

**DIRECT TESTIMONY OF
WILLIAM K. CASTLE
ON BEHALF OF KINGSPORT POWER COMPANY
D/B/A AEP APPALACHIAN POWER
BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
DOCKET NO. 17-_____**

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

2 A. My name is William K. Castle. My business address is 1051 E. Cary St, Suite 1100,
3 Richmond, VA. I am the Director of Regulatory Services VA/TN for Kingsport Power
4 Company d/b/a AEP Appalachian Power (Kingsport, KgPCo or the Company).

5 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
6 **BUSINESS EXPERIENCE.**

7 A. I earned a Bachelor of Science degree in Mechanical Engineering from Tulane University
8 in 1988, and a Masters of Business Administration degree from the University of Texas –
9 Austin in 1998. I hold the Chartered Financial Analyst (CFA) designation. I have
10 worked in the utility industry since 1998, beginning with the Columbia Energy Group,
11 Herndon, Virginia, where I held positions in financial planning and corporate finance.
12 Subsequent to the acquisition of Columbia Energy Group by Merrillville, Indiana based
13 NiSource in 2000, I performed financial planning and analysis functions. Since 2004,
14 and prior to my current position, I was employed by American Electric Power Service
15 Corporation (AEPSC) in the Corporate Planning and Budgeting department.
16 Assignments included resource planning and demand-side management analysis, which
17 encompasses Energy Efficiency and Demand Response. I have been in my current
18 position since July, 2014.

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

3 A. Yes. I presented testimony on behalf of Kingsport Power in Docket No. 16-0001 and on
4 behalf of APCo before the Virginia State Corporation Commission, most recently in Case
5 Nos. PUE-2016-00050, and PUE-2016-00051. I have also presented testimony in the
6 states of Ohio, Oklahoma, Indiana, West Virginia, and Arkansas.

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

8 A. I sponsor and provide the rationale for the Company's request in this proceeding. The
9 Company seeks approval of its proposed distribution reliability program, the Targeted
10 Reliability Plan (TRP), which consists of a vegetation management component and a
11 distribution system improvement component. The Company further seeks approval of an
12 Alternative Rate Mechanism (ARM), in the form of a Rider, to recover from, or refund
13 to, its customers the costs associated with the proposed TRP, which are not included in
14 base rates, as well as O&M expense or credits associated with major storm (MS)
15 recovery efforts, which are not included in base rates (TRP & MS Rider). Tennessee
16 Public Utility Commission (TPUC) approval of the Company's proposals would not
17 immediately change its customers' rates, as Kingsport is requesting authority to defer
18 costs associated with its proposals. Over/under recovery accounting of any major storm
19 costs and TRP costs would begin the month after TPUC approval. After the Company
20 incurs approximately twelve months of TRP costs, and annually thereafter, the Company
21 will make "true-up" filings that will reflect recovery of actual costs through its TRP &
22 MS Rider.

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

1 A. Yes. I am sponsoring the following exhibit:

- 2 • KgPCo Exhibit No. 1 (WKC): Proposed TRP & MS Rider

3 **Q. IDENTIFY THE OTHER WITNESSES THAT WILL PROVIDE TESTIMONY IN**
4 **THIS CASE.**

5 A. The Company will present the testimony of the following witnesses:

- 6 ○ Philip A. Wright, Vice-President of Distribution Region Operations for
7 Appalachian Power Company, who is responsible for Kingsport's distribution
8 operations, will describe the Company's TRP proposal in detail; provide its
9 expected costs and benefits; and address matters related to major storms.
10 ○ A. Wayne Allen, Regulatory Accounting Case Manager for AEPSC will discuss
11 the basis for deferring unrecovered costs associated with the Company's
12 proposals, and describe the accounting for costs including over/under recovery
13 accounting.

14 **Q. PLEASE EXPLAIN THE TARGETED RELIABILITY PLAN.**

15 A. The TRP is designed to improve reliability for Kingsport's distribution customers. There
16 are two components to the TRP, a vegetation management program (VMP) and a system
17 improvement program (SIP). The proposed VMP transitions the Company to a four-year,
18 ongoing vegetation management cycle. Getting to a four-year, ongoing vegetation
19 management cycle requires an initial concentrated and accelerated effort of rights-of-way
20 clearing. That is followed by a vegetation management program that systematically
21 addresses each circuit, end-to-end, every four years. The system improvement program
22 focuses on three aspects of system improvement, including circuit improvements, circuit

1 inspections and maintenance, and station improvements, to improve reliability and better
2 protect the distribution system from storms and other events.

