

Exhibit No.:
Issues: Customer Data Privacy
Witness: Lisa A. Kremer
Sponsoring Party: Missouri Department of
Economic Development –
Division of Energy
Type of Exhibit: Rebuttal Testimony
Case Nos.: ER-2018-0145
ER-2018-0146

MISSOURI PUBLIC SERVICE COMMISSION

KANSAS CITY POWER & LIGHT COMPANY

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NOS. ER-2018-0145 and ER-2018-0146

REBUTTAL TESTIMONY

OF

LISA A. KREMER

ON

BEHALF OF

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

DIVISION OF ENERGY

Jefferson City, Missouri

July 27, 2018

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service)
) Case No. ER-2018-0145
)
)

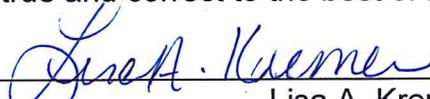
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service)
) Case No. ER-2018-0146
)
)

AFFIDAVIT OF LISA A. KREMER

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Lisa A. Kremer, of lawful age, being duly sworn on her oath, deposes and states:

1. My name is Lisa A. Kremer. I work in the City of Jefferson, Missouri, and I am employed by the Missouri Department of Economic Development as the Manager of Energy Policy and Resources, Division of Energy.
2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony (Revenue Requirement) on behalf of the Missouri Department of Economic Development – Division of Energy.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge.



Lisa A. Kremer

Subscribed and sworn to before me this 27th day of July, 2018.



Notary Public

My commission expires:

4/26/20

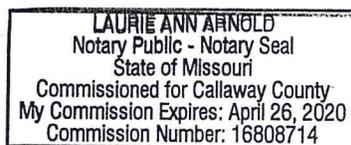


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1 **I. INTRODUCTION**

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

3 A. My name is Lisa A. Kremer. My business address is 301 West High Street, Suite
4 720, PO Box 1766, Jefferson City, Missouri 65102.

5 **Q. Please describe your educational and professional background.**

6 A. I graduated from Lincoln University in Jefferson City, Missouri with a Bachelor of
7 Science Degree in Public Administration and a Masters Degree in Business
8 Administration. I have successfully passed the Certified Internal Auditor (“CIA”)
9 Examination and am a CIA as well as a member of the Central Missouri Institute
10 of Internal Auditors.

11 I serve as the Manager of Policy and Resources for the Missouri Division of Energy
12 (“DE”), a position I accepted in 2018. Prior to assuming my current position at DE,
13 I was employed for approximately 30 years by the Missouri Public Service
14 Commission (“Commission”) Staff (“Staff”). My Staff tenure included experience as
15 a Utility Management Analyst I, II, and III and approximately 18 years of service as
16 a Utility Regulatory Manager. Prior to working for Staff, I was employed by Lincoln
17 University as an Institutional Researcher.

18 Specifically, I have participated in the analysis of, and/or had oversight
19 responsibilities for, numerous utility management and operational audits, as well
20 as reviews and investigations into utility customer service processes and practices.

21 I have had oversight responsibility for many comprehensive customer service
22 reviews of nearly all of Missouri’s large, investor-owned energy utilities. I have filed
23 testimony regarding utility service quality in a number of proceedings and have

1 served as Project Manager and in support roles on a variety of investigatory and
2 review projects. Such analysis was performed for electric, natural gas,
3 telecommunications, water, and sewer companies operating within the state of
4 Missouri. My work also has addressed the operational and customer service
5 practices of many small water and sewer companies. I also served as the Utility
6 Regulatory Manager overseeing engineers responsible for performing
7 depreciation studies and making depreciation recommendations in the context of
8 rate cases and in other regulatory proceedings. A listing of cases in which I have
9 filed testimony is attached as Schedule LAK-1, as well as my audit and project
10 participation, which is attached as Schedule LAK-2 to my testimony.

11 **II. PURPOSE AND SUMMARY OF TESTIMONY**

12 **Q. What is the purpose of your Rebuttal Testimony?**

13 A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimonies of
14 Office of Public Counsel (“OPC”) witness Dr. Geoffrey Marke and to Kansas City
15 Power & Light Company (“KCPL”) and KCP&L Greater Missouri Operations
16 Company (“GMO”) (collectively, “Companies”) witnesses Mr. Charles A. Caisley
17 and Mr. Forest Archibald. Specifically, my Rebuttal Testimony addresses the
18 matters of customer data protection and customer privacy raised by Dr. Marke in
19 the context of the companies’ advanced technology deployments, such as
20 Advanced Metering Infrastructure (“AMI”) and the new Customer Information
21 System (“One CIS” or “CIS”). These are both critical utility systems that have
22 considerable interdependency and interface as addressed in various contexts by
23 Mr. Caisley and Mr. Archibald.

