

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

In the Matter of the Application of Evergy)	
Kansas Central, Inc. and Evergy Kansas)	
South, Inc. for Approval to Make Certain)	25-EKCE-294-RTS
Changes in their Charges for Electric)	
Service Pursuant to K.S.A 66-117.)	

DIRECT TESTIMONY PREPARED BY

PAUL C. OWINGS

UTILITIES DIVISION

KANSAS CORPORATION COMMISSION

JUNE 6, 2025

**** __ ** Denotes Confidential Information**

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1 **I. Introduction, Qualifications, Purpose of Testimony**

2 **Q. Please state your name and business address.**

3 A. My name is Paul C. Owings and my business address is 1500 Southwest Arrowhead
4 Road, Topeka, Kansas, 66604.

5 **Q. By whom and in what capacity are you employed?**

6 A. I am employed by the Kansas Corporation Commission (KCC or Commission) as Chief
7 Engineer of the Operations and Pipeline Safety Section of the Utilities Division.

8 **Q. Please summarize your educational and employment background.**

9 A. I received Bachelor and Master of Science Degrees in Civil Engineering from Kansas State
10 University, Manhattan, Kansas. I have worked in various capacities as an engineer for the
11 past 13 years. I am licensed as a professional engineer in the states of Kansas and Missouri.
12 Since January of 2024, I have assisted the Kansas Corporation Commission in matters
13 dealing with electric utility operations. I have also managed the pipeline safety program,
14 overseen open dockets related to utility operations, and administered and enforced the
15 underground utility damage prevention program. Prior to my work at the Commission, I
16 was a Civil Engineering consultant, where I handled design and construction contract
17 administration for various utility and development projects.

18 **Q. Have you previously submitted testimony before this Commission?**

19 A. Yes. I testified in dockets 24-GBEE-790-STG, 25-EKCE-207-PRE, and 25-BHCG-298-
20 RTS.

1 **Q. What is the purpose of your testimony in the review of this Evergy Kansas Central,**
2 **Inc. and Evergy Kansas South, Inc. (collectively referred to as “Evergy Kansas**
3 **Central” or “EKC”) rate case docket before the Commission?**

4 A. The purpose of my testimony is to provide Staff’s perspective on various distribution
5 system issues primarily discussed in the Direct Testimony of EKC witness Ryan P.
6 Mulvany. Relative to the items I am covering, Mr. Mulvany is not requesting Commission
7 action on a particular matter. His testimony appears to be informative with the objective to
8 support the Application as evidence demonstrating efficiency and sufficiency of service. I
9 provide a review of the following topics in my testimony:

- 10 • Distribution System Infrastructure Review.
- 11 • Distribution System Reliability Performance Metrics Review.
- 12 • Vegetation Management Review.

13 **Q. Do you make any recommendations within your testimony?**

14 A. Historically, the Commission has reviewed the adequacy of matters relating to distribution
15 infrastructure improvements and reliability through compliance reports. I recommend the
16 Commission require EKC to provide an annual distribution system infrastructure review
17 report. Additionally, I recommend the Commission require EKC to supplement existing
18 reliability compliance reports by providing data in digital (Excel) format with the filing.
19 These recommendations are supported within my testimony below.

20 **II. Distribution System Infrastructure Review**

21 **Q. Please summarize the information EKC provided about their distribution system.**

1 A. The Direct Testimony of EKC witness Ryan Mulvany provides an overview of EKC's
2 electric distribution system. The overview summarizes information about distribution
3 system key components including overhead conductors, underground conductors, poles,
4 overhead transformers, and underground transformers (Key Assets). The overview
5 includes the average asset age and anticipated asset life.¹

6 **Q. How did Mr. Mulvany present the age of Key Assets?**

7 A. Mr. Mulvany summarized the average age of Key Assets in Table 1.² The average age
8 shown is compared to the expected life of the key asset. Mr. Mulvany also provided a
9 histogram showing age groups in decade increments for distribution poles in Figure 1.³

10 **Q. Could you describe the underlying data utilized to develop Table 1 and Figure 1 from**
11 **Mr. Mulvany's Direct?**

12 A. The underlying data utilized to develop Table 1 and Figure 1 was based on the actual age
13 of Key Assets derived from data within Evergy's Geographic Information System (GIS).⁴
14 The "expected life" shown in Table 1 is the average service life for assets based on industry
15 publications and data provided by equipment manufacturers.⁵

16 **Q. Please summarize Mr. Mulvany's testimony relating to failure and performance of**
17 **Key Assets.**

18 A. Mr. Mulvany provides a conceptual diagram which shows a failure curve.⁶ The failure
19 curve plots the probability of failure against increasing age. The probability of failure

¹ See Direct Testimony of Ryan Mulvany, p. 3-5 (Jan. 31, 2025) (Mulvany Direct).

² *Id.*, p. 4, Table 1.

³ *Id.*, p. 4, Figure 1.

⁴ See Response to Staff Data Request 379.

⁵ See Response to Staff Data Request 377.

⁶ See Mulvany Direct, p. 5, Figure 3.

1 rapidly increases at a certain age. The curve is provided to demonstrate Mr. Mulvany's
2 assertion that failure of assets occurs at an exponential rate as the assets age.⁷

3 **Q. Does Mr. Mulvany relate age and failure to EKC's distribution investment strategy?**

4 A. Mr. Mulvany ends the distribution system overview section of his testimony by relating
5 Key Asset age to a utility's investment strategy plan. He asserts that a utility's investment
6 strategy should replace assets ahead of their failure curves to maintain adequate reliability.⁸

7 **Q. Does Mr. Mulvany make a conclusion about the pace of distribution infrastructure**
8 **investment?**

9 A. Yes, Mr. Mulvany makes a conclusion about the pace of distribution infrastructure
10 investment within the Distribution System Investment Strategy & Process section of his
11 testimony.⁹ Mr. Mulvany asserts that EKC's level of investment has not kept pace with
12 aging distribution infrastructure. He bases this conclusion on the comparison of the average
13 age of Key Assets and expected life presented in Table 1.¹⁰

14 **Q. Do you agree with Mr. Mulvany's conclusion that EKC's level of investment has not**
15 **kept pace with aging distribution system?**

16 A. Not based exclusively on the data presented in Table 1. As stated in Mr. Mulvany's
17 testimony, a successful investment strategy replaces assets ahead of their failure curves.
18 He then compares the average life of Key Assets to their expected life. The expected life
19 values were not derived based on data analysis and are not equivalent to failure curves.
20 Furthermore, he does not provide data trends to determine whether Key Asset age is
21 increasing or decreasing. While the data in Table 1 provides insight into the average age of

⁷ *Id.*, p. 5, lines 8-9.

