9748	\$14.2218	\$15.6252	\$16.5844	\$20.8034		
	3 4 5	\$7.4921 \$13.9749 \$14.2218 \$18.0524 \$21.5216 \$24.8938	ψ IS IGOL	\$7.1824 \$9.4956 \$7.5249 \$16.6440 \$15.1278 \$17.3730	\$9.5528 \$4.9467 \$4.9865 \$6.3532 \$6.6636 \$11.9619	\$13.5256 \$4.6254 \$3.6021 \$9.6463 \$8.0595 \$13.1761	\$13.3208 \$5.9136 \$5.5242 \$4.7303 \$5.2531 \$9.3120	\$15.0207 \$8.1272 \$9.9773 \$5.1144 \$4.9285 \$4.9068	\$18.4662 \$10.4863 \$11.5265 \$7.2992 \$6.4110 \$4.2499		

#### Notes:

1/

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 3/ of \$0.0168.

### RATES PER DEKATHERM

# COMMODITY RATES

Commodity Rates	DECEN	<b>T</b>			DELIVERY	ZONE			
	ZONE	the second second second	L	1	2	3	4	5	6
	0	\$0.0032	\$0.0012	\$0.0115	\$0.0177	\$0.0219	\$0.2339	\$0.2232	\$0.2656
	1	\$0.0042		\$0.0081	\$0.0147	\$0.0179	\$0.1989	\$0.2028	\$0.2315
	2	\$0,0167 \$0,0207		\$0.0087 \$0.0169	\$0,0012 \$0,0026	\$0.0028 \$0.0002	\$0.0644 \$0.0860	\$0.1032 \$0.1190	\$0.1144 \$0.1300
	4 5	\$0.0250 \$0.0284		\$0.0205	\$0.0087 \$0.0100	\$0.0105 \$0.0118	\$0.0398	\$0.0563 \$0.0555	\$0.0912
	6	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0862	\$0.0467	\$0.0284

#### Minimum

Base

Commodity Rates 1/, 2/

RECEIP	-			DELIVERY Z	ONE			
ZONE		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						
1	\$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
3	\$0.0207		\$0.0169	\$0.0026	\$0.0002	\$0.0081	\$0.0118	\$0.0163
4	\$0.0250		\$0.0205	\$0,0087	\$0.0105	\$0.0028	\$0.0046	\$0.0092
5	\$0.0284		\$0.0256	\$0.0100	\$0.0118	\$0.0046	\$0.0046	\$0.0066
6	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0086	\$0.0041	\$0,0020

DELIVERY ZONE

#### Maximum

Commodity Rates 1/, 2/, 3/

 RECEIP	T							
ZONE	the second second	Ļ	1	2	З	4	5	6
0	\$0.0039	\$0.0019	\$0.0122	\$0.0184	\$0.0226	\$0.2346	\$0.2239	\$0.2663
1	\$0.0049	40.0013	\$0,0088	\$0.0154	\$0.0186	\$0,1996	\$0.2035	\$0,2322
2	\$0.0174 \$0.0214		\$0.0094 \$0.0176	\$0.0019 \$0.0033	\$0.0035	\$0.0651 \$0.0867	\$0.1039 \$0.1197	\$0.1151 \$0.1307
4	\$0.0214		\$0.0212	\$0.0094	\$0.0112	\$0.0405	\$0.0570	\$0.0919
5	\$0.0291		\$0.0263	\$0.0107	\$0.0125	\$0.0567	\$0.0562	\$0.0696
6	\$0.0353		\$0.0307	\$0.0150	\$0.0170	\$0.0869	\$0.0474	\$0.0291

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.

3/ Includes a per Dth charge for the PS/GHGS urcharge Adjustment per Article XXXVIII of the General Terms and Conditions of \$0.0007.

