Exhibit No.:

Issue(s): Advanced Metering

Infastructure

Witness: Claire M Eubanks
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony

Case Nos.: ER-2022-0129 and

ER-2022-0130

Date Testimony Prepared: June 8, 2022

MISSOURI PUBLIC SERVICE COMMISSION INDUSTRY ANALYSIS DIVISION ENGINEERING ANALYSIS DEPARTMENT

DIRECT TESTIMONY

OF

CLAIRE M. EUBANKS, P.E.

Evergy Metro, Inc. d/b/a Evergy Missouri Metro Case No. ER-2022-0129

Evergy Missouri West, Inc. d/b/a Evergy Missouri West Case No. ER-2022-0130

> Jefferson City, Missouri June 2022

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| 1 | DIRECT TESTIMONY |
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| 2 | \mathbf{OF} |
| 3 | CLAIRE M. EUBANKS, P.E. |
| 4 5 | Evergy Metro, Inc. d/b/a Evergy Missouri Metro Case No. ER-2022-0129 |
| 6 7 | Evergy Missouri West, Inc. d/b/a Evergy Missouri West Case No. ER-2022-0130 |
| 8 | Q. Please state your name and business address. |
| 9 | A. My name is Claire M. Eubanks and my business address is Missouri Public |
| 10 | Service Commission, P.O. Box 360, Jefferson City, Missouri, 65102. |
| 11 | Q. By whom are you employed and in what capacity? |
| 12 | A. I am employed by the Missouri Public Service Commission ("Commission") as |
| 13 | the Manager of the Engineering Analysis Department of the Industry Analysis Division. |
| 14 | Q. Please describe your educational background and work experience. |
| 15 | A. I received my Bachelor of Science degree in Environmental Engineering from |
| 16 | the University of Missouri - Rolla, now referred to as Missouri University of Science and |
| 17 | Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and |
| 18 | Arkansas. I began my career as a Project Engineer with Aquaterra Environmental Solutions, |
| 19 | Inc., now SCS Aquaterra, an engineering consulting firm with locations across the Midwest. |
| 20 | As a Project Engineer, I worked on a variety of engineering and environmental projects |
| 21 | including landfill design, environmental sampling, construction oversight, and construction |
| 22 | quality assurance. Over the course of my six years with Aquaterra I was promoted several times, |
| 23 | eventually to Project Manager. As a Project Manager, I managed a variety of engineering |
| 24 | projects primarily related to the design and environmental compliance of solid waste landfills, |

including performing as the Certifying Engineer for projects related to landfill design,
construction plans and specifications, and construction quality assurance.

In November 2012, I began my employment with the Commission as a Utility Regulatory Engineer I. My primary job duties were primarily related to the Renewable Energy Standard, reviewing applications for Certificates of Convenience and Necessity, construction audits, and the development and evaluation of in-service criteria. In January 2017, I was promoted to Utility Regulatory Engineer II and in April of 2020, I was promoted to my current position.

- Q. Have you previously filed testimony before the Commission?
- A. Yes, numerous times. Please refer to Schedule CME-d1, attached to this Direct Testimony, for a list of cases in which I have filed testimony or recommendations.
- Q. What knowledge, skills, experience, training, and education do you have in the areas of which you are testifying as an expert witness?
- A. I have received continuous training at in-house and outside seminars on technical matters since I began my employment at the Commission. I have been employed by this Commission as an Engineer for over 9 years, and have submitted testimony numerous times before the Commission. I have also been responsible for the supervision of other Commission employees in rate cases and other regulatory proceedings.

EXECUTIVE SUMMARY

- Q. What is the purpose of your direct testimony?
- A. The purpose of my direct testimony is to support Staff's recommended disallowance related to the premature retirement of Advanced Metering Infrastructure ("AMI").

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Q. Through this testimony, do you provide any recommendations for recommended rate base levels to be reflected in the revenue requirement ordered in this case?

A. Yes.

ADVANCED METERING INFRASTRUCTURE

- Q. What is Staff's recommendation to the Commission regarding the premature retirement of AMI meters?
- A. Based on the data Staff has received to date, Staff recommends that the Commission resolve the premature retirement of AMI meters issue by basing its awarded revenue requirement on a disallowance of (\$3,641,734) and (\$1,973,398) from Evergy Missouri Metro's ("EMM") and Evergy Missouri West's ("EMW") FERC Account 370.2, respectively. At this time, these adjustments are based only on the premature retirements that occurred during the test year and update period. Staff has requested more data from Evergy as this issue has matured, and will incorporate the level of disallowance associated with premature retirement that occurred before the test year as soon as the information to calculate such adjustments is provided by Evergy.
 - Q. What is AMI?
- A. AMI is an integrated system of smart meters, communication networks, and data management systems that enables two-way communication between utilities and customers.²
 - Q. What is a smart meter?

