

Exhibit No.:
Issue: Fuel Adjustment
Witness: Todd W. Tarter
Type of Exhibit: Direct Testimony
Sponsoring Party: Empire District Electric
Case No.
Date Testimony Prepared: April 2011

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

Direct Testimony

of

Todd W. Tarter

April 2011

****Denotes Highly Confidential****

NP

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

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 **AND WHAT ARE YOUR JOB RESPONSIBILITIES?**

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

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

11 A. I graduated from Pittsburg State University in 1986 with a Bachelor of Science
12 Degree in Computer Science. After graduation I received a mathematics education
13 certification. I began my employment with Empire in May 1989. During my tenure
14 with Empire I have worked in the Corporate Planning, Strategic Planning,
15 Information Technology, and Planning and Regulatory departments. My primary
16 responsibilities during this time have included work with the Company's
17 construction budget, load forecasts, sales and revenue budgets, financial forecasts
18 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 and integrated resource planning.

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

5 A. Yes. I testified on behalf of Empire on the topic of on-system fuel and purchased
6 power expense in Missouri Public Service Commission ("Commission") Case Nos.
7 ER-2006-0315, ER-2008-0093, ER-2010-0130 and ER-2011-0004. I also testified
8 on behalf of Empire in Kansas Corporation Commission Case No. 05-EPDE-980-
9 RTS.

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

11 A. My testimony will support the Fuel Adjustment Clause ("FAC") rate schedules that
12 have been filed by Empire to reflect the actual energy costs that Empire has
13 incurred during the six-month period September 2010 through February 2011. This
14 six-month period is an Accumulation Period specified in Empire's FAC tariff that
15 was approved by the Missouri Public Service Commission ("Commission") in its
16 Report and Order issued in Case Nos. ER-2008-0093 and ER-2010-130.

17 **EXECUTIVE SUMMARY**

18 **Q. ARE THERE ANY DIFFERENCES FROM PREVIOUS FAC FILINGS**
19 **THAT SHOULD BE NOTED?**

20 A. Yes. Unlike Empire's previous FAC filings, changes to two tariff sheets are
21 required in this filing because during the Accumulation Period commencing
22 September 1, 2010, two different FACs were in effect. For the first nine (9) days of
23 September 2010, the FAC approved in Commission Case No. ER-2008-0093 was

1 in effect. For the remainder of the Accumulation Period which ended February 28,
2 2011, the FAC approved by the Commission in Case No. ER-2010-0130 was in
3 effect. Thus my testimony will reference rate schedule sheet 17c, which applies to
4 the period September 1, 2010, through September 9, 2010, and rate schedule 17g,
5 which applies to the period September 10, 2010, through February 28, 2011. For
6 billing purposes Empire proposes to combine the two FAC cost recovery factors
7 into a single factor. The cost adjustment factors (“CAF”) described in this
8 testimony (one for primary service and one for secondary service) are the combined
9 impacts of the two different FACs that were in effect during the Accumulation
10 period September 1, 2010 through February 28, 2011. Rate schedules 17c and 17g
11 along with the analysis of the energy costs and energy cost recovery that has taken
12 place during the Accumulation Period can be found attached to my testimony as
13 Schedule TWT-1. This schedule provides the calculations for the two different
14 FACs in effect during the period and their combined result.

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

17 A. The Commission’s rule governing fuel and purchased power cost recovery
18 mechanisms for electric utilities – specifically 4 CSR 240-20.090(4) – requires
19 Empire to make periodic FAC filings that are designed to enable Commission
20 review of the actual fuel costs, purchased power costs and off-system sales margins
21 the Company has incurred during an Accumulation Period. In addition, these
22 periodic filings are designed to adjust the FAC rates, up or down, to reflect the
23 actual energy costs incurred during the Accumulation Period. Empire’s FAC tariff

1 calls for two annual filings: a filing covering the six-month Accumulation Period
2 running from September through February and a second filing covering the
3 Accumulation Period running from March through August. Any increases or
4 decreases in rates that are approved by the Commission, or that take effect by
5 operation of law, are then collected from or refunded to customers over two six-
6 month Recovery Periods: June through November and December through May.