⁸ *Id.*, p. 5, lines 12-15.

⁹ *Id.*, p. 10-20.

¹⁰ *Id.*, p. 10, lines 4-6.

EKC's Key Assets relative to their expected life, it does not demonstrate that EKC's level of investment has not kept pace with the aging of the infrastructure.

Q. Has the average age of EKC's Key Assets increased over time?

A. Through discovery, I requested year-over-year asset average age data. Based on its response, EKC does not track the year-over-year asset average age, and its GIS system does not retain necessary information to determine the average asset age at a previous time.¹¹ My conclusion is that EKC does not track the average asset age over time.

Q. How does Evergy prioritize asset replacement?

A. Evergy utilizes proprietary software to rank and prioritize asset replacement. The proprietary software utilizes both ** [REDACTED] ** considerations to assess the likelihood of failure. The software utilizes ** [REDACTED] ** to assess the likelihood of failure as assets age. While failure curves show the rate at which an asset fails over time, ** [REDACTED] **. The condition of an asset is utilized to determine an ** [REDACTED] ** of the asset. The ** [REDACTED] **. The likelihood of failure is determined using the ** [REDACTED] **. ¹²

Q. Did you request EKC's ** [REDACTED] **?

A. Yes. However, EKC was unable to produce the ** [REDACTED] ** stating they are a part of the proprietary software and are inaccessible.

¹¹ See Response to Staff Data Request 374.

¹² See Response to Staff Data Request 136.

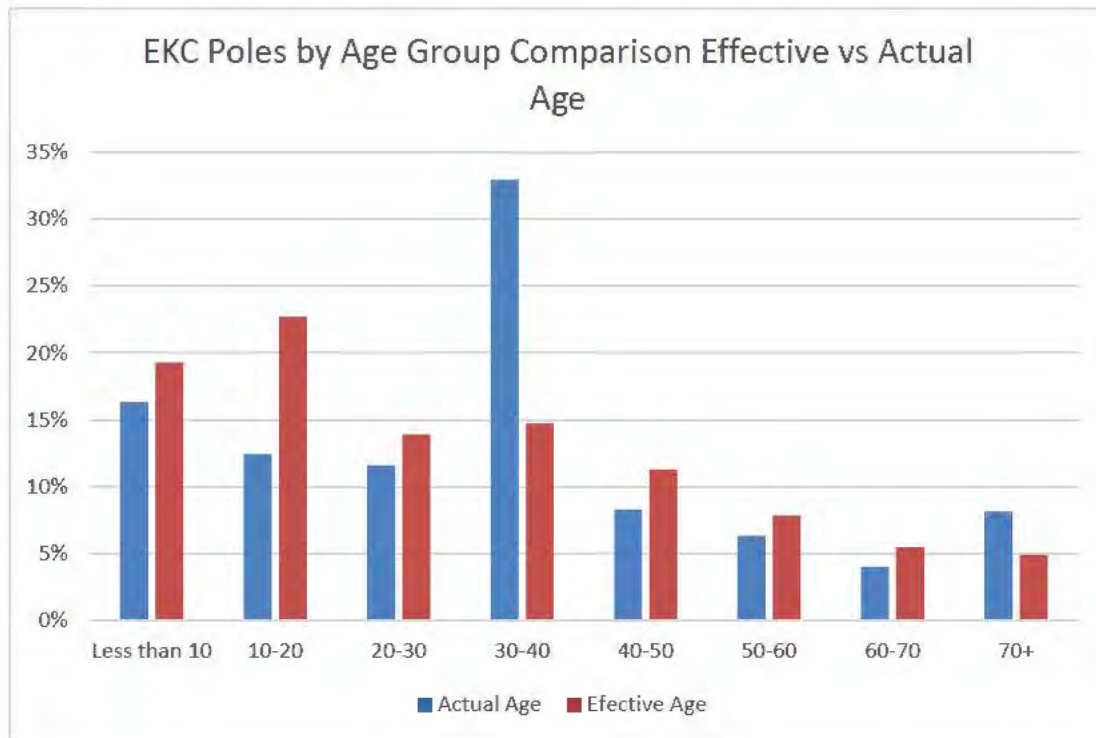
1 **Q. Did you compare the effective age of Key Assets to the actual age of Key Assets?**

2 A. Yes, through discovery I was able to compare the effective age of Key Assets to the actual
3 age of Key Assets.¹³ Table PCO-1 and Figure PCO-1 below present this data.

4 **Table PCO-1: Effective Age versus Actual Age of Key Assets (2025 Rate Case Data)**

Key Asst Type	Effective Age	Actual Age
Overhead Conductors	41	36
Underground Conductors	21	24
Poles	30	32
Overhead Transformers	27	28
Underground Transformers	21	21

5 **Figure PCO-2: EKC Poles by Age Comparison (Effective vs Actual Age)**



¹³ See Response to Staff Data Request 380.

1 **Q. What can you deduce from the data that compares the effective age of Key Assets to**
2 **the actual age?**

3 A. Overhead conductors have a higher effective age in comparison to their actual age. All
4 other assets have equivalent or lower effective age. Generally, it appears that the condition
5 of Evergy's Key Assets is better than the calendar age would have you believe, excluding
6 the overhead conductors.

7 **Q. Does the additional data EKC provided support EKC's claim that their investment**
8 **strategy has not kept pace with the aging distribution infrastructure?**

9 A. EKC was unable to provide necessary data to determine whether this claim was accurate.
10 However, Staff acknowledges that a significant portion of EKC's system has exceeded or
11 is near the end of its useful life. Therefore, Staff is supportive of EKC's continued efforts
12 to invest in their distribution system, although this investment does need to proceed in a
13 measured fashion that balances the cost of this investment, and the impact on rate
14 affordability, with the benefits from this investment.

