

1 **DIRECT TESTIMONY**

2 **OF**

3 **JAMES C. WATKINS**

4 **UNION ELECTRIC COMPANY**

5 **CASE NO. EM-96-149**

6  
7 **Q. Please state your name and business address.**

8 A. My name is James C. Watkins and my business address is Missouri Public  
9 Service Commission, 301 West High Street, P. O. Box 360, Jefferson City, Missouri  
10 65102.

11 **Q. What is your present position with the Missouri Public Service**  
12 **Commission (Commission)?**

13 A. I am a Regulatory Economist in the Electric Department of the Operations  
14 Division. My working title is Assistant Manager - Tariffs / Rate Design.

15 **Q. Please review your educational background and work experience.**

16 A. I have a Bachelor of Arts Degree in Economics from William Jewell  
17 College, a year of graduate study at the University of California at Los Angeles in the  
18 Masters Degree Program, and have completed all requirements except my dissertation for  
19 a Ph.D. in Economics from the University of Missouri-Columbia. My previous work  
20 experience has been as an Instructor of Economics at Columbia College, the University of  
21 Missouri-Rolla, and William Jewell College. I have been on the Staff of the Missouri  
22 Public Service Commission (Staff) since August 1, 1982.

1           **Q. What is the purpose of your direct testimony in this case?**

2           A. The purpose of my direct testimony is to recommend changes to the  
3 overall rate levels of Union Electric Company's (UE or Company) rate schedules  
4 serving each customer class in order to implement the rate reduction in this case.

5                       This recommendation is being made pursuant to Section 6 of the  
6 Stipulation and Agreement approved by the Commission in Case No. EM-96-149:

7                       Earnings monitoring in Case No. EO-96-14 will result in a general  
8 change in rates charged and revenues collected after August 31,  
9 1998. The change in revenues collected will be equal to the average  
10 annual total revenues credited to customers during the three ARP  
11 years ending June 30, 1998, adjusted to reflect normal weather. The  
12 procedures to determine the annual credits for the three years  
13 comprising the ARP are set forth in Attachment A appended hereto.  
14 Any rate reduction shall be spread within and among revenue classes  
15 on the basis of the Commission decision in Case No. EO-96-15,  
16 which is the UE customer class cost of service and comprehensive  
17 rate design docket created as a result of Case No. ER-95-411. In the  
18 event that a Commission decision has not been reached in Case No.  
19 EO-96-15, the parties will jointly or severally propose to the  
20 Commission a basis or bases on which a rate reduction may be  
21 spread on an interim basis within and among the classes pending  
22 issuance of the Commission's decision in Case No. EO-96-15.  
23 [emphasis added].

24                       **Q. Has the Staff compared current revenue levels to the cost of serving**  
25 **each class?**

26           A. Yes. On a class-by-class basis, the Staff has determined the amount by  
27 which revenues differ from the cost of service and the percentage increase or decrease in  
28 rate levels that would be required to adjust class revenues to exactly recover the cost of  
29 serving each class on an overall revenue-neutral basis. The following results are based  
30 on the customer class cost-of-service study filed by the Staff in Case No. EO-96-15 on  
31 February 19, 1999.  
32

Direct Testimony  
James C. Watkins

	<u>RES</u>	<u>SGS</u>	<u>LGS</u>	<u>LPS</u>
REVENUE DEFICIENCY:	\$20,808,000	(\$20,226,000)	(\$15,919,000)	\$15,337,000
REQUIRED % INCREASE:	2.80%	(9.45%)	(2.82%)	10.33%

Notes: The dollar amounts and percentages are shown as a *positive* number if an *increase* in rates would be required and as a *negative* number if a *decrease* in rates would be required.

RES is Residential Service

SGS is Small General Service

LGS is Large General Service and Small Primary Service

LPS is Large Primary Service and Interruptible Power Rate Service

A more detailed summary of the results of the Staff's customer class cost of service study is shown in Schedule 1. Also shown in Schedule 1 is that, on a combined basis, the Small General Service, Large General Service, and Small Primary Service rates are higher than cost of service by 4.65%.

