

**DIRECT TESTIMONY OF
ELEANOR K. KEETON
ON BEHALF OF KINGSPORT POWER COMPANY
D/B/A AEP APPALACHIAN POWER
BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
DOCKET NO. 19-00106**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.**

2 A. My name is Eleanor K. Keeton. My business address is Three James Center, Suite
3 1100, 1051 East Cary Street Richmond, Virginia 23219. I am employed by
4 Appalachian Power Company (APCo) as a Regulatory Consultant Senior VA/TN.

5 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND**
6 **AND PROFESSIONAL EXPERIENCE.**

7 A. I received my Master of Public Administration from Virginia Commonwealth
8 University in 2015, with a concentration in Public Policy. From 2013 to 2015 I
9 worked as a graduate research fellow at the Virginia Department of Corrections where
10 my primary responsibilities were to support operations of the Research Unit, including
11 data extraction, collection, and collation for federal grant reporting purposes and
12 compliance to agency procedure. In 2015 I was hired by the Virginia Department of
13 Corrections as a Senior Research Analyst in the Program Fidelity and Evaluation Unit.
14 My primary duties included designing and maintaining various research studies for
15 program evaluation and policy analysis, and making recommendations based on the
16 outcomes of the analyses. In August 2017, I accepted the position of Regulatory
17 Consultant Senior with APCo.

1 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY AS A WITNESS**
2 **BEFORE ANY REGULATORY COMMISSION?**

3 A. Yes. I have submitted testimony to the Tennessee Public Utility Commission (TPUC
4 or Commission) on behalf of Kingsport Power Company (KgPCo or the Company) in
5 Docket No. 18-00125. I have also submitted testimony on behalf of Appalachian
6 Power Company (APCo) before the Virginia State Corporation Commission.

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

8 A. The purpose of my testimony is to provide an overview of the elements of KgPCo's
9 filing to implement new rates under its Targeted Reliability Plan and Major Storm
10 Alternative Rate Mechanism (TRP & MS ARM), including reliability information
11 and metrics as directed by the Commission's Order in Docket No. 17-00032. I also
12 explain the method used to allocate the revenue requirement to the customer classes
13 as approved in the Company's prior TRP & MS filing (Docket No. 18-00125),
14 support the development of the associated rates for the various customer classes, and
15 sponsor the TRP & MS tariff sheets.

16 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

17 A. Yes, I am sponsoring the following exhibits:

- 18 • KgPCo Exhibit No. 1 (EKK): Kingsport Power Reliability Profile (10/1/2018 –
19 9/30/2019)
- 20 • KgPCo Exhibit No. 2 (EKK): TRP & MS Rider Revenue Allocation and Rate
21 Calculations
- 22 • KgPCo Exhibit No. 3 (EKK): TRP & MS Rider (clean and redline)
- 23 • KgPCo Exhibit No. 4 (EKK): Typical Bill Comparison

1 **Q. PLEASE BRIEFLY DESCRIBE THE TRP & MS ARM AS APPROVED IN**
2 **CASE NO. 17-00032.**

3 A. The TRP & MS ARM recovers costs incurred under the Targeted Reliability Plan
4 (TRP) and expenses associated with Major Storm (MS) restoration efforts beyond
5 the amounts recovered through base rates. The TRP is designed to improve
6 reliability for KgPCo's distribution customers through two components: a vegetation
7 management program (VMP) and a system improvement program (SIP). The VMP
8 is transitioning the Company to a four-year, ongoing vegetation management cycle,
9 which requires an initial accelerated focus on rights-of-way (ROW) clearing,
10 followed by a vegetation management program that addresses each circuit every four
11 years. The SIP, which is being phased in over a 10-year period, encompasses three
12 features that improve reliability and protect the distribution system from storms and
13 other events: circuit improvements, circuit inspections, and station improvements.

14 Pursuant to the Order in Docket No. 17-00032, the Company is filing to
15 recover its TRP costs and MS expenses, including those incurred during the period
16 October 2018 – September 2019 that are not included in base rates, as reflected in
17 the Company's TRP & MS balance as of September 30, 2019. In the Company's
18 last base rate case, Docket No. 16-00001, the Commission set base rates to include
19 \$903,372 in distribution and reliability Operation and Maintenance (O&M) expenses
20 and \$392,381 for MS related O&M costs. The TRP & MS ARM is designed to
21 recover or return any costs above or below these amounts.

