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KgPCo Exhibit No. ___
Witness: ADW

DIRECT TESTIMONY OF
AARON D. WALKER
ON BEHALF OF KINGSPORT POWER COMPANY
D/B/A AEP APPALACHIAN POWER
BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
DOCKET NO. 21-00107

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

A. My name is Aaron D. Walker. My business address is 500 Lee Street East, Suite 800, Charleston, West Virginia 25301. I am the Vice President of Distribution Operations for APCo, KgPCo, and Wheeling Power Company (WPCo) (together the Companies). The Companies are wholly-owned subsidiaries of AEP. KgPCo is registered to do business in Tennessee as AEP Appalachian Power.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I am a graduate of The Ohio State University with a Bachelor of Science degree in Chemical Engineering. In addition, I obtained a Project Management Professional certification in 2009.

In 2005, I joined AEPSC as a Process Engineer. From 2012 through 2016, I served in a variety of roles including Project & Field Engineering, Project Management, Generation Performance Improvement, and Generation Energy Production Superintendent. In these roles, my responsibilities included managing the design, construction, start-up, and testing efforts for major projects across the generating fleet owned by AEP subsidiaries. In the role of Generation Performance Improvement Manager, I helped lead process improvement efforts across the Fossil & Hydro Generation Fleet, where my responsibilities included the analysis of plant operational performance, cost profiles, reliability, environmental, and safety

performance. In 2016, I joined AEP subsidiary Indiana Michigan Power Company as an Energy Production Superintendent at its 2600 MW coal-fired Rockport plant with responsibility for the maintenance and operation of the facility's environmental controls equipment. In 2018 and prior to my current role, I was named Plant Manager of Rockport, where I was responsible for all aspects of plant performance including safety, environmental and regulatory compliance, maintenance, and operations. Since September 2020, I have served as the Vice President of Distribution Operations for the Companies.

Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AND RESPONSIBILITIES AS VICE PRESIDENT OF DISTRIBUTION OPERATIONS?

A. I am responsible for overseeing the planning, construction, operation and maintenance of the Companies' distribution systems, which serve approximately one million customers in Tennessee, Virginia and West Virginia. My duties include the safe and reliable delivery of service to our customers, the extension of service to new customers, and the restoration of service to customers when outages occur. My responsibilities also include overseeing the Companies' distribution asset management and major reliability programs, as well as the distribution vegetation management program.

Q. FOR WHOM ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of KgPCo.

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

A. Yes. I have submitted testimony in Case No. 21-0340-E-P before the Public Service Commission of West Virginia.

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

A. The purpose of my testimony in this proceeding is to sponsor the test year level of distribution O&M expenses and the forecast of KgPCo's post-test year capital investments. I also describe a modification to the vegetation management portion of KgPCo's TRP necessitated by resource constraints and increases in costs. Finally, I explain why KgPCo replaced its AMR meters with AMI meters since its last rate case.

Q. ARE YOU SPONSORING ANY OF KGPCO'S RESPONSES TO THE DRAFT MFRS?

A. Yes. I am sponsoring KgPCo's responses to MFR 57 and MFR 84.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes. I am sponsoring the following exhibit:

- KgPCo Exhibit No. 1 (ADW) Total Distribution O&M Expenses

Q. WAS THE EXHIBIT PREPARED BY YOU OR UNDER YOUR DIRECTION?

A. Yes. The exhibits were prepared by me or under my direction.

Q. PLEASE DESCRIBE KGPCO'S SERVICE TERRITORY.

A. KgPCo serves approximately 48,000 customers in an operational service area covering approximately 200 square miles in northeastern Tennessee. KgPCo's service area includes portions of three counties: Hawkins, Sullivan, and Washington. The KgPCo distribution system includes about 1,600 miles of overhead lines.

Q. WHAT LEVEL OF DISTRIBUTION O&M EXPENSE DID THE COMPANY RECORD DURING THE TEST YEAR?

A. The Company recorded $9,601,767 of distribution O&M expense in accounts 580 through 598 during the test year, which is the twelve month period ending June 30, 2021.