¹ Staff initially requested a spreadsheet of all meter exchanges that occurred from June 30, 2020 through December 31, 2021, as it was unclear when Evergy began its AMI to AMI-SD meter exchanges.

² Advanced Metering Infrastructure and Customer Systems, U.S. Department of Energy, September 2016.

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A. An electric smart meter, or an AMI meter, is a device that measures and records electricity usage hourly or sub-hourly. Depending on the manufacturer and model of the AMI meter, other capabilities may be available such as monitoring the on/off status of electric service, measuring voltage, and remotely disconnecting and reconnecting electric service.

Q. What are the capabilities of the AMI meters used by Evergy?

A. Evergy has installed AMI meters that have different capabilities. Evergy's residential³ AMI meters are **

** The major difference between the **

** meters have the capability to remotely disconnect and reconnect electric service. For the remaining portion of my testimony, I will refer to these meters as AMI-SD meters. Schedule CME-d3 includes an overview of the **

Q. When did Evergy initially deploy AMI meters?

A. EMM and EMW initially replaced AMR⁴ meters with AMI meters in portions of its service territories from 2014 to 2016.⁵ As of September of 2018, EMM's AMI meter penetration was approximately 98% and EMW's was somewhat less than 60%.⁶ Customers in the remaining portions of the service territories received either AMI or AMI-SD meters between 2019 and 2020. As of January 2022, EMM and EMW have 1,225 Non-AMI meters remaining.⁷

³ Evergy's commercial and industrial AMI meters are **

⁴ Automated meter reading is a metering system that allows a utility representative to read the meter device from a handheld device or vehicle at a distance, such as the sidewalk, rather than having a manual meter reader record the number off the display screen.

⁵ The Smart Grid Demonstration project included installation of AMI meters in 2010 and 2011, approximately 2.11% of its meter population (Surrebuttal Testimony of Geoff Marke, Schedule GM-6, ER-2018-0145).

⁶ Surrebuttal Testimony of Darrin Ives in ER-2018-0145 and ER-2018-0146, page 21 lines 10-11.

⁷ Based on data provide in response to Staff Data Request 2s in EE-2022-0071 (included in Schedule CME-d2).

| 1 | Q. | What is the design life of the AMI meters installed in the 2014 to 2016 |
|----|------------------|---|
| 2 | timeframe? | |
| 3 | A. | The ** meters have a design life of 20+ years. |
| 4 | Q. | Is it just and reasonable to retire meters prior to the end of their design life? |
| 5 | A. | Not without justification. |
| 6 | Q. | During the test year and update period how many meters did Evergy exchange? |
| 7 | A. | Over the test year and update period, EMM exchanged 49,647 meters and |
| 8 | EMW exchan | aged 22,235 meters. Of the exchanged meters, 99% of meters exchanged were |
| 9 | less than 7 year | ars old. |
| 10 | Q. | What are the primary reasons provided by Evergy for a meter exchange to occur? |
| 11 | A. | Evergy provided a spreadsheet of all meter exchanges that occurred over the test |
| 12 | year.8 The sp | preadsheet included field notes associated with the individual meter exchanges. |
| 13 | Staff grouped | the field notes into categories. Based on this grouping, in descending order of |
| 14 | most commor | n to least, the top reasons for meter exchanges during the test year include: |
| 15 | | • To exchange an AMI meter with an AMI-SD meter (i.e. service |
| 16 | | disconnect capable meter) |
| 17 | | To exchange an AMI meter with an AMI-SD meter due to customer |
| 18 | | arrears |
| 19 | | • Communication issues |
| 20 | | Unknown reasons |
| 21 | | • Net meter installations |
| 22 | Q. | Are there other reasons for meter exchanges? |
| | | |
| | 1 | |

⁸ Response to Staff Data Request 283 in ER-2022-0129 and Response to Staff Data Request 296 in ER-2022-0130.

