

Exhibit No.:  
Issue: Fuel Adjustment  
Witness: Todd W. Tarter  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Empire District Electric  
Case No. ER-2014- 0264  
Date Testimony Prepared: April 2014

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

**Direct Testimony**

**Of**

**Todd W. Tarter**

**April 2014**

DIRECT TESTIMONY  
OF  
TODD W. TARTER  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI  
CASE NO. ER-2014- 0264

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

1 promoted to my current position where I primarily work with fuel and purchased  
2 power projections, energy efficiency and integrated resource planning.

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

5 A. Yes. I have testified on behalf of Empire before the Missouri Public Service  
6 Commission, the Kansas Corporation Commission, the Corporation Commission of  
7 Oklahoma and the Arkansas Public Service Commission. The case references are  
8 attached to this testimony as Schedule TWT-1.

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

10 A. My testimony will support the Fuel & Purchased Power Adjustment Clause  
11 (“FAC”) rate schedules that have been filed by Empire to reflect the actual energy  
12 costs that Empire has incurred during the six-month period September 2013  
13 through February 2014. This six-month period is an Accumulation Period specified  
14 in Empire’s FAC tariff that was approved by the Missouri Public Service  
15 Commission (“Commission”) in its Report and Order issued in Case No. ER-2012-  
16 0345.

17 **EXECUTIVE SUMMARY**

18  
19 **Q. PLEASE PROVIDE AN OVERVIEW OF YOUR TESTIMONY IN**  
20 **SUPPORT OF THE FAC RATE SCHEDULES FILED BY EMPIRE.**

21 A. The Commission’s rule governing fuel and purchased power cost recovery  
22 mechanisms for electric utilities – specifically 4 CSR 240-20.090(4) – requires  
23 Empire to make periodic FAC filings that are designed to enable Commission

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

14 Since the implementation of Empire's FAC, the variable cost of fuel and purchased  
15 power used by the Company's Missouri customers has varied from the base fuel  
16 and energy cost established in rates. For the Accumulation Period September 2013  
17 through February 2014, Empire's actual total energy costs eligible for the FAC have  
18 been higher than the base energy costs included in the Company's Missouri rates by  
19 approximately \$4,064,779. In accordance with the FAC tariff, Empire has absorbed  
20 5% of the overall increase in Missouri variable energy costs during that six-month  
21 period. Therefore, in accordance with the Commission's FAC rule and Empire's  
22 approved FAC tariff, the Company has filed FAC rate schedules that are designed  
23 to recover 95 percent of the energy cost differences of approximately \$3,861,540

1 from its Missouri jurisdictional customers.

2 In addition, Empire also seeks to refund approximately \$231,336, which is further  
3 described in the true-up testimony that is provided in a separate filing, of over-  
4 recovered energy costs from the prior recovery period ending November 30, 2013.  
5 This brings the total net recovery sought by the Company to approximately  
6 \$3,629,875 including interest. This total represents the Fuel and Purchased Power  
7 Adjustment (“FPA”).

8 As reflected in the rate schedules filed by the Company, Empire has developed two  
9 Fuel Adjustment Rates (“FAR”) designed to recover the FPA, each of which is  
10 based on forecasted retail Missouri sales over the next Recovery Period: a FAR of  
11 \$0.00170 per kilowatt-hour (kWh) for primary service, and a FAR of \$0.00173 per  
12 kWh for secondary service have been developed for this filing. These FARs will  
13 enable Empire to recover over a Recovery Period ending November 2014 the  
14 difference between base energy costs built into its rates and the total energy costs  
15 that were actually incurred during the Accumulation Period and the true-up of fuel  
16 and energy costs during the Recovery Period ended November 30, 2013.

17 **Q. DOES THE EMPIRE FAC TARIFF INCLUDE PROVISIONS THAT ARE**  
18 **DESIGNED TO LIMIT EMPIRE’S FAC RECOVERYS TO THE ACTUAL**  
19 **COST OF ENERGY?**

20 **A.** Yes. The Empire FAC and the Commission’s rule governing FACs include two  
21 safeguards that limit FAC recovery to actual, prudently-incurred energy costs. The  
22 first safeguard is a true-up process that ensures that the FAC collections during the  
23 Recovery Period do not exceed actual energy costs incurred during the

1 Accumulation Period. The second safeguard involves a requirement that Empire's  
2 energy costs be subjected to periodic Prudence Reviews, which will ensure that  
3 only prudently-incurred energy costs are passed through to customers using the  
4 FAC. Empire's operation of the FAC has been audited by the Commission's staff  
5 through February 28, 2013 and no disallowances have been recommended.

