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March 31, 2016

Chairman Herbert H. Hillard
Tennessee Regulatory Authority
502 Deaderick Street, 4th Floor
Nashville, TN 37243

Re: First Discovery Request
Docket No. 16-00001

Dear Chairman Hillard:

Attached for filing are the "First Discovery Requests" of The Alliance for Solar Choice and TenneSEIA to Kingsport Power.

Sincerely,

BOULT, CUMMINGS, CONNERS & BERRY, PLC

By:

A handwritten signature in black ink, appearing to read 'H. Walker', followed by the printed name 'Henry Walker'.

HW/dbi

cc: Kelly Cashman-Grams

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

IN RE:)	
)	
PETITION OF KINGSFORT POWER)	
COMPANY d/b/a AEP APPALACHIAN)	
POWER GENERAL RATE CASE)	DOCKET NO. 16-00001

**FIRST DISCOVERY REQUESTS OF
THE ALLIANCE FOR SOLAR CHOICE AND TENNESEIA**

Intervenors The Alliance for Solar Choice and TenneSEIA hereby propound the following First Discovery Requests upon Kingsport Power Company.

DEFINITIONS

A. “The Company,” “Kingsport,” and “Kingsport Power Company” mean the Kingsport Power company d/b/a AEP Appalachian Power, as well as its agents, attorneys, representatives or any other person acting or purporting to act on its behalf.

B. “And” and “or” shall be construed conjunctively or disjunctively as necessary to make the interrogatory inclusive rather than exclusive. The singular shall include the plural, and vice-versa, where appropriate.

C. “Communication” means any transmission of information by oral, graphic, written, pictorial, or otherwise perceptible means including, but not limited to, telephone conversations, letters, memoranda, electronic correspondence, meetings and personal conversations.

D. “Document” means, in the broadest sense possible, any medium upon which information has been recorded or retrieved, whether in draft or final form, and includes the original and each copy thereof if the copy contains additional material or is not identical to the

original, which is in your or your agent's possession, custody or control or which was, but is no longer, in your or your agent's possession, custody or control.

E. The word "identify" with respect to:

- (1) any natural person, means to state the full name; telephone number; and the last known residence and business addresses of the person and that person's relationship, whether business, commercial, professional, or personal with you;
- (2) any legal person, business entity or association, means to state the full name; telephone number; and last known address of such person or entity;
- (3) any document, means to state the type of document (e.g., a letter); the title; the subject matter; the date the document bears and the date it was written; and
- (4) any oral communication, means to state the date when and the place where it was made; the identity of the person who made it; the identity of the person to whom it was made; the identity of any other person or persons who were present or who heard it; and the substance of it.

F. "Person" shall mean an individual, partnership, proprietorship, corporation, association, and any other kind of business or legal entity.

G. "Relates to" means constitutes, contains, records, discusses, summarizes, discloses, and/or refers to, in whole or in part.

H. "Petition," "case," "proceeding," and "docket" refer to the above-captioned rate case.

INSTRUCTIONS

1. To the extent that the information sought is incorporated or contained in a document, please identify the document.
2. If you object to a question on the basis of privilege, state in detail the facts on which you base your objection. If you claim a document is privileged, identify the document and state the basis for the privilege.
3. These interrogatories shall be deemed to be continuing and to require supplemental answers to the extent required by the Tennessee Rules of Civil Procedure and the rules of the Tennessee Regulatory Authority.

DISCOVERY REQUESTS

1. Please provide the following information regarding the existing Tariff N.M.S.:
 - (a) Total number of customers for each rate class taking net metering service as of January 1, 2016;
 - (b) Total nameplate capacity of net metering facilities, listed separately for each rate class taking net metering service;
 - (c) Sum of all kWh delivered to residential net metering customers ("Channel 1" measurement) for each month of 2015;
 - (d) Sum of all kWh supplied by residential net metering customers to the grid ("Channel 2" measurement) for each month of 2015; and
 - (e) Number of applications received for net metering service for each month from January 2014 to March 2016.

RESPONSE:

2. Refer to the Company's response to Discovery Request No. 159 of CAD's first set of discovery to the Company, pages 1 through 29 of CPAD 1-150 Attachment 1_Redacted.pdf. The following questions or requests refer to the bill data presented for the residential customer account with a meter number "650352195."

- (a) Please describe the process the Company undertakes to maintain and track the amount of excess generation created at the end of monthly billing period and how the Company reconciles and applies those excess kWh credits in future billing periods.
- (b) On page 7, please confirm that the third meter reading of "Metered Usage" of "6.700 KW" refers to the measurement of the customer's maximum demand over the service period and indicate the interval over which the customer's maximum demand was determined (e.g., instantaneous maximum demand, 15-minute average of maximum demand, 30-minute average of maximum demand, or 60-minute average of maximum demand).

