MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

ELEVENTH PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF THE EMPIRE DISTRICT ELECTRIC COMPANY, d/b/a LIBERTY

FILE NO. EO-2024-0241

September 1, 2022 through February 29, 2024

Jefferson City, Missouri
August 2024

** Denotes Confidential Information **

*** Denotes Highly Confidential Information ***

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I. EXECUTIVE SUMMARY

The Missouri Public Service Commission ("Commission") first authorized a Fuel Adjustment Clause ("FAC") for The Empire District Electric Company, d/b/a Liberty (Empire) ("Liberty" or "Company") in the Company's 2008 general rate case (Case No. ER-2008-0093). Since then, the Commission has approved continuation of Liberty's FAC with modifications in its orders in Liberty's subsequent general rate cases, Case Nos. ER-2010-0130, ER-2011-0004, ER-2012-0345, ER-2014-0351, ER-2016-0023, ER-2019-0374, and ER-2021-0312.

Commission Rule 20 CSR 4240-20.090(11) and Missouri Revised Statute Section 386.266.5(4) require that the Commission's Staff ("Staff") conduct prudence reviews of an electric utility's FAC no less frequently than every 18 months. In this eleventh prudence review of Liberty's FAC for the period September 1, 2022 through February 29, 2024, Staff analyzed items affecting Liberty's total fuel costs, purchased power costs, net emission costs, transmission costs, off-system sales revenues, and interest for the twenty-ninth, thirtieth, and thirty-first six-month accumulation periods of Liberty's FAC. Staff's previous Liberty FAC prudence reviews are listed in Table 1:

Table 1

Prudence Review	File Number	Review Period
First	EO-2010-0084	September 1, 2008 through August 31, 2009
Second	EO-2011-0285	September 1, 2009 through February 28, 2011
Third	EO-2013-0114	March 1, 2011 through August 31, 2012
Fourth	EO-2014-0057	September 1, 2012 through February 28, 2013
Fifth	EO-2015-0214	March 1, 2013 through February 28, 2015
Sixth	EO-2017-0065	March 1, 2015 through August 31, 2016
Seventh	EO-2018-0244	September 1, 2016 through February 28, 2018
Eighth	EO-2020-0059	March 1, 2018 through August 31, 2019
Ninth	EO-2021-0281	September 1, 2019 through February 28, 2021
Tenth	EO-2023-0087	March 1, 2021 through August 31, 2022

In evaluating prudence, Staff reviews whether a reasonable person making the same decision would find both the information the decision-maker relied on and the process the decision-maker employed to be reasonable based on the circumstances at the time the decision was made, *i.e.*, without the benefit of hindsight. If either the information relied upon or the decision-making process employed was imprudent, then Staff examines whether the imprudent decision caused any harm to customers. Only if an imprudent decision resulted in harm to customers, will Staff recommend a disallowance. However, if an imprudent decision did not result in harm to the Company's customers, then Staff may further evaluate the decision-making process, and may recommend changes to the Company's business practice going forward.

Staff analyzed a variety of items in examining whether Liberty prudently incurred the fuel and purchased power costs associated with its FAC tariff sheets. Based on its review, Staff identified no incidence or evidence of imprudence at this time by Liberty in the items Staff examined for the period of September 1, 2022 through February 29, 2024. In regards to the Renewable Energy Credits ("RECs"), Staff is not alleging imprudence or a disallowance at this time because the revenues would be outside of the Review Period. For further explanation, see the REC Section IV.

Table 2 identifies Liberty's Commission-approved FAC tariff sheets which were applicable for service provided by Liberty to its customers during the period of September 1, 2022 through February 29, 2024 including the tariff sheets applicable to calculation of the Fuel Adjustment Rates[1] ("FAR") for the twenty-ninth, thirtieth, and thirty-first accumulation period ("AP")[2] covered by the Fuel and Purchase Power Adjustment Clause Rider FAC for the same period:

[1] Fuel Adjustment Rate Filings, File Nos. ER-2023-0342, ER-2024-0118 and ER-2024-0274.

[2] Accumulation periods: AP 29; September 2022 – February 2023, AP 30; March 2023 – August 2023, and AP 31; September 2023 – February 2024.

Table 2

September 1, 2022 through February 29, 2024
1st Revised Sheet No. 17i
1st Revised Sheet No. 17j
1st Revised Sheet No. 17k
1st Revised Sheet No. 17l
1st Revised Sheet No. 17m
1st Revised Sheet No. 17n
1st Revised Sheet No. 17o
1st Revised Sheet No. 17p
6th Revised Sheet No. 17q
7th Revised Sheet No. 17q
8th Revised Sheet No. 17q

Staff Expert: Brooke Mastrogiannis

II. INTRODUCTION

A. Prudence Standard

In making its recommendation to the Commission, Staff must determine if the utility acted imprudently and if this imprudence resulted in harm to the utility's customers. This determination is based upon the information available to the utility, and under the circumstances prevailing, at the time when the decision was made or the action was taken. Staff's responsibility is to determine how a reasonable person would have performed the tasks that confronted a company. The determination is not based on hindsight or information that was not available at the time.

Staff Expert: Brooke Mastrogiannis

B. General Description of Liberty's FAC

Liberty's FAC requires that it accumulate its Total Energy Cost ("TEC")[3]; defined generally as variable fuel, purchased power, transmission and net emissions costs less off-system sales revenue and renewable energy credit revenue during the six-month

[3] Total Energy Costs are equal to fuel costs (FC) plus costs of purchased power (PP) plus net emissions allowances (E) minus off-system sales revenue (OSSR) minus renewable energy credits (REC) as defined on Liberty's 1st Revised Sheet No. 17o.

accumulation periods. Each six-month accumulation period is followed by a six-month recovery period ("RP")[4] during which ninety-five percent (95%) of the over- or under-recovery of TEC during the previous six-month accumulation period relative to the Base Energy Cost ("B") amount[5] is returned to or collected from customers as part of a decrease or an increase of the FAC Fuel and Purchased Power Adjustment ("FPA") per kWh rate, which is the FAR for each accumulation period. Because the total amount charged through the FAR rarely, if ever, will exactly match the required offset, Liberty's FAC is designed to true-up[6] the difference between the revenues billed and the revenues authorized for collection during recovery periods including interest at Liberty's short-term interest rate. Any disallowance the Commission orders as a result of a FAC prudence review shall include interest at Liberty's short-term interest rate and will be accounted for as an adjustment[7] item when calculating the FPA for a future recovery period.