6 **THE PROPOSED FAC RATE ADJUSTMENT**

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

9 A. The Commission's rules – specifically 4 CSR 240-20.090(4) – and Empire's FAC  
10 tariff require the Company to make periodic FAC filings that enable the  
11 Commission to review Empire's actual fuel, purchased power, AQCS costs, off-  
12 system sales, REC revenue, and net costs of emissions allowances so that Empire's  
13 FAC rates can be adjusted to reflect the actual energy costs the Company incurs to  
14 provide electric service to its Missouri customers. Empire's Missouri FAC tariff  
15 calls for two FAC adjustment filings per year: a filing covering the six-month  
16 Accumulation Period running from September through February and a second filing  
17 covering the Accumulation Period running from March through August. Empire  
18 is seeking an increase in its FAC rates to reflect 95% of the difference between the  
19 base energy costs built into its base Missouri rates and Empire's actual Missouri  
20 energy costs for the Accumulation Period, plus a true-up of the costs recovered  
21 during the Recovery Period ending November 30, 2013. This recovery via FAC  
22 rates will be reflected on the Missouri customers' bills over the six-month Recovery  
23 Period running from June 2014 through November 2014.

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

4 A. Empire's average energy costs per kWh have increased above the level built into its  
5 base electric rates, which is why the FAC rate schedules filed by the Company seek  
6 an increase in the rates charged to the Missouri customers. More specifically,  
7 Empire's Missouri base rates included an average cost of energy per kWh of net  
8 system production of \$0.02831 during the Accumulation Period of September 2013  
9 through February 2014. Empire actually incurred average energy costs of \$0.03007  
10 per kWh during the Accumulation Period. This represents an overall increase in  
11 average energy costs of \$0.00176 per kWh during the Accumulation Period, or  
12 about 6.22 percent higher than the average cost built into base rates. Pursuant to  
13 Empire's FAC tariff, Empire is requesting to recover from its Missouri customers  
14 the net of 95 percent of this cost increase minus approximately \$231,336 of over  
15 recovered energy cost and \$(329.32) of interest expense from the Recovery Period  
16 ending November 30, 2013, or an average of \$0.00162 per kWh sold during the  
17 upcoming Recovery Period.

18 **Q. PLEASE BRIEFLY DESCRIBE THE REASONS FOR THE INCREASE IN**  
19 **THE AVERAGE ENERGY COST DURING THE ACCUMULATION**  
20 **PERIOD?**

21 A. As previously noted, the average total energy cost for the period was 6.22 percent  
22 higher than the base. The accumulation period (September 2013 – February 2014),  
23 was much colder than normal. For example, based on heating-degree-days

1 (“HDD”), December 2013 was the second coldest December in the past decade;  
2 January 2014 was the second coldest January in the past decade and third coldest  
3 January of the past 25 years; and February 2014 was the second coldest February in  
4 the past 26 years. The colder than normal weather increased the level of higher cost  
5 peaking generation needed to meet the demands of customers. Increased natural  
6 gas-fired peaking generation due to the cold weather also contributed to higher than  
7 anticipated natural gas prices and spot market purchase prices.

8 **Q. HOW DOES THE MONTHLY FAC CHANGE FOR A TYPICAL**  
9 **RESIDENTIAL CUSTOMER?**

10 A. For Missouri residential customers using 1,000 kWh per month, the electric bill  
11 will increase by approximately \$1.49 per month over the six-month period June  
12 2014 through November 2014, when the current FAC charge of \$0.00173 is applied  
13 to their bill and the previous FAC recovery factor of \$0.00024 is eliminated from  
14 their bill.

15 **Q. DID THE AVERAGE ENERGY COST VARY FROM EXPECTATIONS?**

16 A. Yes, the actual total energy cost per megawatt-hour was above the Company budget  
17 by approximately 13.67 percent; primarily due to higher natural gas and spot  
18 purchase prices and the previously mentioned much colder than normal winter  
19 weather during the Accumulation Period.

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 MARCH 2014 THROUGH**  
23 **AUGUST 2014?**



1 A. Based on the current budget, we expect the total energy costs eligible for the FAC  
2 to be about 3.57% higher than the base. The period in question, March 2014  
3 through August 2014, contains the spring and summer months, so this period has  
4 the potential for a higher average cost per megawatt-hour than what would be  
5 expected for an annual average cost per megawatt-hour. The current budget, which  
6 assumes normal weather, anticipates average energy costs eligible for the FAC to  
7 be higher than the current FAC base of \$28.31 per megawatt-hour during the next  
8 Accumulation Period.

