

Exhibit No.: _____
Issue(s): Tariff Issue/Fuel Adjustment Clause
Witness/Type of Exhibit: Mantle/Direct
Sponsoring Party: Public Counsel
Case No.: ER-2021-0312

RATE DESIGN
DIRECT TESTIMONY
OF
LENA M. MANTLE

Submitted on Behalf of the Office of the Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY
D/B/A LIBERTY

FILE NO. ER-2021-0312

November 17, 2021

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**


In the Matter of the Request of The)
Empire District Electric Company d/b/a)
Liberty for Authority to File Tariffs) Case No. ER-2021-0312
Increasing Rates for Electric Service)
Provided to Customers in its Missouri)
Service Area)

AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Lena M. Mantle, of lawful age and being first duly sworn, deposes and states:


1. My name is Lena M. Mantle. I am a Senior Analyst for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rate design direct testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.


Lena M. Mantle
Senior Analyst

Subscribed and sworn to me this 17th day of November 2021.



TIFFANY HILDEBRAND
My Commission Expires
August 8, 2023
Cole County
Commission #15637121


Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2023.

DIRECT TESTIMONY
OF
LENA M. MANTLE
THE EMPIRE DISTRICT ELECTRIC COMPANY
FILE NO. ER-2021-0312

1 **Q. What are your name and business address?**

2 A. My name is Lena M. Mantle and my business address is P.O. Box 2230, Jefferson
3 City, Missouri 65102.

4 **Q. Did you testify in this case on behalf of the Office of Public Counsel in revenue**
5 **requirement direct testimony prefiled on October 29, 2021?**

6 A. Yes.

7 **Q. What is the purpose of this direct testimony?**

8 A. In this testimony I recommend changes to Empire's FAC tariff sheets designed to
9 clarify and shorten Empire's FAC, and to effectuate recommendations to Empire's
10 FAC that I made in my revenue requirement direct testimony. The changes I
11 recommend are to Empire's current FAC tariff sheets,¹ not to the revised FAC tariff
12 sheets Empire proposed in its direct case.

13 My recommended changes to Empire's current FAC tariff sheets are shown
14 in redline/strikeout and with all changes accepted in attached Schedules LMM-D-
15 4 and LMM-D-5 respectively.

16 **Q. Starting with the implementation of additions to Empire's current FAC tariff**
17 **sheets that you recommended in your revenue requirement direct testimony,**
18 **what is your first recommendation?**

19 A. In my revenue requirement testimony, I recommended language that would allow
20 a longer recovery period for recovery of extreme net costs. I propose that this

¹ P.S.C. Mo. No. 6, Sec. 4, Original Sheets No. 17i through 17q.

1 language be added to the definition of “Recovery Period” on FAC tariff sheet 17i
2 so that it would read as follows.

3 RECOVERY PERIOD:

4 The billing months during which a FAR is applied to retail customer
5 usage on a per kilowatt-hour (“kWh”) basis. *When extraordinary net*
6 *costs have been incurred in an accumulation period, for good cause the*
7 *Commission may allow (after opportunity for any party to be heard) the*
8 *recovery period to extend beyond six months. The amount not recovered*
9 *will be added to subsequent recovery periods with a true-up for the*
10 *extraordinary cost at the end of the Commission approved recovery time*
11 *period for the extraordinary cost.*

12 **Q. What is your next recommendation?**

13 A. Tariff sheet 17j includes a definition of fuel costs (FC). As I explained in my
14 revenue requirement direct testimony, the definition of fuel costs should be
15 modified to specifically exclude retirement and decommissioning costs. Currently
16 the tariff sheet language is simply “FC = Fuel Costs Incurred to Support Sales.” I
17 recommend the definition to be changed by including the italicized language as
18 follows:

FC = Fuel costs, *excluding decommissioning and retirement costs,*
incurred to support sales and revenues associated with the
Company’s in-service generating plants consisting of the following:

19 **Q. What is your next recommendation?**

20 A. Empire’s cost of energy used for research and development projects should be
21 explicitly excluded from Empire’s FAC. That cost would be the market price of
22 the energy at the time it was consumed multiplied by the amount of energy
23 consumed. Presently this cost is included in the purchased power costs included
24 the PP term of Empire’s FAC. Therefore, I recommend the first section in the
25 definition of PP found on Empire’s current FAC tariff sheet 17j be changed to read
26 as follows with additional language italicized:

- 27 1. Costs and revenues for purchased power reflected in FERC Account 555,
28 excluding: *1) all charges under Southwest Power Pool (“SPP”) Schedules*

1 1a and 12, and 2) amounts associated with energy purchased from the SPP
2 market to serve research and development projects of the Company. Such
3 costs include:

4 And, to fully remove the impact of research and development projects, the energy
5 used for the research projects should also be removed from the accumulation period
6 sales (S_{AP}) and recovery period sales (S_{RP}). The definition of S_{AP} found on Empire's
7 current FAC tariff sheet 17o should be changed to read as follows:

8 S_{AP} = Actual net system input (NSI), excluding the energy used by
9 Company research and development projects, at the generation level
10 for the accumulation period.

11 **Q. Why do you recommend adding “(NSI)” to the definition of S_{AP}?**

12 A. NSI is used in the definition of S_{RP}, yet never defined in Empire's tariff. NSI stands
13 for net system input. The definition of S_{AP} includes net system input. Rather than
14 adding another separate definition in the tariff sheets for NSI, I recommend
15 inserting “(NSI)” in the definition of S_{AP} to clarify the use of NSI in the definition
16 of S_{RP}.

17 **Q. What is your next recommendation?**

18 A. I recommend that the definition of S_{RP} found on Empire's current FAC tariff sheet
19 17p be modified to read as follows with new language in italics and language
20 removed struck out.

21 S_{RP} = Forecasted Missouri NSI kWh for the recovery period *excluding*
22 *energy projected to be used by Company research and development*
23 *projects.*

24 = Forecasted total system NSI * Forecasted Missouri retail kWh sales
25 Forecasted total system kWh sales

26 Where Forecasted total system NSI ~~kWh sales~~ includes kWh sales to
27 municipalities that are associated with Empire and excludes off-
28 system sales *and energy projected to be used by Company research*
29 *and development projects.*

1 **Q. Do you have any other recommendations that are based on recommendations**
2 **you made in your revenue requirement direct testimony?**

3 A. No.

4 **Q. What other changes to Empire’s FAC tariff sheets are you recommending?**

5 A. I recommend the paragraph in section 4 of the purchased power (PP) definition
6 currently found on tariff sheet 17l be moved above the description of hedging costs
7 currently found on tariff sheet 17n. After deletion of the last sentence in it, the
8 paragraph to be moved is:

9 Costs and revenues not specifically detailed in Factors FC, PP, E, or OSSR shall
10 not be included in the Company’s FAR filings; provided however, in the case
11 of Factors PP or OSSR the market settlement charge types under which SPP or
12 another market participant bills / credits a cost or revenue need not be detailed
13 in Factors PP or OSSR for the costs or revenues to be considered specifically
14 detailed in Factors PP or OSSR; and provided further, should the SPP or another
15 market participant implement a new charge type, exclusive of changes in
16 transmission revenue.

17 **Q. Why are you recommending that this paragraph be moved?**

18 A. This paragraph is intended to convey that only costs and revenues that are included
19 in the specific definitions of fuel cost (FC), purchased power costs (PP), emissions
20 cost (E), and off-system sales revenue (OSSR) flow through Empire’s FAC, yet
21 this paragraph currently is included in the definition of PP. This paragraph should
22 be removed from the definition of PP and moved to follow the definitions of factors
23 FC, PP, E, and OSSR.

24 **Q. Are you recommending that the last sentence of that paragraph, which reads,**
25 **“The list of sub-accounts included will be provided in the FAC Monthly**
26 **Reports,” be deleted?**

27 A. Yes, because the sub-accounts where the costs and revenues are recorded should be
28 listed in Empire’s FAC tariff sheets.

1 **Q. Why?**

2 A. Empire's tariff is a public document. Empire's monthly FAC reports are not
3 publicly available. If only included in Empire's FAC monthly reports, the list of
4 sub-accounts is not publicly available. There is nothing confidential about the sub-
5 account numbers or a short description of the nature of the costs/revenues that are
6 included in each subaccount. This information should be available to the public in
7 Empire's tariff.

