Exhibit No.: _____
Issue(s): Fuel Adjustment Clause (FAC)
Witness/Type of Exhibit: Mantle/Reply to Answers to Commission Questions
Sponsoring Party: Public Counsel
Case No.: ER-2019-0374

REPLY TO TESTIMONY RESPONDING TO COMMISSION QUESTIONS

OF

LENA M. MANTLE

Submitted on Behalf of the Office of the Public Counsel

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2019-0374

May 12, 2020

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company's Request for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in its Missouri Service Area	)))))	Case No. ER-2019-0374

VERIFICATION OF LENA M. MANTLE

Lena M. Mantle, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my responsive testimony to answers to Commission questions in the above-captioned case.

3. My answer to each question in the attached responsive testimony to answers to Commission questions is true and correct to the best of my knowledge, information, and belief.

Lena M. Mantle
Senior Analyst
Office of the Public Counsel

REPLY TO TESTIMONY RESPONDING TO COMMISSION QUESTIONS

OF

LENA M. MANTLE, P.E.

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2019-0374

Q. What is your name?

A. Lena M. Mantle.

Q. Are you the same Lena M. Mantle who testified in direct, rebuttal, and surrebuttal in this case for the Office of Public Counsel ("OPC")?

A. Yes I am.

Q. What is the purpose of your testimony in reply to testimony responding to Commission questions?

A. In this testimony I respond to the supplemental testimony of Empire witnesses Aaron J. Doll, and Todd W. Tarter, and Staff witness Brook Mastrogiannis regarding Commissioner's questions as to Empire's fuel adjustment clause ("FAC").

FAC Question 1. Empire - Will the base fuel rate for the FAC be reset in the next rate case?

Q. Should the FAC base factor be reset in the next case?

A. Yes. It should be reset in every case.

I agree with Mr. Tarter that it is appropriate to reset the FAC base factor in Empire's next general rate case. However, it is also appropriate for the FAC base factor to be reset in this case for the same reasons Mr. Tarter gives in his supplemental testimony. Mr. Tarter states that Empire's generation mix will change for the next case with the retirement of the Asbury generation unit, and

that all other pertinent FAC costs, prices and revenues should be updated to then current levels.[1]

However, the Asbury unit, as Public Counsel witness John A. Robinett and Staff witness Chuck Poston testify in this case, was, operationally, shut down for the last time on December 12, 2019, well before the Commission-ordered true-up cutoff date of January 31, 2020. In addition, many of Empire's pertinent costs, prices, and revenues are different in this case as compared to Empire's last case. These differences are shown on Schedule LMM-Q-1 where I provide the components of the base factor agreed to in the global agreement[2] and the alternatives recommended by Empire[3] and Staff [4] in their testimonies in reply to Commission questions.

In regards to the importance of accurately setting the FAC base, Empire witness Mr. Tarter provided rebuttal testimony[5], and in response to Commission question 4b supplemental testimony[6] regarding the importance of setting the FAC base accurately and the potential harm to Empire of increasing the incentive sharing percentage with an inaccurate FAC base. I agree with his testimony that setting the FAC base factor as accurately as possible is an important component of minimizing the impact to Empire of any incentive mechanism. So just as the FAC base factor should be reset in the next case, it should be reset in this case.

[1] Ex. 1011, Empire witness Todd Tarter, Supplemental Testimony, pp.1-2.
[2] *Global Stipulation and Agreement*, p. 3.
[3] Ex. 18, Supplemental Direct Testimony of Aaron Doll, p. 4.
[4] Ex. 137, Surrebuttal/True-up Direct Testimony of Brook Mastrogiannis, p. 2.
[5] Ex. 15, Empire witness Todd Tarter, Direct Testimony, pp. 6-7.
[6] Ex. 1011, Empire witness Todd Tarter, Supplemental Testimony, p. 7-8.

FAC Question 2. Empire - What is the source for the capacity to fulfill the obligations for the MJMEUC contract?

Q. Empire witness Doll states, "The listed capacity is the same capacity with which the both cities were served prior to their aggregation and creation of the Southwest Missouri Power Electric Pool ("SWMPEP")." Is the generation that the municipalities were served with prior to the MJMEUC contract the same as the sources of capacity OPC provided in its answer to this question?

