

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**DATA REQUESTS OF KENTUCKY POWER COMPANY
TO KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.**

RECEIVED

APR 21 2010

**PUBLIC SERVICE
COMMISSION**

April 21, 2010

Kentucky Power Company (“Kentucky Power” or “Company” for its data requests to Kentucky Industrial Utility Customers, Inc. (“KIUC”)) states:

DEFINITIONS

1. “Document(s)” is used in its customary broad sense and includes electronic mail and all written, typed, printed, electronic, computerized, recorded or graphic statements, communications or other matter, however produced or reproduced, and whether or not now in existence, or in your possession.
2. "Study" means any written, recorded, transcribed, taped, filmed, or graphic matter, however produced or reproduced, either formally or informally, on a particular issue or situation, in whatever detail, whether or not the consideration of the issue or situation is in a preliminary stage, and whether or not the consideration was discontinued prior to completion, whether preliminary or final, and whether or not referred to the subject witness' direct testimony herein.
3. If any document requested herein was at one time in existence, but has been lost, discarded or destroyed, identify such document as completely as possible, including the type of document, its date, the date or approximate date it was lost, discarded or destroyed, the identity of the person (s) who last had possession of the document and the identity of all persons having knowledge of the contents thereof.
4. "You" or "your" means Kentucky Industrial Utility Customers, Inc., the person whose filed testimony is the subject of these requests and, to the extent relevant and necessary to provide full and complete answers to any request, "you" or "your" may be deemed to include any person with information relevant to any request who is or was employed by or otherwise associated with the witness or who assisted, in any way, in the preparation of the witness' testimony.

INSTRUCTIONS

1. The Requests shall be deemed continuing so as to require prompt further and supplemental production if at any time during this proceeding in the event you locate or obtain possession, custody or control of additional responsive documents.
2. Any studies, documents, or other subject matter not yet completed that will be relied upon during the course of this proceeding should be provided as soon as they are completed. You are obliged to change, supplement and correct all answers to these Requests to conform to available information, including such information as it first becomes available to you after the answers hereto are served.
3. Unless otherwise expressly provided, each interrogatory should be construed independently and not with reference to any other interrogatory herein for purpose of limitation.
4. The answers should identify the person(s) supplying the information.
5. Please answer each designated part of each information request separately. If you do not have complete information with respect to any interrogatory, so state and give as much information as you do have with respect to the matter inquired about, and identify each person whom you believe may have additional information with respect thereto.
6. If you believe any Request is unclear or ambiguous please consult with counsel for Kentucky Power for clarification.
7. If assert any privilege with respect to each document or communication please identify the privilege, all facts supporting your assertion of the privilege, and all persons who were provided access to the document or communication.

Data Requests

Data Requests For Mr. Kollen:

1. Please refer to Page 19, lines 4-20, and Page 20, line 1 of Mr. Kollen's testimony.
 - (a) Did Mr. Kollen review Recommendations V-1, V-2 and V-3 of the Schumaker & Company March 24, 2003 "Final Report Focused Management Audit of The Hazard Service Area of American Electric Power Power/Kentucky" prior to preparing his testimony? The recommendations are referenced in the Company's Response to the Staff's Second Set of Data Requests, No. 46. (A copy of the recommendations is attached as Exhibit 1 to these data requests)
 - (b) Does Mr. Kollen agree or disagree with Recommendations V-1, V-2 and V-3 of the Schumaker & Company Final Report?
 - (c) Please provide the basis, including any studies, reports or other documentation, for Mr. Kollen's agreement or disagreement with Recommendations V-1, V-2 and V-3 of the Schumaker & Company Final Report.

