

Exhibit No.:
Issue: On-System Fuel and Purchased Power
FAC Base
Witness: Todd W. Tarter
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2012-0345
Date Testimony Prepared: January 2013

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

Rebuttal Testimony

of

Todd W. Tarter

January 2013



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TODD W. TARTER
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2012-0345

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. Todd W. Tarter. My business address is 602 S. Joplin Avenue, Joplin, Missouri.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. The Empire District Electric Company (“Empire” or “Company”). My title is Manager of
6 Strategic Planning.

7 **Q. ARE YOU THE SAME TODD W. TARTER THAT EARLIER PREPARED AND**
8 **FILED DIRECT TESTIMONY IN THIS RATE CASE BEFORE THE MISSOURI**
9 **PUBLIC SERVICE COMMISSION (“COMMISSION”) ON BEHALF OF EMPIRE?**

10 A. Yes.

11 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

12 A. In my rebuttal testimony, I will comment on the Commission Staff’s (“Staff”) position on
13 the on-system fuel and purchased power (“FPP”) expense level for setting the base FPP
14 cost, as proposed in the direct testimony of Staff witness Ms. Kimberly K. Bolin and
15 Staff’s Rate Design and Cost of Service Report. I will also discuss Empire’s position on
16 this topic.

1 **II. ON-SYSTEM FPP EXPENSE AND THE FAC BASE**

2 **Q. WHAT IS EMPIRE’S POSITION ON ENERGY COST RECOVERY IN THIS**
3 **CASE?**

4 A. Empire is recommending the continuation of a fuel adjustment clause (“FAC”). In its
5 direct filing, Empire recommended a proposed base fuel and purchased power rate in the
6 FAC. Empire presented a computer model run and clearly presented all the cost
7 components as compared to the Company’s current FAC base. In its rebuttal testimony,
8 the Company also proposes to include transmission costs from FERC account 565, natural
9 gas transportation costs and natural gas storage costs in the FAC.

10 **Q. HAVE YOU REVIEWED STAFF’S FPP MODEL OUTPUT AND THE STAFF’S**
11 **WORKPAPERS IN THIS AREA?**

12 A. Yes. Moreover, this issue was recently discussed during the settlement discussions in this
13 case.

14 **Q. HOW DID STAFF ESTABLISH ITS DIRECT FILING PROPOSED ENERGY**
15 **COST BASE?**

16 A. Staff used a computer production cost model to estimate the on-system FPP expense on
17 Empire’s electric system for a period of one year. Outside the model, fuel related costs
18 were added to the production cost model run. Staff developed and used a set of
19 assumptions for inputs into the model and for fuel related costs added exogenous to the
20 model.

21 **Q. DO YOU HAVE ANY CONCERNS ABOUT THE ASSUMPTIONS THAT STAFF**
22 **USED TO DEVELOP ITS PROPOSED ENERGY COST BASE?**

23 A. Yes. Based on my review, it appears that Staff and Empire do have many similar

1 assumptions in their respective normalized computer model runs used in this case. It also
2 appears to me that Staff's model run, which is presented in its direct filing, is generally
3 generating reasonable results with the given set of model inputs Staff uses. At this time,
4 my concerns are primarily related to some FAC base components that are external to the
5 model run. Specifically, this would include the following: (1) Staff's position on the FAC
6 sharing mechanism; (2) the Staff's omission of the operation and maintenance ("O&M")
7 costs associated with the Plum Point purchased power agreement ("PPA"); (3) the Staff's
8 level of renewable energy credits ("REC"); (4) the Staff's removal of some FERC account
9 501 administrative and labor expenses from the energy cost base; and (5) the Staff's
10 composition of the FAC base.

11 **Q. WHAT SHARING PERCENTAGES DID STAFF PROPOSE IN ITS DIRECT**
12 **FILING?**

13 A. In its direct filing, Staff proposed to change the FAC sharing mechanism from 95%/5%
14 (the current level) to 85%/15%. However, Staff has indicated that it will change its
15 position on this issue. It is Empire's understanding that Staff will now propose to retain
16 the current 95%/5% level in this case.