A. No. Currently there are no designated generation resources to serve full or partial requirement wholesale municipalities, just as there are no designated generation resources to serve residential, commercial, or industrial customers. Costs of all of Empire's generation resources are allocated to the wholesale customers using the jurisdictional allocation factors, with the municipalities being FERC wholesale jurisdictional. In contrast, specific generation resources and megawatt amounts are specified in the MJMEUC contract as summarized on page 3 of Public Counsel's answers to this question filed on May 6, 2020. This is just one way the MJMEUC contract is different from a full or partial requirements contract to serve municipalities referenced in Empire's FAC tariff.

FAC Question 3. All parties - What is the appropriate base factor for the FAC and what evidence supports it?

Q. Should the Commission set the base factor in this case at the current $24.15 per MWh as Mr. Tarter and Staff witness Mastrogiannis propose?

A. No. As described above and shown in Schedule LMM-Q-1, the costs and revenues included in the base factor have changed considerably since Empire's last general rate case. The very first cost listed – Fuel – was estimated in the last case to be $64 million. In this case Empire estimated it to be $98 million and Staff estimated it to be $91 million. This alone shows quite a difference between the

fuel cost included in Empire's FAC base in its last general rate case and its fuel costs in this case.

In addition, the fuel costs both Empire and Staff estimated in this case include the coal, coal transportation, oil, and variable O&M costs associated with Empire's Asbury plant. This plant is no longer operating, meaning both Staff and Empire's estimates of fuel costs are too high, even before the rates from this case go into effect.

Q. Empire witness Tarter provides testimony that using the same base factor from the last case is reasonable because it is nearly identical to the base factor Empire proposes in this case. Do you agree that this supports keeping the base factor the same?

A. No. Empire's proposed FAC base factor includes 100% of Empire's transmission costs and revenues. It also includes SPP Schedule 1A Tariff Administration and Schedule 12 FERC Assessment costs. Only a portion of the transmission costs and none of transmission revenues, SPP Schedule 1A Tariff Administration or Schedule 12 FERC Assessment costs were included in Empire's FAC base in the last case. So comparing Empire's proposed FAC base factor in this case to Empire's FAC base factor in its last general rate case is comparing apples to oranges, and does not support keeping the current FAC base factor.

Furthermore, the $24.16/MWh FAC base factor that Empire recommends in Mr. Tarter's supplemental testimony is from Empire's direct case as provided in Mr. Doll's supplemental direct testimony.[7] Empire did not update it through the true-up period.

In addition to this factor not being based on the most recent data, the adoption of Empire's base factor of $24.15/MWh conflicts with the stipulation agreement paragraph 6 in which the signatories agree to a continuation of

Empire's current FAC with the changes listed further in the agreement. These changes do not include 100% of transmission revenues and costs, SPP Schedule 1A Tariff Administration costs, or Schedule 12 FERC Assessment costs. Therefore, if the Commission adopts Empire's FAC base, which it did not update for true-up costs, it could create confusion in future FAC rate change cases regarding exactly what costs and revenues are included in the FAC.

Q. Are these extra costs comparable to the decrease in Asbury's fuel costs that were included in Empire's last rate case?

A. Due to the complex interactions between fuel costs and the energy market, there is no way to tell without doing a fuel run.

Q. What is the appropriate FAC base factor in this case?

A. Public Counsel generally supports Staff's calculations of its true-up base factor, with three changes. The appropriate base factor should:

1) Exclude fuel, variable operation and maintenance costs, and SPP revenues for Asbury generation which shut down for the last time on December 12, 2019;

2) Include additional transmission costs since the absence of Asbury generation lowers the total generation Empire sells into the market but does not change the energy Empire purchases from the SPP market; and

3) Include transmission revenues received through the SPP schedules for which costs flow through Empire's FAC at the same percentage as the transmission costs.

Therefore, for a base factor consistent with Empire's generation resources at the end of the true-up period, the Commission should order Staff to re-run its fuel

[7] Ex. 18, Supplemental Direct Testimony of Aaron Doll, p. 4.

model without Asbury generation and account for these three factors in the calculation of the FAC base factor.

FAC Question 4a. Ms. Mantle also states in her surrebuttal testimony that, "It is very likely that Empire would have reduced the hedging losses if, at that time, it was required to absorb 15 percent of the losses ($14.3 million) instead of the 5 percent ($4.8 million) it absorbed." Why shouldn't the Commission change the FAC sharing percentage in this case when Empire failed to control hedging costs that were largely passed on to their customers for a decade?

