Exhibit No.: Issue: Sponsoring Party: MoPSC Staff Type of Exhibit: Rebuttal Testimony Date Testimony Prepared: November 4, 2004

Depreciation Witness: Gregory E. Macias Case No.: ER-2004-0570

# **MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DIVISION** 

**FILED**<sup>3</sup>

DEC 2 8 2004

# **REBUTTAL TESTIMONY**

### Missouri Public Service Commission

Exhibit N

Date 2

# OF

## **GREGORY E. MACIAS**

# **EMPIRE DISTRICT ELECTRIC COMPANY**

## CASE NO. ER-2004-0570

Jefferson City, Missouri Case No(s). November 2004

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### **OF THE STATE OF MISSOURI**

In The Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase for Retail Electric Service Provided to Customers in its Missouri Service Area.

Case No. ER-2004-0570

#### AFFIDAVIT OF GREGORY E. MACIAS

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STATE OF MISSOURI ) ) COUNTY OF COLE )

Gregory E. Macias, being of lawful age, on his oath states: that he has participated in the preparation of the following rebuttal testimony in question and answer form, consisting of \_\_\_\_\_ pages to be presented in the above case; that the answers in the following rebuttal 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.

Gregory E. Macias

Subscribed and sworn to before me this <u>SPD</u> day of November 2004.



Notary

TONI M. CHARLTON NOTARY PUBLIC STATE OF MISSOURI COUNTY OF COLE My Commission Expires December 28, 2004

1	REBUTTAL TESTIMONY
2	OF
3	GREGORY E. MACIAS
4	EMPIRE DISTRICT ELECTRIC COMPANY
5	CASE NO. ER-2004-0570
6 7	EXISTING DEPRECIATION RATES AND REMAINING LIFE METHOD OF ADJUSTMENT
8	LIFE SPAN RETIREMENT DATES
9	COST OF REMOVAL
10	

1		REBUTTAL TESTIMONY	
2		OF	
3		GREGORY E. MACIAS	
4		EMPIRE DISTRICT ELECTRIC COMPANY	
5		CASE NO. ER-2004-0570	
6			
7	Q.	Please state your name and business address.	
8	Α.	Gregory E. Macias, P.O. Box 360, Jefferson City, MO 65201.	
9	Q.	By whom are you employed and in what capacity?	
10	А.	I am employed by the Missouri Public Service Commission (PSC or	
11	Commission) as a Utility Engineering Specialist II in the Engineering and Management		
12	Services Department.		
13	Q.	Are you the same Gregory E. Macias who filed direct testimony on behalf of	
14	the Staff of the Missouri Public Service Commission in this case?		
15	А.	Yes.	
16	Q.	What is the purpose of your testimony?	
17	А.	The purpose of my testimony is to present the Staff's rebuttal to Empire	
18	District Electric Company (Empire or Company) witness Donald S. Roff.		
19	Q.	What issues will you address?	
20	А.	I will respond to the factors that are driving Mr. Roff's recommended increase	
21	in annual depreciation expense. Specifically, Mr. Roff states on page 4 lines 6 through 12 of		
22	his direct testimony that the three primary elements of his recommended increase are: 1) the		

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"relative low existing depreciation rates"; 2) the production plant final retirement dates; and 1 2 3) the effects of negative net salvage (i.e., cost of removal).

### EXISTING DEPRECIATION RATES AND REMAINING LIFE METHOD OF **ADJUSTMENT**

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Q. Please comment on the existing depreciation rates.

6 Α. Mr. Roff believes that Empire's depreciation rates, ordered in Case No. 7 ER-2002-424, are inappropriate due to the relative magnitude of other utilities' depreciation 8 rates. This comparison has no validity due to the numerous factors influencing a company's 9 depreciation rate. The only conclusion that can be drawn from these comparisons is that some 10 companies are currently generating relatively more cash flow from depreciation that others. 11 Furthermore, Mr. Roff does not indicate whether the comparison utilities' depreciation rates 12 have a component for cost of removal or salvage. In fact, the depreciation rates of Kansas 13 City Power and Light include a component for cost of removal and salvage. A comparison of 14 Empire's depreciation rates to Kansas City Light and Power's depreciation rates is one of 15 apples to oranges.

