



February 27, 2020

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Tennessee Gas Pipeline Company, L.L.C.
Annual Fuel Adjustment Filing
Docket No. RP20-____-000

Dear Ms. Bose:

Pursuant to Section 4 of the Natural Gas Act (“NGA”) and Part 154 of the Regulations of the Federal Energy Regulatory Commission (“Commission”), 18 C.F.R. Part 154, Tennessee Gas Pipeline Company, L.L.C. (“Tennessee”) hereby tenders for filing and acceptance revised tariff records to its FERC Gas Tariff, Sixth Revised Volume No. 1 (“Tariff”), which Tariff records are listed on Appendix A. Tennessee proposes that these Tariff records be placed into effect on April 1, 2020.

Statement of Nature, Reasons, and Basis for the Filing

Background

On November 30, 2010, Tennessee made an NGA Section 4 rate case filing in Docket No. RP11-1566-000, (“2011 Filing”), which included a proposal to establish a fuel and electric power cost recovery mechanism (“Fuel Adjustment Mechanism”) to recover the cost of energy used in Tennessee’s pipeline operations. On September 30, 2011, Tennessee filed an offer of settlement (“2011 Settlement”)¹ to resolve, with limited exceptions, the outstanding issues in the 2011 Filing. As part of the 2011 Settlement, Tennessee agreed to modify its Fuel Adjustment Mechanism to: (a) consolidate the electric power cost recovery mechanism into its Fuel Adjustment Mechanism;² (b) revise and adjust the F&LR and EPCR annually to be effective April 1 of each calendar year; (c) permit Tennessee to make an out-of-cycle filing to adjust the F&LR in the event that the balance in the Deferred F&LR Account, positive or negative, exceeds two (2) Bcf; and (d) establish an exception for physical volumes scheduled and allocated for receipt at the Dracut, Massachusetts

¹ *Tennessee Gas Pipeline Co.*, Offer of Settlement, Docket No. RP11-1566-000 and Docket No. RP11-2066-000, (consolidated), dated September 30, 2011.

² The Fuel Adjustment Mechanism is comprised of two components: (a) the fuel and loss retention percentages (“F&LR”), denominated in percentages of gas retained and (b) the electric power cost rates (“EPCR”), denominated in dollars per dekatherm.

receipt point (excluding meter bounces³) to be assessed only the applicable Losses percentage and EPCR as set forth in Tennessee's Tariff.⁴ The 2011 Settlement was approved by Commission Order dated December 5, 2011⁵ and became effective on January 1, 2012.

On May 15, 2015, in Docket No. RP15-990-000, Tennessee filed an offer of settlement ("2015 Settlement"), to resolve all rate and other related issues arising from the 2011 Settlement. The 2015 Settlement, which maintained the Fuel Adjustment Mechanism implemented as part of the 2011 Settlement, was approved by Commission Order dated July 1, 2015⁶ and became effective on November 1, 2015.

On July 13, 2018, in Docket No. RP18-977-000, in compliance with the Commission's September 6, 2016 Order Issuing Certificate and Approving Abandonment for the Broad Run Expansion Project ("Project") issued in Docket No. CP17-77-000,⁷ Tennessee filed Tariff records to place into effect on the in-service date of the Project facilities,⁸ the initial incremental fuel and electric power cost charges applicable to shippers utilizing the Market Component Project facilities. The initial incremental fuel and electric power charges associated with the Market Component Project facilities were determined by Tennessee using a composite fuel curve to calculate incremental fuel use as a function of incremental Project volumes for each of Tennessee's DART segments⁹ located along the Project's primary path.¹⁰ In the July 13, 2018 filing, Tennessee stated that it would adjust the initial incremental fuel and electric power charges as part of its annual fuel adjustment filings and that it would maintain separate deferred fuel and electric power cost subaccounts to track any over or under-recoveries of fuel and electric power costs allocated to the Market Component Project shippers, in conformance with Article XXXVII of the General Terms and Conditions of Tennessee's Tariff. On August 14, 2018, the Commission accepted Tennessee's Tariff records to implement the initial incremental fuel and electric power cost charges applicable to shippers utilizing the Market Component Project facilities.¹¹

On April 4, 2019, in Docket No. RP19-351-001, Tennessee filed an offer of settlement (the "2019 Settlement") to resolve all rate and other related issues arising from Order 849¹² and the

³ Meter bounces mean situations where a single Shipper or multiple Shippers in coordination, simultaneously nominate gas to and from the Dracut, Massachusetts receipt point, without affecting the amount of physical flow into Tennessee's system.

⁴ *See* Article XII of the 2011 Settlement.

⁵ *Tennessee Gas Pipeline Co.*, 137 FERC ¶ 61,182 (2011).

⁶ *Tennessee Gas Pipeline Co., L.L.C.*, 152 FERC ¶ 61,009 (2015).

⁷ *Tennessee Gas Pipeline Company, L.L.C.*, 156 FERC ¶ 61,157 (2016); *order denying reh'g and dismissing clarification*, 163 FERC ¶ 61,190 (2018).

⁸ All Project facilities were placed in-service by October 25, 2018.

⁹ DART refers to Tennessee's electronic portal used by its customers to nominate and schedule gas and perform other related activities. Within DART, the Tennessee system is broken down into segments, 7 of which are located along the Project's primary path.

¹⁰ Please refer to Exhibit 2 of the July 13, 2018 filing for further detail on the methodology employed by Tennessee to derive the initial incremental fuel and electric power cost charges.

¹¹ *See* Letter Order dated August 14, 2018 in Docket No. RP18-977-000 ("August 2018 Order").

¹² *Interstate and Intrastate Natural Gas Pipelines; Rate Changes Relating to Federal Income Tax Rate*, Order No. 849, 83 Fed. Reg. 36,672 (July 30, 2018).

Commission's Revised Policy Statement concerning income tax allowances.¹³ The 2019 Settlement, which maintained the Fuel Adjustment Mechanism implemented as part of the 2011 Settlement, was approved by Commission Order dated May 24, 2019¹⁴ and became effective on November 1, 2019.

The provisions of the Fuel Adjustment Mechanism, which include the process for determining the fuel and electric power rates, are set forth in Article XXXVII of the General Terms and Conditions of Tennessee's Tariff ("Article XXXVII").

Instant Filing

The purpose of this filing is to propose and place into effect on April 1, 2020, Tennessee's revised F&LR and EPCR pursuant to Article XXXVII,¹⁵ including the revised incremental F&LR and EPCR for service on the Market Component Project facilities. In conformance with Section 5 of Article XXXVII, the revised F&LR reflect Tennessee's proposed recovery of (i) Fuel and Losses for the prospective year based on quantities incurred by Tennessee during the twelve month period ending December 31, 2019 ("Base Period") and (ii) the balances as of the end of the Base Period in the applicable Deferred F&LR subaccounts.¹⁶ Similarly, in conformance with Section 7 of Article XXXVII, the revised EPCR reflect Tennessee's proposed recovery of (i) Electric Power Costs for the prospective year based on costs incurred by Tennessee during the Base Period and (ii) the balances as of the end of the Base Period in the applicable Deferred EPCR subaccounts. The Estimated Volumes used to derive the revised F&LR and EPCR reflect actual billable volumes for the Base Period.¹⁷

The instant filing also reflects revised incremental F&LR and EPCR for service on the Market Component Project facilities based on the methodology approved by the Commission in

¹³ *Inquiry Regarding the Commission's Policy for Recovery of Income Tax Costs*, Revised Policy Statement, 83 *Fed. Reg.* 12,632 (March 21, 2018), *FERC Statutes and Regulations* ¶ 35,060 (2018), *order on reh'g*, 164 FERC ¶ 61,030 (2018) ("Revised Policy Statement")

¹⁴ *Tennessee Gas Pipeline Company, L.L.C.*, 167 FERC ¶ 61,169 (2019)

¹⁵ Section 3 of Article XXXVII provides that Tennessee shall file annually to revise its F&LR and EPCR at least 30 days prior to the effective date of the proposed change in the F&LR and EPCR and that such annual filing shall be filed by Tennessee to become effective on April 1 of each year.

¹⁶ Because Tennessee continues to experience over-recoveries of transportation losses through the end of the Base Period (See Exhibit 2, page 4, line 7, column (e)), the instant filing reflects a negative 0.09% Losses component of the transportation F&LR (See Exhibit 2, page 1). Consistent with Commission policy, the F&LR applicable to transportation service rendered by displacement or for physical volumes of gas scheduled and allocated for receipt at the Dracut, Massachusetts receipt point (excluding meter bounces) has been set at zero. As the Commission has found in previous cases, holding reimbursement rates at zero, rather than allowing the overall reimbursement rates to become negative, is reasonable so long as all the over-recovered amount is eventually returned to shippers. *See* GulfSouth Pipeline Company, LP, 154 FERC ¶ P 61,115, at P13-14 (2016); ETC Tiger Pipeline, LLC, 147 FERC ¶ P 61,166, at P 7 (2014) (citing ETC Tiger Pipeline, LLC, 141 FERC ¶ P 61,159 (2012); Columbia Gulf Transmission Co., 132 FERC ¶ P 61,134 at P 43). *See also* Wyoming Interstate Company, 121 FERC ¶ P 61,213, at P15 (2007).

¹⁷ The estimated volumes used to derive the fuel component of the F&LR reflect actual billable volumes for the Base Period net of displacements since such volumes are not subject to the fuel component of the F&LR.

the August 2018 Order.¹⁸

Exhibits 1 and 2 detail the revised EPCR and F&LR components of the Fuel Adjustment Mechanism that Tennessee proposes to place into effect in the instant filing.

The instant filing reflects lower F&LR applicable to the general system transportation and storage services, as well as lower EPCR applicable to the general system transportation services. The revised fuel rates for the general system transportation services were impacted by higher fuel utilization during the Base Period offset by a reduction in under-collections booked to the transportation Deferred F&LR subaccounts as of the end of the Base Period,¹⁹ and an increase in transportation volumes net of displacements.²⁰ The revised electric power rates for the general system transportation services were impacted by lower electric power costs incurred during the Base Period, an increase in over-collections booked to the transportation Deferred EPCR subaccounts as of the end of the Base Period,²¹ and an increase in transportation volumes. The revised fuel rates for storage services were impacted by slightly higher fuel and losses incurred during the Base Period offset by reduction in under-collections booked to the storage Deferred F&LR subaccount as of the end of the Base Period,²² and an increase in customer storage injections. The instant filing also reflects higher incremental F&LR and EPCR for the Broad Run Market Component Project from the initial rates established in the July 13, 2018 filing, primarily due to higher throughput experienced by Tennessee during the Base Period in each of the DART segments located along the Project's primary path as well as due to an increase in under-collections during the Base Period.²³

A comparison of the fuel and electric power costs included in the instant filing and in the 2019 Filing,²⁴ is shown in Exhibit 12.

¹⁸ Because the Project shipper, Antero Resources Corporation, did not utilize its contract capacity prior to August, 2019, the incremental F&LR and EPCR reflect allocated fuel and electric costs for the period August through December 2019. See Exhibit 11.

¹⁹ Tennessee's Fuel Adjustment Mechanism is designed to set fuel and electric power rates for the prospective year based on Fuel and Losses quantities and Electric Power Costs incurred by Tennessee during a historical base period (a twelve month period ending 3 months prior to the effective date of a change in fuel and electric power rates) as adjusted for any cumulative over or under recoveries as of the end of that historical base period. To the extent costs incurred during the period the fuel and electric power rates are in effect differ from those included in the historical base period, Tennessee over or under collects costs and these over or under collections, which in conformance with Sections 5.1 and 7.1 of Article XXXVII are included in the determination of the fuel and electric power rates in a subsequent filing, may potentially lead to significant volatility from year to year in the fuel and electric power rates. See Exhibit 12.

²⁰ See footnote 17.

²¹ See footnote 19.

²² See footnote 19.

²³ Higher throughput through these DART segments resulted in higher fuel consumption and electric costs, which in turn resulted in higher fuel and electric power costs allocated to the Market Component Project shippers. See also Exhibit 12.

²⁴ See Annual Fuel Adjustment Filing filed by Tennessee on March 1, 2019 ("2019 Filing"). The 2019 Filing was approved by Letter Order dated March 29, 2019.

Tennessee includes herewith the following exhibits that detail the derivation of the revised F&LR and EPCR as proposed in the instant filing:

- Exhibit 1 – Derivation of EPCR component of the Fuel Adjustment Mechanism
- Exhibit 2 – Derivation of F&LR component of the Fuel Adjustment Mechanism
- Exhibit 3 – Transportation miles of haul and quantities for the Base Period
- Exhibit 4 – Storage quantities for the Base Period
- Exhibit 5 – Transportation and Storage Compressor Fuel for the Base Period
- Exhibit 6 – Transportation and Storage by Others Fuel for the Base Period
- Exhibit 7 – Transportation and Storage Losses for the Base Period
- Exhibit 8 – Deferred F&LR and EPCR Account Activity and Balances
- Exhibit 9 – Prior Period Adjustments
- Exhibit 10 – Interest Calculation – EPCR Transportation Component
- Exhibit 11 – Incremental System Fuel Factors, Allocated Fuel and Electric Power Costs
- Exhibit 12 – Fuel and Electric Power Cost Comparison

Materials Enclosed

In accordance with the applicable provisions of Part 154 of the Commission's regulations, Tennessee provides an eTariff .xml filing package containing:

- (1) A transmittal letter in PDF format with Appendix A attached;
- (2) Tariff records in RTF format with metadata attached;
- (3) A clean and marked version of the Tariff records in PDF format for posting on eLibrary;
- (4) Exhibits 1 through 12 - Derivation of Tennessee's revised F&LR and EPCR and supporting workpapers; and
- (5) A copy of the entire filing in PDF format for posting on eLibrary.

