

Exhibit No.:
Issue(s): High Prairie, Rush Island,
and Smart Energy Plan
Witness: Claire M. Eubanks, PE
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony
Case No.: ER-2022-0337
Date Testimony Prepared: January 10, 2023

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

**DIRECT TESTIMONY
Revenue Requirement**

OF

CLAIRE M. EUBANKS, PE

**UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI**

CASE NO. ER-2022-0337

*Jefferson City, Missouri
January 2023*

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

7 Q. Have you previously filed testimony before the Commission?

8 A. Yes, numerous times. Please refer to Schedule CME-d1, attached to this
9 Direct Testimony, for a list of cases in which I have filed testimony or recommendations.

10 Q. What knowledge, skills, experience, training, and education do you have in the
11 areas of which you are testifying as an expert witness?

12 A. I have received continuous training at in-house and outside seminars on
13 technical matters since I began my employment at the Commission. I have been employed by
14 this Commission as an Engineer for 10 years, and have submitted testimony numerous times
15 before the Commission. I have also been responsible for the supervision of other Commission
16 employees in rate cases and other regulatory proceedings.

17 **EXECUTIVE SUMMARY**

18 Q. What is the purpose of your direct testimony?

19 A. The purpose of my direct testimony is to present Staff's recommendation
20 regarding the ongoing bat mitigation issues at the High Prairie Renewable Energy Facility
21 ("High Prairie"), a 400 MW wind farm located in Schuyler and Adair Counties, Missouri.
22 I discuss Staff's recommendation regarding the Rush Island Energy Center ("Rush Island"), a

1 coal-fired generation station near Festus, Missouri. Finally, I discuss Staff’s ongoing review of
2 Ameren Missouri’s Smart Energy Plan distribution system projects.

3 **HIGH PRAIRIE WIND FARM**

4 Q. Please explain the ongoing bat mitigation issue with the High Prairie wind farm.

5 A. During the spring of 2021, nine (9) Indiana bat fatalities were discovered at the
6 High Prairie wind farm. The majority of bat fatalities occurred after Ameren Missouri closed
7 on the facility. On May 14, 2021, the United States Fish and Wildlife Service (“USFWS”)
8 issued an Incidental Take Permit (“ITP”) for High Prairie. An ITP is a permit issued to private
9 entities undertaking projects that might result in the take of an endangered species. The ITP
10 for High Prairie authorizes “the take of up to 72 Indiana bats, 18 northern long-eared bats, and
11 96 little brown bats over a non-renewable 6 year ITP.”¹ As required by the ITP,
12 Ameren Missouri made operational changes based on the number of bat fatalities.
13 Eventually, to avoid the taking of additional bats, Ameren Missouri voluntarily ceased all
14 nighttime operations on June 21, 2021. Nighttime means 45 minutes before sunset until
15 45 minutes after sunrise.

16 Q. Has Ameren Missouri operated any turbines at High Prairie at night since the
17 facility was placed in-service?

18 A. Yes, however, nighttime operations have been limited. During the fall
19 monitoring period (August 15, 2022 through October 31, 2022), up to ten turbines operated on
20 select nights under limited operations.²

¹ Permit Number: ESPER0011567 provided in Response to OPC Data Request 2004 in ER-2021-0240.

² High Prairie Fall Post-Construction monitoring Memo 2022, Stantec, November 30, 2022.

1 Q. What was Staff's position in the last rate case regarding High Prairie?

2 A. Staff recommended several reporting conditions related to the bat mitigation
3 and curtailment of High Prairie.³ Staff provided testimony stating that the facility met the
4 agreed-upon in-service criteria as of September 16, 2021.⁴ Further, Staff noted its serious
5 concerns surrounding the economics and operations of the High Prairie facility and the potential
6 that Staff may seek different ratemaking treatment in a future rate case to account for the
7 curtailment.⁵

8 Q. What is the impact to customers of ceasing operations at High Prairie over night?

9 A. Ameren Missouri has lost revenue, Production Tax Credits ("PTCs"), and
10 Renewable Energy Credits ("RECs"). The loss of revenue and PTCs means fewer benefits are
11 flowing to customers through the Fuel Adjustment Clause ("FAC") and Renewable Energy
12 Standard Rate Adjustment Mechanism ("RESRAM") than otherwise would occur. The loss of
13 RECs has increased the cost of compliance with the Renewable Energy Standard in that Ameren
14 Missouri has had to purchase RECs to comply.