7 Since the implementation of Empire's FAC, the variable cost of fuel and purchased
8 power used by the Company's Missouri customers has varied from the base fuel
9 and energy cost established in rates. For the Accumulation Period September 2010
10 through February 2011, Empire's actual variable fuel, purchased power and Air
11 Quality Control System ("AQCS") costs, less off-system sales and Renewable
12 Energy Credit sales ("REC"), have exceeded the base energy costs included in the
13 Company's Missouri rates in Case Nos. ER-2008-0093 and ER-2010-0130 by
14 approximately \$1.6 million. In accordance with the FAC tariff, Empire has
15 absorbed 5% of the overall increase in Missouri variable fuel, purchased power and
16 AQCS costs during the six-month period September 2010 through February 2011.
17 Therefore, in accordance with the Commission's FAC rule and Empire's approved
18 FAC tariff, the Company has filed FAC rate schedules that are designed to recover
19 net energy cost increases of approximately \$1.5 million from its Missouri
20 jurisdictional customers, and approximately \$320,000 of additional un-recovered
21 energy costs from the prior recovery period ending November 30, 2010 for a total
22 of \$1.873 million, including interest. As reflected in the rate schedules filed by the
23 Company, Empire has developed two Cost Adjustment Factors ("CAF") of

1 \$0.00086 per kilowatt-hour (kWh) for primary service and a CAF of \$0.00088 per
2 kWh for secondary service. These CAFs will enable Empire to recover the
3 difference between base costs of fuel and purchased power built into its rates and
4 the net fuel and purchased power costs that were actually incurred during the
5 Accumulation Period as well as the amounts identified during the true-up of fuel
6 and energy costs for the Recovery Period ended November 30, 2010 over a
7 Recovery Period running from June 2011 through November 2011.

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 the actual, prudently-incurred fuel and
13 purchased power costs. The first safeguard is a true-up process that ensures that
14 the FAC collections during the Recovery Period do not exceed actual fuel and
15 purchased power costs incurred during the Accumulation Period. The second
16 safeguard involves a requirement that Empire's energy costs be subjected to
17 periodic Prudence Reviews, which will ensure that only prudently-incurred energy
18 are passed through to customers using the FAC. The first year's operation of
19 Empire's FAC has been audited by the Commission's staff and no disallowances
20 were recommended. The Commission's staff has started a new prudence review of
21 Empire's FAC covering Empire's fuel and energy procurement activities and FAC
22 billings for operating periods subsequent to their first review.

1 **THE PROPOSED FAC RATE ADJUSTMENT**

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

4 A. The Commission's rules – specifically 4 CSR 240-20.090(4) – and Empire's FAC
5 tariff require the Company to make periodic FAC filings that enable the
6 Commission to review Empire's actual fuel, purchased power and AQCS costs and
7 off-system sales and REC revenue so that Empire's FAC rates can be adjusted to
8 reflect the actual energy costs the Company incurs to provide electric service to its
9 Missouri customers. Empire's Missouri FAC tariff calls for two FAC adjustment
10 filings per year: a filing covering the six-month Accumulation Period running from
11 September through February and a second filing covering the Accumulation Period
12 running from March through August. The Missouri FAC rate schedules related to
13 my testimony are Empire's fifth filing since Empire's FAC was approved by the
14 Commission in ER-2008-0093 and ER-2010-0130. Empire is seeking an increase
15 in its FAC rates to reflect 95% of the difference between the base energy costs built
16 into its base Missouri rates and Empire's actual Missouri energy costs for the
17 Accumulation Period, plus a true-up of the costs recovered during the Recovery
18 Period ending November 30, 2010. This increase in FAC rates will be reflected on
19 the Missouri customers' bills over the six-month Recovery Period running from
20 June 2011 through November 2011.