15 **Q. Do you recommend EKC track and report the age of their distribution system?**

16 A. Yes. EKC states that current investment in distribution assets has not kept pace with aging
17 infrastructure.¹⁴ An annual filing will allow for continuous review of the age of EKC's
18 distribution system for comparison to the level of investment. With this information, the
19 pace of improvement can be better tracked to assess whether EKC's level of investment is
20 sufficient. Furthermore, EKC is not currently tracking the age of its system in a regular,
21 consistent manner and they are unable to track the age retroactively. For these reasons, I

¹⁴ See Mulvany Direct, p. 10, lines 2-10.

recommend EKC track the age of Key Assets within their distribution and report the data to the Commission annually.

III. Distribution System Reliability Performance Metrics Review

Q. What metrics did EKC utilize to demonstrate the reliability of its system?

A. EKC utilized System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) metrics to demonstrate its system performance.

Q. Are these metrics commonly utilized within the electric industry?

A. Yes, these metrics are commonly used within the electric industry. The metrics are included in the Institute of Electrical and Electronics Engineers (IEEE) standard 1366 titled *IEEE Guide for Electric Power Distribution Reliability Indices* amongst other reliability metrics and indices.

Q. Please explain the SAIDI and SAIFI metrics.

A. SAIDI measures how long, on average, each customer experiences a power outage over a period (usually a year). It tells you the average outage duration per customer. SAIFI measures how often, on average, each customer experiences a power outage over a period. It tells you the average number of outages per customer. The metrics only include sustained interruptions, momentary interruptions are not counted. In summary, SAIDI measures the average outage time and SAIFI measures the average number of outages.

Q. How did EKC present SAIDI and SAIFI data?

A. Beginning on page 6 of Mr. Mulvany's Direct Testimony, EKC provided several figures which presented normalized SAIDI and SAIFI values over time. The line charts begin in

2020 and end in 2024. Mr. Mulvany also plotted annual SAIDI and SAIFI metrics in comparison with industry averages provided by IEEE.

Q. In your opinion, were the reliability metrics presented in Mr. Mulvany's testimony adequate?

A. Yes. The annual metrics presented in Mr. Mulvany's testimony suggest that EKC's electric distribution system performs adequately for normalized SAIDI and SAIFI metrics.

Q. You state above that the SAIDI and SAIFI metrics are normalized. Could you explain how the values are normalized?

A. SAIDI and SAIFI metrics are normalized, or adjusted, by removing data associated with outage events which were influenced by external factors such as inclement weather. Removal of anomalous data allows for better comparison of the metrics on a year-over-year and utility-to-utility basis.

Q. Is their value in assessing actual SAIDI and SAIFI metrics?

A. Yes. Assessing actual SAIDI and SAIFI metrics provides insight into a grid's resiliency and the adequacy of a utility's response. In this context, resiliency relates to a grid's ability to withstand inclement weather. For an electric distribution system to be considered reliable, the system must reasonably tolerate inclement weather. Furthermore, the utility must restore service in an acceptable time frame. Comparison of actual SAIDI and SAIFI allows for analysis of these factors.

Q. Did you review SAIDI and SAIFI metrics calculated with actual data?

A. Yes. EKC provided actual SAIDI and SAIFI values in response to Staff Data Request 128. Refer to the following two figures which show actual SAIDI and SAIFI values in comparison with averages provided by IEEE.

Figure PCO-2: Historical IEE Unnormalized SAIDI Comparison

Historical IEEE Unnormalized SAIDI Comparison

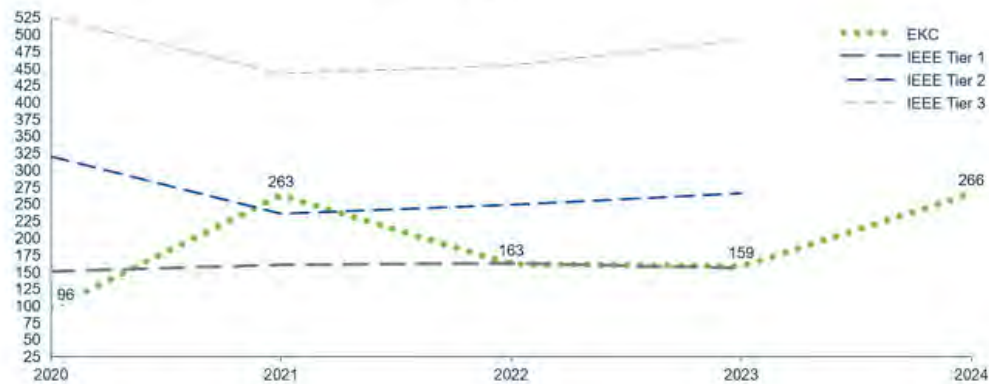
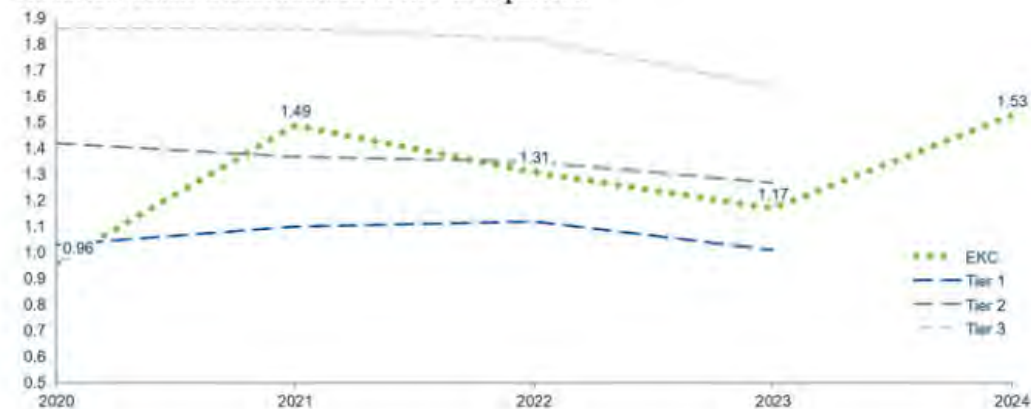


Figure PCO-3: Historical IEE Unnormalized SAIFI Comparison

Historical IEEE Unnormalized SAIFI Comparison



Q. What can you deduce from the data above?

A. When compared to its peers, the actual data had a greater degree of variability than the normalized data. During certain years, EKC performed relatively well in comparison with its peers. Other years EKC performed below an IEEE Tier 2 level, which never occurred for normalized data. More variability is anticipated when comparing actual reliability metrics. The variability likely relates to anomalous external factors such as inclement weather. In my opinion, the actual SAIDI and SAIFI values provided by EKC suggest that EKC's electric distribution system is sufficiently resilient.

