

Exhibit No.:
Issue: Fuel Adjustment
Witness: Todd W. Tarter
Type of Exhibit: Direct Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2015-
Date Testimony Prepared: October 2014

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

Direct Testimony

Of

Todd W. Tarter

October 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-2015-

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 March 2014 through
13 August 2014. This six-month period is an Accumulation Period specified in
14 Empire’s FAC tariff that was approved by the Missouri Public Service Commission
15 (“Commission”) in its Report and Order issued in Case No. ER-2012-0345.

16 **EXECUTIVE SUMMARY**

17 **Q. ARE THERE ANY CHANGES DURING THE ACCUMULATION PERIOD**
18 **(MARCH 2014 – AUGUST 2014) THAT SHOULD BE NOTED?**

19 A. Yes. The Southwest Power Pool’s Integrated Marketplace (“SPP IM”) went live on
20 March 1, 2014 corresponding with the beginning of the Accumulation period in this
21 filing. The SPP IM is a full-scale energy market consisting of a day-ahead market,
22 real-time balancing market, and transmission congestion market. Within the SPP
23 IM, SPP not only commits and dispatches generation to serve load, but also acts as

1 a consolidated balancing authority in order to effectively operate a market-based
2 reserve market. The expected result of the SPP IM is a more efficient commitment
3 and dispatch of regional generation and operating reserves across the SPP footprint,
4 resulting in anticipated shared savings among pool members. In the past Empire
5 functioned as a balancing authority and dispatched its generators to serve its native
6 load while buying and selling energy when it was economical to do so, mostly
7 through bilateral contracts. Since the SPP IM began, Empire now purchases energy
8 from the market to serve native load, sells generation into the market, and receives
9 revenue from selling its generation into the market.

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

12 A. The Commission's rule governing fuel and purchased power cost recovery
13 mechanisms for electric utilities – specifically 4 CSR 240-20.090(4) – requires
14 Empire to make periodic FAC filings that are designed to enable Commission
15 review of the actual fuel costs, purchased power costs, cost of consumables
16 associated with the power plants' air quality control system ("AQCS"), net cost of
17 emission allowances, revenue from the sale of renewable energy credits ("REC")
18 and off-system sales margins (collectively referred to as total energy costs) that the
19 Company has incurred during an Accumulation Period. In addition, these periodic
20 filings are designed to adjust the FAC rates up or down, to reflect the actual energy
21 costs incurred during the Accumulation Period. Empire's FAC tariff calls for two
22 annual filings: a filing covering the six-month Accumulation Period running from
23 September through February and a second filing covering the Accumulation Period

1 running from March through August. Any increases or decreases in rates that are
2 approved by the Commission, or that take effect by operation of law, are then
3 collected from or refunded to customers over two six-month Recovery Periods:
4 June through November and December through May.

5 Since the implementation of Empire's FAC, the variable cost of fuel and purchased
6 power used by the Company's Missouri customers has varied from the base fuel
7 and energy cost established in rates. For the Accumulation Period March 2014
8 through August 2014, Empire's actual total energy costs eligible for the FAC have
9 been higher than the base energy costs included in the Company's Missouri rates by
10 approximately \$2,097,060. In accordance with the FAC tariff, Empire has absorbed
11 5% of the overall increase in Missouri variable energy costs during that six-month
12 period. Therefore, in accordance with the Commission's FAC rule and Empire's
13 approved FAC tariff, the Company has filed FAC rate schedules that are designed
14 to recover 95 percent of the energy cost differences of approximately \$1,992,207
15 from its Missouri jurisdictional customers.

16 In addition, Empire also seeks to collect approximately \$220,997, which is further
17 described in the true-up testimony that is provided in a separate filing, of under-
18 recovered energy costs from the prior recovery period ending May 31, 2014. This
19 brings the total net recovery sought by the Company to approximately \$2,221,079
20 including interest. This total represents the Fuel and Purchased Power Adjustment
21 ("FPA").

22 As reflected in the rate schedules filed by the Company, Empire has developed two
23 Fuel Adjustment Rates ("FAR") designed to recover the FPA, each of which is

1 based on forecasted retail Missouri sales over the next Recovery Period: a FAR of
2 \$0.00106 per kilowatt-hour (kWh) for primary service, and a FAR of \$0.00108 per
3 kWh for secondary service have been developed for this filing. These FARs will
4 enable Empire to recover over a Recovery Period ending May 2015 the difference
5 between base energy costs built into its rates and the total energy costs that were
6 actually incurred during the Accumulation Period and the true-up of fuel and energy
7 costs during the Recovery Period ended May 31, 2014.

