Exhibit No.:	
Issue(s):	*Fuel Adjustment Clause*
Witness:	*Brooke Mastrogiannis*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*ER-2024-0189*
Date Testimony Prepared:	*August 6, 2024*

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENERGY RESOURCES DEPARTMENT

REBUTTAL TESTIMONY

OF

BROOKE MASTROGIANNIS

EVERGY MISSOURI WEST, INC.,

d/b/a Evergy Missouri West

CASE NO. ER-2024-0189

Jefferson City, Missouri
August 6, 2024

** Denotes Confidential Information **

TABLE OF CONTENTS OF

REBUTTAL TESTIMONY OF

BROOKE MASTROGIANNIS

EVERGY MISSOURI WEST, INC.,
d/b/a Evergy Missouri West

CASE NO. ER-2024-0189

REBUTTAL TESTIMONY

OF

BROOKE MASTROGIANNIS

EVERGY MISSOURI WEST, INC.,
d/b/a Evergy Missouri West

CASE NO. ER-2024-0189

Q. Please state your name and business address.

A. My name is Brooke Mastrogiannis, and my business address is 200 Madison Street, Jefferson City, Missouri 65102.

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

A. I am employed by the Missouri Public Service Commission ("Commission") as a Utility Regulatory Audit Supervisor.

Q. Please describe your educational background and work experience.

A. Please refer to the attached Schedule BM-r1.

Q. Have you previously filed testimony before this Commission?

A. Yes. Please refer to Schedule BM-r1 for a list of cases in which I have previously written testimony or participated in.

EXECUTIVE SUMMARY

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address Evergy Missouri West, Inc., d/b/a Evergy Missouri West's ("EMW") witness Linda J. Nunn's Fuel Adjustment Clause ("FAC") direct testimony in which she requests additional language added to the FAC tariff sheets associated with the outcome of EMW's implemented hedging activities and also removing the language that currently excludes Crossroads transmission costs from the FAC. I will also respond to the Office of the Public Counsel ("OPC") witness John Riley's direct testimony in regards to resuming the FAC hedging activities, and OPC witness Lena Mantle's direct testimony in regards to the FAC sharing mechanism.

FAC CROSSROADS

Q. What does EMW propose in regards to Crossroads transmission costs in the FAC?

A. Ms. Nunn proposes to remove the language in the FAC tariff sheets that currently excludes Crossroads transmission costs from FAC recovery.

Q. Does Staff agree with this proposed deletion of language to the FAC tariff sheets?

A. No. Staff witness Keith Majors speaks to why Crossroads transmission expenses should not be recovered in base rates in his direct testimony. Therefore, they should not be recovered in the FAC either.

Q Has the Commission ruled on this before?

A. Yes. In File No. ER-2012-0175 the Commission's *Report and Order*[1] stated the following concerning KCP&L Greater Missouri Operation's ("GMO")[2] Crossroads generating plant:

> Crossroads Transmission. Several parties ask the Commission to order that GMO's FAC tariff sheets state expressly that GMO's FAC excludes transmission costs related to the Crossroads. Insofar as the Commission has determined that no transmission costs from Crossroads will enter GMO's MPS rates, there is no further dispute, and no further findings of fact and conclusions of law are required. The Commission will order

[1] Page 64 of the Commission's *Report and Order* in File No. ER-2012-0175.
[2] KCP&L Greater Missouri Operations, now known as Evergy Missouri West, Inc., d/b/a Evergy Missouri West

> GMO's FAC clarified to state that GMO's FAC excludes transmission costs related to Crossroads.

The Commission also stated in its *Report and Order*[3] in File No. ER-2010-0356 the following concerning GMO's Crossroads generating plant:

> If the Commission accepts Staff's position on fuel costs in the Crossroads issue, Staff recommends the Commission authorize and require modification of GMO's fuel adjustment clause to include a new factor that would exclude an increment of GMO's fuel costs for its Crossroads generating station from Fuel and Purchased Power Adjustments (GMO FAC –FPAs). Consistent with its position that GMO's ratepayers should pay costs based on two 105 megawatt combustion turbines built in 2005 and located at the South Harper site, GMO's fuel clause should be modified so that its customers do not bear the incremental costs associated with high gas prices and transmission costs of the Crossroads Energy Center which is located near Clarksdale, Mississippi.

Q. What is Staff's recommendation regarding Crossroads transmission costs in the FAC?

A. Staff recommends the Commission continue to exclude all of EMW's transmission costs related to EMW's Crossroads generating plant from the FAC consistent with the Commission's Report and Orders in EMW's 2010 and 2012 rate cases. A more detailed discussion of EMW's Crossroads generating plant and Staff's recommendation to exclude all transmission costs in base rates is in Staff witness Mr. Majors' direct and rebuttal testimonies.