1 **Q. If an electric distribution system has relatively low SAIDI and SAIFI values, would**
2 **you conclude that the system is reliable?**

3 A. If an electric distribution system had relatively low SAIDI and SAIFI values I would
4 conclude that on average the system is reliable; however, I would acknowledge that
5 portions of the system may be unreliable. For example, a distribution system could have a
6 SAIFI of 0.5, which is relatively low. The system may have no interruptions for 90% of
7 customers and five interruptions for 10% of customers. On average the system experiences
8 adequate SAIFI values, however, the 10% of customers experiencing 5 interruptions per
9 year do not have adequate service relative to their peers.

10 **Q. What are potential implications of relying exclusively on SAIDI and SAIFI data?**

11 A. While SAIDI and SAIFI values inform on average reliability of an electric distribution
12 system, certain customers may have inadequate service despite acceptable averages. All
13 EKC customers are equally entitled to efficient and sufficient service. Therefore, outlier
14 cases should be monitored and assessed to mitigate customer specific reliability issues.

15 **Q. In your testimony above, you caution against exclusively examining SAIDI and SAIFI**
16 **metrics because certain customers may not have reliable service regardless of system**
17 **averages. Does EKC seek to identify and improve reliability for customers whose**
18 **service is inadequate?**

19 A. Yes. EKC has two programs to address poorly performing circuits, the Worst Performing
20 Circuit (WPC) Program and the Customers Experiencing Multiple Interruptions (CEMI)
21 Program.¹⁵ These programs endeavor to identify areas of EKC's system which are
22 underperforming. EKC then attempts to correct causes of the poor performance.

¹⁵ See Response to Staff Data Request 138.

1 **Q. Could you provide an overview of the WPC Program?**

2 A. The Commission established the WPC Program in an Order issued on January 16, 2004,
3 within Docket No. 02-GIME-365-GIE (WPC Order). The purpose of the WPC Order was
4 to establish uniform definitions and requirements relating to service obligations, record
5 keeping, notifications, and reporting to ensure the health, safety, and welfare of the public.
6 Among other factors, the WPC Order required two lists of worst performing circuits be
7 reported annually. Based on the data generated in this list, EKC's engineers determine
8 appropriate correct actions needed or request walkdown inspections of the circuits. EKC
9 then executes workorders to correct problems.¹⁶ Worst Performing Circuits are defined
10 within the WPC Order as follows:

11 *"Worst-performing circuit" means a distribution circuit for which any of the following*
12 *conditions applies for a reporting year:*

13 *(1) With respect to interruption duration, a circuit with a SAIDI value excluding*
14 *major events that either ranks among the utility's 10 least reliable circuits, or is*
15 *more than 300% greater than the utility's overall SAIDI excluding major events,*
16 *or both; and*

17 *(2) With respect to interruption frequency, a circuit with a SAIFI value excluding*
18 *major events that either ranks among the utility's 10 least reliable circuits, or is*
19 *more than 300% greater than the utility's overall SAIFI excluding major events,*
20 *or both.*

21 **Q. Could you provide an overview of the CEMI Program?**

22 A. The CEMI Program focuses on improving the service for customers who experience six or
23 more interruptions over a 12-month period. EKC identifies circuits with six or more
24 interruptions and focuses on making repairs and improvements to mitigate future
25 incidents.¹⁷

¹⁶ See Response to Staff Data Request 138.

¹⁷ See Mulvany Direct, p. 14, lines 3-6.

1 **Q. In your opinion, do the WPC and CEMI Programs adequately improve reliability for**
2 **outlier cases?**

3 A. In my opinion, EKC's programs appropriately target customers with poor reliability
4 metrics. However, Staff does not have specific data which demonstrates whether the
5 number of customers with inadequate service is increasing, decreasing, or remaining
6 relatively constant. Therefore, I cannot make a conclusion on the adequacy of the WPC
7 and CEMI Programs.

8 **Q. Does the Commission have reliability standards?**

9 A. No, the Commission does not have reliability standards. However, the Commission has
10 numerous reliability reporting requirements.

11 **Q. Could you provide an overview of Evergy's reliability reporting requirements?**

12 A. The Commission issued an Order within Docket No. 18-KCPE-095-MER (18-095 Docket)
13 on May 24, 2018 (Merger Order). In its Merger Order the Commission approved the Non-
14 Unanimous Settlement Agreement submitted on March 7, 2018, by certain parties to the
15 18-095 Docket (Settlement Agreement). Attachment A to the Settlement Agreement
16 contains Merger Conditions, some of which require Evergy to make post-merger filings
17 with the Commission. Merger Condition 37 related to reliability reporting. The following
18 list summarizes items included in the Merger Condition 37 Reliability Report:

- 19 1) Annual Performance Data:
 - 20 a) SAIDI Statistics.
 - 21 b) SAIFI Statistics.
- 22 2) Major Event Days.
- 23 3) Worst Performing Circuits:
 - 24 a) By SAIDI Statistics.
 - 25 b) By SAIFI Statistics.
- 26 4) Number of CEMI-6 for the year by jurisdiction.
- 27 5) Statistics of standardized company equipment that caused customer outages.
- 28 6) Distribution Inspections:

- 1 a) Wood pole inspection programs.
- 2 b) Padmount inspection programs.
- 3 7) Transmission inspection.
- 4 8) Vegetation report.

