COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF THE RELIABILITY MEASURES OF KENTUCKY'S JURISDICTIONAL ELECTRIC DISTRIBUTION UTILITIES	))))	ADMINISTRATIVE CASE NO. 2011-00450

ORDER

On July 9, 2013, the Commission issued an Order which granted the joint petition of Duke Energy Kentucky, Inc. ("Duke Kentucky") and Kentucky Power Company ("Kentucky Power") (collectively "Joint Petitioners") for rehearing of the Final Order entered on May 30, 2013, ("May 30 Order") issued in this matter, and which also granted the motion for reconsideration and clarification of the May 30 Order filed by Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively the "Companies"). On July 31, 2013, the Commission issued an Order establishing a procedural schedule on rehearing.

On August 7, 2013, Kentucky Power filed its direct testimony.[1] On August 8, 2013, Duke,[2] KU and LG&E filed direct testimony.[3]

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[1] Direct Testimony of Everett G. Phillips on behalf of Kentucky Power Company, filed Aug. 7, 2013 ("Phillips Testimony").

[2] Direct Testimony of Leroy S. Taylor, Jr. on behalf of Duke Energy Kentucky, Inc., filed Aug. 8, 2013 ("Taylor Testimony").

[3] Rehearing Testimony of Paul Gregory "Greg" Thomas Vice President, Energy Delivery – Distribution Operations Louisville Gas and Electric Company and Kentucky Utilities Company, filed Aug. 8, 2013 ("Thomas Rehearing Testimony").

Duke Kentucky's Testimony

Duke Kentucky submitted the testimony of Leroy S. Taylor, Jr. In his testimony, Mr. Taylor explains that Duke Kentucky does not think that a circuit-by-circuit benchmarking is necessary because the concept of circuit-by-circuit benchmarking is based on the false premise that circuits themselves "go bad."[4] He states that it is design and/or process weaknesses that impact performance and that these weaknesses can occur on any circuit. He states that the major outages where these design/process weaknesses manifest are not numerous in any one year and that a single outage can dramatically skew reporting data.[5]

In addition, Mr. Taylor states that no two circuits are identical and that the performance of a particular circuit depends much upon its geography and the weather.[6] He states that many utilities, such as Duke Kentucky, take a holistic view of the system and employ a reliability strategy that is focused on consistently and strategically replacing or retrofitting weaknesses in the entire system from a design standpoint rather than trying to solve all problems on a particular circuit.[7] He states that Duke Kentucky focuses on addressing systemic weaknesses in design throughout the system and on fixing those issues. He states that those weaknesses could be found on what is considered a well-performing circuit or what could be considered a poorer-performing circuit under the Commission's new reporting standard.[8] He states that the Company

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[4] Taylor Testimony at p. 4.

[5] *Id.*

[6] *Id.* at p. 6.

[7] *Id.*

[8] *Id.*

manages its performance with a view to the total system and prioritizes and attempts to fix the worst problems on all its circuits, rather than all problems on the worst circuit, and that reporting on a circuit-by-circuit basis is thus misleading and inconsistent with the prioritization employed by Duke Kentucky.[9]

Mr. Taylor states that Duke Kentucky will incur additional costs for the enhanced data collection and reporting that is required "by this change in the reporting requirements."[10] He states that with respect to the accompanying corrective action plan required under the Commission's Order, if the requirement is left unchanged, Duke Kentucky "will be forced to re-deploy capital from programs already earmarked for reliability enhancements that benefit the entire system performance to address these so-called worst circuits."[11]

Duke Kentucky recommends: (1) elimination of the new same-circuit comparison requirement altogether; (2) that if the Commission were to require some additional level of reporting, the administrative burden of any reporting requirement should be reduced to a reasonable level; and (3) that the final Order with respect to any reporting should be issued as a regulation so that the requirement is clear going forward.

<u>Kentucky Power's Testimony</u>

Kentucky Power submitted the testimony of Everett G. Phillips.[12] In his testimony, Mr. Phillips states that Kentucky Power does not support the methodology to determine worst-performing circuits and reporting additional circuit-level detail, such as

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[9] *Id.*

[10] *Id.*, at p. 9.