FAC HEDGING ACTIVITIES

Q. How does OPC witness Mr. John Riley define "cross-hedging"?

A. He states on page 8 of his direct testimony, "Cross-hedging is purchasing financial contracts in natural gas to offset price volatility in buying power from the

[3] Page 212 through 213 of the Commission's *Report and Order* in File No. ER-2010-0356.

Southwest Power Pool ("SPP"). A Company is hedging a commodity to counter the prices paid for power purchase. This is different than simply hedging for the cost of natural gas used to produce electricity."

Q. Would Staff define cross-hedging differently?

A. Somewhat, yes. It is Staff's understanding that because of the scarcity of natural gas hedges available on the market, it can be difficult to use one commodity to try and mitigate volatility. Instead, EMW can compare and contrast different products or commodities and use a heat rate to determine which is the better option to buy at the time.

Q. OPC witness Mr. John Riley states in his direct testimony on page 8 lines 1-2, "The Company finally agreed to cease the practice. Yet, here we are again seeing the Company's poor execution of cross-hedging". How do you respond?

A. I do not think you can necessarily conclude that the hedging transactions that occurred over the test year period in this case are the same type of hedges that occurred prior to the 2016 case.

Mr. Riley also says, "This is different than simply hedging for the cost of natural gas used to produce electricity," insinuating that if EMW had just hedged natural gas, then their hedging program would not be as bad. However, by looking at the data provided in Data Request ("DR") 0340.4, natural gas hedging losses were approximately ** [redacted] **, and power purchase losses were approximately ** [redacted] **; both had losses, but ** [redacted] **.

Q. On page 9 of Mr. Riley's direct testimony he states, "Instead, all the Company has shown is that cross-hedging is a waste of money." How do you respond?

A. Hedging is a safeguard measure to mitigate risk. The primary risk is market volatility; however, it is not cost free. Hedging is an internal management strategy, and is done as a risk mitigation measure to avoid spot market pricing exposure and provide budget consistency for forecasting purposes. This is similar to paying for insurance premiums, to help mitigate risk or cover the market exposure of the energy market.

Looking at the results of hedging transactions in isolation after settlement and determining success by whether the hedges made or lost money is completely missing the point of the purpose of hedging. The concept of hedging is to take a small portion of that spot market pricing exposure and spread it out to reduce volatility by "fixing" the price via a hedge. Without hedging EMW would be ignoring this volatility exposure and hoping that the SPP market will always clear low in the day-ahead and real-time markets.

Q. Has EMW been having regular meetings with Staff to inform them of hedging activity since they resumed hedging in December 2021?

A. Yes. Since the initial meeting in December 2021, EMW has set up meetings in April 2022, November 2022, April 2023, November 2023, and May 2024. EMW has explained that hedges will "lose" in downward forward markets and "win" in upward forward markets. When EMW resumed hedging around January 2022, it was less than a year after Winter Storm Uri had occurred during Accumulation Period ("AP") 28.[4] Then during AP29,[5] which was the period that occurred right before EMW resumed hedging, there was a 54% increase in purchased power expense, and the published natural gas contract settlement price averaged $4.51, which was 64% higher than the $2.75 average during AP28.

[4] AP28 was for months December 2020 through May 2021.
[5] AP29 was for months June 2021 through November 2021.

EMW maintains a significant net short position. It is apparent that EMW started hedging in January 2022 to try to get more fixed prices in place as an insurance "hedge" to mitigate the volatility of the SPP market. Hedging softens the fuel and purchase power impact in higher natural gas price environments and reduces volatility that comes with all transactions occurring at spot prices. During the most recent AP33[6] and AP32,[7] which were during the test year and update period, the published New York Mercantile Exchange ("NYMEX") natural gas contract settlement price averaged $2.63 and $3.52, significantly lower than the average price of $4.51 during AP29. This is in line with why EMW incurred hedging losses during the test year and update period, because their hedges will "lose" in downward forward markets. However, if market prices spike again, EMW and its customers will not be fully exposed to the higher market prices.

Q. Does Staff support EMW's recommendation to include a four-year amortization of hedging in the revenue requirement, and to include hedging language/future hedging transactions in the FAC?

A. Staff does not oppose the proposed hedging language in the FAC tariff sheets in order to attempt to mitigate the market volatility, nor does Staff oppose including a four-year amortization of $3.1 million.

FAC SHARING MECHANISM

Q. On page 8, lines 5-7 of Ms. Mantle's direct testimony, she states: "the current sharing mechanism of 95% customers/5% Evergy West has not provided enough of an incentive to prudently meet the energy needs of its customers." What is she implying?