Service and Correspondence

The undersigned certifies that a copy of this filing has been served electronically pursuant to 18 C.F.R. § 154.208 on Tennessee's customers and affected state regulatory commissions. A paper copy of this filing may only be served if a customer has been granted waiver of electronic service pursuant to 18 C.F.R. Part 390 of the Commission's regulations. In addition, an electronic copy of this filing is available for public inspection during regular business hours in Tennessee's office at 1001 Louisiana Street, Suite 1000, Houston, Texas 77002.

Pursuant to 18 C.F.R. § 385.2005 and § 385.2011(c)(5) of the Commission's regulations, the undersigned has read this filing and knows its contents, and the contents are true as stated, to the best knowledge and belief of the undersigned.

The names, titles, and mailing addresses of the persons to whom correspondence and communications concerning this filing should be directed are as follows:

* Tony Sala
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* Persons designated for service in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2010. Additionally, service via email is requested in lieu of paper copies.

Effective Date

Pursuant to Section 3 of Article XXXVII, Tennessee is required to file annually to revise its F&LR and EPCR at least 30 days prior to the effective date of the proposed change in the F&LR and EPCR, to become effective on April 1st of each year. Accordingly, Tennessee respectfully requests that the Commission accept and approve Tennessee's proposed Tariff records listed on Appendix A to be effective April 1, 2020.

Pursuant to Section 154.7(a)(9) of the Commission's regulations, Tennessee hereby moves to place the revised Tariff records as listed on Appendix A into effect on the requested effective date. Additionally, pursuant to Section 18 C.F.R. § 154.206(b) of the Commission's regulations, Tennessee hereby requests the Commission to accept the Tariff records without suspension in order for these Tariff records to go into effect as requested on April 1, 2020. If the Commission conditions the acceptance of this filing in any way, Tennessee reserves the right to withdraw the proposed Tariff records or to file a later motion to place such Tariff records into effect at a later date.

Any questions regarding this filing may be directed to the undersigned at (713) 420-5771.

Respectfully submitted,

TENNESSEE GAS PIPELINE COMPANY, L.L.C.

By: /s/ Carlos Oblitas
Carlos J. Oblitas
Director, Rates and Regulatory Affairs

Enclosures

APPENDIX A

Annual Fuel Adjustment Filing

Tennessee Gas Pipeline FERC Gas Tariff
Sixth Revised Volume No. 1
Tariff Sheets/Records

Proposed Effective Date: April 1, 2020

Section Title			
Narrative Name	Record Contents Description	Tariff Record Title	Version
Sixteenth Revised Sheet No. 32	Sheet No. 32	Fuel and EPCR	16.0.0
Eighteenth Revised Sheet No. 61	Sheet No. 61	FS Storage Rates – Firm Storage	18.0.0
Eighteenth Revised Sheet No. 62	Sheet No. 62	IS Storage Rates – Interruptible Storage	18.0.0

CLEAN TARIFF SHEETS / RECORDS

FUEL AND EPCR

F&LR 1/, 2/, 3/, 4/

RECEIPT ZONE	DELIVERY ZONE							
	0	L	1	2	3	4	5	6
0	0.38%		1.55%	2.47%	3.08%	3.59%	4.24%	4.84%
L		0.10%						
1	0.52%		1.08%	2.00%	2.44%	3.02%	3.68%	4.21%
2	2.47%		1.16%	0.09%	0.33%	0.77%	1.43%	1.96%
3	3.08%		2.44%	0.33%	0.00%	1.14%	1.70%	2.32%
4	3.59%		2.79%	1.16%	1.41%	0.35%	0.63%	1.22%
5	4.24%		3.68%	1.45%	1.73%	0.62%	0.62%	0.84%
6	5.09%		4.40%	2.00%	2.32%	1.13%	0.46%	0.14%

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

EPCR 3/, 4/

RECEIPT ZONE	DELIVERY ZONE							
	0	L	1	2	3	4	5	6
0	\$0.0020		\$0.0077	\$0.0120	\$0.0149	\$0.0180	\$0.0204	\$0.0245
L		\$0.0007						
1	\$0.0027		\$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	\$0.0070	\$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 applicable to FT-A, FT-BH, FT-G, FT-GS, and IT.
- 4/ The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.
- 5/ The incremental F&LR and EPCR set forth above are applicable to a Shipper(s) utilizing capacity on the Broad Run Expansion Project – Market Component facilities, from any receipt point(s) to any delivery point(s) located on the project's transportation path. Any service provided to a Shipper(s) outside the project's transportation path shall be subject to the greater of the incremental F&LR and EPCR for the project or the applicable F&LR and EPCR for the applicable receipt(s) and delivery point(s) as shown in the rate matrices above. Included in the above F&LR is the Losses component of the F&LR equal to -0.09%.

RATES PER DEKATHERM

FIRM STORAGE SERVICE
 RATE SCHEDULE FS

Rate Schedule and Rate	Base Tariff Rate	Max Tariff Rate	F&LR 2/, 3/	EPCR 2/
FIRM STORAGE SERVICE (FS) - PRODUCTION AREA				
Deliverability Rate	\$1.8222	\$1.8222 1/		
Space Rate	\$0.0185	\$0.0185 1/		
Injection Rate	\$0.0073	\$0.0073	1.36%	\$0.0000
Withdrawal Rate	\$0.0073	\$0.0073		
Overrun Rate	\$0.2187	\$0.2187 1/		
FIRM STORAGE SERVICE (FS) - MARKET AREA				
Deliverability Rate	\$1.3386	\$1.3386 1/		
Space Rate	\$0.0183	\$0.0183 1/		
Injection Rate	\$0.0087	\$0.0087	1.36%	\$0.0000
Withdrawal Rate	\$0.0087	\$0.0087		
Overrun Rate	\$0.1607	\$0.1607 1/		

Notes:

- 1/ Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of \$0.000.
- 2/ The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.
- 3/ The applicable F&LR pursuant to Article XXXVII of the General Terms and Conditions, associated with Losses is equal to 0.03%.

RATES PER DEKATHERM

INTERRUPTIBLE STORAGE SERVICE
 RATE SCHEDULE IS

Rate Schedule and Rate	Base Tariff Rate	Max Tariff Rate	F&LR 2/, 3/	EPCR 2/
INTERRUPTIBLE STORAGE SERVICE (IS) - PRODUCTION AREA				
Space Rate	\$0.0913	\$0.0913 1/		
Injection Rate	\$0.0073	\$0.0073	1.36%	\$0.0000
Withdrawal Rate	\$0.0073	\$0.0073		
INTERRUPTIBLE STORAGE SERVICE (IS) - MARKET AREA				
Space Rate	\$0.0736	\$0.0736 1/		
Injection Rate	\$0.0087	\$0.0087	1.36%	\$0.0000
Withdrawal Rate	\$0.0087	\$0.0087		

Notes:

- 1/ Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of \$0.0000.
- 2/ The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.
- 3/ The applicable F&LR pursuant to Article XXXVII of the General Terms and Conditions associated with Losses is equal to 0.03%.

MARKED TARIFF SHEETS / RECORDS

FUEL AND EPCR

F&LR 1/, 2/, 3/, 4/	RECEIPT ZONE	DELIVERY ZONE							
		0	L	1	2	3	4	5	6
	0	<u>0.38%</u> <u>0.46%</u>		<u>1.55%</u> <u>1.71%</u>	<u>2.47%</u> <u>2.68%</u>	<u>3.08%</u> <u>3.32%</u>	<u>3.59%</u> <u>3.86%</u>	<u>4.24%</u> <u>4.36%</u>	<u>4.84%</u> <u>5.18%</u>
	L		<u>0.10%</u> <u>0.17%</u>						
	1	<u>0.52%</u> <u>0.62%</u>		<u>1.08%</u> <u>1.21%</u>	<u>2.00%</u> <u>2.17%</u>	<u>2.44%</u> <u>2.71%</u>	<u>3.02%</u> <u>3.25%</u>	<u>3.68%</u> <u>3.95%</u>	<u>4.21%</u> <u>4.51%</u>
	2	<u>2.47%</u> <u>2.61%</u>		<u>1.16%</u> <u>1.30%</u>	<u>0.09%</u> <u>0.16%</u>	<u>0.33%</u> <u>0.41%</u>	<u>0.77%</u> <u>0.88%</u>	<u>1.43%</u> <u>1.57%</u>	<u>1.96%</u> <u>2.18%</u>
	3	<u>3.08%</u> <u>3.32%</u>		<u>2.44%</u> <u>2.64%</u>	<u>0.33%</u> <u>0.41%</u>	<u>0.00%</u> <u>0.02%</u>	<u>1.14%</u> <u>1.27%</u>	<u>1.70%</u> <u>1.89%</u>	<u>2.32%</u> <u>2.52%</u>
	4	<u>3.59%</u> <u>3.86%</u>		<u>2.79%</u> <u>3.01%</u>	<u>1.16%</u> <u>1.29%</u>	<u>1.41%</u> <u>1.56%</u>	<u>0.35%</u> <u>0.43%</u>	<u>0.63%</u> <u>0.73%</u>	<u>1.22%</u> <u>1.35%</u>
	5	<u>4.24%</u> <u>4.56%</u>		<u>3.68%</u> <u>3.95%</u>	<u>1.45%</u> <u>1.57%</u>	<u>1.73%</u> <u>1.89%</u>	<u>0.62%</u> <u>0.72%</u>	<u>0.62%</u> <u>0.72%</u>	<u>0.84%</u> <u>0.95%</u>
	6	<u>5.09%</u> <u>5.46%</u>		<u>4.40%</u> <u>4.72%</u>	<u>2.00%</u> <u>2.18%</u>	<u>2.32%</u> <u>2.52%</u>	<u>1.13%</u> <u>1.26%</u>	<u>0.46%</u> <u>0.55%</u>	<u>0.14%</u> <u>0.21%</u>

Broad Run Expansion Project – Market Component (Z3-Z1): 5/ 4.626.59%

EPCR 3/, 4/	RECEIPT ZONE	DELIVERY ZONE							
		0	L	1	2	3	4	5	6
	0	<u>\$0.0020</u> <u>\$0.0033</u>		<u>\$0.0077</u> <u>\$0.0129</u>	<u>\$0.0120</u> <u>\$0.0199</u>	<u>\$0.0149</u> <u>\$0.0248</u>	<u>\$0.0180</u> <u>\$0.0299</u>	<u>\$0.0204</u> <u>\$0.0340</u>	<u>\$0.0245</u> <u>\$0.0408</u>
	L		<u>\$0.0007</u> <u>\$0.0011</u>						
	1	<u>\$0.0027</u> <u>\$0.0045</u>		<u>\$0.0054</u> <u>\$0.0090</u>	<u>\$0.0099</u> <u>\$0.0165</u>	<u>\$0.0121</u> <u>\$0.0202</u>	<u>\$0.0151</u> <u>\$0.0251</u>	<u>\$0.0184</u> <u>\$0.0307</u>	<u>\$0.0212</u> <u>\$0.0353</u>
	2	<u>\$0.0120</u> <u>\$0.0199</u>		<u>\$0.0058</u> <u>\$0.0097</u>	<u>\$0.0006</u> <u>\$0.0010</u>	<u>\$0.0018</u> <u>\$0.0029</u>	<u>\$0.0039</u> <u>\$0.0065</u>	<u>\$0.0071</u> <u>\$0.0118</u>	<u>\$0.0098</u> <u>\$0.0162</u>
	3	<u>\$0.0149</u> <u>\$0.0248</u>		<u>\$0.0121</u> <u>\$0.0202</u>	<u>\$0.0018</u> <u>\$0.0029</u>	<u>\$0.0000</u> <u>\$0.0000</u>	<u>\$0.0057</u> <u>\$0.0095</u>	<u>\$0.0084</u> <u>\$0.0140</u>	<u>\$0.0113</u> <u>\$0.0187</u>
	4	<u>\$0.0180</u> <u>\$0.0299</u>		<u>\$0.0139</u> <u>\$0.0231</u>	<u>\$0.0058</u> <u>\$0.0096</u>	<u>\$0.0070</u> <u>\$0.0117</u>	<u>\$0.0019</u> <u>\$0.0031</u>	<u>\$0.0032</u> <u>\$0.0054</u>	<u>\$0.0061</u> <u>\$0.0101</u>
	5	<u>\$0.0204</u> <u>\$0.0340</u>		<u>\$0.0184</u> <u>\$0.0307</u>	<u>\$0.0071</u> <u>\$0.0118</u>	<u>\$0.0084</u> <u>\$0.0140</u>	<u>\$0.0032</u> <u>\$0.0053</u>	<u>\$0.0032</u> <u>\$0.0052</u>	<u>\$0.0042</u> <u>\$0.0070</u>
	6	<u>\$0.0245</u> <u>\$0.0408</u>		<u>\$0.0212</u> <u>\$0.0353</u>	<u>\$0.0098</u> <u>\$0.0162</u>	<u>\$0.0113</u> <u>\$0.0187</u>	<u>\$0.0057</u> <u>\$0.0094</u>	<u>\$0.0024</u> <u>\$0.0040</u>	<u>\$0.0009</u> <u>\$0.0014</u>

Broad Run Expansion Project – Market Component (Z3-Z1): 5/ \$0.03080.0429

- 1/ Included in the above F&LR is the Losses component of the F&LR equal to -0.04-0.09%.
- 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 applicable to FT-A, FT-BH, FT-G, FT-GS, and IT.
- 4/ The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.
- 5/ The incremental F&LR and EPCR set forth above are applicable to a Shipper(s) utilizing capacity on the Broad Run Expansion Project – Market Component facilities, from any receipt point(s) to any delivery point(s) located on the project's transportation path. Any service provided to a Shipper(s) outside the project's transportation path shall be subject to the greater of the incremental F&LR and EPCR for the project or the applicable F&LR and EPCR for the applicable receipt(s) and delivery point(s) as shown in the rate matrices above. Included in the above F&LR is the Losses component of the F&LR equal to -0.04-0.09%.

