

Exhibit No.:
Issue: Fuel Adjustment
Witness: W. Scott Keith
Type of Exhibit: Direct Testimony
Sponsoring Party: Empire District Electric
Case No.
Date Testimony Prepared: September 2010

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

Direct Testimony

of

W. Scott Keith

September 2010

****Denotes Highly Confidential****

DIRECT TESTIMONY
OF
W. SCOTT KEITH
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 W. Scott Keith 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 Director of Planning and Regulatory. I have held this position
9 since August 1, 2005. Prior to joining Empire I was Director of Electric Regulatory
10 Matters in Kansas and Colorado for Aquila, Inc. from 1995 to July 2005.

11 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND FOR THE**
12 **COMMISSION.**

13 A. In August 1973, I received a Bachelor of Business Administration degree with a
14 major in Accounting at Washburn University, Topeka, Kansas.

15 **Q. WHAT EXPERIENCE HAVE YOU HAD IN THE FIELD OF PUBLIC**
16 **UTILITIES?**

17 A. In 1973, I accepted a position in the firm of Troupe Kehoe Whiteaker & Kent as a
18 staff accountant. I assisted in or was responsible for fieldwork and preparation of

1 exhibits for rate filings presented to various regulatory commissions and audits
2 leading to opinions on financial statements of various types of companies including
3 utility companies.

4 In September 1976, I accepted a position with the staff of the Kansas Corporation
5 Commission ("KCC"). My responsibilities at the KCC included the investigation
6 of utility rate applications and the preparation of exhibits and presentation of
7 testimony in connection with applications that were under the jurisdiction of the
8 KCC. The scope of the investigations I performed on behalf of the KCC included
9 the areas of accounting, cost of service and rate design.

10 In March of 1978, I joined the firm of Drees Dunn & Company and continued to
11 perform services for various utility clients with that firm until it dissolved in March
12 of 1991.

13 From March of 1991 until June of 1994, I was self-employed as a utility consultant
14 and continued to provide clients with analyses of revenue requirements, cost of
15 service studies and rate design. In connection with those engagements I also
16 provided expert testimony and exhibits to be presented before regulatory
17 commissions.

18 As I mentioned earlier, I was employed by Aquila, Inc. as the Director of
19 Regulatory for its electric operations in Kansas and Colorado from 1995 to July
20 2005.

21 **Q. HAVE YOU PREVIOUSLY PARTICIPATED IN ANY REGULATORY**
22 **PROCEEDINGS?**

23 **A.** Yes, I have. I have testified before regulatory commissions in the states of Kansas,

1 Colorado, Indiana, Missouri, Oklahoma and West Virginia. I have also testified
2 before the Federal Energy Regulatory Commission ("FERC").

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

4 A. My testimony will support the Fuel Adjustment Clause ("FAC") rate schedules that
5 have been filed by Empire to reflect the actual energy costs that Empire has
6 incurred during the six-month period March 2010 through August 2010. This six-
7 month period is an Accumulation Period specified in Empire's FAC tariff sheet 17
8 that was approved by the Missouri Public Service Commission ("Commission") in
9 its Report and Order issued in Case No. ER-2010-0130.

10 **EXECUTIVE SUMMARY**

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

13 A. The Commission's rule governing fuel and purchased power cost recovery
14 mechanisms for electric utilities – specifically 4 CSR 240-20.090(4) – requires
15 Empire to make periodic FAC filings that are designed to enable Commission
16 review of the actual fuel costs, purchased power costs and off-system sales margins
17 the Company has incurred during an Accumulation Period. In addition, these
18 periodic filings are designed to adjust the FAC rates up or down, to reflect the
19 actual energy costs incurred during the Accumulation Period. Empire's FAC tariff
20 calls for two annual filings: a filing covering the six-month Accumulation Period
21 running from September through February and a second filing covering the
22 Accumulation Period running from March through August. Any increases or
23 decreases in rates that are approved by the Commission, or that take effect by

1 operation of law, are then collected from or refunded to customers over two six-
2 month Recovery Periods: June through November and December through May.