2. Please refer to Page 20, lines 2-11, of Mr. Kollen's testimony. Please identify:
 - (a) The highest System Average Interruption Duration Index that in Mr. Kollen's opinion is consistent with Kentucky Power's obligation to provide reasonable service.
 - (b) The highest System Average Interruption Frequency Index that in Mr. Kollen's opinion is consistent with Kentucky Power's obligation to provide reasonable service.
 - (c) The highest Customer Average Interruption Duration Index that in Mr. Kollen's opinion is consistent with Kentucky Power's obligation to provide reasonable service.
 - (d) Please provide the basis, including any studies, reports or other documentation, for the responses to subparts (a)-(c) of this data request.

3. Please refer to Page 22, Lines 2-5 of Mr. Kollen's testimony.
 - (a) Please explain and provide the basis, including any studies, reports or other documentation, for Mr. Kollen's testimony that the experience of Public Service Company of Oklahoma "does not demonstrate the superiority of the cycle based approach compared to a performance based approach."

- (b) Does Mr. Kollen contend that the employment by Kentucky Power of a performance based vegetation management approach would be superior to the cycle based vegetation management approach?
 - (c) Please provide the basis, including any studies, reports or other documentation, for the responses to subpart (b) of this data request.
4. Please refer to Page 26, lines 18-19 of Mr. Kollen's testimony. Please identify:
- (a) the specific costs Mr. Kollen is referring to when he testifies: "These costs already are embedded in the test year."
 - (b) the amount of the costs embedded in the test year and referred to by Mr. Kollen in his testimony quoted in subpart (a) of this data request.
 - (c) the portions of the application or supporting work papers supporting the response to subparts (a) and (b) of this data request.
5. Please refer to Page 27, lines 6-20, and Page 28, lines 1-12 of Mr. Kollen's testimony. Please identify:
- (a) which, if any, of these "reasons" would be addressed in whole or part by a "reliability" tracker that would allow Kentucky Power to recoup reliability associated costs above base rate amounts as they are incurred?
 - (b) the basis, including any studies, reports or other documentation, supporting the response to subpart (a) of this data request.
6. Please refer to Page 13, lines 33-35 of Mr. Kollen's testimony in which he states: "The Company has failed to consider the effect on its costs and revenue requirement due to a richer common equity ratio to offset the rating agencies' imputation of debt equivalents for purchased power contracts."
- (a) Does Mr. Kollen agree that Kentucky Power's interest Rockport Unit Nos. 1 and 2 is a purchased power agreement of the type Mr. Kollen contends ?
 - (b) Please provide the basis, including any studies, reports or other documentation, supporting the response to subpart (a) of this data request.
 - (c) Please identify each Kentucky Power proceeding in which Kentucky Power has requested "a richer common equity ratio to offset the rating agencies' imputation of debt equivalents for purchased power contracts."
 - (d) Please identify and provide any rating agency's rating or report with respect to Kentucky Power in which the rating agency imputed a debt equivalent associated with the Rockport Purchase Power Agreement.

- (e) Please identify the amount of incremental revenue increase that would be required in the current proceeding as a result of a richer common equity ratio to offset the rating agencies' imputation of debt equivalents for purchase power contract.
- (f) Please provide all calculations supporting or relating to the responses to subparts (d) and (e) of this data request.