1 **Q. Please provide a summary of your Rebuttal Testimony.**

2 A. Dr. Marke's Direct Testimony¹ raises a number of critical and timely considerations
3 regarding the protection of customer data, particularly as advancements and
4 increased sophistication have occurred, and will continue to occur, in utility
5 technologies. Technologies such as AMI and the Companies' new CIS that require
6 more extensive and complex collection, storage and utilization of customer
7 information heighten the need to examine customer data protections and to adopt
8 appropriate policies and customer safeguards as part of that important review
9 effort.

10 Specifically, my testimony will address 1) Dr. Marke's proposal for "... certain
11 preliminary privacy standards and safeguards for KCPL and GMO rate payers"²
12 regarding customer information and AMI, and 2) his request to open a rulemaking
13 workshop to explore customer protections, including the incorporation of data
14 privacy and sharing requirements into Commission rule 4 CSR 240-13. My
15 testimony will further address why the Missouri Division of Energy has interest in
16 customer privacy and information protection, as well as the findings and
17 recommendations made in the Missouri Comprehensive State Energy Plan
18 ("CSEP") regarding these matters.

19 My Rebuttal Testimony, in response to Mr. Caisley's and Mr. Archibald's Direct
20 Testimonies, will address the sophisticated technologies the Companies have
21 deployed (AMI and One CIS) and the opportunities and responsibilities those

¹ Case Nos. ER-2018-0145 and ER-2018-0146 Marke Direct p 3, lines 1 through 10, p. 5 lines 3 and 4.

² Case Nos. ER-2018-0145 and ER-2018-0146 Marke Direct p. 1, lines 12 through 19.

1 advances create with regards to protecting customer information and privacy. To
2 the best of DE's knowledge, none of the Companies' witnesses addressed these
3 topics in the context of the present cases. As the entity with the greatest control
4 over customer data the responsibility for customer data protection rests solidly with
5 the Companies. Missouri utilities must avail themselves of the necessary
6 specialized expertise that data protection requires as well as in leading detection
7 and prevention control practices in this important area in order to properly ensure
8 the safety and security of their customer's data which they have been entrusted.
9 We also welcome the opportunity to engage with utilities, the Commission and all
10 stakeholders that share this area of interest.

11 **III. CUSTOMER DATA PRIVACY**

12 **Q. In addition to the customer data risks identified in Dr. Marke's Direct**
13 **Testimony, what are some of the benefits of smart meter deployment?**

14 A. A September 2014 report and survey, prepared by the Institute for Electric
15 Innovation, presented a number of benefits that may be realized by the
16 implementation of smart meters. Some of benefits include: 1) enhanced outage
17 management and restoration through improved distribution system monitoring; 2)
18 enhanced opportunities for the integration of new resources such as distributed
19 generation, community solar projects, electric vehicles, storage and microgrids;
20 3) produced savings and efficiencies from reduced "truck rolls" to disconnect and
21 reconnect service; 4) reduced energy theft and more timely detection of theft,
22 field personnel savings to eliminate field meter reads; and 5) numerous customer

1 service benefits such as bill management tools, energy usage notification,
2 demand response programs, time of use rates and others.

3 **Q. Do you agree with Dr. Marke that there are also risks to customer**
4 **information created by the use of AMI?**

5 A. Yes. Dr. Marke provides evidence as to the customer data risks associated with
6 AMI including the citing of high-profile data breaches³. In addition to noting the
7 customer harm that can occur in such situations, he raises the potential costs and
8 risks to both customers and utility shareholders in situations where data is
9 mishandled and/or inappropriately accessed.