Q. Would you summarize Empire's response to that question?

A. Empire witness Doll's response to the Commissioner's question is that the Commission found Empire's hedging policy prudent and that, because I provided testimony in an Evergy Missouri West case that the Sibley plant was a hedge for its customers and should remain an Evergy generating resource, I am inconsistent regarding my position on hedging.

Q. Are you being inconsistent?

A. No. Hedging is a tool that can be used to reduce risk and smooth out price fluctuations. Hedging takes many forms. It can be financial instruments or physical power plants. Either or neither may be appropriate in any given circumstance. Some hedging policies are more efficient than others. A hedging practice may be prudent in one circumstance or for a certain time and not another. It is my opinion that Empire should have changed its financial and physical hedging policy sooner than it did due to falling, then stabilizing, natural gas prices, and it is my opinion that the Sibley power plant was a good hedge against fluctuations in energy market prices. I do not find this inconsistent. Different markets and different conditions; different hedging strategies.

Q. Was the hedging policy Empire employed the only possible hedging policy for natural gas purchases?

A. No. There are numerous hedging policies; some are better in markets with increasing prices and some better in markets with decreasing prices.

Q. Could Empire have been more efficient in its hedging practices?

A. Yes, I think so. It could have modified its practices when it became obvious that the production of shale oil was resulting in decreasing natural gas prices, and when it was evident the price of natural gas was stabilizing. Empire should have changed its hedging practices. It is logical that, if Empire was absorbing more of the losses through its FAC, it is very likely that it would have examined its hedging practices sooner.

Q. What do you have to support your opinion?

A. Empire witness Tarter provides testimony in response to Commission FAC question 4.b. regarding the measurement of harm to Empire. He testifies that $1.3 million would "most certainly constitute real harm" to Empire.[8] If the sharing had been 85%/15%, over the ten years prior to the prudence audit, Empire would have absorbed about $1.43 million a year. If $1.3 million constitutes real harm, it is safe to say that if Empire was losing $1.43 million a year due to its hedging strategy, it would have likely changed its strategy much sooner than it did to the benefit of both Empire and its customers.

[8] Ex. 1011, Todd Tarter, Supplemental Testimony to Address Commissioner Questions, p. 5.

FAC Question 4b. Ms. Mantle also states in her surrebuttal testimony that, "Since the FAC was established, Empire has recovered over 99.9% of its FAC costs placing almost all of the risk associated with its FAC costs on the customers and very little on Empire (0.1%). OPC's modest proposal would shift 0.2% more risk to Empire still leaving 99.7% of the risk on the customers." Under the current sharing percentage Empire has absorbed an average of $150,000 a year in FAC costs for the past 11 years, so what is the real harm of requiring Empire to be exposed to an additional 0.2% of FAC risk?

Q. Would you summarize Empire's response to this question?

A. It is Empire's position that there is a "potential" harm to Empire if it is exposed to an additional 0.2% of FAC risk.[9] Mr. Tarter explains how the measurement of 0.2% is not a good measurement because it is over a long period of time, and how it could be different in the future. Mr. Tarter then expresses concern that the customers could be harmed by changing the sharing percentage[10] before he expresses his concern that changing the sharing could be viewed negatively by the financial community potentially harming Empire's financial profile.[11] Mr. Tarter concludes his response to this Commission question by describing how important it is to set the FAC base factor is in a general rate case.[12]

Q. How do you respond to Mr. Tarter's testimony that the 0.2% is not a good measurement and it could be different in the future?

A. The percentage will definitely be different in the future and 0.2% is one of many measurements. I provided in Schedule LMM-S-1 attached to my surrebuttal testimony and again attached to this testimony as LMM-Q-2 the information necessary to be able to calculate this percentage over every accumulation period

[9] Ex. 1011, Todd Tarter, Supplemental Testimony to Address Commissioner Questions, pp. 4-5.
[10] *Id.*, pp. 5-6.
[11] *Id.*, p. 6.
[12] *Id.*, pp. 7-8.

since the Commission authorized Empire to use a FAC. Mr. Tarter's calculation that Empire absorbed 0.38% is consistent with the information I provided.

Another measurement that is useful is that over the same three-year time period in which Empire ***absorbed $1.3 million*** due to the 95%/5% sharing mechanism is that, *absent the FAC,* Empire would have ***absorbed $34 million*** in fuel and purchased power costs over that same time period.

Q. What is your response to Mr. Tarter's testimony that Empire's customers could be harmed by changing the sharing percentage to 85%/15%?

