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COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF THE RELIABLITY MEASURES OF KENTUCKY'S JURISDICTIONAL ELECTRIC DISTRIBUTION UTILITES

ADMINISTRATIVE CASE NO. 2011-00450

Reported by: Clark Energy Cooperative, Winchester, Kentucky

CERTIFICATE OF PREPARATION

STATE OF KENTUCKY)

COUNTY OF CLARK)

This letter is to certify that I, Scott Sidwell, Sr. V.P. of Engineering & Operations for Clark Energy Cooperative in Winchester, Kentucky, completed this report and do attest the information contained within this response is true, accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

This 29th day of March, 2012 Scott Sidwell

Witnessed by

Notary Public, KY State at Large

MY COMMISSION EXPIRES SEPTEMBER 8, 2012 My Commission Expires ____

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Request:

- The following questions relate to the use of a five-year average of System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI) on a circuit basis as a benchmark to determine the relative reliability of an individual circuit.
 - In your opinion, is it reasonable for the Commission to require each utility to develop and report a five-year average SAIDI on a circuit-by-circuit basis as a benchmark for comparison purposes? Explain your answer.

Response:

a. Clark Energy already compiles SAIDI information on a five-year circuit-by-circuit basis for internal use to analyze and monitor outages looking for reoccurrence of outages over a relative longer period to time. It is thru this analysis that a realization of certain things become apparent, such as the fact that longer circuits have more exposure that almost always translate into higher SAIDI numbers as does weather related events and circuits surrounded by solid right-of-ways. Even with the use of the IEEE (MED) method to calculate indices and remove the most severe storm numbers, the frequency and length of the outages are higher and longer because of these factors.

> In Clark Energy's opinion it is not unreasonable for the Commission to request a fiveyear SAIDI average since the data is readily available but little is to be gained considering the factors previously mentioned.

Request:

 In your opinion, is it reasonable for the Commission to require each utility to explain why a particular circuit has a higher SAIDI than the utility's five-year average SAIDI for that circuit? Explain you answer.

Response:

 b. As discussed in the answer for question (a.) the majority of outages have more to do with conditions rather than the lack of response to causes. In Clark Energy's opinion there is little to be gained by this requirement.

Request:

c. In your opinion, is it reasonable for the Commission to require each utility to explain the planned corrective measures for the circuit with a higher SAIDI than the five-year average? Explain your answer.

Response:

c. In the opinion of Clark Energy the majority of outages are the result of inclement weather or conditions beyond the control of the utility and normally require only immediate corrective measures such as the replacement of fuses or the re-tensioning of conductors and such. Requiring an explanation from utilities for each circuit with a higher than average SAIDI would seem to be of little benefit to the Commission because most of the corrective measures would have already been made.

Request:

 In your opinion, is it reasonable for the Commission to require each utility to develop and report a five-year average SAIFI on a circuit-by-circuit basis as a benchmark for comparison purposes? Explain your answer.

Response:

d. Clark Energy has developed a five-year SAIFI average on a circuit-by-circuit basis and we do monitor our SAIFI numbers on a monthly basis. In Clark Energy's opinion, the requirement of reporting SAIFI numbers on a five-year average is unnecessary.

Request:

e. In your opinion, is it reasonable for the Commission to require each utility to explain why a particular circuit has a higher SAIFI that the utility's five-year average SAIFI for that circuit? Explain your answer.

Response:

The largest number of outages, on average for Clark Energy's electrical system are caused by storms that produce numerous lightning strikes or high winds that blow trees and/or limbs into the lines. Some years the storms are worse than others and this can cause SAIFI numbers to inflate accordingly. In Clark Energy's opinion, explaining this in detail would not be productive or cause outage numbers to improve.

Request:

f. In your opinion, is it reasonable for the Commission to require each utility to explain the planned corrective measures for the circuit with a higher SAIFI than the five-year average? Explain your answer.

Response:

f. For reasons explained in the response of question (e.)Clark Energy does not think it is necessary to be required to provide planned corrective measures on circuits that have a higher than average SAIFI number than the five-year average.

Request:

g. In your opinion, is it reasonable for the Commission to require each utility to develop and report a five-year average CAIDI on a circuit-by-circuit basis as a benchmark for comparison purposes? Explain your answer.