[6] AP33 was for months June 2023 through November 2023.
[7] AP32 was for months December 2022 through May 2023.

A. She is implying in this case, and has already stated in previous prudence review cases, that EMW has been imprudent in its resource planning decisions to rely on the SPP energy market to meet the energy needs of its customers instead of building or acquiring cost-effective generation.

Q. Has the Commission ever found EMW imprudent for this?

A. Not to date. However, we are still waiting on a Commission Order in the EO-2023-0277 case, for EMW's Eleventh FAC Prudence Review.

Q. Has the Commission ever found EMW imprudent for anything in the FAC from its inception until now?

A. In Case No. EO-2020-0262, EMW agreed to remove $984,898 associated with Sibley retirement costs, with no admission of imprudence. Also, in Case No. EO-2020-0262 the Commission found that due to EMW's imprudent decision to not utilize its demand response programs to save energy costs for its customers, EMW was ordered to refund $160,892 plus interest to its customers. In Case No. EO-2022-0065, the parties agreed to settle the case with a one-time FAC adjustment of $48,796 for not attempting to sell any Renewable Energy Credits, with no admission of imprudence. None of these disallowances, one found to be imprudent and the other two not, were specific to EMW not acquiring enough generation to meet the energy needs of its customers.

Q. Ms. Mantle provides table 2 in her direct testimony on page 9, demonstrating how much more EMW has spent on non-firm short-term energy for its customers than it has received in revenues, as compared to Evergy Metro Inc., d/b/a Evergy Missouri Metro ("EMM"). How do you respond to this?

A. I looked at Liberty Utilities, another Missouri utility that has an FAC and is also in SPP's territory, and created a chart below[8]. You can see that during one prudence review period, its revenues did not exceed its non-firm short-term energy, similar to EMW.

Liberty			
Case Number	Non-Firm Short Term Energy Cost	Off System Sales Revenue	Margin
EO-2018-0244	$ 34,618,410	$ 49,399,784	$ 14,781,374
EO-2020-0059	$ 31,590,497	$ 44,941,877	$ 13,351,380
EO-2021-0281	$ 181,656,448	$ 114,678,196	$ (66,978,252)
EO-2023-0087	$ 104,125,357	$ 124,549,422	$ 20,424,065
			$ (18,421,433.00)

Q. What has the Commission ruled regarding the EMW sharing mechanism in the past?

A. The most recent Report and Order addressing EMW's sharing mechanism, that I have found, was in Case No. ER-2012-0175. In this order, it states:

> The Commission concludes that GMO's current FAC sharing percentages of 95%-5% better support safe and adequate service at just and reasonable rates than 85%-15%, so the Commission will order GMO's current percentages for GMO's FAC.[9]

Q. What is Staff's position regarding Ms. Mantle's recommendation to change the current FAC sharing mechanism to 75%/25%?

A. It is Staff's position that changing the current sharing percentage in this rate case is inconsistent with prior Commission rulings and the sharing percentages of other Missouri regulated utilities with FACs. Staff has not found sufficient evidence to support a recommendation to change the sharing mechanism at this time. Staff's position is to continue to recommend the current sharing mechanism of 95%/5%.

[8] The amounts included in this table are taken from the Staff Reports filed in each designated Case Number.
[9] *Report and Order* in Case No. ER-2012-0175, filed January 9, 2013, pages 61-62.

Q. What does the FAC statute provide as guidance for setting a sharing mechanism?

A. Section 386.266.1, RSMo states: "The Commission may, in accordance with existing law, include in such rate schedules features designed to provide the electrical corporation with incentives to improve the efficiency and cost-effectiveness of its fuel and purchased-power procurement activities."

Q. What do the Commission FAC rules provide as guidance for setting a sharing mechanism?

A. Commission Rule 20 CSR 4240-20.090 (14) states in part:

> Incentive Mechanism or Performance Based Program. During a general rate proceeding in which an electric utility has proposed establishment or modification of a [Rate Adjustment Mechanism], or in which a RAM may be allowed to continue in effect, any party may propose for the commission's consideration incentive mechanisms or performance-based programs to improve the efficiency and cost effectiveness of the electric utility's fuel and purchased power procurement activities and/or off-system sales activities. (A) The incentive mechanisms or performance-based programs may or may not include some or all components of base energy costs. **(B) Any incentive mechanism or performance-based program shall be structured to align the interests of the electric utility's customers and shareholders**." (emphasis added)

Q. Do either the statute or the rule provide any reasoning to change the current sharing mechanism of 95%/5%?

A. No. I believe the only guidance it does provide is to not structure the sharing incentive at 100%, otherwise it would not be aligned in the interests of the electric utility's customers at all.