Staff Expert: Brooke Mastrogiannis

C. Staff Review and Reconciliation of FERC Accounts

Staff has reviewed all Federal Energy Regulatory Commission ("FERC") accounts related to Liberty's FAC for this review period. FERC accounts subject for this FAC review are 411 Gains and Losses from Disposition of Allowances, 447 Sales for Resale, 456 Other Electric Revenues, 501 Fuel, 506 and 548 Air Quality Control Systems ("AQCS"), 509 Allowances, 547 Fuel, 555 Purchased Power, and 565 Transmission by Others.

Staff created independent work papers that are based on three separate sources provided by Liberty, as further explained below. These work papers were created to review and reconcile the FERC Accounts in Table 3 below and included in the calculation of the components of the TEC presented in Table 4.

Liberty provided its monthly General Ledger to Staff through its response to Staff Data Request No. 0026, which provided the detail of all accounting transactions for the expenses and

[4] Recovery periods are: June through November for each immediately preceding September through February accumulation period; and December through May for each immediately preceding March through August accumulation period.

[5] "Base Energy Cost" (B) as defined on Liberty's 1st Revised Sheet No. 17i.

[6] True-up of FAC is defined on Liberty's 1st Revised Sheet No. 17o and 17p.

[7] See line item 10 on Liberty's 7th Revised Sheet No. 17q (For service on and after December 1, 2023).

revenues encompassed in the TEC in Table 4. Staff sorted the General Ledger by each account reflected in the FERC Accounts listed in Table 3:

Table 3

Account Name	FERC Account Number
Fuel used for Steam	501
AQCS Consumables	506 and 548
Fuel/Natural Gas	547
Short-Term Purchased Power Costs	555
Long-Term Purchased Power Contracts	555
Transmission Expense	565
Net Emission Allowances	411 and 509
REC Revenue	456
Off System Sales Revenue	447

The transactions and totals for each FERC account by month and year from the General Ledger were compared to the accounts included in the TEC Monthly Reports and FAC FAR filings. In addition to verifying that the total dollar amounts from these three accounting sources are equal, Staff reviewed expense and revenue transactions to identify any unusual dollar amounts, improperly categorized amounts, or categories of cost or revenue, which are not allowed in the FAC's definition of TEC.

Staff Expert: Brooke Mastrogiannis

D. Staff Regulatory Accounting Summary

Staff analyzed the TEC based on the transactions in the FERC accounts related to the calculation of the TEC from three different sources: the General Ledger, the Monthly Reports, and the FAR work papers provided by Liberty. Staff analyzed, reviewed and was able to reconcile these three individual sources to each other based on the individual line items categorized by FERC Accounts that captured Fuel Costs, Costs of Purchased Power, and Off-System Sales Revenues for the TEC.

Staff Expert: Brooke Mastrogiannis

E. Participation with Regional Transmission Organizations

As part of this review, Staff reviewed Liberty's participation in Regional Transmission Organizations ("RTOs"). Liberty participates in Southwest Power Pool[8] ("SPP").[9] Staff reviewed a wide variety of Liberty's practices and procedures related to SPP. Liberty directly participates in SPP's Day Ahead Market and Real-Time Market. At a high level, these markets allow Liberty to offer-in and - if cleared in the market - to sell the energy it generates to SPP. In turn, Liberty must purchase back from SPP the energy needed to serve its native load. The practices and procedures related to these transactions are highly technical and complex. Liberty was required to develop specialized front and back office[10] practices and procedures to manage the large amounts of data associated with its market participation. Liberty utilizes specialized software[11] to manage key components of the bid-to-settlement trading cycle and analysis modes for the Day-Ahead Market and Real-time Market bidding. These processes and software include robust capabilities for settling and disputing a wide range of market transactions. Liberty uses this software to verify and shadow complex RTO charge codes and invoices and to customize contract settlements. The software serves as the repository for SPP market data, the system of record for fuel trading, as well as various settlement reporting functions.[12]

As a result of Staff's understanding and experience with these practices and processes, Staff found that Liberty is managing its participation in the market effectively and maintains appropriate procedures and processes to account for the financial and operational results of participation in the RTO. During the Review Period, there were no instances of recovery for penalties associated with RTO services or refunds or credits.

Staff Expert: Brooke Mastrogiannis

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[8] SPP is a regional transmission organization that provides electric power across all or parts of 14 U.S. states. SPP assures consumers have an unbiased regional grid management and open access to the transmission facilities under SPP's functional supervision.

[9] Liberty (Empire) also has minority ownership in Plum Point plant, which is in the MISO RTO and decisions on production are made by the majority owners.

[10] Front Office: A blanket term that refers to the portion of a company that deals with outside entities in its daily functions of buying, selling and trading of energy. Back Office: A blanket term that refers to the portion of a company made up of administration, accounting and settlement functions in support of the selling, buying and trading of energy.

[11] Adapt2 Solution was implemented in 2018 and replaced the previous software PCI. See Data Request No. 0076 in EO-2021-0281.

[12] Data Request No. 0074 in EO-2024-0241.

III. TOTAL ENERGY COSTS

The Liberty FAC definition of Total Energy Costs includes three components of costs – fuel costs ("FC"), costs of purchased power ("PP") and net emissions allowance costs ("E"), and two components of revenue – off-system sales revenues ("OSSR") and Renewable Energy Credit Revenues ("REC"). Table 4 is a breakdown of Liberty's fuel costs, costs of purchased power, net emissions allowance costs, off-system sales revenues and renewable energy credit revenues for the period of September 1, 2022 through February 29, 2024:

Table 4

Component		Summary
Generation	(FC)	$ 233,980,852
Fuel - AQCS	(FC)	$ 1,690,521
Native Load Costs	(PP)	$ 11,111,143
Transmision Costs	(PP)	$ 9,301,683
Net Emission Allowances	(E)	$ (6)
EMPIRE Sales	(OSSR)	$ (121,462,238)
Renewable Energy Credit Revenues	(REC)	$ (8,762,313)
Total Energy Cost	(TEC)	$ 125,859,642

Staff Expert: Brooke Mastrogiannis

A. Fuel Risk Management Policy

1. Description

** [redacted]

[redacted][13] ** Liberty has since had annual natural gas hedging discussions with Missouri PSC Staff and the Office of the Public Counsel on November 4, 2021, November 21, 2022, and December 1, 2023.

*** [redacted][14]

[redacted]

[redacted]

[13] Data Request Response No. 0070 in EO-2021-0281.