# Sixteenth Revised Sheet No. 15

Seventeenth Revised Sheet No. 15

Superseding

#### RATES PER DEKATHERM

#### COMMODITY RATES RATE SCHEDULE FOR FT-A

Base Commodity Rates	RECEIP				DELIVERY	ZONE			
	ZONE	0	Ľ,	1	2	3	4	5	6
	0	\$0.0032	\$0.0012	\$0.0115	\$0.0177	\$0.0219	\$0.2391	\$0.2282	\$0.2716
	1	\$0.0042	4010012	\$0.0081	\$0.0147	\$0.0179	\$0.2033	\$0.2073	\$0,2367
	2	\$0.0167		\$0.0087 \$0.0169	\$0,0012	\$0.0028 \$0.0002	\$0.0658 \$0.0879	\$0.1055	\$0.1169 \$0.1329
	4	\$0.0207		\$0.0205	\$0.0020	\$0.0002	\$0.0407	\$0.0576	\$0.0932
	5	\$0.0284		\$0.0256	\$0.0100	\$0.0118	\$0.0573	\$0.0567	\$0.0705
	6	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0881	\$0.0478	\$0.0290

Minimum

Commodity Rates 1/, 2/

			1	DELIVERY ZO	NE			
ZONE	0	L	1	2	3	4	5	6
0	\$0.0032		\$0.0115	\$0.0177	\$0.0219	\$0.0250	\$0.0284	\$0.0346
CL.		\$0.0012						
1	\$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
3	\$0,0207		\$0.0169	\$0.0026	\$0.0002	\$0.0081	\$0,0118	\$0.0165
4	\$0.0250		\$0.0205	\$0.0087	\$0.0105	\$0,0028	\$0.0046	\$0.0092
5	\$0.0284		\$0.0256	\$0.0100	\$0.0118	50.0046	\$0.0046	\$0.0068
б	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0086	\$0.0041	\$0.0020

DELTVERY ZONE

#### Maximum

Commodity Rates 1/, 2/, 3/

miniourcy naces 2/1 2/1 5/	RECEIP	Town of the second			OCLIVENT	CONE			
	ZONE		L	1	2	3	4	5	6
	0	\$0.0039	\$0.0019	\$0.0122	\$0.0184	\$0.0226	\$0.2398	\$0.2289	\$0.2723
	1	\$0.0049	\$0.0019	\$0.0088	\$0.0154	\$0,0186	\$0.2040	\$0.2080	50.2374
	23	\$0.0174 \$0.0214		\$0.0094 \$0.0176	\$0.0019 \$0.0033	\$0.0035 \$0.0009	\$0.0665 \$0.0886	\$0,1062 \$0,1224	\$0,1176 \$0.1336
	4 5	\$0.0257 \$0.0291		\$0.0212 \$0.0263	\$0.0094 \$0.0107	\$0.0112 \$0.0125	\$0.0414 \$0.0580	\$0.0583 \$0.0574	\$0.0939 \$0.0712
	6	\$0.0353		\$0.0307	\$0.0150	\$0.0170	\$0.0888	\$0,0485	\$0.0297

#### Notes:

Rates stated above exclude the ACA Surcharge as revised annually and posted on the FERC website at http://www.ferc.gov on 1/ 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.

The applicable F&LR's and EPCR's, determined pursuant to Article XXXVII of the General Terms and Conditions, are listed on 21 Sheet No. 32.

Includes a per Dth charge for the P5/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of 3/ \$0.0007.

#### RATES PER DEKATHERM

### Sixteenth Revised Sheet No. 15 Superseding Fifteenth Revised Sheet No. 15

#### COMMODITY RATES RATE SCHEDULE FOR FT-A

DEL BUEDU ZONE

Base	

Commodity Rates

DECEID	r			DELLVERY	ZONE			
 ZONE	0	L	1	2	3	4	5	6
0 L	\$0.0032	\$0,0012	\$0.0115	\$0.0177	\$0.0219	\$0.2391	\$0.2282	\$0.2716
1 2 3 4 5 6	\$0.0042 \$0.0167 \$0.0207 \$0.0250 \$0.0284 \$0.0346	,,,,,,,	\$0.0081 \$0.0087 \$0.0169 \$0.0205 \$0.0256 \$0.0300	\$0.0147 \$0.0012 \$0.0026 \$0.0087 \$0.0100 \$0.0143	\$0.0179 \$0.0028 \$0.0002 \$0.0105 \$0.0118 \$0.0163	\$0.2033 \$0.0658 \$0.0879 \$0.0407 \$0.0573 \$0.0881	\$0.2073 \$0.1055 \$0.1217 \$0.0576 \$0.0567 \$0.0478	\$0.2367 \$0.1169 \$0.1329 \$0.0932 \$0.0705 \$0.0290