Q. Ms. Mantle states on page 37 of her direct testimony,

> Having no other data points to analyze, I accepted as a floor for a sharing mechanism the Commission's finding in its Case No. ER-2007-0004 Report and Order that a 50/50 sharing would not allow sufficient recovery of prudence fuel and purchased power costs. A sharing

mechanism that recovers 75% of cost above base rates from customers and allows Evergy West 25% of savings is a reasonable choice that relieves some of the risk from the customers to Evergy West.

Do you agree, or are there other data points to analyze?

A. No, I do not agree, as there are other data points to analyze besides just what we know is effective in Missouri. DR 0314.1 explains that under the Kansas Corporation Commission, both the Central Retail Energy Adjustment Clause ("RECA") and the Metro Energy Adjustment Clause ("ECA") are designed as full recovery mechanisms (100% pass through, no 95/5 sharing). Also, it appears that by looking through the Arkansas and Oklahoma tariffs (attached as Schedule BM-r2), they both have an Energy Cost Recovery Rider ("ECR") and a Fuel Adjustment Rider ("FA") that allows 100% pass through.

Additionally, Staff found a few other states with different sharing ratios:

- Hawaii- The Energy Cost Recovery Clause ("ECRC") utilizes a straight-sharing approach, where the utility passes 98% through of fuel costs to customers;[10]
- Idaho- The Power Cost Adjustment ("PCA") increased their pass through to 95% in 2009[11];
- Wyoming- The Energy Cost Adjustment Mechanism ("ECAM") features an 80% pass through;[12]
- Wisconsin- They have a plan that includes a forecast of the utility's expected costs for fuel, purchased power, and related expenditure categories to be collected from customers. Once the utility's actual fuel and related costs are known, the commission can approve a true-up to collect or refund any difference that represents 2 percent of the forecasted amount. In other words, there is

[10] Daniel, Joe et al., Strategies for Encouraging Good Fuel-Cost Management: A Handbook for Utility Regulators, https://rmi.org/insight/strategies-for-encouraging-good-fuel-cost-management/; page 14.
[11] Lin, Albert, Can We Share the Cost of Fuel? (pssfinancelab.com); FAC Primer PSS Finance Lab April 4, 2023 Report, page 22
[12] Strategies for Encouraging Good Fuel-Cost Management - RMI; page 13.

a 2 percent deadband where no sharing occurs and a 100 percent pass-through outside this deadband;[13]

- Washington- They have a fuel-cost sharing policy called the Power Cost Adjustment Mechanism ("PCAM") for Pacific Power. The PCAM includes purchased power, relies on forecasts, and employs an asymmetrical banded design. The design features a deadband of $4 million on either side of the forecast within which no true-up is made. If actual costs exceed this amount, there are two sharing bands: within the first (up to $10 million), 50% of the difference is trued up; and within the second (over $10 million), 90% is trued up. If actual costs are less than expected, there are also two sharing bands; within the first (down to -$10 million), 75% of the difference is trued up; and within the second (less than -$10 million), 90% is trued up.[14]
- Oregon- They employ fuel-cost sharing subject to an earnings test. For example, Portland General Electric has an Annual Power Cost Variance Mechanism, which shares 10% of the difference between expected and actual costs outside of a deadband. However, this occurs only if sharing does not cause the utility's earnings to deviate by more than 100 basis points from its commission approved return on equity. The deadband is asymmetrical (no sharing occurs if actual costs are between $15 million less than forecast and $30 million more than forecast).[15]

Q. Does Ms. Mantle recognize there are other percentages that the Commission could adopt?

A. Yes. She states 85%/15% or 80%/20% would also send a signal to EMW that it needs to consider the risk it is placing on the customers.

Q. Based on all this information, and what other states are implementing, what is Staff's recommendation?

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[13] Can We Share the Cost of Fuel? (pssfinancelab.com); FAC Primer PSS Finance Lab April 4, 2023 Report, page 23.
[14] Strategies for Encouraging Good Fuel-Cost Management - RMI; page 13
[15] Strategies for Encouraging Good Fuel-Cost Management - RMI; page 14.

A. With the exception of Washington, which seems to have a very complex fuel-cost sharing policy in general, Staff's research indicates a 75/25 sharing mechanism would be more extreme than most other US states. Most of the states explained above have 95% or even higher. Therefore, Staff recommends keeping the current 95%/5% sharing mechanism. If the Commission thinks a change in the sharing mechanism is warranted, then the Commission could consider another sharing mechanism, closer to 90%/10%. This is a more conservative approach, as it is much closer in line with the other states sharing I state above.