[11] *Id.*

[12] Phillips Testimony.

a corrective action plan, for those circuits that have either a SAIDI (System Average Interruption Duration Index) or SAIFI (System Average Interruption Frequency Index) value that is higher than that circuit's respective rolling historical five-year average.[13] He states that Kentucky Power "believes that the additional data collection and reporting requirements associated with distribution circuits is not an appropriate benchmark for measuring reliability, is overly burdensome, and does not provide any commensurate benefits."[14]

Mr. Phillips states that comparing a circuit against its five-year rolling historical average could produce an inaccurate list of worst-performing circuits. He states that a poor-performing circuit may not make the worst-performing circuit list if its comparison year is only slightly better than historical performance.[15] He states that having to produce a non-representative list of worst-performing circuits, spending time and resources to analyze this list of circuits, and creating a corrective action plan for each of these circuits, even when one is not warranted, becomes an overly burdensome and costly requirement. He states that the cost of the additional efforts needed to comply with these new reporting mandates would ultimately be passed on to ratepayers and may not provide a commensurate benefit.[16] He states that Kentucky Power is not opposed to providing additional circuit data to the Commission "as long as the data

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[13] *Id.* at p. 4. Excluding Major Event Days ("MED") as per the Institute of Electrical and Electronics Engineers ("IEEE") standard.

[14] *Id.*

[15] *Id.* at p. 5.

[16] *Id.*

given to the Commission provides useful and actionable information concerning the reliability of a distribution circuit."[17]

He states that Kentucky Power supports the type of approach suggested by KU and LG&E whereby a utility would be required to only report a circuit whose current-year SAIDI or SAIFI exceeds its own historical five-year average by two standard deviations as a worst-performing circuit.[18] He states that applying two standard deviations to the five-year average allows Kentucky Power to capture approximately 95 percent of the normal expected variation caused by typical factors, giving a more accurate assessment of the worst-performing circuits.[19]

Kentucky Power recommends: (1) utilization of a different statistical methodology that would identify worst-performing circuits; (2) providing the Commission the reporting year SAIDI and SAIFI performance; (3) providing the Commission the prior five years of historical performance for each of its distribution circuits each year; and (4) modifications of various findings paragraphs of the May 30 Order.

Kentucky Power submitted a "redlined" version of pages 7-9 of the May 30 Order indicating its proposed recommendations with regard to finding paragraphs 7, 10, 11, and 12 of that Order which include: (1) modification of findings paragraph 7 to read: "'Compare each circuit to that circuit's rolling five-year average SAIDI plus two standard deviations;'"[20] to reflect Kentucky Power's recommendation for determining worst-performing circuits; (2) removal of findings paragraph 10; (3) modification of findings

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[17] *Id.* at p. 6.

[18] *Id.*

[19] *Id.* at pp. 7-8.

[20] *Id.* at p. 8.

paragraph 11 so that the reporting is due May 1 of each year to allow the Company the requisite time to complete the filing; and (4) modification of findings paragraph 12 so that the introductory language would read: "'For each circuit with a SAIDI value higher than that circuit's respective rolling five-year average SAIDI plus two standard deviations, excluding MEDs, include in the annual Reliability Report the following information . . . .'"[21] Kentucky Power proposes that for the worst-performing circuits that meet this SAIDI threshold, it would still provide all of the information outlined in findings paragraph 12, with a revision to subparagraph "o" of paragraph 12 so that the subparagraph would read: "'A Corrective Action Plan which describes any measures the utility has completed or plans to complete to improve the circuit's performance, or where no corrective action is necessary, this field may be labeled N/A.'"[22]

LG&E AND KU's Testimony

LG&E and KU submitted the testimony of Paul Gregory Thomas.[23] In his testimony, Mr. Thomas addresses the Companies' request that the Commission modify its same-circuit-comparison reporting requirement to make it more meaningful by requiring Corrective Action Plans only for each of those circuits whose one-year SAIDI or SAIFI exceeds its own rolling five-year SAIDI or SAIFI average by at least two standard deviations.[24]

In addition, Mr. Thomas's testimony requests the Commission to extend the reporting deadline for a given year's data from April 1 of the following year to July 1 of

[21] *Id.*

[22] *Id.* at p. 9.