10 Further, the Companies' new CIS system, which KCP&L and GMO indicate
11 includes replacements to various customer portals, includes enhancements for
12 customer self-service. Such self-service capabilities, which depend upon
13 electronic customer interactions utilizing customer information, "went live" in May
14 2018 and include:

- 15 1. Start/Stop/Transfer Service;
- 16 2. Customer Search and Manage Account Details;
- 17 3. View Account and Property Info;
- 18 4. One-Time and Autopay Payments;
- 19 5. Account Administration Functions;;
- 20 6. User Profile Maintenance Updates;
- 21 7. View Bills, Bill Inserts, and Transactional History;

³ Case Nos. ER-2018-0145 and ER-2018-0146 Marke Direct pp. 4 – 8.

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- 1 8. Set Account Preferences;
- 2 9. Opower Direct Integration;
- 3 10. Alert Notifications and Self-Service Preferences;
- 4 11. Customer Reports;
- 5 12. View Current, Estimated, and Interactive Bill;
- 6 13. Contact KCP&L/Energy Consultant;
- 7 14. Outage Reporting; and,
- 8 15. Password Maintenance.⁴

9 Upon DE's request, the Companies provided a list of privacy and customer
10 information protections associated with their new CIS. These protections include
11 cyber security monitoring and response by a Cyber Threat Operations Center
12 ("CTOC") on a "24 X 7" basis and the engagement of a Cyber Incident Response
13 Team available to react to events escalated from the CTOC, again on a "24 X 7"
14 basis.⁵ While the area of cyber security requires specialized expertise and
15 technical abilities, based on responses to DE's data requests, the Companies
16 appear to be taking significant measures at this time to protect customer
17 information from cyberattack. However, diligent and persistent efforts must
18 continue to be applied in the prevention, detection, and response to both actual
19 and potential data breaches in the Companies' cyber security programs, coupled
20 with the sufficient implementation of controls and their testing.⁶

⁴ Case Nos. ER-2018-0145, ER-2018-0146 Caisley p. 17 lines 11-16. And DED-205 No. 7.

⁵ DED-205 No. 9.

⁶ Report: Internal Audit's Growing Engagement in Cyber Management, March 12, 2018.

1 **Q. Have stakeholders previously identified the same or similar customer**
2 **information risks and interests offered by Dr. Marke?**

3 A. Yes. The CSEP, developed through an extensive stakeholder process, includes
4 considerable reference to ensuring customer privacy and customer protection in
5 light of the emergence of smart grid technologies, including Recommendation 3.11
6 of the report, "Planning for Smart Grid:"

7 Investigate potential issues related to grid security and customer privacy as
8 it is related to smart grid, perhaps through a rulemaking docket at the PSC.⁷

9 **Q. What considerations regarding customer data, privacy, and protection were**
10 **identified through the CSEP process?**

11 A. Excerpts from the CSEP, listed below, highlight the awareness of, and concern
12 with, the protection of customer privacy during smart grid deployment:

13 Despite some advancements in smart grid implementation, IOU's [investor
14 owned utilities] in Missouri face several planning and implementation issues
15 that include cost effectiveness, cost recovery, security, privacy, customer
16 relations and reliability.⁸

17 ...

18 In addition, the need to address security and consumer privacy is essential
19 while developing a smarter and stronger power grid that will be more
20 dependent on two-way communication and information technologies.⁹

21 ...

⁷ Missouri State Comprehensive Energy Plan, p. 235.

⁸ Missouri Comprehensive State Energy Plan, p. 56.

⁹ Ibid, p. 126.

1 Smart grids should benefit both customers and energy providers.
2 Consumer protection issues should be addressed in the overall construct of
3 smart grid design and deployment planning such as consumer education
4 and bill protection programs, ownership of data, privacy and security, the
5 risk of remote disconnection, and social safety nets for vulnerable
6 customers.¹⁰

7 **Q. What are some considerations in assessing customer data protection and**
8 **customer privacy generally?**

9 A. The Institute of Internal Audit provides some key questions for those auditing an
10 organization's, "... current security posture, risk appetite, and its ability to manage
11 and mitigate any potential cyber threats:"

- 12 • Who has access to the organization's most valuable information?
- 13 • Which assets are most likely to be targeted?
- 14 • Which systems would cause the most significant impact to the
15 organization should they be compromised?
- 16 • Which data, if stolen, would cause financial or competitive
17 advantage, legal ramifications and/or reputational damage?
- 18 • Is management prepared to react in a timely manner should a cyber
19 security incident occur?
- 20 • Are senior management aware of risks relating to cyber security?
- 21 • Are cyber security policies and procedures in place, understood and
22 followed?
- 23 • Has management performed risk assessments to quantify their risk
24 exposure?