3 Since the implementation of the FAC, the variable cost of fuel and purchased power
4 used by the Company's Missouri customers has varied from the base cost
5 established in the FAC. For the Accumulation Period March 2010 through August
6 2010, Empire's actual variable fuel and purchased power costs less off-system sales
7 margins, emission allowance sales and a true-up of costs from a prior accumulation
8 period, have exceeded the average base energy costs included in the Company's
9 Missouri rates in Case No. ER-2008-0093 by approximately \$5.4 million. In
10 accordance with the FAC tariff, Empire has absorbed 5% of the overall increase in
11 average Missouri variable fuel and purchased power costs during the six-month
12 period March 2010 through August 2010. Therefore, in accordance with the
13 Commission's FAC rule and Empire's approved FAC tariff, the Company has filed
14 FAC rate schedules that are designed to recover energy cost increases of
15 approximately \$5.5 million from its Missouri jurisdictional customers less
16 \$191,669 of un-refunded energy costs from the prior recovery period ending August
17 31, 2009 for a total of \$5.35 million. As reflected in the rate schedules filed by the
18 Company, Empire has developed two Cost Adjustment Factors ("CAF") of
19 \$0.00248 per kilowatt-hour (kWh) for primary service and a CAF of \$0.00253 per
20 kWh for secondary service. These CAFs will enable Empire to recover the
21 difference between base costs of fuel and purchased power built into its rates and
22 the fuel and purchased power costs that were actually incurred during the
23 Accumulation Period and the true-up of fuel and energy costs during the Recovery

1 Period ended February 28, 2010 over a Recovery Period running from December
2 2010 through May 2011.

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

6 A. Yes. The Empire FAC and the Commission's rule governing FACs include two
7 safeguards that limit FAC recovery to the actual, prudently-incurred fuel and
8 purchased power costs. The first safeguard is a true-up process that ensures that the
9 FAC collections during the Recovery Period do not exceed actual fuel and
10 purchased power costs incurred during the Accumulation Period. The second
11 safeguard involves a requirement that Empire's energy costs be subjected to
12 periodic Prudence Reviews, which will ensure that only prudently-incurred energy
13 are passed through to customers using the FAC. The staff of the Commission has
14 recently completed a formal Prudence Review of Empire's past energy costs during
15 its operation of the FAC. This case has been designated EO-2010-0084 and the
16 Commission's staff has recommended no disallowances or adjustments to Empire's
17 energy costs during the first year of the operation of Empire's FAC. The first year
18 of operation of Empire's FAC covered the 12-months ending August 31, 2009.

19 **THE PROPOSED FAC RATE ADJUSTMENT**

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

22 A. The Commission's rules – specifically 4 CSR 240-20.090(4) – and Empire's FAC
23 tariff require the Company to make periodic FAC filings that enable the

1 Commission to review Empire's actual fuel and purchased power costs and off-
2 system sales margins so that Empire's FAC rates can be adjusted to reflect the
3 actual energy costs the Company incurs to provide electric service to its Missouri
4 customers. Empire's Missouri FAC tariff calls for two FAC adjustment filings per
5 year: a filing covering the six-month Accumulation Period running from
6 September through February and a second filing covering the Accumulation Period
7 running from March through August. The Missouri FAC rate schedules related to
8 my testimony are Empire's fourth filing under the FAC that was approved by the
9 Commission. Empire is seeking an increase in its FAC rates to reflect 95% of the
10 difference between the average base energy costs built into its base Missouri rates
11 and Empire's actual Missouri energy costs for the Accumulation Period, plus a true-
12 up of the costs recovered during the Recovery Period ending May 31, 2010. This
13 increase in FAC rates will be reflected on the Missouri customers' bills over the
14 six-month Recovery Period running from December 31, 2010 through May 31,
15 2011.