RESPONSE:

3. In reference to Mr. Castle's Testimony, page 6 (lines 7-8), please provide all workpapers and analysis relied upon by Mr. Castle to support his opinion that "cross-subsidization" may be occurring with the "current net metering construct" and that the proposed rider will reduce or eliminate the alleged cross-subsidy.

RESPONSE:

4. In reference to Mr. Castle's testimony, page 6 (lines 11 through 13), please specifically identify and describe the "fixed infrastructure" costs that the residential demand charge (Tariff R.S.-D) is developed to recover and distinguish, with detail and specificity, the types of fixed costs recovered by the demand charge from the types of costs recovered by the monthly fixed customer charge.

RESPONSE:

5. In reference to Mr. Castle's testimony at page 6 (lines 13 through 14), when a net metering customer supplies electricity to the grid (i.e., through Channel 2) and receives a kWh credit that will later be applied to offset deliveries by the utility to the customer, does the Company account for the creation of the kWh credit as a purchase of power from the customer that and then recover that costs through its fuel clause or other recovery mechanism? If so, please provide the total dollar amount and the number of purchased kWh passed through the fuel clause or other mechanism to compensate net metering customers for the years 2013, 2014 and 2015.

RESPONSE:

6. In reference to Mr. Castle's testimony at page 6 (lines 14 through 15), what is the current value of "environmental attributes" associated with renewable net metered generation in the Company's service territory?

RESPONSE:

7. In reference to Mr. Castle's testimony at pages 5-6, generally, does the Company intend to allow existing net metering customers to continue taking service under that tariff into perpetuity? If so, does the right to remain on the existing net metering tariff terminate when the current customer is no longer the customer of record on the "grandfathered" net metering account or is that right assignable to future customers that may take service at the situs?

RESPONSE:

8. In reference to Mr. Castle's testimony at pages 5-6 and proposed Tariff R.S.-D attached to Mr. Caudill's direct testimony, please provide all workpapers and any analysis performed to determine the proper amount of the demand charge in Tariff R.S.-D. Please identify all inputs and assumptions used to establish customer billing determinants for that Rider to

ensure that the demand charge would be designed to appropriately collect the designated fixed charges and would not significantly over-collect or under-collect revenue from the affected customers.

- (a) Does the Company have a projection of the number of residential customers that will voluntarily take service under a demand-metered electric service schedule?
- (b) What is the basis for imposing a 250-customer limit on participation in Tariff R.S.-D?
- (c) Does the Company consider Tariff R.S.-D to be a pilot program or experimental tariff for residential customers that do not net meter?
- (d) Please describe, with specificity and detail, the Company's plan to educate residential customers choosing to net meter or otherwise take service under Tariff R.S.-D about how to effectively manage the level of electrical demand to avoid negative bill impacts.
- (e) Does the Company intend to make Tariff R.S.-D, or another tariff featuring a demand-charge component, the default tariff for residential service at any point in the future?
- (f) Does the Company have a projection of the number of residential customers that will take service under this Tariff by virtue of participating in net metering?

RESPONSE:

9. In reference to Mr. Castle's testimony at page 6, what is the precise dollar amount of the cross-subsidy that the Company is seeking to "reduce" or "eliminate" with proposed rider N.M.S.-2? Please provide a detailed description of the method used to determine the dollar amount of the alleged cross-subsidy for net metering customers.

RESPONSE:

10. Please provide any load research study or similar analysis that shows that residential net metering customers, as a separate class, are imposing costs above that which would have been incurred had net metering customers remained within the residential class and took service on the same tariffs as non-net metered customers.

RESPONSE:

11. Please provide any data or analyses performed by the Company that distinguish the cost-causing characteristics of residential net metering customers from other residential customers that do not engage in net metering.

RESPONSE:

12. The testimony of Company witness Caudill at page 6, lines 9-12 states that "metering for these rate classes registers kWh consumption but does not have the ability to register demand due to historical costs for such meters. Without separate demand charges in these rate classes, the majority of fixed distribution costs are recovered through volumetric energy charges." The testimony at page 7, lines 8-9 states that "it is appropriate to collect fixed costs through a demand charge, wherever possible."