25 **Q. What are some considerations in assessing customer data protection and**
26 **customer privacy specifically at Missouri's regulated utilities?**

27 A. The protection of customer information deserves examination from a variety of
28 perspectives including:

¹⁰ Ibid, p. 151.

1 1) Customer data protection from those external to the organization who
2 seek to penetrate company systems to gain information access. The Companies
3 have provided detailed information about their efforts to protect against cyber
4 attacks in a number of data request responses within the current cases.¹¹

5 2) Customer data protection from those within an organization or performing
6 duties in an outsourced capacity on behalf of the organizations who have access
7 to data in the course of their duties and seek to misuse and/or abuse such data
8 access privilege and information.

9 3) Customer data protection from managerial decisions that could or may
10 result in unacceptable or detrimental use of customer information. The
11 Commission's Affiliate Transaction Rules, specifically 4 CSR 240-20.15 (2)(C), 4
12 CSR 240-40.15(2)(C), 4 CSR 240-80.15(2)(C) attempt to address this later matter.

13 **Q. What are the potential costs associated with cyber security and customer**
14 **data breaches?**

15 A. Training material provided on The International Institute of Internal Audit's website
16 indicates that the average cost of a data breach to a U.S.-based company is \$5.4
17 million.¹² Monetary costs, however, are not the only costs associated with data
18 breaches. Reputational damage, as Dr. Marke indicates in his Direct Testimony,¹³
19 should be recognized as a potential cost that can take significant time and
20 resources to overcome.

¹¹ Including but not limited to: Data Request Responses DED 8-5, 8-7 and 8-7

¹² Course: "Cybersecurity Auditing in an Unsecure World" – offered on The International Institute of Internal Auditing's web-site.

¹³ Case Nos. ER-2018-0145 and ER-2018-0146 Marke Direct p. 19, lines 24 and 25.

1 **Q. Do you have any specific comments or suggestions regarding**
2 **recommendations made in Dr. Marke's testimony?**

3 A. Yes. Dr. Marke states on page 1, lines 12 through 19 of his Direct Testimony that
4 he proposes certain preliminary "privacy standards and safeguards" regarding
5 customer, data and AMI. DE agrees conceptually with Dr. Marke's
6 recommendations in this case with regard to consent for customer information
7 disclosure and Green Button adoption (or other similar technology providers if such
8 exists) as well as an annual submission of a Cybersecurity Plan and Privacy
9 Impact Assessments to the Missouri Public Service Commission. I am not taking
10 a position on the Data Modeling Standards recommended by Dr. Marke at this
11 time.

12 **Q. What is "Green Button?"**

13 A. As I understand, the Green Button is an initiative supported by the Department of
14 Energy that gives utility customers access to their electric usage data and
15 designed in a standard format across multiple utilities. Data files can be shared
16 with third parties, upon customer election or choice, and usage data is downloaded
17 via a literal 'green button' on utility websites. Green Button is based on the Energy
18 Services Provider Interface data standard released by the North American Energy
19 Standards Board. According to the Green Button web-site, many utilities have
20 "committed to implementing Green Button" including Ameren Illinois, Virginia
21 Dominican Power Chattanooga EPB, Rocky Mountain Power, Pacific Gas and
22 Electric (PG&E), Consolidated Edison and others.

1 **Q. Do you have any specific response to Dr. Marke’s suggested rulemaking to**
2 **protect customer data?**

3 A. Yes. Dr. Marke’s testimony requests the opening of a rulemaking workshop to, “...
4 explore more robust consumer protection” in 4 CSR 240-13 – Service and Billing
5 Practices for Residential Customers of Electric, Gas, Sewer, and Water Utilities
6 (“Chapter 13”), as well as in the affiliate transaction rules found in 4 CSR 240-20.
7 DE notes that the rules in Chapter 13 are the “consumer and utility protection
8 rules” as they relate to billing, customer payments, service disconnections,
9 reconnections, customer deposits, the cold weather rule, and other critical
10 protections that provide protocols for interactions between consumers and the
11 regulated utilities that provide them service. Staff motions filed subsequent to Dr.
12 Marke’s Direct Testimony in this case resulted in a Commission order to create
13 Case Nos. AW-2018-0393 and AW-2018-0394 for review of rules on the treatment
14 of customer data, including the placement of such rules within the Code of State
15 Regulations, or “CSRs.” A Staff motion appears to recommend the insertion of
16 customer protection rules in 4 CSR 240-10 and the rescission of components of
17 various affiliate transactions rules found in Chapters 20, 40 and 80 that address
18 customer data.