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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-2024-0189

AFFIDAVIT OF BROOKE MASTROGIANNIS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW BROOKE MASTROGIANNIS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Rebuttal Testimony of Brooke Mastrogiannis*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Brooke Mastrogiannis

BROOKE MASTROGIANNIS

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 31st day of July 2024.

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

D. Suzie Mankin

Notary Public

Brooke Mastrogiannis

Education and Employment Background

I am a Utility Regulatory Audit Supervisor in the Energy Resources Department of the Missouri Public Service Commission. I have been employed by the Missouri Public Service Commission since May 2014. I previously was a Utility Regulatory Auditor in the Auditing Unit of the Utility Services Department, and a Utility Management Analyst in the Consumer and Management Analysis Unit. I have been in my current position since May 2020.

I received a Bachelor of Science degree in Accounting from Lincoln University, in Jefferson City, MO in May of 2012. I then continued to further my education and received my Masters of Business Administration with an emphasis in Accounting in December 2013. In earning these degree's I completed numerous core Accounting and Business classes.

Prior to joining the Commission, I was employed by the State of Missouri - Department of Natural Resources from June 2013 to May 2014 as an Accounting Specialist. My duties entailed: reviewing and monitoring expense account forms to ensure employees followed correct procedures, prepared and set up project and job codes so they could be coded correctly on employee's time sheets, analyzed and prepared necessary cash draws, and also prepared financial information or reports to facilitate budget information and execution.

Brooke Mastrogiannis
Case Participation
Utility Regulatory Audit Supervisor

Company Name	Case Number	Testimony/Issues
The Empire District Electric Company	ER-2014-0351	January 2015 Cost of Service Report- Plant in Service, Depreciation Reserve, Prepayments, Materials and Supplies, Customer Deposits, Customer Deposit Interest, Customer Advances, Amortization of Electric Plant, Amortization of PeopleSoft Intangible Asset, Corporate Franchise Taxes, Depreciation Expense, Amortization Expense, Dues and Donations, EEI Dues, Advertising Expense, Outside Services, and Postage.
Seges Partners Mobile Home Park L.L.C.	SR-2015-0106	January 2015 Staff Report- Rate Base, Revenues, Purchased Sewer Costs, Payroll and Payroll Taxes, Management Fee, Postage, Telephone Expense, Maintenance Expense, Insurance, Outside Services, PSC Assessment, and Rate Case Expense
The Empire District Electric Company	ER-2014-0351	March 2015 Surrebuttal Testimony- Advertising Expense, Customer Advances, and EEI Dues.
Ozark International, Inc.	WR-2015-0192	September 2015 Staff Report- Payroll, Telephone and Cell Phone Expense, Auto Expense, Insurance Expense, Bank Service Charges, Customer Deposits, Customer Deposit Interest, PSC Assessment, Revenues, Miscellaneous Income, Contract Labor, General Maintenance Expense, Electric Expense, Returned Check Fees, Outside Services, Dues and Subscriptions, and Credit Card Fees
Hillcrest Utility Operating Company, Inc.	WR-2016-0064	March 2016 Staff Report- Customer Service and Business Operations Review
Cannon Home Association	SR-2016-0112	April 2016 Staff Report- Customer Service and Business Operations Review
Roy-L Utilities, Inc.	WR-2016-0109	May 2016 Staff Report- Customer Service and Business Operations Review
Raccoon Creek Utility Operating Company, Inc.	SR-2016-0202	August 2016 Staff Report- Customer Service and Business Operations Review

Company Name	Case Number	Testimony/Issues
Raccoon Creek Utility Operating Company, Inc.	SR-2016-0202	October 2016 Rebuttal Testimony- Collection of Bad Debt
Kansas City Power and Light Company	EO-2016-0124	January 2017 Management Audit Report- Employee Expense Account Process and Internal Audit Activities
Terre Du Lac Utilities Corporation	WR-2017-0110	April 2017 Staff Report- Customer Service and Business Operations Review
Indian Hills Utility Operating Company, Inc.	WR-2017-0259	July 2017 Staff Report- Customer Service and Business Operations Review
Spire Missouri, Inc.	GR-2017-0215	December 2017 Rebuttal Testimony- Performance Metrics Incentive Proposal
Ameren Missouri	EO-2018-0155	April 2018 Staff Report- First MEEIA Cycle 2 Prudence Review
Liberty Utilities, LLC	WR-2018-0170	April 2018 Staff Report- Normalized and Annualized Revenues, Miscellaneous Revenues, Bad Debt Expense, Outside Services/Contract Maintenance, DNR Fees, Meter Reading Expense, Transportation Expense, and Property Taxes
KCPL Greater Missouri Operations	ER-2018-0146	June 2018 Direct Testimony- Fuel Adjustment Clause Rebuttal Testimony- Fuel Adjustment Clause and Renewable Energy Rider Surrebuttal Testimony- Fuel Adjustment Clause
The Empire District Electric Company	EO-2018-0244	September 2018 Staff Report- Fuel Adjustment Clause Prudence Review
KCPL	EO-2018-0363	November 2018 Staff Report- First MEEIA Cycle 2 Prudence Review
KCPL Greater Missouri Operations	EO-2018-0364	November 2018 Staff Report- First MEEIA Cycle 2 Prudence Review
KCPL	EO-2019-0068	February 2019 Staff Report- Fuel Adjustment Clause Prudence Review
KCPL Greater Missouri Operations	EO-2019-0067	February 2019 Staff Report- Fuel Adjustment Clause Prudence Review