- (a) Please explain why the proposed service charge for Tariff R.S.-D. (\$11.00) is the same as the service charge for Tariff R.S. (\$11.00), notwithstanding the proposed introduction of a demand charge (\$9.44 per kW) in Tariff R.S.-D. Please provide any supporting calculations showing the recovery of fixed costs under a tariff schedule without a demand charge versus a tariff schedule with demand charges. What portion of fixed costs is recovered through the proposed service charge of \$11.00 under Tariff R.S.-D.? What portion of fixed costs is recovered through the proposed demand charge of \$9.44 per kW?
- (b) Please explain why the proposed service charge for Tariff S.G.S.-D. (\$20.20) is greater than the proposed service charge for Tariff S.G.S. (\$12.60), notwithstanding the proposed introduction of a demand charge (\$15.10 per kW) in Tariff S.G.S.-D. Please provide any supporting calculations showing the recovery of fixed costs under a tariff schedule

without a demand charge versus a tariff schedule with demand charges. What portion of fixed costs is recovered through the proposed service charge of \$20.20 under Tariff S.G.S.-D.? What portion of fixed costs is recovered through the proposed demand charge of \$15.10 per kW?

- (c) Please explain why the proposed service charges for Tariff M.G.S. (changing from \$21.50 to \$40.00 for secondary and changing from \$93.85 to \$94.00 for primary) are increasing, notwithstanding the proposed introduction of a demand charge (\$2.08 per kW for secondary and \$2.02 per kW for primary) in Tariff M.G.S. Please provide any supporting calculations showing the recovery of fixed costs under a tariff schedule without a demand charge versus a tariff schedule with demand charges. For secondary service, what portion of fixed costs is recovered through the proposed service charge of \$40.00 under Tariff M.G.S.? What portion of fixed costs is recovered through the proposed demand charge of \$2.08 per kW? For primary service, what portion of fixed costs is recovered through the proposed service charge of \$94.00 under Tariff M.G.S.? What portion of fixed costs is recovered through the proposed demand charge of \$2.02 per kW?

RESPONSE:

13. With respect to proposed Tariff R.S.-D. (KgPCo Exhibit No. 3 (TAC) at page 11), please provide workpapers or calculations which support or relate to the proposed service charge of \$11.00 per customer.

RESPONSE:

14. With respect to proposed Tariff R.S.-D. (KgPCo Exhibit No. 3 (TAC) at page 11), please provide workpapers or calculations which support or relate to the proposed energy charge of 3.826 cents per kWh.

- (a) Please reconcile the energy charge of 9.248 cents per kWh under proposed Tariff R.S. with the proposed energy charge of 3.826 cents per kWh under proposed Tariff R.S.-D. Please identify each element or rate component that was subtracted from 9.248 cents per kWh in order to arrive at the 3.826 cents per kWh rate, and explain the basis for such subtraction.
- (b) Please explain how the 3.826 cents per kWh rate effectively values the excess generation "at the Company's cost to purchase that generation from other sources." (Castle, page 6, lines 13-14)

- (c) In calculating the 3.826 cents per kWh energy charge under proposed Tariff R.S.-D., did the Company take into account costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company (e.g., avoided T&D infrastructure costs; avoided line losses; benefits of increased system resilience and increased power quality; environmental benefits associated with reduced greenhouse gas (GHG) emissions from distributed energy resources versus the Company's generating portfolio; and demand-induced benefits through the reduction in wholesale power prices due to reduction in peak loads)? If so, please provide any workpapers or other calculations which support or relate to the inclusion of such costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company. If not, please explain why such avoided costs, or benefits produced, were not considered by the Company in determining the proposed energy charge of 3.286 cents per kWh.

RESPONSE:

15. With respect to proposed Tariff R.S.-D. (KgPCo Exhibit No. 3 (TAC) at page 11), please provide workpapers or calculations which support or relate to the proposed demand charge of \$9.44 cents per kW.

- (a) Please explain how the proposed demand charge of \$9.44 per kW results in "participating customers being charged for the fixed infrastructure they utilize." (Castle, page 6, lines 12-13)
- (b) In calculating the proposed demand charge of \$9.44 per kW under proposed Tariff R.S.-D., did the Company take into account costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company (e.g., avoided T&D infrastructure costs; avoided line losses; benefits of increased system resilience and increased power quality; environmental benefits associated with reduced greenhouse gas (GHG) emissions from distributed energy resources versus the Company's generating portfolio; and demand-induced benefits through the reduction in wholesale power prices due to reduction in peak loads)? If so, please provide any workpapers or other calculations which support or relate to the inclusion of such costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company. If not, please explain why such avoided costs, or benefits produced, were not considered by the Company in determining the proposed demand charge of \$9.44 per kW.

RESPONSE:

16. With respect to proposed Tariff S.G.S.-D. (KgPCo Exhibit No. 3 (TAC) at page 16, please provide workpapers or calculations which support or relate to the proposed service charge of \$20.20 per customer.