19 While DE takes no position at this time regarding the most appropriate place for
20 such rules to appear within the CSRs, when Chapter 13 was reviewed and revised
21 a number of years ago, the process was protracted and at times contentious, with
22 understandable conflicts arising between the customer and utility protections being
23 advocated by various parties. I was involved in that review process, which spanned

1 approximately seven years. Opening that same rule for review again could
2 potentially mire down a process whose worthy and initial goal appears to be solely
3 to codify essential customer data and privacy protection rules.

4 **Q. Are there certain principles, in your opinion, that should be contemplated in**
5 **a rulemaking process that seeks to protect customer information and**
6 **customer privacy?**

7 A. Yes. Wherever customer data treatment and protection language is placed in the
8 Commission's rules, we must ensure that the rule is thorough and provides
9 sufficient customer protection language.

10 Dr. Marke cites the Washington Transportation and Utilities Commission's 2001
11 adopted electric and gas rules, which protect customers from the release of their
12 information without written permission. The Washington rules also provide an
13 explicit definition of customer information that includes the following: "...
14 customer's name, address, telephone number, and any other personally
15 identifying information, as well as information related to the quantity, technical
16 configuration, type, destination, and amount of use of service or products
17 subscribed to by a customer of a regulated utility that is available to the utility solely
18 by virtue of the customer-utility relationship."¹⁴

¹⁴ Case Nos. ER-2018-0145 and ER-2018-0146 Marke Direct pp. 15 and 16;

1 The matter of customer data protection is not a new interest or phenomenon, as it
2 is an issue addressed previously in Washington, Missouri,¹⁵ and elsewhere, as
3 noted in Dr. Marke's testimony;¹⁶ however technological advances heighten both
4 the urgency and relevancy of revisiting the issue. Customer data can be
5 compromised in multiple ways, and a rule making should strive to address all ways
6 in which customer data may require protection.

7 DE recommends that such a rulemaking should result in a rule that evaluates
8 tenets such as: 1) what the utility can and cannot do with customer information; 2)
9 requirements for informing customers in a timely manner if their data are
10 compromised; 3) requirements for reporting data breaches to the Commission; 4)
11 a customer data privacy statement published publicly for customer awareness,
12 such as on a utility's website and in customer information material; 5) the utility's
13 inherent responsibility to protect customer information that is within its possession
14 and used to serve customers; 6) a clear definition as to what constitutes customer
15 information; 7) where ownership of customer data resides; 8) filed notification to
16 the Commission when companies make changes to their customer data privacy
17 policies; and, 9) the authority the customer has to share their energy information
18 with any other entity or person of their choice. DE looks forward to participating in

¹⁵Missouri Public Service Commission File No. EO-2014-0306, Report of Staff's Investigation – Allconnect Direct Transfer Service Agreement Between Allconnect, Inc. and Great Plains Energy Services Incorporated Respecting Itself and Its Affiliates Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company and Case No. EC-2015-0309; The Washington Commission Docket U-061239.

¹⁶ Case Nos. ER-2018-0145 and ER-2018-0146 Marke Direct pp. 8 and 9.

1 the rule review processes regarding this important topic and is in the process of
2 reviewing Staff's filings.

3 **Q. From a policy perspective, why is the topic of customer data ownership**
4 **pertinent to the discussion of customer data protection?**

5 A. Clarity of data ownership is a concept that is within the public interest of Missouri's
6 utility regulatory policy and deserves vetting in any process of examining
7 Commission privacy and protection rules. The Companies' response to DED-8-1
8 included the Companies' Privacy Policy for customer users of the Companies'
9 website. As stated earlier, the Companies' website is used for much of the self-
10 service capability enabled by the Companies' new CIS project.¹⁷ Specifically, the
11 Companies' Privacy Policy states, among other things:

12 Information Collection

13 KCP&L collects personally identifiable information from the users on our
14 Web-site. KCP&L Greater Missouri Operations and its parent holding
15 company, Great Plains Energy, are the sole owners of the information
16 collected on kcpl.com. By using the Web-site, you consent to the data
17 practices described in this statement.¹⁸

18 In light of customers paying approximately \$118 Million for a new CIS,¹⁹ it is worth
19 consideration that, in order to avail themselves fully of the self-service capabilities
20 created by One CIS, they must acknowledge and agree to the Companies "owning"
21 their data as well as to the Companies' use of their information. As with any policy,

¹⁷ Case Nos. ER-2018-0145 and ER-2018-0145 Caisley Direct p 17 lines 10 – 21.