| A. | Yes, there were instances of meter exchanges that occurred due to damaged or |
|-----------------|--|
| failing meters | s, access issues, and customer requested exchanges (such as the AMI-opt out |
| program). | |
| Q. | Is Staff recommending a disallowance of all meter replacements that involved |
| meters prior to | o the end of design service life (20+ years)? |
| A. | No. Staff is recommending a disallowance of meter exchanges that occurred for |
| the following | reasons: |
| | • To exchange an AMI meter with an AMI-SD meter. Including the |
| | instances where Evergy noted the customer arrears. As Staff is |
| | concerned that customers in arrears are being targeted first for |
| | exchanging an AMI meter with an AMI-SD meter. |
| | • Unknown reasons |
| Q. | Why is Staff recommended a disallowance for meter replacements that occurred |
| for the reason | s listed above? |
| A. | The vast majority (99%) of the exchanged AMI meters are less than 7 years old. |
| While it is re | asonable and necessary to replace a meter that is damaged or failing, it is not |
| reasonable to | replace a meter solely to gain a new a new capability or when there is seemingly |
| no reason. | |
| Q. | Is Evergy replacing meters when on-site for other reasons? |
| A. | Yes, in some instances. However, Evergy is also replacing meters in batches as |
| workload allo | ws. |
| Q. | Does Evergy have a plan for switching out all AMI meters by a date certain? |
| | |

| 1 | A. Evergy intends to complete the replacement of AMI meters with AMI-SD |
|----|---|
| 2 | meters by the end of 2024. |
| 3 | Q. Has the Commission recently ordered a disallowance related to premature |
| 4 | retirement of meters? |
| 5 | A. Yes. In a recent Spire case, GR-2021-0108, the Commission could not conclude |
| 6 | that replacement of meters that were less than 10 years old was just and reasonable in all |
| 7 | instances and therefore disallowed recovery of 26% of the meter replacements. The |
| 8 | Commission found instances where certain meter replacements were appropriate, for example, |
| 9 | when an existing meter needs replacement. Staff's recommendation in this case is consistent |
| 10 | with the Commission's order in the previous Spire rate case. |
| 11 | Q. Are the AMI meters with service disconnect capability more costly than |
| 12 | AMI meters without that capability? |
| 13 | A. Yes. ** |
| 14 | ** For this |
| 15 | reason, Staff does not oppose the installation of AMI-SD on an as-needed basis. However, in |
| 16 | many instances, Evergy is replacing AMI meters that still have a significant portion of |
| 17 | remaining life. |
| | |
| 18 | CONCLUSION |
| 19 | Q. What is the level and derivation of Staff's recommended disallowance related to |
| 20 | imprudent meter retirements? |
| | |
| | |

⁹ Amended Report and Order GR-2021-0108, page 46-48.

| 1 | A. Staff multiplied the number of meters per grouping described above by the cost |
|----|--|
| 2 | per meter (** ** per meter ** per meter ** depending on meter type). This resulted in a |
| 3 | disallowance of (\$3,641,734) and (\$1,973,398) from EMM's and EMW's FERC account |
| 4 | 370.2, respectively. Schedule CME-d4 includes a summary of the number of meters per |
| 5 | grouping. |
| 6 | Q. Does Staff have concerns with Evergy's continuing plans to exchange |
| 7 | AMI meters? |
| 8 | A. Staff recommends that Evergy discontinue its practice of premature meter |
| 9 | replacements. However, ** |
| 10 | |
| 11 | |
| 12 | |
| 13 | 11 ** As of January 2022, EMM and EMW have only 1,225 Non-AMI meters. 12 |
| 14 | This apparent disparity between the number of meters ** |
| 15 | and the remaining number of non-AMI meters left to replace is consistent with an intent by |
| 16 | Evergy to continue or expand its practice of premature meter retirements. |
| 17 | Q. Does that conclude your direct testimony? |
| 18 | A. Yes it does. |
| | |
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| | |

¹⁰ Cost per meter from the direct work papers of Marisol Miller. "CONFIDENTIAL_Evergy (MO West) Allocators Workpapers 202106 - Direct Filing" and "Evergy (MO Metro) Allocators Workpapers 202106 - Direct Filing" ¹¹ Staff Data Request 287.1 in ER-2022-0129 and Staff Data Request 298.1 in ER-2022-0130 (included in Schedule CME-d2).

¹² Based on data provide in response to Staff Data Request 2s in EE-2022-0071 (included in Schedule CME-d2).

