

Exhibit No.:
Issue: Fuel Adjustment
Witness: Todd W. Tarter
Type of Exhibit: Direct Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2012-
Date Testimony Prepared: September 2012

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

Direct Testimony

of

Todd W. Tarter

September 2012

****Denotes Highly Confidential****

DIRECT TESTIMONY
OF
TODD W. TARTER
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI
CASE NO. ER-2012-

1 **INTRODUCTION AND QUALIFICATIONS**

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

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

5 **Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR JOB TITLE?**

6 A. I am presently employed by The Empire District Electric Co. ("Empire" or "the
7 Company") as the Manager of Strategic Planning.

8 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
9 **BACKGROUND FOR THE COMMISSION.**

10 A. I graduated from Pittsburg State University in 1986 with a Bachelor of Science
11 Degree in Computer Science. After graduation I received a mathematics education
12 certification. I began my employment with Empire in May 1989. During my tenure
13 with Empire I have worked in the Corporate Planning, Strategic Planning,
14 Information Technology, and Planning and Regulatory departments. My primary
15 responsibilities during this time have included work with the Company's
16 construction budget, load forecasts, sales and revenue budgets, financial forecasts
17 and fuel and purchased power projections, among others. In September 2004, I was
18 promoted to my current position where I primarily work with fuel and purchased

1 power projections and integrated resource planning.

2 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR ANY OTHER STATE**
3 **UTILITY COMMISSION?**

4 A. Yes. I testified on behalf of Empire on the topic of on-system fuel and purchased
5 power expense in Missouri Public Service Commission ("Commission") Cases No.
6 ER-2006-0315, ER-2008-0093, ER-2010-0130, ER-2011-0004 and ER-2012-0345.
7 I also testified on behalf of Empire in Missouri Fuel Adjustment Cases No. ER-
8 2011-0320, ER-2012-0098 and ER-2012-0326. I have also testified on behalf of
9 Empire in other jurisdictions. I testified before the Kansas Corporation
10 Commission in Case No. 05-EPDE-980-RTS; before the Corporation Commission
11 of Oklahoma in Cause No. PUD 201100082, PUD 20110013 and PUD 201200170;
12 and before the Arkansas Public Service Commission in Docket 07-076-TF.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. My testimony will support the Fuel Adjustment Clause ("FAC") rate schedules that
15 have been filed by Empire to reflect the actual energy costs that Empire has
16 incurred during the six-month period March 2012 through August 2012. This six-
17 month period is an Accumulation Period specified in Empire's FAC tariff that was
18 approved by the Missouri Public Service Commission ("Commission") in its
19 Report and Order issued in Case No. ER-2011-0004.

20 **EXECUTIVE SUMMARY**

21 **Q. PLEASE PROVIDE AN OVERVIEW OF YOUR TESTIMONY IN**
22 **SUPPORT OF THE FAC RATE SCHEDULES FILED BY EMPIRE.**

23 A. The Commission's rule governing fuel and purchased power cost recovery

1 mechanisms for electric utilities – specifically 4 CSR 240-20.090(4) – requires
2 Empire to make periodic FAC filings that are designed to enable Commission
3 review of the actual fuel costs, purchased power costs, cost of consumables
4 associated with the power plants’ air quality control system (“AQCS”), net cost of
5 emission allowances, revenue from the sale of renewable energy credits (“REC”)
6 and off-system sales margins (collectively referred to as energy costs or the cost of
7 energy) the Company has incurred during an Accumulation Period. In addition,
8 these periodic filings are designed to adjust the FAC rates up or down, to reflect the
9 actual energy costs incurred during the Accumulation Period. Empire’s FAC tariff
10 calls for two annual filings: a filing covering the six-month Accumulation Period
11 running from September through February and a second filing covering the
12 Accumulation Period running from March through August. Any increases or
13 decreases in rates that are approved by the Commission, or that take effect by
14 operation of law, are then collected from or refunded to customers over two six-
15 month Recovery Periods: June through November and December through May.