15 Q. Did Staff quantify the lost revenue, PTCs, and RECs stemming from the lack of
16 nighttime operations?

17 A. Yes. The table below presents Staff's quantification of the lost off-system sales
18 revenue, PTCs, and RECs over 12-months ending June 30 2022⁶ due to Ameren Missouri's
19 voluntary curtailment at High Prairie:

³ Rebuttal Testimony of Claire M. Eubanks, PE in ER-2021-0240.

⁴ Rebuttal Testimony of J Luebbert in ER-2021-0240.

⁵ Rebuttal Testimony of Lisa M. Ferguson in ER-2021-0240.

⁶ July 2021 was the first full month of nighttime curtailment at High Prairie.

Lost Off-system sales Revenue	\$15,087,364
Lost PTCs	\$14,754,013
Value of lost RECs	\$2,890,841

Q. How did Staff quantify the lost off-system sales revenue?

A. First, Staff estimated the amount of generation that did not occur overnight over a 12-month period ending June 2022. Staff compared two output profiles for High Prairie (the same profiles Ameren Missouri utilized in its production cost modeling in this case). One profile reflects the current operations of High Prairie (i.e. no generation overnight from April - October). The other profile reflects High Prairie's original operating profile.⁷ To calculate the lost generation, Staff netted the generation from these two profiles in every hour, resulting in ** [REDACTED] ** MWhs not produced. Staff then multiplied each MWh to the corresponding day-ahead average normalized market price as provided by Staff witness Justin Tevie.

Q. How did Staff quantify the lost PTCs?

A. Staff utilized the process above to calculate the lost generation and then calculated the lost PTCs in the same manner Ameren Missouri calculates the PTCs for the RESRAM (i.e. multiplying the generation by the PTC rate and grossing up for the statutory tax rate).

Q. How did Staff quantify the lost RECs?

A. RECs represent that 1 MWh of generation was produced by a renewable energy resource. High Prairie is located in Missouri and therefore receives an additional

⁷ Direct Testimony of Andrew M. Meyer, page 41, lines 7 – 12.

1 adder (i.e. 1.25 REC per MWh). High Prairie’s lost generation would have contributed
2 ** [REDACTED] ** RECs (assuming the 1.25 adder for its Missouri location). Staff utilized an
3 average cost of ** [REDACTED] ** to calculate the additional RES compliance cost associated
4 with the lost High Prairie generation. The REC price reflects the average price of Ameren
5 Missouri’s purchases of 2021 vintage wind RECs.⁸

6 Q. Has Ameren Missouri made progress in implementing its bat mitigation
7 measures?

8 A. Yes, however, the effectiveness of the measures is still unknown. Ameren
9 Missouri has several projects in progress:

- 10 (1) Detection and Active Response Curtailment (“DARC”);
- 11 (2) A Bat Deterrent System; and
- 12 (3) a Modeled Curtailment study.

13 Q. What is the DARC system and is it in use?

14 A. The DARC system is a series of microphones that interfaces with the control
15 system for the wind turbines. If bat calls are detected, the control system will signal the turbines
16 to curtail for 10 minutes. Ameren Missouri is phasing in the operation of the DARC system and
17 currently plans on expanding its use to 90 turbines by mid-April 2023.⁹

18 Q. What is the Bat Deterrent System and is it in use?

19 A. The Bat Deterrent System creates ultrasonic noise to deter bats from entering
20 the area around the wind turbines. Equipment is installed on 15 turbines and Ameren Missouri
21 expects integration with its SCADA system by December 31, 2022.¹⁰

⁸ Ameren Missouri reported its 2021 REC purchases in EO-2022-0244.