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

11 A. Yes. The Empire FAC and the Commission's rule governing FACs include two
12 safeguards that limit FAC recovery to actual, prudently-incurred energy costs. The
13 first safeguard is a true-up process that ensures that the FAC collections during the
14 Recovery Period do not exceed actual energy costs incurred during the
15 Accumulation Period. The second safeguard involves a requirement that Empire's
16 energy costs be subjected to periodic Prudence Reviews, which will ensure that
17 only prudently-incurred energy costs are passed through to customers using the
18 FAC. Empire's operation of the FAC has been audited by the Commission's staff
19 through February 28, 2013 and no disallowances have been recommended.

20 **THE PROPOSED FAC RATE ADJUSTMENT**

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

23 A. The Commission's rules – specifically 4 CSR 240-20.090(4) – and Empire's FAC

1 tariff require the Company to make periodic FAC filings that enable the
2 Commission to review Empire's actual fuel, purchased power, AQCS costs, off-
3 system sales, REC revenue, and net costs of emissions allowances so that Empire's
4 FAC rates can be adjusted to reflect the actual energy costs the Company incurs to
5 provide electric service to its Missouri customers. Empire's Missouri FAC tariff
6 calls for two FAC adjustment filings per year: a filing covering the six-month
7 Accumulation Period running from September through February and a second filing
8 covering the Accumulation Period running from March through August. Empire
9 is seeking an increase in its FAC rates to reflect 95% of the difference between the
10 base energy costs built into its base Missouri rates and Empire's actual Missouri
11 energy costs for the Accumulation Period, plus a true-up of the costs recovered
12 during the Recovery Period ending May 31, 2014. This recovery via FAC rates will
13 be reflected on the Missouri customers' bills over the six-month Recovery Period
14 running from December 2014 through May 2015.

15 **Q. HOW HAVE EMPIRE'S AVERAGE ENERGY COSTS CHANGED OVER**
16 **THE COST INCLUDED IN BASE RATES DURING THE**
17 **ACCUMULATION PERIOD?**

18 A. Empire's average energy costs per kWh have increased above the level built into its
19 base electric rates, which is why the FAC rate schedules filed by the Company seek
20 an increase in the rates charged to the Missouri customers. More specifically,
21 Empire's Missouri base rates included an average cost of energy per kWh of net
22 system production of \$0.02831 during the Accumulation Period of March 2014
23 through August 2014. Empire actually incurred average energy costs of \$0.02928

1 per kWh during the Accumulation Period. This represents an overall increase in
2 average energy costs of \$0.00097 per kWh during the Accumulation Period, or
3 about 3.41 percent higher than the average cost built into base rates. Pursuant to
4 Empire's FAC tariff, Empire is requesting to recover from its Missouri customers
5 the net of 95 percent of this cost increase plus approximately \$220,997 of under
6 recovered energy cost and \$7,875 of interest income from the Recovery Period
7 ending May 31, 2014, or an average of \$0.00101 per kWh sold during the
8 upcoming Recovery Period.

9 **Q. PLEASE BRIEFLY DESCRIBE THE REASONS FOR THE INCREASE IN**
10 **THE AVERAGE ENERGY COST DURING THE ACCUMULATION**
11 **PERIOD?**

12 A. As previously noted, the average total energy cost for the period was 3.41 percent
13 higher than the base. Contributing to this result was an outage of the Plum Point
14 unit during a significant portion of the accumulation period. Empire owns 50 MW
15 of the Plum Point unit and purchases another 50 MW through a long-term PPA.
16 Plum Point, a coal-fired base load unit, was on a forced outage from May 11, 2014
17 through August 6, 2014 due to an electrical fault in the generator potential
18 transformer cubicle. When it was brought back on line, the unit transitioned well
19 through startup and reached full load in less than sixty hours. However, a tube leak
20 a few days later required another four day forced outage in mid-August.
21 Additionally, March 2014, was much colder than normal. Based on heating-degree-
22 days ("HDD"), March 2014 was the second coldest March in the past decade. The
23 abnormally cold weather drove an increase in natural gas prices.

1 **Q. HOW DOES THE MONTHLY FAC CHANGE FOR A TYPICAL**
2 **RESIDENTIAL CUSTOMER?**

3 A. For Missouri residential customers using 1,000 kWh per month, the electric bill
4 will decrease by approximately \$0.65 per month over the six-month period
5 December 2014 through May 2015, when the current FAC charge of \$0.00108 is
6 applied to their bill and the previous FAC recovery factor of \$0.00173 is eliminated
7 from their bill.