[23] Thomas Rehearing Testimony.

[24] *Id.* at first [unnumbered] page.

the following year, even if the Commission adopts the Companies' modified Corrective Action Plan requirement.

Finally, Mr. Thomas's testimony asks that the Commission affirm Commission Staff's views from the June 28, 2013 technical conference, namely that the new reporting requirements supplant – not supplement – the previous requirements, and that the new reporting requirements are not new *de facto* distribution-reliability standards.[25]

Mr. Thomas further states that, as the Companies noted in their Motion for Reconsideration and Clarification, at least in some years, the SAIDI, SAIFI, and Corrective Action Plan reporting requirements set out in the Commission's May 30 Order may result in the Commission's receiving no significant reporting or action plans for consistently poor-performing circuits, while receiving extensive reporting and action plans for well-performing circuits that have slightly worse-than-average years. He states that such reporting would create increased administrative burdens for utilities and potentially increased costs for customers without providing the Commission information on circuits that might need improvement.[26] He states that the Companies do not object to supplying the circuit-level data the Commission has requested and the Companies do not object to providing Corrective Action Plans for circuits with abnormal performance issues that require explanation or correction:[27] "[I]ndeed, the Companies annually review circuit-level data for all of their circuits and develop and execute improvement plans for circuits identified as needing improvement."[28] He states that the Companies

[25] *Id.*

[26] *Id.* at p. 2.

[27] *Id.*

[28] *Id.*

maintain data on, and calculate reliability metrics for, over 1,700 Kentucky jurisdictional circuits.

Mr. Thomas states that the Companies have a well-established annual process for analyzing and providing improvement plans for individual distribution circuits. He states that at the beginning of each year, the companies gather reliability data for all of their circuits and then analyze the data to determine which circuits need improvements. After the Companies identify a circuit as needing improvement, they then begin a root-cause analysis for the circuit.

> The first step in a root-cause analysis is to review the circuit's history in the Companies' database by examining the various causes of the circuit's outages to determine which causes have most contributed to SAIDI or SAIFI issues for the circuit. After identifying the most important outage causes, the Companies review the circuit's individual event data to determine what kinds of solutions might improve the circuit's performance. The Companies' personnel then physically examine the circuit in a field evaluation to verify and modify the results of their root-cause analysis and to develop a specific improvement plan for the circuit. The field-work portion of the process, which results in the creation and implementation of improvement plans, occurs throughout the year, not during a few months at the beginning of the year.[29]

In their testimony, LG&E and KU recommend and request: (1) maintaining all circuit-level reporting requirements from the May 30 Order except for modification of the Corrective Action Plan component to require plans only for each circuit whose one-year SAIDI or SAIFI exceeds its own rolling five-year average by two standard deviations;[30] (2) setting July 1 as the reporting deadline, even if the Commission accepts the two-

[29] *Id.* at p. 3.

[30] Thomas Rehearing Testimony.

standard-deviation proposal;[31] (3) clarification that the new reporting requirements are to replace or supplement the requirements established in Administrative Case No. 2006-00494,[32] and that the Commission affirms Commission Staff's views from the June 28, 2013, technical conference that the new reporting requirements supplant, not supplement the previous requirements;[33] and (4) clarification that the new same-circuit comparison reporting requirements should not be used to judge the reasonableness of a utility's distribution service because it could lead to inefficient distribution investment decisions and that the Commission affirms Commission Staff's views from the June 28, 2013, technical conference that the new reporting requirements are not *de facto* distribution-reliability standards.[34]

RESPONSES TO REQUESTS FOR INFORMATION

Commission staff issued one set of requests for information to Kentucky Power, one set of requests for information to Duke Kentucky, and one set of requests for information to LG&E and KU.