RATES PER DEKATHERM

FIRM STORAGE SERVICE
 RATE SCHEDULE FS

Rate Schedule and Rate	=====			
	Base Tariff Rate	Max Tariff Rate	F&LR 2/, 3/	EPCR 2/

FIRM STORAGE SERVICE (FS) - PRODUCTION AREA				
=====				
Deliverability Rate	\$1.8222	\$1.8222 1/		
Space Rate	\$0.0185	\$0.0185 1/		
Injection Rate	\$0.0073	\$0.0073	1.751.36%	\$0.0000
Withdrawal Rate	\$0.0073	\$0.0073		
Overrun Rate	\$0.2187	\$0.2187 1/		
FIRM STORAGE SERVICE (FS) - MARKET AREA				
=====				
Deliverability Rate	\$1.3386	\$1.3386 1/		
Space Rate	\$0.0183	\$0.0183 1/		
Injection Rate	\$0.0087	\$0.0087	1.751.36%	\$0.0000
Withdrawal Rate	\$0.0087	\$0.0087		
Overrun Rate	\$0.1607	\$0.1607 1/		

Notes:

- 1/ Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of \$0.000.
- 2/ The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.
- 3/ The applicable F&LR pursuant to Article XXXVII of the General Terms and Conditions, associated with Losses is equal to ~~0.010.03~~ 0.03%.

RATES PER DEKATHERM

INTERRUPTIBLE STORAGE SERVICE
 RATE SCHEDULE IS

Rate Schedule and Rate	Base Tariff Rate	Max Tariff Rate	F&LR 2/, 3/	EPCR 2/
INTERRUPTIBLE STORAGE SERVICE (IS) - PRODUCTION AREA =====				
Space Rate	\$0.0913	\$0.0913 1/		
Injection Rate	\$0.0073	\$0.0073	1.75 1.36%	\$0.0000
Withdrawal Rate	\$0.0073	\$0.0073		
INTERRUPTIBLE STORAGE SERVICE (IS) - MARKET AREA =====				
Space Rate	\$0.0736	\$0.0736 1/		
Injection Rate	\$0.0087	\$0.0087	1.75 1.36%	\$0.0000
Withdrawal Rate	\$0.0087	\$0.0087		

Notes:

- 1/ Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of \$0.0000.
- 2/ The F&LR's and EPCR's determined pursuant to Article XXXVII of the General Terms and Conditions.
- 3/ The applicable F&LR pursuant to Article XXXVII of the General Terms and Conditions associated with Losses is equal to ~~0.0~~0.03%.

Exhibits 1-12

Tennessee Gas Pipeline Company, L.L.C.
 EPCR Component of Fuel Adjustment Mechanism
 Transportation and Storage Services

Line No.	Description	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Transportation EPCR, \$/Dth										
General System										
		1/	Delivery Zone							
		Receipt Zone	0	L	1	2	3	4	5	6
1		0	\$0.0020		\$0.0077	\$0.0120	\$0.0149	\$0.0180	\$0.0204	\$0.0245
2		L		\$0.0007						
3		1	\$0.0027		\$0.0054	\$0.0099	\$0.0121	\$0.0151	\$0.0184	\$0.0212
4		2	\$0.0120		\$0.0058	\$0.0006	\$0.0018	\$0.0039	\$0.0071	\$0.0098
5		3	\$0.0149		\$0.0121	\$0.0018	\$0.0000	\$0.0057	\$0.0084	\$0.0113
6		4	\$0.0180		\$0.0139	\$0.0058	\$0.0070	\$0.0019	\$0.0032	\$0.0061
7		5	\$0.0204		\$0.0184	\$0.0071	\$0.0084	\$0.0032	\$0.0032	\$0.0042
8		6	\$0.0245		\$0.0212	\$0.0098	\$0.0113	\$0.0057	\$0.0024	\$0.0009
Mileaged Component, \$ per 100 Dth Miles:										
9	Electric Power Costs (\$)		\$18,991,932	Exh 1, P2 Ln 1 - Ln 3, Col (e)						
10	Estimated Volumes (Dth)		4,016,036,135	Exh 3, P1 Ln 35						
11	100 Dth-Miles		14,672,000,242	Exh 3, P1 Ln 44						
12	Unit Rate (\$ per 100 Dth-mile)		\$0.00129	Ln 9 / Ln 11						
Incremental System										
13	Electric Power Costs (\$)		\$681,409	Exh 1, P2 Ln 3, Col (e)						
14	Estimated Volumes (Dth)		15,900,499	Exh 3, P1 Ln 53						
15	Unit Rate (\$ per Dth)		\$0.0429	Ln 13 / Ln 14						
Storage EPCR, \$/Dth										
16	Electric Power Costs (\$)		\$0	Exh 1, P2 Ln 2, Col (e)						
17	Estimated Volumes (Dth)		68,250,442	Exh 4, P1 Ln 4						
18	Unit Rate (\$ per Dth)		\$0.0000	Ln 16 / Ln 17						

Notes:

1/ The EPCR for each zone is equal to the mileaged component rate (\$ per 100 Dth-mile, Ln 12) / 100 x the miles of haul for the applicable zone - see Exhibit 3, Page 1, Lines 1-8.

Tennessee Gas Pipeline Company, L.L.C.
 EPCR Component of Fuel Adjustment Mechanism
 Transportation and Storage Services
 Electric Power Costs

Line No.	Description	Ref	Base Period 1/	Deferred EPCR Account Balance 2/	Total
	(a)	(b)	(c)	(d)	(e) = (c) - (d)
<u>Total System</u>					
1	Transportation Electric Power Costs	Exh1, P3 Ln 14; Exh8, P1 Ln 34	\$ 26,723,920	\$ 7,050,579	\$ 19,673,341
2	Storage Electric Power Costs	Exh1, P3 Ln 17	\$ -	\$ -	\$ -
<u>Incremental System Detail</u>					
3	Transportation Electric Power Costs	Exh1, P3 Ln 16; Exh8, P2 Ln 10	\$ 578,663	\$ (102,747)	\$ 681,409

Notes:

- 1/ 12 month period ending Dec-31-2019.
- 2/ See Exhibit 8.

Tennessee Gas Pipeline Company, L.L.C.
F&LR Component of Fuel Adjustment Mechanism
Transportation and Storage Services
Derivation of Mileaged and Non-Mileaged Components of F&LR

Line No.	Description	Ref	Total	Transport			Storage	
				Gen. System	Incr. System	Total Transportation		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Fuel								
1	Transportation Compressor Fuel	Mileaged	Exh2, P4 Ln 1 and 11 , Col (e)	37,510,205	36,372,812	1,137,393	37,510,205	-
2	Transportation by Others Fuel	Non-Mileaged	Exh2, P4 Ln 2, Col (e)	583,684	583,684	-	583,684	-
3	Storage Compressor Fuel	1/ Non-Mileaged	Exh2, P4 Ln 4, Col (e)	281,312	162,598	-	162,598	118,714
4	Storage by Others Fuel	1/ Non-Mileaged	Exh2, P4 Ln 5, Col (e)	1,893,420	1,094,397	-	1,094,397	799,023
5	Storage Compressor and SBO Fuel			2,174,732	1,256,995	-	1,256,995	917,737
6	Fuel Mileaged Component	Dth		36,372,812	36,372,812	-	36,372,812	-
7	Fuel Non-mileaged Component	Dth		3,895,809	1,840,678	1,137,393	2,978,072	917,737
8	Total Fuel	Dth		40,268,621	38,213,491	1,137,393	39,350,884	917,737
9	Losses	2/ Non-Mileaged	Exh2, P4 Ln 7-9, Col (e)	(3,675,249)	(3,677,967)	(14,562)	(3,692,529)	17,280
Estimated Volumes								
10	Total Throughput	Dth	Exh3, P1 Ln 35 and 53; Exh4, P1 Ln 4		4,016,036,135	15,900,499	4,031,936,634	68,250,442
11	Throughput excl. Displacements	Dth	Exh3, P1 Ln 17 and 53; Exh4, P1 Ln 4		3,630,373,141	15,900,499	3,646,273,640	68,250,442
12	Throughput excl. Displacements	100 Dth-Miles	Exh3, P1 Ln 26		13,426,348,059		13,426,348,059	
13	Fuel Component of F&LR - Non-Mileaged Component, % per Dth		Ln 7 / (Ln 7 + Ln 11)		0.05%	6.68%		1.33%
14	Fuel Component of F&LR - Mileaged Component, % per 100 Dth-mile		Ln 6 / Ln 12		0.27%			
15	Transportation Losses Component of F&LR - Non-Mileaged, % per Dth		Ln 9 / (Ln 9 + Ln 10)				-0.09%	0.03%

Notes:

1/ Storage compressor and SBO fuel allocated to transportation and storage services based on storage injections during the Base Period:

Transportation: Storage Injection for System Operations	57.8%	94,985,475	Exhibit 4, P1, Ln 1
Storage: Customer Storage Injections	42.2%	69,450,839	Exhibit 4, P1, Ln 2
Total	100.0%	164,436,314	

2/ Transportation losses allocated to Gen. System and Incr. System based on total transportation throughput (Line 10).

Tennessee Gas Pipeline Company, L.L.C.
 Transportation Services - General System
 Derivation of Mileaged Fuel Component of F&LR by Zone

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	Mileaged Fuel Component, Dth									
		36,372,812 Exh 2, P2 Ln 6, Col (e)								
	1/	Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
2	0	1,273,642		803,870	-	-	343	-	75,786	2,153,641
3	L		420,849							420,849
4	1	747,994		3,019,275	19,458	1	9,887	9,309	9,563	3,815,488
5	2	-		168,065	5,927	88	955	40	46	175,122
6	3	-		3,135,644	93,185	4	128,760	30,043	-	3,387,637
7	4	1,300,066		12,571,153	190,663	37,147	2,825,917	4,415,240	3,118,522	24,458,709
8	5	-		3,253	-	-	110,373	1,129,235	679,111	1,921,971
9	6	-		-	-	-	3,294	1,136	34,964	39,394
10		3,321,703	420,849	19,701,261	309,234	37,240	3,079,529	5,585,004	3,917,992	36,372,812

Volumes excl. Displacements, Dth

	2/	Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
11	0	302,731,098	-	49,645,905	-	-	9,119	-	1,475,867	353,861,989
12	L	-	299,323,022	-	-	-	-	-	-	299,323,022
13	1	131,731,036	-	266,056,205	936,706	22	313,461	241,018	215,500	399,493,948
14	2	-	-	13,786,260	4,548,841	23,788	117,134	2,667	2,272	18,480,962
15	3	-	-	123,502,445	25,199,623	162,882	10,799,675	1,700,386	-	161,365,011
16	4	34,552,181	-	431,585,548	15,737,852	2,520,174	728,955,048	655,065,881	245,133,012	2,113,549,696
17	5	-	-	84,222	-	-	16,494,725	170,974,689	76,801,797	264,355,433
18	6	-	-	-	-	-	278,012	228,098	19,436,970	19,943,080
19		469,014,315	299,323,022	884,660,585	46,423,022	2,706,866	756,967,174	828,212,739	343,065,418	3,630,373,141

Mileaged Fuel Component of the F&LR, %

20	% per 100 Dth Miles: 0.27% Exh 2, P2 Ln 14, Col (e)									
	3/	Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	
21	0	0.42%		1.59%	2.51%	3.12%	3.63%	4.28%	4.88%	
22	L		0.14%							
23	1	0.56%		1.12%	2.04%	2.48%	3.06%	3.72%	4.25%	
24	2	2.51%		1.20%	0.13%	0.37%	0.81%	1.47%	2.00%	
25	3	3.12%		2.48%	0.37%	0.00%	1.18%	1.74%	2.36%	
26	4	3.63%		2.83%	1.20%	1.45%	0.39%	0.67%	1.26%	
27	5	4.28%		3.72%	1.49%	1.77%	0.66%	0.66%	0.88%	
28	6	5.13%		4.44%	2.04%	2.36%	1.17%	0.50%	0.18%	

Notes:

- 1/ Mileaged fuel component of F&LR allocated to each zone based on 100 Dth-miles. Refer to Exhibit 3, Page 1, Lines 18-26.
- 2/ Refer to Exhibit 3, Page 1, Lines 9-17.
- 3/ The mileaged fuel component of the F&LR per Dth is equal to Fuel / (Fuel + Volumes).
 The mileaged fuel component of the F&LR per Dth for zones with no volumes, is equal to the mileaged component rate per 100 Dth-mile (Ln 20) /100 x the miles of haul for the applicable zone - see Exhibit 3, Page 1, Lines 1-8.

