

Exhibit No. 51

Empire District Electric Company – Exhibit 51
Testimony of Todd W. Tarter
Surrebuttal/True-Up Direct
File No. ER-2024-0261

CONFIDENTIAL DESIGNATIONS

The Empire District Electric Company d/b/a Liberty

ER-2024-0261

RE: All schedules (True-Up Direct Schedules TWT-1 and TWT-2) of Todd Tarter

The information provided is designated “Confidential” in accordance with Commission Rule 20 CSR 4240-2.135(2)(A)4, as it contains marketing analyses or other market-specific information relating to services offered in competition with others, including detailed information at the resource level and market negotiated prices and conditions that could result in anti-competitive behavior that might unreasonably impact the competitive process. The confidentiality shall be maintained consistent with Rule 2.135 and/or Section 386.480 RSMo., as the case may be.

Exhibit No.: _____
Issue(s): Fuel Adjustment Base Factor
Witness: Todd W. Tarter
Type of Exhibit: Surrebuttal & True-Up
Direct Testimony
Sponsoring Party: The Empire District
Electric Company d/b/a Liberty
Case No.: ER-2024-0261
Date Testimony Prepared: September 2025

**Before the Public Service Commission
of the State of Missouri**

Surrebuttal and True-Up Direct Testimony

of

Todd W. Tarter

on behalf of

The Empire District Electric Company d/b/a Liberty

September 17, 2025



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THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2024-0261

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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Todd W. Tarter. My business address is 602 South Joplin Avenue, Joplin,
4 Missouri.

5 **Q. Are you the same Todd W. Tarter who provided direct and rebuttal testimony in**
6 **this matter on behalf of The Empire District Electric Company d/b/a Liberty**
7 **(“Liberty” or the “Company”)?**

8 A. Yes.

9 **Q. What is the purpose of your surrebuttal and true-up direct testimony in this**
10 **proceeding before the Missouri Public Service Commission (“Commission”)?**

11 A. As a part of the Company’s true-up in this case, I will introduce the Company’s updated
12 fuel adjustment clause (“FAC”) base factor proposal and discuss the key assumptions
13 that were revised and the rationale for the changes. I also address portions of the rebuttal
14 testimonies of Staff witness Brooke Mastrogiannis and Office of the Public Counsel
15 (“OPC”) witness Lena M. Mantle.

16 **II. TRUE-UP DIRECT: UPDATED FAC BASE FACTOR PROPOSAL**

17 **Q. Has the Company updated its FAC base factor proposal in this case?**

18 A. Yes. As alluded to in my rebuttal testimony when it was stated that if new evidence or
19 updated calculations warrant a revision, the Company would reevaluate all related
20 figures accordingly. This evaluation has led to an updated FAC base factor proposal.
21 Also, as a result of the time that has passed since the Company’s original FAC base

1 factor was developed, key factors, including natural gas and market prices, have
2 changed.

3 **Q. How was this updated FAC base factor developed?**

4 A. Like the original proposal, the Company used the Encompass production cost model to
5 perform a simulation while analyzing the net fuel and purchased power cost level and
6 other eligible FAC costs and revenues for base rates in this case. This was based on an
7 annualized and normalized approach. The same general methodology as the original
8 proposal was used. The Encompass model was described in direct testimony.

9 **Q. What is the updated FAC base factor proposal, and how does it compare to the**
10 **Company's direct testimony proposal?**

11 A. The Company's updated FAC base factor proposal is \$17.85/MWh. This is \$1.26/MWh
12 higher than the original position of \$16.59/MWh. For more detailed information,
13 please see Confidential True-Up Direct Schedule TWT-1 and Confidential True-
14 Up Direct Schedule TWT-2.

15 **Q. Does this updated FAC base factor proposal continue to assume that all**
16 **transmission expense would be eligible to be recovered through the FAC?**

17 A. Yes. This assumption is the same as the original proposal.

18 **Q. Please list the key factors that were revised for the updated FAC base factor**
19 **proposal.**

20 A. All factors were considered, but the most impactful changes were to the following:

- 21 • Natural gas and market prices;
- 22 • Transmission Congestion Rights ("TCR") revenue offset;
- 23 • Renewable Energy Certificate (aka Renewable Energy Credit) ("REC")
24 revenue offset; and

- Elk River Extension.

Q. Why did the Company update natural gas and market prices?

A. Approximately one year has passed since the Company developed its initial FAC base factor proposal for this case. The Company acknowledges that the \$1.88/MMBtu weighted average cost of natural gas price that it used in its direct filing—while a reasonable assumption at the time—seems to be too low for establishing an accurate FAC base factor based on the current natural gas market. Market prices are correlated with the natural gas prices, so as the natural gas prices change, market prices change. Additionally, since the time the Company filed this case, Horizons Energy, the Company’s natural gas and market price consultant, has developed and delivered updated data. Initially, the Company utilized data from Horizons Energy’s Spring 2024 Reference Case, and the update run makes use of the most recent data from Horizons Energy’s Spring 2025 Reference Case.