⁹ Direct Testimony of Andrew M. Meyer, page 38, line 5.

¹⁰ Response to Staff Data Request No. 0254

1 Q. What is the Modeled Curtailment Study and its status?

2 A. Ameren Missouri has a contract with Western EcoSystems Technology
3 (“WEST”) to study when bats are active near operational wind turbines at High Prairie. WEST
4 will recommend curtailment criteria designed to reduce bat fatalities while also increasing wind
5 turbine available operational time. In other words, the curtailment criteria may eventually be
6 utilized to increase nighttime operations at High Prairie. The anticipated completion date is
7 January 31, 2023. WEST provides Ameren Missouri with monthly progress reports.¹¹

8 Q. Will the recommended curtailment criteria increase production and therefore
9 reduce Staff’s recommended adjustment in this case?

10 A. At this time, the curtailment criteria has not yet been proposed by Ameren
11 Missouri’s contractor nor has Ameren Missouri made a decision to employ the criteria,¹²
12 therefore, it is premature for Staff to make a recommendation related to the curtailment criteria.

13 Q. Is Staff including the plant associated with the DARC and Bat Deterrent systems
14 in its direct case?

15 A. Yes. ** [REDACTED]
16 [REDACTED]

17 [REDACTED] ** In the event the bat mitigation systems are found to be ineffective,
18 Staff will reevaluate the inclusion of the equipment in plant.

19 Q. What is Staff’s recommendation regarding the voluntary bat curtailment at
20 High Prairie?

21 A. Staff recommends the Commission order the following adjustments related to
22 lost production at High Prairie:

¹¹ Response to Staff Data Request No. 0254.

¹² Response to Staff Data Request No. 0253.

Lost Off-system sales Revenue	\$15,087,364
Lost PTCs	\$14,754,013
Value of lost RECs	\$2,890,841

RUSH ISLAND ENERGY CENTER

Q. Please describe the Rush Island Energy Center (“Rush Island”).

A. Rush Island has two coal-fired electric generating units, Units 1 and 2. These units began operations in 1976 and 1977, respectively. The combined net summer capability of the units is 1,178 MW.¹³ Neither unit has air pollution control equipment.

Q. Why is Rush Island an issue in this case?

A. Ameren Missouri has been involved in litigation regarding environmental permits at Rush Island since 2011. Rather than installing air pollution equipment at Rush Island, Ameren Missouri made the decision to retire the plant. The Regional Transmission Organization (“RTO”) Ameren Missouri participates in, the Midcontinent Independent System Operator (“MISO”), has a retirement process that requires a study be undertaken to determine whether all or a portion of the resource is necessary to maintain system reliability. Ultimately, Ameren Missouri and MISO entered into a System Support Resource (“SSR”) agreement. The SSR agreement was approved by FERC, effective September 1, 2022. Rush Island will continue to operate through fall of 2023 but significantly less than it has in the past.

Q. Please explain the projects which prompted the legal issues surrounding Rush Island.

¹³ Ameren Missouri 2020 Integrated Resource Plan, volume 4, page 3.

1 A. The legal issues surrounding Rush Island began with major projects that
2 occurred during two planned outages. The projects for Unit 1 occurred during an outage in
3 2007 and for Unit 2 during an outage in 2010. Ameren Missouri failed to obtain permits
4 required by the New Source Review (“NSR”) provisions of the Clean Air Act (“CAA”) for
5 these major projects.