Data Requests for Mr. Baron

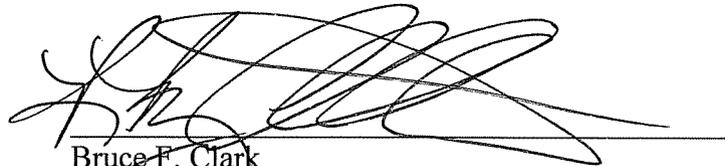
- 7. Please refer to Page 19, lines 8-16, Page 20 lines 1-13, and Page 21, lines 1-7 of Mr. Barron's testimony.
 - (a) Has Mr. Baron calculated the impact of the Company's proposed QP rate design on the total bill for higher load factor QP customers referenced by Mr. Barron at lines 10-11 of page 20 of his testimony?
 - (b) Has Mr. Baron calculated the impact of the Company's proposed QP rate design on the total bill for customers other than the higher load factor QP customers referenced by Mr. Barron at lines 10-11 of page 20 of his testimony?
 - (c) Please provide the results of the calculations described in subparts (a) and (b) of this data request and all supporting workpapers.
- 8. Please refer to Page 8, lines 4-14 of Mr. Barron's testimony. Mr. Baron testifies that "residential customers did not pay sufficient revenues during the test year to even cover the operating expenses associated with their usage of power from KPCo, let alone a return on the invested capital (generating units, transmission plant, distribution facilities) built to serve these customers. Rather, KPCo's return on investment built to serve residential customers was provided by all of the other KPCo rate classes (SGS, MGS, LGS, QP, CIP-TOD, MW, OL and SL)." To the extent Kentucky Power is not earning its authorized return on invested capital does Mr. Baron agree that the revenues provided by non-residential rate class customers classes (SGS, MGS, LGS, QP, CIP-TOD, MW, OL and SL) would not be sufficient, when combined with the revenues from residential customers, to provide Kentucky Power its authorized return on capital.

Data Requests For Mr. Baudino

- 9. Please refer to Page 15, lines 5-7, of Mr. Baudino's testimony. With respect to the criterion that a member of the proxy group receive at least 50% of its revenue from electric operations:
 - (a) Please provide copies of all analyses, studies, and documentation prepared by Mr. Baudino demonstrating that the proportion of a company's revenues from electric utility operations is related to investors' risk perceptions.

- (b) Please provide all analyses, studies, and documentation prepared by Mr. Baudino to support the use of a 50% of revenue from electric operations threshold in selecting the proxy group. If Mr. Baudino has performed no such analyses or studies, please provide a complete explanation supporting his selection of a 50% threshold, including any studies, reports or other documentation supporting the use of the 50% threshold.
 - (c) Please provide copies of any independent analyses, studies, or publications that support Mr. Baudino's position that the percent of revenues from electric utility operations is related to investors' risk perceptions.
10. Please refer to Mr. Baudino's testimony at Page 14, lines 16-23, Page 15, lines 1-17, and Table 1 on Page 16.
- (a) Please provide a complete list of all companies considered by Mr. Baudino for inclusion in his proxy group.
 - (b) For each company listed in response to subpart (a) of this data request please provide the values or other pertinent information for each of the screening criteria used by Mr. Baudino to select his proxy group.:
11. Please provide a copy of the April 2010 AUS Utility Report referenced at Page 14, lines 21-22 of Mr. Baudino's testimony.
12. Please provide a copy of all electronic spreadsheets (with formulas intact) relied on in the preparation of Mr. Baudino's testimony and exhibits with formulas intact.
13. Please provide a copy of Mr. Baudino's testimony filed with the Public Service Commission of Wisconsin in Case No. 6690-UR-119.

Respectfully submitted,



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**COUNSEL FOR KENTUCKY POWER
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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served by first class mail, postage prepaid, upon the following parties, on this 21st day of April, 2010.

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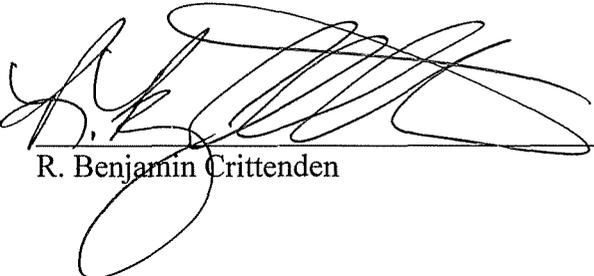
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Finding V-12 Animal protection practices are adequate.

Animal caused outages are a minor cause of unplanned service interruptions. AEP/Kentucky's approach to installing protective devices in response to emergent animal caused reliability problems is reasonable.

D. Recommendations

Recommendation V-1 Determine the annual vegetation management workload increment. (Refer to *Finding V-7*).