¹⁸ Data Request Response DED-8-1

¹⁹ Case Nos. ER-2018-0145 and ER-2018-0146 p. 15 line 8.

1 the Companies' practices are subject to change, and a customer who previously
2 agrees to potentially relinquish ownership of their information to the Companies
3 under one established policy or policies may be subject to changes in a previously
4 agreed-to understanding. Further, what seems to be unclear is the Companies'
5 continued "ownership" of customer data after the customer leaves the system or
6 the use of the data for purposes other than the delivery of the regulated utility
7 service. An additional consideration is whether customer information 'ownership'
8 would transfer during a potential sale of the Companies. Customer information
9 ownership is worthy of examination from both a state policy perspective and
10 whether it is in the interest of Missouri consumers.

11 **Q. Why are Commission customer data rules necessary if utilities have adopted**
12 **sufficient internal controls to protect customer information?**

13 A. Rules are necessary to ensure that the Companies' actions align with regulated
14 utility policies and directives codified by the Commission. Utility managements
15 change, and internal policies and practices that were directed by one specific
16 group of company executives and leadership may be subsequently reevaluated
17 and re-prioritized by future company managements. Organizational directions can
18 shift in many ways that result in differing prioritizations of goals and objectives. The
19 matter of customer information, customer protection, and privacy rises to the level
20 of importance of being thoroughly addressed in Commission rules.

21 **Q. Have the Companies addressed the subject of "customer expectations?"**

22 A. Yes. Both Mr. Archibald and Mr. Caisley address the continuing evolution of
23 customer expectations. DE agrees with Mr. Caisley's testimony regarding service

1 comparisons utility customers may make, not necessarily to other utility providers,
2 but to other private sector companies such as Walmart and Amazon²⁰ with regard
3 to service, responsiveness to customer desires, convenience and other
4 performance qualities. DE offers that additionally customer expectations of the
5 appropriate and secure handling of their data and information by Walmart and
6 Amazon extends to customer expectations of Missouri's regulated utilities. If
7 customers expect Walmart and Amazon to honor and protect their privacy, it is
8 logical that they expect and deserve the same from their utility, which operates
9 within a regulatory compact as a monopoly provider of electric service.

10 **IV. CONCLUSIONS**

11 **Q. Do you have any closing comments regarding customer information**
12 **breaches and customer privacy?**

13 A. Yes. Data have become both an increasingly valuable asset and increasingly
14 accessible over time.²¹ As technology has evolved that makes customer
15 information available and required in the utilization of computerized systems to
16 conduct normal business, the opportunities for data breaches have risen. A 2016
17 study by Verizon indicates that during data breach investigations, "93% of cases
18 took attackers minutes or less to compromise systems;" however, organizations
19 may have not discovered the breaches for weeks or longer.²²

²⁰ Ibid, Caisley p. 26 lines 15 and Archibald p. 6 lines 6 through 7.

²¹ The Institute of Internal Audit Cyber Security: Guidelines and a Checklist November 30, 2017 publication.

²² The Institute of Internal Audit Home Page – Data Security Risk Course presented by Dr. Stephen Hill.

1 Further, there must be sufficient internal controls for both in-house and contracted
2 personnel who have access to customer data. Identity theft, the misuse of credit
3 card information, energy usage information derived from advanced metering and
4 other examples all may create temptations for those who would seek to exploit
5 private customer information.

6 Technological advancements like AMI and One CIS, which come at considerable
7 customer expense and whose costs are borne by ratepayers, provide significant
8 opportunities for enhanced customer service but create an equally compelling
9 rationale for the critical examination of customer data protection controls. Assertive
10 and effective protection of Missouri regulated utilities' customer data and customer
11 information is not only a worthy goal, but should be required in the regulatory
12 construct for KCP&L, GMO, and all other Commission-regulated utility companies.

13 **Q. Does this conclude your Rebuttal Testimony?**

14 A. Yes.