Duke Kentucky's Responses

In response to a request asking Duke Kentucky to identify what portion of the May 30 Order prohibits it from addressing problems with its individual circuits and overall system in accordance with its policy, as stated in its testimony, Duke Kentucky

[31] In response to a request for information, the Companies indicated they do not object to moving the reporting deadline to May 1. Response of Louisville Gas and Electric Company and Kentucky Utilities Company to Staff's Initial Request for Information on Rehearing dated Aug. 23, 2013, Response to Item No. 6, filed Sept. 6, 2013.

[32] Case No. 2006-00494, *An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices* (Ky. PSC Oct. 26, 2007).

[33] Thomas Rehearing Testimony at first [unnumbered] page and p. 5.

[34] *Id.*

stated that the Commission's Order does not directly prohibit Duke from addressing problems in accordance with its current philosophy:

> . . .assuming the Commission recognizes that this reporting methodology of a circuit on a rolling 5 year average as set forth in the Commission's Order does not reflect the utility's actual reliability performance from an accountability standpoint. And that there is no nexus between how the system is maintained and how the Commission requires reporting. Nonetheless, if the Commission's order stands, then the Order directs Company resources to compile annual reporting not reflective of how the distribution system is managed and seems wasteful and not particularly useful to the Commission in gauging utility reliability performance . . . .[35]

Duke Kentucky also indicated that it can and will prioritize and implement its system reliability work in a manner that it has determined over many years to be the best method:

> . . .assuming the Commission is willing to accept a Corrective Action Plan for a particular circuit that states 'No Action Planned' for a particular circuit that may appear on the list but is itself, not prioritized as part of a more systemic design maintenance and repair philosophy. However, the circuit by circuit benchmarking/comparison to determine worst circuits as ordered by the Commission then becomes a superfluous activity and will result in misdirected and wasted resources, even if in the analysis and reporting phases only.[36]

The Company further states that it does not take corrective actions by circuit. It states that it seeks to correct problems that cause faults on the system in a manner that balances both reliability and cost.

> The Company's response to such a requirement on a 'by circuit' basis would likely be 'no action planned,' because the

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[35] Responses of Duke Energy Kentucky, Inc. to Commission Staff's Initial Request for Information on Rehearing, Response to Item 4.a. filed Sept. 6, 2013.

[36] *Id.* at Response to Item 3.

> Company may not have a plan to improve any particular circuit's individual performance as compared to its five year rolling average performance. In fact, the Company may deploy resources to fix a problem with a design on part of the system that does not even appear on the list of circuits falling below their five year rolling average because it has the potential to proactively address a system weakness that has not yet come to fruition.[37]

Duke Kentucky states that it thinks the concept of "worst circuit" is invalid.[38]

> The Commission has ordered reporting that focuses on circuits, divides circuits into above and below their average, and therefore the commission clearly believes in the concept of 'worst circuit.' The Commission, therefore, is directing that utilities should focus reliability improvements in this manner.[39]

Kentucky Power's Responses

In response to a request for information asking it to explain the process it uses internally to review and analyze the performance of individual circuits annually based on the reliability indices, Kentucky Power states that it first runs performance reports.

> These performance reports contain reliability data for each of KPCo's circuits, including such information as SAIDI and SAIFI. KPCo distribution personnel review, analyze, and then rank the circuits accordingly by SAIDI and SAIFI. When warranted, KPCo will complete further analysis to create a corrective action plan for its worst-performing circuits. The 10 worst-performing circuits by both SAIDI and SAIFI are included in KPCo's annual reliability filing.[40]

It states that determining which circuits require reliability improvements is an ongoing process throughout the year. It states that Kentucky Power's distribution personnel

[37] *Id.* at Response to Item 6.

[38] *Id.* at Response to Item 9.