Q. IS THE LEVEL OF DISTRIBUTION O&M EXPENSE RECORDED BY KGPCO DURING THE TEST YEAR APPROPRIATE TO REFLECT IN BASE RATES?

A. No. The $9,601,767 amount includes an out–of-period pole attachment expense adjustment and over/under recovery expenses associated with KgPCo's approved TRP&MS Rider, which have been removed by adjustments sponsored by Company witness Allen. Because KgPCo is proposing to reflect the test year level of TRP expenses in base rates, as explained by Company witness Castle, those expenses, which were recorded in various distribution O&M accounts, have not been removed from the $9,601,767 value. Company witness Allen identifies the level of TRP expenses incurred during the test year for use in future TRP&MS Rider calculations. To reflect a normalized level of on-going major storm damage expense in base rates, and given that no major storms occurred during the test year, Company witness Allen is also sponsoring an MS damage adjustment that normalizes KgPCo's test year level of distribution O&M expense. Witness Allen's normalized level will be used to in future TRP&MS Rider calculations. These adjustments result in an on-going level of Distribution O&M expense of approximately $8 million. I have reviewed the components of this value and, except for the various payroll adjustments sponsored

by Company witness Allen, support it as a reasonable and necessary level of Distribution O&M expense to reflect in base rates.

Q. HOW MUCH CAPITAL INVESTMENT HAS KGPCO PLACED IN-SERVICE SINCE THE LAST BASE CASE?

A. This information is provided in MFR 54, sponsored by Company witness Allen.

Q. WHAT IS KGPCO'S EXPECTED CAPITAL INVESTMENT FROM JULY 1, 2021 THROUGH DECEMBER 31, 2022?

A. KgPCo is projecting distribution capital investments of approximately $28 million for the period July 1, 2021 through December 31, 2022. Table 1 below shows the approximate distribution of projected capital investments by FERC account and by period:

Table 1.

Acct	Year	2021 (Jul-Dec)	2022	
	Account Classification	**Forecast**	**Forecast**	**Post Test Year Capital Investment**
360	Dis - Land & Land Rights	$ 114,711	$ 259,583	$ 374,294
361	Dis - Structures & Improvements	$ 2,428	$ 1,687,873	$ 1,690,300
362	Dis - Station Equipment	$ 103,499	$ 4,299,920	$ 4,403,419
364	Dis - Poles, Towers & Fixtures	$ 198	$ 2,182,054	$ 2,182,252
365	Dis - Overhead Conductors & Devices	$ 2,062,752	$ 5,118,016	$ 7,180,768
366	Dis - Underground Conduit	$ 4,014,835	$ 1,302,880	$ 5,317,715
367	Dis - Underground Conductors & Devices	$ 141,614	$ 643,577	$ 785,191
368	Dis - Line Transformers	$ 520,102	$ 1,855,541	$ 2,375,644
369	Dis - Services	$ 1,031,436	$ 816,077	$ 1,847,513
370	Dis - Meters	$ 572,113	$ 558,847	$ 1,130,960
371	Dis - Installations on Customer Premises	$ 335,971	$ 234,050	$ 570,021
373	Dis - Street Lighting & Signal Systems	$ 122,004	$ 393,356	$ 515,361
	Dis - Total Distribution Plant	**$ 9,021,663**	**$ 19,351,773**	**$ 28,373,436**

Q. DOES THE FORECASTED CAPITAL SPEND INCLUDE TRP&MS PROJECTS?

A. Yes. I anticipate investing approximately $12.8 million in TRP&MS projects between the rate year and the end of the attrition year. Company witness Castle discusses the cost recovery proposal for these investments.

Q. IS THE TRP PROCEEDING AS PLANNED AND APPROVED IN DOCKET NO. 17-00032?

A. Yes, except for the vegetation management portion of the TRP. KgPCo has experienced marked increases in the costs for, and marked decreases in the availability of, forestry crews. To maintain spending within the levels approved by the Commission, KgPCo is clearing rights-of-way at a slower pace than expected. While it expected to be on a four-year cycle at this stage, cutting each right-of-way once every four years, given the resource constraints and cost increases, KgPCo now anticipates clearing the rights-of-way once every six years.