#### Minimum

Commodity Rates 1/, 2/

DECENT			1	DELIVERY ZO	NE			
ZONE	0	L	1	2	3	4	5	6
ņ	\$0.0032	\$0.0012	\$0.0115	\$0.0177	\$0.0219	\$0.0250	\$0.0284	\$0.034
1	\$0.0042	4010011	\$0.0081	\$0.0147	\$0.0179	\$0.0210	\$0.0256	\$0.030
2 3	\$0.0167 \$0.0207		\$0.0087 \$0.0169	\$0.0012 \$0.0026	\$0.0028 \$0.0002	\$0.0056 \$0.0081	\$0.0100 \$0.0118	\$0.014
4 5	\$0.0250 \$0.0284		\$0.0205 \$0.0256	\$0.0087 \$0.0100	\$0.0105 \$0.0118	\$0.0028 \$0.0046	\$0.0046 \$0.0046	\$0.005
6	\$0.0346		\$0.0300	\$0.0143	\$0.0163	\$0.0086	\$0.0041	\$0.000 \$0.002

DELIVERY ZONE

\$0.0093

\$0.0105

\$0.0149

\$0.0111

\$0,0124 \$0.0169

### Maximum

Commodity Rates 1/, 2/, 3/	RECEIP	τ			DELIVERT	ZUNE	
	ZONE	٥	L	1	2	3	4
	0	\$0.0038	\$0.0018	\$0.0121	\$0.0183	\$0.0225	\$0.2397
	1	\$0.0048 \$0.0173	40,0010	\$0.0087 \$0.0093	\$0.0153 \$0.0018	\$0.0185 \$0.0034	\$0.2039 \$0.0664
	3	\$0.0213		\$0.0175	\$0.0032	\$0.0008	\$0.0885

4

5

6

\$0.0256

\$0.0290

\$0.0352

Notes:

1/ Rates stated above exclude the ACA Surcharge as revised annually and posted on the FERC website at <a href="http://www.ferc.cov">http://www.ferc.cov</a> 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.

\$0.0211

\$0.0262 \$0.0306

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.

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

Docket No. Accepted:

5

\$0.2288

\$0.2079

\$0.1061 \$0.1223

\$0.0582

\$0.0573

\$0.0484

\$0.0413

\$0.0579

\$0.0887

6

\$0.2722

\$0.2373 \$0.1175 \$0.1335

\$0.0938

\$0.0711

\$0.0296

#### Sixteenth Revised Sheet No. 32 Superseding Substitute Fifteenth Revised Sheet No. 32

FUELAND	EPCR
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F&LR1/,2/,3/,4/	RECEIPT	-	DELIVERYZONE								
• • # statte # • • • • • • • • • • • • • • • • • •	ZONE		L	1	2	3	4	5	6		
	0 L	0.38%	0.10%	1.55%	2.47%	3.08%	3.59%	4.24%	4.84%		
	1	0.52%		1.08%	2.00%	2.44%	3.02%	3.68%	4.21%		
	2 3	2.47% 3.08%		1.16% 2.44%	0.09% 0.33%	0.33% 0.00%	0.77% 1.14%	1.43% 1.70%	1.96% 2.32%		
	4	3.59%		2.79%	1.16%	1.41%	0.35%	0.63%	1.22%		
	5 6	4.24% 5.09%		3.68% 4.40%	1.45% 2.00%	1.73% 2.32%	0.62% 1.13%	0.62% 0.46%	0.84% 0.14%		

Broad Run Expansion Project - Market Component (Z3-Z1): 5/ 6.59%

#### EPCR3/,4/

DECOT	DE LIVERY ZONE									
ZONE		L	1	2	3	4	5	6		
0 L	\$0.0020	\$0.0007	\$0.0077	\$0.0120	\$0.0149	\$0.0180	\$0.0204	\$0.0245		
1	\$0.0027	40.000	\$0.0054	\$0.0099	\$0.0121	\$0.0151	\$0.0184	\$0.0212		
2	\$0.0120		\$0.0058	\$0.0006	\$0.0018	\$0.0039	\$0.0071	\$0.0098		
3	\$0.0149		\$0.0121	\$0.0018	\$0.0000	\$0.0057	\$0.0084	\$0.0113		
4	\$0.0180		\$0.0139	\$0.0058	\$0. <b>0070</b>	\$0.0019	\$0.0032	\$0.0061		
5	\$0.0204		\$0.0184	\$0.0071	\$0.0084	\$0.0032	\$0.0032	\$0.0042		
6	\$0.0245		\$0.0212	\$0.0098	\$0.0113	\$0.0057	\$0.0024	\$0.0009		

Broad Run Expansion Project - Market Component (Z3-Z1): 5/ \$0.0429

- 1/ Included in the above F&LR is the Losses component of the F&LR equal to -0.09%.
- 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 a pplicable 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 for the bove are applicable to a Shipper(s) utilizing capacity on the Broad Run Expansion Project – Market Componentia Cilities, 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 -0.09%.