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

9 A. The average energy cost was close to expectations. The actual total energy cost per
10 megawatt-hour was slightly below Empire's forecast for this time-period by
11 approximately 0.15 percent.

12 **Q. DO YOU EXPECT THE AVERAGE ENERGY COSTS ELIGIBLE FOR**
13 **THE FAC TO BE HIGHER OR LOWER THAN THE BASE DURING THE**
14 **NEXT ACCUMULATION PERIOD FROM SEPTEMBER 2014 THROUGH**
15 **FEBRUARY 2015?**

16 A. Based on the current budget, we expect the total energy costs eligible for the FAC
17 to be about 2.44% higher than the base cost built into Missouri electric rates.

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

20 A. Yes. The design of the Commission's rule governing the FAC was the subject of
21 much discussion and debate prior to being approved by the Commission. In
22 addition, there was much discussion and debate concerning Empire's FAC tariff in
23 Case No. ER-2008-0093. This was the case in which the Commission ultimately

1 approved Empire's initial FAC tariff. Additional discussions have occurred in
2 subsequent cases. Empire's FAC filing is being made in accordance with the
3 Commission's rules governing the FAC and in accordance with the FAC tariff
4 approved for Empire.

5 **Q. PLEASE DESCRIBE HOW EMPIRE IS PROPOSING TO COLLECT THE**
6 **ENERGY COST INCREASES EXPERIENCED DURING THE MARCH**
7 **2014-AUGUST 2014 ACCUMULATION PERIOD?**

8 A. The FAC rate schedule filed by Empire will collect the energy cost increase actually
9 incurred during the Accumulation Period by applying the positive Fuel Adjustment
10 Rate or FAR of \$0.00106 for primary and \$0.00108 for secondary service to the
11 actual Missouri retail kWh sales that take place during the December 1, 2014 to
12 May 31, 2015 Recovery Period. The proposed FARs were calculated in accordance
13 with Empire's authorized FAC tariff. I have attached to my testimony, as Schedule
14 TWT-2, a copy of one of Empire's approved FAC tariff sheets. In addition to the
15 tariff sheet, I have included as page 2 of Schedule TWT-2 a monthly analysis of the
16 energy costs and energy cost recovery that has taken place during the Accumulation
17 Period. Schedule TWT-2 contains the basic information and FAC formula that
18 Empire used to calculate the FARs that have been included in the proposed revised
19 FAC rate schedule sheet 17e. The Empire FAC tariff and the formula included
20 therein were approved by the Commission in Case No. ER-2012-0345.

21 **Q. HOW WERE THE VARIOUS VALUES USED TO DETERMINE THE**
22 **PROPOSED FARS THAT ARE SHOWN ON SCHEDULE TWT-2**
23 **DEVELOPED?**

1 A. The data upon which Empire based the values for each of the variables in the
2 approved FAR formula are included on the schedule, and came from Empire's
3 books and records. Schedule TWT-2 contains all of the basic information that is
4 required to calculate the proposed change in the FAR. In addition, I have filed the
5 detailed information required by 4 CSR 240-3.161(7) (A) with this testimony as a
6 separate set of supporting workpapers. Additional information about the true-up
7 amount was filed concurrently in a separate docket. In addition, as required by 4
8 CSR 240-3.161(7) (B), I have separately provided to all parties of record in Case
9 Nos. ER-2008-0093, ER-2010-0130, ER-2011-0004 and ER-2012-0345 with a set
10 of these workpapers.

11 **Q. IS EMPIRE IN COMPLIANCE WITH THE PROVISIONS OF THE**
12 **COMMISSION'S FAC RULE CONCERNING PERIODIC REPORTING**
13 **AND SURVEILLANCE?**

14 A. Yes. Empire has complied with all of the Commission's rules, 4 CSR 240-3.161(5)
15 and (6), governing periodic reports and surveillance using the Commission's
16 electronic filing system and provided all of the parties to ER-2008-0093, ER-2010-
17 0130, ER-2011-0004, and ER-2012-0345 with copies of the periodic compliance
18 reports and copies of surveillance reports at the same time they were filed with the
19 Commission.