1 **Q. PLEASE DESCRIBE KGPCO EXHIBIT NO. 1 (EKK).**

2 A. KgPCo Exhibit No. 1 (EKK) provides the information and metrics for the review
3 period October 1, 2018, through September 30, 2019, as directed by the
4 Commission's Order in Docket No. 17-00032.¹

5 **Q. PLEASE BRIEFLY DESCRIBE THE STATUS OF THE VMP COMPONENT**
6 **OF THE TRP.**

7 A. The Company is currently in the initial 4-year cycle, which it anticipates will be
8 completed in 2021. During the most recent reporting period, October 1, 2018,
9 through September 30, 2019, the Company completed vegetation management
10 activities on 314 miles of ROWs. Cumulatively, the Company has completed
11 vegetation management activities on 493 of the total 1,322 miles of ROWs, and
12 performed work on 30 of the 65 targeted distribution circuits since the inception of
13 the program.

14 **Q. PLEASE DISCUSS THE STATUS OF THE SIP COMPONENT OF THE TRP.**

15 A. The SIP component of KgPCo' TRP is underway and progressing well. During the
16 most recent review period the Company incurred costs related to circuit inspections
17 and maintenance, circuit improvements, and pole inspections and replacements. The
18 Company has completed the inspection of 1,868 wood poles, including over 525
19 streetlight poles, 300 overhead circuit miles, and over 1,614 underground structures.

¹ See *In re: Petition of Kingsport Power Company d/b/a AEP Appalachian Power for Approval of Its Targeted Reliability Plan, and Its TRP & MS Rider, An Alternative Rate Mechanism and Motion for Protective Order*, Docket No. 17-0032, *Order Granting Petition*, p. 11 (November 9, 2017).

1 The Company has also completed the replacement of 205 wood poles as a result of
2 these inspections.

3 **Q. BRIEFLY DESCRIBE ANY MAJOR STORM EVENTS THAT OCCURRED**
4 **DURING THE PERIOD OCTOBER 2018 THROUGH SEPTEMBER 2019.**

5 A. The Company experienced two major weather events during this period.² The first
6 and more severe event was a snow storm that occurred December 9, 2018. The
7 duration of this event was 134 hours and it caused damage to poles, crossarms,
8 conductors and insulators that resulted in power outages for more than 14,000
9 KgPCo customers. The second event occurred on February 24, 2019, had a duration
10 of 43 hours, and resulted in damage that left almost 4,000 KgPCo customers without
11 power.

12 **Q. WHAT IS THE REVENUE REQUIREMENT THE COMPANY IS SEEKING**
13 **IN THIS CASE?**

14 A. The revenue requirement the Company is seeking to recover in this case is
15 \$6,683,782, as sponsored by Company witness Allen. This amount excludes the
16 Prompt Payment Discount, per the TPUC approved Stipulation and Settlement
17 Agreement in Docket No. 18-00125.³

² Per the TPUC Order approving the Stipulation and Settlement Agreement in Docket No. 18-00125, KgPCo used the IEEE Standard 1366-2012 to determine if this weather event qualified as a Major Storm for purposes of recovering eligible Major Storm costs under the Company's TRP&MS Rider. *In re: Petition of Kingsport Power Company d/b/a AEP Appalachian Power for Annual Recovery Under the Targeted Reliability Plan and Major Storm Rider ("TRP & MS Rider"), Alternative Rate Mechanisms Approved in Docket No. 17-00032, Docket No. 18-00125, Order Approving the Stipulation and Settlement Agreement*, p. 9 (August 5, 2019).

³ *Id.* at 8.

1 **Q. HOW DID YOU ALLOCATE THE CALCULATED REVENUE**
2 **REQUIREMENT OF \$6,683,782 TO THE CLASSES?**

3 A. I allocated the revenue requirement to KgPCo's customer classes consistent with the
4 methodology approved in its most recent base rate case, Docket No. 16-00001, and
5 prescribed by the TPUC in Docket No. 17-00032. The resultant revenue allocation
6 by rate schedule is shown on KgPCo Exhibit No. 2 (EKK).

