Exhibit No.:	
Issues:	Rate Design / Class Cost-Of-Service
Witness:	William M. Warwick
Sponsoring Party:	Union Electric
Type of Exhibit:	Rebuttal Testimony
Case No.:	EC-2002-1
Date Testimony Prepared:	May 10, 2002

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EC-2002-1

REBUTTAL TESTIMONY

OF

WILLIAM M. WARWICK

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

Exhibit No. 165
Date 7/10/02 Case No. EC-2002-1
Reporter KPM

St. Louis, Missouri
May 10, 2002

REBUTTAL TESTIMONY

OF

WILLIAM M. WARWICK

CASE NO. EC-2002-1

Q. Please state your name and business address.

A. My name is William M. Warwick. My business address is 1901 Chouteau Avenue, St. Louis, Missouri 63103.

Q. By whom are you employed and in what capacity?

A. I am employed by Ameren Services Company as a Consulting Rate Engineer in the Rate Engineering Department of Corporate Planning. In this capacity, I provide rate engineering services to Union Electric Company d/b/a AmerenUE.

Q. Please describe Ameren Services Company.

A. Ameren Services is a subsidiary of Ameren Corporation which provides various administrative and technical support services for its parent and other subsidiaries including Union Electric Company, doing business as AmerenUE, (referred to herein as UE, Company or AmerenUE).

Q. Please summarize your education and business experience.

A. This information is summarized in Appendix A to this testimony.

Q. What are your responsibilities in this proceeding?

A. I am responsible for:

(1) Developing a fully allocated embedded customer class cost of service study for the Company's Missouri jurisdictional operations for the test year established by the Missouri Public Service

Commission for this proceeding - the twelve months ending June 30, 2001.

(2) Disaggregating, or unbundling, the various functional cost components included in the Company's allocated class cost of service study.

An **Executive Summary** of my testimony is included in Appendix B of Company witness Richard J. Kovach's testimony.

Q. Please identify Schedule 1 attached to your testimony.

A. Schedule 1 contains the results of my customer class cost of service study for the Company's Missouri jurisdictional operations for the test year ending June 30, 2001. This study is based upon the Company's present rate levels and weather normalized sales during the test year. A Missouri jurisdictional cost of service study prepared by Regulatory Accounting at my request provided the total rate base and expense items that formed the starting point for this class cost of service study.

Q. What categories of cost did you examine in developing the customer class cost of service study summary included in Schedule 1 of your testimony?

A. I conducted a detailed analysis of all elements of the Company's investment and expenses, associated with the Company's Missouri operations, for the purpose of allocating such costs to the non-lighting customer classes served by the Company. As a part of this analysis, total expenses and investment in property and plant were classified into their customer-related, energy-related, and demand-related components.

Q. Were the rate base investment and expenses associated with the Company's lighting customers considered in the cost of service study you performed?

A. Yes, they were. However, in considering such lighting costs in my study, I employed a cost of service approach similar to that utilized by the Commission Staff in the Company's past cases involving such studies. This approach consists of allocating all direct lighting costs and the total of all other Company investment and expenses only to the non-lighting customer classes, as if there were no lighting customers. This allocation of such costs to the non-lighting classes is offset by also allocating, or crediting, existing lighting revenues to the non-lighting customer classes. This allocation of lighting costs and revenues was done based on each class' respective total net original cost rate base. This process presumes that the Company's current lighting revenues, which are about one percent of the Company's total revenues, currently provide a fair and reasonable recovery of the Company's total costs of providing lighting service. Said another way, it is presumed that allocated lighting revenues are equivalent to allocated lighting costs.

Q. Please describe the development of the factors used to allocate costs to each customer class.

A. The allocation factors for each customer class were determined by calculating the proportionate share of total customer or property units of each class and the total energy or demand related units of each class, including applicable losses. These calculations were developed at the various voltage levels on the Company's generation, transmission and distribution system that are associated with the facilities being allocated.

Q. After the allocation factors for each class were derived, what was the next step in the study?

A. The next step was to apply these allocation factors to the various functional components of rate base and operating and maintenance expenses, as developed in total for the Company's Missouri jurisdictional operations.

Q. Please describe how those costs and expenses were allocated to the customer classes.

A. The original cost and depreciation reserves of the major functional components of the Company's Missouri electric rate base were allocated to customer classes as described below. The resulting dollar amounts (in thousands) allocated to each class are provided in Schedule 1.

(1) Production Plant. Production plant was allocated to each customer class on the basis of the Four Non-Coincident Peak (4 NCP) Average and Excess Demand allocation factors for each customer class at the Company's generating stations. The rebuttal testimony sponsored by Mr. Kovach in this docket explains why the 4 NCP Average and Excess methodology should be used for the allocation of the Missouri jurisdictional Production Plant to the various customer classes.

(2) Transmission Plant. Transmission line and substation investment was allocated to each customer class on the basis of the twelve coincident peak (12 CP) demands of each class at their point of input to the Company's transmission system. Such 12 CP allocation is consistent with the development of the Ameren Corporation (Ameren) system transmission revenue requirement, under Ameren's Open Access Transmission Tariff (OATT), on file with the Federal Energy Regulatory Commission (FERC).

(3) Distribution Plant. The Company's Missouri Distribution Plant was allocated to each customer class based upon the results of a detailed analysis of the function performed by the facilities in Distribution Plant Accounts 360-369. This analysis determined the breakdown of each account into its customer related and primary and secondary voltage demand-related functions. Primary distribution voltage is 600 volts and above, while secondary distribution voltage is below 600 volts.

The portion of the Distribution Plant accounts assigned to the customer component was derived using the generally accepted and widely used zero intercept methodology described in the National Association Of Regulatory Utility Commissioners (NARUC) Electric Utility Cost Allocation Manual. This approach to cost assignment is predicated on the fact that there is a zero or no load component in even the smallest available unit of utility distribution equipment. The zero intercept method identifies the portion of plant related to a hypothetical no-load or zero-intercept condition, i.e., the cost of making service available to a customer. The remaining, or demand-related portion of the Company's Distribution plant accounts was split between the primary and secondary voltage levels on the basis of a review of the functional utilization of the various equipment and hardware in such accounts. For all distribution accounts, with the exception of Account 369, Services, the demand-related investment in each account was allocated to each customer class on the basis of the non-coincident peak demand of each class at the appropriate primary and secondary voltage levels.

The demand-related investment in Account 369, Services, was allocated to each customer class on the basis of the sum of the maximum demands of each customer in the class at the secondary level. The maximum individual customer demands were

used to reflect the fact that the maximum demand of individual customers dictates the sizing of their service facilities.