16 Since the implementation of Empire’s FAC, the variable cost of fuel and purchased
17 power used by the Company’s Missouri customers has varied from the base fuel
18 and energy cost established in rates. For the Accumulation Period March 2012
19 through August 2012, Empire’s actual energy costs eligible for the FAC, have been
20 lower than the base energy costs included in the Company’s Missouri rates by
21 approximately \$2 million. In accordance with the FAC tariff, Empire has retained
22 5% of the overall decrease in Missouri variable energy costs during the six-month
23 period March 2012 through August 2012. Therefore, in accordance with the

Commission's FAC rule and Empire's approved FAC tariff, the Company has filed FAC rate schedules that are designed to refund energy cost differences of approximately \$1.9 million from its Missouri jurisdictional customers, and recover approximately an additional \$1.16 million of under recovered energy costs from the prior recovery period ending May 31, 2012 for a total net refund of \$775,752, including interest. As reflected in the rate schedules filed by the Company, Empire has developed two Cost Adjustment Factors ("CAF"). However, in this case when utilizing five decimal places, the two factors round to the same value. A CAF of \$(0.00038) per kilowatt-hour (kWh) for primary service and a CAF of \$(0.00038) per kWh for secondary service have been developed for this filing. These CAFs will enable Empire to refund the difference between base energy costs built into its rates and the energy costs that were actually incurred during the Accumulation Period and the true-up of fuel and energy costs during the Recovery Period ended May 31, 2012 over a Recovery Period running from December 2012 through May 2013.

Q. DOES THE EMPIRE FAC TARIFF INCLUDE PROVISIONS THAT ARE DESIGNED TO LIMIT EMPIRE'S FAC RECOVERYS TO THE ACTUAL COST OF ENERGY?

A. Yes. The Empire FAC and the Commission's rule governing FACs include two safeguards that limit FAC recovery to the actual, prudently-incurred energy costs. The first safeguard is a true-up process that ensures that the FAC collections during the Recovery Period do not exceed actual energy costs incurred during the Accumulation Period. The second safeguard involves a requirement that Empire's

1 energy costs be subjected to periodic Prudence Reviews, which will ensure that
2 only prudently-incurred energy costs are passed through to customers using the
3 FAC. The first 30 months' operation of Empire's FAC has been audited by the
4 Commission's staff and no disallowances were recommended.

5 **THE PROPOSED FAC RATE ADJUSTMENT**

6 **Q. WHY HAS EMPIRE FILED FAC-RELATED RATE SCHEDULES AT THIS**
7 **TIME?**

8 A. The Commission's rules – specifically 4 CSR 240-20.090(4) – and Empire's FAC
9 tariff require the Company to make periodic FAC filings that enable the
10 Commission to review Empire's actual fuel, purchased power, and AQCS costs and
11 off-system sales, REC revenue and net costs of emissions allowances so that
12 Empire's FAC rates can be adjusted to reflect the actual energy costs the Company
13 incurs to provide electric service to its Missouri customers. Empire's Missouri
14 FAC tariff calls for two FAC adjustment filings per year: a filing covering the six-
15 month Accumulation Period running from September through February and a
16 second filing covering the Accumulation Period running from March through
17 August. The Missouri FAC rate schedules related to my testimony are Empire's
18 eighth filing since Empire's FAC was approved by the Commission in ER-2008-
19 0093, ER-2010-0130 and ER-2011-0004. Empire is seeking a decrease in its FAC
20 rates to reflect 95% of the difference between the base energy costs built into its
21 base Missouri rates and Empire's actual Missouri energy costs for the
22 Accumulation Period, plus a true-up of the costs recovered during the Recovery
23 Period ending May 31, 2012. This refund via FAC rates will be reflected on the

1 Missouri customers' bills over the six-month Recovery Period running from
2 December 2012 through May 2013.

3 **Q. HOW HAVE EMPIRE'S AVERAGE ENERGY COSTS CHANGED OVER**
4 **THE COST INCLUDED IN BASE RATES DURING THE EIGHTH**
5 **ACCUMULATION PERIOD?**