6 Q. Please briefly describe the major boiler modifications for Rush Island Units 1
7 and 2.

8 A. The 2007 major boiler modification for Unit 1 consisted of replacement of the
9 reheater, economizer, air preheaters, and lower slope at Rush Island Unit 1. The cost for these
10 upgrades was approximately \$34 million. The 2010 major boiler modification for Rush Island
11 Unit 2 consisted of replacement of the reheater, economizer, and air preheaters. The cost for
12 these upgrades was approximately \$38 million.¹⁴

13 Q. Please explain the legal timeline surrounding Rush Island.

14 A. The U.S. Environmental Protection Agency (“EPA”) issued a Notice of
15 Violation on January 26, 2010 and amended Notices of Violations on October 14, 2010 and
16 May 27, 2011. In 2011, EPA, represented by the U.S. Department of Justice (“DOJ”), filed a
17 lawsuit against Ameren, alleging that the Company installed boiler equipment that raised
18 emissions of sulfur dioxide without obtaining applicable permits.¹⁵

19 In January 2017, a U.S. district court judge ruled that the Company violated the Clean
20 Air Act when it made upgrades to its Rush Island Power Plant.¹⁶ In 2019, the U.S. District

¹⁴ Civil Action No. 4:11-cv-00077-RWS. Document #852, page 63.

¹⁵ Case Number 4:2011cv00077- US District Court for the Eastern District of Missouri (Plaintiff: The United States of America- Defendant: Ameren Missouri).

¹⁶ Case Number 4:11 CV 77 RWS- US District Court for the Eastern District of Missouri (Plaintiff: The United States of America- Defendant: Ameren Missouri).

1 Court for the Eastern District of Missouri ordered Ameren to obtain applicable permits, install
2 wet flue-gas desulfurization units (i.e. scrubbers) and meet standards for sulfur dioxide
3 emissions.¹⁷ The 2019 order included relief against another Ameren Missouri plant, the
4 Labadie Energy Center (“Labadie”).

5 In 2021, the 8th Circuit U.S. Court of Appeals upheld the above ruling in part,
6 concluding “[a]ccordingly, we affirm the judgment of the district court in all respects except as
7 to the injunctive relief entered against Ameren’s Labadie plant. We remand for further
8 proceedings consistent with this opinion.”¹⁸

9 On December 14, 2021, through a filing with the U.S. District Court for the Eastern
10 District of Missouri, Ameren Missouri announced its plan to retire the Rush Island Energy
11 Center in 2024. The proposed 2024 retirement date is 15 years earlier than previously planned
12 (i.e., 2039).¹⁹ Ameren Missouri requested the Court to “[f]ind that Ameren’s retirement of Rush
13 Island in lieu of installing an FGD [Flue Gas Desulfurization] complies with the SO₂ emissions
14 limit required by the Remedy Ruling, with Rush Island’s specific retirement date to be
15 determined pursuant to MISO [Midcontinent Independent System Operator] assessment.”²⁰

16 Ameren Missouri, in its December 14, 2021 filing with the Court, proposed that a
17 specific retirement date (to be no later than March 30, 2024) be decided when MISO’s reliability
18 assessment is completed.

¹⁷ Case Number 4:11 CV 77 RWS- US District Court for the Eastern District of Missouri (Plaintiff: The United States of America- Defendant: Ameren Missouri). [11-077 - United States of America v. Ameren Missouri - Content Details - USCOURTS-moed-4_11-cv-00077-15 \(govinfo.gov\)](#).

¹⁸ United States vs. Ameren Missouri, No. 19-3220 (8th Cir. 2021).

¹⁹ Ameren Missouri 2020 Integrated Resource Plan, chapter 1, page 4.

²⁰ Civil Action No. 4:11-cv-00077-RWS- US District Court for the Eastern District of Missouri (Plaintiff: The United States of America; Plaintiff-intervener: Sierra Club- Defendant: Ameren Missouri).

1 On August 19, 2022, MISO submitted for approval a System Support Resource (“SSR”)
2 Agreement by and between the Ameren Missouri and MISO (“Rush Island SSR Agreement”)
3 as well as a cost allocation for SSR costs.