[39] *Id.*

[40] Responses of Kentucky Power Company to Commission Staff's Initial Request for Information on Rehearing, Response to Item 3.a., filed Sept. 6, 2013.

review a variety of information, including outage data, circuit-inspection data, and complaint date to determine whether a circuit is in need of reliability improvements and how best to improve the circuit reliability if improvements are warranted.[41]

Kentucky Power states that it believes that more effort and resources will be required to analyze additional circuits, determine if a corrective action plan is warranted, and plan what corrective action would be warranted "as required by the methodology in the May 30 Order."[42] It further states that based on the current methodology described in the Order of comparing a circuit's SAIDI and SAIFI with its five-year average, it would need to report approximately half of its circuits each year. It states that if it were to report approximately half of its circuits, which equates to 100 or more circuits, the time spent on the filing would increase to approximately 1,600 man-hours.[43] It further states that in addition to the reporting requirements, it is Kentucky Power's understanding that for each corrective action plan filed for a circuit, it would need to implement that plan and that each additional circuit-corrective action plan developed would result in additional implementation costs.[44]

Kentucky Power states that applying two standard deviations to the five-year average allows it to capture approximately 95 percent of the normal, expected variation caused by typical factors, giving a more accurate assessment of the worst-performing circuits. It believes that using an individual circuit's five-year rolling historical SAIDI data and calculating standard deviation using these values provides a more accurate

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[41] *Id.* at Response to Item 3.b.

[42] *Id.* at Response to Item 4.a.

[43] *Id.*

[44] *Id.*

methodology for determining the worst-performing circuits. It believes that having a more accurate list of worst-performing circuits will allow it to focus on those circuits most in need of corrective action.[45]

LG&E and KU's Responses

In response to a request for information query concerning Corrective Action Plans, the Companies state that they had previously assumed the Commission had intended Corrective Action Plans to be new work, which would have required considerable additional investigation and analysis on a relatively tight time frame, but "agree that the Commission's Order describes a Corrective Action Plan as 'any measures the utility has completed or plans to complete to improve the circuit's performance.'"[46] Had the Commission intended Corrective Action Plans to be new work, the Companies stated, such an effort would have required significant additional administrative cost.

> But on the understanding that a Corrective Action Plan will not require new investigation or analysis, the additional administrative cost of creating the required Corrective Action Plans will be minimal; however, it will still require Corrective Action Plans because the Companies' personnel will have to collect and compile existing distribution-system data from multiple systems. That is why the Companies continue to request an extension of the current April 1 filing deadline.[47]

The Companies state that they already gather, review, and maintain data sufficient to comply with the Commission's new reporting requirements, but do not currently compile this data into Corrective Action Plans, with the exception of the improvement plans as

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[45] *Id.* at Response to Item 5.

[46] Response of Louisville Gas and Electric Company and Kentucky Utilities Company to Staff's Initial Request for Information on Rehearing Dated Aug. 23, 2013, Response to Item 1, filed Sept. 6, 2013.

[47] *Id.* at Response to Item 2.

described in the testimony submitted by Mr. Thomas.[48] They state that on the understanding that a Corrective Action Plan will not require new investigation or analysis, "the Companies agree that the Commission's order would not prohibit reporting existing plans in place, irrespective of a two standard deviation strategy or other strategies utilized to develop plans."[49]

Finally, LG&E and KU state that they do not object to moving the filing deadline for reports to May 1 of each year.[50]

DISCUSSION

In the January 11, 2012 Order ("January Order") that initiated the current proceeding, the Commission indicated that it had determined that a need exists to further consider the reporting requirements set forth in the previous administrative case.[51] The January Order stated that the Commission would investigate the adequacy of the current reporting requirements, including the ability of the electric distribution utilities to submit on-line or electronic reports; and that the Commission would investigate the utilities' corrective action measures and the timeliness of their completion.

In the May 30 Order issued in this proceeding, the Commission stated that it believes that the system-wide information filed yearly by each utility regarding SAIDI, SAIFI, and Customer Average Interruption Duration Index ("CAIDI") is not sufficient to

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[48] *Id.* at Response to Item 3.

[49] *Id.* at Response to Item 5.

[50] *Id.* at Response to Item 6.