5 **Q. Is the Condition 37 Reliability Report adequate?**

6 A. In my opinion, the existing reliability report is adequate. However, the data is not provided
7 in a format the allows for easy analysis and therefore it is difficult to trend and analyze the
8 reported data.

9 **Q. Do you have any recommendations in relation to EKC's reliability metrics?**

10 A. I recommend the Commission require EKC to provide all Condition 37 Reliability
11 Reporting data within an Excel spreadsheet to facilitate analysis.

12 **Q. Do you have any conclusions about EKC's distribution system reliability?**

13 A. Based on available data, I would conclude that EKC's distribution system reliability is
14 adequate. While certain outlier customers may have inadequate service, EKC is actively
15 attempting to improve their service quality. In my opinion, the continued monitoring and
16 trending of reliability metrics is necessary to monitor the sufficiency of EKC's service.
17 However, at this time, I would not recommend the establishment of reliability standards,
18 considering EKC has maintained adequate reliability metrics. If EKC's average level of
19 service declines a reliability standard may be necessary. Furthermore, if EKC does not
20 continue to improve the service for outlier customers, a reliability standard may be
21 necessary.

1 **IV. Vegetation Management Review**

2 **Q. Do you agree with Mr. Mulvany's assessment that vegetation management (VM) is a**
3 **key factor in maintaining the reliability performance of the system?**

4 A. Yes, I agree VM is a key factor in maintaining the reliability of performance because falling
5 trees or branches can damage or destroy any structures (new or old) within the fall zone. I
6 would go so far as to say that proper vegetation management may be more impactful on
7 reliability than an aggressive program to replace aging infrastructure.

8 **Q. Has the issue of VM been discussed with the Commission in previous dockets?**

9 A. Yes. It is an issue that has been discussed several times over the past 30 years. One of the
10 most significant dockets related to VM is the 97-GIME-483-GIE docket, which was a
11 Commission investigation into outages related to an October ice storm that caused
12 extensive damage and outages in the Kansas City metro area. This docket led to the
13 Commission requiring annual reporting requirements for tree trimming programs. With
14 respect to EKC and its predecessor company, another important discussion on VM can be
15 found in Docket No. 12-WSEE-112-RTS, which initiated the Westar ReliabiliTree
16 vegetation management program. As part of that case, Westar sponsored testimony from a
17 consultant that included a study and recommendations on Westar's VM history as well as
18 future goals at that time.¹⁸

19 **Q. What was the outcome of the ReliabiliTree program?**

20 A. The program led to more frequent trimming cycles, and I believe the program improved
21 the distribution system reliability. As shown on Figure PCO-4, from 2002 to 2024, the

¹⁸ See Direct Testimony of Vince Mikulanis on behalf of Westar Energy,
<https://estar.kcc.ks.gov/estar/ViewFile.aspx/20110825160713.pdf?Id=7b721087-3467-47c8-927d-d89c58495ffc>

1 system reliability indices improved without a significant infrastructure replacement plan,
 2 which started in 2016. This fact implies improved vegetation management was a leading
 3 factor in system maintenance and reliability.

4 **FIGURE PCO-4: Historic SAIFI and SAIDI Values¹⁹**



6 **Q. Were there other benefits to reliability related to the ReliabilityTree program?**

7 A. Yes. Because a VM program requires personnel to visually inspect the entire system for
 8 tree trimming, it also provides EKC the opportunity to visually inspect the condition of the
 9 electric system components as well. In fact, one of the major benefits of a VM program is
 10 the opportunity to inspect the system as part of the VM process.

11 **Q. Does EKC do any other patrols of its system?**

12 A. If a section of the distribution system is having reliability problems, EKC may initiate a
 13 “walkdown” or inspection of that portion of the system.²⁰ Because EKC no longer has
 14 meter readers visiting each meter monthly, the visual inspection of system components
 15 associated with a VM program appears to be the only regularly scheduled visual patrol of
 16 the system.

¹⁹ Developed from Staff Data Request responses in previous dockets as well as EKC compliance filings in Docket No. 19-KCPE-178-CPL.

²⁰ See response to Staff Data Requests 138 and 369.

1 **Q. Is VM the major cause of sustained outages on the EKC system?**

2 A. Based on Evergy's annual quality of service performance report²¹, the most prominent
3 category of normalized sustained outages²² is equipment failures, which may partially be
4 related to the age of some of the equipment in inventory. The categories of failures related
5 to weather and vegetation are respectively the second and third most common cause of
6 sustained outages. In my opinion, it is likely that weather and vegetation related failures
7 may be interrelated. For example, high winds may cause tree branches to blow into the
8 power line. If you consider this relationship and combine the weather and vegetation outage
9 categories, it is likely that vegetation/weather would be the leading cause of outages.

10 **Q. Did the Commission establish any performance standards with respect to vegetation**
11 **management?**

12 A. No. However as noted in the above-mentioned dockets, the Commission has required
13 extensive reporting related to vegetation management programs.

14 **Q. What is the cost of the VM program?**

15 A. For the last five years, EKC has spent on average \$18.8 million annually for vegetation
16 management.²³

17 **Q. Has EKC maintained this level of investment over the last 10 years?**

18 A. No. As shown in figure PCO-5, EKC VM average program costs have declined such that
19 average 2022-2024 VM program costs are 32% lower than the 2016-2018 timeframe.