Q. WILL THIS IMPACT THE RELIABILITY STATISTICS?

A. Yes. KgPCo is getting less vegetation management work performed for the same level of spend. However, the end-to-end maintenance of circuits, even if less frequent than a four year cycle, is still superior to the prior "hot spotting" or reactive approach, and as such, KgPCo still expects the statistics to improve, over time. It is also true, that the increased costs would similarly affect the reactive approach.

Q. WHY DID KGPCO REPLACE ITS AMR METERS?

A. The utility meter is the electrical interface between KgPCo and its customers. The meter provides the traditional function of measuring usage by the customer so KgPCo

can render a bill that accurately reflects the electricity usage. KgPCo replaced its mechanical analog meters at the beginning of this century with AMR meters. The AMR meters were an advancement that allowed for remote reading of the meters, saving the expense associated with manual meter reading. Because the AMR meters have electronic components, they have a shorter life than a mechanical meter and KgPCo's AMR meters had reached the end of their useful lives.

Q. WHY DID KGPCO CHOOSE TO REPLACE THE AMR METERS WITH AMI METERS?

A. The bulk of the AMR meters were purchased and installed in 2004 and 2005. The AMR meters transfer customer usage data, via radio frequency, to a Mobile Collection System. When the meter reading vehicles returned to their respective service buildings, the customer usage data was then transferred from the Mobile Collection System to internal computer servers. Subsequent changes to the communication modules on available replacement AMR meters created an incompatibility issue with the existing meter reading system. This compatibility issue forced KgPCo to look at alternatives to AMR meters.

Q. WHAT OTHER FACTORS INFLUENCED THE DECISION?

A. The primary factor for replacement was the age and life expectancy of the AMR meters. AMR meters were installed in 2004-2005, and by 2016 were at or nearing the end of their useful lives. But KgPCo could not replace the old AMR meters with new ones, as by 2016, three of the five manufacturers (Honeywell/Elster, Sensus and Aclara/GE) had stopped manufacturing AMR meters, a fourth, (L+G) announced it would discontinue their manufacture by 2019, and Itron, the fifth and only provider of

the AMR ERT modules, was also considering phasing out the manufacturing and support of AMR meters in favor of AMI. KgPCo thus faced the likelihood of one single, less than committed, vendor that could support its AMR technology for the supply of meters and spare parts for the next decade or more.

Moreover, as indicated above, the newer generation AMR meters have a different communication protocol than the ones already installed, which would have required KgPCo to purchase all new AMR meter reading equipment. It was neither practical nor cost effective to maintain multiple separate communication infrastructures for reading two types of AMR meters during the multi-year transition.

For these reasons, KgPCo decided that it had no reasonable choice but to replace AMR meters with the now industry standard AMI technology meters.

Q. DO AMI METERS PROVIDE BENEFITS TO BOTH CUSTOMERS AND KGPCO?

A. Yes. The AMI meter technology enables the billing information to be available to customers in near real-time, which means customers can access their usage data 24/7. By understanding the cost of using electric appliances or devices, customers can make informed decisions regarding the types of devices to purchase. AMI meters allow customers to evaluate the costs and savings associated with operating certain devices, giving the customers the knowledge to choose more efficient appliances or devices. An example would be the purchase of an electric vehicle and the associated cost of electricity to charge the vehicle. Through the use of AMI meters, KgPCo is able to connect or disconnect customers remotely within minutes, reducing service costs and delays.

KgPCo benefits from the use of AMI meters in terms of improved efficiencies in the operation and maintenance of the meter. It can remotely read and monitor the performance of the meter and remotely connect and disconnect the meter from the source and load without rolling a truck. In addition, KgPCo can remotely determine if the customer is experiencing a service outage, unexpected voltage levels, or quality of service issues such as a loose neutral.