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

19 A. Empire's average energy costs per kWh have increased over the level built into its
20 base electric rates, which is why the FAC rate schedules filed by the Company seek
21 an increase in the rates charged to the Missouri customers. More specifically,
22 Empire's Missouri base rates included an average cost of energy per kWh of net
23 system production of \$0.02893 during the Accumulation Period of March 2010

1 through August 2010. Empire actually incurred average energy costs of \$0.03141
2 per kWh during the Accumulation Period. This represents an overall increase in
3 average energy costs of \$0.00248 per kWh during the Accumulation Period, or
4 about 8.6 percent above than the average cost built into base rates. Pursuant to
5 Empire's FAC tariff, Empire is requesting to pass on to its Missouri customers 95
6 percent of this cost increase less approximately \$192,000 of under refunded energy
7 cost from the Recovery Period ending May 31, 2010 or an average of \$0.00252 per
8 kWh sold during the upcoming Recovery Period.

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

12 A. A number of factors caused the average fuel and energy cost to increase during the
13 Accumulation Period. For example, the weather during the summer of 2010 was
14 warmer than normal resulting in increased fuel costs due to the increase in the level
15 of peaking generation needed to meet the demands of our customers. This peaking
16 generation is fired using natural gas, which is a higher priced fuel than coal for
17 example. In addition, this past Accumulation Period reflected the expiration of a
18 long-term power contract with Westar, Inc. that provided lower cost coal energy
19 from Westar's Jeffrey Energy Center. This contract expired on May 31, 2010.
20 Finally, the Accumulation Period reflects the impact of the test power from
21 Empire's new generating units, Plum Point and Iatan 2.

22 **Q. WHAT IS THE MONTHLY FAC INCREASE FOR A TYPICAL**
23 **RESIDENTIAL CUSTOMER?**

1 **A.** For Missouri residential customers using 1,000 kWh per month, the electric bill
2 will increase by approximately \$0.90 per month over the six-month period
3 December 2010 through May 2011, when the current FAC charge is applied to their
4 bill and the previous positive FAC factor of \$0.00163 is eliminated from their bill.

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

6 **A.** Yes. Due to the anticipated change in generation mix due to the expiration of the
7 long-term Westar contract, Empire's fuel and energy cost budget assumed that
8 average energy costs for the Accumulation Period would be \$33.31 per MWH. The
9 increase in average costs to \$31.41 was around six (6) percent below what we had
10 anticipated in the budget.

11 **Q. DO YOU EXPECT THE AVERAGE COST OF FUEL AND PURCHASED**
12 **POWER TO INCREASE DURING THE NEXT ACCUMULATION PERIOD**
13 **FROM SEPTEMBER 2010 THROUGH FEBRUARY 2011?**

14 **A.** No. Our current budget anticipates average energy costs of ** ** per
15 megawatt-hour during the next Accumulation Period, excluding the impact of
16 Renewable Energy Credit ("REC") sales and off-system sales revenue, which
17 should lower the average cost of energy that flows through the FAC. In addition,
18 the energy costs for next six-month Accumulation Period will also reflect the
19 transition of the Plum Point generation unit from construction status to in service
20 status. The actual results will also depend upon the in service status of Iatan 2, and
21 how fuel costs and test power costs are accounted for.

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

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

8 **Q. PLEASE DESCRIBE HOW EMPIRE IS PROPOSING TO RECOVER THE**
9 **ENERGY COST INCREASES EXPERIENCED DURING THE MARCH**
10 **2010-AUGUST 2010 ACCUMULATION PERIOD?**

11 A. The FAC rate schedule filed by Empire will recover the energy cost increase
12 actually incurred during the Accumulation Period by applying two Cost Adjustment
13 Factors or CAFs of \$0.00248 for primary service and \$0.00253 for secondary
14 service to the actual Missouri kWh sales that take place during the December 1,
15 2010 to May 31, 2011 Recovery Period. The proposed CAFs were calculated in
16 accordance with Empire's authorized FAC tariff. I have attached to my testimony
17 as Schedule WSK-1 a copy of one of Empire's approved FAC tariff sheets. In
18 addition to the tariff sheet, I have included as page 2 of Schedule WSK-1 a monthly
19 analysis of the energy costs and energy cost recovery that has taken place during the
20 Accumulation Period. Schedule WSK-1 contains the basic information and FAC
21 formula that Empire used to calculate the CAFs that have been included in the
22 proposed revised FAC rate schedule sheet 17c. The Empire FAC tariff and the
23 formula included therein were approved by the Commission in Case No. ER-2010-

1 0130.