Response:

Clark Energy has developed a five-year average of CAIDI on a circuit-by-circuit basis that is used in comparison to the current indice on a monthly basis. All three indices, SAIDI, SAIFI, and CAIDI are reported to our board of directors each month for their review as well. CAIDI is also affected by larger numbers of or extended outages that skew the numbers and don't always reflect the average time it takes to restore service. For this reason Clark Energy is of the opinion that we should not be required to report this on a five-year average on a circuit-by-circuit basis but be allowed to continue to use it internally as a tool to monitor our service restoration efforts.

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Request:

 h. In your opinion, is it reasonable for the commission to require each utility to explain why a particular circuit has a higher CAIDI that the utility's five year average CAIDI for that circuit? Explain your answer.

Response:

Extended outages due to broken poles and events or storms that fall out of the IEEE (MED) criteria but are still beyond the control of the utility are some of the reasons why CAIDI numbers inflate on occasion. Ultimately, Clark Energy has a responciblity to our members to explain these occurrences to them and it is Clark Energy's opinion that we should not be required to explain outages that fall out of the five-year CAIDI criteria to the Commission.

Request:

 In your opinion, is it reasonable for the Commission to require each utility to explain the planned corrective measures for the circuit with a higher CAIDI than the five-year average? Explain your answer.

Response:

It is Clark Energy's stance that large and extended outages are normally the primary reason for higher CAIDI numbers. When all of our available field personnel are busy with outages, our only choice is to request assistance from other cooperatives or line contractors and it takes time to import additional help due to the logistics of distance and travel. Whenever possible we attempt to back feed lines to get the most members back on while repairs are made but most rural feeders do not have back feed capabilities. In Clark Energy's opinion there are few measures we can take to correct the situations and lower our CAIDI numbers and it doesn't seem reasonable to be required to report expected corrective measure plans that would not be meaningful.

Request:

2. KRS 61.870 through KRS 62.884 address open records of public agencies and 807 KAR 5:001, Section 7, pertains to confidential material submitted to the Commission. Do you anticipate that some information submitted concerning the utility's circuits, whether with regard to SAIDI, SAIFI, CAIDI, or other reporting, could contain confidential, proprietary, or critical infrastructure information for which a petition for confidential information may also be submitted? Explain your answer. In your answer, provide examples of the type of information for which you may seek confidential protection.

Response:

Our SAIDI, SAIFI, and CAIDI numbers contains no proprietary information and Clark Energy will not seek confidential protection if we are required to report them. But we consider our indice numbers to be confidential and of no real value to our members since they are used internally for planning and to monitor the progress of our system reliability improvements. The diversity of our system does not lend to comparison between rural or urban feeders and without an understanding about the complexity of our electrical system some members could come to a wrong conclusion.

Request:

3. Please describe your utility's current capacity to compose electronic documents.

a. Is the utility familiar with or currently using Microsoft Office products such as MS Word or Excel? If so, include the name and version(s) of the software currently used.

b. Describe your utility's current internet connectivity status, including connection speed.

c. Is the utility familiar with the Commission's website?

d. Has your utility registered on the PSC website and does it have a valid username and password? (This registration would currently be used for Electronic Case Filing, Annual Reports, and Tariff Filings).

e. If recommended, would your utility have technical staff available to interface with the PSC Information Services Team to assist in the design and implementation of an automated process for uploading data to the Commission?

Response:

a. Clark Energy currently uses Microsoft Office software with multiple different versions running. The majority of the versions are either Microsoft 2007 or 2010.

b. Clark Energy's current internet connectivity is up and running at this time. We have a 3Mb dedicated circuit which is two bundled T1 lines.

c. Yes, Clark Energy is familiar with the Commissions web site

d. Clark Energy is currently registered on the PSC website and has a valid username and password.

e. Clark Energy currently has the technical people needed and they are available to interface with the PSC Information Services Team to assist in the design and implementation of an automated process for uploading data to the Commission.