Distribution Account 370, Meters, was allocated to each of the customer classes by allocation factors which weigh the results of multiplying the current cost of the typical metering arrangement, determined for each customer class, by the number of meters used in serving that class. All metering cost is classified as customer related.

Account 371-1, Installation On Customer's Premises Substation equipment, was allocated to the Primary class on the basis of such customers' historic use of these facilities.

Account 373, Street Lighting & Signal Systems, was allocated to the customer classes based on their net original cost rate base, as explained earlier.

(4) General Plant. The balance in this account was allocated to each customer class on the basis of the proportion of labor expense allocable to each class. This "labor ratio" method of allocation is the same as that employed by Mr. Weiss, in arriving at the Missouri portion of General Plant and Administrative and General (A&G) expenses in his jurisdictional cost of service study.

(5) Accumulated Reserves for Depreciation. As such reserves are functionalized by type of plant, these reserves were allocated on the same basis as the allocation of the various plant accounts, as described above.

(6) Materials & Supplies. This component consists of fuel inventories, power pool materials related to power plants and transmission facilities, and local materials related mainly to distribution facilities. Fuel inventories and power pool materials are directly related to generation, and were therefore allocated on the basis of

the energy allocation factor. The local distribution materials were allocated on the basis of the composite allocation of Distribution Plant, as previously described.

(7) Cash Working Capital. This item is related primarily to operating expenses and was therefore allocated to each customer class in proportion to the total operating expenses allocated to each class.

(8) Customer Advances for Construction and Deposits. This component of rate base was assigned to each customer class on the basis of an analysis of the sources of such deposits in Missouri.

(9) Total Accumulated Deferred Income Taxes. This component is related primarily to investment in property, and was therefore allocated to each customer class on the basis of allocated gross plant.

Q. How did you allocate the Missouri jurisdictional test year operating and maintenance expenses to the customer classes?

A. With very few exceptions, the operating and maintenance expenses were allocated to the customer classes on the same basis as the related investment in plant was allocated. This type of allocation employs the familiar and widely used "expenses follow plant" principle of cost allocation. For example, the allocator for Transmission Lines was utilized to allocate Transmission Line expenses. The only exceptions to this procedure are as follows:

(1) Production Expenses. This item consists of two categories: (1) fixed, which includes standard operating crews, nuclear support staff and net interchange capacity charges; and (2) variable, which includes fuel, fuel handling, production plant maintenance expenses and net interchange power energy costs. The fixed portion of

production expenses was allocated on the same basis as Production Plant, while the variable portion was allocated using a variable allocator based on the megawatthours required at the generator to provide service to each respective customer class.

(2) System Revenues. This item consists of revenues derived from system capacity sales, transmission service charges and miscellaneous rentals. Reserve capacity and transmission service charges primarily contribute to the reduction of fixed charges on transmission facilities, while a significant portion of miscellaneous rental revenue is associated with General Plant. Thus, these revenues were allocated to the customer classes based on a weighting of the results of applying the previously mentioned Transmission Plant allocators to the reserve capacity and transmission service revenues, and "labor ratio" allocators to the remaining miscellaneous rental revenue.

(3) Customer Accounts Expenses. An analysis of Account 903, Customer Records & Collection Expenses, indicated that approximately 21 percent of such expenses are devoted to credit and collection activities. Therefore, this portion of Account 903 and all of Account 904, Uncollectible Accounts, were allocated to each customer class on the basis of the annual level of such activities applicable to each customer class in the Company's Missouri jurisdiction. The remaining 79 percent of Account 903, and other direct Customer Accounts Expenses were allocated to each customer class utilizing a weighted billing and customer accounts administration allocation factor. Account 902, Meter Reading, was allocated to each class by weighting the results of applying the monthly contract meter reading cost per meter to the respective number of meters in each customer class. Account 901, Supervision, was allocated to

each class on the basis of the composite allocation of all other Customer Accounts Expenses.

(4) Customer Service & Sales Expenses. These expenses were allocated to each customer class using the composite allocation of Customer Accounts Expenses.

(5) Interest on Customer Surety Deposits. These expenses were allocated to each customer class on the basis of the previously allocated Customer Advances and Deposits, since advances and deposit accounts are typically representative of where surety deposits are booked.

(6) Administrative & General Expenses. The Electric Power Research Institute (EPRI) subscription included in the test year A&G Expenses is based upon a formula incorporating the Company's kilowatthour sales and revenues. Therefore, this expense was allocated to each customer class on the basis of the application of this formula to the sales and revenues of each customer class during the study period.

All remaining A&G expenses were allocated to the customer classes on the basis of the class composite distribution of previously allocated labor expense. As indicated earlier, this allocation of A&G expenses reflects the same methodology as that utilized by Mr. Weiss in the Company's jurisdictional cost of service study.

Q. How did you allocate the test year depreciation expenses?

A. Since depreciation expenses are functionalized and are directly related to the Company's original cost investment in plant, this expense within each function was allocated to each customer class on the basis of the previously allocated original cost production, transmission, distribution and general plant.

Q. How did you allocate the test year real estate and property taxes?

A. Real estate and property tax expenses are directly related to the Company's original cost investment in plant, so this expense was allocated to customer classes on the basis of the sum of the previously allocated production, transmission, distribution and general plant.

Q. How did you allocate the test year income taxes?

A. Income tax expense is directly related to the Company's net operating income as a proportion of its net rate base investment, i.e. rate of return on its net original cost rate base. As a result, income taxes were allocated to each class on the basis of the net original cost rate base of each customer class.

Q. Did you make any adjustments to Company witness James R. Pozzo's weather normalized base rate revenues?

A. Yes, despite Mr. Pozzo's effort to replicate Regulatory Accounting's weather normalized base rate revenues, there was a $626,000 difference. As the cause of this difference can not be determined, such difference was allocated to the classes based on the allocation of net original cost rate base. Such treatment is consistent with the allocation of lighting revenues mentioned earlier in my testimony. This adjustment can be found on my Schedule 1, page 1, line 5 titled Base Rate Revenue Variance.

Q. Please identify Schedule 2.

A. Schedule 2 was derived from my class cost of service summary on page 1 of Schedule 1. To develop Schedule 2, I modified the base revenues of each class in Schedule 1 to reflect the class revenues necessary for the Company to realize equalized rates of return from each customer class at the Company's current level of total Missouri revenues.

Q. Please describe the methodology used to equalize rates of return for each customer class, as reflected in your Schedule 2.