Q. HOW IS KGPCO PROPOSING TO ACCOMMODATE CUSTOMERS WHO DO NOT WISH TO HAVE AN AMI METER?

A. Similar to the experience of other AEP operating companies, there are typically a handful of customers who prefer not to have an AMI meter. While the meters are completely safe and pose no hazard to customers, the issue can be emotionally charged. Company witness Keeton describes KgPCo's proposal for non-standard metering solutions to address such customer concern and the costs associated with such solutions.

Q. PLEASE SUMMARIZE THE QUANTITY AND INVESTMENT FOR AMI METERS.

A. Approximately 49,000 meters have been installed by KgPCo from 2017 through 2021 at a total cost of approximately $5.7 million.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Exhibit No. 1 (ADW)

Kingsport Power Company - Total Distribution O&M Expenses

Acct	Year	2016	2017	2018	2019	2020	Test Year
580	Dis Oper Supervision & Engineering $	$ 238,996	$ 291,801	$ 194,405	$ 342,568	$ 271,054	$ 325,914
581	Dis Oper Load Dispatching $	$ 758	$ -	$ -	$ -	$ -	$ -
582	Dis Oper Station Expenses $	$ 277,964	$ 58,205	$ 60,121	$ 72,937	$ 108,209	$ 135,822
583	Dis Oper Overhead Line Expenses $	$ 109,941	$ 16,524	$ 86,694	$ 70,621	$ 40,047	$ 107,724
584	Dis Oper Underground Line Expenses $	$ 80,970	$ 71,336	$ 78,467	$ 72,778	$ 58,251	$ 49,561
585	Dis Oper Street Lighting & Signal System $	$ 47,137	$ 73,860	$ 55,235	$ 65,438	$ 56,749	$ 131,708
586	Dis Oper Meter Expenses $	$ 84,174	$ 98,025	$ 83,345	$ 59,210	$ 62,621	$ 84,996
587	Dis Oper Customer Installation Expenses $	$ 88,944	$ 73,696	$ 57,106	$ 63,028	$ 25,874	$ 47,322
588	Dis Oper Misc Expenses $	$ 906,201	$ 942,400	$ 943,172	$ 805,169	$ 769,248	$ 673,283
589	Dis Oper Rents $	$ 406,630	$ 612,005	$ 475,036	$ 444,138	$ 522,156	$ 467,382
590	Dis Maint Supervision & Engineering $	$ 10,353	$ 14,361	$ 9,805	$ 6,065	$ 3,406	$ 2,297
591	Dis Maint Structures $	$ 13,481	$ 3,437	$ 24,768	$ 4,989	$ 4,111	$ 6,852
592	Dis Maint Station Equipment $	$ 160,810	$ 89,337	$ 78,117	$ 69,159	$ 48,541	$ 46,949
593 *	Dis Maint Overhead Lines $ *	$ 2,565,026	$ 2,290,651	$ 3,721,466	$ 3,474,311	$ 5,979,094	$ 7,179,632
594	Dis Maint Underground Lines $	$ 37,535	$ 55,570	$ 46,802	$ 69,540	$ 45,846	$ 43,923
595	Dis Maint Line Transformers $	$ 205,844	$ 267,688	$ 168,157	$ 40,970	$ 18,200	$ 12,966
596	Dis Maint Street Lighting & Signal Systems $	$ 16,292	$ 49,187	$ 12,670	$ 11,048	$ 21,456	$ 47,742
597	Dis Maint Meters $	$ 3,150	$ 4,764	$ 2,908	$ 4,974	$ 9,653	$ 14,465
598	Dis Maint Misc Distribution Plant $	$ 185,264	$ 218,291	$ 196,973	$ 276,537	$ 263,295	$ 223,228
	Total Distribution Expenses $	**$ 5,439,470**	**$ 5,231,138**	**$ 6,295,247**	**$ 5,953,480**	**$ 8,307,811**	**$ 9,601,767**

*Includes subaccount 5933426, TRP&MS Over/Under Recovery, which increased (decreased) Distribution Maintenance Expenses by $171,718, ($5,278,925), ($2,280,236), ($320,712) and $2,154,781 for the years 2017, 2018, 2019, 2020 and 12 months ended June 2021, respectively, for the over (under) recovery of incurred costs through the TRP&MS Rider as supported by Company witness Allen.