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0. Please explain how the existing depreciation rates are affecting Mr. Roff's recommended annual depreciation expense.

18 Α. Mr. Roff uses the remaining life method of adjustment to develop his 19 depreciation rates and resulting depreciation expense. In addition to the recovery of the 20 original cost of investment, the remaining life method of adjustment recognizes any 21 depreciation reserve imbalance and adjusts the depreciation rate to eliminate that imbalance 22 over the estimated remaining life of the account. A depreciation reserve imbalance is the 23 difference between the booked deprecation reserve and the calculated theoretical reserve.

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Mr. Roff has testified that the Company is experiencing a deficient level of accumulated reserve for depreciation due to his assertion that the existing depreciation rates are too low and have been generating an insufficient amount of annual depreciation expense. 4 The reason Mr. Roff calculated a theoretical reserve that is much greater than the accumulated 5 reserve for depreciation for the mass property accounts is because he has included an excessive amount of estimated cost of removal. Mr. Roff is recommending the use of 6 7 remaining life depreciation rates to increase annual depreciation expense to make up this 8 purported deficiency over the remaining lives of the accounts. It is important to understand 9 that the depreciation reserve deficiency for mass property accounts only exists because of the 10 inclusion of cost of removal into the depreciation calculation.

11 Based on a theoretical reserve calculated using Staff's average service lives, the 12 accumulated reserve for depreciation for mass property accounts has over-accrued 13 \$61 million.

14 For production plant accounts, in addition to excessive cost of removal, the period 15 over which depreciation expense is to be collected has been significantly shortened due to a shortening of service life. This life span treatment further escalates the theoretical reserve for 16 17 production plant accounts and is an additional component of the reserve deficiency.

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## LIFE SPAN RETIREMENT DATES

Your second point of rebuttal is the proposed final retirement dates for the 19 О. 20 production plants. What is your primary disagreement?

Mr. Roff proposes final retirement dates for Empire's production facilities that 21 Α. 22 are unsubstantiated and unreasonable. His recommended depreciation rates are designed for 23 the final retirements of all of Empire's coal fired generation by 2014. Neither Mr. Roff nor

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the Company have demonstrated that the Company has planned for the replacement of the approximately 382 MW of capacity that will be lost by the final retirement of every coal fired generation facility that the Company owns. Additionally, I believe that it is noteworthy to 4 mention that while Mr. Roff testifies that Company personnel told him the estimated dates of 5 retirement for the production plants, there isn't a single Company employee who has provided 6 sworn testimony regarding the final retirement of any production plant.

Staff witness Guy C. Gilbert, PE, RG, has addressed the issue of production plant final retirement dates in greater detail in his rebuttal testimony that he is filing in this docket.

**COST OF REMOVAL** 

Q. Mr. Roff discusses the effect of negative net salvage as an element of the increase in annual depreciation expense. Could you please define negative net salvage?

12 A. Negative net salvage occurs when the cost of removal exceeds gross salvage; net salvage being gross salvage less cost of removal. Gross salvage is the recovered 13 14 marketable value of retired plant. Cost of removal is the cost associated with the retirement from service and disposition of plant. Negative net salvage is sometimes also referred to as 15 16 net salvage expense; however, for clarity I will refer to negative net salvage as cost of 17 removal net of salvage.

18 **O**. Mr. Roff states that the existing depreciation rates are understated because the 19 cost of removal net of salvage has been improperly recognized in the past. Do you agree?

20 Α. No. The currently ordered deprecation rates are appropriate because they are 21 designed to recover the company's investment in plant over the average used and useful life 22 of the various plant accounts. The same is true about the depreciation rates that I 23 recommended in my direct testimony.