[51] Case No. 2006-00494, *An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices* (Ky. PSC Oct. 26, 2007).

render a judgment on a utility's specific reliability performance because the system-wide indices reflect only average performance criteria based on the sum of all of the circuits within its territory.[52] The Commission stated that by requiring reporting on a circuit level, the performance of each circuit within the utility's system can be analyzed individually over time to determine its performance trend.

> With the data provided per circuit, the Commission believes it will have sufficient information to analyze reliability and effectively review the utilities' plans for any corrective actions. The Commission believes that requiring indices to be reported for every circuit whose SAIDI and/or SAIFI exceeds the five-year averages for that same circuit will eliminate the ability to mask poorly performing circuits and will provide a more accurate representation of the utility's overall system reliability.
>
> It is important to note that the Commission does not believe that it is practical to use SAIDI or SAIFI on a system-wide or individual-circuit basis to compare one system to another or one circuit to another. However, the Commission does believe that it is appropriate to use SAIDI and SAIFI as indicators of the historical performance of an individual circuit. The Commission recognizes that while all electric utilities use SAIDI and SAIFI in some fashion, they do not use these indices as the primary indicator of reliability or as the primary determinant of where to perform additional clearing or to make additional capital investment. Likewise, the Commission considers SAIDI and SAIFI, whether calculated system-wide or on a circuit-by-circuit basis, with or without Major Event Days ("MEDs"), as simply *indicators* of reliability.[53] (Emphasis added).

In the July 9, 2013 Order granting the joint petition for rehearing and the motion for reconsideration and clarification, the Commission stated that it is particularly interested in the alternatives raised by KU and LG&E with respect to same-circuit

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[52] Case No. 2011-00450, Order issued May 30, 2013, at p. 6.

[53] *Id.* at pp. 6-7.

reporting requirements, including the Companies' suggestion that Corrective Action Plans be required only for the outlier circuits that exceed the average variance of those circuits.

It has been and remains the Commission's intent with this proceeding to establish reporting requirements for jurisdictional electric distribution utilities. It is not the Commission's intent to require jurisdictional electric distribution utilities to develop and complete corrective action plans where the utility does not contemplate the development and completion of such plans.

Indeed, the May 30 Order expressly states that for each circuit with either a SAIDI or SAIFI value higher than that circuit's respective SAIDI or SAIFI rolling five-year average — excluding MEDs — the jurisdictional electric distribution utility is to include in the annual Reliability Report "A Corrective Action Plan which describes any measures the utility has completed or plans to complete to improve the circuit's performance."[54] If the utility has not completed any measures to improve the applicable circuit's performance, it can simply indicate that no measures have been completed. If the utility does not plan to complete any measures to improve the applicable circuit's performance, it can simply indicate that no measures are planned to be taken.

The deployment of resources is a business decision that each entity must make for itself. The reporting requirements established in this case are not intended to interfere with or dictate the manner in which a utility focuses its resources, nor to direct the manner in which a utility performs its daily functions. The reporting requirements articulated in the May 30 Order do not prevent or preclude any jurisdictional electric distribution utility from managing its distribution system in the manner it deems prudent,

[54] Case No. 2011-00450, May 30, 2013 Order, paragraph 12.

and these reporting requirements are not *de facto* distribution reliability standards. The Commission now recognizes that we may have created some confusion and apprehension by adopting the name "Corrective Action Plan," which has been interpreted by some of the parties to mean that some form of corrective action must be developed and implemented. To correct this misnomer, we will clarify that the reporting requirement includes only "a list of corrective actions, if any, taken or to be taken."

The Commission is not persuaded by the argument of the Joint Petitioners that the new reporting requirements need to be promulgated as a regulation. KRS 278.230(3) states:

> Every utility, when required by the commission, shall file with it any reports, schedules, classifications or other information that the commission reasonably requires. The commission shall prepare and distribute to the utilities blank forms for any information required under this chapter. All such reports shall be under oath when required by the commission.

The reporting outlined in the May 30 Order falls within the parameters of KRS 278.230(3).