Tennessee Gas Pipeline Company, L.L.C.
F&LR Component of Fuel Adjustment Mechanism
Transportation and Storage Services
Fuel and Losses

Line No.	Description	Ref	Base Period 1/	Deferred F&LR Balance 2/	Total
	(a)	(b)	(c)	(d)	(e) = (c) - (d)
<u>Total System</u>					
<i>Transportation Fuel</i>					
1	Compressor Fuel	Exh 5, P1 Ln3; Exh 8, P1 Ln20	35,280,637	(2,229,568)	37,510,205
2	TBO Fuel	Exh 6, P1 Ln5; Exh 8, P1 Ln21	721,734	138,050	583,684
3	Total Transportation Fuel		36,002,371	(2,091,518)	38,093,889
<i>Storage Fuel</i>					
4	Compressor Fuel	Exh 5, P1 Ln 7; Exh 8, P1 Ln 23	464,435	183,123	281,312
5	SBO Fuel	Exh 6, P1 Ln 25; Exh 8, P1 Ln 24	1,758,802	(134,618)	1,893,420
6	Total Storage Fuel		2,223,237	48,505	2,174,732
<i>Losses</i>					
7	Transportation Losses	Exh 7, P1 Ln 1; Exh 8, P1 Ln 26	(855,295)	2,837,234	(3,692,529)
8	Storage Losses	Exh 7, P1 Ln 6; Exh 8, P1 Ln 27	17,940	660	17,280
9	Total Losses		(837,355)	2,837,894	(3,675,249)
10	<i>Total</i>		37,388,253	794,881	36,593,372
<u>Incremental System Detail</u>					
11	Allocated Transportation Fuel	Exh 5, P1 Ln 2; Exh 8, P2 Ln 5	956,487	(180,906)	1,137,393

Notes:

1/ 12 month period ending Dec-31-2019.

2/ See Exhibit 8.

Tennessee Gas Pipeline Company, L.L.C.
Transportation Miles of Haul and Quantities (Dth and 100 Dth-Miles) for Base Period

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
General System										
Miles of haul										
		1/ Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	
1	0	155		598	925	1,150	1,389	1,580	1,896	
2	L		52							
3	1	210		419	767	937	1,164	1,426	1,638	
4	2	925		450	48	137	301	550	754	
5	3	1,150		937	137	1	440	652	871	Average Miles
6	4	1,389		1,075	447	544	143	249	470	of Haul
7	5	1,580		1,426	550	652	247	244	326	Ln 26*/100/Ln17
8	6	1,896		1,638	754	871	437	184	66	370 miles
Volumes excl. Displacements										
		2/ Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
9	0	302,731,098		49,645,905			9,119		1,475,867	353,861,989
10	L		299,323,022							299,323,022
11	1	131,731,036		266,056,205	936,706	22	313,461	241,018	215,500	399,493,948
12	2			13,786,260	4,548,841	23,788	117,134	2,667	2,272	18,480,962
13	3			123,502,445	25,199,623	162,882	10,799,675	1,700,386		161,365,011
14	4	34,552,181		431,585,548	15,737,852	2,520,174	728,955,048	655,065,881	245,133,012	2,113,549,696
15	5			84,222			16,494,725	170,974,689	76,801,797	264,355,433
16	6						278,012	228,098	19,436,970	19,943,080
17		469,014,315	299,323,022	884,660,585	46,423,022	2,706,866	756,967,174	828,212,739	343,065,418	3,630,373,141
100 Dth-Miles										
		3/ Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
18	0	470,141,395		296,733,574			126,654		27,975,059	794,976,682
19	L		155,348,648							155,348,648
20	1	276,108,252		1,114,509,442	7,182,662	206	3,649,625	3,436,193	3,530,101	1,408,416,480
21	2			62,038,170	2,187,993	32,471	352,573	14,669	17,126	64,643,001
22	3			1,157,464,915	34,397,485	1,629	47,529,370	11,089,917		1,250,483,316
23	4	479,895,239		4,640,407,814	70,379,674	13,712,267	1,043,134,674	1,629,803,912	1,151,144,626	9,028,478,205
24	5			1,200,753			40,741,971	416,836,292	250,681,065	709,460,081
25	6						1,216,024	419,472	12,906,148	14,541,645
26		1,226,144,886	155,348,648	7,272,354,668	114,147,814	13,746,572	1,136,750,891	2,061,600,455	1,446,254,125	13,426,348,059
Total Volumes										
		2/ Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
27	0	370,587,175		93,913,305	2,504,738		202,198		1,475,868	468,683,284
28	L		299,815,329							299,815,329
29	1	131,731,780		416,014,403	7,076,199	5,659	895,119	241,018	216,227	556,180,405
30	2			13,786,688	7,285,588	1,164,115	278,967	2,667	2,272	22,520,297
31	3			123,502,728	25,222,417	620,330	10,799,711	1,700,386		161,845,572
32	4	34,552,181		431,586,168	15,738,076	2,520,175	809,233,853	655,188,355	245,259,372	2,194,078,180
33	5			84,222			16,731,275	186,992,636	76,844,764	280,652,897
34	6						279,087	523,276	31,457,808	32,260,171
35		536,871,136	299,815,329	1,078,887,514	57,827,018	4,310,279	838,420,210	844,648,338	355,256,311	4,016,036,135
100 Dth-Miles										
		3/ Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
36	0	575,521,883		561,319,824	23,166,322		2,808,328		27,975,078	1,190,791,434
37	L		155,604,156							155,604,156
38	1	276,109,811		1,742,684,334	54,260,294	53,036	10,421,869	3,436,193	3,542,010	2,090,507,546
39	2			62,040,096	3,504,368	1,589,017	839,691	14,669	17,126	68,004,966
40	3			1,157,467,567	34,428,599	6,203	47,529,528	11,089,917		1,250,521,815
41	4	479,895,239		4,640,414,480	70,380,676	13,712,272	1,158,013,644	1,630,108,627	1,151,738,012	9,144,262,951
42	5			1,200,753			41,326,249	455,888,047	250,821,310	749,236,359
43	6						1,220,727	962,305	20,887,985	23,071,016
44		1,331,526,933	155,604,156	8,165,127,053	185,740,259	15,360,529	1,262,160,035	2,101,499,757	1,454,981,520	14,672,000,242
Incremental System										
Volumes										
		2/ Delivery Zone								
	Receipt Zone	0	L	1	2	3	4	5	6	Total
45	0									
46	L									
47	1									
48	2									
49	3			15,900,499						15,900,499
50	4									
51	5									
52	6									
53				15,900,499						15,900,499

Notes:

1/ November 30, 2010 filing in Docket No. RP11-1566: Schedule I-3, page 2 of 3.

2/ Monthly Activity:

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Total Throughput	372,923,755	313,319,291	337,017,038	305,271,102	320,843,289	313,132,861	329,155,709
Throughput excl. Displacements	318,248,614	273,733,925	296,111,373	276,773,710	292,678,904	287,901,555	305,320,560
Incr. System Throughput	0	0	0	0	0	0	0
Incr. System, % of Total T'put	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Total Throughput		349,721,529	328,498,922	350,334,679	349,476,730	362,241,729	4,031,936,634
Throughput excl. Displacements		320,221,819	302,981,403	318,162,456	320,365,113	333,774,208	3,646,273,640
Incr. System Throughput		544,708	5,640,188	3,917,987	2,277,543	3,520,073	15,900,499
Incr. System, % of Total T'put		0.16%	1.72%	1.12%	0.65%	0.97%	

3/ (Miles of haul x Dth)/100.

Tennessee Gas Pipeline Company, L.L.C.
 Storage Quantities for Base Period

Line No.	Description	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
<u>Storage Injections</u>														
1	System Operations	2,339,738	3,132,136	8,657,184	16,611,362	13,392,096	4,883,013	5,408,705	639,337	11,183,874	10,019,653	9,405,499	9,312,878	94,985,475
2	Customer Storage Injections	1,238,787	1,505,204	2,730,705	9,167,622	8,484,643	7,900,514	6,570,287	7,792,057	9,834,337	9,105,352	2,763,091	2,358,240	69,450,839
3	Total	3,578,525	4,637,340	11,387,889	25,778,984	21,876,739	12,783,527	11,978,992	8,431,394	21,018,211	19,125,005	12,168,590	11,671,118	164,436,314
4	Net Customer Storage Injections	1,220,095	1,482,548	2,689,543	9,007,278	8,336,425	7,762,475	6,455,605	7,656,039	9,662,498	8,946,189	2,714,754	2,316,993	68,250,442

Tennessee Gas Pipeline Company, L.L.C.
 Transportation & Storage Compressor Fuel for Base Period

Line No.	Description	Ref	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
<u>Transportation</u>															
1	Gen. System		2,911,176	2,229,205	2,542,540	2,118,013	2,123,488	2,491,573	3,303,196	3,613,488	3,017,620	3,090,656	3,412,677	3,470,519	34,324,150
2	Incr. System	Exh 11, P5 Ln 44	-	-	-	-	-	-	-	33,182	320,733	233,773	138,238	230,561	956,487
3	Total Transportation		2,911,176	2,229,205	2,542,540	2,118,013	2,123,488	2,491,573	3,303,196	3,646,670	3,338,353	3,324,429	3,550,914	3,701,080	35,280,637
<u>Storage</u>															
4	Hebron		1,311	1,650	2,397	1,682	4,420	2,026	1,477	1,414	2,470	4,149	931	888	24,815
5	Ellisburg		10,090	11,713	14,776	23,526	34,971	28,493	15,585	20,060	42,665	45,720	15,502	13,861	276,962
6	Harrison		6,412	7,953	17,953	15,252	21,426	14,243	10,889	9,154	22,446	20,368	9,644	6,918	162,658
7	Total Storage		17,813	21,316	35,126	40,460	60,817	44,762	27,951	30,628	67,581	70,237	26,077	21,667	464,435
8	Total		2,928,989	2,250,521	2,577,666	2,158,473	2,184,305	2,536,335	3,331,147	3,677,298	3,405,934	3,394,666	3,576,991	3,722,747	35,745,072

Tennessee Gas Pipeline Company, L.L.C.
 Transportation & Storage by Others Fuel for Base Period

Line No.	Description	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
<u>Transportation</u>														
1	Dominion K# 200557 (FT)	56,730	51,240	56,730	54,900	56,730	54,900	56,730	56,730	54,900	56,730	54,900	56,730	667,950
2	National Fuel K# N12489 (FST)	-	-	-	-	-	-	-	2,288	2,238	3,224	2,761	1,701	12,212
3	National Fuel K# N12365 (FST)	-	-	420	3,173	2,754	4,396	4,131	153	3,011	4,743	1,031	-	23,812
4	Petal Storage K# 50807 (PKS)	-	-	5,300	12,460	-	-	-	-	-	-	-	-	17,760
5	Total Transportation	56,730	51,240	62,450	70,533	59,484	59,296	60,861	59,171	60,149	64,697	58,692	58,431	721,734
<u>Storage</u>														
6	Bear Creek	22,281	35,509	41,592	49,364	50,183	41,343	77,360	41,775	54,120	36,379	88,680	118,773	657,359
7	Caledonia K# TGPCALFIRM2017 (FSS)	2,244	1,632	-	-	-	-	-	-	-	-	-	-	3,876
8	Caledonia K# TGPCALFIRM2018 (FSS)	1,122	1,122	6,260	-	-	-	-	-	-	-	-	-	8,504
9	Caledonia K# TGPCALFIRM2019 (FSS)	-	-	-	20,282	10,506	3,876	4,284	6,018	14,280	11,118	8,262	7,242	85,868
10	Caledonia K# TGPCALFIRM2020 (FSS)	-	-	-	-	7,905	4,909	1,465	1,326	4,294	4,014	2,371	2,534	28,818
11	Freebird K# TGPFfreebirdFSS2017 (FSS)	2,244	1,632	-	-	-	-	-	-	-	-	-	-	3,876
12	Freebird K# TGPFfreebirdFSS2018 (FSS)	2,346	2,244	9,524	-	-	-	-	-	-	-	-	-	14,114
13	Freebird K# TGPFfreebirdFSS2019 (FSS)	-	-	-	2,332	2,652	2,703	2,652	3,009	7,140	5,712	4,131	3,672	34,003
14	KMTP K# TGP583121 (FSS)	2,050	742	-	15,729	5,020	16,410	36,081	14,597	11,552	13,621	19,676	19,991	155,469
15	Leaf River K# TGP009365 (FSS)	6,442	12,557	28,160	37,457	7,435	-	7,050	20,673	43,489	33,818	26,234	15,931	239,246
16	Lost Creek K# 300078 (GSS)	-	-	-	-	-	-	-	140,988	-	41,055	35,263	-	217,306
18	National Fuel K# O12362 (FSS)	3,348	1,223	1,066	-	-	-	-	-	-	-	-	-	5,637
19	National Fuel K# O12488 (FSS)	2,775	2,067	-	-	-	-	-	968	951	2,015	2,876	3,694	15,346
20	National Fuel K# O12364 (FSS)	3,534	1,284	1,590	1,347	1,170	1,867	1,755	65	1,274	1,364	1,171	1,863	18,284
21	Petal Storage K# 50687 (ISS-P)	-	3,261	2,868	1,004	-	-	-	-	-	-	-	-	7,133
22	Petal Storage K# 50684 (FSS-P)	-	-	-	4,900	956	1,960	2,384	2,695	7,437	6,174	4,606	3,359	34,471
24	Pine Prairie K# TEN01698S (FSS)	2,499	6,018	14,484	60,713	11,350	3,316	10,612	13,572	42,754	30,813	17,291	16,070	229,492
25	Total Storage	50,885	69,291	105,544	193,128	97,177	76,384	143,643	245,686	187,291	186,083	210,561	193,129	1,758,802
26	Total	107,615	120,531	167,994	263,661	156,661	135,680	204,504	304,857	247,440	250,780	269,253	251,560	2,480,536

Tennessee Gas Pipeline Company, L.L.C.
 Transportation and Storage Losses for Base Period

Line No.	Description	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
1	Total Transportation	(265,714)	32,981	23,022	(1,391)	(85,821)	140,886	(397,701)	(134,070)	11,091	(158,833)	(29,105)	9,360	(855,295)
2	<u>Storage</u>													
3	Hebron	1,270	1,530	1,169	212	563	179	422	186	6	68	488	430	6,523
4	Ellisburg	45	7	145	899	571	390	618	793	808	341	311	452	5,380
5	Harrison	-	-	1,065	390	-	585	603	977	731	381	694	611	6,037
6	Total Storage	1,315	1,537	2,379	1,501	1,134	1,154	1,643	1,956	1,545	790	1,493	1,493	17,940
7	Total	(264,399)	34,518	25,401	110	(84,687)	142,040	(396,058)	(132,114)	12,636	(158,043)	(27,612)	10,853	(837,355)