3 **Q. WHAT AMOUNTS OF MAJOR STORM RECOVERY AND DISTRIBUTION**
4 **RELIABILITY SPENDING ARE IN BASE RATES?**

5 A. Base rates are designed to recover \$903,372 in distribution reliability O&M expenses and
6 \$392,381 in major storm related O&M costs. The TRP & MS Rider is designed to
7 recover from (or return to) customers actual costs above (or below) these amounts.

8 **Q. WHY IS THE COMPANY SEEKING THE DISTRIBUTION TRP SO SOON**
9 **AFTER THE CONCLUSION OF ITS BASE RATE CASE IN DOCKET 16-00001?**

10 A. The Company filed for the TPUC's approval of the TRP and an associated ARM as part
11 of its initial base case filing in Docket No. 15-00093. Following discussion with the
12 CPAD and TPUC Staff, the Company subsequently withdrew the filing and refiled a
13 streamlined case, Docket No. 16-00001, in which the Company requested an increase in
14 the on-going level of distribution spending to reflect a projected annual level of spending
15 on the TRP, based upon an average of the first four-years of the TRP, with the intention
16 to subsequently file for an ARM to recover from, or return to customers only costs above
17 or below that level. During the pendency of the proceeding, as part of settlement
18 discussions resulting in the Stipulation Agreement approved by the TPUC, the ongoing
19 O&M expense associated with reliability programs reflected in base rates, as well as
20 other costs, including major storm O&M expense, reflected in base rates, were
21 specifically identified. From the Company's perspective, this approach provided the
22 foundation for it to petition the TPUC for approval of an ARM – the proposed TRP &
23 MS Rider, to recover associated costs above those in current rates.

1 **Q. IS THE COMPANY PROPOSING TO USE THE BILLING DETERMINANTS**
2 **AND RATE OF RETURN (ROR) APPROVED IN THE RECENT BASE RATE**
3 **CASE TO CALCULATE FUTURE REVENUE REQUIREMENTS TO BE**
4 **RECOVERED THROUGH THE TRP & MS RIDER?**

5 A. Yes. In future true-up filings related to its proposed Rider, the Company proposes to use
6 the same billing determinants and ROR that the TPUC approved in the Company's
7 recently completed base rate case (Docket No. 16-00001) to develop and recover the
8 revenue requirement to be collected from customers through the Rider.

9 **Q. UNDER WHAT PROVISION OF THE TENNESSEE CODE ARE YOU SEEKING**
10 **RECOVERY FOR TRP COSTS AND MAJOR STORM EXPENSE NOT**
11 **REFLECTED IN BASE RATES?**

12 A. The Company is seeking to recover costs associated with the TRP under Tennessee Code
13 Annotated § 65-5-103 (d) (2) (A) (ii) and (iii).

14 **Q. WHAT IS THE COMPANY PROPOSING IN REGARDS TO MAJOR STORM**
15 **EXPENSES?**

16 A. Upon approval of the Rider, the Company is proposing to begin over/under recovery
17 accounting for, and then to true-up, annual major storm expenses, as part of the
18 proposed annual rider filing. Basically, if actual O&M expenses for major storms in a
19 given twelve month period are less than the amount included in base rates (*i.e.*,
20 \$392,381), the difference will be credited to customers through the annual rider filing.
21 Conversely, if actual expenses for major storms are more than the amount in base rates,
22 the difference would be recovered from customers through the annual rider filing. All
23 major storm costs remain subject to TPUC oversight prior to recovery. Company

witness Allen provides additional detail as to how recovery of major storm O&M expenses, above (or below) the level in base rates, would work.

Q. DESCRIBE THE RECONCILIATION OF ACTUAL COSTS TO COSTS COLLECTED IN BASE RATES AND IN THE RIDER.

A. The rates in the Rider will initially be set at zero. The Company will track and defer costs associated with each component of the rider using unique identifiers. Once the Company incurs approximately a year's worth of actual TRP costs, it will submit a "true-up" filing, to be reviewed by the TPUC, with a rate or factor designed to recover the previously incurred actual costs over a specified period. In the Company's subsequent "true-up" filings, the balance of what was ultimately collected or returned to customers through the previous rate will be combined with costs incurred in the interim, and a new rate or factor would be set.

Q. HOW IS THE COMPANY PROPOSING TO ALLOCATE AND RECOVER THE COSTS OF ITS PROPOSED PROGRAMS TO CUSTOMERS?

A. Under traditional cost-of-service principles, the Rider costs would be allocated to distribution-level customers only, as they relate to distribution system costs. However, given that the parties in the Company's recent base rate case agreed to allocate other distribution reliability and major storm costs among all customers, in future true-up filings, the Company proposes to allocate Rider costs to customers in the same manner that costs were allocated in its base rate case (Docket No. 16-00001). The Company reserves the right to propose changes to this allocation approach in the future. The proposed TRP & MS Rider, with recovery factors initially at zero is attached as KgPCo

Exhibit 1 (WKC). As shown on KgPCo Exhibit 1 (WKC), future recovery factors for tariff customers will be designed as an energy, demand or customer rate.