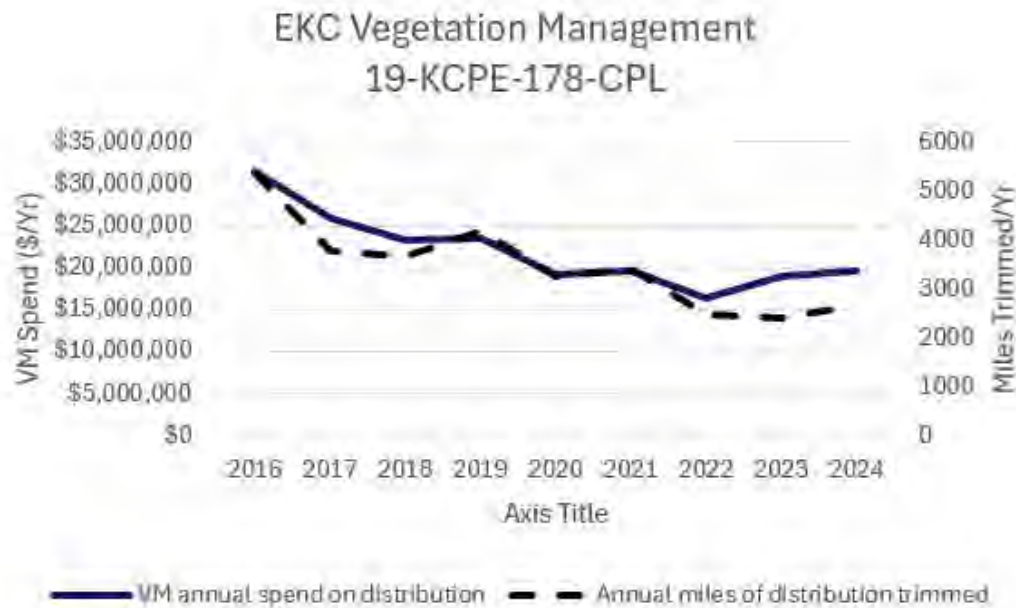
²¹ See Docket 19-KCPE-178-CPL filing dated April 30, 2025, Table 8.

<https://estar.kcc.ks.gov/estar/ViewFile.aspx/S202504301034264654.pdf?Id=00bbc521-687b-4daa-b774-20bfa5458962>

²² A normalized sustained outage can be defined as an outage at least 5 minutes in length that does not occur during a major storm.

²³ *Id.* Page 14.

Figure PCO-5: EKC Vegetation Management Expenditure and Miles Trimmed over Time



Q. Can the decline in VM program costs be attributed to cost savings efficiencies that occurred after the merger between Kansas City Power & Light and Westar?

A. Some of the cost reductions may be the result of merger efficiencies and a more focused trimming program. However, based on the annual VM performance report, the main cost savings appears to be the result of not trimming as many circuit miles of lines as it did in the past. Table 20 of the Quality of Service Performance report shows that EKC is trimming 41% fewer miles of distribution lines than it did in the pre-merger timeframe.²⁴

Q. Has trimming fewer mile of distribution lines resulted in a deterioration of EKC system reliability metrics?

A. No. The overall system performance shown by SAIDI/SAIFI calculations has remained stable or slightly improved since before the merger. However, as mentioned earlier,

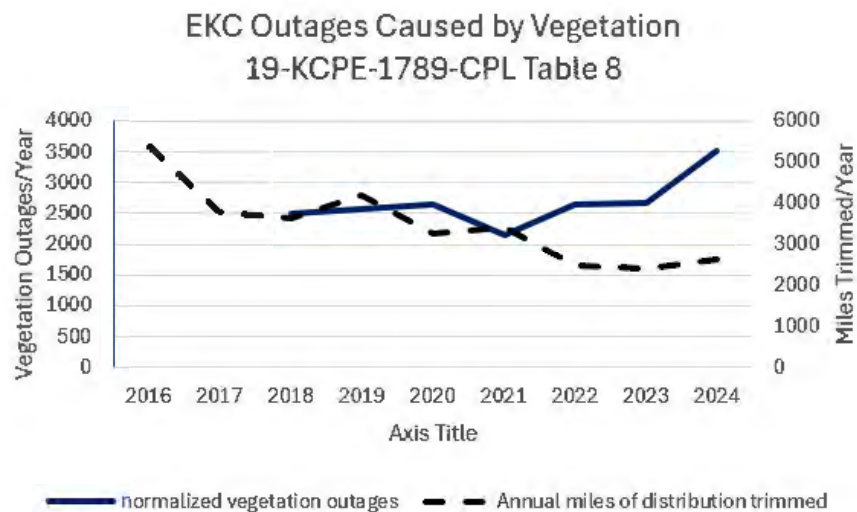
²⁴ Comparing 2016-2018 average miles trimmed per year to the 2022-2024 average of miles trimmed per year.

systemwide performance indices can mask the contribution or performance of certain aspects of the various efforts that contribute to the reliability metrics.

Q. Is there any evidence that trimming fewer miles of distribution lines has negatively impacted the reliability of the system?

A. There is evidence of increased outages relating to vegetation; however, this data cannot be directly correlated to the reliability of the system. The number of sustained outages which list vegetation as the root cause is showing an increase over the last few years. Figure PCO-6 provides trends related to vegetation related outages and the number of miles of distribution line trimmed over the last nine years.

Figure PCO-6: Outages Caused by Vegetation and Miles Trimmed versus Time



Q. Do you have any comments regarding the proposed Hazard Tree initiative discussed in Mr. Mulvany's testimony?

A. Yes. Staff welcomes the opportunity to discuss this proposal with EKC.

1 **Q. Do you have any concerns about how a hazard tree removal program would be**
2 **implemented?**

3 A. As noted in Mr. Mulvany's testimony, hazard trees typically may not be in the EKC right-
4 of-way, so any removal would require the approval of the landowner where the tree is
5 located. In my opinion, successful implementation of this type of program would require a
6 public awareness campaign that includes landowners, city administration and
7 homeowners' insurance associations. EKC does not have any formal public awareness
8 programs regarding vegetation management.²⁵

9 **Q. Do you have any concerns about the cost of a hazard tree removal program?**

10 A. Yes. Hazard trees by definition will be large trees that are in a congested area, which in my
11 experience, will make the removal process relatively expensive. Because the ratepayer will
12 ultimately be responsible for paying for any EKC tree removal program, there is a need to
13 demonstrate that the cost of tree removal will benefit the ratepayer and should be the
14 responsibility of the ratepayer.

15 **Q. Do you have any examples of a Hazard tree?**

16 A. Yes. During discovery, EKC provided some photos of a hazard tree removal process, which
17 are shown in Figure PCO-7. Based on the photos, this tree is located adjacent to the EKC
18 ROW and in a congested area next to several homes.

²⁵ See Response to Staff Data Request 148.