17 **Q. PLEASE RESTATE EMPIRE'S POSITION ON THE FAC SHARING**
18 **MECHANISM IN THIS CASE.**

19 A. Empire's proposal is to continue to utilize the current FAC sharing level of 95%/5%. FPP
20 expenses represent a significant portion of the overall costs to operate an electric utility.
21 For the most part, Empire is a price taker and not a price setter with regards to variable
22 FPP costs. A proposal to put more of the over/under FAC balance at risk is viewed by the
23 Company as less of an incentive to control costs, and more of a penalty for not being able

1 to forecast future energy costs (which is highly dependent on uncontrollable factors such as
2 weather) for Missouri retail load requirements. Becoming more risky in this area also
3 places the Company at a disadvantage while competing with other entities in the capital
4 markets. As outlined in each of the Company's FAC filings, there already exist safeguards
5 in the Missouri FAC for Empire to pass only prudently incurred FPP costs on to its
6 customers. The current sharing mechanism causes the Company to absorb (in the case of
7 energy costs being above the base), or retain (in the case of energy costs being below the
8 base) a certain percentage (currently 5%) of the over/under balance. Changing to an
9 85%/15% sharing mechanism would only increase the percentage of FPP costs shared
10 above or below the base and would not be equitable for Empire or its customers.

11 **Q. IS IT IMPORTANT TO ESTABLISH THE APPROPRIATE LEVEL OF FUEL**
12 **AND PURCHASED POWER EXPENSE IN THE BASE RATE?**

13 A. Yes.

14 **Q. PLEASE EXPLAIN WHY?**

15 A. As mentioned, the current FAC does not recover or return 100% of the FPP costs above or
16 below the FPP costs included in base rates. Under the current FAC, Empire collects 95%
17 of prudently incurred FPP costs that are above the base. Empire also refunds 95% of
18 prudently incurred FPP costs below the base. Since future FPP costs are unknown, an
19 adequate normalized estimate is needed so that the potential over/under energy cost
20 balances that require either refunds or additional collections to customers do not become
21 overly large. In order to be fair to both the Company and its customers, the base fuel
22 expense should reflect the expected FPP cost level during the rate recovery period as
23 accurately as possible.

1 **Q. WHAT CONCERNS DO YOU HAVE WITH STAFF'S PLUM POINT**
2 **PURCHASED POWER COST ASSUMPTIONS?**

3 A. Since Empire's Plum Point ownership share and Plum Point PPA are sourced from the
4 same unit, both the Staff and Empire modeled the 50 MW Plum Point coal purchase and
5 the 50 MW Plum Point coal ownership as one 100 MW coal unit in order to keep the
6 random forced outages aligned. Outside the model, Empire then added the O&M costs
7 associated with the 50 MW purchase to the calculation of on-system FPP expense, which is
8 based on the actual billing practices. It is my understanding that Staff omitted the O&M
9 costs for the Plum Point purchase in its direct filing. The O&M costs associated with the
10 Plum Point Purchase should be included with the on-system FPP cost component used to
11 establish the base FPP expense and FAC base.

12 **Q. ARE THE PLUM POINT PURCHASED POWER O&M COSTS THAT YOU ARE**
13 **REFERRING TO INCLUDED IN EMPIRE'S CURRENT ENERGY COST BASE?**

14 A. Yes, they are.

15 **Q. WHAT CONCERNS DO YOU HAVE WITH STAFF'S ASSUMPTIONS**
16 **REGARDING REC REVENUES?**

17 A. As I pointed out in my direct testimony, Empire currently sells on the open market a
18 significant portion of the RECs from its wind farm PPAs, and flows the revenue from the
19 sales of RECs, net of sales-related expenses, through the FAC as an offset to FPP costs.
20 The annualized value of RECs that Empire has utilized in this case represents the expected
21 level for calendar year 2013 based on the wind farm production in Empire's model run for
22 this case as outlined in direct testimony. This offset is about a 63.6% lower than the level
23 in Empire's existing FAC base. The primary reason for this decline in REC revenue is the

1 expiration of a REC sale contract that ended at the end of 2012. When that contract
2 expired, the average price received per REC sold is expected to decline considerably
3 because the current REC market prices are much lower than the prices in the expired
4 contract. As stated, Empire's FAC base proposal has recognized the impact of this expired
5 contract. Staff's direct filing position ignored this change. In fact, the Staff direct filing
6 proposal actually increased the level of the REC offset above the level in Empire's current
7 base.