Q. What is the annual weighted cost of natural gas in the updated proposal?

A. The updated weighted average cost of natural gas is \$4.04/MMBtu.

Q. What are the primary drivers for the estimated increase in natural gas and market prices?

A. In the most recent iteration of natural gas and market price development, Horizons Energy is predicting higher nationwide demand for electricity with the expected growth of larger load customers such as data centers and cryptocurrency mining customers. Additionally, due to the advent of more stringent resource adequacy requirements, such as increased planning reserve margins by season and unit performance-based accreditation (“PBA”), lower retirement rates for natural gas-fired resources and a lower installation rate for new renewable resources are anticipated as compared to the

1 prior set of data. These are the primary factors putting more pressure on the projected
2 natural gas and market price outlook.

3 **Q. What updates were made to revise the TCR revenue?**

4 A. As described in my rebuttal testimony, with the increase in natural gas prices comes an
5 increase in market prices. This includes the cost to purchase native load costs for
6 customers from the market. In its updated FAC base factor proposal, the Company has
7 increased the TCR revenue in order to offset more of that cost. This was accomplished
8 by having about a year of additional data and by weighting more recent years higher in
9 the calculation. The TCR revenue offset assumption increased from \$23,533,318 to
10 \$38,197,084 or 62.3%.

11 **Q. What updates were made to revise the REC revenue?**

12 A. With the benefit of more recent information, the Company made a couple revisions to
13 the REC revenue assumption for the updated FAC base factor proposal. Most
14 significantly, the Company increased the \$/REC assumption by about 60%. The
15 Company also slightly lowered the number of RECs available for sale from the Kings
16 Point wind resource to account for MJMEUC entitlements (resulting from the
17 MJMEUC sale described in direct testimony). Overall, this resulted in the REC revenue
18 offset assumption increasing from \$3,759,926 to \$5,851,899 or 55.6%.

19 **Q. Please describe the changes made to the FAC base factor related to the Elk River**
20 **extension.**

21 A. For a full discussion on the impact to the FAC base factor related to the Elk River
22 extension, please refer to the surrebuttal and true-up testimony of Company witness
23 Aaron J. Doll.

1 **Q. Is it fair to say that the changes described above bring the FAC base factor**
2 **assumptions in the Company’s updated proposal closer to the Staff direct case**
3 **assumptions?**

4 A. Yes. While not matching the Staff assumptions exactly, in the production cost modeling
5 that develops the Company’s updated FAC base factor proposal, the natural gas price,
6 TCR Revenue and REC Revenue all moved closer to the assumptions in the Staff direct
7 case position as compared to the Company’s original proposal.

8 **III. RESPONSE TO STAFF WITNESS BROOKE MASTROGIANNIS**

9 **Q. Did Staff update its FAC base factor proposal?**

10 A. Yes. In the rebuttal testimony of Staff witness Mastrogiannis, she reported that Staff
11 changed REC revenue values to correct a sign error, in order to demonstrate the REC
12 values as revenues and not costs. Following this correction, Staff’s proposed base factor
13 is now \$15.35/MWh (as opposed to \$18.27/MWh). This is the same value that was
14 footnoted in my rebuttal testimony. The Company agrees with this correction. Ms.
15 Mastrogiannis went on to report that this base factor number will be updated by Staff
16 again with true-up testimony.

17 **IV. RESPONSE TO OPC WITNESS LENA M. MANTLE**

18 **Q. On page 8, beginning at line 9, OPC witness Mantle states that in Liberty’s last**
19 **rate case, Liberty agreed to a low FAC base cost to keep the overall rate increase**
20 **low knowing it would, with a 95/5 FAC sharing mechanism, recover almost all of**
21 **its FAC costs. What is your response?**

22 A. I strongly disagree with Ms. Mantle’s statement. First, Liberty had no unilateral control
23 over the FAC base cost in the last case. The FAC base factor in the last case was the
24 result of a negotiated settlement with Commission approval. The FAC base factor had

1 input from several other parties to the case and was a part of a global settlement. Also,
2 in the last case, about 600 MW of new wind resources were included in the FAC base
3 calculation for the first time, making it more difficult to predict outcomes. This was a
4 change to the Company's generation mix with limited operational history at the time
5 the FAC base factor was established.

6 **Q. OPC witness Mantle contends that the Company is artificially keeping its FAC**
7 **base cost low in this case. What is your response?**

8 A. Again, I strongly disagree. In fact, the Company's FAC proposal in its direct filing was
9 higher than the Staff proposal. In direct testimony, the Company had an FAC base
10 factor proposal of \$16.59/MWh and Staff had a proposal of \$15.35/MWh after making
11 the above-described correction.

12 **Q. In making this comparison, are there additional considerations that should be**
13 **taken into account?**

14 A. Yes. As noted in my rebuttal testimony, a key factor complicating this comparison is
15 the difference in transmission cost components between the proposals. This remains a
16 significant conception distinction at this stage of the proceeding and materially affects
17 the compatibility of the figures. Additionally, as outlined in the true-up section of my
18 testimony, the Company has revised its position on the FAC base factor, increasing it
19 to \$17.85/MWH. This update further impacts the comparison and should be considered
20 when evaluating the proposal in context.