21 **Q. HOW HAVE EMPIRE'S AVERAGE ENERGY COSTS CHANGED OVER**
22 **THE COST INCLUDED IN BASE RATES DURING THE FIFTH**
23 **ACCUMULATION PERIOD?**

1 A. Empire's average energy costs per kWh have increased over the level built into its
2 base electric rates, which is why the FAC rate schedules filed by the Company seek
3 a change in the rates charged to the Missouri customers. This will be an increase
4 over the level built into base electric rates, but a decrease when compared to the
5 prior FAC period. More specifically, Empire's Missouri base rates included an
6 average cost of energy per kWh of net system production of \$0.029002 during the
7 Accumulation Period of September 2010 through February 2011. Empire actually
8 incurred average energy costs of \$0.029709 per kWh during the Accumulation
9 Period. This represents an overall increase in average energy costs of \$0.00071 per
10 kWh during the Accumulation Period, or about 2.44 percent above than the average
11 cost built into base rates. Pursuant to Empire's FAC tariff, Empire is requesting to
12 pass on to its Missouri customers 95 percent of this cost increase plus
13 approximately \$320,000 of under-recovered energy cost from the Recovery Period
14 ending November 30, 2010 or an average of \$0.00088 per kWh sold during the
15 upcoming Recovery Period.

16 **Q. PLEASE BRIEFLY DESCRIBE THE REASONS FOR THE INCREASE IN**
17 **THE AVERAGE COST OF ENERGY DURING THE ACCUMULATION**
18 **PERIOD?**

19 A. A couple of factors were primary drivers which caused the average fuel and energy
20 cost to increase during the Accumulation Period. For example, the weather during
21 January 2011 was abnormally cold, which increased the level peaking generation
22 needed to meet the demands of our customers. This peaking generation is fired
23 using natural gas, which is a higher priced fuel than coal for example. In addition,

1 Empire received energy from the Iatan 2 unit during the accumulation period but,
2 due to the use of a construction accounting procedure authorized by the
3 Commission, Empire reflected the market value of the Iatan 2 power in its fuel
4 expenses, rather than the actual cost of the fuel consumed at Iatan 2. This
5 construction accounting procedure raised the cost of fuel during the accumulation
6 period and resulted in a corresponding decrease in the cost of construction at Iatan
7 2.

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 decrease by approximately \$1.65 per month over the six-month period June
12 2011 through November 2011, when the current FAC charge is applied to their bill
13 and the previous positive FAC factor of \$0.00253 is eliminated from their bill.

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

15 **A.** It was slightly higher than expected, primarily driven by the colder than normal
16 weather, and the corresponding increase in customer usage, and Iatan 2
17 construction accounting, the average energy costs came in slightly higher than
18 budget, which is based upon normal weather and no Iatan 2 construction
19 accounting for Iatan 2 fuel. Our budget anticipated an average fuel and purchased
20 power energy costs during the current Accumulation Period of \$28.81 per
21 megawatt-hour of net system production. The actual results were above budget by
22 around 3 percent at \$29.71 per megawatt-hour.

23 **Q. DO YOU EXPECT THE AVERAGE COST OF FUEL AND PURCHASED**

**POWER TO INCREASE DURING THE NEXT ACCUMULATION PERIOD
FROM MARCH 2011 THROUGH AUGUST 2011?**

A. Yes. Our current budget anticipates average energy costs of **_____** per megawatt-hour during the next Accumulation Period with the aforementioned Iatan 2 construction accounting procedure considered. Empire's Missouri fuel adjustment clause includes a seasonal base cost factor that takes the higher summer energy costs into account.

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

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

Q. PLEASE DESCRIBE HOW EMPIRE IS PROPOSING TO RECOVER THE ENERGY COST INCREASES EXPERIENCED DURING THE SEPTEMBER 2010-FEBRUARY 2011 ACCUMULATION PERIOD?