8 **Q. WHAT CONCERNS DO YOU HAVE WITH THE STAFF REMOVING SOME**
9 **FUEL-RELATED ADMINISTRATION AND LABOR COSTS FROM THE**
10 **ENERGY COST BASE?**

11 A. Based on an examination of Staff workpapers, it appears Staff made an adjustment to
12 reduce the base energy expense outside of its model run by removing some FERC account
13 501 administrative and labor expenses. This adjustment totals \$250,867, which is a
14 relatively small percentage of the overall FPP expense. However, these types of costs are a
15 part of the FERC 501 fuel accounts (uniform system of accounts for electric utilities) that
16 are currently run through the FAC. It would create an administrative burden to remove and
17 audit the particular costs that Staff proposes to remove. Therefore, it is the Company's
18 position to continue to run all of FERC account 501 through the FAC. On the other hand,
19 if it is judged that these types of costs should not be a part of the FAC, then they should be
20 reflected in the cost of service in this case in an area other than FPP expense. It is not clear
21 from a review of Staff's projected payroll costs in this case if the administrative costs the
22 Staff has excluded from the FAC are properly included in Staff's normalized payroll costs.

23 **Q. PLEASE LIST THE COST COMPONENTS OF EMPIRE'S CURRENT ENERGY**

1 **COST BASE.**

2 A. The cost components of Empire's existing FAC base are shown in Rebuttal Schedule
3 TWT-1. Empire's direct filing contained the same cost components as the existing FAC
4 base. On a high-level, the base energy cost components in Empire's current FAC can be
5 summarized as follows:

- 6 • On-system fuel and purchased power costs
 - 7 ○ Including the Plum Point PPA O&M costs
 - 8 ○ Including fuel related costs such as undistributed and other and unit train
 - 9 ○ costs
 - 10 ○ Including the cost of natural gas losses and natural gas commodity charges
- 11 • Air quality control system (AQCS) consumables such as ammonia, lime, limestone
- 12 and powder activated carbon
- 13 • Renewable Energy Credits (offset to FPP costs)
- 14 • Net emission allowances

15 **Q. PLEASE OUTLINE THE COMPONENTS OF STAFF'S ENERGY COST BASE.**

16 A. Based on Staff's direct filing, Staff calculated the net base energy cost rate before voltage
17 adjustments to be \$32.23 /MWh. After reviewing workpapers and discussions with Staff,
18 it is Empire's understanding that the Staff included the components in Empire's existing
19 base energy cost with the exception of the Plum Point PPA O&M costs as previously
20 discussed. In addition, it appears the Staff's base energy cost includes natural gas pipeline
21 reservation charges, natural gas pipeline storage charges, purchased power demand charges
22 and transmission costs. As a result of these differences, Staff's direct filing position of
23 \$32.23 /MWh for the base energy cost cannot be directly compared to Empire's existing

1 base or Empire's direct filing position in this case without making modifications.
2 Following further discussions with Staff, it is Empire's understanding that the Staff did not
3 intend to include some of these additional costs in Staff's proposed energy cost base.

4 **Q. DO YOU AGREE WITH STAFF'S INCLUSION OF NATURAL GAS**
5 **TRANSPORTATION COSTS AND NATURAL GAS STORAGE COSTS IN THE**
6 **ENERGY COST BASE?**

7 A. Yes, while these costs do not flow through Empire's existing FAC, I could agree that they
8 could be eligible for the FAC. They are related to the delivery of fuel and the natural gas
9 transportation costs were included in an earlier version of Empire's Missouri FAC.