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

| In the Matter of Evergy Metro, Inc. d/b/a Evergy) Missouri Metro's Request for Authority to) Implement a General Rate Increase for Electric) Service) | Case No. ER-2022-0129 |
|--|--------------------------------------|
| In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service) | Case No. ER-2022-0130 |
| AFFIDAVIT OF CLAIRE M. | EUBANKS, PE |
| STATE OF MISSOURI)) ss. COUNTY OF COLE) | |
| COMES NOW CLAIRE M. EUBANKS, PE of sound mind and lawful age; that she contributed Claire M. Eubanks, PE; and that the same is true and cand belief. | to the foregoing Direct Testimony of |
| | M Eubands 1. EUBANKS, PE |
| JURAT | |
| Subscribed and sworn before me, a duly constituted the County of Cole. State of Missouri, at my office in Id | |

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number; 12412070

of June 2022.

Descullankin Novary Public

CLAIRE M. EUBANKS, PE

PRESENT POSITION:

I am the Manager of the Engineering Analysis Department, Industry Analysis Division of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

I received my Bachelor of Science degree in Environmental Engineering from the University of Missouri – Rolla, now Missouri University of Science and Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and Arkansas. Immediately after graduating from UMR, I began my career with Aquaterra Environmental Solutions, Inc., now SCS Aquaterra, an engineering consulting firm based in Overland Park, Kansas. During my time with Aquaterra, I worked on various engineering projects related to the design, construction oversight, and environmental compliance of solid waste landfills. I began my employment with the Commission in November 2012 and was promoted to my current position in April 2020.

CASE HISTORY:

| Case Number | Utility | Туре | Issue |
|------------------------------|-----------------------|--|--|
| EA-2012-0281 | Ameren | Rebuttal | Certificate of Convenience and Necessity |
| EC-2013-0379 EC-2013-0380 | KCP&L KCP&L GMO | Rebuttal | RES Compliance |
| EO-2013-0458 | Empire | Memorandum | RES Compliance Plan & Report |
| EO-2013-0462 | Ameren | Memorandum | RES Compliance Report |
| EO-2013-0503 | Ameren | Memorandum | RES Compliance Plan |
| EO-2013-0504 | KCPL | Memorandum | RES Compliance Plan & Report |
| EO-2013-0505 | GMO | Memorandum | RES Compliance Plan & Report |
| ET-2014-0059 | KCP&L GMO | Rebuttal | RES Retail Rate Impact |
| ET-2014-0071 | KCP&L | Rebuttal | RES Retail Rate Impact |
| ET-2014-0085 | Ameren | Rebuttal | RES Retail Rate Impact |
| ER-2014-0258 | Ameren | Cost of Service Report, Surrebuttal | RES, In-Service |

| Case Number | Utility | Туре | Issue |
|--------------|--------------|------------------------|---|
| EO-2014-0151 | KCP&L GMO | Memorandum | RESRAM |
| EO-2014-0357 | Electric | Memorandum | Solar Rebates Payments |
| EO-2014-0287 | KCPL | Memorandum | RES Compliance Plan |
| EO-2014-0288 | GMO | Memorandum | RES Compliance Plan |
| EO-2014-0289 | KCPL | Memorandum | RES Compliance Report |
| EO-2014-0290 | GMO | Memorandum | RES Compliance Plan |
| ER-2014-0370 | KCP&L | Cost of Service Report | RES |
| EX-2014-0352 | N/A | Live Comments | RES rulemaking |
| EC-2015-0155 | GMO | Memorandum | Solar Rebate Complaint |
| EO-2015-0260 | Empire | Memorandum | RES Compliance Plan & Report |
| EO-2015-0263 | KCPL | Memorandum | RES Compliance Report |
| EO-2015-0264 | GMO | Memorandum | RES Compliance Report |
| EO-2015-0265 | KCPL | Memorandum | RES Compliance Plan |
| EO-2015-0266 | GMO | Memorandum | RES Compliance Plan |
| EO-2015-0267 | Ameren | Memorandum | RES Compliance Plan & Report |
| EO-2015-0252 | GMO | Staff Report | Integrated Resource Plan – Renewable Energy Standard |
| EO-2015-0254 | KCPL | Staff Report | Integrated Resource Plan – Renewable Energy Standard |
| EA-2015-0256 | KCP&L GMO | Live Testimony | Greenwood Solar CCN |
| EO-2015-0279 | Empire | Memorandum | RES Compliance Plan & Report |
| ET-2016-0185 | KCP&L | Memorandum | Solar Rebate Tariff Suspension |
| EO-2016-0280 | KCPL | Memorandum | RES Compliance Report |
| EO-2016-0281 | GMO | Memorandum | RES Compliance Report |
| EO-2016-0282 | KCPL | Memorandum | RES Compliance Plan |
| EO-2016-0283 | GMO | Memorandum | RES Compliance Plan |
| EO-2016-0284 | Ameren | Memorandum | RES Compliance Plan & Report |
| ER-2016-0023 | Empire | Report | RES |
| ER-2016-0156 | KCP&L GMO | Rebuttal | RESRAM Prudence Review |