7 **Q. HOW DID YOU DETERMINE THE IMPACT TO INDIVIDUAL RATE**
8 **SCHEDULES?**

9 A. Using the prescribed base case billing determinants, I updated the demand, energy,
10 and customer charge components of each rate schedule, as appropriate. The
11 resultant TRP & MS Rider rate schedule, in both red-line and clean formats, is
12 included as KgPCo Exhibit No. 3 (EKK).

13 **Q. WHAT IS THE IMPACT ON A RESIDENTIAL CUSTOMER'S BILL?**

14 A. A residential customer will see an increase of \$2.48 in the service charge component
15 on their monthly bill. KgPCo Exhibit No. 4 (EKK) provides the typical monthly bill
16 increases for all customer classes by comparing the rates effective November 1,
17 2019 to those with the TRP & MS increase.

18 **Q. WHEN WILL THE PROPOSED TRP & MS RATES BE IMPLEMENTED?**

19 A. KgPCo is seeking an effective date of April 1, 2020, on a service rendered basis.

20 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

21 A. Yes, it does.

Kingsport Power (10/1/18 - 9/30/19) Reliability Profile

PROFILE:	10/1/18 - 9/30/19	Footnote
Total Customer Accounts	49,373	[i]
Active Customer Premises	48,086	[ii]
Residential Customer Accounts	43,356	
OH Residential Services	30,755	[iii]
Total OH Distribution R-O-W (2-/3-phase miles, single phase miles)	2-/3-phase miles 411; Single phase miles 911	
OH Distr. R-O-W Miles Requiring Vegetation Management (2-/3-phase miles, single phase miles)	2-/3-phase miles 411; Single phase miles 911	
Distribution Circuits	65	
Distribution Pole Miles	1,322	
Distribution Cable Miles	261	
R-O-W Width	40 feet	
NEW OH & UG SERVICE CONNECTS:	10/1/18 - 9/30/19	
New Service Connects	575	
New Service Connects Total Costs	\$1,154,859	
Average Time to Complete New Service Requests	4.38 Days	
Average Daily OT Worked per Lineman (hrs)	1.48	
RESOURCES/EXPENSES:	10/1/18 - 9/30/19	
Distribution Employees	50	
Distribution Reliability Program Employees	30	
Company OH Distribution Linemen	21	
Contract OH Distribution Linemen	20	
Restoration Vehicles	58	[iv]
Pole Inventory (UOM = each)	163	[v]
Cross Arm Inventory (UOM = each)	170	[v]
Wire Inventory (UOM = feet)	118,388	[v]
Distribution O&M Expenses	\$12,909,220	
Distribution Capital Expenses	\$10,509,514	
Distribution Reliability Improvement Expenses	\$6,563,953	
Major Storms Restoration Expenses	\$2,097,678	
Service Restoration Expenses (excl. major storms)	\$1,132,854	
POLE INSPECTION PROGRAM:	10/1/18 - 9/30/19	
Utility or Contractor (provide name) Conducted	GeoForce	
Inspection Cycle (years)	10	
Number of Distribution Wood Poles on System	approx. 31,507	
Number of Distribution Wood Poles Inspected	1,868	
Distribution Wood Utility Poles Replaced (as a result of routine inspections)	205	
Distribution Wood Utility Poles Replaced as a result of major storms	11	
Distribution Wood Utility Poles Reinforced	0	

RELIABILITY IMPROVEMENT TARGETS:	10/1/18 - 9/30/19	
Number of Worst Circuits Targeted	13	
Number of Worst Devices Targeted	Not Available	[vi]
Number of Worst CEI Customers Targeted	Not Available	[vi]
OUTAGES (Including Major Storms):	10/1/18 - 9/30/19	
Major Storms	2	
Major Storms Impacting > 100,000 Customers	0	
Number of Outage Events	2,299	
Minimum Time for an Outage Event to Qualify as a Sustained Outage (min.)	6	
Average Number of Hours For Full Restoration (last customer on) Per Event	6.1	
Total Customer Hours Out	501,377	
Customer Hours Out – UG Mat'l	Included in OH Material	
Customer Hours Out – Trees	229,250.4	
Customer Hours Out – Weather	142,076.9	
Customer Hours Out – OH Mat'l	45,168.0	
Customer Hours Out – Misc.	8,530.9	
Customer Hours Out – Public	29,092.6	
Customer Hours Out – Bulk Pwr.	2,807.5	
Customer Hours Out – Company	44,450.7	
Number of Customers with greater than 10 Outages	8	[vii]
Number of Customers with 7-10 Outages	1,220	[vii]
Number of Customers with 4-6 Outages	6,807	[vii]
Number of Customers with 1-3 Outages	33,224	[vii]
Number of Customers with 0 Outages	6,827	[vii]
1st Major Cause of Outages	Veg Inside RoW	
2nd Major Cause of Outages	Scheduled	
3rd Major Cause of Outages	Animal	
4th Major Cause of Outages	Equipment	
5th Major Cause of Outages	Veg Outside RoW	