A. The total net original cost rate base of each customer class was multiplied by the Missouri jurisdictional test year return of 9.094% to obtain the required total net operating income of each class. This net operating income was then added to the operating expenses of each class to obtain the total operating revenue of each class required for equal class rates of return. The resulting revenue requirement to be derived from the Company's base rates and assigned to each customer class is the sum of lines 1 and 5 of Schedule 2.

Q. What is your second area of responsibility in this case?

A. My second area of responsibility is to desegregate or unbundle the Company's class revenue requirements in its allocated class cost of service study. These costs were divided into the following Functionalized Cost Categories.

1) Customer Related Costs

2) Distribution - Demand Related Costs

3) Transmission - Demand Related Costs

4) Production - Energy Related Costs

5) Production - Demand Related Costs

Q. Why is a breakdown of such costs necessary?

A. This breakdown was required by Company witness Mr. Kovach for use in the development of proposed rates in this case.

Q. Please describe the general methodology utilized in your analyses for the unbundling of the Company's revenue requirement.

A. This unbundling process entailed a detailed analysis of the various components of the equalized customer class rates of return study presented in Schedule 2 of my testimony. As the Company's various components of cost presented in Schedule 1 were allocated to customer classes on either a customer, energy or demand related basis, the unbundling process consisted of extracting these components of cost and assigning them to the functional cost categories indicated earlier.

Q. In this accounting of the Company's total costs, how did you reconcile total costs with the Company's various sources of revenue?

A. As the objective of the cost unbundling analysis was to unbundle the costs associated with the Company's base rate revenues, the Company's miscellaneous revenue sources associated with Other, Lighting and System revenues were deducted from the unbundled functional cost categories in a manner reflective of where the costs associated with such services appear in the Company's accounts. Some examples of Other Company revenues are late payment charges, returned check charges, meter rentals, substation rentals and disconnect/reconnect charges. System revenues generally consist of transmission service charges and facility and land rental receipts.

Q. Following this process of netting the Company's miscellaneous revenues against their supporting costs, were the remaining unbundled costs the amounts which are, in the aggregate, recovered in the Company's base rate revenues?

A. Yes, the steps I have described equated the Company's base rate revenues with the costs associated with such revenues. The results of this analysis are contained in Schedule 3 of my testimony. As I indicated earlier, this information will be used by Mr.

Kovach in the development of the revised rates being proposed by the Company in this case.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

The Staff of the Missouri Public Service Commission, Complainant,	)	
vs.	)	Case No. EC-2002-1
Union Electric Company, d/b/a AmerenUE, Respondent.	)	

AFFIDAVIT OF WILLIAM M. WARWICK

STATE OF MISSOURI)
) **ss**
CITY OF ST. LOUIS)

William M. Warwick, being first duly sworn on his oath, states:

1. My name is William M. Warwick. I work in St. Louis, Missouri and I am employed by Ameren Services Company as a Consulting Rate Engineer.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 13 pages, Appendix A and Schedules 1 through 3, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

William M. Warwick

Subscribed and sworn to before me this 3rd day of May, 2002.

Debby Anzalone
Notary Public

My commission expires:

DEBBY ANZALONE
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: April 18, 2006

QUALIFICATIONS OF WILLIAM M. WARWICK

My name is William M. Warwick and I reside in St. Louis County, Missouri.

I am a Consulting Rate Engineer in the Rate Engineering Department of Corporate Planning at Ameren Services Company.

I received the degree of Bachelor of Science in Engineering Management from the University of Missouri-Rolla in December 1978.

I was employed at ACF Industries' Amcar Division-St. Louis Plant from December, 1978 to December, 1981, as an engineer in the Industrial Engineering Department, responsible for project planning. I began working at Union Electric Company in the Rate Engineering Department in December, 1981.

My duties and responsibilities include assignments related to the Company's gas and electric rates, including participation in regulatory proceedings, rate analysis, the development and interpretation of the Company's gas and electric tariffs, including rules and regulations, and other rate or regulatory projects as assigned.

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
TEST YEAR: 12 MONTHS ENDED JUNE 2001

	TITLE: SUMMARY ($000's)	MISSOURI	RESIDENTIAL	SMALL GEN SERV	LARGE GEN SERV	SMALL PRIMARY	LARGE PRIMARY
1	BASE REVENUE	$ 1,773,763	$ 786,445	$ 226,660	$ 393,395	$ 204,361	$ 162,901
2	OTHER REVENUE	$ 73,128	$ 40,919	$ 7,826	$ 13,203	$ 6,028	$ 5,153
3	LIGHTING REVENUE	$ 25,633	$ 13,246	$ 3,175	$ 5,334	$ 2,120	$ 1,758
4	SYSTEM REVENUE	$ (3,744)	$ (1,892)	$ (453)	$ (787)	$ (339)	$ (272)
5	BASE RATE REVENUE VARIANCE	$ 626	$ 323	$ 78	$ 130	$ 52	$ 43
6	TOTAL OPERATING REVENUE	$ 1,869,405	$ 839,040	$ 237,285	$ 411,275	$ 212,222	$ 169,582
7							
8	TOTAL PROD., T&D, CUST., AND A&G EXP.	$ 971,740	$ 455,212	$ 115,777	$ 204,379	$ 105,788	$ 90,583
9	TOTAL DEPR. AND AMMORT. EXP.	$ 278,979	$ 144,806	$ 34,774	$ 57,982	$ 22,637	$ 18,780
10	REAL ESTATE AND PROPERTY TAXES	$ 78,116	$ 40,683	$ 9,750	$ 16,210	$ 6,273	$ 5,201
11	INCOME TAXES	$ 162,739	$ 84,096	$ 20,159	$ 33,864	$ 13,459	$ 11,161
12	PAYROLL TAXES	$ 16,944	$ 8,387	$ 1,996	$ 3,449	$ 1,681	$ 1,430
13	FEDERAL EXCISE TAX	$ (117)	$ (56)	$ (14)	$ (27)	$ (11)	$ (9)
14	REVENUE TAXES	$ -	$ -	$ -	$ -	$ -	$ -
15	TOTAL OPERATING EXPENSES	$ 1,508,401	$ 733,129	$ 182,442	$ 315,857	$ 149,826	$ 127,146
16							
17	NET OPERATING INCOME	$ 361,003	$ 105,911	$ 54,843	$ 95,418	$ 62,395	$ 42,436
18							
19	GROSS PLANT IN SERVICE	$ 8,145,416	$ 4,242,096	$ 1,016,695	$ 1,690,221	$ 654,097	$ 542,307
20	RESERVES FOR DEPRECIATION	$ 3,518,877	$ 1,833,165	$ 436,650	$ 732,878	$ 282,314	$ 233,870
21	NET PLANT IN SERVICE	$ 4,626,539	$ 2,408,931	$ 580,045	$ 957,343	$ 371,782	$ 308,437
22							
23	MATERIALS & SUPPLIES - FUEL	$ 125,294	$ 47,899	$ 14,244	$ 30,042	$ 17,701	$ 15,408
24	MATERIALS & SUPPLIES -LOCAL	$ 17,020	$ 10,316	$ 2,233	$ 2,954	$ 855	$ 661
25	CASH WORKING CAPITAL	$ 34,382	$ 16,106	$ 4,096	$ 7,231	$ 3,743	$ 3,205
26	CUSTOMER ADVANCES & DEPOSITS	$ (23,301)	$ (9,918)	$ (7,755)	$ (3,398)	$ (714)	$ (1,515)
27	ACCUM. DEFERRED INCOME TAXES	$ (810,067)	$ (421,879)	$ (101,111)	$ (168,094)	$ (65,050)	$ (53,933)
28	TOTAL NET ORIGINAL COST RATE BASE	$ 3,969,867	$ 2,051,454	$ 491,753	$ 826,080	$ 328,317	$ 272,264
29							
30	RATE OF RETURN	9.094%	5.163%	11.153%	11.551%	19.005%	15.586%