10 **Q. DO YOU AGREE WITH STAFF'S INCLUSION OF PURCHASED POWER**
11 **DEMAND COSTS IN THE BASE?**

12 A. No. It is my understanding that the FAC rules prohibit the inclusion of long-term purchased
13 power demand costs in the FAC. The demand cost Staff has included in its proposed base
14 energy cost calculation is related to Empire's Plum Point purchased power contract, which
15 is a long-term contract.

16 **Q. DO YOU AGREE WITH THE STAFF'S INCLUSION OF TRANSMISSION COSTS**
17 **IN ENERGY COST BASE?**

18 A. Yes. However, based on the Staff's direct filing it is unclear what type of transmission
19 costs Staff was intending to include. The transmission cost value from the workpapers
20 (which is included in the \$32.23 /MWh Staff FAC proposal) and the notes that accompany
21 this cost level are not in concurrence. Additionally, as previously mentioned, during the
22 settlement conference, Staff indicated that some of the items included in their direct filed
23 base energy cost were done so unintentionally and do not represent the Staff's current

1 position.

2 **Q. WHAT IS EMPIRE'S REBUTTAL POSITION ON TRANSMISSION COSTS AND**
3 **THE FAC?**

4 A. Empire proposes to flow the transmission costs from FERC account 565 through the FAC.
5 Please refer to the rebuttal testimony of Empire witness W. Scott Keith for more
6 information on this proposal. Empire proposes to use an annualized transmission cost
7 level of approximately \$7.7 million in the FAC base pending any true up in this case.

8 **Q WHAT IS THE BASIS FOR THAT TRANSMISSION COST LEVEL?**

9 A. This is the Staff adjusted total company transmission cost level from its direct filing.

10 **Q DOES EMPIRE HAVE ANY UPDATES TO THE PLUM POINT DEMAND**
11 **CHARGE?**

12 A. Yes. This cost does not run through the FAC, but I sponsored a cost level for this case in
13 my direct testimony. Since that time, Empire has received a letter from Plum Point Energy
14 Associates, LLC, dated November 8, 2012, which provides notice of the results of the
15 annual unit capacity test. According to this letter, effective November 9, 2012, the unit
16 capacity has increased, which impacts Empire's demand charge for this purchase.
17 Empire's 7.5% share of the capacity is changing from 49.875 MW to 50.25 MW. As a
18 result, Empire is increasing the annualized cost level for the Plum Point demand charge
19 based on expected 2013 calendar year levels by approximately 0.75% which corresponds
20 with the increased capacity change.

21 **Q. WHAT IS EMPIRE'S POSITION FOR SETTING THE BASE ENERGY COST IN**
22 **THIS CASE?**

23 A. Empire proposes to update the base using the results of Empire's on-system model

1 described in direct testimony and the addition of transmission costs from FERC account
2 565, natural gas transportation costs and natural gas storage costs. When combined with
3 the other FAC cost components, the proposed average FAC base cost is \$31.15 /MWh
4 pending any true up runs in this case. The proposed base cost worksheet which
5 incorporates the update is attached to this testimony as Rebuttal Schedule TWT-1.

6 **III. SUMMARY**

7 **Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

8 A. Empire is requesting a continuation of the FAC tariff with the existing 95%/5% sharing
9 mechanism. In conjunction with an FAC, it is important to correctly establish the level of
10 on-system FPP expense in the FAC. Empire has a few concerns regarding the Staff's
11 FAC base in this case. The concerns Empire has identified with the Staff's direct filing
12 proposal can be summarized as follows: (1) the Staff's position on FAC sharing
13 mechanism (However, Staff has indicated that they now support the Company's proposal
14 of utilizing the existing 95%/5% level); (2) the Staff's omission of the O&M costs
15 associated with the Plum Point purchased PPA; (3) the Staff's level of RECs in the FAC;
16 (4) the Staff's removal of some FERC account 501 administrative and labor expenses from
17 the FAC base; and (5) the Staff's composition of the base energy cost. All of these
18 concerns have been addressed within this rebuttal testimony. Empire is revising its
19 proposal for the annualized Plum Point purchase demand charge for this case based on a
20 recent unit capacity test. Empire is also proposing to include transmission costs from
21 FERC account 565, natural gas transportation costs and natural gas storage costs in the
22 FAC. Rebuttal Schedule TWT-1 summarizes the FAC position pending any true up runs
23 in this case.