[14] Data Request Response Nos. 0070.2 and 0070.5 in EO-2021-0281.

[redacted][15]

[redacted] ***

Table 5 - Highly Confidential

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[redacted]

***

[15] Data Request Response No. 0067.

Table 6 - Highly Confidential

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[redacted]

[redacted]

[redacted]

***

Staff has reviewed the new policy along with extensive data provided by Liberty including prices paid per DTh for both the fixed physical purchases and monthly index purchases as compared to the Southern Star Central Gas Day Daily ("SSC-GDD"). Staff has also reviewed the anticipated budgeted burn for native load by month in the gas position reports,[16] as compared to 50% of the actual physical amount of MMbtu's purchased by month including any monthly index volumes, adjusted for outages, and found no concerns. Staff points out that market conditions and exposures have changed significantly since Storm Uri, and Liberty experienced periods of decreased liquidity of local natural gas supply during perceived high need seasons. This caused prices for the daily/spot purchases to increase significantly, along with Liberty being unable at times to enter into counterparty fixed physical purchases or monthly index purchases. Staff is still of the opinion that Liberty's new RMP helps mitigate risk and volatility for Liberty's natural gas requirements, and the market exposures experienced during this review period were outside the control of Liberty. Hedging is a safeguard measure to mitigate risk. The primary risk here is market volatility of natural gas. However, it is not cost free and in general it elevates the variable cost of operation in the defined period of time. This is done as a risk mitigation measure to avoid spot market pricing exposure and provide budget consistency for forecasting purposes.

2. Summary of Cost Implications

If Liberty does not manage its risk management strategies prudently, fuel costs that are collected from customers through Liberty's FAC could be significantly increased.

3. Conclusion

Staff did a thorough review of Liberty's risk management strategies and the provided financial results of its natural gas hedging associated with Liberty's past policy and practices. Staff also reviewed the changes Liberty made to its processes and procedures related to natural gas purchases, specifically transitioning from financial hedging instruments to fixed physical purchases and monthly index physical purchases. Although market conditions could change, which could result in an updated RMP, Staff did not find any prudency issues with Liberty's new policy and practices during this review period.

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[16] The gas position reports can be found in Data Request No. 0046, however some of those reports have been updated in response to Data Request No. 0067.2.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0070 and 0070.2 in Case No. EO-2021-0281;

b. Liberty's responses to Staff Data Request Nos. 0027, 0030, 0031, 0044, 0046, and 0067; and,

c. Phone conversations with Aaron Doll.

Staff Expert: Brooke Mastrogiannis

B. Fuel Costs (Coal Plants)

1. Description

Liberty is required to account for fuel costs contained within FERC[17] Account 501 used in the production of steam for the generation of electricity per its Fuel Adjustment Rider Tariff. Staff reviewed Liberty's fuel costs associated with Liberty's generation facilities, which are comprised of coal and natural gas generation units. Staff has summarized these fuel costs in Table 7:

Table 7 - Confidential

**

[redacted]

**

[17] Federal Energy Regulatory Commission, Uniform System of Accounts ("FERC Account").

For the review period, ** [redacted] ** or 13.75% of Liberty's total fuel costs were associated with the generation of electricity from its coal-fired generation facilities. During the review period Liberty generated 21.61% of its electricity with its coal-fired generation facilities and burned ** [redacted] ** tons of coal which translates to an average price of ** [redacted] ** per ton including transportation/freight and other rail charges. Staff reviews public sources in an effort to determine the reasonableness of prices paid by Liberty for its coal supply. Staff monitors U.S. Energy Information Administration ("EIA") and for past and future market prices, supply forecasts and other market trends.[18] Staff finds that the prices paid by Liberty appear to be consistent with market prices in effect during the review period.

Also contained within FERC Account 501 and reviewed during this review is fuel oil costs. The total fuel oil costs for the review period was ** [redacted] **. The fuel oil burned only accounts for about 0.88% or ** [redacted] ** kWh of total kWhs generated by Liberty. Fuel oil is used as a support fuel (startup and/or burn stabilization) in the production of steam with the coal and natural gas fired generation facilities.

Liberty maintains ** [redacted] ** short and long-term coal purchase contracts, and ** [redacted] ** rail transportation contract. The counterparties for the contracts are shown below in Table 8:

Table 8 – Confidential

**

[redacted]

**

Staff reviewed Liberty's 2019 Energy Risk Management Policy that was in effect during the review period and concludes that Liberty has complied with its stated objectives.

[18] EIA Quarterly Coal Report, EIA Average Price of U.S. Coal, EIA Coal Markets 2021.

2. Summary of Cost Implications

If Liberty was imprudent in its purchasing decisions relating to the purchase of coal and transportation, customer harm could result from such imprudence through an increase in Liberty customer FAC charges.

3. Conclusion

Staff identified no imprudence by Liberty in its purchase of coal and transportation contained in FERC Account 501 for the prudence review period.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0001, 0002, 0007, 0008, 0009, 0015, 0022, 0023, 0024, 0026, 0029, 0029.1, 0032, 0032.1, 0032.2, 0033, 0034, 0035, 0035.1, 0035.2, 0036, 0038, 0042, 0043, 0044, 0052, and 0073; and,

b. Market research: https://www.eia.gov.

Staff Expert: Brooke Mastrogiannis

C. Air Quality Control Systems ("AQCS") Chemicals

1. Description

For the review period, ** [redacted] **, or .87%, of Liberty's total fuel costs is associated with FERC Account 506 and 548. This account includes expenses associated with AQCS materials used to reduce emissions as a result of burning fossil fuels in Liberty's generation facilities.

2. Summary of Cost Implications

If Staff determined that Liberty was imprudent in its purchasing decisions relating to AQCS materials costs, customer harm could result from that imprudence by an increase in FAC charges.

3. Conclusion

Staff found no evidence of imprudence associated with Liberty's AQCS purchases for the prudence review period.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0001, 0002, 0026, 0052, 0069, and 0069.1.

Staff Expert: Brooke Mastrogiannis

D. Fuel Costs (Natural Gas Plants)

1. Description

Liberty accounts for the natural gas and natural gas transportation capacity costs used in its generation facilities in FERC Account 547. For the review period, ** [redacted] **, or 77.94%, of Liberty's total fuel costs is associated with FERC Account 547. The total natural gas cost recorded in FERC Account 547 is comprised of several components. The natural gas commodity cost is ** [redacted] ** with transportation costs of ** [redacted] **, transportation credits of ** [redacted] ** and natural gas hedging expense (gains)/losses[19] of ** [redacted] **. Section III.A. of this report addresses the change to Liberty's hedging policies.