OUTAGES (Excluding Major Storms):	10/1/18 - 9/30/19	
Number of Outage Events (excl. major storms)	2,053	
Average Number of Hours For Full Restoration (last customer on) Per Event (excl. major storms)	3.2	
Total Customer Hours Out (excl. major storms)	218,283	
Customer Hours Out – UG Mat'l (ex. major storms)	Included in OH Material	
Customer Hours Out – Trees (ex. major storms)	102,863.4	
Customer Hours Out – Weather (ex. major storms)	10,104.5	
Customer Hours Out – OH Mat'l (ex. major storms)	21,477.9	
Customer Hours Out – Misc. (ex. major storms)	7,680.5	
Customer Hours Out – Public (ex. major storms)	28,898.6	
Customer Hours Out – Bulk Pwr. (ex. major storms)	2,807.5	
Customer Hours Out – Company (ex. major storms)	44,450.7	
Number of Customers with greater than 10 outages	6	[vii]
Number of Customers with 7-10 Outages	567	[vii]
Number of Customers with 4-6 Outages	5,103	[vii]
Number of Customers with 1-3 Outages	33,430	[vii]
Number of Customers with 0 Outages	8,980	[vii]
1st Major Cause of Outages	Veg Inside RoW	
2nd Major Cause of Outages	Scheduled	
3rd Major Cause of Outages	Animal	
4th Major Cause of Outages	Equipment	
5th Major Cause of Outages	Veg Outside RoW	
INDICES EXCLUDING MAJOR STORMS: (Distribution only)	10/1/18 - 9/30/19	
SAIDI Goal (minutes, excl. major storms)	Not Applicable	[viii]
SAIDI Actual (minutes, excl. major storms)	268.9	
SAIFI Actual (interruptions, excl. major storms)	1.562	
CAIDI Actual (minutes, excl. major storms)	172.1	
CTAIDI Actual (minutes, excl. major storms)	330.6	
Service Availability Goal (% , excl. major storms)	Not Applicable	[viii]
Actual Service Availability (% , excl. major storms)	99.95%	
INDICES WITH NO EXCLUSIONS: (Distribution only)	10/1/18 - 9/30/19	
SAIDI Actual (minutes, incl. major storms)	622.1	
SAIFI Actual (interruptions, incl. major storms)	1.87	
CAIDI Actual (minutes, incl. major storms)	332.6	
CTAIDI Actual (minutes, incl. major storms)	725.0	
Actual Service Availability (% , incl. major storms)	99.880%	

INDICES EXCLUDING MAJOR STORMS: (Total Distribution and Bulk Power)	10/1/18 - 9/30/19	
SAIDI Goal (minutes, excl. major storms)	Not Applicable	[ix]
SAIDI Actual (minutes, excl. major storms)	272.4	
SAIFI Actual (interruptions, excl. major storms)	1.603	
CAIDI Actual (minutes, excl. major storms)	169.9	
CTAIDI Actual (minutes, excl. major storms)	334.9	
Service Availability Goal (% , excl. major storms)	Not Applicable	[ix]
Actual Service Availability (% , excl. major storms)	99.950%	
INDICES WITH NO EXCLUSIONS: (Total Distribution and Bulk Power)	10/1/18 - 9/30/19	
SAIDI Actual (minutes, incl. major storms)	625.6	
SAIFI Actual (interruptions, incl. major storms)	1.911	
CAIDI Actual (minutes, incl. major storms)	327.3	
CTAIDI Actual (minutes, incl. major storms)	729.1	
Actual Service Availability (% , incl. major storms)	99.88%	
TREE-RELATED DATA	10/1/18 - 9/30/19	
Routine Tree Trimming Expense	\$3,679,624	[x]
Tree Removal Program Expense	\$1,190,572	[xi]
Hot Spot Trimming Expense	\$7,123	[xii]
Tree Trimming Cycle (urban and rural, years)	4	[xiii]
Distribution R-O-W Miles Maintained	314	
Spot Inspections Conducted	326	
Total Distribution Foresters	1	
Degreed Distribution Foresters	1	
Contract Tree Trimmers (approx.)	75	[xiv]
Tree Outage Events (excl. major storms)	801	
Average Number of Hours For Full Restoration (last customer on) Per Tree Event (excl. major storms)	3.9	
Range for Full Restoration (shortest, longest)	0.12 to 43.67	
Tree SAIFI Actual (excl. major storms)	0.670	
Tree SAIFI Goal (excl. major storms)	Not Applicable	[xv]
Tree SAIDI Actual (minutes, excl. major storms)	128.3	
Total Tree Trimming Complaints (Trimming Report to TPUC)	1	