A. The FAC rate schedule filed by Empire will recover the energy cost increase actually incurred during the Accumulation Period by applying two Cost Adjustment Factors or CAFs of \$0.00086 for primary service and \$0.00088 for secondary service to the actual Missouri kWh sales that take place during the June

1 1, 2011 to November 30, 2011 Recovery Period. The proposed CAFs were
2 calculated in accordance with Empire's authorized FAC tariff. I have attached to
3 my testimony as Schedule TWT-1 a copy of two of Empire's approved FAC tariff
4 sheets. In addition to the tariff sheet, I have included as page 3 of Schedule TWT-1
5 a monthly analysis of the energy costs and energy cost recovery that has taken
6 place during the Accumulation Period. Schedule TWT-1 contains the basic
7 information and FAC formula that Empire used to calculate the CAFs that have
8 been included in the proposed revised FAC rate schedule sheets 17c and 17g. The
9 Empire FAC tariff and the formula included therein were approved by the
10 Commission in Case Nos. ER-2008-0093 and ER-2010-130.

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

14 A. The data upon which Empire based the values for each of the variables in the
15 approved CAF formula are included on the schedule, and came from Empire's
16 books and records. Schedule TWT-1 contains all of the basic information that is
17 required to calculate the proposed change in the CAF. In addition, I have filed the
18 detailed information required by 4 CSR 240-3.161(7)(A) with this testimony as a
19 separate set of supporting workpapers. In addition, as required by 4 CSR 240-
20 3.161(7)(B), I have separately provided to all parties of record in Case Nos. ER-
21 2008-0093 and ER-2010-130 with a set of these workpapers.

22 **Q. IS EMPIRE IN COMPLIANCE WITH THE PROVISIONS OF THE**
23 **COMMISSION'S FAC RULE CONCERNING PERIODIC REPORTING**

1 **AND SURVEILANCE?**

2 A. Yes. Empire has complied with all of the Commission's rules, 4 CSR 240-3.161(5)
3 and (6), governing periodic reports and surveillance using the Commission's
4 electronic filing system and provided all of the parties to ER-2008-0093 and ER-
5 2010-130 with copies of the periodic compliance reports and copies of surveillance
6 reports at the same time they were filed with the Commission.

7 **Q. IF REVISED FAC SHEETS 17c and 17g ARE APPROVED BY THE**
8 **COMMISSION, WHAT SAFEGUARDS EXIST TO ENSURE THAT THE**
9 **FAC REVENUE COLLECTED BY EMPIRE DOES NOT EXCEED THE**
10 **ACTUAL ENERGY COST INCURRED BY EMPIRE DURING THE**
11 **ACCUMULATION PERIOD?**

12 A. As I mentioned earlier, Empire's FAC and the Commission's rules provide two
13 mechanisms designed to limit the FAC amounts collected from customers to
14 Empire's actual, prudently-incurred energy costs. First, at the end of each
15 Recovery Period the Company is required to true-up the amounts collected from
16 customers through the CAF with the energy costs that were actually incurred
17 during the Accumulation Period to which the CAF applies. In addition, Empire's
18 energy costs will be subjected to periodic Prudence Reviews to ensure that only
19 prudently-incurred energy costs are collected from customers through the FAC.
20 These two mechanisms serve as checks that ensure that Empire's Missouri
21 customers pay only the prudently-incurred, actual cost of energy used to provide
22 electric service in Missouri (less the 5% Empire is absorbing) – no more and no
23 less.

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

4 A. As provided by 4 CSR 240-20.090(4), Staff has thirty (30) days from the date the
5 FAC rate schedule is filed to conduct a review and to make a recommendation to
6 the Commission as to whether the rate schedules comply with the Commission's
7 FAC rules, the requirements of Section 386.266, RSMo, and Empire's approved
8 FAC. The Commission has sixty (60) days from the date of Empire's filing to
9 either approve the rate schedule or to allow it to take effect by operation of law.
10 Empire believes its FAC filing satisfies all of the requirements of applicable
11 statutes, the Commission's rules, and Empire's approved FAC. Empire requests
12 that, following Staff's review, the Commission approve 1st revised FAC sheet 17g
13 and the sixth revised FAC sheet 17c to be effective as of June 1, 2011, which is the
14 first day of the Recovery Period prescribed in Empire's FAC tariff.