SCHEDULE 1-1

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: **GROSS PLANT IN SERVICE - PAGE 1**

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1		PRODUCTION	A.F.1	$4,562,947	$2,167,336	$558,468	$1,037,746	$434,210	$365,186
2									
3		TRANSMISSION							
4		LINES	A.F.2	$267,771	$126,903	$30,730	$58,810	$27,426	$23,903
5		SUBSTATION	A.F.3	$172,068	$81,547	$19,747	$37,791	$17,624	$15,360
6									
7		TOTAL TRANSMISSION		$439,839	$208,449	$50,477	$96,601	$45,049	$39,263
8									
9		DISTRIBUTION PLANT							
10									
11	360	SUBSTATION LAND	A.F.8	$15,317	$7,702	$1,876	$3,295	$1,331	$1,113
12		OTHER LAND	A.F.5	$3,084	$1,565	$381	$669	$266	$203
13									
14	361-362	SUBSTATIONS	A.F.8	$450,035	$226,309	$55,125	$96,812	$39,099	$32,691
15									
16	364	POLES TOWERS FIXTURES							
17		CUSTOMER	A.F.4	$63,546	$55,802	$7,225	$478	$37	$3
18		PRIMARY	A.F.5	$365,256	$185,306	$45,137	$79,272	$31,496	$24,045
19		SECONDARY	A.F.6	$109,720	$65,647	$15,990	$28,083	$0	$0
20		LIGHTING-DIRECT	DIRECT	$0	$0	$0	$0	$0	$0
21									
22		SUBTOTAL		$538,522	$306,755	$68,352	$107,833	$31,534	$24,048
23									
24	365	OVERHEAD CONDUCTOR							
25		CUSTOMER	A.F.4	$166,225	$145,969	$18,900	$1,250	$98	$8
26		PRIMARY	A.F.5	$403,498	$204,707	$49,662	$87,572	$34,794	$26,563
27		SECONDARY	A.F.6	$23,936	$14,321	$3,488	$6,126	$0	$0
28									
29		SUBTOTAL		$593,659	$364,997	$72,251	$94,948	$34,892	$26,571
30									
31	366	UNDERGROUND CONDUIT							
32		CUSTOMER	A.F.4	$6,979	$6,129	$794	$52	$4	$0
33		PRIMARY	A.F.5	$81,528	$41,362	$10,075	$17,694	$7,030	$5,367
34		SECONDARY	A.F.6	$36,118	$21,610	$5,264	$9,244	$0	$0
35									
36		SUBTOTAL		$124,625	$69,100	$16,132	$26,991	$7,034	$5,367
37									
38	367	UNDERGROUND CONDUCTORS							
39		CUSTOMER	A.F.4	$80,641	$70,814	$9,169	$607	$47	$4
40		PRIMARY	A.F.5	$185,493	$94,107	$22,922	$40,258	$15,995	$12,211
41		SECONDARY	A.F.6	$108,941	$65,181	$15,877	$27,884	$0	$0
42									
43		SUBTOTAL		$375,075	$230,101	$47,968	$68,748	$16,043	$12,215

SCHEDULE 1-2

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: **GROSS PLANT IN SERVICE - PAGE 2**

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1									
2	368	LINE TRANSFORMERS							
3		CUSTOMER	A.F.15	$178,087	$155,485	$20,262	$1,340	$0	$0
4		SECONDARY	A.F.6	$124,782	$74,659	$16,185	$31,938	$0	$0
5									
6		SUBTOTAL		$302,869	$231,144	$36,447	$33,278	$0	$0
7									
8	369-1	OVERHEAD SERVICES							
9		CUSTOMER	A.F.15	$53,439	$46,957	$6,080	$402	$0	$0
10		SECONDARY	A.F.16	$54,519	$36,600	$7,083	$10,836	$0	$0
11									
12		SUBTOTAL		$107,958	$83,557	$13,163	$11,238	$0	$0
13									
14	369-2	UNDERGROUND SERVICES							
15		CUSTOMER	A.F.15	$24,130	$21,203	$2,745	$182	$0	$0
16		SECONDARY	A.F.16	$78,992	$53,029	$10,262	$15,700	$0	$0
17									
18		SUBTOTAL		$103,122	$74,232	$13,008	$15,882	$0	$0
19									
20	370	METERS	A.F.7	$95,949	$55,002	$29,606	$7,796	$3,096	$449
21									
22	371	CUSTOMER INSTALLATIONS	DIRECT	$164	$0	$0	$0	$82	$82
23									
24	373	STREET LIGHTING	A.F.29	$86,471	$44,684	$10,711	$17,994	$7,151	$5,930
25									
26		SUBTOTAL - CUSTOMER DIST PLANT		$668,996	$558,361	$94,781	$12,107	$3,283	$465
27		- DEMAND DIST PLANT		$2,127,854	$1,136,789	$272,239	$473,377	$137,245	$108,205
28									
29		DISTRIBUTION TOTAL		$2,796,850	$1,695,150	$367,019	$485,484	$140,528	$108,669
30									
31		GENERAL PLANT	A.F.35	$345,780	$171,161	$40,731	$70,390	$34,310	$29,188
32									
33				$0	$0	$0	$0	$0	$0
34									
35				0	0	0	0	0	0
36									
37		SUBTOTAL PROD,T&D,GEN,COMMON PLANT		$8,145,416	$4,242,096	$1,016,695	$1,690,221	$654,097	$542,307
38									
39				$0	$0	$0	$0	$0	$0
40				$0	$0	$0	$0	$0	$0
41				$0	$0	$0	$0	$0	$0
42									
43		TOTAL GROSS PLANT		$8,145,416	$4,242,096	$1,016,695	$1,690,221	$654,097	$542,307