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

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

19 **Q. PLEASE DESCRIBE HOW EMPIRE IS PROPOSING TO COLLECT THE**  
20 **ENERGY COST INCREASES EXPERIENCED DURING THE**  
21 **SEPTEMBER 2013-FEBRUARY 2014 ACCUMULATION PERIOD?**

22 A. The FAC rate schedule filed by Empire will collect the energy cost increase actually  
23 incurred during the Accumulation Period by applying the positive Fuel Adjustment

1 Rate or FAR of \$0.00170 for primary and \$0.00173 for secondary service to the  
2 actual Missouri retail kWh sales that take place during the June 1, 2014 to  
3 November 30, 2014 Recovery Period. The proposed FARs were calculated in  
4 accordance with Empire's authorized FAC tariff. I have attached to my testimony,  
5 as Schedule TWT-2, a copy of one of Empire's approved FAC tariff sheets. In  
6 addition to the tariff sheet, I have included as page 2 of Schedule TWT-2 a monthly  
7 analysis of the energy costs and energy cost recovery that has taken place during the  
8 Accumulation Period. Schedule TWT-2 contains the basic information and FAC  
9 formula that Empire used to calculate the FARs that have been included in the  
10 proposed revised FAC rate schedule sheet 17e. The Empire FAC tariff and the  
11 formula included therein were approved by the Commission in Case No. ER-2012-  
12 0345.

13 **Q. HOW WERE THE VARIOUS VALUES USED TO DETERMINE THE**  
14 **PROPOSED FARs THAT ARE SHOWN ON SCHEDULE TWT-2**  
15 **DEVELOPED?**

16 A. The data upon which Empire based the values for each of the variables in the  
17 approved FAR formula are included on the schedule, and came from Empire's  
18 books and records. Schedule TWT-2 contains all of the basic information that is  
19 required to calculate the proposed change in the FAR. 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. Additional information about the true-up  
22 amount was filed concurrently in a separate docket. In addition, as required by 4  
23 CSR 240-3.161(7) (B), I have separately provided to all parties of record in Case

1 Nos. ER-2008-0093, ER-2010-0130, ER-2011-0004 and ER-2012-0345 with a set  
2 of these workpapers.

3 **Q. IS EMPIRE IN COMPLIANCE WITH THE PROVISIONS OF THE**  
4 **COMMISSION'S FAC RULE CONCERNING PERIODIC REPORTING**  
5 **AND SURVEILLANCE?**

6 A. Yes. Empire has complied with all of the Commission's rules, 4 CSR 240-3.161(5)  
7 and (6), governing periodic reports and surveillance using the Commission's  
8 electronic filing system and provided all of the parties to ER-2008-0093, ER-2010-  
9 0130, ER-2011-0004, and ER-2012-0345 with copies of the periodic compliance  
10 reports and copies of surveillance reports at the same time they were filed with the  
11 Commission.

12 **Q. IF FAC SHEET 17e IS APPROVED BY THE COMMISSION, WHAT**  
13 **SAFEGUARDS EXIST TO ENSURE THAT THE FAC REVENUE**  
14 **COLLECTED BY EMPIRE DOES NOT EXCEED THE ACTUAL TOTAL**  
15 **ENERGY COST INCURRED BY EMPIRE DURING THE**  
16 **ACCUMULATION PERIOD?**

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

1 incurred energy costs are collected from customers through the FAC. These two  
2 mechanisms serve as checks that ensure that Empire's Missouri customers pay only  
3 the prudently-incurred, actual cost of energy used to provide electric service in  
4 Missouri (less the 5% Empire absorbs or retains) – no more and no less.

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

8 A. As provided by 4 CSR 240-20.090(4), Staff has thirty (30) days from the date the  
9 FAC rate schedule is filed to conduct a review and to make a recommendation to  
10 the Commission as to whether the rate schedule complies with the Commission's  
11 FAC rules, the requirements of Section 386.266, RSMo, and Empire's approved  
12 FAC. The Commission has sixty (60) days from the date of Empire's filing to  
13 either approve the rate schedule or to allow it to take effect by operation of law.  
14 Empire believes its FAC filing satisfies all of the requirements of applicable  
15 statutes, the Commission's rules, and Empire's approved FAC. Empire requests  
16 that, following Staff's review, the Commission approve revised FAC sheet 17e to  
17 be effective as of June 1, 2014, which is the first day of the Recovery Period  
18 prescribed in Empire's FAC tariff.