cont'd Case Participation
Brooke Mastrogiannis

Company Name	Case Number	Testimony/Issues
Ameren Missouri	EO-2019-0257	August 2019 Staff Report- Fuel Adjustment Clause Prudence Review
Ameren Missouri	EO-2019-0376	October 2019 Staff Report- Second MEEIA Cycle 2 Prudence Review
The Empire District Electric Company	EO-2020-0059	February 2020 Staff Report- Fuel Adjustment Clause Prudence Review
The Empire District Electric Company	ER-2019-0374	January 2020 Direct Testimony- Fuel Adjustment Clause Rebuttal Testimony- Fuel Adjustment Clause Surrebuttal Testimony- Fuel Adjustment Clause
Evergy Missouri Metro	EO-2020-0227	June 2020 Staff Report- Second MEEIA Cycle 2 Prudence Review
Evergy Missouri West	EO-2020-0228	June 2020 Staff Report- Second MEEIA Cycle 2 Prudence Review
Evergy Missouri West	EO-2020-0262	August 2020 Staff Report- Fuel Adjustment Clause Prudence Review
Evergy Missouri Metro	EO-2020-0263	August 2020 Staff Report- Fuel Adjustment Clause Prudence Review
Ameren Missouri	EO-2021-0060	February 2021 Staff Report- Fuel Adjustment Clause Prudence Review
Ameren Missouri	EO-2021-0157	May 2021 Staff Report- First MEEIA Cycle 3 Prudence Review
The Empire District Electric Company	EO-2021-0281	August 2021 Staff Report- Fuel Adjustment Clause Prudence Review
Ameren Missouri	ER-2021-0240	September 2021 Direct Testimony- Fuel Adjustment Clause Rebuttal Testimony- Fuel Adjustment Clause Surrebuttal Testimony- Fuel Adjustment Clause
The Empire District Electric Company	ER-2021-0312	October 2021 Direct Testimony- Fuel Adjustment Clause Rebuttal Testimony- Fuel Adjustment Clause Surrebuttal Testimony- Fuel Adjustment Clause

cont'd Case Participation
Brooke Mastrogiannis

Company Name	Case Number	Testimony/Issues
Evergy Missouri West	EO-2021-0416	October 2021 Staff Report- First MEEIA Cycle 3 Prudence Review
Evergy Missouri Metro	EO-2021-0417	October 2021 Staff Report- First MEEIA Cycle 3 Prudence Review
Evergy Missouri Metro	EO-2022-0064	February 2022 Staff Report- Fuel Adjustment Clause Prudence Review
Evergy Missouri West	EO-2022-0065	February 2022 Staff Report- Fuel Adjustment Clause Prudence Review
Ameren Missouri	EO-2022-0236	August 2022 Staff Report- Fuel Adjustment Clause Prudence Review
The Empire District Electric Company	EO-2023-0087	February 2023 Staff Report- Fuel Adjustment Clause Prudence Review
Evergy Missouri West	ER-2023-0210	Rebuttal Testimony- Fuel Adjustment Clause; Fuel Adjustment Rate Filing
Ameren Missouri	EO-2023-0180	April 2023 Staff Report- Second MEEIA Cycle 3 Prudence Review
Evergy Missouri Metro	EO-2023-0276	August 2023 Staff Report- Fuel Adjustment Clause Prudence Review Direct Testimony- November 2023 Rebuttal Testimony- December 2023 Surrebuttal Testimony- January 2024
Evergy Missouri West	EO-2023-0277	August 2023 Staff Report- Fuel Adjustment Clause Prudence Review Direct Testimony- November 2023 Rebuttal Testimony- December 2023 Surrebuttal Testimony- January 2024
Evergy Missouri Metro	EO-2023-0407	October 2023 Staff Report- Second MEEIA Cycle 3 Prudence Review Direct Testimony- February 2024
Evergy Missouri West	EO-2023-0408	October 2023 Staff Report- Second MEEIA Cycle 3 Prudence Review Direct Testimony- February 2024