SCHEDULE 1-3

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: GROSS PLANT IN SERVICE - PAGE 3

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1									
2		MATERIALS & SUPPLIES - FUEL	A.F.11	$125,294	$47,899	$14,244	$30,042	$17,701	$15,408
3		MATERIALS & SUPPLIES - LOCAL	A.F.18	$17,020	$10,316	$2,233	$2,954	$855	$661
4		CASH WORKING CAPITAL	A.F.37	$34,382	$16,106	$4,096	$7,231	$3,743	$3,205
5		CUSTOMER ADVANCES & DEPOSITS	A.F.12	($23,301)	($9,916)	($7,755)	($3,398)	($714)	($1,515)
6		ACCUM DEFERRED INCOME TAXES	A.F.19	($810,067)	($421,879)	($101,111)	($168,094)	($65,050)	($53,933)
7									
8		TOTAL GROSS RATE BASE		$7,488,744	$3,884,619	$928,403	$1,556,957	$610,631	$506,134

SCHEDULE 1-4

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: **RESERVES FOR DEPRECIATION - PAGE 1**

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1		PRODUCTION	A.F.1	$1,949,195	$925,840	$238,566	$443,303	$185,485	$156,000
2									
3		TRANSMISSION							
4		LINES	A.F.2	$117,646	$55,755	$13,501	$25,838	$12,050	$10,502
5		SUBSTATION	A.F.3	$71,138	$33,714	$8,164	$15,624	$7,286	$6,350
6									
7		TOTAL TRANSMISSION		$188,784	$89,469	$21,665	$41,462	$19,336	$16,852
8									
9		DISTRIBUTION PLANT							
10									
11	360	SUBSTATION LAND	A.F.8	$0	$0	$0	$0	$0	$0
12	321	OTHER LAND	A.F.5	$0	$0	$0	$0	$0	$0
13									
14	361-362	SUBSTATIONS	A.F.8	$191,570	$96,335	$23,465	$41,211	$16,644	$13,916
15									
16	364	POLES TOWERS FIXTURES							
17		CUSTOMER	A.F.4	$53,390	$46,884	$6,070	$402	$31	$3
18		PRIMARY	A.F.5	$306,885	$155,693	$37,923	$66,604	$26,463	$20,203
19		SECONDARY	A.F.6	$92,185	$55,155	$13,435	$23,595	$0	$0
20		LIGHTING-DIRECT	DIRECT	$0	$0	$0	$0	$0	$0
21									
22		SUBTOTAL		$452,460	$257,732	$57,428	$90,600	$26,494	$20,205
23									
24	365	OVERHEAD CONDUCTOR							
25		CUSTOMER	A.F.4	$62,818	$55,163	$7,142	$472	$37	$3
26		PRIMARY	A.F.5	$152,486	$77,361	$18,843	$33,094	$13,149	$10,038
27		SECONDARY	A.F.6	$9,045	$5,412	$1,318	$2,315	$0	$0
28									
29		SUBTOTAL		$224,349	$137,936	$27,304	$35,882	$13,186	$10,042
30									
31	366	UNDERGROUND CONDUIT							
32		CUSTOMER	A.F.4	$1,842	$1,618	$209	$14	$1	$0
33		PRIMARY	A.F.5	$21,520	$10,918	$2,659	$4,671	$1,656	$1,417
34		SECONDARY	A.F.6	$9,533	$5,704	$1,389	$2,440	$0	$0
35									
36		SUBTOTAL		$32,895	$18,239	$4,258	$7,124	$1,857	$1,417
37									
38	367	UNDERGROUND CONDUCTORS							
39		CUSTOMER	A.F.4	$17,282	$15,176	$1,965	$130	$10	$1
40		PRIMARY	A.F.5	$39,753	$20,168	$4,912	$8,628	$3,428	$2,617
41		SECONDARY	A.F.6	$23,346	$13,968	$3,402	$5,975	$0	$0
42									
43		SUBTOTAL		$80,381	$49,312	$10,280	$14,733	$3,438	$2,618
44									

SCHEDULE 1-5

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: **RESERVES FOR DEPRECIATION - PAGE 2**

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1									
2	368	LINE TRANSFORMERS							
3		CUSTOMER	A.F.15	$55,896	$49,116	$6,360	$421	$0	$0
4		SECONDARY	A.F.6	$39,166	$23,434	$5,708	$10,025	$0	$0
5									
6		SUBTOTAL		$95,062	$72,549	$12,067	$10,445	$0	$0
7									
8	369-1	OVERHEAD SERVICES							
9		CUSTOMER	A.F.15	$50,630	$44,489	$5,760	$381	$0	$0
10		SECONDARY	A.F.16	$51,652	$34,675	$6,710	$10,266	$0	$0
11									
12		SUBTOTAL		$102,282	$79,164	$12,471	$10,647	$0	$0
13									
14	369-2	UNDERGROUND SERVICES							
15		CUSTOMER	A.F.15	$3,543	$3,113	$403	$27	$0	$0
16		SECONDARY	A.F.16	$11,598	$7,786	$1,507	$2,305	$0	$0
17									
18		SUBTOTAL		$15,141	$10,899	$1,910	$2,332	$0	$0
19									
20	370	METERS	A.F.7	$25,629	$14,692	$7,908	$2,082	$827	$120
21									
22	371	CUSTOMER INSTALLATIONS	DIRECT	$26	$0	$0	$0	$13	$13
23									
24	373	STREET LIGHTING	A.F.29	$57,561	$29,745	$7,130	$11,978	$4,760	$3,948
25									
26		SUBTOTAL - CUSTOMER DIST PLANT		$271,030	$230,250	$35,818	$3,929	$907	$127
27		- DEMAND DIST PLANT		$1,006,326	$536,353	$128,404	$223,106	$66,313	$52,151
28									
29		DISTRIBUTION TOTAL		$1,277,356	$766,603	$164,222	$227,034	$67,219	$52,278
30									
31		*GENERAL PLANT*	A.F.35	$103,542	$51,253	$12,197	$21,078	$10,274	$8,740
32									
33				$0	$0	$0	$0	$0	$0
34									
35				$0	$0	$0	$0	$0	$0
36									
37		SUBTOTAL PROD,T&D,GEN,COMMON PLANT		$3,518,877	$1,833,165	$436,650	$732,878	$282,314	$233,870
38									
39				$0	$0	$0	$0	$0	$0
40				$0	$0	$0	$0	$0	$0
41				$0	$0	$0	$0	$0	$0
42									
43		TOTAL RESERVE FOR DEPRECIATION		$3,518,877	$1,833,165	$436,650	$732,878	$282,314	$233,870