Tennessee Gas Pipeline Company, L.L.C.
Deferred F&LR and EPCR Account Activity and Balances

Line No.	Description	Balance 1/2018 EOY	PPA's 2/	Actual Balance 2019 EOY	Actuals 31 Jan-19	Actuals 28 Feb-19	Actuals 31 Mar-19	Actuals 30 Apr-19	Actuals 31 May-19	Actuals 30 Jun-19	Actuals 31 Jul-19	Actuals 31 Aug-19	Actuals 30 Sep-19	Actuals 31 Oct-19	Actuals 30 Nov-19	Actuals 31 Dec-19	365 Total	Balance 2019 EOY
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(l)	(n)	(n)	(n)	(q)	(r)	
Deferred F&LR Transportation and Storage Account Activity and Balances																		
F&LR Retained																		
1	Transportation F&LR		(24,251)		3,205,076	2,756,820	2,762,344	2,820,920	3,280,577	3,144,180	3,328,095	3,670,791	3,724,482	3,915,883	3,612,569	3,779,322	40,001,059	
2	Less: Losses		(2,006)		373,297	313,633	337,354	(122,060)	(128,286)	(125,203)	(131,610)	(139,833)	(131,347)	(140,078)	(139,735)	(144,839)	(178,705)	
3	Less: TBO Fuel		(451)		63,662	54,758	59,234	83,057	87,830	86,396	91,624	96,095	90,922	95,477	96,138	100,162	1,005,357	
4	Less: Storage Allocation to Transportation		(507)		63,658	54,754	59,230	83,051	87,824	86,390	91,617	96,088	90,915	95,470	96,131	100,155	1,005,284	
5	Compressor Fuel - Transportation		(21,288)		2,704,459	2,333,676	2,306,526	2,776,872	3,233,209	3,096,597	3,276,464	3,618,440	3,673,992	3,865,013	3,560,034	3,723,843	38,169,124	
6	Storage F&LR		(379)		18,692	22,656	41,162	160,344	148,218	138,039	114,682	136,018	171,839	159,163	48,337	41,247	1,200,397	
7	Less: Losses		11		(1,097)	(1,333)	(2,418)	901	834	776	646	766	966	895	272	232	1,438	
8	Plus: Storage Allocation to Transportation		(507)		63,658	54,754	59,230	83,051	87,824	86,390	91,617	96,088	90,915	95,470	96,131	100,155	1,005,284	
9	Compressor and SBO Fuel - Storage		(897)		83,447	78,743	102,810	242,494	235,208	223,653	205,653	231,341	261,788	253,739	144,197	141,170	2,204,243	
10	Losses		(1,995)		372,200	312,300	334,936	(121,159)	(127,452)	(124,427)	(130,964)	(139,067)	(130,381)	(139,183)	(139,463)	(144,607)	(177,267)	
Fuel and Losses																		
11	Compressor Fuel - Transportation		12,981		2,911,176	2,229,205	2,542,540	2,118,013	2,123,488	2,491,573	3,303,196	3,646,670	3,338,353	3,324,429	3,550,914	3,701,080	35,280,637	
12	TBO Fuel		0		56,730	51,240	62,450	70,533	59,484	59,296	60,861	59,171	60,149	64,697	58,692	58,431	721,734	
13	Compressor and TBO Fuel - Transportation		12,981		2,967,906	2,280,445	2,604,990	2,188,546	2,182,972	2,550,869	3,364,057	3,705,841	3,398,502	3,389,126	3,609,606	3,759,511	36,002,371	
14	Compressor Fuel - Storage		(1,068)		17,813	21,316	35,126	40,460	60,817	44,762	27,951	30,628	67,581	70,237	26,077	21,667	464,435	
15	SBO Fuel		(187,413)		50,885	69,291	105,544	193,128	97,177	76,384	143,643	245,686	187,291	186,083	210,561	193,129	1,758,802	
16	Compressor and SBO Fuel - Storage		(188,481)		68,698	90,607	140,670	233,588	157,994	121,146	171,594	276,314	254,872	256,320	236,638	214,796	2,223,237	
17	Losses - Transportation		(4,150)		(265,714)	32,981	23,022	(1,391)	(85,821)	140,886	(397,701)	(134,070)	11,091	(158,833)	(29,105)	9,360	(855,295)	
18	Losses - Storage		0		1,315	1,537	2,379	1,501	1,134	1,154	1,643	1,956	1,545	790	1,493	1,493	17,940	
19	Losses		(4,150)		(264,399)	34,518	25,401	110	(84,687)	142,040	(396,058)	(132,114)	12,636	(158,043)	(27,612)	10,853	(837,355)	
Deferred F&LR Account																		
20	Compressor Fuel - Transportation	(5,083,786)	(34,269)	(5,118,055)	(206,717)	104,471	(236,014)	658,859	1,109,721	605,024	(26,732)	(28,230)	335,639	540,584	9,120	22,763	2,888,487	(2,229,568)
21	TBO Fuel	(145,121)	(451)	(145,572)	6,932	3,518	(3,216)	12,524	28,346	27,100	30,763	36,924	30,773	30,780	37,446	41,731	283,623	138,050
22	Fuel - Transportation	(5,228,907)	(34,720)	(5,263,627)	(199,785)	107,988	(239,230)	671,383	1,138,067	632,124	4,031	8,694	366,412	571,364	46,566	64,495	3,172,109	(2,091,518)
23	Compressor Fuel - Storage 3/	137,265	1,063	138,328	3,824	(2,791)	(9,454)	1,543	29,722	37,875	5,548	(4,985)	1,834	(707)	(10,187)	(7,427)	44,795	183,123
24	SBO Fuel 3/	(257,350)	186,521	(70,829)	10,925	(9,073)	(28,406)	7,363	47,492	64,632	28,511	(39,988)	5,082	(1,874)	(82,254)	(66,199)	(63,789)	(134,618)
25	Fuel - Storage	(120,085)	187,584	67,499	14,749	(11,864)	(37,860)	8,906	77,214	102,507	34,059	(44,973)	6,916	(2,581)	(92,441)	(73,626)	(18,994)	48,505
26	Transportation	2,158,499	2,144	2,160,644	639,011	280,652	314,332	(120,669)	(42,465)	(266,089)	266,091	(5,763)	(142,438)	18,755	(110,630)	(154,199)	676,590	2,837,234
27	Storage	17,151	11	17,162	(2,412)	(2,870)	(4,797)	(600)	(300)	(378)	(997)	(1,190)	(579)	105	(1,221)	(1,261)	(16,502)	660
28	Losses	2,175,651	2,155	2,177,806	636,599	277,782	309,535	(121,269)	(42,765)	(266,467)	265,094	(6,953)	(143,017)	18,860	(111,851)	(155,460)	660,088	2,837,894
29	Total	(3,173,342)	155,020	(3,018,322)	451,563	373,906	32,445	559,020	1,172,516	468,164	303,184	(43,232)	230,311	587,643	(157,726)	(164,591)	3,813,203	794,881
0																		
Deferred EPCR Account Activity and Balances																		
Transportation																		
30	EPCR Collections		\$0		\$3,160,747	\$2,595,839	\$2,709,663	\$2,286,846	\$2,622,206	\$2,519,926	\$2,683,347	\$2,931,298	\$2,921,948	\$3,073,223	\$2,939,701	\$2,969,452	\$33,414,197	
31	Electric Compression Costs		(\$898)		\$2,364,593	\$1,837,880	\$1,801,156	\$1,928,895	\$1,824,181	\$2,134,561	\$2,568,085	\$2,458,019	\$2,650,860	\$2,607,031	\$2,421,812	\$2,126,847	\$26,723,920	
Deferred EPCR Account																		
32	Principal	\$524,804	\$898	\$525,701	\$796,154	\$757,959	\$908,507	\$357,951	\$798,025	\$385,366	\$115,262	\$473,280	\$271,088	\$466,192	\$517,890	\$842,605	\$6,690,277	\$7,215,978
33	Carrying Charges	(368,886)	9	(368,877)	1,933	4,647	8,945	12,338	15,164	17,557	19,910	21,042	22,152	24,441	25,762	29,586	\$203,477	(165,399)
34	Total	\$155,918	\$907	\$156,825	\$798,087	\$762,606	\$917,453	\$370,288	\$813,189	\$402,922	\$135,172	\$494,321	\$293,240	\$490,633	\$543,652	\$872,191	\$6,893,754	\$7,050,579

Notes:
1/ Refer to Exhibit 8 of March 1, 2019 annual fuel adjustment filing in Docket No. RP19-801-000.
2/ Refer to Exhibit 9.
3/ The deferred F&LR balance in the storage account has been allocated to sub-accounts based on Base Period activity (Lns. 14-16).

Tennessee Gas Pipeline Company, L.L.C.
 Deferred Fuel and EPCR Account Activity and Balances
 Incremental System Detail

Line No.	Description	Balance 2018 EOY	PPA's	Actual Balance 2019 BOY	Actuals 31 Jan-19	Actuals 28 Feb-19	Actuals 31 Mar-19	Actuals 30 Apr-19	Actuals 31 May-19	Actuals 30 Jun-19	Actuals 31 Jul-19	Actuals 31 Aug-19	Actuals 30 Sep-19	Actuals 31 Oct-19	Actuals 30 Nov-19	Actuals 31 Dec-19	365 Total	Balance 2019 EOY
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(l)	(n)	(n)	(n)	(q)	(r)
Deferred Fuel Transportation Account Activity and Balances																		
1	Fuel Retained		0		0	0	0	0	0	0	0	26,385	273,199	189,783	110,322	170,502	770,191	
2	Fuel and Losses Retained		0		0	0	0	0	0	0	0	26,385	273,199	189,783	110,322	170,502	770,191	
3	Less: Losses Component		0		0	0	0	0	0	0	0	(218)	(2,255)	(1,567)	(911)	(1,407)	(6,358)	
3	Fuel Component		0		0	0	0	0	0	0	0	26,603	275,454	191,350	111,233	171,909	776,549	
4	Allocated Fuel		0		0	0	0	0	0	0	0	33,182	320,733	233,773	138,238	230,561	956,487	
5	Deferred Fuel Account	(968)	0	(968)	0	0	0	0	0	0	0	(6,580)	(45,279)	(42,424)	(27,005)	(58,651)	(179,938)	(180,906)
Deferred EPCR Transportation Account Activity and Balances																		
6	EPCR Collections		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,777	\$173,718	\$120,674	\$70,148	\$105,789	\$487,106	
7	Allocated Electric Compression Costs		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,167	\$215,159	\$177,443	\$82,021	\$84,872	\$578,663	
8	Deferred EPCR Account																	
8	Principal	(\$9,264)	\$0	(\$9,264)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$2,390)	(\$41,441)	(\$56,769)	(\$11,873)	\$20,917	(\$91,556)	(\$100,821)
9	Carrying Charges	(89)	0	(89)	(41)	(37)	(41)	(42)	(44)	(42)	(45)	(49)	(117)	(340)	(510)	(529)	(51,836)	(1,926)
10	Total	(\$9,354)	\$0	(\$9,354)	(\$41)	(\$37)	(\$41)	(\$42)	(\$44)	(\$42)	(\$45)	(\$2,439)	(\$41,558)	(\$57,109)	(\$12,383)	\$20,388	(\$93,393)	(\$102,747)

Tennessee Gas Pipeline Company, L.L.C.
 Prior Period Adjustments

Line No.	Description	Previous Periods	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	
<u>Volumetric Adjustments</u>															
1	Transportation F&LR	0	0	0	0	0	0	0	0	0	0	0	12	(24,263)	(24,251)
2	Storage F&LR	0	0	0	0	0	0	0	0	0	0	0	0	(379)	(379)
3	Compressor Fuel - Transportation	0	0	0	0	0	0	0	0	0	0	0	0	12,981	12,981
4	Compressor Fuel - Storage	0	0	0	0	0	0	0	0	0	0	0	64	(1,132)	(1,068)
5	SBO Fuel 1/	0	0	0	0	0	0	0	0	0	0	(35,054)	(67,879)	(84,480)	(187,413)
6	Transportation Losses	0	212	(1,143)	0	0	0	0	0	(2)	(2,455)	0	6,407	(7,169)	(4,150)
<u>\$ Adjustments</u>															
7	Transportation Electric Compression Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$898)	\$0	\$0	(\$898)

Notes:

1/ Reflects PPAs related to Bear Creek storage.