Figure PCO-7²⁶: Photographs of a Hazard Tree Removal Process



Q. Do you have any comments regarding the removal of this tree?

A. While my impressions are based solely on the photos received from EKC, I note the tree was severely deteriorated and was in danger of falling. Based on its location, there is no indication the tree would preferentially fall in the direction of the EKC facilities, and likely a 50% probability that when the tree failed, it would fall away from the EKC facilities in the direction of the adjacent houses.

Q. What was the cost for the removal of this tree?

A. The cost to EKC ratepayers for the removal of this tree was \$20,000.²⁷

Q. Did the homeowner, their associated home insurance companies, or the city participate in paying for the tree removal costs?

A. According to EKC, the homeowner was responsible for cutting up and removing the debris from the tree removal process.

²⁶ See response to Staff Data Request 147.

²⁷ See response to Staff Data Request 371.

1 **V. Recommendations**

2 **Q. Could you summarize your recommendations?**

3 A. The following list summarizes my recommendations:

- 4 • EKC should be required to track the age of Key Assets within their electric
- 5 distribution system and report the data to the Commission annually. Data should be
- 6 made available in multiple formats including within an Excel spreadsheet.
- 7 • EKC should be required to provide all Condition 37 Reliability Reporting data in
- 8 an Excel spreadsheet.

9 **VI. Conclusion**


10 **Q. Does that conclude your testimony?**

11 A. Yes.

STATE OF KANSAS)
) ss.
COUNTY OF SHAWNEE)

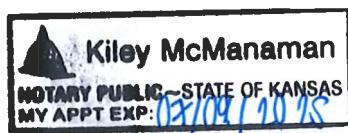
VERIFICATION

Paul Owings, being duly sworn upon his oath deposes and states that he is Chief Engineer of the Utilities Division of the Kansas Corporation Commission of the State of Kansas, that he has read and is familiar with the foregoing Direct Testimony, and attests that the statements contained therein are true and correct to the best of his knowledge, information and belief.



Paul Owings
Chief Engineer
State Corporation Commission of the
State of Kansas

Subscribed and sworn to before me this 4th day of June, 2025.





Notary Public

CERTIFICATE OF SERVICE

25-EKCE-294-RTS

I, the undersigned, certify that a true copy of the attached Direct Testimony has been served to the following by means of electronic service on June 6, 2025.

JOSEPH R. ASTRAB, CONSUMER COUNSEL
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
joseph.astrab@ks.gov

COLE A BAILEY, CORPORATE COUNSEL DIRECTOR
EVERGY KANSAS SOUTH, INC.
D/B/A EVERGY KANSAS CENTRAL
818 S KANSAS AVE, PO Box 889
TOPEKA, KS 66601-0889
cole.bailey@evergy.com

ELIZABETH A. BAKER, ATTORNEY AT LAW
BAKER, STOREY, & WATSON
1603 SW 37TH STREET
TOPEKA, KS 66611
ebaker@bakerstorey.com

DAVID BANKS, CEM, CEP
FLINT HILLS ENERGY CONSULTANT
117 S PARKRIDGE
WICHITA, KS 67209
david@fheconsultants.net

Justin Bieber
ENERGY STRATEGIES, LLC
PARKSIDE TOWERS
215 S STATE ST STE 200
SALT LAKE CITY, UT 84111
jbieber@energystat.com

KURT J. BOEHM, ATTORNEY
BOEHM, KURTZ & LOWRY
36 E SEVENTH ST STE 1510
CINCINNATI, OH 45202
kboehm@bkllawfirm.com

MELISSA M. BUHRIG, EXEC. VICE PRESIDENT, GEN.
COUNSEL & SECRETARY
CVR REFINING CVL, LLC
2277 Plaza Dr., Ste. 500
Sugar Land, TX 77479
mmbuhrig@cvrenergy.com

DANIEL J BULLER, ATTORNEY
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
dbuller@foulston.com

GLENDA CAFER, MORRIS LAING LAW FIRM
MORRIS LAING EVANS BROCK & KENNEDY CHTD
800 SW JACKSON STE 1310
TOPEKA, KS 66612-1216
gcafer@morrislaing.com

ANNE E. CALLENBACH, ATTORNEY
POL SINELLI PC
900 W 48TH PLACE STE 900
KANSAS CITY, MO 64112
acallenbach@polsinelli.com

CERTIFICATE OF SERVICE

25-EKCE-294-RTS

FRANK A. CARO, JR., ATTORNEY
POLSINELLI PC
900 W 48TH PLACE STE 900
KANSAS CITY, MO 64112
fcaro@polsinelli.com

Constance Chan, SENIOR CATEGORY MANAGER -
ELECTRICITY & BUSINESS TRAVEL
HF SINCLAIR EL DORADO REFINING LLC
2323 Victory Ave. Ste 1400
Dalla, TX 75219
constance.chan@hfsinclair.com

JODY KYLER COHN, ATTORNEY
BOEHM, KURTZ & LOWRY
36 E SEVENTH ST STE 1510
CINCINNATI, OH 45202
jkylercohn@bkllawfirm.com

ROB DANIEL, DIRECTOR OF REGULATORY
BLACK HILLS/KANSAS GAS UTILITY COMPANY LLC
D/B/A Black Hills Energy
601 NORTH IOWA STREET
LAWRENCE, KS 66044
rob.daniel@blackhillscorp.com

CATHRYN J. DINGES, SR DIRECTOR & REGULATORY
AFFAIRS COUNSEL
EVERGY KANSAS CENTRAL, INC
818 S KANSAS AVE
PO BOX 889
TOPEKA, KS 66601-0889
cathy.dinges@evergy.com

LORNA EATON, MANAGER RATES & REGULATORY -
OKE01026
KANSAS GAS SERVICE, A DIVISION OF ONE GAS, INC.
7421 W 129TH STREET
OVERLAND PARK, KS 66213
invoices@onegas.com

LORNA EATON, MANAGER OF RATES AND REGULATORY
AFFAIRS
KANSAS GAS SERVICE, A DIVISION OF ONE GAS, INC.
7421 W 129TH STREET
OVERLAND PARK, KS 66213
lorna.eaton@onegas.com