2018-2019 Footnotes

[i] Total Customer Accounts per MACSS (Marketing and Customer Services System) Page 9-1 report for December 2018. The Residential Customer Accounts are a subset of the total number from the same report.

[ii] Total premise counts (end of year actual) used in the calculation of reliability indices.

[iii] The number of OH Residential Services is determined from GIS Small World and MACSS classification of accounts (residential).

[iv] The count of vehicles reflects the number of distribution vehicles involved in restoration throughout the Kingsport service territory. In the event of a more severe storm, additional vehicles would be brought in from neighboring states and ultimately from across the AEP system.

[v] The 2018-2019 inventory numbers came from MAXIMO (Work and Asset Management System).

[vi] Records are not kept on specific devices and CEI customers targeted.

[vii] There are processes that are not yet perfected in tying actual premises to outages. As the processes improve, the estimates of the number of customers with a particular number of outages will tend to increase.

[viii] The Company does not set goals for "Distribution Only."

[ix] Kingsport does not set explicit goals for SAIDI or ASAI.

[x] O&M expenses from the VMP representing accounts 5930000 and 5930001.

[xi] Capital expenses from the VMP representing account 1070001.

[xii] O&M for material and outside service only. All O&M expenditures are also included in the 'Routine Tree Trimming Expense'.

[xiii] The Company switched to a 4 year cycle beginning 1/1/18.

[xiv] Distribution-Only.

[xv] Kingsport does not have a tree SAIFI goal.

Kingsport Power Company
TRP & MS Rider
Revenue Allocation and Rate Calculation

Revenue Allocation Factor by Tariff Subclass (a)		Revenue (b) Requirement	Billing (c) Determinants	Energy (¢)/kWh	Rate/Charge Demand (\$)/KW or KVA	Customer/Service (\$)/Customer
(1)		(2)	(3)		(4) = (2 / 3)	
<u>Residential</u> - 011, 015, 018, 030, 051	28.30%	\$ 1,889,786	495,438			\$ 3.81
<u>Small General Service (SGS)</u> - 231, 232, 233	3.12%	\$ 208,824	43,489			\$ 4.80
<u>Medium General Service (MGS) Secondary</u> - 235	14.26%	\$ 953,800	425,067		\$ 2.24	
<u>General Service Time-of-Day (GS-TOD)</u> - 229	0.02%	\$ 1,046	477,775	0.21897		
<u>Medium General Service (MGS) Primary</u> - 237	0.17%	\$ 11,634	5,381		\$ 2.16	
<u>Large General Service (LGS) Secondary</u> - 240, 242	24.26%	\$ 1,622,037	667,906		\$ 2.43	
<u>Large General Service (LGS) Primary</u> - 244, 246	1.48%	\$ 99,073	52,670		\$ 1.88	
<u>LGS Subtransmission/Transmission</u> - 248	0.00%	\$ -	0		\$ 1.84	
<u>Industrial Power (IP) Secondary</u> - 327	0.00%	\$ -	0		\$ 0.88	
<u>Industrial Power (IP) Primary</u> - 322	1.88%	\$ 125,473	145,875		\$ 0.86	
<u>Industrial Power (IP) Subtransmission/Transmission</u> - 323, 324	15.88%	\$ 1,062,069	1,314,816		\$ 0.81	
<u>Church Service (CS)</u> - 221	1.24%	\$ 82,886	9,850,982	0.84140		
<u>Public Schools (PS)</u> - 640, 641, 642	2.78%	\$ 185,581	27,413,429	0.67697		
<u>Electric Heating General (EHG)</u> - 208, 209	3.24%	\$ 216,426	96,863		\$ 2.23	
<u>Outdoor Lighting (OL)</u> - 094 - 126	0.97%	\$ 64,619	65,663			\$ 0.98
(d) <u>Non-Tariff Class (SL)</u>	2.40%	\$ 160,529	N/A	N/A	N/A	N/A
Total	100.00%	\$ 6,683,782				