1 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

2 A. Yes.

Rebuttal Schedule TWT-1

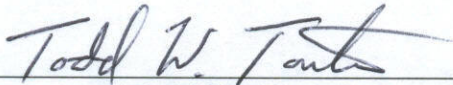
Based on Gas Price of: \$ 5.65 \$ 4.61 \$ 4.61

<u>Description</u>	<u>Current FAC Base Total Company</u>	<u>Direct Filing Proposed FAC Base Total Company</u>	<u>Rebuttal Filing Proposed FAC Base Total Company</u>
FUEL			
Fuel	\$ 100,572,857	\$ 94,314,546	\$ 94,314,546
Gas Transportation - Variable	\$ 100,358	\$ 156,729	\$ 156,729
Gas losses (LUF) at Cost of Gas	\$ 823,712	\$ 946,264	\$ 946,264
AQCS Consumables (Ammonia, Limestone, PAC)-Variable	\$ 1,905,037	\$ 1,626,017	\$ 1,626,017
Gas Transportation - Fixed			\$ 5,962,452
SSCGP Natural Gas Storage - Fixed			\$ 1,131,500
Total Fuel	\$ 103,401,964	\$ 97,043,556	\$ 104,137,508
FUEL RELATED COSTS			
Total Fuel-Related Costs	\$ 4,002,880	\$ 3,693,117	\$ 3,693,117
TOTAL FUEL AND RELATED COSTS	\$ 107,404,844	\$ 100,736,673	\$ 107,830,625
PURCHASED POWER ENERGY CHARGES			
Purchased power energy	\$ 44,839,700	\$ 47,386,230	\$ 47,386,230
50 MW Plum Point O&M Cost-Variable	\$ 2,978,039	\$ 3,365,823	\$ 3,365,823
Purchased power energy	\$ 47,817,739	\$ 50,752,053	\$ 50,752,053
LESS: Renewable Energy Credits-Variable	\$ (1,516,715)	\$ (552,534)	\$ (552,534)
Benefit of Natural Gas Storage-Variable	\$ (1,133,004)		
Total	\$ (2,649,719)	\$ (552,534)	\$ (552,534)
Fuel and Purchased Power Adjustment for Settlement Purposes	\$ 776,200		
TRANSMISSION			
Transmisson			\$ 7,702,177
TOTAL FUEL AND PURCHASED POWER FOR EMPIRE FAC BASE	\$ 153,349,064	\$ 150,936,193	\$ 165,732,321
Total kWh's	5,432,910,685	5,319,822,612	5,319,822,612
Base Cost per kWh	\$ 0.02823	\$ 0.02837	\$ 0.03115
Base Cost per MWh	\$ 28.23	\$ 28.37	\$ 31.15
Other Energy Related Costs not included in FAC			
Gas Transportation - Fixed	\$ 5,948,773	\$ 5,962,452	
Plum Point PPA Demand Charge - Fixed	\$ 9,037,350	\$ 9,370,491	\$ 9,440,945
SSCGP Natural Gas Storage - Fixed	\$ 1,131,500	\$ 1,131,500	

AFFIDAVIT OF TODD W. TARTER

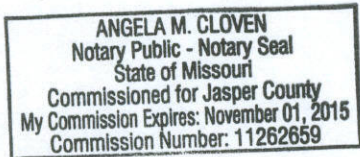
STATE OF MISSOURI)
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COUNTY OF JASPER)

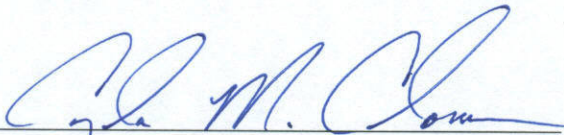
On the 14th day of January, 2013, before me appeared Todd W. Tarter, to me personally known, who, being by me first duly sworn, states that he is Manager of Strategic Planning of The Empire District Electric Company and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.



Todd W. Tarter

Subscribed and sworn to before me this 14th day of January, 2013.





Notary Public

My commission expires: 11/01/15.