BRIAN G. FEDOTIN, GENERAL COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
brian.fedotin@ks.gov

JAMES G. FLAHERTY, ATTORNEY
ANDERSON & BYRD, L.L.P.
216 S HICKORY
PO BOX 17
OTTAWA, KS 66067-0017
jflaherty@andersonbyrd.com

JASON T GRAY, ATTORNEY
DUNCAN & ALLEN
1730 Rhode Island Ave., NW
Suite 700
Washington, DC 20036
jtg@duncanallen.com

PATRICK HURLEY, CHIEF LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
patrick.hurley@ks.gov

DARRIN IVES, VP - REGULATORY AFFAIRS
EVERGY METRO, INC
D/B/A EVERGY KANSAS METRO
One Kansas City Place
1200 Main St., 19th Floor
Kansas City, MO 64105
darrin.ives@evergy.com

CERTIFICATE OF SERVICE

25-EKCE-294-RTS

JARED R. JEVONS, ATTORNEY
POLSINELLI PC
900 W 48TH PLACE STE 900
KANSAS CITY, MO 64112
jjevons@polsinelli.com

RONALD A. KLOTE, DIRECTOR, REGULATORY AFFAIRS
EVERGY METRO, INC
D/B/A EVERGY KANSAS METRO
ONE KANSAS CITY PLACE
1200 MAIN, 19TH FLOOR
KANSAS CITY, MO 64105
ronald.klote@evergy.com

KEVIN K. LACHANCE, CONTRACT LAW ATTORNEY
UNITED STATES DEPARTMENT OF DEFENSE
ADMIN & CIVIL LAW DIVISION
OFFICE OF STAFF JUDGE ADVOCATE
FORT RILEY, KS 66442
kevin.k.lachance.civ@army.mil

DOUGLAS LAW, ASSOCIATE GENERAL COUNSEL
BLACK HILLS/KANSAS GAS UTILITY COMPANY, LLC
D/B/A BLACK HILLS ENERGY
1731 WINDHOEK DRIVE
LINCOLN, NE 68512
douglas.law@blackhillscorp.com

DANIEL LAWRENCE, GENERAL COUNSEL

USD 259
903 South Edgemoor Room 113
Wichita, KS 67218
dlawrence@usd259.net

Jon Lindsey, CORPORATE COUNSEL
HF SINCLAIR EL DORADO REFINING LLC
550 E. South Temple
Salt Lake City, UT 84102
jon.lindsey@hfsinclair.com

TODD E. LOVE, ATTORNEY
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
todd.love@ks.gov

RITA LOWE, PARALEGAL
MORRIS LAING EVANS BROCK & KENNEDY CHTD
300 N MEAD STE 200
WICHITA, KS 67202-2745
rlowe@morrislaing.com

CARLY MASENTHIN, LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
carly.masenthin@ks.gov

KACEY S MAYES, ATTORNEY
TRIPLETT, WOOLF & GARRETSON, LLC
2959 N ROCK RD STE 300
WICHITA, KS 67226
ksmayes@twgfirm.com

TIMOTHY E. MCKEE, ATTORNEY
TRIPLETT, WOOLF & GARRETSON, LLC
2959 N ROCK RD STE 300
WICHITA, KS 67226
temckee@twgfirm.com

JOHN J. MCNUTT, GENERAL ATTORNEY
U.S. ARMY LEGAL SERVICES AGENCY
REGULATORY LAW OFFICE
9275 GUNSTON RD., STE. 1300
FORT BELVOIR, VA 22060-5546
john.j.mcnutt.civ@army.mil

CERTIFICATE OF SERVICE

25-EKCE-294-RTS

MOLLY E MORGAN, ATTORNEY
FOULSTON SIEFKIN LLP
1551 N. Waterfront Parkway
Suite 100
Wichita, KS 67206
mmorgan@foulston.com

TIM OPITZ
OPITZ LAW FIRM, LLC
308 E. HIGH STREET
SUITE B101
JEFFERSON CITY, MO 65101
tim.opitz@opitzlawfirm.com

SHONDA RABB
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
shonda.rabb@ks.gov

DELLA SMITH
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
della.smith@ks.gov

NICK SMITH, MANAGER OF KANSAS REGULATION
BLACK HILLS ENERGY CORPORATION
601 North Iowa Street
Lawrence, KS 66044
nick.smith@blackhillscorp.com

VALERIE SMITH, ADMINISTRATIVE ASSISTANT
MORRIS LAING EVANS BROCK & KENNEDY
800 SW JACKSON
SUITE 1310
TOPEKA, KS 66612-1216
vsmith@morrislaing.com

LEE M SMITHYMAN, ATTORNEY
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
lsmithyman@foulston.com

ROBERT E. VINCENT, MANAGING ATTORNEY
KANSAS GAS SERVICE, A DIVISION OF ONE GAS, INC.
7421 W. 129TH STREET
OVERLAND PARK, KS 66213
robert.vincent@onegas.com

LESLIE WINES, SR. EXEC. ADMIN. ASST.
EVERGY KANSAS CENTRAL, INC
818 S KANSAS AVE
PO BOX 889
TOPEKA, KS 66601-0889
leslie.wines@evergy.com

TREVOR WOHLFORD, ATTORNEY
MORRIS LAING EVANS BROCK & KENNEDY
800 SW JACKSON
SUITE 1310
TOPEKA, KS 66612-1216
twohlford@morrislaing.com

WILL B. WOHLFORD, ATTORNEY
MORRIS LAING EVANS BROCK & KENNEDY CHTD
300 N MEAD STE 200
WICHITA, KS 67202-2745
wwohlford@morrislaing.com

Greg Wright
Priority Power Mgt.
12512 Augusta Dr
Kansas City, KS 66109
gwright@prioritypower.com

CERTIFICATE OF SERVICE

25-EKCE-294-RTS

JAMES P ZAKOURA, ATTORNEY
FOULSTON SIEFKIN LLP
7500 COLLEGE BOULEVARD, STE 1400
OVERLAND PARK, KS 66201-4041
jzakoura@foulston.com

/S/ Kiley McManaman

Kiley McManaman