(a) Allocation factors derived from Attachment A, Schedule 13, and Attachment C of the Settlement Agreement in Docket No. 16-00001

(b) Excludes Prompt Payment discount per TPUC approved Settlement Agreement in Docket No. 18-00125

(c) 12 months billing determinants from Docket No. 16-00001, Settlement Attachment C, Schedules 1-10

(d) Street Lighting (SL) rates determined by contract

KINGSPORT POWER COMPANY
Number 21-1
d/b/a AEP Appalachian Power
Kingsport, Tennessee

First Second Revised Sheet

T.P.U.C. Tariff Number 2

TRP & MS RIDER

In accordance with Tennessee Code Annotated § 65-5-103 (d) (2) (A) (ii) and (iii), Kingsport Power is authorized under the terms of this rider to apply a charge to all customer bills on a service rendered basis to recover actually incurred TRP & MS (Targeted Reliability Plan & Major Storm) Rider costs.

1. Calculation of Targeted Reliability Program and Major Storm Rider Recovery

At least annually the Company will file information regarding actual Targeted Reliability Plan (TRP) costs and Major Storm (MS) expenses. The annual change in the Company's TRP & MS Rider recovery amount shall be calculated according to the following formula:

$$\text{TRP \& MSa} - \text{TRP \& MSr}$$

Where

TRP & MSa is the Company's Targeted Reliability Plan and Major Storm actual costs incurred by the Company for the period. The costs will be net of the reliability expenses and major storm expenses approved in the Company's most recent base case (an annual amount of \$1,295,753). In developing the Targeted Reliability Plan return on capital, the Company will use the most recent base case authorized rate of return.

TRP & MSr is the actual revenues received as a result of TRP & MS Rider rates in effect for the same period.

2. Updates to TRP & MS Rider Costs

TRP & MS Rider rates shall remain in effect until such time as new TRP & MS Rider rates are approved by the Tennessee Public Utility Commission.

3. Determination of Adjustments to Surcharges by Tariff

The Company will adjust the level of revenue recovery (positive or negative) under the TRP & MS Rider by the amount of the Calculation described in Section 1 and any remaining prior period over/under recovery balance. Prior period over/under recovery balances result from differences between the Company's actual costs as calculated in Section 1 and actual billing under the Rider in prior reporting periods. The Company will allocate the revenue requirement to the individual tariff class by application of the revenue allocation factors used in the Company's most recent base case, and will use the appropriate billing determinants, as determined in the Company's most recent base case, to develop the TRP & MS Rider tariff charges.

4. Notification of Change in Charge by the Company

The Company will provide no less than a 30-day notice of the proposed effective date in any change in the Rider charge to its customers. The Company will also provide the calculations and other information supporting the Rider charges to the Staff of the Tennessee Public Utility Commission in advance of the effective date of such charge.

KINGSPORT POWER COMPANY
d/b/a AEP Appalachian Power
Kingsport, Tennessee

Sheet Number 21-2
T.P.U.C. Tariff Number 2

TRP & MS RIDER

5. Charge

Pursuant to the provisions of this Rider, a TRP & MS Rider charge will be applied to each account under the Company's filed tariffs.