4 On October 24, 2022, FERC accepted MISO’s proposed Rush Island SSR Agreement,
5 effective September 1, 2022. The SSR is effective for 1 year leaving the status of Rush Island
6 past the fall of 2023 still in question. Ameren Missouri reports that the U.S. District Court for
7 the Eastern District of Missouri has ordered the parties to the case to confer and propose, if
8 possible, an Agreed to Stipulated Order regarding interim operations.²¹

9 Q. What is the result of the SSR agreement?

10 A. A MISO operating guide has been developed which details the specific
11 triggers and conditions to be used for Rush Island’s operations in the future. Ultimately,
12 Rush Island will be called upon to operate significantly less than it has in the past. Staff witness
13 Shawn E. Lange, PE provides additional detail regarding how Staff reflected Rush Island in its
14 production cost modeling. Staff modeled the operation of the Rush Island units consistent with
15 how MISO dispatches the Rush Island Energy Center²².

16 Q. Based on the reduced level of usage of Rush Island, is it just and reasonable for
17 the Commission to include the entire rate base of Rush Island in rates in this case?

18 A. No. The reality is that Rush Island will only operate for SSR reliability purposes.
19 From September 1, 2022 through November 15, 2022, Unit 1 was committed by MISO
20 (i.e., asked to operate for reliability purposes) on three occasions and Rush Island 2 had not
21 received a commitment.²³ Staff’s recommendation in this case is intended to recognize that a

²¹ Ameren Missouri’s Monthly Report dated December 15, 2022. File No. EO-2022-0215.

²² Ameren Missouri Response to Staff Data Request No. 0393.

²³ Ameren Missouri’s Monthly Report dated November 15, 2022. File No. EO-2022-0215.

1 portion of Rush Island Units 1 and 2 are necessary to serve Ameren Missouri’s customers and
2 support the MISO system. As such, Ameren Missouri should only receive recovery of and on a
3 portion of its revenue requirement associated with Rush Island.

4 Q. Do other Staff witnesses discuss Rush Island?

5 A. Yes. Staff witness Shawn E. Lange, PE discusses the future transmission
6 upgrades required prior to the retirement of Rush Island. Staff witness Karen Lyons discusses
7 the MISO SSR payments.

8 Q. What actions have the Commission taken with regards to the legal issues at
9 Rush Island?

10 A. The Commission opened a docket to facilitate Staff’s investigation into Ameren
11 Missouri’s plans to retire Rush Island. In Staff’s initial report it proposed several
12 recommendations to the Commission including that “the Commission direct Ameren Missouri
13 to file a memorandum, supported by affidavits and other exhibits as necessary, showing how
14 its decisions resulting in the present circumstances were prudent.” Ameren Missouri in its reply
15 agreed to “include an explanation of how its decisions resulting in the present circumstance
16 were prudent ** [REDACTED] **. **” The Commission ordered
17 Ameren Missouri to comply with the recommendations in the Staff Report in the manner
18 described in Ameren Missouri’s response to the report.²⁴

19 Q. Did Ameren Missouri fully explain how all its decisions resulting in the present
20 circumstance were prudent in its Direct Testimony?

21 A. No. Staff will address Ameren Missouri’s assertion of prudence in its rebuttal
22 testimony and other cases as appropriate.

²⁴ Order Directing Ameren Missouri to Comply with Staff’s Recommendations, May 4, 2022.

1 Q. Is Staff recommending a prudence disallowance in this case?

2 A. No. Staff is recommending an adjustment to plant to reflect that Rush Island is
3 not fully available to serve customers. As noted above, Staff will address any prudency concerns
4 in a future case where appropriate.

