Kentucky Power Company KPSC Case No. 2020-00062 Commission Staff's First Set of Data Requests Dated October 12, 2020 Page 1 of 2

DATA REQUEST

KPSC 1-02 Refer to Kentucky Power's application, page 10, footnote 12, and page 13. a. Explain and provide a breakout of the total detailed estimate of the project cost as if Kentucky Power was completing the project in its entirety. Include in the response breakout a distinction of which costs are allocated to Kentucky Power and which are allocated to AEP Kentucky Transmission Company, Inc. (Kentucky Transco). Also, include the estimated ongoing O&M costs for the various components for both companies.

> b. Explain the rationale for the division in project elements between Kentucky Power and Kentucky Transco.

c. Explain how Kentucky Transco will recover the cost of the components of the proposed Kewanee Substation project that it will own. d. Identify all transmission projects that have been constructed and implemented by Kentucky Transco, include in this identification the name of the transmission projects, the detailed components of each of those transmission projects, the date on which those transmission projects went into service, the purpose(s) of each of those transmission projects, and the total cost of each of those transmission projects.

RESPONSE

a. Kentucky Transco's portion of the project, which includes the installation of five 138 kV circuit breakers and a 28.8 MVAR capacitor bank, would total \$3.8 million. This cost brings the total project cost to \$39.0 million. Total annual O&M expense for the project is estimated to be \$20,000, of which Kentucky Transco's portion would be approximately \$900.

b. The decisions associated with the scope of work to be performed by Kentucky Power in connection with addressing transmission needs in Kentucky Power's service territory, including the work that is the subject of Case No. 2020-00062, are fact-specific and may vary on a project by project and need by need basis. The Company plans its transmission development in coordination with the AEP Transmission, within the framework of local, siting, operational, and service requirements, NERC rules, and other applicable parameters, as well as PJM's Regional Transmission Expansion Process ("RTEP") planning process. AEPSC and AEP Transmission also have developed project selection guidelines, which are attached as KPCO_R_KPSC_1_2_Attachment1, for use in determining which facilities will be developed by Kentucky Power and which will be developed by AEP Kentucky Transmission Company, Inc. Kentucky Power Company KPSC Case No. 2020-00062 Commission Staff's First Set of Data Requests Dated October 12, 2020 Page 2 of 2

Following a review of the project selection guidelines, Kentucky Power and AEP Transmission determined what components were eligible for Transco ownership as part of the Kewanee-Enterprise Park project. The business decision that Kentucky Transco would construct the circuit breakers and capacitor bank was based on capital budget considerations.

c. Kentucky Transco recovers its annual transmission revenue requirement from PJM which collects that revenue requirement from the LSEs in the transmission zones to which Kentucky Transco's transmission revenue requirements are allocated. The capital expenditures and operating costs of projects that are forecasted to be in service during the year are included in the annual transmission revenue requirement.

d. Kentucky Power had not prepared the requested analysis prior to this request, but the Company is in the process of doing so now. The Company has not yet completed the analysis, but it will supplement this response with the requested information as soon as practicable.

December 4, 2020 Supplemental Response

d. Please see KPCO_R_KPSC_1_2_Attachment2 for the requested analysis.

Witness: Nicolas C. Koehler

KPSC Case No. 2020-00062 Commission Staff's First Set of Data Requests Dated October 12, 2020 Item No. 2 December 4, 2020 Supplemental Response Attachment 2

Kentucky Transmission Company Projects Project Compo

Allen Station Fiber Installation Ashland SC-Chadwick Fiber Installation Ashland 25th Fiber Installation Ashland-Kingsport Fiber Installation Baker Station Equipment Replacement Baker Station Spare Equipment Baker Station Transformer Failure Baker Station Transformer Failure Baker Station Circuit Breaker Replacement Baker Station Bus Disconnect Switch Baker Station Circuit Breaker Spare Baker Station Transformer Baker Station Circuit Breaker Spares Beaver Creek Circuit Switcher Replacement Beckham Station Circuit Breakers Bellefonte Station Transformer Replacement Breaks Station Rebuild Breaks Station Spare Transformer Cannonsburg Station Fiber Installation Cannonsburg Station Transition Catalpa TS-Busseyville Fiber Installation Catalpa TS-Pound Street Fiber Installation Cedar Creek Station Circuit Breakers Chadwick Station Circuit Breakers **Chadwick Station Fiber Installation Collier Station Upgrades Daisy Station Upgrades Dorton Station Upgrades** England Hill Circuit Breakers Failed GPS Clock Replacement Inez Station Circuit Breaker Johns Creek Station 138 kV Circuit Breaker Mobile Capacitor Bank Slemp Station Upgrades Stanville Station Construction Stanville Station Construction