Company Name	Case Number	Testimony/Issues
Evergy Missouri West	ER-2023-0444	Direct Testimony- October 2023- Fuel Adjustment Clause; Fuel Adjustment Rate Filing Rebuttal Testimony- November 2023- Fuel Adjustment Clause; Fuel Adjustment Rate Filing
The Empire District Electric Company	EO-2024-0151	April 2024 Staff Report- First MEEIA Cycle 1 Prudence Review
Ameren Missouri	EO-2024-0053	February 2024 Staff Report- Fuel Adjustment Clause Prudence Review

FUEL ADJUSTMENT
RIDER – FA

To compensate for changes in the cost of purchased power and fuel burned at the Company's thermal generating plants, the charges per kilowatt-hour for energy billed under the Company's tariffs subject to this Rider by reference will be adjusted monthly as follows:

$$CAF = ((F + AQCS \pm SO_2 - REC - OSS) / NSI) + OUF$$

$$OUF = COU / (NSI_1)$$

$$\text{FAC Primary} = CAF \times 1.0502$$

$$\text{FAC Secondary} = CAF \times 1.0686$$

Where:

F	=	Total Fuel and Purchased Power Costs (Cost Month)
OSS[1]	=	Off System Sales Credit (Cost Month)
REC	=	Revenue from Sale of Renewable Energy Credits
COU	=	Total Cost to Date Over/(Under)
OUF	=	Over/(Under) Cost Factor Current Month
ADJ	=	Fuel Adjustment for Current Month
AQCS	=	Lime Stone, Activated Carbon and Ammonia Costs
SO_2	=	Net Cost of Emission Allowances
NSI	=	Net System Input – kWh (Cost Month)
NSI_1	=	Net System Input – kWh (Billing Month)
CAF	=	Cost Adjustment Factor
EF	=	Expanson Factors : Primary 1.0502 and Secondary 1.0686
FAC	=	Fuel Adjustment Cost Factor

NOTE: The period referred to above is the second calendar month preceding the end of the billing period for which the Kwh usage is billed. (Cost Month)

All components in the formula are Oklahoma jurisdictional.

(1) – The Off System Sales Credit will reflect the net wind revenues received from market revenues, Paygo, Renewable Energy Credits (RECs), Production Tax Credits (PTCs), Net Hedge Settlements, and Tax Equity Distributions.

~~ORIGINAL~~1st Revised Sheet No. ~~34~~R-16.1

Replacing: Original Sheet No. 34

The Empire District Electric Company d/b/a Liberty-Empire
Name of Company

Kind of Service: Electric Class of Service: All

Part III Rate~~Policy~~ Schedule No. 16

Title: **ENERGY COST RECOVERY RIDER (Rider ECR)** PSC File Mark Only

16. ENERGY COST RECOVERY RIDER

16.1. RECOVERY OF ENERGY COST

Energy Cost Recovery Rider (ECR Rider) defines the procedure by which the “Energy Rate” of The Empire District Electric Company (“Empire” or “Company”) shall be initially established and periodically determined. The Energy Cost Rate shall recover the Company’s net fuel and purchased energy cost, as defined in this Rider ECR.

16.2. ENERGY COST RATE

The Energy Cost Rate to be initially effective under this Rider ECR shall be determined in the manner prescribed by the Arkansas Public Service Commission (“Commission”) in its final order in Docket No. 13-111-U and shall become effective upon the date established by the Commission. The Energy Cost Rate shall then be redetermined through filings made in accordance with the provisions of Annual Redetermination of this Rider ECR. The Energy Cost Rate shall be applied to each customer’s monthly billing energy (kWh).

16.3. ANNUAL REDETERMINATION

On or before March 15 of each year beginning in 2015, the Company shall file a redetermined Energy Cost Rate with the Commission. The redetermined Energy Cost Rate shall be determined by application of the Energy Cost Rate Formula set out in Attachment A of this Rider ECR. Each such revised Energy Cost Rate shall be filed in the proper underlying docket and shall be accompanied by a set of workpapers sufficient to fully document the calculations of the revised Energy Cost Rate.

The redetermined Energy Cost Rate shall reflect the projected Energy Cost for the 12- month period commencing on April 1 of each year (“Projected Energy Cost Period”) together with a true-up adjustment reflecting the over-recovery or under-recovery of the Energy Cost for the 12-month period ended December 31 of the prior calendar year (“Energy Cost Period”). The Energy Cost Rate so determined shall be effective for bills rendered on and after the first billing cycle of April of the filing year and shall remain in effect for twelve (12) months, except as otherwise provided for below.