A. It is true that a change in the incentive mechanism to 85%/15% results in a lower *percentage* of savings being returned to customers. However, that percentage savings reduction does not necessarily translate to a lesser reduction in customer bills. It is general practice that when someone has a larger incentive to save, savings are greater. This is the principle behind many salary bonuses. A larger incentive through the FAC should result in larger savings. A smaller percentage of greater dollar savings could very well be a greater reduction, in dollars and cents, than a larger percentage of a smaller savings amount. This is why Public Counsel is recommending Empire's FAC incentive be changed to a sharing of 85%/15%.

Q. Does Mr. Tarter provide any support for his testimony that changing the sharing incentive may be viewed negatively by the financial community potentially harming Empire's financial profile and its ability to attract financing necessary to meet customers' needs?

A. No.

Q. What is the real harm of not requiring Empire to be exposed to an additional FAC risk?

A. The harm of not exposing Empire to more FAC risk is that Empire puts its fuel and purchase power expenditures on auto-pilot much like it did with its hedging policy knowing that it will recover almost all of its fuel and purchased power costs regardless of whether it could have been more efficient in its expenditures. I believe avoiding such complacency is why the Missouri Legislature included a provision for an incentive mechanism in Section 386.266 RSMo.

Q. Does this conclude your reply to testimony responding to Commission questions?

A. Yes, it does.

Description	Staff Proposed True up Base Factor Total Company	EDE Proposed Base Factor Total Company	Agreement Base Factor Total Company
FUEL			
Fuel	$ 91,376,194	$ 97,782,989	$ 64,233,473
Removed from FERC 501, 547 (Admin/Labor)	$ (239,286)	$ (276,885)	$ (100,183)
Gas Transportation - Variable	$ 260,711	$ 227,825	$ 153,435
Gas losses (LUF) at Cost of Gas	$ 977,386	$ 922,713	$ 539,058
AQCS Consumables (Ammonia, Limestone, PAC) - Variable	$ 1,629,852	$ 1,782,816	$ 2,399,192
Freeze Control Coal Adder	$ 7,176		$ 30,382
Other Fuel Related (Undistributed & Other & Unit Train)	$ 2,442,595	$ 4,178,553	$ 3,572,852
Staff Removed Labor from Other Fuel Related	$ (63,633)		$ (630,485)
TOTAL FUEL AND RELATED COSTS	**$ 96,390,995**	**$ 104,618,011**	**$ 70,197,724**
PUCHASED POWER ENERGY CHARGES			
Purchased power energy (Plum Point PPA, Wind PPAs, & Market Purchases)	$ 37,962,518	$ 36,279,098	$ 59,406,006
50 MW Plum Point O&M Cost- Variable	$ 3,280,764	$ 3,927,710	$ 3,652,771
TOTAL PURCHASED POWER ENERGY	**$ 41,243,282**	**$ 40,206,808**	**$ 63,058,777**
SPP INTEGRATED MARKETPLACE			
Native Load Cost	$ 162,179,916	$ 146,170,942	
OTHER ENERGY COSTS			
Net Emission Allowances	$ -	$ -	$ -
Transmission	$ 5,600,029	$ 13,568,075	$ 5,586,340
Net ARR/TCR	$ (13,763,360)	$ (14,663,530)	$ -
Ancillary/Other	$ 1,627,013	$ 1,500,000	
LESS: Net Renewable Energy Credits (REC)	$ (324,023)	$ (229,286)	$ (429,682)
LESS: Off-System Sales Revenue	$ (166,676,225)	$ (159,095,653)	$ (9,763,693)
TOTAL FUEL AND PURCHASED POWER FOR EMPIRE FAC BASE	**$ 126,277,627**	**$ 132,075,367**	**$ 128,649,466**
total kWh's	5,412,557,989	5,465,856,000	5,326,447,974
Base Cost per kWh	**$ 0.02333**	**$ 0.02416**	**$ 0.02415**
Base Cost per MWh	**$ 23.33**	**$ 24.16**	**$ 24.15**