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: **RESERVES FOR DEPRECIATION - PAGE 3**

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1									
2		MATERIALS & SUPPLIES - FUEL	A.F.11	$0	$0	$0	$0	$0	$0
3		MATERIALS & SUPPLIES - LOCAL	A.F.18	$0	$0	$0	$0	$0	$0
4		CASH WORKING CAPITAL	A.F.37	$0	$0	$0	$0	$0	$0
5		CUSTOMER ADVANCES & DEPOSITS	A.F.12	$0	$0	$0	$0	$0	$0
6		ACCUM DEFERRED INCOME TAXES	A.F.19	$0	$0	$0	$0	$0	$0
7									
8		RESERVES FOR DEPRECIATION		$3,518,877	$1,833,165	$436,650	$732,878	$282,314	$233,870

SCHEDULE 1-7

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: **NET ORIGINAL COST - PAGE 1**

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1		PRODUCTION	A.F.1	$2,613,752	$1,241,496	$319,902	$594,443	$248,725	$209,186
2									
3		TRANSMISSION							
4		LINES	A.F.2	$150,125	$71,148	$17,229	$32,972	$15,376	$13,401
5		SUBSTATION	A.F.3	$100,930	$47,833	$11,583	$22,167	$10,337	$9,010
6									
7		TOTAL TRANSMISSION		$251,055	$118,980	$28,812	$55,139	$25,714	$22,411
8									
9		DISTRIBUTION PLANT							
10									
11	360	SUBSTATION LAND	A.F.8	$15,317	$7,702	$1,876	$3,295	$1,331	$1,113
12	321	OTHER LAND	A.F.5	$3,084	$1,565	$381	$669	$266	$203
13									
14	361-362	SUBSTATIONS	A.F.8	$258,465	$129,974	$31,659	$55,601	$22,455	$18,775
15									
16	364	POLES TOWERS FIXTURES							
17		CUSTOMER	A.F.4	$10,156	$8,918	$1,155	$76	$6	$1
18		PRIMARY	A.F.5	$58,371	$29,613	$7,213	$12,668	$5,033	$3,843
19		SECONDARY	A.F.6	$17,535	$10,491	$2,555	$4,488	$0	$0
20		LIGHTING-DIRECT	DIRECT	$0	$0	$0	$0	$0	$0
21									
22		SUBTOTAL		$86,062	$49,023	$10,923	$17,233	$5,039	$3,843
23									
24	365	OVERHEAD CONDUCTOR							
25		CUSTOMER	A.F.4	$103,407	$90,806	$11,757	$778	$61	$5
26		*PRIMARY*	A.F.5	$251,012	$127,346	$31,019	$54,477	$21,645	$16,524
27		SECONDARY	A.F.6	$14,891	$8,909	$2,170	$3,811	$0	$0
28									
29		SUBTOTAL		$369,310	$227,062	$44,946	$59,066	$21,706	$16,530
30									
31	366	*UNDERGROUND CONDUIT*							
32		CUSTOMER	A.F.4	$5,137	$4,511	$584	$39	$3	$0
33		PRIMARY	A.F.5	$60,008	$30,444	$7,415	$13,024	$5,175	$3,950
34		SECONDARY	A.F.6	$26,585	$15,906	$3,874	$6,804	$0	$0
35									
36		SUBTOTAL		$91,730	$50,861	$11,874	$19,867	$5,178	$3,951
37									
38	367	UNDERGROUND CONDUCTORS							
39		CUSTOMER	A.F.4	$63,359	$55,638	$7,204	$477	$37	$3
40		PRIMARY	A.F.5	$145,740	$73,939	$18,010	$31,630	$12,567	$9,594
41		SECONDARY	A.F.6	$85,595	$51,213	$12,474	$21,908	$0	$0
42									
43		SUBTOTAL		$294,694	$180,789	$37,688	$54,015	$12,605	$9,597

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: NET ORIGINAL COST - PAGE 2

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
1									
2	368	LINE TRANSFORMERS							
3		CUSTOMER	A.F.15	$122,191	$107,369	$13,902	$920	$0	$0
4		SECONDARY	A.F.6	$85,616	$51,225	$12,477	$21,914	$0	$0
5									
6		SUBTOTAL		$207,807	$158,594	$26,379	$22,833	$0	$0
7									
8	369-1	OVERHEAD SERVICES							
9		CUSTOMER	A.F.15	$2,809	$2,468	$320	$21	$0	$0
10		SECONDARY	A.F.16	$2,867	$1,925	$372	$570	$0	$0
11									
12		SUBTOTAL		$5,676	$4,393	$692	$591	$0	$0
13									
14	369-2	UNDERGROUND SERVICES							
15		CUSTOMER	A.F.15	$20,587	$18,090	$2,342	$155	$0	$0
16		SECONDARY	A.F.16	$67,394	$45,243	$8,756	$13,395	$0	$0
17									
18		SUBTOTAL		$87,981	$63,333	$11,098	$13,550	$0	$0
19									
20	370	METERS	A.F.7	$70,320	$40,311	$21,698	$5,714	$2,269	$329
21									
22	371	CUSTOMER INSTALLATIONS	DIRECT	$138	$0	$0	$0	$69	$69
23									
24	373	STREET LIGHTING	A.F.29	$28,910	$14,939	$3,581	$6,016	$2,391	$1,983
25									
26		SUBTOTAL - CUSTOMER DIST PLANT		$397,966	$328,111	$58,962	$8,179	$2,376	$338
27		- DEMAND DIST PLANT		$1,121,528	$600,436	$143,835	$250,271	$70,932	$56,054
28									
29		DISTRIBUTION TOTAL		$1,519,494	$928,547	$202,797	$258,450	$73,308	$56,392
30									
31		GENERAL PLANT	A.F.35	$242,238	$119,908	$28,534	$49,312	$24,036	$20,448
32									
33				$0	$0	$0	$0	$0	$0
34									
35				$0	$0	$0	$0	$0	$0
36									
37		SUBTOTAL PROD,T&D,GEN,COMMON PLANT		$4,626,539	$2,408,931	$580,045	$957,343	$371,782	$308,437
38									
39				$0	$0	$0	$0	$0	$0
40				$0	$0	$0	$0	$0	$0
41				$0	$0	$0	$0	$0	$0
42									
43		TOTAL NET PLANT		$4,626,539	$2,408,931	$580,045	$957,343	$371,782	$308,437