**Q. What is the purpose of a customer class cost-of-service study?**

A. A customer class cost-of-service study is a tool for developing the above comparisons. The preparation of such a study is as much art as science and is intended to provide a reasonable basis for the comparison of revenues to costs. The result of the customer class cost-of-service study is one factor that should be considered in determining the appropriate rate design for a utility.

**Q. What is your recommendation to the Commission regarding class revenue shifts?**

A. As a matter of policy, I believe that the Commission should order that rate levels be adjusted to move class revenues closer to class cost of service as

1 determined by the Staff's study, after considering other relevant factors. In this  
2 particular case, the rate reduction should be spread to the customer classes in a manner  
3 that will not only lower the Company's overall rate level, but, also, move class revenues  
4 closer to cost of service.

5 **Q. Are there other factors that should be considered by the Commission**  
6 **in this case?**

7 A. In addition to the factors that would normally be considered in shifting  
8 class revenue requirement responsibility (impact on customer's bills, effect on  
9 economic development, etc.), the Commission should consider the relationship of this  
10 case to Case No. EO-96-15, which was established to consider any rate design changes  
11 that would shift revenues within or among customer classes and any adjustments that  
12 needed to be made to class revenue requirements, before implementing the rate  
13 reduction resulting from the First Experimental Alternative Regulation Plan and the  
14 Stipulation and Agreement in Case No. EM-96-149, on an equal percentage basis. It is  
15 important for rate stability that the Commission's decisions in Case No. EO-96-14 and  
16 Case No. EM-96-149 do not result in rate changes that are reversed by the  
17 Commission's decision in Case No. EO-96-15.

18 **Q. Do you have a specific recommendation to the Commission for**  
19 **implementing the rate reduction resulting from the Stipulation and Agreement in**  
20 **Case No. EM-96-149 and Case No. EO-96-14?**

21 A. My recommendation is conditioned on the magnitude of the overall rate  
22 reduction ordered by the Commission.

23 If the overall rate reduction is not more than \$25,000,000, I recommend

1 that the entire rate reduction be applied to the Small General Service, Large General  
2 Service, and Small Primary Service rate schedules by applying an equal percentage  
3 decrease to every rate and charge on each rate schedule.

4 If the overall rate reduction is more than \$25,000,000, I recommend that  
5 the first \$25,000,000 of the rate reduction be applied to the Small General Service,  
6 Large General Service, and Small Primary Service rate schedules by applying an equal  
7 percentage decrease to every rate and charge on each rate schedule. The remainder of  
8 the overall rate reduction should be applied to the rate schedules serving all customer  
9 classes, excluding the Lighting class, i.e., Residential Service, Small General Service,  
10 Large General Service, Small Primary Service, Large Primary Service, and the  
11 Interruptible Power Rate by applying an equal percentage decrease to every rate and  
12 charge on each rate schedule. The effect on the relationship between costs and revenues  
13 on a class-by-class basis of implementing this recommendation for a \$25,000,000, or  
14 greater, rate reduction is shown in Schedule 2. Also shown in Schedule 2 is that, on a  
15 combined basis, the Small General Service, Large General Service, and Small Primary  
16 Service rates have been brought to within 3% of cost of service.

17 **Q. Is there a possibility that adopting the Staff's recommendation will**  
18 **result in rate changes that would be reversed by the Commission's decision in Case**  
19 **No. EO-96-15?**

20 A. Yes, there is a possibility. However, if the overall rate reduction is  
21 implemented on the basis of an "interim" rate design prior to the implementation of the  
22 rate design changes ordered in Case No. EO-96-15, the Staff recommends, and has  
23 recommended in Case No. EO-96-15, that no further shifts to class revenue

1 requirements be implemented in Case No. EO-96-15.

2 In addition, the Staff's recommendation is consistent with the results of  
3 the cost of service studies filed by the other parties in Case No. EO-96-15 for rate  
4 reductions of no more than \$25,000,000. It is only in the situation that the rate  
5 reduction exceeds \$25,000,000 that the studies differ on whether or not the Residential  
6 and/or Large Power classes should share in the rate reduction in order to move toward  
7 cost of service.