| Case Number | Utility | Type | Issue |
|-----------------------------------|---|---|---|
| EA-2016-0208 | Ameren | Rebuttal | Certificate of Convenience and Necessity |
| ER-2016-0285 | KCPL | Cost of Service Report | In-Service, Greenwood Solar |
| ER-2016-0179 | Ameren | Rebuttal | In-Service, Labadie Landfill |
| EW-2017-0245 | Electric | Report | Working Case on Emerging Issues in Utility Regulation |
| EO-2017-0268 | Ameren | Memorandum | RES Compliance Plan & Report |
| EO-2017-0269 | KCPL | Memorandum | RES Compliance Report |
| EO-2017-0271 | KCPL | Memorandum | RES Compliance Plan |
| GR-2017-0215 & GR-2017-0216 | Spire | Rebuttal & Surrebuttal | CHP for Critical Infrastructure |
| GR-2018-0013 | Liberty Utilities (Midstates Natural Gas) | Rebuttal | CHP Outreach Initiative for Critical Infrastructure Resiliency |
| EO-2018-0287 | Ameren | Memorandum | RES Compliance Plan & Report |
| EO-2018-0288 | KCPL | Memorandum | RES Compliance Report |
| EO-2018-0290 | KCPL | Memorandum | RES Compliance Plan |
| EA-2016-0207 | Ameren | Memorandum | Certificate of Convenience and Necessity |
| ER-2018-0146 | GMO | Cost of Service Report | RESRAM Prudence Review |
| ER-2018-0145 ER-2018-0146 | KCPL GMO | Class Cost of Service Report, Rebuttal | Solar Subscription Pilot Rider, Standby Service Rider |
| EA-2018-0202 | Ameren | Staff Report | Certificate of Convenience and Necessity |
| EE-2019-0076 | Ameren | Memorandum | Variance Request – Reliability Reporting |
| EA-2019-0021 | Ameren | Staff Report | Certificate of Convenience and Necessity |
| EA-2019-0010 | Empire | Staff Report | Certificate of Convenience and Necessity |
| EX-2019-0050 | N/A | Live Comments | Renewable Energy Standard |

| Case Number | Utility | Туре | Issue |
|--------------------------|-----------------------------|--|--|
| EO-2019-0315 | KCPL | Memorandum in Response to Commission Questions | Renewable Energy Standard |
| EO-2019-0316 | GMO | Memorandum | Renewable Energy Standard |
| EO-2019-0317 | KCPL | Memorandum in Response to Commission Questions | Renewable Energy Standard |
| EO-2019-0318 | GMO | Memorandum | Renewable Energy Standard |
| ER-2019-0335 | Ameren | Cost of Service Report | Renewable Energy Standard, In- Service Criteria |
| EA-2019-0371 | Ameren | Staff Report | Certificate of Convenience and Necessity |
| EO-2020-0329 | Evergy Missouri Metro | Memorandum | Renewable Energy Standard |
| EO-2020-0330 | Evergy Missouri West | Memorandum | Renewable Energy Standard |
| EE-2021-0237 | Evergy Missouri Metro | Memorandum | Cogeneration Tariff |
| EE-2021-0238 | Evergy Missouri West | Memorandum | Cogeneration Tariff |
| EE-2021-0180 | Ameren Missouri | Memorandum | Electric Meter Variance |
| ET-2021-0151 and 0269 | Evergy | Memorandum, Rebuttal Report | Transportation Electrification |
| AO-2021-0264 | Various | Staff Report | February 2021 Cold Weather Event |
| EW-2021-0104 | n/a | Staff Report | RTO Membership |
| EW-2021-0077 | n/a | Staff Report | FERC Order 2222 |
| EO-2021-0339 | Evergy Missouri West | Memorandum | Territorial Agreement |
| GR-2021-0108 | Spire | Rebuttal | Automated Meter Reading Opt-out Tariff |
| EA-2021-0087 | ATXI | Rebuttal Report | Certificate of Convenience and Necessity |
| ER-2021-0240 | Ameren Missouri | Cost of Service Report Rebuttal | In-Service Bat Mitigation |