5 Q. Please explain Staff's recommended adjustment.

6 A. As part of its production cost modeling in this case, Staff modeled the
7 Ameren Missouri generating resources (1) with Rush Island units operating as normal and
8 (2) with Rush Island operating as a SSR. The results of the production cost model provide the
9 expected generation from these two scenarios. Staff then calculated a net capacity factor for
10 each unit under these scenarios (i.e. the modeled generation for the test year divided by the
11 expected generation at the average net capability). The comparison of these two scenarios
12 results in a reduction in the units capacity factor of ** [REDACTED]
13 [REDACTED] ** when operating as an SSR. Staff reduced the
14 rate base associated with Rush Island by this percentage.

15 **SMART ENERGY PLAN**

16 Q. What is the Smart Energy Plan?

17 A. Ameren Missouri's Smart Energy Plan stems from Senate Bill 564, enacted in
18 2019. This legislation allows Ameren Missouri to use Plant-in-Service Accounting. The Smart
19 Energy Plan touches on the entirety of the Ameren Missouri's operations. Ameren Missouri
20 files its 5-year capital budget with the Commission each February in EO-2019-0044.

21 Q. Please described Staff's review of the Smart Energy Plan projects in this case.

22 A. Staff's Engineering Analysis Department reviewed a selection of Ameren
23 Missouri's Smart Energy Plan projects related to energy delivery projects (i.e. distribution

1 system projects) with consideration of the following: whether the projects are needed for safe
2 and reliable service, whether the projects provide reliability improvements, and whether there
3 were significant variances in costs from an individual project's budget and its actual cost.

4 Engineering Analysis is reviewing the documentation provided by Ameren Missouri
5 pursuant to the stipulation and agreement in ER-2021-0240. For this case, Engineering Analysis
6 Staff selected projects identified by Ameren Missouri as operational during the period April 1,
7 2021 through June 30, 2022. Staff intends to review additional projects through December 31,
8 2022 in true-up direct testimony.

9 Q. What documentation did Ameren Missouri provide?

10 A. Ameren Missouri provided Staff with project specific documentation for 79
11 individual projects. This included the following items as applicable:

- 12 a. Purchase orders;
- 13 b. Change orders;
- 14 c. Final project cost summaries;
- 15 d. Project Notifications/Project Charters;
- 16 e. Oversight Committee review materials; and
- 17 f. In-service dates.

18 Q. Did Staff discover any evidence of imprudence?

19 A. Not at this time. As with any construction project, Engineering Analysis found
20 variances in an individual project's budget and its actual cost. For example, a project may see
21 an increase in actual cost due to unforeseen field conditions. Engineering Analysis is reviewing
22 the individual project Change Orders and Purchase Orders and is continuing to follow-up with
23 Ameren Missouri regarding specific questions through the true-up phase of this case.

24 Q. Does this conclude your direct testimony?

25 A. Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company)
d/b/a Ameren Missouri's Tariffs to Adjust)
Its Revenues for Electric Service) Case No. ER-2022-0337

AFFIDAVIT OF CLAIRE M. EUBANKS, PE

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW CLAIRE M. EUBANKS, PE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Direct Testimony of Claire M. Eubanks, PE*; and that the same is true and correct according to her best knowledge and belief.


Further the Affiant sayeth not.


CLAIRE M. EUBANKS, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 9th day of January 2023.

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


Notary 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.

Currently, I am the co-chair of the NARUC Staff subcommittee on Electric Reliability & Resilience.

CASE HISTORY:

Case Number	Utility	Type	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	KCP&L	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	Type	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	Type	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	Type	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
ER-2022-0129	Evergy Missouri West	Direct Rebuttal	Advanced Metering Infrastructure, Reliability, Transmission & Distribution Investment, PISA reporting, Misc. Tariff issues
ER-2022-0130	Evergy Missouri Metro	Direct Rebuttal Surrebuttal/True-Up	Advanced Metering Infrastructure, Reliability, Transmission & Distribution Investment, PISA reporting, Misc. Tariff issues
EE-2022-0329	Ameren Missouri	Memorandum	Variance Request
GR-2022-0179	Spire Missouri	Direct Rebuttal	Metering Infrastructure