8 I should note that because the study filed by the Office of the Public  
9 Counsel combines customers served under the Small Primary Service rate schedule with  
10 the customers served under the Large Primary Service and the Interruptible Power Rate  
11 rate schedules into a single "Primary" customer class, it is not clear whether or not that  
12 study supports the rate reduction for the Small Primary Service customers indicated by  
13 all of the other studies. All of the studies, including the study filed by the Office of the  
14 Public Counsel, indicate that the Small General Service and Large General Service rates  
15 are too high.

16 **Q. Why shouldn't there be different class revenue requirements on a**  
17 **permanent basis than on an interim basis?**

18 A. What I am recommending is that there should not be multiple rate  
19 changes within a short period of time; one that first lowers a customer's rate, followed  
20 shortly thereafter by another rate change that raises it, perhaps higher than it was before.  
21 It would be better in that situation to have only one change in the rate level for each  
22 customer class that incorporates both the rate increase or decrease resulting from the  
23 shift in class revenue requirements and the rate decrease due to the overall rate

1 reduction, or wait until the end of the Second Experimental Alternative Regulation Plan  
2 to implement additional revenue shifts.

3 **Q. Why haven't you shown the effect on the relationship between costs**  
4 **and revenues on a class-by-class basis of implementing a rate reduction of**  
5 **something less than \$25,000,000?**

6 A. The relationship between costs and revenues remains constant for rate  
7 reductions in excess of \$25,000,000 because the additional rate reduction would be  
8 spread to all classes on an equal percentage basis. For rate reductions of less than  
9 \$25,000,000 the resulting relationship between costs and revenues will depend on the  
10 exact amount of the rate reduction, but the result will be somewhere between the result  
11 shown for no reduction (shown on Schedule 1) and the result for a \$25,000,000  
12 reduction (shown on Schedule 2).

13 **Q. Does this conclude your prefiled direct testimony?**

14 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

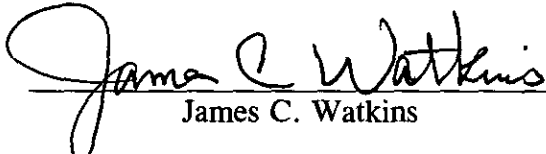
OF THE STATE OF MISSOURI

In the matter of the Application of Union Electric Company                 )  
 for an order authorizing: (1) certain merger transactions                 )  
 involving Union Electric Company; (2) the transfer of                         )  
 assets, real estate, leased property, easements and                         ) Case No. EM-96-149  
 contractual agreements to Central Illinois Public                             )  
 Service Company; and (3) in connection therewith,                         )  
 certain other related transactions.   )

AFFIDAVIT OF JAMES C. WATKINS

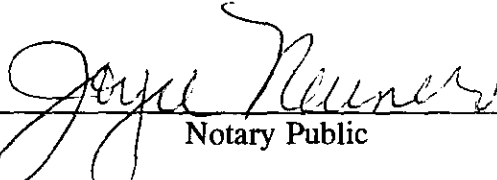
STATE OF MISSOURI                 )  
    ) ss  
 COUNTY OF COLE )

James C. Watkins, of lawful age, on his oath states: that he has participated in the preparation of the foregoing written testimony in question and answer form, consisting of 7 pages of testimony to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

  
 \_\_\_\_\_  
 James C. Watkins

Subscribed and sworn to before me this 23<sup>rd</sup> day of February, 1999.