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A. Currently, the Company is collecting in rates an amount for cost of removal that reflects the amount the Company was experiencing at the time of the last rate case. The Staff's position is that the Company should continue to collect in rates the costs associated with the removal of plant after its useful life, and that the amount should be based on the costs that the Company is currently experiencing. The amount of cost of removal net of salvage that the Staff believes is appropriate was presented in the direct testimony of Staff Auditor Leasha Teel.

How is the cost of removal net of salvage currently recognized?

A. Mr. Roff has proposed to collect in rates an amount for cost of removal that is speculated to occur far into the future. The means by which he estimates this speculative occurrence of removal cost is unproven and not substantiated by empirical evidence.

How does Mr. Roff propose to collect cost of removal for the Company?

Q. How are the speculative cost of removal and gross salvage calculated in
Mr. Roff's depreciation study?

15 Α. Historical data is used to calculate a ratio of the current cost of removal 16 amount divided by the original cost of plant associated with regular retirements in a year (cost 17 of removal percent) and a ratio of the current gross salvage amount divided by the original 18 cost of plant associated with regular retirements in the same year (gross salvage percent). The 19 gross salvage percent less the cost of removal percent is the net salvage percent experienced 20 in that year. The company is proposing to use the cost of removal and gross salvage 21 percentages for the past 5, 10 or 15 years, depending on the account, as a basis for predicting 22 the cost of removal and gross salvage that will be experienced by current plant in service for 23 decades into the future.

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Q. Why are you opposed to using Mr. Roff's formula for calculating future cost of removal net of salvage?

Α. This formula is not substantiated by any empirical evidence and the Company provides no evidence of the formula's accuracy or reliability. I am not aware of any report or study establishing that the cost of removal net of salvage many decades into the future can be accurately determined by this method. Some argue that because past estimates of present cost of removal using this formula were too low, the formula must result in a conservative estimate of actual future events. However, explaining that previous estimates for future cost of removal were too low only demonstrates that the method and procedure for predicting the 10 amount is flawed. This argument would have you believe that even though you arrive at the "wrong answer," the formula is "proven" because the sign is right.

12 О. Are you saying that applying this formula to the Company's historical records 13 can't possibly accurately predict future cost of removal net of salvage?

14 Α. Yes. Distant future events such as the compound rate of inflation, 15 environmental regulations and technological advances cannot be predicted, nor can it be 16 assumed that historical patterns will be consistently repeated.

17 Furthermore, future practices may not necessitate the removal of plant in the same 18 manner as today, if at all. Retired plant could be sold or abandoned in place. There is no 19 assurance that plant will in fact be removed or that the Company will actually experience any 20 cost of removal expense. It is not appropriate to increase depreciation rates to allow Empire 21 to build large reserves for costs it may or may not experience, at some unspecified date, far into the future. 22

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Q. Are there other benefits to the currently ordered method of expensing current cost of removal and gross salvage?

Α. Yes. The Staff method currently in place reduces the risk that customers will overpay for the future, unknown, cost of removal that may or may not be experienced.

Mr. Roff's proposal is that the Company collect far more money in rates for cost of removal today than is currently being spent. Therefore, at some point in the future, the Company will be collecting less money in rates for cost of removal than is required to be spent at that time, assuming the intention is to only collect the amount of money necessary to retire and remove plant.

In other words, if Empire is building its depreciation reserve today to fund future retirements, by collecting more money than it is spending, the Company will have to draw down the depreciation reserve at some point in the future when retirements are made. At that time, Empire will be collecting less money for cost of removal from its customers than is 14 needed. There is no indication that Empire is retaining the current customer-supplied cash 15 until the time it will be needed.

16 The Staff's method currently in place relieves future Company management of the 17 burden of collecting less money in rates than the cost of removal net of salvage at some time in the future. 18

Does this conclude your rebuttal testimony?

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Α. Yes.

Q.