SCHEDULE 1-9

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
($000's)

TITLE: NET ORIGINAL COST - PAGE 3

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	MISSOURI TOTAL	RESIDENTIAL	SMALL GEN SERVICE	LARGE GEN SERVICE	PRIMARY	LARGE PRIMARY
42									
43									
44									
45		MATERIALS & SUPPLIES - FUEL	A.F.11	$126,294	$47,899	$14,244	$30,042	$17,701	$15,408
46		MATERIALS & SUPPLIES - LOCAL	A.F.18	$17,020	$10,316	$2,233	$2,954	$855	$661
47		CASH WORKING CAPITAL	A.F.37	$34,382	$16,106	$4,096	$7,231	$3,743	$3,205
48		CUSTOMER ADVANCES & DEPOSITS	A.F.12	($23,301)	($9,918)	($7,755)	($3,398)	($714)	($1,515)
49		ACCUM DEFERRED INCOME TAXES	A.F.19	($810,067)	($421,879)	($101,111)	($168,094)	($65,050)	($53,933)
		TOTAL NET ORIGINAL COST RATE BASE		$3,969,867	$2,051,454	$491,753	$826,080	$328,317	$272,264

SCHEDULE 1-10

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUD
YEAR: 12 MONTHS ENDED JUNE 2001
AVERAGE & EXCESS FOUR NONCOINCIDENT PEAK
($000's)

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	TOTAL MISSOUR LABOR	TOTAL MISSOUR OTHER	TOTAL MISSOUR TOTAL	RESIDENTIAL LABOR	RESIDENTIAL OTHER	SMALL G. S LABOR	SMALL G. S OTHER	LARGE G. S LABOR	LARGE G. S OTHER	PRIMARY LABOR	PRIMARY OTHER	L. PRIMARY LABOR	L. PRIMARY OTHER
1		**OPERATING EXPENSES**														
2																
3																
4		PRODUCTION														
5		OTHER	A.F.1	$78,807	$47,233	$126,040	$37,432	$22,435	$9,645	$5,781	$17,923	$10,742	$7,499	$4,495	$6,307	$3,780
6		VARIABLE	A.F.11	$65,019	$356,152	$421,170	$24,856	$136,153	$7,392	$40,488	$15,590	$85,396	$9,186	$50,316	$7,996	$43,798
7																
8		SUBTOTAL		$143,826	$403,385	$547,211	$62,288	$158,588	$17,037	$46,269	$33,513	$96,138	$16,685	$54,811	$14,303	$47,579
9																
10		SYSTEM REVENUE CREDITS														
11		INTERRUPTIBLE SALES	A.F.1	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12		RENTALS	A.F.1	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13																
14		SUBTOTAL		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15																
16		TRANSMISSION														
17		LINES	A.F.2	$622	$3,159	$3,781	$295	$1,497	$71	$363	$137	$694	$64	$324	$56	$282
18		SUBSTATIONS	A.F.3	$4,140	$11,005	$15,145	$1,962	$5,215	$475	$1,263	$909	$2,417	$424	$1,127	$370	$982
19																
20		TOTAL TRANSMISSION EXPENSE		$4,762	$14,164	$18,926	$2,257	$6,712	$547	$1,625	$1,046	$3,111	$488	$1,451	$425	$1,264
21																
22																
23		**DISTRIBUTION OPERATING EXPENSE**														
24																
25																
26	582	SUBSTATIONS	A.F.8	$3,129	$1,145	$4,274	$1,574	$576	$383	$140	$673	$246	$272	$99	$227	$83
27																
28	583-1	OVERHEAD LINES														
29		CUSTOMER	A.F.22	$415	$135	$550	$364	$119	$47	$15	$3	$1	$0	$0	$0	$0
30		PRIMARY	A.F.23	$1,103	$360	$1,462	$559	$182	$136	$44	$239	$78	$95	$31	$73	$24
31		SECONDARY	A.F.24	$126	$41	$167	$76	$25	$18	$6	$32	$10	$0	$0	$0	$0
32		LIGHTING-DIRECT	A.F.25	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
33																
34		SUBTOTAL		$1,643	$536	$2,179	$1,000	$326	$202	$66	$274	$89	$95	$31	$73	$24
35																
36	583-2	OVERHEAD TRANSFORMERS														
37		CUSTOMER	A.F.20	$656	$504	$1,160	$577	$443	$75	$57	$5	$4	$0	$0	$0	$0
38		SECONDARY	A.F.21	$460	$353	$813	$275	$211	$67	$51	$118	$90	$0	$0	$0	$0
39																
40		SUBTOTAL		$1,116	$857	$1,973	$852	$654	$142	$109	$123	$94	$0	$0	$0	$0

SCHEDULE 1-11

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUD
YEAR: 12 MONTHS ENDED JUNE 2001
AVERAGE & EXCESS FOUR NONCOINCIDENT PEAK
($000's)