RESPONSE:

17. With respect to proposed Tariff S.G.S.-D. (KgPCo Exhibit No. 3 (TAC) at page 16, please provide workpapers or calculations which support or relate to the proposed energy charge of 3.791 cents per kWh.

- (a) Please reconcile the energy charges of 9.284 cents per kWh (for the first block) and 8.768 cents per kWh (for the tail block) under proposed Tariff S.G.S. (KgPCo Exhibit 3 (TAC) at page 15) with the proposed energy charge of 3.791 cents per kWh under proposed Tariff S.G.S.-D (KgPCo Exhibit 3 (TAC) at page 16). Please identify each element or rate component that was subtracted from the proposed Tariff S.G.S. energy rates in order to arrive at the 3.791 cents per kWh rate under proposed Tariff S.G.S.-D., and explain the basis for such subtraction.
- (b) Please explain how the 3.791 cents per kWh rate effectively values the excess generation "at the Company's cost to purchase that generation from other sources." (Castle, page 6, lines 13-14)
- (c) In calculating the 3.791 cents per kWh energy charge under proposed Tariff S.G.S.-D., did the Company take into account costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company (e.g., avoided T&D infrastructure costs; avoided line losses; benefits of increased system resilience and increased power quality; environmental benefits associated with reduced greenhouse gas (GHG) emissions from distributed energy resources versus the Company's generating portfolio; and demand-induced benefits through the reduction in wholesale power prices due to reduction in peak loads)? If so, please provide any workpapers or other calculations which support or relate to the inclusion of such costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company. If not, please explain why such avoided costs, or benefits produced, were not considered by the Company in determining the proposed energy charge of 3.791 cents per kWh.

RESPONSE:

18. With respect to proposed Tariff S.G.S.-D. (KgPCo Exhibit No. 3 (TAC) at page 16), please provide workpapers or calculations which support or relate to the proposed demand charge of \$15.10 per kW.

- (a) Please explain how the proposed demand charge of \$15.10 per kW results in "participating customers be[ing] charged for the fixed infrastructure they utilize." (Castle, page 6, lines 14-15)
- (b) In calculating the proposed demand charge of \$15.10 per kW under proposed Tariff S.G.S.-D., did the Company take into account costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company (e.g., avoided T&D infrastructure costs; avoided line losses; benefits of increased system resilience and increased power quality; environmental benefits associated with reduced greenhouse gas (GHG) emissions from distributed energy resources versus the Company's generating portfolio; and demand-induced benefits through the reduction in wholesale power prices due to reduction in peak loads)? If so, please provide any workpapers or other calculations which support or relate to the inclusion of such costs that are avoided, or benefits that are produced, by having energy produced on the customer's side of the meter rather than delivered by the Company. If not, please explain why such avoided costs, or benefits produced, were not considered by the Company in determining the proposed demand charge of \$15.10 per kW.

RESPONSE:

19. Regarding the testimony of Company witness Daves at Exhibit No. 4 (PRD), please provide the source documents for the "Beta Value Line" for each of the eight companies shown in Exhibit No.8 (PRD).

RESPONSE:

20. Regarding the testimony of Company witness Daves at Exhibit No. 8 (PRD), please provide the source documents for the "Value Line Dividend Growth Estimate" and

“Value Line Earnings Growth Estimate” for each of the eight companies shown in Exhibit No.8 (PRD).

RESPONSE:

21. Regarding the testimony of Company witness Daves at page 10, lines 16-18, please provide the supporting workpapers showing the regression of daily stock returns on the S&P 500 return using 1 and 3 years of daily data.

RESPONSE:

22. Does the Company admit that it has an obligation under federal law to credit or otherwise compensate a residential or commercial end user for generating and providing power from solar panels to the Company?

- (a) If the answer is yes, please describe the source of that legal obligation.
- (b) If the answer is no, please explain why the Company is not obligated under the Public Utility Regulatory Policies Act of 1978 to take power from a residential or commercial end user who qualifies as a small power production facility.
- (c) If the answer is no, please explain why the Company is offering to purchase power from customers under the company’s proposed tariffs.

RESPONSE:

23. Does the Company admit that residential customers who take service under the proposed Tariff RS-D are in the same service class as other residential customers? Please answer “yes” or “no” and explain your answer.


RESPONSE:

24. Explain why residential customers who generate electricity from solar panels and provide a portion of that electricity to the Company, either for credit or other compensation, should be required to pay a demand charge while other residential customers are not.

RESPONSE:

Respectfully submitted,

BRADLEY ARANT BOULT CUMMINGS LLP

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CERTIFICATE OF SERVICE

I hereby certify that on the 21st day of March, 2016, a copy of the foregoing document was served on the parties of record, via electronic email transmission and regular U.S. Mail, postage prepaid, addressed as follows:

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