Exhibit No.:

Fuel Expenses Issues:

Rate Base

Witness:

David W. Elliott

Sponsoring Party: Type of Exhibit: MO PSC Staff

Supplemental Direct

Testimony

Case No.:

ER-2006-0315

Date Testimony Prepared:

July 17, 2006

# MISSOURI PUBLIC SERVICE COMMISSION UTILITY OPERATIONS DIVISION

### SUPPLEMENTAL DIRECT TESTIMONY

**OF** 

DAVID W. ELLIOTT

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2006-0315

Jefferson City, Missouri **July 2006** 

## BEFORE THE PUBLIC SERVICE COMMISSION

# OF THE STATE OF MISSOURI

In the matter of The Empire District Company of ) Joplin, Missouri for authority to file tariffs ) increasing rates for electric service provided to ) customers in Missouri service area of the Company.						
AFFIDAVIT OF DAVID W. ELLIOTT						
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )						
David W. Elliott, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Supplemental Direct Testimony in question and answer form, consisting of 3 pages to be presented in the above case; that the answers in the foregoing Supplemental Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.						
David W. Elliott						
Subscribed and sworn to before me this						
My commission expires  CARLA K. SCHNIEDERS  Notary Public - Notary Seal  State of Missouri  County of Cole  My Commission Exp. 06/07/2008						

### SUPPLEMENTAL DIRECT TESTIMONY 1 2 3 **OF** 4 5 DAVID W. ELLIOTT 6 7 THE EMPIRE DISTRICT ELECTRIC COMPANY 8 9 CASE NO. ER-2006-0315 10 11 12 Q. Please state your name and business address. A. 13 David W. Elliott, P.O. Box 360, Jefferson City, Missouri, 65102. 14 Q. Are you the same David W. Elliott who has previously filed direct testimony 15 in this case? 16 Yes I am. A. 17 Q. What is the purpose of your supplemental direct testimony? 18 A, The purpose of my supplemental direct testimony is to provide additional 19 variable fuel and purchased power information requested in question number 2 of the 20 Commission Order Regarding Additional Information Or Supplemental Filing of June 20, 21 2006. 22 Q. Please provide a summary of your testimony. 23 A. This testimony provides a calculation of contract and spot power purchased 24 and the amount of natural gas used for The Empire District Electric Company (Empire) for a period of three years out from Staff's direct case. The Staff used the RealTime® production 25 26 cost model to determine the purchased power amounts and the natural gas amounts for Empire for three years out from Staff's direct case. The results for purchased power are 27 28 202,509 MWh for year one, 221,927 Mwh for year two, and 248,108 MWh for year three.

3

What inputs were used in the RealTime® production cost model simulations Q.

Three additional load forecasts and an additional generating unit, Riverton

4

for this analysis?

A.

5

Unit 12, were the only changes to the inputs used in the simulation supporting the Staff's

7

6

calculation of variable fuel and purchased power costs in its direct case.

8

Q. Why was Riverton Unit 12 added to Staff's production cost simulation?

9

Empire has started construction of this 155 MW unit at its Riverton Plant in A.

10

Kansas, and it is expected to be in operation by spring of 2007. The Staff believes that in

11

order to have representative results for the additional runs, this unit should be included in the

12

13

14

What was the impact of just adding Riverton Unit 12 to the production cost Q.

A.

model.

simulation supporting Staff's direct case.

15 16

price of the spot purchased power. The Staff believes this was due to the fact that the cost of

The results showed a lower purchased power amount and a lower average

17

running Riverton Unit 12 is less than the price of some spot purchased power in the

18

simulation during certain periods. As a result, the model, at times, purchased less high priced

19

spot purchased power and generated lower cost megawatts from Riverton Unit 12 than it did

20

before Riverton Unit 12 was included.

21

How was the load forecasts developed for each of the three years going Q.

22

23

forward?

Please refer to Staff witness Lena M. Mantle's supplemental direct testimony. A.

#### Of David W. Elliott Q. Please explain how these load forecasts were used in the simulation. 1 2 A production cost simulation run was made with each of the three load A. forecasts. Each run included Riverton Unit 12. 3 4 Q. What were the results of these three runs? 5 A. The results are shown in Schedule 1. 6 What were the resulting averages of all purchased power prices and amount of Q. 7 all purchased power? 8 A. 1,787,706 MWh at \$22.68 for year one, 1,833,110 MWh at \$22.91 for year 9 two, and 1,885,478 MWh at \$23.23 for year three. 10 Q. What were the natural gas usage results from the simulations? 11 The usage was 11,190,370 mmBTU for the first year, 11,744,300 mmBTU for A. 12 the second year, and 12,204,910 mmBTU for the third year. 13 Q. Did you provide this gas usage information to any Staff witness? 14 Yes. I provided the natural gas usage numbers to Staff witness James A. A. 15 Busch, 16 Q. Does this conclude your supplemental direct testimony? 17 A. Yes, it does.

Supplemental Direct Testimony

	-		-		
	<u>RUN20</u>	<u>RUNCO</u>	<u>RUNC1</u>	RUNC2	RUNC3
	Filed case	Filed case w R12	Year 1	Year 2	Year 3
GEN					
MWH	3,620,296	3,625,624	3,696,713	3,767,484	3,833,772
\$	\$95,572,046	\$96,687,787	\$100,377,261	\$104,030,727	\$107,087,720
\$/MWH	\$26.40	<b>\$</b> 26.67	\$27.15	\$27.61	\$27.93
<u>PURC</u>					
MWH	1,750,307	1,744,980	1,787,706	1,833,110	1,885,478
\$	\$39,986,933	\$38,986,668	\$40,550,800	\$41,992,453	\$43,800,683
\$/MWH	\$22.85	\$22.34	\$22.68	\$22.91	\$23.23
TOTAL					
MWH	5,370,603	5,370,604	5,484,419	5,600,594	5,719,250
\$	\$135,558,979	\$135,674,455	\$140,928,061	\$146,023,180	\$150,888,403
\$/MWH	\$25.24	\$25.26	\$25.70	\$26.07	\$26.38
Gas Usage					<u>,</u>
MMBTU	10,452,630	10,627,220	11,190,370	11,744,300	12,204,910
	A CONTROL OF THE STATE OF THE S	e andre ser summercens no. In., we n. a same name of the Port Venitor board electrics is 60 me enthanced		ger kissin daga kerapatan dan da di dalah sebagai sebagai dan dalah da sebagai da sebagai da sebagai da sebaga Sebagai sebagai da sebagai sebagai da sebagai sebagai da sebagai da sebagai da sebagai da sebagai da sebagai d	trada reinh dalltir, der andra am davelledelsel dav littera d. v.th. v.th. v.tm. besen besed naden bes v.el f

Schedule 1