6 A. Empire's average energy costs per kWh have decreased below the level built into
7 its base electric rates, which is why the FAC rate schedules filed by the Company
8 seek a decrease in the rates charged to the Missouri customers. More specifically,
9 Empire's Missouri base rates included an average cost of energy per kWh of net
10 system production of \$0.02823 during the Accumulation Period of March 2012
11 through August 2012. Empire actually incurred average energy costs of \$0.02731
12 per kWh during the Accumulation Period. This represents an overall decrease in
13 average energy costs of \$0.00092 per kWh during the Accumulation Period, or
14 about 3.26 percent lower than the average cost built into base rates. Pursuant to
15 Empire's FAC tariff, Empire is requesting to refund to its Missouri customers the
16 net of 95 percent of this cost decrease plus approximately \$1,157,848 of under
17 recovered energy cost from the Recovery Period ending May 31, 2012 or an
18 average of \$(0.00038) per kWh sold during the upcoming Recovery Period.

19 **Q. PLEASE BRIEFLY DESCRIBE THE REASONS FOR THE DECREASE IN**
20 **THE AVERAGE COST OF ENERGY DURING THE ACCUMULATION**
21 **PERIOD?**

22 A. The primary drivers which caused the average fuel and energy cost to decrease
23 below the base during the Accumulation Period were favorable natural gas and

1 market power prices (sometimes referred to as wholesale power prices). Access to
2 shale gas has continued to contribute to the relatively low natural gas prices.
3 Related to the low natural gas price is the lower than expected wholesale power
4 prices that Empire experienced during the Accumulation Period.

5 **Q. HOW DOES THE MONTHLY FAC CHANGE FOR A TYPICAL**
6 **RESIDENTIAL CUSTOMER?**

7 **A.** For Missouri residential customers using 1,000 kWh per month, the electric bill
8 will increase by approximately \$1.45 per month over the six-month period
9 December 2012 through May 2013, when the current FAC credit factor of
10 \$(0.00038) is applied to their bill and the previous FAC credit factor of \$(0.00183)
11 is eliminated from their bill. Even though their electric bill would slightly increase
12 under this comparative scenario, an energy cost refund is still being administered.
13 It is just a smaller refund than the previous FAC period.

14 **Q. WAS THE AVERAGE ENERGY COST IN LINE WITH EXPECTATIONS?**

15 **A.** It was lower than budgeted, primarily driven by the favorable natural gas and
16 wholesale power prices that were mentioned earlier. Our budget anticipated an
17 average energy costs during the current Accumulation Period of \$29.96 per
18 megawatt-hour of net system production. The actual results were below budget by
19 around 8.8 percent at \$27.31 per megawatt-hour.

20 **Q. DO YOU EXPECT THE AVERAGE ENERGY COSTS ELIGIBLE FOR**
21 **THE FAC TO BE HIGHER OR LOWER THAN THE BASE DURING THE**
22 **NEXT ACCUMULATION PERIOD FROM SEPTEMBER 2012 THROUGH**
23 **FEBRUARY 2013?**

1 A. Based on our current budget, we expect that the energy costs eligible for the FAC
2 will continue to be slightly lower than the base as it has been during the previous
3 couple of FAC filings. The period in question, September 2012 through February
4 2013, does not contain any of the warmest summer months, so this period typically
5 has a lower average cost per megawatt-hour than what would be expected for an
6 annual average cost per megawatt-hour. The current budget, which assumes
7 normal weather, anticipates average energy costs eligible for the FAC of ** _____ **
8 per megawatt-hour during the next Accumulation Period compared to the FAC base
9 of \$28.23 per megawatt-hour.