Bear Creek Adjustments

Previous Fuel Tracker Filing Estimate (See Exh. 6, Pg. 1, Ln. 8)

BC tariff fuel billed	126,963	79,594	106,043	45,738	51,184	48,917	35,938	50,066	58,238	64,371	102,515	141,727	911,294
BC fuel refund	(100,514)	(25,687)	(18,504)	(25,660)	(4,967)	(19,249)	(21,662)	(36,836)	(23,190)	-	-	-	(276,269)
Net Bear Creek Fuel	26,449	53,907	87,539	20,078	46,217	29,668	14,276	13,230	35,048	64,371	102,515	141,727	635,025
<u>Actuals</u>													
BC tariff fuel billed	126,963	79,594	106,043	45,738	51,184	48,917	35,938	50,066	58,238	64,371	102,515	141,727	911,294
BC fuel refund	(100,514)	(25,687)	(18,504)	(25,660)	(4,967)	(19,249)	(21,662)	(36,836)	(23,190)	(35,054)	(67,879)	(84,480)	(463,682)
Net Bear Creek Fuel	26,449	53,907	87,539	20,078	46,217	29,668	14,276	13,230	35,048	29,317	34,636	57,247	447,612
Bear Creek PPA	-	-	-	-	-	-	-	-	-	(35,054)	(67,879)	(84,480)	(187,413)

Tennessee Gas Pipeline Company, L.L.C.
 Interest Calculation - EPCR Transportation Component of Fuel Adjustment Mechanism

Line No.	Month	Days in Month	Prior Month	(1)	(2)	PPA's	Adjusted	Current Month	Interest Rate	(3)	Prior Month	(4)	Total Monthly	Cumm.	Days to end of Month	Due Date
			Interest Base	Quarterly Interest	Current Month Principal		Current Month Principal	Current Month Interest Base		Monthly Interest	Interest	Current Month Interest	Interest	Monthly Interest		
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 5A)	(Col. 5B)	(Col. 6)	(Col. 7)	(Col. 8)	(Col. 9)	(Col. 10)	(Col. 11)	(Col. 11A)	(Col. 12)	(Col. 13)
1	Jan-18	31	\$ (3,539,176)	(41,105)	\$ (29,665)	\$ -	\$ (29,665)	\$ (3,609,947)	4.2500%	0.3610%	\$ (12,923)	\$ (38)	\$ (12,961)	\$ (272,228)	11	1/20/2018
2	Feb-18	28	(3,609,947)		110,668	-	110,668	(3,499,280)	4.2500%	0.3260%	(11,769)	103	(11,666)	(283,895)	8	2/20/2018
3	Mar-18	31	(3,499,280)		230,416	-	230,416	(3,268,864)	4.2500%	0.3610%	(12,631)	295	(12,336)	(296,231)	11	3/20/2018
4	Apr-18	30	(3,268,864)	(36,964)	229,074	-	229,074	(3,076,753)	4.4700%	0.3674%	(12,146)	281	(11,865)	(308,096)	10	4/20/2018
5	May-18	31	(3,076,753)		308,770	-	308,770	(2,767,983)	4.4700%	0.3796%	(11,681)	416	(11,265)	(319,360)	11	5/20/2018
6	Jun-18	30	(2,767,983)		374,490	-	374,490	(2,393,493)	4.4700%	0.3674%	(10,169)	459	(9,711)	(329,071)	10	6/20/2018
7	Jul-18	31	(2,393,493)	(32,841)	151,002	-	151,002	(2,275,332)	4.6900%	0.3983%	(9,665)	213	(9,451)	(338,523)	11	7/20/2018
8	Aug-18	31	(2,275,332)		191,080	-	191,080	(2,084,253)	4.6900%	0.3983%	(9,063)	270	(8,793)	(347,316)	11	8/20/2018
9	Sep-18	30	(2,084,253)		169,180	-	169,180	(1,915,072)	4.6900%	0.3855%	(8,034)	217	(7,817)	(355,133)	10	9/20/2018
10	Oct-18	31	(1,915,072)	(26,062)	545,213	898	546,111	(1,395,023)	4.9600%	0.4213%	(8,177)	816	(7,361)	(362,494)	11	10/20/2018
11	Nov-18	30	(1,395,023)		696,719	-	696,719	(698,303)	4.9600%	0.4077%	(5,687)	947	(4,740)	(367,234)	10	11/20/2018
12	Dec-18	31	(698,303)		\$868,872	-	868,872	170,569	4.9600%	0.4213%	(2,942)	1,299	(1,643)	(368,877)	11	12/20/2018
13	Jan-19	31	\$ 170,569	(13,744)	\$796,154	\$ -	\$ 796,154	\$ 952,979	5.1800%	0.4399%	\$ 690	\$ 1,243	\$ 1,933	\$ (366,944)	11	1/20/2019
14	Feb-19	28	952,979		\$757,959	-	757,959	1,710,937	5.1800%	0.3974%	3,787	861	4,647	(362,297)	8	2/20/2019
15	Mar-19	31	1,710,937		\$908,507	-	908,507	2,619,444	5.1800%	0.4399%	7,527	1,418	8,945	(353,351)	11	3/20/2019
16	Apr-19	30	2,619,444	15,526	\$357,951	-	357,951	2,992,921	5.4500%	0.4479%	11,803	534	12,338	(341,013)	10	4/20/2019
17	May-19	31	2,992,921		\$798,025	-	798,025	3,790,946	5.4500%	0.4629%	13,854	1,311	15,164	(325,849)	11	5/20/2019
18	Jun-19	30	3,790,946		\$385,366	-	385,366	4,176,311	5.4500%	0.4479%	16,981	575	17,557	(308,292)	10	6/20/2019
19	Jul-19	31	4,176,311	45,059	\$115,262	-	115,262	4,336,632	5.5000%	0.4671%	19,719	191	19,910	(288,382)	11	7/20/2019
20	Aug-19	31	4,336,632		\$473,280	-	473,280	4,809,911	5.5000%	0.4671%	20,257	784	21,042	(267,341)	11	8/20/2019
21	Sep-19	30	4,809,911		\$271,088	-	271,088	5,080,999	5.5000%	0.4521%	21,743	408	22,152	(245,189)	10	9/20/2019
22	Oct-19	31	5,080,999	63,104	\$466,192	-	466,192	5,610,295	5.4200%	0.4603%	23,680	761	24,441	(220,747)	11	10/20/2019
23	Nov-19	30	5,610,295		\$517,890	-	517,890	6,128,185	5.4200%	0.4455%	24,993	769	25,762	(194,986)	10	11/20/2019
24	Dec-19	31	6,128,185		842,605	-	842,605	6,970,790	5.4200%	0.4603%	28,210	1,376	29,586	(165,399)	11	12/20/2019
25	Total Jan - Dec 2019				\$ 6,690,277	\$ -	\$ 6,690,277				\$ 193,244	\$ 10,233	\$ 203,477			

- (1) Quarterly interest based upon Col. 11.
- (2) Refer to Exhibit 8, Page 1, Ln 32, and to Exhibit 8 Page 1, Line 38 of March 1, 2019 annual fuel adjustment filing in Docket No. RP19-801-000.
- (3) FERC prescribed interest rates pursuant to CFR 154.501. Rate factored by number of days in the month.
- (4) Interest calculated assuming amount is due or received as shown in Column 13. Column 5B * Column 7 * (No. of days in the month - due date)/365.

Tennessee Gas Pipeline Company, L.L.C.
 Interest Calculation - EPCR Transportation Component of Fuel Adjustment Mechanism
 Incremental System Detail

Line No.	Month	Days in Month	Prior Month	(1)	(2)	PPA's	Adjusted	Current Month	Interest Rate	(3)	Prior Month	(4)	Total Monthly	Cumm.	Days to end of Month	Due Date
			Interest Base	Quarterly Interest	Current Month Principal		Current Month Principal	Interest Base		Monthly Interest	Interest (Col. 3+4) x Col. 8	Current Month Interest	Interest (Col. 9+10)	Monthly Interest		
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 5A)	(Col. 5B)	(Col. 6)	(Col. 7)	(Col. 8)	(Col. 9)	(Col. 10)	(Col. 11)	(Col. 11A)	(Col. 12)	(Col. 13)
1	Jan-19	31	\$ (9,264)	(89) \$	- \$	- \$	- \$	(9,354)	5.1800%	0.4399%	\$ (41)	- \$	(41) \$	(131)	11	1/20/2019
2	Feb-19	28	(9,354)	-	-	-	-	(9,354)	5.1800%	0.3974%	(37)	-	(37)	(168)	8	2/20/2019
3	Mar-19	31	(9,354)	-	-	-	-	(9,354)	5.1800%	0.4399%	(41)	-	(41)	(209)	11	3/20/2019
4	Apr-19	30	(9,354)	(119)	-	-	-	(9,473)	5.4500%	0.4479%	(42)	-	(42)	(251)	10	4/20/2019
5	May-19	31	(9,473)	-	-	-	-	(9,473)	5.4500%	0.4629%	(44)	-	(44)	(295)	11	5/20/2019
6	Jun-19	30	(9,473)	-	-	-	-	(9,473)	5.4500%	0.4479%	(42)	-	(42)	(338)	10	6/20/2019
7	Jul-19	31	(9,473)	(129)	-	-	-	(9,602)	5.5000%	0.4671%	(45)	-	(45)	(383)	11	7/20/2019
8	Aug-19	31	(9,602)	-	(2,390)	-	(2,390)	(11,992)	5.5000%	0.4671%	(45)	(4)	(49)	(431)	11	8/20/2019
9	Sep-19	30	(11,992)	-	(41,441)	-	(41,441)	(53,433)	5.5000%	0.4521%	(54)	(62)	(117)	(548)	10	9/20/2019
10	Oct-19	31	(53,433)	(210)	(56,769)	-	(56,769)	(110,413)	5.4200%	0.4603%	(247)	(93)	(340)	(888)	11	10/20/2019
11	Nov-19	30	(110,413)	-	(11,873)	-	(11,873)	(122,286)	5.4200%	0.4455%	(492)	(18)	(510)	(1,397)	10	11/20/2019
12	Dec-19	31	(122,286)	-	20,917	-	20,917	(101,369)	5.4200%	0.4603%	(563)	34	(529)	(1,926)	11	12/20/2019
13	Total			\$ (91,556)	\$ -	\$ -	\$ (91,556)				\$ (1,694)	\$ (143)	\$ (1,836)			

- (1) Quarterly interest based upon Col. 11.
- (2) Refer to Exhibit 8, Page 2, Ln 8.
- (3) FERC prescribed interest rates pursuant to CFR 154.501. Rate factored by number of days in the month.
- (4) Interest calculated assuming amount is due or received as shown in Column 13. Column 5B * Column 7 * (No. of days in the month - due date)/365.

Tennessee Gas Pipeline Company, L.L.C.
Incremental System
Segment Capacity and Volumes, Dth/d

Line No.	Zone (a)	Primary Path Segments 1/ (b)	Segment Capacity 2/ (c)	Segment Volumes 2/		
				Total (d)	Gen. System (e)	Incr. System (f)
<u>Jan-19</u>						
1	Z3-100 Line	114	941,159	304,402	304,402	0
2	Z2-100 Line	111	941,159	261,641	261,641	0
3	Z2-100 Line	187	2,735,831	1,425,574	1,425,574	0
4	Z1-800 Line	860	2,906,158	1,065,261	1,065,261	0
5	Z1-500 Line	548	1,915,011	1,136,839	1,136,839	0
6	Z1-500 Line	542	1,877,966	1,043,014	1,043,014	0
7	Z1-500 Line	534	1,863,095	879,116	879,116	0
<u>Feb-19</u>						
8	Z3-100 Line	114	941,159	326,640	326,640	0
9	Z2-100 Line	111	941,159	286,884	286,884	0
10	Z2-100 Line	187	2,735,831	1,246,872	1,246,872	0
11	Z1-800 Line	860	2,906,158	1,054,319	1,054,319	0
12	Z1-500 Line	548	1,915,011	1,069,910	1,069,910	0
13	Z1-500 Line	542	1,877,966	936,731	936,731	0
14	Z1-500 Line	534	1,863,095	703,120	703,120	0
<u>Mar-19</u>						
15	Z3-100 Line	114	941,159	242,636	242,636	0
16	Z2-100 Line	111	941,159	204,619	204,619	0
17	Z2-100 Line	187	2,735,831	1,156,277	1,156,277	0
18	Z1-800 Line	860	2,906,158	846,288	846,288	0
19	Z1-500 Line	548	1,915,011	961,276	961,276	0
20	Z1-500 Line	542	1,877,966	777,029	777,029	0
21	Z1-500 Line	534	1,863,095	579,183	579,183	0
<u>Apr-19</u>						
22	Z3-100 Line	114	918,865	342,946	342,946	0
23	Z2-100 Line	111	918,865	307,667	307,667	0
24	Z2-100 Line	187	2,659,039	1,455,269	1,455,269	0
25	Z1-800 Line	860	2,783,885	928,188	928,188	0
26	Z1-500 Line	548	1,819,170	1,312,055	1,312,055	0
27	Z1-500 Line	542	1,789,962	1,142,952	1,142,952	0
28	Z1-500 Line	534	1,775,091	901,211	901,211	0
<u>May-19</u>						
29	Z3-100 Line	114	918,865	352,597	352,597	0
30	Z2-100 Line	111	918,865	324,553	324,553	0
31	Z2-100 Line	187	2,659,039	1,790,335	1,790,335	0
32	Z1-800 Line	860	2,783,885	1,091,727	1,091,727	0
33	Z1-500 Line	548	1,819,170	1,194,386	1,194,386	0
34	Z1-500 Line	542	1,789,962	1,055,677	1,055,677	0
35	Z1-500 Line	534	1,775,091	885,332	885,332	0
<u>Jun-19</u>						
36	Z3-100 Line	114	919,896	351,379	351,379	0
37	Z2-100 Line	111	919,896	321,747	321,747	0
38	Z2-100 Line	187	2,659,228	1,753,559	1,753,559	0
39	Z1-800 Line	860	2,790,494	998,652	998,652	0
40	Z1-500 Line	548	1,819,207	1,212,771	1,212,771	0
41	Z1-500 Line	542	1,794,163	1,028,341	1,028,341	0
42	Z1-500 Line	534	1,765,292	828,640	828,640	0

Tennessee Gas Pipeline Company, L.L.C.
 Incremental System
 Segment Capacity and Volumes, Dth/d