Liberty's natural gas generation facilities are combustion turbine generators ("CTGs") and combined cycle ("CC") units (*see* Table 9). Liberty's CTGs are used as peaking units which means they are used generally when demand for electricity increases to a point when baseload units cannot meet that demand. Liberty's Stateline CC by nature is more efficient than the CTG units in Liberty's generation fleet, and, therefore, less expensive to operate. During the review period, Liberty's CTGs consumed ** [redacted] ** million cubic feet of natural gas which translates to an average of ** [redacted] ** per MMBtu.

Southwest Power Pool (SPP) dispatches these units when needed in the market. However, Liberty must still ensure these CTG's have adequate fuel to operate and are maintained properly and reliably for when they are called upon by SPP.

The following table identifies Liberty's peaking generating units that burn natural gas:

Table 9

Energy Center 1, 2, 3, and 4: Combustion Turbine
Riverton 10 and 11 Combustion Turbine; and Riverton 12 Combined Cycle
State Line Unit 1; Combustion Turbine

[19] Losses occur when actual market prices are lower than the futures and swaps purchases, and gains occur when the actual market prices are higher than the futures and swaps purchases.

2. Summary of Cost Implications

If Staff determined that Liberty was imprudent in its purchasing decisions relating to natural gas commodity, reservation, transportation, storage, and hedging costs, customer harm could result from that imprudence by an increase in FAC charges.

3. Conclusion

Staff observed no indication of imprudence associated with Liberty's natural gas commodity purchases for the prudence review period. See Section III.A for a discussion of Liberty's hedging practices.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0001, 0002, 0007, 0026, 0027, 0028, 0030, 0031, 0038, 0044, 0046, 0052, 0067, and 0073; and,

b. Market research: https://www.eia.gov.

Staff Expert: Brooke Mastrogiannis

E. FERC Account 555 - Purchased Power – Long Term Variable Contracts

1. Description

For the period September 1, 2022 through February 29, 2024, Staff reviewed all long term contracts and the Renewable Resource Energy Purchase Power Agreement ("PPA") by and between Elk River Windfarm, LLC ("Elk River PPA") and Liberty, and Cloud County Wind Farm, LLC ("Cloud County PPA")[20] and Liberty. Staff also reviewed, for the review period, the purchased power agreement between Plum Point Energy Associates, LLC ("Plum Point PPA") and Liberty. The details associated with each PPA is provided in the following Table 10:

[20] Liberty operates under the Cloud County Wind Farm purchased power agreement; however, they refer to this PPA as "Meridian Way" under their monthly reporting since this contract purchases energy from their Meridian Wind Farm.

Table 10 – Highly Confidential

***

[redacted]

***

When Staff reviews PPAs for prudency, it reviews transactions that occurred during the review period. Staff also considers the circumstances at the time these contracts are entered into between the parties. In the Direct Testimony of William L. Gipson, in Case No. ER-2008-0093, he describes the reasons securing long-term purchase power contracts attempts to mitigate energy and fuel price risk:

> Q. WITH REGARD TO THE FAC, IS EMPIRE UNDERTAKING ANY STEPS TO MITIGATE THE INCREASES IN FUEL COSTS, ESPECIALLY NATURAL GAS?
>
> A. Yes. Empire is working to control the volatility associated with fuel costs through the use of a natural gas hedging program which has been in place since 2001. In addition, Empire began receiving wind energy from the Elk River Wind Farm in October 2005, and Empire has recently signed a contract with Horizon Wind Energy to purchase 100 percent of the output from a new wind farm, Meridian Way Wind Farm, located near Concordia, Kansas. The new wind farm is expected to come on line in January 2009. These tools aid in mitigating price volatility, mitigate our natural gas exposure and provide price stability for Empire and our customers. As indicated, however, Empire is still exposed to increased fuel cost risk and thus has requested an FAC.

2. Summary of Cost Implication

If Liberty was imprudent by purchasing energy to meet its demand at a cost that exceeded Liberty's cost to generate that energy itself, at the time Liberty entered into those

PPAs, customer harm could result from that imprudence through an increase in FAC charges. Since the time these contracts were entered into, SPP has developed a complete integrated market place which has positively influenced market energy prices, and additional low cost wind resources have entered the market.

3. Conclusion

Staff has identified no evidence of imprudence related to these long-term PPAs at this time.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0001, 0021, 0026, 0043, 0061, 0061.2, 0061.3, 0062, 0065, 0070, 0070.1, and 0071;

b. Work papers for Liberty FAR filings in File Nos. ER-2023-0342, ER-2024-0118, and ER-2024-0274; and,

c. Liberty FAC Monthly Reports.

Staff Expert: Teresa Denney

F. FERC Account 447 – Off-System Sales Revenue ("OSSR") and FERC Account 555 - Purchased Power Costs ("PP")

1. Description

For the period September 1, 2022 through February 29, 2024, Liberty received ** [redacted] ** in total OSSR.

Liberty's Day-Ahead strategy consists of all generation units being offered to the market on a daily basis unless the unit is on an outage. Combined Interest Resources are offered in by the majority owner. Liberty owns a minority share in Iatan and Iatan 2, so since they are not the majority owner, Liberty does not make the decision of the offer status for Iatan or Iatan 2.

Liberty also only owns a minority share of Plum Point. Plum Point is located in MISO, not SPP, and Liberty is the only owner of Plum Point in SPP. The majority owner makes the decisions regarding unit operation.[21]

Liberty is the majority owner of State Line Combined Cycle. Therefore, Liberty does make the decisions regarding the offer status into the SPP IM for State Line Combined Cycle.

[21] Staff Data Request No. 0068.

*** [redacted] ***[22]

Since Liberty participates in the SPP IM, it offers in all of its available generation, and Liberty is then paid for the generation it produces based on a locational marginal price. Thus, Liberty sells energy from its generation resources into the market and purchases energy from the market to serve native load. Liberty records those PP transactions in FERC Account 555, and for the review period the PP costs were ** [redacted] **. There were no new RFPs or agreements entered into by Liberty for capacity sales or purchases during the review period. Liberty's OSSRs and PP once netted for the review period showed OSSR to be ** [redacted] **.

2. Summary of Cost Implications

Liberty's revenues from off-system sales and ancillary services are offset against total fuel, purchased power, and net emissions allowance costs. If Liberty was imprudent, either because it did not maximize or did not make off-system sales and ancillary services, customers could be harmed by that imprudence through an increase in FAC charges.