Q. WHAT IS THE POTENTIAL IMPACT TO RATES FOR A RESIDENTIAL CUSTOMER?

A. Based upon projections of first year TRP costs, following the Company's first true-up, and assuming a twelve-month recovery period, the Company forecasts that a residential customer would pay an additional \$1.90 per month, not including any differences associated with major storm expense.

Q. HAVE YOU DETERMINED THE POTENTIAL IMPACT TO OTHER RATE CLASSES?

A. Yes. Using the same projections of first year TRP costs, and not including any differences associated with major storm expense, the Company forecasts the potential impact to other rate classes as shown below in Figure 1.

Figure 1

<u>Tariff</u>	<u>Energy Rate</u>	<u>Demand Rate</u>	<u>Customer Rate</u>
	(¢) / kWh	(\$)/ KW or *KVA	(\$)/ Month /Customer
<u>Residential</u>			\$1.90
<u>Residential Employee</u>			\$1.90
<u>Residential Time-of-Day</u>			\$1.90
<u>Small General Service (SGS)</u>			\$2.39
<u>Medium General Service (MGS) Secondary</u>		\$1.12	
<u>General Service Time-of-Day (GS-TOD)</u>	0.10908		
<u>Medium General Service (MGS) Primary</u>		\$1.08	
<u>Large General Service (LGS) Secondary*</u>		\$1.21	
<u>Large General Service (LGS) Primary*</u>		\$0.94	
<u>LGS Subtransmission/Transmission*</u>		\$0.92	
<u>Industrial Power (IP) Secondary</u>		\$0.44	
<u>Industrial Power (IP) Primary</u>		\$0.43	
<u>Industrial Power (IP) Subtransmission/Transmission</u>		\$0.40	
<u>Church Service</u>	0.41914		
<u>Public Schools (PS)</u>	0.33723		
<u>Electric Heating General (EHG)</u>		\$1.11	
<u>Outdoor Lighting (OL)- (per Lamp)</u>			\$0.49

1 **Q. WHEN WILL THE TRP START AND WHEN WILL THE COMPANY BEGIN**
2 **TO RECOVER THE COSTS FROM CUSTOMERS?**

3 A. The Company expects to begin the TRP approximately three months after receiving
4 approval from the TPUC. This time is required to get the necessary resources in place.
5 Approximately twelve months after the start date, the Company will submit its first “true-
6 up” filing to the TPUC, seeking to implement a rider rate to begin recovering the revenue
7 requirement associated with costs incurred to that point.

8 **Q. DOES THE COMPANY HAVE AN OPINION AS TO THE APPROPRIATE LIFE**
9 **OF THE PROPOSED ALTERNATIVE RATE MECHANISM?**

10 A. Yes. The Company proposes that the TRP & MS Rider established in this proceeding be
11 sunset after ten years. If the Company files a base rate case prior to the termination of the
12 Rider, the Company expects it would petition the TPUC to extend the life of the Rider to
13 ten years after the conclusion of that base case.

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

15 A. Yes, it does.

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:

TRP & MSa—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.

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>Customer Rate</u>
	(¢) / kWh	(\$)/ KW or *KVA	(\$)/Customer
<u>Residential</u>			\$0.00
<u>Residential Employee</u>			\$0.00
<u>Residential Time-of-Day</u>			\$0.00
<u>Small General Service (SGS)</u>			\$0.00
<u>Medium General Service (MGS) Secondary</u>		\$0.00	
<u>General Service Time-of-Day (GS-TOD)</u>	0.0000		
<u>Medium General Service (MGS) Primary</u>		\$0.00	
<u>Large General Service (LGS) Secondary*</u>		\$0.00	
<u>Large General Service (LGS) Primary*</u>		\$0.00	
<u>LGS Subtransmission/Transmission*</u>		\$0.00	
<u>Industrial Power (IP) Secondary</u>		\$0.00	
<u>Industrial Power (IP) Primary</u>		\$0.00	
<u>Industrial Power (IP) Subtransmission/Transmission</u>		\$0.00	
<u>Church Service</u>	0.00000		
<u>Public Schools (PS)</u>	0.00000		
<u>Electric Heating General (EHG)**</u>		\$0.00	
<u>Outdoor Lighting (OL)- (per Lamp)</u>			\$0.00

**Demand is measured in accordance with tariff.