| Case Number | Utility | Туре | Issue |
|--------------|----------------------------|------------------------|--|
| ER-2021-0312 | Empire | Cost of Service Report | Construction Audit – Engineering Review, In-service |
| EO-2022-0061 | Evergy Missouri West | Surrebuttal | Special Rate/ Renewable Energy Standard |
| EA-2022-0099 | ATXI | Rebuttal | Certificate of Convenience and Necessity |



Evergy MO Metro and MO West Case Name: 2021 Knock and Collect Waiver Case Number: EE-2022-0071

> Requestor Bernsen Deborah -Response Provided March 24, 2022

Question:0002S

SUPPLEMENT

Please provide an update as of January 2022 on all the meter models used throughout EMM and EMW service territories. Include the name of the model(s) used in EMM and EMW territories, provide the total number of each meter type in EMM and EMW territories, state which meters are AMI or non-AMI with a breakdown of how many are AMI with and without service disconnect capabilities. Please provide the date AMI meter deployment began and when it was complete for EMW and EMM. DR requested by Debbie Bernsen (debbie.bernsen@psc.mo.gov)

<u>RESPONSE</u>: (do not edit or delete this line or anything above this)

Confidentiality: PUBLIC

Statement: This response is Public. No Confidential Statement is needed.

Response:



| erritory | AMI/ <u>Non</u> <u>AMI</u> | Manufacturer | Meter Model | Switch Disconnect | Meter Count |
|----------|-------------------------------|---------------------|---------------|----------------------|----------------|
| EMM | AMI | Landis + Gyr | FOCUS AL | No | 117,669 |
| EMM | AMI | Landis + Gyr | FOCUS AXR | No | 2,095 |
| EMM | AMI | Landis + Gyr | FOCUS AXR-SD | Yes | 177,728 |
| EMM | AMI | Landis + <u>Gyr</u> | FOCUS RXR | No | 5,960 |
| EMM | AMI | Landis + <u>Gyr</u> | RXR S4E | No | 10,319 |
| EMM | AMI | Landis + Gyr | RXR S4X | No | 459 |
| EMM | NON-AMI | Unknown | Unknown | No | 428 |
| EMM | NON-AMI | Landis + Gyr | FOCUS AL | No | 5 |
| EMM | NON-AMI | Unknown | Unknown | No | 50 |
| EMW | AMI | Landis + Gyr | FOCUS AL | No | 126,189 |
| EMW | AMI | Landis + Gyr | FOCUS AXR | No | 9,394 |
| EMW | AMI | Landis + Gyr | FOCUS AXRE-SD | Yes | 1 |
| EMW | AMI | Landis + Gyr | FOCUS AXR-SD | Yes | 187,974 |
| EMW | AMI | Landis + Gyr | FOCUS RXR | No | 8,543 |
| EMW | AMI | Landis + Gyr | RXR S4E | No | 5,997 |
| EMW | AMI | Landis + Gyr | RXR S4X | No | 2,811 |
| EMW | NON-AMI | Unknown | Unknown | No | 270 |
| EMW | NON-AMI | Landis + Gyr | FOCUS AL | No | 21 |
| EMW | NON-AMI | Landis + Gyr | FOCUS AX | No | 1 |
| EMW | NON-AMI | Unknown | Unknown | No | 450 |

The rollout of AMI for KC Metro EMM meters began in 2014Q1 and was substantially completed in 2015Q4. KC Metro EMW began in 2015Q4 and substantially completed in 2016Q4. The deployment of the remainder of both EMM and EMW began in 2019Q1 and completed in 2020Q4.

Information provided by: Corey Paczosa

Attachment(s):



Missouri Verification:

I have read the Information Request and answer thereto and find answer to be true, accurate, full and complete, and contain no material misrepresentations or omissions to the best of my knowledge and belief; and I will disclose to the Commission Staff any matter subsequently discovered which affects the accuracy or completeness of the answer(s) to this Information Request(s).

Signature /s/ *Brad Lutz*Director Regulatory Affairs

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HAS BEEN DEEMED

CONFIDENTIAL

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