807 KAR 5:041, Section 2, states that:

> Every utility shall furnish adequate service and facilities at rates filed with the commission, and in accordance with administrative regulations of the commission and applicable rules of the utility. Energy shall be generated, transmitted, converted and distributed by the utility, and utilized, whether by the utility or the customer, in such manner as to obviate undesirable effects upon the operation of standard services or equipment on the utility, its customers and other utilities.

807 KAR 5:041, Section 5(1), further provides in pertinent part that:

> Each utility shall make all reasonable efforts to prevent interruptions of service, and when such interruptions occur shall endeavor to reestablish service with the shortest possible delay.

807 KAR 5:041, Section 5(2), further requires that:

> Each utility shall keep a record of: time of starting and shutting down the principal units of its power station equipment and feeders for major divisions; indications of sufficient switchboard instruments to show voltage and quantity of the load; all interruptions to service affecting the entire distribution system of any single community or important division of a community; and date and time of interruption, date and time of restoring service, and when known, cause of each interruption.

In order to evaluate whether the energy that is distributed by the utility is done so in a manner that obviates undesirable effects upon the operation of standard services or equipment of the utility, its customers, and other utilities, the Commission may require, pursuant to KRS 278.230(3), the fling of "reports . . . or other information . . . ."

The Commission recognizes and agrees with Duke Kentucky that no two circuits are identical and that the performance of a particular circuit depends much upon its geography and the weather.[55] Likewise, the Commission agrees with LG&E and KU that the new same-circuit comparison reporting requirements should not be used to judge the reasonableness of a utility's distribution service because it could lead to inefficient distribution investment decisions.[56] This Commission recognizes and applauds those utilities, such as Duke Kentucky, that take a holistic view of their particular systems and that employ a reliability strategy that is focused on consistently and strategically replacing or retrofitting weakness in the entire system from a design standpoint.

There are many different approaches taken by the electric distribution utilities in determining when and how to allocate resources to upgrade and improve distribution

[55] Taylor Testimony at p. 4.

[56] Thomas Rehearing Testimony at p. 5.

reliability. Distribution investment decisions are made based on a myriad of factors, only one of which is the reliability indices for a particular circuit. The Commission agrees with this individualized approach to distribution investment decisions and we reemphasize our finding on page 17 that the reporting requirements set forth in our May 30 Order are not *de facto* distribution reliability standards. As such, we reject Joint Petitioners' assertion that the promulgation of a regulation is necessary in order for the Commission to collect the statistical information outlined in the May 30 Order.

With respect to Duke Kentucky's recommendations as set forth in its testimony, the Commission finds that the reporting requirements as hereinafter set forth are reasonable pursuant to KRS 278.230(3). As such, the Commission will not eliminate the same-circuit reporting requirement. Because the electric distribution utilities are not required to develop or implement any new corrective actions, but only to list any corrective actions planned or taken, the Commission finds that the administrative task of reporting such is not overly burdensome.

The new reporting requirements are intended to supplant and replace the current reporting requirements that were established in Case No. 2006-00494 and do not establish a benchmark for judging the performance of circuits operated by a particular utility or the performance of one utility to another. We find it reasonable for the reports, as outlined in the May 30 Order, to be filed with the Commission by May 1 of each year.

Based on the record and being otherwise sufficiently advised, the Commission finds:

1. The May 30 Order should be modified by deleting references to "A Corrective Action Plan," and substituting in its place the requirement for "A list of

corrective actions, if any, taken or to be taken," and if a distribution utility determines that corrective actions are not required or are not practical, that information should be included in the list.

2. The reporting requirements, as described in the May 30 Order, and as modified by finding 1. above, should not be further modified to limit the "list of corrective actions, if any, taken or to be taken" to include only those circuits whose one-year SAIDI or SAIFI exceeds its own rolling five-year average by two standard deviations.

3. The forms for the reports described in the May 30 Order and as modified by finding 1. above are set forth in an attached Appendix and should be submitted by July 1, 2014, and by May 1 of each subsequent year.