10 **Q. DO YOU BELIEVE EMPIRE'S FUEL ADJUSTMENT CLAUSE IS**
11 **REASONABLE AND APPROPRIATE?**

12 A. Yes. The design of the Commission's rule governing the FAC was the subject of
13 much discussion and debate prior to being approved by the Commission. In
14 addition, there was much discussion and debate concerning Empire's FAC tariff in
15 Case No. ER-2008-0093. This was the case in which the Commission ultimately
16 approved Empire's initial FAC tariff. Empire's FAC filing is being made in
17 accordance with the Commission's rules governing the FAC and in accordance
18 with the FAC tariff approved for Empire.

19 **Q. PLEASE DESCRIBE HOW EMPIRE IS PROPOSING TO REFUND THE**
20 **ENERGY COST DECREASES EXPERIENCED DURING THE MARCH**
21 **2012-AUGUST 2012 ACCUMULATION PERIOD?**

22 A. The FAC rate schedule filed by Empire will refund the energy cost decrease
23 actually incurred during the Accumulation Period by applying the negative Cost

1 Adjustment Factor or CAF of \$(0.00038) for primary and secondary service to the
2 actual Missouri kWh sales that take place during the December 1, 2012 to May 31,
3 2013 Recovery Period. The proposed CAFs were calculated in accordance with
4 Empire's authorized FAC tariff. I have attached to my testimony as Schedule
5 TWT-1 a copy of one of Empire's approved FAC tariff sheets. In addition to the
6 tariff sheet, I have included as page 2 of Schedule TWT-1 a monthly analysis of the
7 energy costs and energy cost recovery that has taken place during the
8 Accumulation Period. Schedule TWT-1 contains the basic information and FAC
9 formula that Empire used to calculate the CAFs that have been included in the
10 proposed revised FAC rate schedule sheet 17k. The Empire FAC tariff and the
11 formula included therein were approved by the Commission in Case No. ER-2011-
12 0004.

13 **Q. HOW WERE THE VARIOUS VALUES USED TO DETERMINE THE**
14 **PROPOSED CAFS THAT ARE SHOWN ON SCHEDULE TWT-1**
15 **DEVELOPED?**

16 A. The data upon which Empire based the values for each of the variables in the
17 approved CAF formula are included on the schedule, and came from Empire's
18 books and records. Schedule TWT-1 contains all of the basic information that is
19 required to calculate the proposed change in the CAF. In addition, I have filed the
20 detailed information required by 4 CSR 240-3.161(7)(A) with this testimony as a
21 separate set of supporting workpapers. In addition, as required by 4 CSR 240-
22 3.161(7)(B), I have separately provided to all parties of record in Case Nos. ER-
23 2008-0093, ER-2010-0130 and ER-2011-0004 with a set of these workpapers.

1 **Q. IS EMPIRE IN COMPLIANCE WITH THE PROVISIONS OF THE**
2 **COMMISSION’S FAC RULE CONCERNING PERIODIC REPORTING**
3 **AND SURVEILLANCE?**

4 A. Yes. Empire has complied with all of the Commission’s rules, 4 CSR 240-3.161(5)
5 and (6), governing periodic reports and surveillance using the Commission’s
6 electronic filing system and provided all of the parties to ER-2008-0093, ER-2010-
7 0130 and ER-2011-0004 with copies of the periodic compliance reports and copies
8 of surveillance reports at the same time they were filed with the Commission.

9 **Q. IF REVISED FAC SHEET 17k IS APPROVED BY THE COMMISSION,**
10 **WHAT SAFEGUARDS EXIST TO ENSURE THAT THE FAC REVENUE**
11 **COLLECTED BY EMPIRE DOES NOT EXCEED THE ACTUAL ENERGY**
12 **COST INCURRED BY EMPIRE DURING THE ACCUMULATION**
13 **PERIOD?**

14 A. As I mentioned earlier, Empire’s FAC and the Commission’s rules provide two
15 mechanisms designed to limit the FAC amounts collected from customers to
16 Empire’s actual, prudently-incurred energy costs. First, at the end of each
17 Recovery Period the Company is required to true-up the amounts collected from
18 customers through the CAF with the energy costs that were actually incurred
19 during the Accumulation Period to which the CAF applies. In addition, Empire’s
20 energy costs will be subjected to periodic Prudence Reviews to ensure that only
21 prudently-incurred energy costs are collected from customers through the FAC.
22 These two mechanisms serve as checks that ensure that Empire’s Missouri
23 customers pay only the prudently-incurred, actual cost of energy used to provide

1 electric service in Missouri (less the 5% Empire absorbs or retains) – no more and
2 no less.