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

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

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

23 A. Yes, it does.

## Cases with Filed Written Testimony of Todd W. Tarter

### Before the Missouri Public Service Commission

- Rate Cases

ER-2006-0315, ER-2008-0093, ER-2010-0130, ER-2011-0004, ER-2012-0345

- Fuel Adjustment Cases

ER-2011-0320, ER-2012-0098, ER-2012-0326, ER-2013-0122, ER-2013-0442, ER-2014-0087

- Fuel Adjustment True-Up

EO-2014-0088

### Before the Kansas Corporation Commission

- Rate Docket

05-EPDE-980-RTS

- Energy Cost Adjustment ACA Docket

KS-12-EPDE-392-ACA, KS-13-EPDE-385-ACA

### Before the Oklahoma Corporation Commission

- Rate Cause

PUD 201100082

- Fuel Prudence Review Causes

PUD 201100131, PUD 201200170, PUD 201300131

- Energy Efficiency Cause

PUD 201300142, PUD 201300203

### Before the Arkansas Public Service Commission

- Energy Efficiency Docket

07-076-TF

- Net Metering Docket

12-060-R

- Rate Docket

13-11-U

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 4th Revised Sheet No. 17e

Canceling P.S.C. Mo. No. 5 Sec. 4 3rd Revised Sheet No. 17e

For ALL TERRITORY

<p>FUEL &amp; PURCHASE POWER ADJUSTMENT CLAUSE RIDER FAC For service on and after April 1, 2013</p>
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	Accumulation Period Ending		Feb 28, 2014
1	Total Energy Cost (TEC) = (FC+PP+E-OSSR-REC)		83,236,791
2	Net Base Energy Cost (B)	-	78,366,213
	2.1 Base Factor (BF)		0.02831
	2.2 Accumulation Period NSI (S <sub>AP</sub> )		2,768,146,000
3	(TEC-B)		4,870,578
4	Missouri Energy Ratio (J)	*	83.46%
5	(TEC-B)*J		4,064,779
6	Fuel Cost Recovery	*	95.00%
7	(TEC-B)*J*0.95		3,861,540
8	True-Up Amount (T)	+	(231,336)
9	Prudence Adjustment Amount (P)	+	
10	Interest (I)	+	(329)
11	Fuel and Purchased Power Adjustment (FPA)	=	3,629,875
12	Forecasted Missouri NSI (S <sub>RP</sub> )	÷	2,233,896,883
13	Current Period Fuel Adjustment Rate (FAR) to be applied Beginning 06-01-2014	=	0.00162
14	Current Period FAR <sub>PRIM</sub> = FAR x VAF <sub>PRIM</sub>		0.00170
15	Current Period FAR <sub>SEC</sub> = FAR x VAF <sub>SEC</sub>		0.00173
16	VAF <sub>PRIM</sub> = 1.0466		1.0466
17	VAF <sub>SEC</sub> = 1.0622		1.0622

**The Empire District Electric Company  
Fuel Adjustment Clause  
Cost Adjustment Factor Calculation  
Estimated Recovery Impact on Customer**

Forecasted MO Retail NSI for Recovery Period	2,233,896,883
Fuel Adjustment Clause	\$ 3,629,875
Cost Adjustment Factor	\$ 0.00162
Secondary Expansion Factor	1.06860
FAC Factor	0.00174

Impact on Customer Using 1000 kWh/Mo	
Monthly Impact	\$ 1.74
Annual Impact	\$ 20.88

Month	Mwh Sales			Monthly Loss	MO %
	Missouri	Total Co	NSI		
Jun-14	356,716	437,573	469,931	6.89%	81.52%
Jul-14	413,624	502,678	540,098	6.93%	82.28%
Aug-14	405,115	496,131	532,349	6.80%	81.65%
Sep-14	314,925	385,983	414,438	6.87%	81.59%
Oct-14	284,963	350,693	376,462	6.85%	81.26%
Nov-14	305,243	370,668	397,886	6.84%	82.35%
Total	2,080,586	2,543,726	2,731,164	6.86%	81.79%

Missouri Ratio/NSI 81.79% 2,233,896,883 kwh

Annual Loss Factor 6.86%

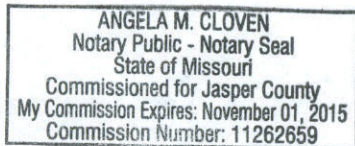
AFFIDAVIT OF TODD W. TARTER

STATE OF MISSOURI )  
  ) ss  
COUNTY OF JASPER )

On the 1st day of April 2014, 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 1st day of April, 2014.



Angela M. Cloven  
Notary Public

My commission expires: 11/01/15.