The TRP & MS Rider charge applicable to each tariff is set below:

<u>Tariff</u>	<u>Energy Rate</u>	<u>Demand Rate</u>	<u>Service Charge</u>
	(¢) / kWh	(\$)/ KW or *KVA	(\$)/Customer
<u>Residential</u>			\$3.814.33
<u>Residential Employee</u>			\$3.814.33
<u>Residential Time-of-Day</u>			\$3.814.33
<u>Small General Service (SGS)</u>			\$4.804.67
<u>Medium General Service (MGS) Secondary</u>		\$2.240.78	
<u>General Service Time-of-Day (GS-TOD)</u>	0. 2189707636		
<u>Medium General Service (MGS) Primary</u>		\$2.160.75	
<u>Large General Service (LGS) Secondary*</u>		\$2.430.85	
<u>Large General Service (LGS) Primary*</u>		\$1.880.66	
<u>LGS Subtransmission/Transmission*</u>		\$1.840.65	
<u>Industrial Power (IP) Secondary</u>		\$0.8834	
<u>Industrial Power (IP) Primary</u>		\$0.8630	
<u>Industrial Power (IP) Subtransmission/Transmission</u>		\$0.8128	
<u>Church Service</u>	0. 8414029340		
<u>Public Schools (PS)</u>	0. 6769723606		
<u>Electric Heating General (EHG)**</u>		\$2.230.78	
<u>Outdoor Lighting (OL)- (per Lamp)</u>			\$0.9834

**Demand is measured in accordance with tariff.

KINGSPORT POWER COMPANY
d/b/a AEP Appalachian Power
Kingsport, Tennessee

Second Revised Sheet Number 21-1
T.P.U.C. Tariff Number 2

TRP & MS RIDER

In accordance with Tennessee Code Annotated § 65-5-103 (d) (2) (A) (ii) and (iii), Kingsport Power is authorized under the terms of this rider to apply a charge to all customer bills on a service rendered basis to recover actually incurred TRP & MS (Targeted Reliability Plan & Major Storm) Rider costs.

1. Calculation of Targeted Reliability Program and Major Storm Rider Recovery

At least annually the Company will file information regarding actual Targeted Reliability Plan (TRP) costs and Major Storm (MS) expenses. The annual change in the Company's TRP & MS Rider recovery amount shall be calculated according to the following formula:

$$\text{TRP \& MSa} - \text{TRP \& MSr}$$

Where

TRP & MSa is the Company's Targeted Reliability Plan and Major Storm actual costs incurred by the Company for the period. The costs will be net of the reliability expenses and major storm expenses approved in the Company's most recent base case (an annual amount of \$1,295,753) . In developing the Targeted Reliability Plan return on capital, the Company will use the most recent base case authorized rate of return.

TRP & MSr is the actual revenues received as a result of TRP & MS Rider rates in effect for the same period.

2. Updates to TRP & MS Rider Costs

TRP & MS Rider rates shall remain in effect until such time as new TRP & MS Rider rates are approved by the Tennessee Public Utility Commission.

3. Determination of Adjustments to Surcharges by Tariff

The Company will adjust the level of revenue recovery (positive or negative) under the TRP & MS Rider by the amount of the Calculation described in Section 1 and any remaining prior period over/under recovery balance. Prior period over/under recovery balances result from differences between the Company's actual costs as calculated in Section 1 and actual billing under the Rider in prior reporting periods. The Company will allocate the revenue requirement to the individual tariff class by application of the revenue allocation factors used in the Company's most recent base case, and will use the appropriate billing determinants, as determined in the Company's most recent base case, to develop the TRP & MS Rider tariff charges.

4. Notification of Change in Charge by the Company

The Company will provide no less than a 30-day notice of the proposed effective date in any change in the Rider charge to its customers. The Company will also provide the calculations and other information supporting the Rider charges to the Staff of the Tennessee Public Utility Commission in advance of the effective date of such charge.

KINGSPORT POWER COMPANY
d/b/a AEP Appalachian Power
Kingsport, Tennessee

Second Revised Sheet Number 21-2
T.P.U.C. Tariff Number 2

TRP & MS RIDER

5. Charge

Pursuant to the provisions of this Rider, a TRP & MS Rider charge will be applied to each account under the Company's filed tariffs.