Line No.	Zone	Primary Path Segments 1/ (a)	Segment Capacity 2/ (c)	Segment Volumes 2/		
				Total (d)	Gen. System (e)	Incr. System (f)
<u>Jul-19</u>						
43	Z3-100 Line	114	920,411	422,072	422,072	0
44	Z2-100 Line	111	920,411	394,969	394,969	0
45	Z2-100 Line	187	2,659,322	1,719,999	1,719,999	0
46	Z1-800 Line	860	2,793,799	1,045,285	1,045,285	0
47	Z1-500 Line	548	1,819,225	1,262,391	1,262,391	0
48	Z1-500 Line	542	1,796,263	1,151,960	1,151,960	0
49	Z1-500 Line	534	1,760,392	946,870	946,870	0
<u>Aug-19</u>						
50	Z3-100 Line	114	920,411	466,898	449,622	17,276
51	Z2-100 Line	111	920,411	439,503	422,227	17,276
52	Z2-100 Line	187	2,659,322	2,111,716	2,094,440	17,276
53	Z1-800 Line	860	2,793,799	1,440,720	1,423,444	17,276
54	Z1-500 Line	548	1,819,225	1,394,033	1,376,757	17,276
55	Z1-500 Line	542	1,796,263	1,223,545	1,210,490	13,055
56	Z1-500 Line	534	1,760,392	983,108	970,053	13,055
<u>Sep-19</u>						
57	Z3-100 Line	114	920,411	669,696	481,690	188,006
58	Z2-100 Line	111	920,411	642,883	454,877	188,006
59	Z2-100 Line	187	2,659,322	2,268,820	2,080,814	188,006
60	Z1-800 Line	860	2,793,799	1,413,101	1,225,095	188,006
61	Z1-500 Line	548	1,819,225	1,448,020	1,260,014	188,006
62	Z1-500 Line	542	1,796,263	1,335,836	1,151,163	184,673
63	Z1-500 Line	534	1,760,392	1,091,842	917,392	174,450
<u>Oct-19</u>						
64	Z3-100 Line	114	920,411	732,151	605,764	126,387
65	Z2-100 Line	111	920,411	700,680	574,293	126,387
66	Z2-100 Line	187	2,659,322	2,232,396	2,106,009	126,387
67	Z1-800 Line	860	2,793,799	1,467,027	1,341,608	125,419
68	Z1-500 Line	548	1,819,225	1,399,528	1,274,270	125,258
69	Z1-500 Line	542	1,796,263	1,180,866	1,080,116	100,750
70	Z1-500 Line	534	1,760,392	948,237	854,540	93,697
<u>Nov-19</u>						
71	Z3-100 Line	114	944,948	722,767	646,849	75,918
72	Z2-100 Line	111	944,948	694,150	618,232	75,918
73	Z2-100 Line	187	2,734,834	2,036,617	1,960,699	75,918
74	Z1-800 Line	860	2,918,314	1,655,836	1,579,918	75,918
75	Z1-500 Line	548	1,912,994	1,183,603	1,107,685	75,918
76	Z1-500 Line	542	1,885,814	1,115,489	1,039,571	75,918
77	Z1-500 Line	534	1,849,943	886,367	810,449	75,918
<u>Dec-19</u>						
78	Z3-100 Line	114	945,296	750,428	637,845	112,583
79	Z2-100 Line	111	945,296	719,571	606,988	112,583
80	Z2-100 Line	187	2,743,825	1,990,170	1,877,587	112,583
81	Z1-800 Line	860	2,927,950	1,752,538	1,639,955	112,583
82	Z1-500 Line	548	1,913,108	1,320,244	1,207,661	112,583
83	Z1-500 Line	542	1,885,928	1,173,953	1,063,826	110,127
84	Z1-500 Line	534	1,850,057	989,394	881,785	107,609

Notes:

- 1/ Refers to the seven DART segments on the Tennessee system located along the Broad Run Expansion Project primary capacity path.
- 2/ Represents average daily segment backhaul capacity and volumes.

Tennessee Gas Pipeline Company, L.L.C.
Incremental System
Fuel Factors

Line No.	Zone (a)	Primary Path Segments 1/ (b)	(X) = Segment Volumes, % of Capacity		(Y) = Fuel Use, % of Total 4/		% Fuel Allocated to Incr. System (g) = (f) - (e) / (f)
			Gen. System 2/ (c)	Total 3/ (d)	Gen. System (e)	Total (f)	
<u>Jan-19</u>							
1	Z3-100 Line	114	32.3400%	32.3400%	7.8764%	7.8764%	0.00%
2	Z2-100 Line	111	27.8000%	27.8000%	6.6464%	6.6464%	0.00%
3	Z2-100 Line	187	52.1100%	52.1100%	16.4978%	16.4978%	0.00%
4	Z1-800 Line	860	36.6600%	36.6600%	9.2574%	9.2574%	0.00%
5	Z1-500 Line	548	59.3600%	59.3600%	21.6360%	21.6360%	0.00%
6	Z1-500 Line	542	55.5400%	55.5400%	18.7557%	18.7557%	0.00%
7	Z1-500 Line	534	47.1900%	47.1900%	13.7251%	13.7251%	0.00%
<u>Feb-19</u>							
8	Z3-100 Line	114	34.7100%	34.7100%	8.6063%	8.6063%	0.00%
9	Z2-100 Line	111	30.4800%	30.4800%	7.3471%	7.3471%	0.00%
10	Z2-100 Line	187	45.5800%	45.5800%	12.9231%	12.9231%	0.00%
11	Z1-800 Line	860	36.2800%	36.2800%	9.1268%	9.1268%	0.00%
12	Z1-500 Line	548	55.8700%	55.8700%	18.9887%	18.9887%	0.00%
13	Z1-500 Line	542	49.8800%	49.8800%	15.1777%	15.1777%	0.00%
14	Z1-500 Line	534	37.7400%	37.7400%	9.6390%	9.6390%	0.00%
<u>Mar-19</u>							
15	Z3-100 Line	114	25.7800%	25.7800%	6.1628%	6.1628%	0.00%
16	Z2-100 Line	111	21.7400%	21.7400%	5.2986%	5.2986%	0.00%
17	Z2-100 Line	187	42.2600%	42.2600%	11.4142%	11.4142%	0.00%
18	Z1-800 Line	860	29.1200%	29.1200%	6.9828%	6.9828%	0.00%
19	Z1-500 Line	548	50.2000%	50.2000%	15.3604%	15.3604%	0.00%
20	Z1-500 Line	542	41.3800%	41.3800%	11.0446%	11.0446%	0.00%
21	Z1-500 Line	534	31.0900%	31.0900%	7.5166%	7.5166%	0.00%
<u>Apr-19</u>							
22	Z3-100 Line	114	37.3200%	37.3200%	9.4888%	9.4888%	0.00%
23	Z2-100 Line	111	33.4800%	33.4800%	8.2194%	8.2194%	0.00%
24	Z2-100 Line	187	54.7300%	54.7300%	18.1961%	18.1961%	0.00%
25	Z1-800 Line	860	33.3400%	33.3400%	8.1765%	8.1765%	0.00%
26	Z1-500 Line	548	72.1200%	72.1200%	34.8676%	34.8676%	0.00%
27	Z1-500 Line	542	63.8500%	63.8500%	25.5919%	25.5919%	0.00%
28	Z1-500 Line	534	50.7700%	50.7700%	15.6914%	15.6914%	0.00%
<u>May-19</u>							
29	Z3-100 Line	114	38.3700%	38.3700%	9.8688%	9.8688%	0.00%
30	Z2-100 Line	111	35.3200%	35.3200%	8.8049%	8.8049%	0.00%
31	Z2-100 Line	187	67.3300%	67.3300%	29.1491%	29.1491%	0.00%
32	Z1-800 Line	860	39.2200%	39.2200%	10.1875%	10.1875%	0.00%
33	Z1-500 Line	548	65.6600%	65.6600%	27.3842%	27.3842%	0.00%
34	Z1-500 Line	542	58.9800%	58.9800%	21.3307%	21.3307%	0.00%
35	Z1-500 Line	534	49.8800%	49.8800%	15.1777%	15.1777%	0.00%
<u>Jun-19</u>							
36	Z3-100 Line	114	38.2000%	38.2000%	9.8062%	9.8062%	0.00%
37	Z2-100 Line	111	34.9800%	34.9800%	8.6937%	8.6937%	0.00%
38	Z2-100 Line	187	65.9400%	65.9400%	27.6725%	27.6725%	0.00%
39	Z1-800 Line	860	35.7900%	35.7900%	8.9611%	8.9611%	0.00%
40	Z1-500 Line	548	66.6600%	66.6600%	28.4278%	28.4278%	0.00%
41	Z1-500 Line	542	57.3200%	57.3200%	20.0468%	20.0468%	0.00%
42	Z1-500 Line	534	46.9400%	46.9400%	13.5974%	13.5974%	0.00%

Tennessee Gas Pipeline Company, L.L.C.
Incremental System
Fuel Factors

Line No.	Zone	Primary Path Segments 1/ (b)	(X) = Segment Volumes, % of Capacity		(Y) = Fuel Use, % of Total 4/ Gen. System		% Fuel Allocated to Incr. System (g) = (f) - (e) / (f)
			Gen. System 2/ (c)	Total 3/ (d)	Gen. System (e)	Total (f)	
<u>Jul-19</u>							
43	Z3-100 Line	114	45.8600%	45.8600%	13.0591%	13.0591%	0.00%
44	Z2-100 Line	111	42.9100%	42.9100%	11.6950%	11.6950%	0.00%
45	Z2-100 Line	187	64.6800%	64.6800%	26.3988%	26.3988%	0.00%
46	Z1-800 Line	860	37.4100%	37.4100%	9.5208%	9.5208%	0.00%
47	Z1-500 Line	548	69.3900%	69.3900%	31.4835%	31.4835%	0.00%
48	Z1-500 Line	542	64.1300%	64.1300%	25.8613%	25.8613%	0.00%
49	Z1-500 Line	534	53.7900%	53.7900%	17.5676%	17.5676%	0.00%
<u>Aug-19</u>							
50	Z3-100 Line	114	48.8500%	50.7300%	14.6042%	15.6679%	6.79%
51	Z2-100 Line	111	45.8700%	47.7500%	13.0640%	14.0156%	6.79%
52	Z2-100 Line	187	78.7600%	79.4100%	44.6959%	45.7957%	2.40%
53	Z1-800 Line	860	50.9500%	51.5700%	15.7974%	16.1679%	2.29%
54	Z1-500 Line	548	75.6800%	76.6300%	39.8330%	41.2736%	3.49%
55	Z1-500 Line	542	67.3900%	68.1200%	29.2145%	30.0231%	2.69%
56	Z1-500 Line	534	55.1000%	55.8500%	18.4496%	18.9745%	2.77%
<u>Sep-19</u>							
57	Z3-100 Line	114	52.3300%	72.7600%	16.6341%	35.7123%	53.42%
58	Z2-100 Line	111	49.4200%	69.8500%	14.9188%	32.0298%	53.42%
59	Z2-100 Line	187	78.2500%	85.3200%	43.8515%	57.1233%	23.23%
60	Z1-800 Line	860	43.8500%	50.5800%	12.1135%	15.5803%	22.25%
61	Z1-500 Line	548	69.2600%	79.6000%	31.3308%	46.1223%	32.07%
62	Z1-500 Line	542	64.0900%	74.3700%	25.8227%	37.9286%	31.92%
63	Z1-500 Line	534	52.1100%	62.0200%	16.4978%	23.8991%	30.97%
<u>Oct-19</u>							
64	Z3-100 Line	114	65.8100%	79.5500%	27.5383%	46.0361%	40.18%
65	Z2-100 Line	111	62.4000%	76.1300%	24.2411%	40.5090%	40.16%
66	Z2-100 Line	187	79.1900%	83.9500%	45.4205%	54.2703%	16.31%
67	Z1-800 Line	860	48.0200%	52.5100%	14.1578%	16.7464%	15.46%
68	Z1-500 Line	548	70.0400%	76.9300%	32.2582%	41.7393%	22.72%
69	Z1-500 Line	542	60.1300%	65.7400%	22.2681%	27.4663%	18.93%
70	Z1-500 Line	534	48.5400%	53.8700%	14.4358%	17.6202%	18.07%
<u>Nov-19</u>							
71	Z3-100 Line	114	68.4500%	76.4900%	30.3959%	41.0581%	25.97%
72	Z2-100 Line	111	65.4200%	73.4600%	27.1396%	36.6595%	25.97%
73	Z2-100 Line	187	71.6900%	74.4700%	34.3114%	38.0707%	9.87%
74	Z1-800 Line	860	54.1400%	56.7400%	17.7990%	19.6166%	9.27%
75	Z1-500 Line	548	57.9000%	61.8700%	20.4864%	23.7654%	13.80%
76	Z1-500 Line	542	55.1300%	59.1500%	18.4704%	21.4668%	13.96%
77	Z1-500 Line	534	43.8100%	47.9100%	12.0954%	14.0997%	14.22%
<u>Dec-19</u>							
78	Z3-100 Line	114	67.4800%	79.3900%	29.3130%	45.7615%	35.94%
79	Z2-100 Line	111	64.2100%	76.1200%	25.9388%	40.4939%	35.94%
80	Z2-100 Line	187	68.4300%	72.5300%	30.3732%	35.4064%	14.22%
81	Z1-800 Line	860	56.0100%	59.8600%	19.0883%	22.0444%	13.41%
82	Z1-500 Line	548	63.1300%	69.0100%	24.9120%	31.0392%	19.74%
83	Z1-500 Line	542	56.4100%	62.2500%	19.3760%	24.1055%	19.62%
84	Z1-500 Line	534	47.6600%	53.4800%	13.9685%	17.3651%	19.56%

Notes:

- 1/ Refers to the seven DART segments on the Tennessee system located along the Broad Run Expansion Project primary capacity path.
- 2/ Exhibit 11, p1 and 2, col (e) / col (c).
- 3/ Exhibit 11, p1 and 2, col (d) / col (c).
- 4/ Fuel Factor (Y) = $0.0235 \times \exp [3.7398 * (X)]$ where X is either col (c) or (d), as applicable. The fuel factor formula represents the "best-fit" composite fuel curve for the compressor units located in the primary path segments set forth above. The fuel curve was derived by determining fuel consumption along the primary path at various load factors.