3. Conclusion

Staff identified no indication of imprudence related to off-system sales revenue or purchased power costs for the prudence review period.

4. Documents Reviewed

a. Liberty 's responses to Staff Data Request Nos. 0020, 0021, 0026, 0043, 0055, 0061, 0061.1, 0062, 0065, 0068, 0070, and 0070.1;

b. Work papers for Liberty FAR filings in File Nos. ER-2023-0342, ER-2024-0118, and ER-2024-0274; and,

c. Liberty's FAC Monthly Reports.

Staff Expert: Teresa Denney

[22] Staff Data Request No. 0068.

G. Transmission Costs

1. Description

For the Review Period, ** [redacted] **, or 7.39%, of Liberty's total fuel cost, cost of purchased power, transmission costs and net emission costs, was associated with transmission service costs.

There was one tariff in effect during this Review Period: The Original Sheet 1st Revised Sheet No. 17k and 17l, applicable for service on and after June 1, 2022, defines transmission service costs as:

> Transmission service costs reflected in FERC Account Number 565:
>
> A. Nineteen point three nine percent (19.39%) of SPP costs associated with Network Transmission Service:
>   i. SPP Schedule 2 – Reactive Supply and Voltage Control from Generation or Other Sources Service;
>   ii. SPP Schedule 3 – Regulation and Frequency Response Service; and
>   iii. SPP Schedule 11 – Base Plan Zonal Charge and Region-wide Charge.
>
> B. Fifty percent (50%) of Midcontinent Independent System Operator ("MISO") costs associated with:
>   i. Network transmission service;
>   ii. Point-to-point transmission service;
>   iii. System control and dispatch; and
>   iv. Reactive supply and voltage control.

For calculating transmission service costs, Liberty implemented a process whereby total transmission expenses were tabulated and then costs not allowed in the FAC were removed. Staff reviewed the transmission costs over the Review Period to verify only 19.39% of the SPP transmission service costs were included for September 1, 2022 through February 28, 2024. Staff also verified only 50% of the MISO transmission service costs were included. Staff also verified the SPP Schedule 1a and Schedule 12 costs were removed from transmission costs. Liberty's transmission costs during the Review Period was ** [redacted] **.

2. Summary of Cost Implications

If Liberty imprudently included transmission costs or more than 19.39% from of the SPP transmission service costs and more than 50% of the MISO transmission service costs, ratepayer harm could result from increased FAC charges.

3. Conclusion

Staff found no indication Liberty's transmission costs were imprudent.

4. Documents Reviewed

a. Liberty's General Ledger;

b. Liberty's FAC tariff sheets;

c. Liberty's FAC Monthly Reports;

d. Liberty's responses to Staff Data Request Nos. 0026, 0047, 0052, and 0063; and,

e. Work papers for Liberty FAR filings in File Nos. ER-2023-0342, ER-2024-0118, and ER-2024-0274.

Staff Expert: Amanda C. Conner

H. Emission Allowances

1. Description

The Cross-State Air Pollution Rule ("CSAPR") is a ruling by the United States Environmental Protection Agency ("EPA") that requires a number of states, including Missouri, to reduce power plant emissions that contribute to ozone and/or fine particle pollution in other states. The CSAPR replaced EPA's 2005 Clean Air Interstate Rule ("CAIR"), following the direction of a 2008 court decision that required EPA to issue a replacement regulation. CSAPR implementation began on January 1, 2015.

The CSAPR requires Missouri to reduce its annual emissions of sulfur dioxide (SO_2) and nitrous oxides (NO_X) to help downwind states attain the 24-hour National Ambient Air Quality Standards ("NAAQS"). The CSAPR also requires Missouri to reduce ozone season emissions of NO_x to help downwind states attain the 8-hour NAAQS.

On September 7, 2016, the EPA revised the CSAPR ozone season NO_X program by finalizing an update to CSAPR for the 2008 ozone NAAQS, known as the CSAPR Update. The CSAPR Update ozone season NO_X program largely replaced the original CSAPR ozone season

NO_X program starting May 1, 2017. The CSAPR Update will further reduce summertime NOx emissions from power plants in the eastern U.S.

On March 15, 2021, EPA finalized the Revised CSAPR Update reducing NO_x emissions from power plants in twelve (12) states in the eastern United States by 17,000 tons in 2021 compared to projections without the rule. This ruling did not affect the current CSAPR Update ruling in Missouri.

The primary mechanism of CSAPR is a cap-and-trade program that allows a major source of NOx and/or SO_2 to trade excess allowances when its emissions of a specific pollutant fall below its cap for that pollutant. Originally, the EPA issued a model cap-and-trade program for power plants, which could have been used by states as the primary control mechanism under CAIR. This model, with modifications, had continued under CSAPR.

The requirements of CSAPR, CSAPR Update and the State of Missouri requirements were in effect for the entire Review Period from March 1, 2021 through August 31, 2022. Missouri was part of the twenty-two (22) states that the Update affected, but per Staff's review, was not part of the recent March 15, 2021 ruling. Liberty-Empire units were in compliance with the CSAPR, CSAPR Update, and Missouri limits for both SO_2 and NO_x.

Liberty aggressively initiated control equipment on nearly every fuel-burning generating unit it owned. There are some units, such as water injection in turbines and low-NO_x burners and over-fire air in boilers, which control emissions by preventing the formation of SO_2 and NO_x. Others, like selective catalytic reduction (SCR) systems for NO_x or oxidation catalysts for carbon monoxide, neutralize chemical pollutants after they have been generated. Still others, baghouses and electrostatic precipitators, for instance, capture emissions. The CSAPR and CSAPR Update rules cause Liberty to operate its control equipment and systems more robustly to further reduce NO_x emissions. The cost of operating the controls is impacted by commodity pricing of the chemicals and reagents used in the processes. These increases are generally included in the market offerings of the units in the SPP Day Ahead Market and most consumables are captured under the Company's fuel adjustment charges.[23]

[23] See response to Data Request No. 0013.

Liberty currently uses both the Acid Rain Program ("ARP") and CSAPR programs for SO_2 and NO_x. They receive CSAPR and ARP allowance allocations. Currently one ton of SO_2 and NO_x emissions require one SO_2 or NO_x allowance to be retired under both programs. Liberty receives its emission allowances from the EPA on a yearly basis. Liberty 's 2022, 2023, and 2024 emission allowances by category for all plants are in Table 11 below:

Table 11 – Confidential

**

[redacted]

**

These allowances have no cost and are booked at zero dollars. Gains from disposition of emission allowances are recorded to FERC Account 254, and credited to FERC Account 411. There were no sales or purchases of emissions during the Review Period.