3 **Q. WHAT ACTION IS EMPIRE REQUESTING FROM THE COMMISSION**
4 **WITH RESPECT TO THE FAC RATE SCHEDULE THAT THE**
5 **COMPANY HAS FILED?**

6 A. As provided by 4 CSR 240-20.090(4), Staff has thirty (30) days from the date the
7 FAC rate schedule is filed to conduct a review and to make a recommendation to
8 the Commission as to whether the rate schedule complies with the Commission's
9 FAC rules, the requirements of Section 386.266, RSMo, and Empire's approved
10 FAC. The Commission has sixty (60) days from the date of Empire's filing to
11 either approve the rate schedule or to allow it to take effect by operation of law.
12 Empire believes its FAC filing satisfies all of the requirements of applicable
13 statutes, the Commission's rules, and Empire's approved FAC. Empire requests
14 that, following Staff's review, the Commission approve revised FAC sheet 17k to
15 be effective as of December 1, 2012, which is the first day of the Recovery Period
16 prescribed in Empire's FAC tariff.

17 **Q. IS EMPIRE REQUESTING ANY OTHER CHANGES TO THE FAC**
18 **TARIFF AT THIS TIME?**

19 A. No other changes to the FAC tariff sheets are being requested at this time.

20 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

21 A. Yes, it does.

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 3rd Sheet No. 17kCanceling P.S.C. Mo. No. 5 Sec. 4 2nd Sheet No. 17kFor ALL TERRITORY

<p>FUEL ADJUSTMENT CLAUSE SCHEDULE FAC For service on and after June 15, 2011.</p>
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ACCUMULATION PERIOD ENDING, (Aug, 31, 2012)

1. Total energy cost (F + P + E – O - R)	\$74,678,147
2. Base energy cost (B)	\$77,190,644
3. Missouri energy ratio (J)	0.8156
4. Fuel cost recovery [(F + P + E – O - R) – B] * J * 0.95	\$(1,914,185)
5. Adj for over/under recovery for the recovery period ending 05-31-2012 (C)	\$1,157,848
6. Interest (I)	\$(19,415)
7. Fuel Adjustment Clause (FAC)	\$(775,752)
8. Forecasted Missouri NSI for the recovery period (S)	2,162,908,477
9. Cost Adjustment Factor (CAF) to be applied to bills beginning 12-01-2012	\$(0.00036) / kWh
10. CAF - Primary and above (Line 9 x Primary Expansion Factor)	\$(0.00038) / kWh
11. CAF - Secondary (Line 9 x Secondary Expansion Factor)	\$(0.00038) / kWh

Primary Expansion Factor = 1.0502

Secondary Expansion Factor = 1.0686

The Empire District Electric Company
Fuel Adjustment Clause
Cost Adjustment Factor Calculation
For Accumulation Period Ending August 2012