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

16 A. Yes, it does.

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 1st Revised Sheet No. 17g
Canceling P.S.C. Mo. No. 5 Sec. 4 Original Sheet No. 17g

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE SCHEDULE FAC	
For service in Accumulation Periods after September 10, 2010; and for service in that portion of Accumulation Period 5 on and after September 10, 2010.	

ACCUMULATION PERIOD ENDING, (Feb 28, 2011)

1. Total energy cost [(F + P + E – O - R)	\$80,289,219
2. Base energy cost (B)	\$78,376,098
3. Missouri energy ratio (J)	0.8234
4. Fuel cost recovery [(F + P + E – O - R) – B] * J * 0.95	\$1,467,852
5. Adj for over/under recovery for the recovery period ending XX-XX-XXXX (C)	\$000,000
6. Interest (I)	\$26,841
7. Fuel Adjustment Clause (FAC)	\$1,494,693
8. Forecasted Missouri NSI for the recovery period (S)	2,286,745,550
9. Cost Adjustment Factor (CAF) to be applied to bills beginning 06-01-2011	\$0.00065 / kWh
10. CAF - Primary and above (Line 9 x Primary Expansion Factor)	\$0.00069 / kWh
11. CAF - Secondary (Line 9 x Secondary Expansion Factor)	\$0.00070 / kWh

Primary Expansion Factor = 1.0502
Secondary Expansion Factor = 1.0686

DATE OF ISSUE April 1, 2011
ISSUED BY Kelly S. Walters, Vice President, Joplin, MO

DATE EFFECTIVE June 1, 2011

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 6th Revised Sheet No. 17cCanceling P.S.C. Mo. No. 5 Sec. 4 5th Revised Sheet No. 17cFor ALL TERRITORY

FUEL ADJUSTMENT CLAUSE

SCHEDULE FAC

For service in Accumulation Periods prior to September 10, 2010; and for service in that portion of Accumulation Period 5 prior to September 10, 2010.

ACCUMULATION PERIOD ENDING, Sep-09-2010

1.	Total energy cost (F + P + E - O)	\$3,952,767
2.	Base energy cost (B)	\$3,878,817
3.	Missouri Energy Ratio (J)	0.8102
4.	Fuel Cost Recovery [(F + P + E - O) - B] * J	\$56,919
5.	Adj for Over/Under recovery for the Recovery period ending 11-30-2010 (C)	\$319,884
6.	Interest (I)	\$1,902
7.	Fuel Adjustment Clause (FAC)	\$378,705
8.	Forecasted Missouri NSI for the Recovery Period (S)	2,286,745,550
9.	Cost Adjustment Factor (CAF) to be applied to bills beginning 06-01-2011	\$0.00017 / kWh
10.	CAF - Primary and above (Line 9 x Primary Expansion Factor)	\$0.00017 / kWh
11.	CAF - Secondary (Line 9 x Secondary Expansion Factor)	\$0.00018 / kWh

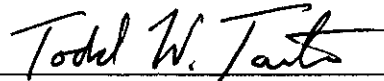
Primary Expansion Factor = 1.0520

Secondary Expansion Factor = 1.0728

AFFIDAVIT OF TODD W. TARTER

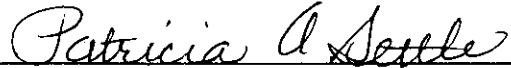
STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 1st day of April, 2011, before me appeared Todd W. Tarter, to me personally known, who, being by me first duly sworn, states that he is the 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 1st day of April, 2011.



Notary Public

My commission expires: _____