The cost associated with the SO_2 premiums, net of discounts, and the revenues from gains on the sale of SO_2 emission allowances have been included in Liberty's FAC. During the Review Period, Liberty indicated there were no sales of surplus SO_2 or NO_x allowances.

Liberty does not currently need to purchase emission allowances. Staff reviewed the work papers supporting the fuel and purchase power costs for load and off-system sales for accumulation periods 29, 30, and 31 and also the FAC monthly reports as required by 20 CSR 4240-20.090(5).

Based on its review of Liberty's responses to Staff Data Request and information provided, Staff found that Liberty has appropriate practices and processes in place to effectively manage its emission allowances to meet the annual requirements during this Review Period either through generation or purchase power contracts.

2. Summary of Cost Implications

If Liberty imprudently used, purchased, sold or banked its SO_2 and NOx allowances, customer harm could result from an increase in Liberty's FAC charges.

3. Conclusion

Staff observed no indication of imprudence associated with Liberty's management of its emission allowances during the prudence review period.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0001, 0013, 0025, 0026, 0037, 0039, 0040, 0041, 0041.1, 0042, 0044, 0045, and 0054; and,

b. Work papers for Liberty FAR filings in File Nos. ER-2023-0342, ER-2024-0118, and ER-2024-0274.

Staff Expert: Amanda C. Conner

IV. RENEWABLE ENERGY CREDIT REVENUE

1. Description

The Missouri Renewable Energy Standard ("RES")[24] requires all investor-owned electric utilities in Missouri to provide at least two percent (2%) of their retail electricity sales using renewable energy resources in each calendar year 2011 through 2013, and to increase that percentage over time to at least fifteen percent (15%) by 2021.[25] For this Review Period, the percentage for renewable energy resources requirement was 15%. Commission Rule 20 CSR 4240-20.100 Electric Utility Renewable Energy Standard Requirements, which first became effective September 30, 2010,[26] contains the definitions, structure, operations, and procedures for implementing the RES.

The RES rule creates two categories of energy-generating resources: non-renewable energy resources (including purchased power from non-renewable energy sources) and

[24] Section 393.1025 RSMo. and Section 393.1030.1(3), RSMo. Missouri Rev Stat (2021).

[25] Commission Rule 20 CSR 4240-20.100(1)(R).

[26] Amended effective November 30, 2015; Last amended effective October 30, 2019.

renewable energy resources (including purchased power from renewable energy sources). Renewable energy resources produce electrical energy and include:

- wind
- solar sources
- dedicated crop grown for energy production
- cellulosic agricultural residues
- plant residues
- methane from landfills, from agricultural operations or wastewater treatment
- thermal sources
- clean and untreated wood sources
- hydropower with rating of ten (10) megawatts or less
- fuel cells using hydrogen produced by one of the above named electrical energy sources
- other sources of energy that become available after November 4, 2008, and are certified as renewable by rule by the division.

Renewable energy resources are certified as renewable by the Missouri Division of Energy. Once an energy resource is certified, it becomes capable of generating a Renewable Energy Credit (REC), with one (1) REC representing one (1) megawatt-hour of electricity that has been generated from the renewable energy resource.[27] These credits can be sold and/or traded in the marketplace bundled with or without the energy that generated the REC.[28] Revenues from the sale of RECs are recovered through the FAC as an off-set to fuel and purchased power costs. This is compliant with Liberty's tariff sheet that was in effect during the Review Period; 1st Revised Sheet No. 17n, effective June 1, 2022, defines RECs as:

> REC = Renewable Energy Credit Revenue reflected in FERC Account 456 from the sale of Renewable Energy Credits that are not needed to meet the Renewable Energy Standard.

[27] Commission Rule 20 CSR 4240-20.100(1)(M).

[28] Commission Rule 20 CSR 4240-20.100(3)(I).

Liberty receives renewable energy from the following sources:

A. Owned Generation:
   1) Ozark Beach Hydroelectric Project (Missouri based);
   2) Wind: North Fork Ridge Wind Project; Neosho Ridge Wind Project and Kings Point Wind Project;
   3) Solar: Prosperity Community Solar Farm.

B. Two Purchased Power Agreements:
   1) Elk River Windfarm, LLC (Kansas based); and,
   2) Meridian Way I (Cloud County) Wind Farm, LLC (Kansas based).

C. Assigned Through Customer-Generated Solar Rebates and Tariff:
   1) Customer Generated Solar Aggregated Assets 1-44 (not applicable to FAC).

During the review period, Liberty generated more renewable energy than what was required for the Missouri RES. Liberty sold excess RECs that generated *** [redacted] *** of REC revenue in FERC Account 456075 and 456215 during the Review Period. All of the RECs sold during this Review Period were from wind sources.

Liberty began receiving wind energy from the Elk River Wind Farm in 2004. Additionally, Liberty contracted to begin receiving wind energy from the Meridian Way Cloud County Wind Farm in 2007. In 2015, Liberty began offering rebates for Missouri customers for qualifying solar installations in accordance with the Missouri RES and Liberty's Solar Rebate Rider approved by the Commission.

In *REC Management Guidelines* provided in Data Request No. 0058, it is Staff's opinion that Liberty provides clear and concise guidelines in regard to its Renewable Energy Credits. The Company appears to be following those guidelines and providing the best return to its customers by selling the excess credits during this review period.

As part of these contracts, Liberty receives RECs, which are credits issued under the Center for Resource Solutions' "green-e" program that certifies that one MWh of electricity has been generated by a facility engaged in the production of renewable energy. Liberty did not allow any RECs to expire on any of these wind RECs, but used them to meet the RES requirements during the review period, sold some of these RECs, or kept some of them for future use for compliance or sale. Liberty is certified to sell its RECs through the Center for Resource Solutions. For the Review Period September 1, 2022 through February 29, 2024, Liberty used *** [redacted] *** of REC revenue to offset its fuel and purchased power costs that flow through its FAC.