### Substitute Fifteenth Revised Sheet No. 32 Superseding Fourteenth Revised Sheet No. 32

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%		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/

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DELIVERY ZONE

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

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 -0.04%.
- For service that is rendered entirely by displacement and for gas scheduled and allocated for receipt at the Dracut, 2/ 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. The F&LR's and EPCR's listed above are applicable to FT-A, FT-BH, FT-G, FT-GS, and IT. 41
- The incremental F&LR and EPCR set forth above are applicable to a Shipper(s) utilizing capacity on the Broad Run Expansion 5/ 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%.

# 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 D	th =	0.0012963432
2018 TRUE-UP:		
Debit/Credit Cost (\$1,595,692) divided by 49,876,999,197 Dth	e	(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.

PUBLIC

# FERC ACA UNIT CHARGE EFFECTIVE OCTOBER 1, 2020

## FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, D.C. 20426

# FY 2020 GAS ANNUAL CHARGES CORRECTION FOR ANNUAL CHARGES UNIT CHARGE June 15, 2020

The annual charges unit charge (ACA) to be applied to in fiscal year 2021 for recovery of FY 2020 Current year and 2019 True-Up is **\$0.0011** per Dekatherm (Dth). The new ACA surcharge will become effective October 1, 2020.

The following calculations were used to determine the FY 2020 unit charge:

## 2020 CURRENT:

Estimated Program Cost 67,023,000 divided by 60,657,793,693 Dth = 0.0011049363

## 2019 TRUE-UP:

Debit/Credit Cost (\$2,266,032) divided by 56,276,625,816 Dth	-	(0.0000402660)	
TOTAL UNIT CHARGE	-	0.0010646704	

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

PUBLIC

# PBR-OSSIF SUPPORTING CALCULATIONS

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

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

COLUMN	1	2	3	4	5	6	7
	OFF-SYSTEM		OI	UT 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. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DEC. 19	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JAN. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FEB. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAR. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
APR. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MAY 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JUN. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JUL. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AUG. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SEP. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OCT. 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# 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	\$2,455,422	25%	75%	\$1,841,567	\$613,855	\$2,455,422
50/50 Company/Customer Sharing in Excess of 3.0% of TAGSC	\$3,576,979	50%	50%	\$1,788,489	\$1,788,490	\$3,576,979
	\$6,032,401			\$3,630,056	\$2,402,345	\$6,032,401
Portion of Company Savings Attributable to De Portion of Company Savings Attributable to Co		36.49% 63.51%			\$876,616 \$1,525,729	
Total Company Portion of Savings		100.00%		CSPBR	\$2,402,345	

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

(1)	(2)	(3)	(4	•)	(5)	(6)	(7)
Total G	Gas Supply Cost Pe	erformance-Based	d Ratemaking Sav	vings	Benchmarke	d Gas Costs	PTAGSC
				Commodity ation			Sec. 1
			Demand	Commodity			(Col. 3 / 6)
Gas Acquisition Ind GAIF	lex Factor			Concernence of the second s	Actual Gas Costs		C-mmil
Demand	\$0		0.00%				
Commodity	\$3,831,193			63.51%			
Total		\$3,831,193			AGC	\$57,806,087	
Transportation Inde	ex Factor				Actual Transporta	tion Costs	
Demand	\$2,201,208		36.49%				
Commodity	\$0			0.00%			
Total		\$2,201,208			TAAGTC	\$24,041,301	
Off-System Sales In OSSIF	ndex Factor						
Demand	\$0						
Commodity	\$0			0.00%			
Total		\$0		1 N 121 N 1			
Total All PBR Facto	ors				Total Actual Gas	Supply Costs	
Demand	\$2,201,208					AND STOLEN	
Commodity	\$3,831,193						
TPBRR		\$6,032,401	36.49%	63.51%	TAGSC	\$81,847,388	7.37%