		Accumulation Period							Total
		March 2012	April 2012	May 2012	June 2012	July 2012	August 2012	Prior Period Adj	
Fuel	[F]	\$ 7,261,121.41	\$ 5,879,777.33	\$ 6,301,812.68	\$ 10,725,898.70	\$ 16,486,358.92	\$ 13,803,894.98		\$ 60,458,864.02
Fuel - AQCS	[F]	\$ 144,356.89	\$ 125,655.53	\$ 90,701.25	\$ 170,210.20	\$ 182,113.60	\$ 204,524.62		\$ 917,562.09
Purchased Power	[P]	\$ 3,921,728.30	\$ 3,764,978.87	\$ 4,984,968.70	\$ 3,823,867.88	\$ 3,324,927.60	\$ 3,114,318.38		\$ 22,934,789.73
Off-System Sales Revenue	[O]	\$ 1,052,868.63	\$ 857,632.09	\$ 899,598.18	\$ 1,830,008.61	\$ 2,358,519.62	\$ 1,474,014.43		\$ 8,472,641.56
Net of Emission Allow.	[E]			\$ (111.37)					\$ (111.37)
Renewable Energy Credit Revenues	[R]	\$ 98,782.88	\$ 363,140.05	\$ 366,369.45	\$ 132,592.95	\$ 115,394.43	\$ 84,036.33		\$ 1,160,316.09
Total Energy Cost		\$ 10,175,555.09	\$ 8,549,639.59	\$ 10,111,403.63	\$ 12,757,375.22	\$ 17,519,486.07	\$ 15,564,687.22		\$ 74,678,146.82
June - September rate		\$ 0.02823	\$ 0.02823	\$ 0.02823	\$ 0.02823	\$ 0.02823	\$ 0.02823		
October - May rate		\$ 0.02823	\$ 0.02823	\$ 0.02823	\$ 0.02823	\$ 0.02823	\$ 0.02823		
NSI kwh		375,295,000	352,244,000	423,190,000	484,787,000	588,161,000	510,671,000		2,734,348,000
Base Energy Cost (B)		\$ 10,594,577.85	\$ 9,943,848.12	\$ 11,946,653.70	\$ 13,685,537.01	\$ 16,603,785.03	\$ 14,416,242.33		\$ 77,190,644.04
Missouri Retail kwh Sales		284,436,309	262,677,334	321,406,157	370,888,393	452,320,949	388,728,530		2,080,457,672
Total System kwh Sales		350,600,588	329,031,121	394,413,081	452,839,535	547,283,810	476,507,112		2,550,675,247
Missouri Energy Ratio (J)		0.8113	0.7983	0.8149	0.8190	0.8265	0.8158		0.8156
Fuel Cost Recovery (Over)/Under {[(F + P + E - O - R - B) * J] * 0.95}		\$ (322,955.51)	\$ (1,057,346.84)	\$ (1,420,768.02)	\$ (722,156.28)	\$ 718,985.56	\$ 890,056.27		\$ (1,914,184.82)
(Over)/Under Adjustment (C)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,157,847.82	\$ 1,157,847.82
Interest (Expense)/Income (I)		\$ 119.62	\$ (1,481.45)	\$ (3,876.08)	\$ (5,569.25)	\$ (4,884.67)	\$ (3,723.22)		\$ (19,415.05)
Fuel Adjustment Clause [(F+P+O+E)-B]*J + C + I	(FAC)	\$ (322,835.89)	\$ (1,058,828.29)	\$ (1,424,644.10)	\$ (727,725.53)	\$ 714,100.89	\$ 886,333.05	\$ 1,157,847.82	\$ (775,752.05)
For Recovery Period									
Forecasted NSI kwh	a								2,627,739,000
Forecasted Missouri Retail kwh Sales	b								2,013,020,000
Forecasted Total System kwh Sales	c								2,445,638,000
Forecasted Missouri Ratio									82.31%
Forecasted Missouri NSI kwh (S)=a*(b/c)	(S)								2,162,908,477
Cost Adjustment Factor (CAF=FAC/S)	(CAF)								-0.00036
CAF - Primary and above									-0.00038
Primary Expansion Factor	1.0502								
CAF - Secondary									-0.00038
Secondary Expansion Factor	1.0686								

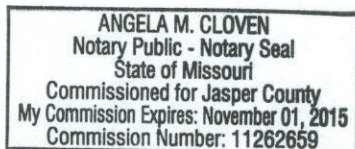
AFFIDAVIT OF TODD W. TARTER

STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 28th day of September, 2012, 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
Todd W. Tarter

Subscribed and sworn to before me this 28th day of September, 2012.



Angela M. Cloven
Notary Public

My commission expires: 11/01/15.