Request:

4. The following questions relate to the manner by which the utility tracks SAIDI, SAIFI, and CAIDI as stated in response to Items 2. (a) and (b) of the Commission's Order of January 11, 2012.

a. This question applies to Kentucky Power Company ("Kentucky Power"), Big Sandy Rural Electric Cooperative Corporation, Blue Grass Energy Cooperative Corporation, Clark Energy Cooperative, Inc., Duke Energy Kentucky, Inc. ("Duke"), Farmers Rural Electric Cooperative Corporation, Inter-County Energy Cooperative Corporation, Jackson Energy Cooperative Corporation, Jackson Purchase Energy Corporation, Kenergy Corp., Kentucky Utilities Company ('KU"), Louisville Gs and Electric Company ("LG&E"), Meade County Rural Electric Cooperative Corporation, Nolin Rural Electric Cooperative Corporation, Owen Electric Cooperative, Inc., Salt River Electric Cooperative Corporation, Shelby Energy Cooperative, Inc., South Kentucky Rural Electric Cooperative Corporation, and Taylor County Rural Electric Cooperative Corporation all of which reported that they tracked SAIDI, SAIFI, and CAIDI using an outage management system or an outage management system in conjunction with an Excel spreadsheet.

(1) Does your utility have the ability to export (or upload) the data to another data base or data system (including an Excel spreadsheet) maintained by the Commission? If not, explain why.

(2) If not identified elsewhere, identify the file formats to which your utility has the ability to export data.

c. This question applies to Cumberland Valley Electric, Inc. and Licking Valley Rural Electric Cooperative Corporation, who reported that they tracked SAIDI, SAIFI, and CAIDI manually. Does your utility have the ability to export (or upload) the data to another data base or data system (including an Excel spreadsheet) maintained by the Commission? If not, explain why.

Response:

- Yes, Clark Energy has the ability to export (or upload) the data to another data base or data system (including an Excel spreadsheet) maintained by the Commission.
- (2) Clark Energy does use Microsoft Office products.
- c. This question does not apply to Clark Energy

Request:

8. Explain how the SAIDI, SAIFI, and CAIDI indices influence the allocation of capital for system improvement projects within the utility. For the Investor –Owned Utilities Kentucky Power, Duke, KU and LG&E, explain the manner in which the parent company influences the amount and allocation of capital for system reliability improvements.

Response:

Evaluation of our SAIDI, SAIFI and CAIDI indices are a prime consideration as we develop our system work plan. These numbers help us target areas that have small conductor that are in need of replacement looking at the frequency of conductor failure coupled with a hardening of the electrical system by adding poles in long spans to reduce span lengths, building new feeders to tie cross country lines together to improve accessibility and changing out poles found thru our ten year pole inspection process. Our power supplier has also added reliability as a consideration on where to place new substations as a way to improve back feed capabilities and reduce exposure on long feeders.

Request:

9. Does the utility currently share other types of data with entities outside your organization? If yes, describe those other sharing systems and data, and with whom your utility shares the information.

Response:

Clark Energy does not share other types of data with entities outside our organization.

Request:

10. Identify any disadvantages to making the reliability index numbers available on the Commission's website.

Response:

Without the proper understanding of what the indice numbers mean and with little way to discern the diversity of the system our members may draw wrong conclusions about their particular substation or feeder that they are served from. They also may use this information to compare Clark Energy to other utilities that are compact and largely urban causing a discord among our members.

Request:

11. Identify any advantages to making the reliability index numbers available on the

Commission's website.

Response:

Clark Energy can think of no advantages to making the reliability index numbers available on the Commission's website.

Request:

12. In your opinion, what information would the utility's customers be most interested in having easily accessible? In your opinion is it more appropriate to have this information available by circuit or system averages? How does your utility relay reliability information to your customers? Explain you answers.

Response:

In Clark Energy's opinion the majority of our members are only interested in their particular situation. They want to know why their service is blinking or if it is off when service might be restored. It is doubtful if the majority of our members know what substation they receive service from; let alone what circuit they are a part of. When any of our members contact us about reliability issues we supply them with explanations about what caused the outage in their area and what we are doing to correct the situation if appropriate.

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Request:

13. If not identified elsewhere, describe the reliability information available for public review on your utility's website.

Response:

Clark Energy's website does not currently list reliability indice information for any part of the system.

Request:

14. If the utility's customer requests information from the utility on reliability measures, do you provide it? Explain your answer.

Response:

If one of our members has questions about their electric reliability, we will discuss with them events or outages that has occurred on their circuit and what we are doing to mitigate those outages or blinks. To our knowledge we have never had a request for any of the indices such as SAIDI, SAIFI, or CAIDI by our members.

Request:

15. Does the utility have a suggestion for a better or more efficient method or manner for reporting or providing reliability information to the public?

Response:

Clark Energy believes the current system of talking one on one with our members when they have reliability concerns is still the best way to provide information to our members.