20 **Q. IF FAC SHEET 17e IS APPROVED BY THE COMMISSION, WHAT**
21 **SAFEGUARDS EXIST TO ENSURE THAT THE FAC REVENUE**
22 **COLLECTED BY EMPIRE DOES NOT EXCEED THE ACTUAL TOTAL**
23 **ENERGY COST INCURRED BY EMPIRE DURING THE**

1 **ACCUMULATION PERIOD?**

2 A. As I mentioned earlier, Empire’s FAC and the Commission’s rules provide two
3 mechanisms designed to limit the FAC amounts collected from customers to
4 Empire’s actual, prudently-incurred energy costs. First, at the end of each Recovery
5 Period the Company is required to true-up the amounts collected from customers
6 through the FAR with the total energy costs that were actually incurred during the
7 Accumulation Period to which the FAR applies. In addition, Empire’s energy costs
8 will be subjected to periodic Prudence Reviews to ensure that only prudently-
9 incurred energy costs are collected from customers through the FAC. These two
10 mechanisms serve as checks that ensure that Empire’s Missouri customers pay only
11 the prudently-incurred, actual cost of energy used to provide electric service in
12 Missouri (less the 5% Empire absorbs or retains) – no more and no less.

13 **Q. WHAT ACTION IS EMPIRE REQUESTING FROM THE COMMISSION**
14 **WITH RESPECT TO THE FAC RATE SCHEDULE THAT THE**
15 **COMPANY HAS FILED?**

16 A. As provided by 4 CSR 240-20.090(4), Staff has thirty (30) days from the date the
17 FAC rate schedule is filed to conduct a review and to make a recommendation to
18 the Commission as to whether the rate schedule complies with the Commission’s
19 FAC rules, the requirements of Section 386.266, RSMo, and Empire’s approved
20 FAC. The Commission has sixty (60) days from the date of Empire’s filing to
21 either approve the rate schedule or to allow it to take effect by operation of law.
22 Empire believes its FAC filing satisfies all of the requirements of applicable
23 statutes, the Commission’s rules, and Empire’s approved FAC. Empire requests

1 that, following Staff's review, the Commission approve revised FAC sheet 17e to
2 be effective as of December 1, 2014, which is the first day of the Recovery Period
3 prescribed in Empire's FAC tariff.

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

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

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

8 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, ER-2014-0351

- Fuel Adjustment Cases

ER-2011-0320, ER-2012-0098, ER-2012-0326, ER-2013-0122, ER-2013-0442, ER-2014-0087, ER-2014-0264

- Fuel Adjustment True-Up

EO-2014-0088, EO-2014-0265

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, PUD201400226

- 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 5th Revised Sheet No. 17e

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

For ALL TERRITORY

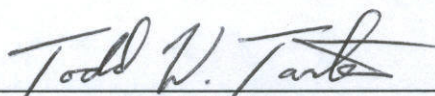
<p>FUEL & PURCHASE POWER ADJUSTMENT CLAUSE RIDER FAC For service on and after April 1, 2013</p>

	Accumulation Period Ending		Aug 31, 2014
1	Total Energy Cost (TEC) = (FC+PP+E-OSSR-REC)		77,536,319
2	Net Base Energy Cost (B)	-	74,979,148
	2.1 Base Factor (BF)		0.02831
	2.2 Accumulation Period NSI (S _{AP})		2,648,504,000
3	(TEC-B)		2,557,171
4	Missouri Energy Ratio (J)	*	82.01%
5	(TEC-B)*J		2,097,060
6	Fuel Cost Recovery	*	95.00%
7	(TEC-B)*J*0.95		1,992,207
8	True-Up Amount (T)	+	220,997
9	Prudence Adjustment Amount (P)	+	
10	Interest (I)	+	7,875
11	Fuel and Purchased Power Adjustment (FPA)	=	2,221,079
12	Forecasted Missouri NSI (S _{RP})	÷	2,188,895,865
13	Current Period Fuel Adjustment Rate (FAR) to be applied Beginning 12-01-2014	=	0.00101
14	Current Period FAR _{PRIM} = FAR x VAF _{PRIM}		0.00106
15	Current Period FAR _{SEC} = FAR x VAF _{SEC}		0.00108
16	VAF _{PRIM} = 1.0466		1.0466
17	VAF _{SEC} = 1.0622		1.0622

AFFIDAVIT OF TODD W. TARTER

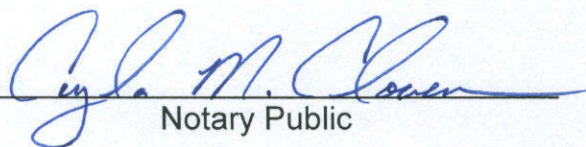
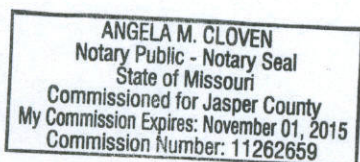
STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 26th day of September 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

Subscribed and sworn to before me this 26th day of September, 2014.



Notary Public

My commission expires: 11/01/15.