Empire's Fuel Adjustment Clause

Information from Current and Cancelled Tariff Sheets

Accumulation Period		Total Company			Missouri Retail Jurisdiction					
	Ending Date	TEC	NBEC	Energy Ratio	TEC	NBEC	(TEC-NBEC)	Customer Share	Empire Share
22	8/31/2019	$ 63,483,115	$ 64,887,766	81.79%	$ 51,924,464	$ 53,073,364	$ (1,404,651)	$ (1,091,455)	$ (57,445)
21	2/28/2019	$ 74,862,132	$ 66,584,207	83.38%	$ 62,417,045	$ 55,515,243	$ 8,277,925	$ 6,556,712	$ 345,090
20	8/31/2018	$ 64,930,243	$ 67,415,208	82.38%	$ 53,491,447	$ 55,538,634	$ (2,484,965)	$ (1,944,828)	$ (102,359)
19	2/28/2018	$ 84,144,071	$ 65,471,519	83.18%	$ 69,992,706	$ 54,460,508	$ 18,672,552	$ 14,755,589	$ 776,610
18	8/31/2017	$ 69,070,641	$ 62,822,095	81.79%	$ 56,490,184	$ 51,379,742	$ 6,248,546	$ 4,854,920	$ 255,522
17	2/28/2017	$ 66,508,009	$ 62,011,760	82.65%	$ 54,970,282	$ 51,254,036	$ 4,496,249	$ 3,530,433	$ 185,812
16	8/31/2016	$ 60,294,281	$ 71,719,486	82.02%	$ 49,455,700	$ 58,827,094	$ (11,425,205)	$ (8,902,825)	$ (468,570)
15	2/29/2016	$ 63,582,057	$ 68,751,492	82.33%	$ 52,347,405	$ 56,603,425	$ (5,169,435)	$ (4,043,219)	$ (212,801)
14	8/31/2015	$ 69,754,928	$ 74,062,163	82.24%	$ 57,366,358	$ 60,908,622	$ (4,307,235)	$ (3,365,151)	$ (177,113)
13	2/28/2015	$ 75,012,690	$ 76,149,399	83.94%	$ 62,967,398	$ 63,921,578	$ (1,136,709)	$ (906,471)	$ (47,709)
12	8/31/2014	$ 77,536,319	$ 74,979,148	82.01%	$ 63,585,233	$ 61,488,173	$ 2,557,171	$ 1,992,207	$ 104,853
11	2/28/2014	$ 83,236,791	$ 78,366,213	83.46%	$ 69,465,915	$ 65,401,136	$ 4,870,578	$ 3,861,540	$ 203,239
10	8/31/2013	$ 75,335,386	$ 75,002,161	83.03%	$ 62,554,569	$ 62,277,876	$ 333,225	$ 262,858	$ 13,835
9	2/28/2013	$ 70,581,445	$ 71,948,220	80.13%	$ 56,557,838	$ 57,653,053	$ (1,366,775)	$ (1,040,454)	$ (54,761)
8	8/31/2012	$ 74,678,147	$ 77,190,644	80.20%	$ 59,889,169	$ 61,904,100	$ (2,512,497)	$ (1,914,185)	$ (100,747)
7	2/29/2012	$ 65,773,548	$ 70,393,679	82.22%	$ 54,082,171	$ 57,881,065	$ (4,620,131)	$ (3,608,949)	$ (189,945)
6	8/31/2011	$ 92,165,823	$ 81,456,890	81.14%	$ 74,783,142	$ 66,093,938	$ 10,708,933	$ 8,254,744	$ 434,460
5	2/28/2011	$ 80,289,219	$ 78,376,098	83.90%	$ 67,359,028	$ 65,754,006	$ 1,913,121	$ 1,524,771	$ 80,251
4	8/31/2010	$ 89,018,894	$ 81,984,294	82.46%	$ 73,406,957	$ 67,606,069	$ 7,034,600	$ 5,510,843	$ 290,044
3	2/28/2010	$ 79,431,215	$ 75,540,365	84.93%	$ 67,457,923	$ 64,153,572	$ 3,890,850	$ 3,139,134	$ 165,218
2	8/31/2009	$ 74,904,898	$ 75,974,254	81.96%	$ 61,393,384	$ 62,269,847	$ (1,069,356)	$ (832,640)	$ (43,823)
1	2/28/2009	$ 77,599,808	$ 75,211,342	85.62%	$ 66,439,575	$ 64,394,613	$ 2,388,466	$ 1,942,714	$ 102,248
	Total	$ 1,632,193,660	$ 1,596,298,403		$ 1,348,397,893	$ 1,318,359,695	$ 35,895,257	$ 28,536,288	$ 1,501,910

Total Missouri FAC costs paid by Missouri retail customers	$ 1,346,895,983	Empire	$ 1,501,910
	99.9%		0.1%

Missouri Energy ratio was calculated given information from tariff sheets to obtain "Fuel Cost Recovery" shown in tariff sheets.