2 **Q. HOW WERE THE VARIOUS VALUES USED TO DETERMINE THE**
3 **PROPOSED CAFS THAT ARE SHOWN ON SCHEDULE WSK-1**
4 **DEVELOPED?**

5 A. The data upon which Empire based the values for each of the variables in the
6 approved CAF formula are included on the schedule, and came from Empire's
7 books and records. Schedule WSK-1 contains all of the basic information that is
8 required to calculate the proposed change in the CAF. In addition, I have filed the
9 detailed information required by 4 CSR 240-3.161(7)(A) with this testimony as a
10 separate set of supporting workpapers. In addition, as required by 4 CSR 240-
11 3.161(7)(B), I have separately provided to all parties of record in Case No. ER-
12 2010-0130 with a set of these work-papers.

13 **Q. IS EMPIRE IN COMPLIANCE WITH THE PROVISIONS OF THE**
14 **COMMISSION'S FAC RULE CONCERNING PERIODIC REPORTING**
15 **AND SURVEILANCE?**

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

21 **Q. IF REVISED FAC SHEET 17C IS APPROVED BY THE COMMISSION,**
22 **WHAT SAFEGUARDS EXIST TO ENSURE THAT THE FAC REVENUE**
23 **COLLECTED BY EMPIRE DOES NOT EXCEED THE ACTUAL ENERGY**

**COST INCURRED BY EMPIRE DURING THE ACCUMULATION
PERIOD?**

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

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

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

1 statutes, the Commission's rules, and Empire's approved FAC. Empire requests
2 that, following Staff's review, the Commission approve 5th revised FAC sheet 17c
3 to be effective as of December 1, 2010, which is the first day of the Recovery
4 Period prescribed in Empire's FAC tariff.

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

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

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

9 A. Yes, it does.

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 5th Revised Sheet No. 17cCanceling P.S.C. Mo. No. 5 Sec. 4 4th 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, Aug-31-2010

1.	Total energy cost (F + P + E - O)	\$89,018,894
2.	Base energy cost (B)	\$81,984,294
3.	Missouri Energy Ratio (J)	0.8182
4.	Fuel Cost Recovery [(F + P + E - O) - B] * J	\$5,510,843
5.	Adj for Over/Under recovery for the Recovery period ending 02-28-2010 (C)	\$(191,669)
6.	Interest (I)	\$29,348
7.	Fuel Adjustment Clause (FAC)	\$5,348,522
8.	Forecasted Missouri NSI for the Recovery Period (S)	2,268,032,744
9.	Cost Adjustment Factor (CAF) to be applied to bills beginning 12-01-2010	\$0.00236 / kWh
10.	CAF - Primary and above (Line 9 x Primary Expansion Factor)	\$0.00248 / kWh
11.	CAF - Secondary (Line 9 x Secondary Expansion Factor)	\$0.00253 / kWh

Primary Expansion Factor = 1.0520

Secondary Expansion Factor = 1.0728

The Empire District Electric Company
Fuel Adjustment Clause
Cost Adjustment Factor Calculation
For Accumulation Period Ending August 2010