Tennessee Gas Pipeline Company, L.L.C.
 Incremental System
 Allocated Fuel

Line No.	Primary Path Segments	CS# 1/	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(c)	(d)	(e)	(f)	(g)	(h)
Fuel															
1	114	114	2,880	256	58	0	0	0	66,563	106,347	103,071	107,294	115,690	120,628	622,787
2	114	119	0	0	0	73	0	0	0	0	35,811	63,234	78,254	78,174	255,546
3	187	96	41,337	39,987	47,434	41,377	42,416	30,594	36,043	34,946	39,130	57,182	24,038	29,392	463,876
4	187	106	124,172	76,310	75,847	83,076	115,789	137,698	148,027	195,607	213,257	229,685	196,322	185,912	1,781,702
5	187	871	281	0	15	10,720	30,360	29,170	37,739	52,503	51,768	51,914	49,448	42,050	355,968
6	187	875	0	0	0	0	2,682	0	20,885	73,939	74,789	51,827	71,613	71,071	366,806
7	860	87	94,511	69,575	69,916	55,630	46,689	59,221	76,862	85,646	74,994	76,266	80,022	86,717	876,049
8	548	550	45,270	0	0	16,652	69,063	36,477	64,588	104,227	94,334	100,196	90,831	121,857	743,495
9	548	555	84,015	78,514	74,694	94,480	5,317	37,726	109,730	132,245	106,302	76,776	57,869	102,524	960,192
10	548	860	88,375	30,279	30,061	27,524	16	35	50,491	91,464	110,078	109,679	96,171	117,483	751,656
11	542	542	63,235	48,667	45,056	55,023	27,032	29,798	59,224	69,521	59,555	53,662	54,781	80,052	645,606
12	542	546	62,658	39,936	40,992	65,321	53,744	44,766	65,152	78,611	72,540	76,428	38,068	89,639	727,855
13	534	534	0	0	153	0	85	0	0	54	52	13	0	0	357
14	534	538	1	6	0	0	1,106	0	7	31	2	4	0	18	1,175
15	Total		606,735	383,530	384,226	449,876	394,299	405,485	735,311	1,025,141	1,035,683	1,054,160	953,107	1,125,517	8,553,070
% Fuel Allocated to Incr. System 2/															
16	114	114	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.79%	53.42%	40.18%	25.97%	35.94%	
17	114	119	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.79%	53.42%	40.18%	25.97%	35.94%	
18	187	96	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%	23.23%	16.31%	9.87%	14.22%	
19	187	106	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%	23.23%	16.31%	9.87%	14.22%	
20	187	871	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%	23.23%	16.31%	9.87%	14.22%	
21	187	875	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%	23.23%	16.31%	9.87%	14.22%	
22	860	87	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.29%	22.25%	15.46%	9.27%	13.41%	
23	548	550	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.49%	32.07%	22.72%	13.80%	19.74%	
24	548	555	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.49%	32.07%	22.72%	13.80%	19.74%	
25	548	860	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.49%	32.07%	22.72%	13.80%	19.74%	
26	542	542	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.69%	31.92%	18.93%	13.96%	19.62%	
27	542	546	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.69%	31.92%	18.93%	13.96%	19.62%	
28	534	534	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.77%	30.97%	18.07%	14.22%	19.56%	
29	534	538	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.77%	30.97%	18.07%	14.22%	19.56%	
Fuel Allocated to Incr. System															
30	114	114	0	0	0	0	0	0	0	7,221	55,061	43,111	30,045	43,354	178,791
31	114	119	0	0	0	0	0	0	0	0	19,130	25,407	20,323	28,096	92,956
32	187	96	0	0	0	0	0	0	0	839	9,090	9,326	2,373	4,180	25,807
33	187	106	0	0	0	0	0	0	0	4,695	49,540	37,462	19,377	26,437	137,510
34	187	871	0	0	0	0	0	0	0	1,260	12,026	8,467	4,881	5,980	32,613
35	187	875	0	0	0	0	0	0	0	1,775	17,374	8,453	7,068	10,106	44,776
36	860	87	0	0	0	0	0	0	0	1,961	16,686	11,791	7,418	11,629	49,485
37	548	550	0	0	0	0	0	0	0	3,638	30,253	22,765	12,535	24,055	93,244
38	548	555	0	0	0	0	0	0	0	4,615	34,091	17,444	7,986	20,238	84,374
39	548	860	0	0	0	0	0	0	0	3,192	35,302	24,919	13,272	23,191	99,876
40	542	542	0	0	0	0	0	0	0	1,870	19,010	10,158	7,647	15,706	54,392
41	542	546	0	0	0	0	0	0	0	2,115	23,155	14,468	5,314	17,587	62,639
42	534	534	0	0	0	0	0	0	0	2	16	2	0	0	20
43	534	538	0	0	0	0	0	0	0	1	1	1	0	4	6
44	Total Fuel Allocated to Incr. System		0	0	0	0	0	0	0	33,182	320,733	233,773	138,238	230,561	956,487

Notes:

- Compressor stations located along the Broad Run Expansion Project primary capacity path.
 Broad Run Expansion Project related compressor units include: CS 118A, 119A, 875, 563, 114 (53.9% of total HP) and 106 (36.56% of total HP) (gas).
 Pre Broad Run Expansion Project compressor units include: CS 96, 110 and 114 (electric) and CS 114 (46.1% of total HP), 96, 106 (63.44% of total HP), 871, 87, 550, 555, 860, 542, 546, 534 and 538 (gas).
 CS 87 is located in TGP's DART Segments 860 (primary path segment) and 163. The fuel reported above on Line 7 is CS87 fuel allocated to Segment 860 based on scheduled volumes through each respective segment.
- Based on fuel factors. See Exhibit 11, Pages 3 and 4.

Tennessee Gas Pipeline Company, L.L.C.
 Incremental System
 Allocated Electric Power Costs

Line No.	Primary Path Segments (a)	CS# 1/ (b)	Jan-19 (c)	Feb-19 (d)	Mar-19 (e)	Apr-19 (f)	May-19 (g)	Jun-19 (h)	Jul-19 (i)	Aug-19 (j)	Sep-19 (k)	Oct-19 (l)	Nov-19 (m)	Dec-19 (n)	Total (o)
Electric Costs															
1	114	114	\$ 236,181	\$ 225,392	\$ 200,004	\$ 214,827	\$ 217,415	\$ 249,360	\$ 288,326	\$ 197,326	\$ 222,185	\$ 245,222	\$ 143,948	\$ 147,094	\$ 2,587,281
2	111	110	15,383	18,874	14,310	18,226	15,150	22,523	96,855	136,550	210,920	230,524	227,413	152,649	1,159,377
3	187	96	342,393	159,168	179,055	197,326	162,188	267,595	370,044	348,119	349,561	367,740	341,428	314,934	3,399,550
4		Total	\$ 593,957	\$ 403,435	\$ 393,369	\$ 430,379	\$ 394,753	\$ 539,478	\$ 755,224	\$ 681,995	\$ 782,666	\$ 843,486	\$ 712,790	\$ 614,677	\$ 7,146,208
Variable Electric Costs 2/															
5	114	114	\$ 91,223	\$ 84,963	\$ 62,428	\$ 74,127	\$ 73,891	\$ 104,676	\$ 142,263	\$ 54,279	\$ 80,206	\$ 103,882	\$ 2,269	\$ 5,518	\$ 879,726
6	111	110	231	218	183	436	143	6,905	77,554	119,028	187,596	204,535	198,879	121,922	917,630
7	187	96	303,388	120,741	140,641	158,194	122,932	227,613	330,135	308,315	310,370	328,400	301,753	274,754	2,927,235
8		Total	\$ 394,841	\$ 205,922	\$ 203,252	\$ 232,758	\$ 196,966	\$ 339,193	\$ 549,951	\$ 481,623	\$ 578,172	\$ 636,817	\$ 502,902	\$ 402,195	\$ 4,724,591
% Electric Variable Costs Allocated to Incr. System 3/															
9	114	114	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.79%	53.42%	40.18%	25.97%	35.94%	
10	111	110	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.79%	53.42%	40.16%	25.97%	35.94%	
11	187	96	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%	23.23%	16.31%	9.87%	14.22%	
Electric Costs Allocated to Incr. System															
12	114	114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,686	\$ 42,846	\$ 41,740	\$ 589	\$ 1,983	\$ 90,844
13	111	110	-	-	-	-	-	-	-	8,082	100,214	82,141	51,649	43,819	285,905
14	187	96	-	-	-	-	-	-	-	7,400	72,099	53,562	29,783	39,070	201,914
15		Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,167	\$ 215,159	\$ 177,443	\$ 82,021	\$ 84,872	\$ 578,663

Notes:

- 1/ Compressor stations located along the Broad Run Expansion Project primary capacity path. Broad Run Expansion Project related compressor units include: CS 118A, 119A, 875, 563, 114 (53.9% of total HP) and 106 (36.56% of total HP) (gas). Pre Broad Run Expansion Project compressor units include: CS 96, 110 and 114 (electric) and CS 114 (46.1% of total HP), 96, 106 (63.44% of total HP), 871, 87, 550, 555, 860, 542, 546, 534 and 538 (gas). CS 110 is located in TGP's DART Segments 111 (primary path segment) and 110. The electric costs reported above in Line 2 is CS110 electric costs allocated to Segment 111 based on scheduled volumes through each respective segment.
- 2/ Excludes fixed costs such as minimum demand charges, misc. facilities charges and related taxes which are incurred by Tennessee irrespective of electric utilization.
- 3/ Based on fuel factors. See Exhibit 11, Pages 3 and 4.

Tennessee Gas Pipeline Company, L.L.C.
 Fuel and Electric Power Cost Comparison

Line No.	Description	Ref	2020 Filing - Docket No. RP20-			2019 Filing - Docket No. RP19-			Difference		
			Fuel	Losses	Total	Fuel	Losses	Total	Fuel	Losses	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
F&LR Component											
<i>Transportation</i>											
1	Base Period	Exh2, P4 Ln 3, 7	36,002,371	(855,295)	35,147,076	32,836,571	817,805	33,654,376	3,165,800	(1,673,100)	1,492,700
2	Deferred F&LR Balance	Exh2, P4 Ln 3, 7	<u>(2,091,518)</u>	<u>2,837,234</u>	<u>745,716</u>	<u>(5,228,907)</u>	<u>2,158,499</u>	<u>(3,070,408)</u>	<u>3,137,389</u>	<u>678,734</u>	<u>3,816,124</u>
3	Total Transportation		38,093,889	(3,692,529)	34,401,360	38,065,478	(1,340,694)	36,724,784	28,411	(2,351,834)	(2,323,424)
<i>Storage</i>											
4	Base Period	Exh2, P4 Ln 6, 8	2,223,237	17,940	2,241,177	2,143,383	23,803	2,167,186	79,854	(5,863)	73,991
5	Deferred F&LR Balance	Exh2, P4 Ln 6, 8	<u>48,505</u>	<u>660</u>	<u>49,165</u>	<u>(120,085)</u>	<u>17,151</u>	<u>(102,934)</u>	<u>168,591</u>	<u>(16,491)</u>	<u>152,099</u>
6	Total Storage		2,174,732	17,280	2,192,012	2,263,468	6,652	2,270,120	(88,737)	10,628	(78,108)
<i>Total</i>											
7	Base Period		38,225,608	(837,355)	37,388,253	34,979,954	841,608	35,821,562	3,245,654	(1,678,963)	1,566,691
8	Deferred F&LR Balance		<u>(2,043,013)</u>	<u>2,837,894</u>	<u>794,881</u>	<u>(5,348,993)</u>	<u>2,175,651</u>	<u>(3,173,342)</u>	<u>3,305,980</u>	<u>662,243</u>	<u>3,968,223</u>
9	Total		40,268,621	(3,675,249)	36,593,372	40,328,947	(1,334,043)	38,994,904	(60,326)	(2,341,206)	(2,401,532)
EPCR Component											
<i>Transportation</i>											
10	Base Period	Exh1, P2 Ln 1	26,723,920	0	26,723,920	31,546,841	0	31,546,841	(4,822,921)	0	(4,822,921)
11	Deferred EPCR Balance	Exh1, P2 Ln 1	<u>7,050,579</u>	<u>0</u>	<u>7,050,579</u>	<u>155,918</u>	<u>0</u>	<u>155,918</u>	<u>6,894,661</u>	<u>0</u>	<u>6,894,661</u>
12	Total Transportation		19,673,341	0	19,673,341	31,390,923	0	31,390,923	(11,717,582)	0	(11,717,582)

**Tennessee Gas Pipeline Company, L.L.C.
 Fuel and Electric Power Cost Comparison
 Incremental Transportation System Detail**

Line No.	Description	Ref	2020 Filing - Docket No. RP20-____	2019 Filing - Docket No. RP19-____	Difference
	(a)	(b)	(c)	(d)	(e)
<u>Fuel Component</u>					
1	Base Period	Exh2, P4 Ln 11	956,487	28,644	927,843
2	Deferred F&LR Balance	Exh2, P4 Ln 11	<u>(180,906)</u>	<u>(968)</u>	<u>(179,938)</u>
3	Total		1,137,393	29,612	1,107,781
<u>EPCR Component</u>					
4	Base Period	Exh1, P2 Ln 3	578,663	26,669	551,993
5	Deferred EPCR Balance	Exh1, P2 Ln 3	<u>(102,747)</u>	<u>(9,354)</u>	<u>(93,393)</u>
6	Total		681,409	36,023	645,386