Trees represent a liability to utilities. Because vegetation is dynamic, there is an annual change in the tree workload inventory. To hold tree-related outages constant, the volume of annual vegetation management work completed must match the annual change in the tree workload inventory. Any portion of the annual work increment not completed enlarges by geometric progression. Failure to remove the annual workload increment results in both deteriorating reliability and increased future costs.

To prevent the escalation of costs and deteriorating reliability, the amount of annual vegetation management required (annual workload increment) must be quantified. It is a specific amount of work, representing a specific cost. Without quantification, there are only guesses.

Determining the annual workload increment necessitates a static snap shot of all current trims, removals, brush, and spray areas. In addition to this inventory, the rate of change needs to be quantified. It typically includes tree growth rates. The average rate of tree mortality over the utility forest should also be determined. As AEP/Kentucky has very high tree exposure, off right-of-way trees comprising 35% of unplanned distribution outages, tree mortality will figure prominently in managing tree-related outages.

Once this workload is determined, it would be useful to represent this information in a vegetation management layer in the Small World. This would provide a more useful representation of the information and eliminate the need to record the information on paper maps only.

Recommendation V-2 Establish pruning cycles based on measured average tree growth. (Refer to *Finding V-4*).

The field review suggests that current pruning cycles are one to two years behind. This observation is supported by the history of tree-related outages arising from trees within the right-of-way. Yet, AEP/Kentucky's experience shows it is feasible to reduce tree-related outages from within right-of-way trees to just a few percent of unplanned outages.

The present pruning cycle does not avoid tree-conductor contacts. Avoiding tree-conductor contacts should, however, be an objective of the pruning program for both safety and reliability reasons. A pruning cycle based on an inventory of trees requiring pruning and tree growth rates minimizes the number of tree-conductor contacts. Reducing outages from vegetation within the right-of-way to zero is not feasible for AEP/Kentucky because of the extremely fast growth rate of kudzu (*Pueraria montana* var. *lobata*). Typically within a maintained circuit there will be locations with exceptional growth that will require off-cycle pruning to avoid tree-conductor contacts. Such locations usually contain planted, introduced species. These locations require hotspotting and are the same ones targeted in the tree replacement program.

There are two possible ways to minimize within right-of-way tree-caused outages. The first is to establish a pruning cycle based on average tree growth. Flexibility is required to adjust the cycles up or down based on exceptional local conditions such as drought. The second approach is to substantially increase the use of hotspotting to prevent trees growing into conductors. The hotspotting approach escalates maintenance costs and is reactive. That is, hotspotting does not constitute management of the tree workload.

Recommendation V-3 Budget for vegetation management based on the annual workload increment. (Refer to *Finding V-8* and *Finding V-9*).

Successful vegetation management that manages tree-related outages can only derive from funding based on actual tree conditions. Funding based on any other premise is bound to fail the objective of providing safe, reliable, economic service. Paradoxically, because the tree workload expands exponentially, budgeting based on the actual tree workload is the path to simultaneously minimizing tree-related outages and costs.

Recommendation V-4 Use hotspotting to minimize tree-related outages until the system is on a sustainable pruning cycle. (Refer to *Finding V-5*).

Until the pruning cycle based on average tree growth is established across the entire Hazard Service Area, tree-conductor contacts will remain high. It may take a number of years to work across the whole Hazard Service Area establishing the shorter pruning cycle. In the interim, if tree-related outages are to be avoided, hotspotting must be substantially increased to prevent burners. The alternative is to maintain hotspotting at current levels, recognizing that while tree-caused outages will remain high, they will begin decreasing as more of the area is completed and maintained on the proper pruning cycle.

In areas where the new pruning cycle has been introduced, hotspotting should be used to maintain clearance at all cycle buster locations. The amount of hotspotting must be determined by the actual need in the field, unlike the current practice of ignoring hotspots because they occur in the next year's work plan. As the need for hotspotting cannot be entirely avoided, a target for the maximum amount of hotspotting should be set. However, the cap must be set based on real need. A cap of 2% to 5% is suggested as achievable with a proper pruning cycle.