		Accumulation Period						Total
		MAR 10	APR 10	MAY 10	JUN 10	JUL 10	AUG 10	
Fuel	(F)	\$ 6,031,721.94	\$ 4,663,030.11	\$ 6,309,213.99	\$ 10,711,915.65	\$ 15,477,714.32	\$ 15,522,312.57	\$ 58,715,908.58
Fuel - Iatan 2		\$ -	\$ -	\$ -	\$ -	\$ -	\$ (22,781.91)	\$ (22,781.91)
Purchased Power	(P)	\$ 5,136,933.87	\$ 5,482,629.01	\$ 4,628,543.61	\$ 5,118,272.92	\$ 5,600,241.64	\$ 4,556,510.37	\$ 30,523,131.42
Purchased Power - Iatan 2		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46,624.68	\$ 46,624.68
Off-System Sales Margin	(O)	\$ 89,131.26	\$ (201,010.92)	\$ (27,946.36)	\$ 135,869.70	\$ 57,615.70	\$ 159,836.73	\$ 213,496.11
Net of Emission Allow.	(E)	\$ -	\$ (5,530.33)	\$ (1,119.59)	\$ -	\$ -	\$ -	\$ (6,649.92)
Total Energy Cost		\$ 11,079,524.55	\$ 10,341,139.71	\$ 10,964,584.37	\$ 15,694,318.87	\$ 21,020,340.26	\$ 19,942,828.98	\$ 89,018,893.97
June - September rate		\$ 0.03001	\$ 0.03001	\$ 0.03001	\$ 0.03001	\$ 0.03001	\$ 0.03001	
October - May rate		\$ 0.02744	\$ 0.02744	\$ 0.02744	\$ 0.02744	\$ 0.02744	\$ 0.02744	
NSI kwh		433,807,000	354,312,000	398,068,000	512,409,000	557,889,000	576,997,000	2,833,482,000
Base Energy Cost	(B)	\$ 11,903,664.08	\$ 9,722,321.28	\$ 10,922,985.92	\$ 15,377,394.09	\$ 16,742,248.89	\$ 17,315,679.97	\$ 81,984,294.23
Missouri Retail kwh Sales		332,466,355	268,618,050	301,302,099	385,414,071	428,671,899	439,078,451	2,155,550,925
Total System kwh Sales		402,963,322	330,183,351	370,362,468	475,669,276	517,888,358	537,530,404	2,634,597,179
Missouri Energy Ratio	(J)	0.8251	0.8135	0.8135	0.8103	0.8277	0.8168	0.8182
Fuel Cost Recovery (Over)/Under [((F+P-O+E)-B)*J]*.95]		\$ (645,997.65)	\$ 478,238.35	\$ 32,148.32	\$ 243,963.94	\$ 3,363,927.42	\$ 2,038,562.55	\$ 5,510,842.93
Over/Under Adjustment	(C)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (191,668.72)	\$ (191,668.72)
Interest (Expense)/Income	(I)	\$ 5,237.23	\$ 4,968.08	\$ 4,397.35	\$ 3,803.87	\$ 4,471.45	\$ 6,470.01	\$ 29,347.99
Fuel Adjustment Clause [(F+P+O+E)-B]*J] + C + I	(FAC)	\$ (640,760.42)	\$ 483,206.43	\$ 36,545.67	\$ 247,767.81	\$ 3,368,398.87	\$ 1,853,363.84	\$ 5,348,522.20
For Recovery Period								
Forecasted NSI kwh	a							2,727,947,000
Forecasted Missouri Retail kwh Sales	b							2,118,343,000
Forecasted Total System kwh Sales	c							2,547,903,000
Forecasted Missouri Ratio								83.14%
Forecasted Missouri NSI kwh (S)=a*(b/c)	(S)							2,268,032,744
Cost Adjustment Factor (CAF=FAC/S) Applied to bills beginning 12/1/2009	(CAF)							0.00236
CAF - Primary and above Primary Expansion Factor	1.0520							0.00248
CAF - Secondary Secondary Expansion Factor	1.0728							0.00253


AFFIDAVIT OF W. SCOTT KEITH

STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 30th day of September, 2010, before me appeared W. Scott Keith, to me personally known, who, being by me first duly sworn, states that he is the Director of Planning and Regulatory 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.


W. Scott Keith

Subscribed and sworn to before me this 30th day of September, 2010.


Notary Public

My commission expires: 10-30-10.

VICKI L. KRAMER-GIBSON Notary Public - Notary Seal STATE OF MISSOURI Jasper County - Comm#06482169 My Commission Expires Oct. 30, 2010
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