Staff does have some concerns that may affect the next review period in relation to Liberty's contract with MJMEUC. In response to Data Request No. 0021, Staff received the original contract for MJMEUC that was entered into on ** [redacted] **. In this contract, Liberty is selling RECs from Meridian Way to MJMEUC for *** [redacted] ***. Staff sent another Data Request No. 0021.1 to Liberty asking if there was any extension to the MJMEUC contract, if so provide the updated contract terms. In response Staff received an amended contract that was entered into on *** [redacted] *** Additionally, Staff found that in the last FAC prudence review, Case No. EO-2023-0087, in 2021 Liberty had sold Meridian Way RECs to two other contractors in the amounts of *** [redacted] *** per REC and *** [redacted] *** per REC.

Staff sent Data Request Nos. 0049.1 through 0049.6 in regards to this amended contract to get more explanation ** [redacted] **

In Data Request No. 0049.6, Staff requested ** [redacted] **. *** [redacted]

[redacted] ***

Table 12 - Highly Confidential

****

[redacted]

****

Table 13 - Highly Confidential

****

[redacted]

****

*** [redacted]

[redacted] ***

When Liberty entered into the original MJMEUC agreement, Liberty did not have to consult Staff or make Staff aware, and neither did it for the extension. Although this extended agreement is not effective until ** [redacted] **, which is outside of this review period, Staff is stating its concerns now as Staff has learned about this extended contract in this current review period. Staff will continue to monitor the REC prices to the end of the original contract terms. However, Staff highly encourages Liberty to look into updating the terms of the extended agreement and renegotiate the price per REC for Meridian Way. Liberty did have enough data available to recognize that the average REC prices are significantly higher now as compared to when this original MJMEUC contract was agreed to in 2018.

The prudence standard states: In evaluating prudence, Staff reviews whether a reasonable person making the same decision would find both the information the decision-maker relied on and the process the decision-maker employed to be reasonable based on the circumstances at the time the decision was made, *i.e.*, without the benefit of hindsight. If either the information relied upon or the decision-making process employed was imprudent, then Staff examines whether the imprudent decision caused any harm to customers. Only if an imprudent decision resulted in harm to customers, will Staff recommend a disallowance. However, if an imprudent decision did not result in harm to the Company's customers, then Staff may further evaluate the decision-making process, and may recommend changes to the Company's business practice going forward.

Staff is not alleging imprudence or a disallowance at this time because the revenues would be outside of the Review Period, therefore an imprudent decision has not resulted in harm to customers yet. However, since the extended contract will be in effect during the next review period, Staff may take action at that time regarding prudency due to Liberty's lack of renegotiating the price per REC in the extension of the contract.

2. Summary of Cost Implications

If the Commission found Liberty was imprudent by not selling RECs when it had the opportunity to do so, ratepayer harm could result from decreased revenues in the FAC.

3. Conclusion

Staff did not find evidence of imprudence in Liberty's management of its RECs during the review period. However, Staff will be monitoring the MJMEUC Contract extensions and price negotiations.

4. Documents Reviewed

a. *REC Management Guidelines*;

b. Liberty's FAC tariff sheets;

c. Liberty's FAC Monthly Reports; and,

d. Liberty's responses to Staff Data Request Nos. 0001, 0021, 0021.1, 0049, 0049.1, 0049.2, 0049.3, 0049.4, 0049.5, 0049.6, 0058, 0059, 0059.1, and 0060.

Staff Expert: Amanda C. Conner

V. INTEREST

1. Description

For its FAC, based on Liberty's short-term debt borrowing rate, Liberty is required to calculate the monthly interest rate that is applied to the monthly amount of its under-recovered, or over-recovered, net base energy costs. For the review period, Liberty utilized a Money Pool[29] as its debt method for short-term interest rates. Liberty's short-term borrowing rate for the review period averaged 5.31 percent (5.31%). The interest amount is component "I" of the FAC calculation. The total accumulation interest amount for the Review Period of September 1, 2022 through February 29, 2024, was $2,230,703.

2. Summary of Interest Implications

If Liberty imprudently calculated the monthly interest amounts or imprudently used a short-term debt borrowing rate that did not fairly represent the actual cost of Liberty's short-term debt, ratepayer harm could result from understated or overstated monthly interest amounts.

[29] Money Pool means a financial arrangement established by a parent or holding company of a regulated utility. It is administered by such parent company or a centralized service company affiliate, to (A) establishes a general purpose fund into which a member thereof may lend or borrow funds through the money pool on a short-term basis to or from affiliates, and/or (B) facilitate favorable interest rates for short-term borrowings or lending by affiliates who are members of the money pool.

3. Conclusion

Staff found no evidence Liberty acted imprudently with regard to its monthly interest rates and calculation of monthly interest amounts during the review period.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0026 and 0051;

b. Liberty's FAR Filings in Cases ER-2023-0342, ER-2024-0118 and ER-2024-0274; and,

c. Liberty's interest calculation work papers in support of the interest calculation amount on the under-recovered or over-recovered balance.

Staff Expert: Teresa Denney

VI. UTILIZATION OF GENERATION CAPACITY

1. Description

Liberty's generation consists of a mixture of Coal, Natural Gas/Oil, Wind (PPA), and Hydro generating stations as indicated in Table 14.[30] Table 14 contains the MWh used by each generating unit and the percentage associated with that unit's overall MWh production. Table 15 contains the net-generation broken down by unit type for Liberty's fleet. These tables illustrate how Liberty's generation fleet is being called upon by SPP in actual operation throughout the Review Period from September 1, 2022 through February 29, 2024:

Table 14 – Confidential[31]

**

[redacted]

[30] Liberty's Response to Staff Data Request No. 0015.

[31] Liberty's Response to Staff Data Request No. 0015.

[redacted]

**

Table 15 – Confidential[32]

**

[redacted]

**

2. Self – Commitment of Baseload Generation Facilities into SPP

During this FAC prudence review, Staff conducted a review of commitment status of Liberty's electric generation facilities into SPP in an effort to determine any negative impacts that might be occurring because of such actions. Liberty has varied electric generation facilities that are designed to provide varying types of services to its customers. These generation

[32] Liberty's Response to Staff Data Request No. 0014.

facilities include coal, natural gas, hydro, and wind turbines. Each one of Liberty's generation facilities has its own distinct operating characteristics and requires specific operational guidelines to be followed as to maintain the reliability of the units as determined by Liberty's plant operations teams to determine optimal plant reliability and manufacturer operational guidelines.[33] The SPP market allows participants to commit resources in different ways rather than have the market choose which units to run. SPP utilizes five resource offer commitment status designations[34] for its market participants ("MP"):

> **1. Market –** the resource is available for centralized unit commitment through its price sensitive (merit-based) price quantity offers.
>
> **2. Self –** the market participant is committing the resource through price insensitive offers outside of centralized unit commitment.
>
> **3. Reliability –** the resource is off-line and is only available for centralized unit commitment if there is an anticipated reliability issue.
>
> **4. Outage –** the resource is unavailable due to a planned, forced, maintenance, or other approved outage.
>
> **5. Not participating –** the resource is otherwise available but has elected not to participate in the day-ahead market.