Project Components Install transmission communications, protection, and control equipment Replacement of various station equipment Purchase of various spare equipment Replacement of 345/138 kV transformer Relocate transformer between breakers "J" and "J1" Replace 765 kV 4000 A 63 kA circuit breakers (3) Replace 765 kV Q1 Bus Disconnect Switch Purchase spare 765 kV circuit breaker Install new 765/345 kV transformer Purchase spare 345 kV circuit breakers (2) Replacement 138 kV circuit switcher Install new 138 kV circuit breakers (2) and replace MOAB with circuit switcher Replace 138/69/34.5 kV transformer Replacement of various station equipment Purchase spare 50 MVA 69/46 kV transformer Install transmission communications, protection, and control equipment Replacement of various station equipment Install transmission communications, protection, and control equipment Install transmission communications, protection, and control equipment Install 138 kV circuit breakers (2) and primary side circuit switcher Replace MOAB switches (2) with 138 kV circuit breakers, replace 69 kV circuit breakers (2) Install transmission communications, protection, and control equipment Replacement of various station equipment Replacement of various station equipment Install 138 kV breakers (3) and a circuit switcher Replace 69 kV circuit breakers (2) with 3000 A 40 kA breakers Replacement of relaying equipment Install new 138 kV circuit breaker Install new 138 kV breaker and circuit switcher Purchase of mobile capacitor bank Replacement of various station equipment Replacement of various station equipment Property purchase

In-Service Date	Project Purpose	Final Cost
11/1/2019	Modernization of communication network	\$202,629
7/24/2019	Modernization of communication network	\$1,264,245
1/26/2018	Modernization of communication network	\$57,252
7/18/2019	Modernization of communication network	\$6,546,249
10/2/2015	Equipment condition, performance and risk	\$12,966,085
12/6/2018	Operational flexibility and efficiency	\$253,390
7/2/2019	Replacement of failed equipment	\$1,141,624
7/19/2019	Operational flexibility and efficiency	\$58,226
12/6/2018	Equipment condition, performance and risk	\$21,356,428
5/10/2019	Equipment condition, performance and risk	\$331,454
2/27/2015	Operational flexibility and efficiency	\$1,176,533
6/24/2016	Thermal violation mitigation	\$38,021,786
12/1/2017	Operational flexibility and efficiency	\$723,130
6/14/2017	Equipment condition, performance and risk	\$9,384
11/16/2017	Operational flexibility and efficiency	\$1,267,005
12/18/2017	Equipment condition, performance and risk	\$4,633,797
12/28/2015	Equipment condition, performance and risk	\$10,306,404
12/27/2016	Operational flexibility and efficiency	\$602,275
2/22/2019	Modernization of communication network	\$109,758
11/18/2019	Thermal violation mitigation	\$104,694
12/17/2018	Modernization of communication network	\$741,880
7/18/2019	Modernization of communication network	\$3,302,987
4/19/2016	Voltage violation mitigation	\$2,352,211
4/18/2017	Equipment condition, performance and risk	\$3,716,091
6/7/2017	Modernization of communication network	\$165,070
6/29/2017	Equipment condition, performance and risk	\$21,938
6/29/2017	Equipment condition, performance and risk	\$39,844
6/21/2015	Equipment condition, performance and risk	\$2,369,933
6/7/2017	Equipment condition, performance and risk	\$2,201,888
3/16/2018	Replacement of failed equipment	\$927
12/20/2017	Operational flexibility and efficiency	\$24,417
5/31/2019	Operational flexibility and efficiency	\$206
12/17/2019	Operational flexibility and efficiency	\$902,679
6/29/2017	Equipment condition, performance and risk	\$73,111
9/26/2018	Thermal and voltage violation mitigation	\$8,012,898
8/12/2015	Thermal and voltage violation mitigation	\$677.976





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Signer 1: Nicolas C Koehler (NCK)

November 30, 2020 06:07:55 -8:00 [842A8486E724] [167.239.221.84] nckoehler@aep.com (Personally Known)

E-Signature Notary: Brenda Williamson (Bw)

November 30, 2020 06:07:55 -8:00 [400DC3D25B49] [167.239.221.82] bgwilliamson@aep.com

I, Brenda Williamson, did witness the participants named above electronically sign this document.



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VERIFICATION

The undersigned, Nicolas C. Koehler, being duly sworn, deposes and says he is the Director of Transmission Planning, American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.

	Nicolas C Koehler Synet on 202011200 060755 400 Nicolas C. Koehler
STATE OF OHIO)) Case No. 2020 00062
COUNTY OF FRANKLIN) Case No. 2020-00002)

Subscribed and sworn before me, a Notary Public, by Nicolas C. Koehler this 11/30/2020 day of November, 2020.

Burka WALanger	
Brenda G. Williamson Commission # 2016-RE-579446 Electronic Notary Public State of Ohio My Comm Exp. Apr 25, 2021	