Joyce C. Neuner  
 Notary Public, State of Missouri  
 County of Osage  
 My Commission Exp. 06/18/2001

  
 \_\_\_\_\_  
 Notary Public

My commission expires \_\_\_\_\_



**STAFF CUSTOMER CLASS COST-OF-SERVICE STUDY**  
**UNION ELECTRIC COMPANY**  
Case No. EO-96-15

COSTS BY FUNCTIONAL CATEGORY							RES	SGS	LGS & SPS	LPS	TOTAL	Combined SGS, LGS & SPS
PRODUCTION	CAPACITY		\$255,292	\$71,129	\$224,707	\$70,638	\$621,767	\$295,837				
PRODUCTION	ENERGY		\$209,614	\$62,131	\$208,782	\$69,181	\$549,708	\$270,913				
TRANSMISSION	CAPACITY		\$22,648	\$6,275	\$19,720	\$6,172	\$54,815	\$25,996				
DISTRIBUTION	SUBSTATIONS	DEMAND	\$38,420	\$9,795	\$22,761	\$5,169	\$76,144	\$32,556				
								\$0				
DISTRIBUTION	POLES AND CONDUCTORS	CUSTOMER	\$40,192	\$4,671	\$324	\$2	\$45,189	\$4,996				
DISTRIBUTION	POLES AND CONDUCTORS	PRIMARY DEMAND	\$77,353	\$19,721	\$45,825	\$10,406	\$153,304	\$65,546				
DISTRIBUTION	POLES AND CONDUCTORS	SECONDARY DEMAND	\$23,099	\$6,015	\$8,664	\$0	\$37,777	\$14,679				
								\$0				
DISTRIBUTION	TRANSFORMERS	CUSTOMER	\$16,921	\$1,967	\$126	\$0	\$19,014	\$2,093				
DISTRIBUTION	TRANSFORMERS	DEMAND	\$8,146	\$2,121	\$3,055	\$0	\$13,323	\$5,177				
								\$0				
DISTRIBUTION	INSTALLATIONS		\$0	\$0	\$0	\$3,444	\$3,444	\$0				
DISTRIBUTION	SERVICES	CUSTOMER	\$9,980	\$1,160	\$74	\$0	\$11,215	\$1,234				
DISTRIBUTION	SERVICES	DEMAND	\$12,782	\$2,569	\$3,073	\$0	\$18,424	\$5,642				
DISTRIBUTION	METERS		\$13,867	\$3,392	\$1,152	\$810	\$19,222	\$4,544				
								\$0				
	METER READING		\$13,948	\$2,418	\$3,450	\$20	\$19,835	\$5,867				
	CUSTOMER SERVICE, SALES, COLLECTION, ETC.		\$24,670	\$4,276	\$15,269	\$88	\$44,303	\$19,546				
	INTEREST ON CUSTOMER SURETY DEPOSITS		\$13,231	\$758	\$426	\$0	\$14,415	\$1,184				
	EPRI		\$1,983	\$586	\$1,894	\$617	\$5,080	\$2,479				
	ASSIGNED RESIDENTIAL		\$74	\$0	\$0	\$0	\$74	\$0				
	<b>OVERALL RATE REDUCTION</b>		0	0	0	0	0	\$0				
	<b>TOTAL COST OF SERVICE</b>		<b>\$782,220</b>	<b>\$198,983</b>	<b>\$559,304</b>	<b>\$166,546</b>	<b>\$1,707,054</b>	<b>\$758,287</b>				
	<b>REVENUES</b>											
	<b>FIRM RATE REVENUE</b>		<b>\$742,338</b>	<b>\$214,090</b>	<b>\$563,980</b>	<b>\$148,434</b>	<b>\$1,668,841</b>	<b>\$778,070</b>				
	NET LIGHTING RATE REVENUE		\$10,758	\$2,737	\$7,692	\$2,291	\$23,478	\$10,429				
	INTERRUPTIBLE CREDITS		(\$1,307)	(\$332)	(\$934)	(\$278)	(\$2,852)	(\$1,267)				
	OTHER REVENUE - LIGHTING CLASS		\$211	\$54	\$151	\$45	\$461	\$205				
	OTHER REVENUE - STUDIED CLASSES		\$2,412	\$2,661	\$4,335	\$718	\$17,125	\$6,995				
	<b>TOTAL REVENUE</b>		<b>\$761,412</b>	<b>\$219,209</b>	<b>\$575,223</b>	<b>\$151,209</b>	<b>\$1,707,054</b>	<b>\$794,432</b>				
	REVENUE SHIFTS		\$0	\$0	\$0	\$0	\$0	(\$0)				
	<b>% CHANGE FROM CURRENT RATES</b>		<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>				
	<b>REVENUE DEFICIENCY</b>		<b>\$20,808</b>	<b>(\$20,226)</b>	<b>(\$15,919)</b>	<b>\$15,337</b>	<b>(\$0)</b>	<b>(\$36,145)</b>				
	<b>% INCREASE (DECREASE) IN RATES REQUIRED TO GENERATE REVENUES EQUAL TO COST OF SERVICE</b>		<b>2.80%</b>	<b>(9.45%)</b>	<b>(2.82%)</b>	<b>10.33%</b>	<b>(0.00%)</b>	<b>(4.65%)</b>				