Some of these reasons to decide to self-commit are unavoidable and can require the resource to be offered in self-commitment status. Testing the output of a plant, as periodically required by regulatory agencies, is a frequent justification. SPP stated in their 2019 white paper on self-committing:

> Some of the reasons, such as high start-up costs, fuel offer through dollar-based offer parameters. Thermal damage due to start-ups and shutdowns and resulting major maintenance could be included in mitigated offers starting in April 2019. SPP has seen a decline in self-committed generation over time and it is possible that perceptions of economic justifications have changed over time.[35]

[33] SPP, Self-committing in SPP markets: Overview, impacts, and recommendations, December 2019, Page 4.
[34] *Id*, Page 5.
[35] *Id*, Page 8.

Staff analyzed data received from Liberty[36] to determine the financial impacts of the self-commit units as offered and cleared into the SPP Real-time market. Combined Interest Resources (CIR): Iatan 1, Iatan 2, and Plum Point were not included in this review as they are operated and offered into the market by the majority owner.[37] Staff reviewed the hourly real-time transactions that were deemed Self Commitment by taking the hourly real time energy cost and adding it to the hourly total revenue for that same hour for the individual generating unit that was self-committed. The overall findings revealed that 67.8% of Liberty's self-commitment hourly transactions had positive revenues associated with them.

3. Conclusion

Staff did not observe any evidence of imprudent utilization of generation resources during this prudence review.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0014, 0015, 0060 and 0068;

b. SPP, Self-committing in SPP markets: Overview, impacts, and recommendations, December 2019; and,

c. EW-2019-0370.

Staff Expert: Jordan T. Hull

VII. HEAT RATES

1. Description

Heat rates of generating units are an indicator of each unit's performance. A heat rate is a calculation of total volume of fuel burned for electric generation multiplied by the average heat content of that volume of fuel for a given time period divided by the total net generation of electricity in kilowatt hours (kWh) for that same time period.

2. Summary of Cost Implications

Heat rates are inversely related to the efficiency of the generating unit. Increasing heat rates of specific units over time may indicate that a specific unit's efficiency is declining. Heat rates can vary greatly depending on operating conditions including but not limited to load, hours

[36] Staff Data Request No. 0060 in File No. EO-2024-0241.
[37] Staff Data Request No. 0068 in File No. EO-2024-0241.

of operation, shut downs and startups, unit outages, derates, and weather conditions. Therefore, a good indication of unit performance for frequently used units is an analysis of the trend of heat rates over time. A permanent increase in monthly heat rates is commonly the result of a decrease in a generating unit's efficiency. This typically occurs when additional emissions reduction equipment is added to the exhaust of the generating unit. Continued utilization of units with sustained elevated heat rates could result in Liberty incurring higher fuel costs per unit of electricity generated than it would otherwise have incurred. If Liberty was imprudent in response to the ongoing trend of a unit's heat rate, ratepayer harm could result from an increase in the fuel costs that are collected through Liberty's FAC charges.

3. Conclusion

In reviewing the monthly heat rates of the Liberty's generating units, Staff found no indication that Liberty acted imprudently during the review.

4. Documents Reviewed

a. Liberty's response to Staff Data Request No. 0019; and,

b. Heat rate test data submitted by Liberty in compliance with Rule 20 CSR 4240-3.190.

Staff Expert: Jordan T. Hull

VIII. PLANT OUTAGES

1. Description

Outages occurring at any of the generating units can have an impact on how much Liberty pays for fuel and purchased power and could result in Liberty paying more for fuel and purchased power cost than is necessary. Liberty is required by the North American Electric Reliability Corporation ("NERC") to submit data for every outage in accordance with Generating Availability Data System ("GADS") data reporting instructions effective January, 2012. Generating unit outages generally can be classified as scheduled outages, forced outages, or partial outages (derating).

Staff examined the outages of Liberty's generation fleet and the timing of these outages to determine if the outages were imprudently taken. Any planned outage during peak load demand times or a period of high replacement energy prices has the potential result of Liberty paying more for fuel and purchased power costs than it would have paid if the outage was planned during forecasted low load times. Periodic planned outages are required to maintain each generating unit in peak operating condition to minimize forced or maintenance outages that could occur during peak load demand or periods of high replacement energy prices. Liberty has little or no control over the timing of maintenance or forced outages of the generating stations it owns and operates when such outages are the result of unforeseen events; therefore, these types of outages are not included as a part of this prudence review.

2. Summary of Cost Implications

An imprudent outage could result in Liberty purchasing expensive spot market energy or running its more expensive units to meet demand and could result in customer harm through an increase in customer FAC charges.

3. Conclusion

Staff did not observe any evidence of imprudent outages during the time period examined in this prudence review.

4. Documents Reviewed

a. Liberty's responses to Staff Data Request Nos. 0003, 0004, 0005, and 0006; and,

b. Monthly Outage data submitted by Liberty in compliance with Rule 20 CSR 4240-3.190.

Staff Expert: Jordan T. Hull

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eleventh Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of The Empire District Electric Company d/b/a Liberty	)))))	File No. EO-2024-0241

AFFIDAVIT OF AMANDA C. CONNER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW AMANDA C. CONNER and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Amanda C. Conner
AMANDA C. CONNER

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 26th day of August 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

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eleventh Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of The Empire District Electric Company d/b/a Liberty	)))))	File No. EO-2024-0241

AFFIDAVIT OF TERESA DENNEY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW TERESA DENNEY and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Teresa Denney

TERESA DENNEY

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 22nd day of August 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

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eleventh Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of The Empire District Electric Company d/b/a Liberty	)))))	File No. EO-2024-0241

AFFIDAVIT OF JORDAN T. HULL

STATE OF MISSOURI COUNTY OF COLE	)))	ss.

COMES NOW JORDAN T. HULL and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Report*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Jordan Hull

JORDAN T. HULL

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 22nd day of August 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

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eleventh Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of The Empire District Electric Company d/b/a Liberty	)))))	File No. EO-2024-0241

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 *Staff Report*; 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 23rd day of August 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