The TRP & MS Rider charge applicable to each tariff is set below:

<u>Tariff</u>	<u>Energy Rate</u>	<u>Demand Rate</u>	<u>Service Charge</u>
	(¢) / kWh	(\$)/ KW or *KVA	(\$)/Customer
<u>Residential</u>			\$3.81
<u>Residential Employee</u>			\$3.81
<u>Residential Time-of-Day</u>			\$3.81
<u>Small General Service (SGS)</u>			\$4.80
<u>Medium General Service (MGS) Secondary</u>		\$2.24	
<u>General Service Time-of-Day (GS-TOD)</u>	0.21897		
<u>Medium General Service (MGS) Primary</u>		\$2.16	
<u>Large General Service (LGS) Secondary*</u>		\$2.43	
<u>Large General Service (LGS) Primary*</u>		\$1.88	
<u>LGS Subtransmission/Transmission*</u>		\$1.84	
<u>Industrial Power (IP) Secondary</u>		\$0.88	
<u>Industrial Power (IP) Primary</u>		\$0.86	
<u>Industrial Power (IP) Subtransmission/Transmission</u>		\$0.81	
<u>Church Service</u>	0.84140		
<u>Public Schools (PS)</u>	0.67697		
<u>Electric Heating General (EHG)**</u>		\$2.23	
<u>Outdoor Lighting (OL)- (per Lamp)</u>			\$0.98

**Demand is measured in accordance with tariff.

KINGSPORT POWER COMPANY
Typical Bill Comparison

			Bill Amount (a)	Bill Amount (a)		
			Under	Under		
			Current Rates	Proposed TRP MS		
	Tariff	Energy / Demand	T.P.U.C. Tariff No. 2	T.P.U.C. Tariff No. 2	Dollar	Percent
	<u>Schedule</u>	<u>Consumption</u>	<u>Effective 11/6/2019</u>	<u>Effective 04/1/2020</u>	<u>Increase</u>	<u>Increase</u>
			\$	\$	\$	%
RS		100 kWh	21.17	23.65	2.48	11.7%
RS		250 kWh	33.67	36.15	2.48	7.4%
RS		500 kWh	54.53	57.01	2.48	4.5%
RS		750 kWh	75.38	77.86	2.48	3.3%
RS		1,000 kWh	96.22	98.70	2.48	2.6%
RS		1,500 kWh	137.93	140.41	2.48	1.8%
RS		2,000 kWh	179.62	182.10	2.48	1.4%
RS		3,000 kWh	263.02	265.50	2.48	0.9%
RS		5,000 kWh	429.81	432.29	2.48	0.6%
RS		7,500 kWh	638.31	640.79	2.48	0.4%
SGS		375 kWh	50.99	54.12	3.13	6.1%
SGS		750 kWh	84.87	88.00	3.13	3.7%
SGS		1,500 kWh	147.91	151.04	3.13	2.1%
SGS		2,000 kWh	189.95	193.08	3.13	1.6%
MGS	Secondary	30 kW / 6,000 kWH	745.53	789.33	43.80	5.9%
	Secondary	50 kW / 12,500 kWH	1,391.36	1,464.36	73.00	5.2%
	Secondary	75 kW / 50,000 kWH	4,253.72	4,363.22	109.50	2.6%
MGS	Primary	250 kW / 50,000 kWH	5,808.62	6,161.12	352.50	6.1%
	Primary	500 kW / 200,000 kWH	18,013.31	18,718.31	705.00	3.9%
LGS	Secondary	150 kW / 30,000 kWH	3,937.31	4,215.39	278.08	7.1%
	Secondary	300 kW / 60,000 kWH	7,744.40	8,302.14	557.74	7.2%
	Secondary	500 kW / 325,000 kWH	25,742.39	26,671.43	929.04	3.6%
LGS	Primary	1000 kW / 200,000 kWH	23,603.51	25,038.23	1,434.72	6.1%
	Primary	1000 kW / 400,000 kWH	34,106.57	35,541.29	1,434.72	4.2%
IP	Sub/Tran	5,000 kW / 2,500,000 kWH	170,655.34	173,305.34	2,650.00	1.6%
	Sub/Tran	10,000 kW / 6,500,000 kWH	397,302.54	402,602.54	5,300.00	1.3%
	Sub/Tran	20,000 kW / 10,000,000 kWH	672,081.94	682,681.94	10,600.00	1.6%
	Sub/Tran	50,000 kW / 25,000,000 kWH	1,686,110.00	1,712,610.00	26,500.00	1.6%

(a) Excludes Prompt Payment discount per TPUC approved Settlement Agreement in Docket No. 18-00125