8 **Q. Has Empire provided a representative list of the subaccounts?**

9 A. Yes. On page 1 of Schedule ZQ-6 attached to his direct testimony, Empire witness
10 Zachary Quintero provides a short descriptive listing of sub-accounts. I do not
11 agree that everything on that list should flow through Empire's FAC; however, it
12 provides an example of how a brief listing of sub-accounts could be provided in
13 Empire's FAC tariff sheets.

14 **Q. You are recommending a paragraph in section 4 on sheet 17l be moved. What
15 about subparagraphs A through E to section 4 on tariff sheets 17l and 17n?**

16 A. These subparagraphs should be removed from Empire's FAC tariff sheets.

17 **Q. Why?**

18 A. SPP or other regional transmission organizations ("RTO") may create a new cost
19 or revenue schedule that is like a cost or revenue that already flows through
20 Empire's FAC. These subparagraphs state a process for Empire to use to flow these
21 new costs and revenues through its FAC. The Commission's FAC rule, 20 CSR
22 4240-20.090, has been revised to include this process in Section (8)(D). Therefore,
23 this process language no longer serves any purpose in Empire's FAC tariff sheets,
24 and should be removed.

1 **Q. If these subparagraphs track the rule, why not leave them in Empire’s FAC tariff**
2 **sheets?**

3 A. They are unnecessary given the updates to the FAC rule, and they add significant
4 volume and complexity to Empire’s FAC tariff sheets. However, if these
5 subparagraphs are included in Empire’s FAC tariff sheets, then they need to be
6 moved out of the definition of PP into a new section titled ACCOUNTING FOR
7 COSTS AND REVENUES. This section should be added below “HEDGING
8 COSTS:” as shown on page 17n of Empire’s current tariff sheets.

9 **Q. What other recommended changes do you have to Empire’s FAC tariff sheets?**

10 A. The term “VAF” is used several times on Empire’s FAC tariff sheet that shows how
11 to calculate the FAC rate,² but it is not defined. I recommend that it be defined by
12 putting the words “the voltage adjustment factors (“VAF”) of” in front of the actual
13 numeric voltage factors in the first paragraph after the heading FUEL
14 ADJUSTMENT RATE currently found on tariff sheet 17o. As changed, this
15 paragraph would read, with language added italicized, as follows.

16 The FAR is the result of dividing the FPA by estimated recovery period SRP
17 kWh, rounded to the nearest \$0.00000. The FAR shall be adjusted to reflect the
18 differences in line losses that occur at primary and secondary voltage by
19 multiplying the average cost at the generator by *the voltage adjustment factors*
20 *(“VAF”) of 1.0429 and 1.0625, respectively.* Any FAR authorized by the
21 Commission shall be billed based upon customers’ energy usage on and after
22 the authorized effective date of the FAR. The formula for the FPA is displayed
23 below

24 **Q. Do you have any recommendations for Empire’s FAC tariff sheet that shows**
25 **the calculation of the FAC rate?**

26 A. Yes. There is a problem with the current FAC rate calculation tariff sheet in that
27 the jurisdictional allocation factor J shown in the table is not the jurisdictional
28 allocation factor for the accumulation period calculated using the accumulation

² Currently tariff sheet 17q.

1 period total sales for Missouri retail and total system as defined on tariff sheet 17o.
2 It is a number that is calculated dividing the sum of the monthly $((TEC - B) * J)$ by
3 the sum of the monthly $(TEC - B)$. Currently 17q contains two footnotes intended
4 to explain that the J factor shown in this table is not the jurisdictional ratio for the
5 accumulation period.

6 **Q. How do you recommend this be corrected?**

7 A. I recommend:

- 8 1) The footnotes be removed from the tariff sheet;
- 9 2) Line 4, Missouri Energy Ratio (J) be removed from the table;
- 10 3) The remaining lines in the table be renumbered;
- 11 4) The new line 4 be relabeled as “Sum of Monthly $(TEC - B) * J$ ”; and
- 12 5) The new line 6 be relabeled “Sum of Monthly $(TEC - B) * J * 0.95$.”

13 While the table would not show all the variables necessary to the calculation, it also
14 would not contain a number that was calculated differently than prescribed in the
15 tariff sheets.

16 **Q. Does this conclude your class cost-of-service direct testimony?**

17 A. Yes, it does.