**STAFF CUSTOMER CLASS COST-OF-SERVICE STUDY  
UNION ELECTRIC COMPANY  
Case No. EO-96-15**

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DISTRIBUTION	INSTALLATIONS		\$0	\$0	\$0	\$3,444	\$3,444	\$0
DISTRIBUTION	SERVICES	CUSTOMER	\$9,980	\$1,160	\$74	\$0	\$11,215	\$1,234
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	CUSTOMER SERVICE, SALES, COLLECTION, ETC.		\$24,670	\$4,276	\$15,269	\$88	\$44,303	\$19,546
	INTEREST ON CUSTOMER SURETY DEPOSITS		\$13,231	\$758	\$426	\$0	\$14,415	\$1,184
	EPRI		\$1,983	\$586	\$1,894	\$617	\$5,080	\$2,479
	ASSIGNED RESIDENTIAL		\$74	\$0	\$0	\$0	\$74	\$0
	OVERALL RATE REDUCTION		-11,456	-2,914	-8,191	-2,439	-25,000	-11,105
	<b>TOTAL COST OF SERVICE</b>		<b>\$770,765</b>	<b>\$196,069</b>	<b>\$551,113</b>	<b>\$164,107</b>	<b>\$1,682,054</b>	<b>\$747,182</b>
	<b>REVENUES</b>							
	<b>FIRM RATE REVENUE</b>		<b>\$742,338</b>	<b>\$214,090</b>	<b>\$563,980</b>	<b>\$148,434</b>	<b>\$1,668,841</b>	<b>\$778,070</b>
	NET LIGHTING RATE REVENUE		\$10,758	\$2,737	\$7,692	\$2,291	\$23,478	\$10,429
	INTERRUPTIBLE CREDITS		(\$1,307)	(\$332)	(\$934)	(\$278)	(\$2,852)	(\$1,267)
	OTHER REVENUE - LIGHTING CLASS		\$211	\$54	\$151	\$45	\$461	\$205
	OTHER REVENUE - STUDIED CLASSES		\$9,412	\$2,661	\$4,335	\$718	\$17,125	\$6,995
	<b>TOTAL REVENUE</b>		<b>\$761,412</b>	<b>\$219,209</b>	<b>\$575,223</b>	<b>\$151,209</b>	<b>\$1,707,054</b>	<b>\$794,432</b>
	REVENUE SHIFTS		\$0	(\$6,879)	(\$18,121)	\$0	(\$25,000)	(\$25,000)
	% CHANGE FROM CURRENT RATES		0.00%	-3.21%	-3.21%	0.00%	-1.50%	-3.21%
	<b>REVENUE DEFICIENCY</b>		<b>\$9,352</b>	<b>(\$16,261)</b>	<b>(\$5,989)</b>	<b>\$12,898</b>	<b>(\$0)</b>	<b>(\$22,250)</b>
	<b>% INCREASE (DECREASE) IN RATES REQUIRED TO GENERATE REVENUES EQUAL TO COST OF SERVICE</b>		<b>1.26%</b>	<b>(7.85%)</b>	<b>(1.10%)</b>	<b>8.69%</b>	<b>(0.00%)</b>	<b>(2.95%)</b>