Rural Electric Cooperative Corporation

A Touchstone Energy® Cooperative

March 26, 2012

MR JEFF DEROUEN
EXECUTIVE DIRECTOR
PUBLIC SERVICE COMMISSION
PO BOX 615
FRANKFORT KY 40602

RE: PSC CASE NO. 2011-00450

Dear Mr. Derouen:

Please find enclosed an original and ten (10) copies of the responses of Nolin RECC to the Commission Staff's Second Request for Information as requested in the above referenced case.

If you have any questions, please let me know.

Sincerely,

Michael L. Miller

Michael L. Miller
President & CEO

/afc

Enclosures

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## Commonwealth of Kentucky

## Before the Public Service Commission

## Case No. 2011-00450

**VERIFICATION**

I verify, state and affirm that the testimony filed with this verification and for which I am listed as a witness is true and correct to the best of my knowledge, information and belief formed after a reasonable inquiry.

Greg Harrington, System Engineer

**State of Kentucky**

**County of Hardin**

The foregoing was signed, acknowledged and sworn to before me by Greg Harrington, this 26th day of March, 2012.

Notary Public

My Commission Expires: August 27, 2012

**Nolin Rural Electric Cooperative Corporation**

**Second Information Request – Case No. 2011-00450**

**Public Service Commission Staff Request Dated March 15, 2012**

Question 1(a-i):

1. *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.*

    a. *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.*

**Answer:**
**It is reasonable, and Nolin RECC is already completing this task.**

    b. *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 your answer.*

**Answer:**
**It is reasonable, and Nolin RECC is already completing this task.**

    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.*

**Answer:**
**No, it is not reasonable. There are many factors that influence reliability indices from year-to-year. Miles of exposure on a feeder, accidents, weather patterns, aging of system component failures, and sometimes bad luck can drive up indices. A knee jerk reaction to a circuit's poor performance in one year's reliability calculation is a poor way of measuring reliability. Looking at indices over a longer period of time, ten to fifteen years, will give the utility a much better idea where to invest in the**

**system. In Nolin's opinion, sometime it is impossible to explain why a yearly index may be higher than the five-year average.**

d. *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.*

**Answer:**
**It is reasonable, and Nolin RECC is already completing this task.**

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

**Answer:**
**No, it is not reasonable to compare frequency to duration indices. Nolin's goal is to provide safe and reliable energy to our members. In our opinion, there is no benefit to comparing these two indices because SAIFI is calculated using the average frequency of sustained interruptions system wide and SAIDI is calculated using the total average time that customers are interrupted. Too many unknown variables and limits on engineering manpower prevent Nolin from using these combined methods.**

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.*

**Answer:**
**No, it is not reasonable. See response to 1c.**

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.*

**Answer:**
**No, it is not reasonable. At what point do we gather so much information that we have information overload? Nolin is able to provide what you ask, but how will it be used to benefit our members? If the Commission requires smaller utilities to calculate reliability indices (SAIFI, SAIDI & CAIDI) by circuit, give the top ten worst performers by circuit and find solutions to reliability problems, this is a taxing burden. Not all utilities are equipped with the manpower or the software resources to complete such a task. This will lead to utilities having to ask the Commission to allow a rate increase in order to pay for requirements mandated by the Commission and in the end did it improve member reliability?**

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

**Answer:**
**No, it is not reasonable comparing duration indices. Nolin wants to get every member's electric service restored safely and as soon as possible. In our opinion, there is no benefit to comparing these two indices because CAIDI is calculated using average time required to restore service to the average customer per sustained interruption and SAIDI uses total average time that customers are interrupted. Too many unknown variables and limits on engineering manpower prevent Nolin from using these combined methods.**

i. *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.*

**Answer:**
**No, it is not reasonable – see answer to 1c.**

Responding Witness: Greg Harrington, System Engineer
Nolin Rural Electric Cooperative Corporation

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Question 2:

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.*

**Answer:**

**Nolin believes that some information should be confidential in regards to reliability indices. System-wide reliability indices are not as difficult to explain as individual circuit reporting. The average member would not be able to adequately assess the reliability numbers and what trends, conditions or actions on the utility's part may drive the numbers up or down. Posting reliability numbers on a web-site by individual circuit or system wide will cause members to compare numbers against other members and utilities. If this occurs, utilities could find a way to "skew" the numbers in their favor and true reporting of reliability indices will not occur because of the confidentiality not being in place.**

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Question 3(a-e):

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 of Excel? If so, include the name and version(s) of the software currently used.*

**Answer:**
**Yes, Nolin RECC uses Microsoft Office 2007.**

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

**Answer:**
**Ethernet internet access.**

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

**Answer:**
**Yes.**

   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).*

**Answer:**
**Yes**

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?*

**Answer:**
**Nolin would if recommended. However, Nolin IT personnel would verify that cyber-security is in place to prevent cyber-attacks.**

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**Public Service Commission Staff Request Dated March 15, 2012**

Question 4(a-b):

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, Fleming-Mason Energy Cooperative, Inc., Grayson Rural Electric Cooperative Corporation, Inter-County Energy Cooperative Corporation, Jackson Energy Cooperative Corporation, Jackson Purchase Energy Corporation, Kenergy Corp., Kentucky Utilities Company ("KU"), Louisville Gas and Electric Company ("LG&E"), Meade County Rural Electric Cooperative Corporation, Nolin Rural 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.*

**Answer:**
**Yes.**

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

**Answer:**
**Nolin is able to export any Microsoft extension.**

b. *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.*

**Answer:**
**N/A**

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**Second Information Request – Case No. 2011-00450**

**Public Service Commission Staff Request Dated March 15, 2012**

Question 8:

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*

**Answer:**

**After reliability indices are calculated an analysis is completed, at the circuit level, to identify circuits that performed poorly over the past year. During the analysis, reliability indices from several years are looked at along with tree trimming cycles to determine if this was due to exposure on the circuit, weather patterns, accidents or other unknown factors that drove the reliability numbers up for the year. If a circuit is identified as a poor performing circuit, an inspection of the line is completed and a decision is made whether to upgrade the line in the existing location or attempt to move the new line beside a road for easier access. Many factors go into the improvement decision such as, age and condition of poles, conductor, hardware, location of line, future loading in the area, existing foreign utility rights-of-way, tree issues, and reliability performance.**

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**Second Information Request – Case No. 2011-00450**

**Public Service Commission Staff Request Dated March 15, 2012**

Question 9:

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.*

**Answer:**
**No.**

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**Second Information Request – Case No. 2011-00450**

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Question 10:

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

**Answer:**

**No advantages. Utilities will be compared against each other – not all service areas are equal.**

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**Second Information Request – Case No. 2011-00450**

**Public Service Commission Staff Request Dated March 15, 2012**

Question 11:

*11. Identify any advantages to making the reliability index numbers available on the Commission's website.*

**Answer:**

**None.**

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**Public Service Commission Staff Request Dated March 15, 2012**

Question 12:

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 your answers.*

**Answer:**

**In our opinion, outage information is more valuable to the member than reliability numbers. The average member would not be able to adequately assess the reliability numbers and what trends, conditions or actions on the utility's part may drive the numbers up or down. Having reliability numbers available by circuit or system wide will have members comparing numbers against other members and utilities. If this occurs, utilities could find a way to "skew" the numbers in their favor and true reporting of reliability indices will not occur.**

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**Public Service Commission Staff Request Dated March 15, 2012**

Question 13:

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

**Answer:**

**System-wide map that shows outages by zip code. No reliability indices are shown anywhere on Nolin's website.**

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**Public Service Commission Staff Request Dated March 15, 2012**

Question 14:

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

**Answer:**

**We do not recall a residential customer ever asking for reliability numbers, however, prospective industrial customers have on occasion asked for numbers and Nolin has always provided this information.**

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Question 15:

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?*

**Answer:**

**No, Nolin RECC attempts to keep information gathering and assimilation as simple and understandable as possible.**

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