The annual update shall include a report of the following:

1. detailed fuel and purchased energy costs for FERC account and month for the historical year;

2. identify and explain changes of 10% or more from the prior year for major cost components of the ECR Rider, including fuel expense, purchased energy expense, off-system sales, etc.

3. identify changes in accounting procedures affecting fuel and purchased power costs, such as changes in FERC account number classifications and changes in costing methodologies;

4. identify changes in fuel and purchased power procurement practices;

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5. identify the monthly level of coal inventory in days and tons for the historical year;

6. identify the average price per unit for each fuel type and purchased power for the historical year;

7. identify and discuss changes in environmental regulations affecting fuel and purchased energy costs and explain the Company's plans for compliance;

8. identify plant outages for the historical year and explain the cause(s) of the outages; and

9. identify penalty charges received in the SPP IM, if any, for the historical year and explain the reasons for incurring such penalties;

10. identify and explain changes in the SPP IM or the application of the SPP tariff that affect fuel and fuel-related costs and revenues recovered in the ECR Rider;

11. explain Empire's process for evaluating the accuracy of the underlying costs from the SPP IM; and

12. The Company, as a part of its annual Rider ECR update, will report the remaining balance of the extraordinary fuel costs that were incurred as a result of the February 2021 Winter Storm, including a narrative of any changes that impact the remaining balance outside of the revenues applied, including but not limited to, further SPP reconciliation and prudence filings.

16.4. INTERIM ADJUSTMENTS

If prior to the annual redetermination of the Energy Cost Rate, APSC General Staff ("Staff") or the Company becomes aware of an event that is reasonably expected to occur and/or has occurred which will materially impact the Company's Energy Cost, either the Staff or the Company may propose an interim adjustment to the Energy Cost Rate Formula set out in Attachment A of this Rider ECR. Furthermore, should a cumulative over-recovery or under-recovery balance arise during any Rider Cycle which exceeds ten percent (10%) of the Energy Cost determined for the Energy Cost Period included in the most recently filed rate redetermination under this Rider ECR, then either Staff or the Company may propose an interim revision to the then currently effective Energy Cost Rate.

~~1st REVISED~~2nd Revised Sheet No. ~~35.1~~R-16.3

Replacing: ~~ORIGINAL~~ 1st Revised Sheet No. 35.1

The Empire District Electric Company d/b/a Liberty-Empire
Name of Company

Kind of Service: Electric Class of Service: All

Part III Rate Schedule No. 16

Title: **ENERGY COST RECOVERY RIDER (Rider ECR)** PSC File Mark Only

ATTACHMENT A

The charge or credit per kilowatt-hour, rounded to the nearest one-thousandth of a cent shall be determined as follows:

ECR = Energy Cost Rate (8)

$$ECR = \frac{TUA + (PEC * EAF) + PEEC}{PES}$$

Where: TUA = True-up adjustment for the Energy Cost Period including carrying charges (1).

$$TUA = \sum_{J=1}^{12} ((EC_J * EAF) + EECP + EECI - (RR_J - PTU_J)) + CC_J$$

Where: EC_J = Energy cost for $month_J$ of the energy cost period.

$EC = FE_J + PE_J + AQCS_J - EMREV_J - REC_J - OSS_J$

Where: FE_J = Gross system Fuel expense charged to accounts 501, 509, and 547 in month of the energy cost period.

PE_J = Gross system Purchased energy expense charged to account 555 in month of the energy cost period. (2).

$EMREV_J$ = Revenues associated with sales of SO2 Emissions Allowances recorded in month of the historical energy cost period.

REC_J = Revenues associated with the sale of Renewable Energy Credits ("REC") recorded in month of the historical energy cost period.

OSS_J = Revenue associated with the sale of electricity to off-system customers (excluding wholesale sales to native load utilities) and revenue associated with the SPP IM during the historical energy cost period.

$AQCS_J$ = The cost of anhydrous ammonia, limestone and limestone and powder activated carbon recorded in account 506.2 and 548.2 in month of the historical energy cost period.

EAF = Energy Cost Allocation factor based on the ratio of Arkansas-jurisdictional kilowatt hour ("kWh") sales to total system kWh sales for each month in the true-up period~~most recently approved by the Commission for application in this Rider ECR (3.0420%)~~.

EECP = Extraordinary Energy Cost Principle to be recovered from 2021 Winter Storm over 48 months (Recovery beginning April 2021), per Order No. 22 in Docket No. 13-111-U.

EECI = Extraordinary Energy Cost Interest Change at the approved Weighted Average Cost of Capital (WACC) to be recovered from