4. The May 30 Order should be clarified to indicate that the reporting requirements, as set forth in this case, should supplant the reporting requirements established in Case No. 2006-00494.

5. The reporting requirements established in this case are not *de facto* distribution reliability standards.

6. The new method of identifying circuits subject to the detail reporting requirement should not be eliminated.

7. The reporting requirements established in this case are appropriate, pursuant to KRS 278.230(3), KRS 278.040(2), and KRS 278.042, are not unduly burdensome, and are consistent with the obligations of and the records required to be maintained by each electric utility, pursuant to 807 KAR 5:041, Section 5, and do not need to be further promulgated as a new regulation.

IT IS THEREFORE ORDERED that:

1. The May 30 Order is modified to the limited extent that:

a. References to "A Corrective Action Plan," are deleted and "A list of corrective actions, if any, taken or to be taken" is substituted in its place.

b. If a distribution utility determines that corrective actions are not required or are not practical, that information should be included in the "list of corrective actions, if any, taken or to be taken."

c. The reliability information described on the forms in the Appendix shall be filed by July 1, 2014, and by May 1 of each subsequent year.

2. All other provisions of the May 30 Order shall remain in full force and effect.

3. The reporting requirements set forth in the May 30 Order, and as modified herein, shall supplant the reporting requirements established in Case No. 2006-00494.

4. The reporting requirements set forth in the May 30 Order, and as modified herein, are not distribution reliability standards and they shall not be construed as *de facto* distribution reliability standards.

5. The Executive Director is delegated authority to grant reasonable extensions of time for the filing of any documents required by this Order upon the movant's showing of good cause for such extension.

By the Commission

ENTERED

APR 01 2014

KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2011-00450 DATED APR 01 2014

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME ____________________
REPORT PREPARED BY ____________________
E-MAIL ADDRESS OF PREPARER ____________________
PHONE NUMBER OF PREPARER ____________________

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT ____________________

SECTION 3: MAJOR EVENT DAYS (MED)

T_{MED} ____________________
FIRST DATE USED TO DETERMINE T_{MED} ____________________
LAST DATE USED TO DETERMINE T_{MED} ____________________
NUMBER OF MED IN REPORT YEAR ____________________

NOTE: Per IEEE 1366 T_{MED} should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

SECTION 4: SYSTEM RELIABILITY INFORMATION AND RESULTS

System-wide Information

TOTAL CUSTOMERS________ TOTAL CIRCUITS ________

Excluding MED

5 YEAR AVERAGE		**REPORTING YEAR**	
SAIDI	____________	SAIDI	____________
SAIFI	____________	SAIFI	____________

Including MED

5 YEAR AVERAGE		**REPORTING YEAR**	
SAIDI	____________	SAIDI	____________
SAIFI	____________	SAIFI	____________

Notes:

1) All duration indices (SAIDI) are to be reported in units of minutes.
2) Reports are due on the first business day of May of each year
3) Reports cover the calendar year ending in the December before the reports are due.
4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, and T_{MED}

KENTUCKY PUBLIC SERVICE COMMISSION

SECTION 5: CIRCUIT REPORTING

(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)

(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT #1:

1. SUBSTATION NAME AND NUMBER

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

3. CIRCUIT NAME AND NUMBER

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

5. TOTAL CIRCUIT LENGTH (MILES)

6. CUSTOMER COUNT FOR THIS CIRCUIT

7.. DATE OF LAST CIRCUIT TRIM (VM)

8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

10. REPORTING YEAR (SAIDI)

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

12. REPORTING YEAR (SAIFI)

13. LIST OF CORRECTIVE ACTION,IF ANY, TAKEN OR TO BE TAKEN

REPEAT INFORMATION FOR EACH CIRCUIT EXCEEDING ITS 5 YEAR AVERAGE FOR SAIDI AND/OR SAIFI

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SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

INCLUDE CURRENT VEGETATION MANAGEMENT PLAN

Additional page may be attached as needed.

SECTION 7: UTILITY COMMENTS

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