21 **Q. Do any of the OPC recommendations work to lower the base factor?**

22 A. Yes. In her direct testimony, OPC witness Angela Schaben proposed a significantly
23 higher level of TCR revenue than what the Company included in its direct filing or in
24 the update presented earlier in this testimony. Since the TCR revenue acts as an offset

1 to energy costs, the higher level as proposed by OPC witness Schaben would serve to
2 *lower* the overall FAC base factor.

3 **Q. Did OPC run a production cost model to develop a position on the FAC base factor**
4 **for this case?**

5 A. No.

6 **Q. At this point in the proceeding, has OPC conducted any other type of analysis to**
7 **put forth an FAC base factor proposal in this case?**

8 A. Not to my knowledge.

9 **Q. In her rebuttal testimony, OPC witness Mantle claims that the Company did not**
10 **discuss how fuel model inputs were developed in direct testimony. How do you**
11 **respond?**

12 A. I strongly disagree with Ms. Mantle's claim. In general, the direct testimony provides
13 a high-level narrative for the target audience (both technical and non-technical readers)
14 to understand the key factors that concerns the Company's FAC base factor proposal
15 in this case. This is done in a manner to provide the most important points without
16 becoming overly burdensome and includes:

- 17 • The purpose of the direct testimony and the purpose of the FAC base factor;
- 18 • What FAC related schedules are provided, how they are identified and what
19 they contain;
- 20 • What the Company is requesting for fuel recovery and other Company
21 witnesses who address related topics;
- 22 • The proposed FAC base factor and how it compares to the current value;
- 23 • The primary drivers for changes to the FAC base;
- 24 • A detailed description of these changes (e.g., new MJMEUC PPA);

- 1 • A detailed listing of all the FAC cost and revenue components;
- 2 • High-level model process and a description of the production cost model the
- 3 Company utilized;
- 4 • The source of the natural gas and market prices which are key inputs; and,
- 5 • The weighted average natural gas price used in the model which also impacts
- 6 the correlated market prices.

7 Additionally, the schedules to the direct testimony provide the next layer of detail. This
8 included a pro forma version of the Company report known as the Summary of Fuel
9 and Purchased Power (Direct Schedule TWT-2), for which many stakeholders are
10 familiar. This is an annual report based on the Company production cost model run that
11 help develop the FAC base proposal. It shows, for every Company resource, the level
12 of generation, the costs, and revenues received from the market. It also shows all the
13 Company load charges (i.e., purchases from the market for native load) and other fuel
14 related costs and revenues eligible for the FAC proposal. It contains a section that
15 calculates the net fuel and purchased power with and without demand (e.g., net capacity
16 charges) and the Missouri FAC base factor. A second direct testimony schedule (Direct
17 Schedule TWT-3), summarizes each cost and revenue component of the FAC base
18 factor proposal, using information from Direct Schedule TWT-2. Essentially, this
19 schedule, which has evolved from past cases, shows how the FAC base factor was
20 calculated and values for each component. This schedule has been used in past cases.
21 The Company and Staff have each adopted this format as a way to illustrate how the
22 FAC base factor proposal is calculated.

23 Finally, the most detailed information from the production cost model and post
24 processing phase that is used to develop the FAC base proposal is contained in the

1 Company workpapers. This includes all the data needed to run the model and re-create
2 the FAC base factor proposal. This includes all fuel and purchase power costs,
3 generating resource parameters, and hourly data for load and multiple sets of market
4 prices, among other data. Through data request responses, the Company provided “road
5 maps” to help parties find data. The Company even provided OPC witness Mantle a
6 version of Direct Schedule TWT-3 with a description of the methodology for how each
7 FAC cost and revenue component was developed.

8 In conclusion, the Company first established an FAC in Missouri in 2008 and
9 has developed a new FAC base factor in seven subsequent cases (excluding this case).
10 The level of detail in this case is consistent with past cases before the Commission.

11 **Q. In her rebuttal testimony on page 13, beginning at line 14, OPC witness Mantle**
12 **“surmises” that Liberty put very little effort into determining what the**
13 **appropriate amounts for the components of the FAC base factor calculation**
14 **should be because any inaccuracies will almost all be recovered through its FAC.**
15 **How do you respond?**

16 A. Ms. Mantle’s supposition is incorrect. The Company spent a great deal of time and
17 effort developing and evaluating the most appropriate and accurate inputs to be used in
18 the production cost model that was used in the development of the FAC base factor in
19 this case. This effort includes, but is not limited to, the compilation and analysis of
20 years of historical data, working with industry-leading consultants to develop the
21 forecast for fuel prices and multiple sets of hourly market prices for the Liberty
22 generation fleet and load, employing a best-in-class software to perform the production
23 cost simulation, and reviewing results. This can all be seen in the Company’s thorough

1 set of workpapers included with the direct filing and comprehensive data request
2 responses throughout the discovery process.

3 **Q. Does this conclude your surrebuttal and true-up direct testimony at this time?**

4 **A. Yes.**

VERIFICATION

I, Todd W. Tarter, under penalty of perjury, on this 17th day of September, 2025,
declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Todd W. Tarter