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	TOTAL MISSOUR LABOR	TOTAL MISSOUR OTHER	TOTAL	RESIDENTIAL LABOR	RESIDENTIAL OTHER	SMALL G. S LABOR	SMALL G. S OTHER	LARGE G. S LABOR	LARGE G. S OTHER	PRIMARY LABOR	PRIMARY OTHER	L. PRIMARY LABOR	L. PRIMARY OTHER
1																
2	584-1	UNDERGROUND LINES														
3		CUSTOMER	A.F.26	111.4	170.4	281.8	97.8	149.7	12.7	19.4	0.8	1.3	0.1	0.1	0.0	0.0
4		PRIMARY	A.F.27	257.2	393.6	650.8	130.5	199.7	31.8	48.6	55.8	85.4	22.2	33.9	16.9	25.9
5		SECONDARY	A.F.28	224.5	343.5	568.0	140.5	214.9	31.4	48.0	52.6	80.5	0.0	0.0	0.0	0.0
6																
7		SUBTOTAL		$593	$907	$1,501	$369	$564	$76	$116	$109	$167	$22	$34	$17	$26
8																
9	584-2	UNDERGROUND TRANSFORMERS														
10		CUSTOMER	A.F.20	261.5	(132.1)	129.4	229.7	(116.1)	29.7	(15.0)	2.0	(1.0)	0.0	0.0	0.0	0.0
11		SECONDARY	A.F.21	183.2	(92.6)	90.6	109.6	(55.4)	26.7	(13.5)	46.9	(23.7)	0.0	0.0	0.0	0.0
12																
13		SUBTOTAL		$445	($225)	$220	$339	($171)	$56	($29)	$49	($25)	$0	$0	$0	$0
14																
15	585	LIGHTING	A.F.29	$440	$113	$553	$227	$58	$55	$14	$92	$23	$36	$9	$30	$8
16																
17	586	METERS	A.F.7	$2,410	$2,443	$4,853	$1,381	$1,400	$744	$754	$196	$198	$78	$79	$11	$11
18																
19	587	CUSTOMER INSTALLATION	DIRECT	$1,578	$113	$1,691	($201)	($14)	$0	$0	$0	$0	$889	$64	$889	$64
20																
21		DIST OPERATING EXPENSE SUBTOTA														
22		CUSTOMER A582-A587		$3,654	$3,120	$6,974	$2,650	$1,996	$908	$831	$207	$204	$78	$79	$11	$11
23		DEMAND A582-A587		$7,501	$2,769	$10,270	$2,891	$1,397	$749	$339	$1,309	$591	$1,315	$237	$1,237	$204
24																
25	580	SUPERVISION & ENGI														
26		CUSTOMER	A.F.30	672.6	116.2	788.7	462.5	74.3	158.4	30.9	36.1	7.6	13.6	2.9	2.0	0.4
27		DEMAND	A.F.31	1,309.1	103.1	1,412.2	504.6	52.0	130.8	12.6	228.4	22.0	229.5	8.8	215.8	7.6
28																
29		SUBTOTAL		$1,982	$219	$2,201	$967	$126	$289	$44	$264	$30	$243	$12	$218	$8
30																
31	581	DISPATCHING														
32		CUSTOMER	A.F.30	953.2	71.6	1,024.8	655.5	45.8	224.6	19.1	51.1	4.7	19.3	1.8	2.8	0.3
33		DEMAND	A.F.31	1,855.4	63.5	1,918.9	715.2	32.0	185.3	7.8	323.7	13.5	325.3	5.4	305.9	4.7
34																
35		SUBTOTAL		$2,809	$135	$2,944	$1,371	$78	$410	$27	$375	$18	$345	$7	$309	$5
36																
37	588	MISCELLANEOUS														
38		CUSTOMER	A.F.30	2,049.3	4,695.7	6,745.0	1,409.1	3,003.1	482.8	1,250.3	109.9	306.4	41.5	118.8	6.0	17.2
39		DEMAND	A.F.31	3,988.7	4,167.0	8,155.7	1,537.5	2,103.1	398.4	510.5	696.0	889.1	699.3	357.2	657.6	307.1
40																
41		SUBTOTAL		$6,038	$8,863	$14,901	$2,947	$5,106	$881	$1,761	$806	$1,195	$741	$476	$664	$324

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUD
YEAR: 12 MONTHS ENDED JUNE 2001
AVERAGE & EXCESS FOUR NONCOINCIDENT PEAK
($000's)

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	TOTAL MISSOUR LABOR	TOTAL MISSOUR OTHER	TOTAL MISSOUR TOTAL	RESIDENTIAL LABOR	RESIDENTIAL OTHER	SMALL G. S LABOR	SMALL G. S OTHER	LARGE G. S LABOR	LARGE G. S OTHER	PRIMARY LABOR	PRIMARY OTHER	L. PRIMARY LABOR	L. PRIMARY OTHER
1																
2	589	RENTS														
3		CUSTOMER	A.F.30	0.0	87.6	87.6	0.0	56.0	0.0	23.3	0.0	5.7	0.0	2.2	0.0	0.3
4		DEMAND	A.F.31	0.0	77.8	77.8	0.0	39.2	0.0	9.5	0.0	16.6	0.0	6.7	0.0	5.7
5																
6		SUBTOTAL		$0	$165	$165	$0	$95	$0	$33	$0	$22	$0	$9	$0	$6
7																
8		DIST OPERATING EXPENSE SUBTOTA														
9		CUSTOMER A580-58E		$7,529	$8,091	$15,620	$5,177	$5,175	$1,774	$2,154	$404	$528	$152	$205	$22	$30
10		DEMAND A580-58E		$14,654	$7,180	$21,834	$5,648	$3,624	$1,464	$880	$2,557	$1,532	$2,569	$816	$2,416	$529
11																
12		TOTAL DIST OPERATING EXPENSE:		$22,183	$15,272	$37,454	$10,825	$8,798	$3,237	$3,034	$2,961	$2,060	$2,722	$820	$2,438	$559
13																
14																
15		DISTRIBUTION MAINTENANCE EXPENSE														
16																
17																
18	591-592	SUBSTATIONS	A.F.8	$6,555	$5,692	$12,247	$3,296	$2,862	$803	$697	$1,410	$1,224	$570	$494	$476	$413
19																
20	593	OVERHEAD LINES														
21		CUSTOMER	A.F.22	3,568.1	7,336.0	10,904.1	3,133.3	6,442.2	405.7	834.1	26.8	55.2	2.0	4.2	0.2	0.4
22		PRIMARY	A.F.23	9,485.9	19,503.4	28,989.3	4,812.5	9,894.7	1,172.2	2,410.1	2,058.7	4,232.8	816.0	1,681.8	624.5	1,283.9
23		SECONDARY	A.F.24	1,082.1	2,224.9	3,307.0	653.9	1,344.4	156.3	321.4	271.9	559.1	0.0	0.0	0.0	0.0
24		LIGHTING-DIRECT	A.F.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25																
26		SUBTOTAL		$14,136	$29,064	$43,200	$8,600	$17,681	$1,734	$3,566	$2,358	$4,847	$820	$1,686	$625	$1,284
27																
28	594	UNDERGROUND LINES														
29		CUSTOMER	A.F.26	780.9	242.1	1,023.0	685.8	212.6	88.8	27.5	5.9	1.8	0.4	0.1	0.0	0.0
30		PRIMARY	A.F.27	1,803.5	559.2	2,362.7	915.0	283.7	222.9	69.1	391.4	121.4	155.5	48.2	118.7	36.8
31		SECONDARY	A.F.28	1,574.1	488.0	2,062.1	984.9	305.4	220.1	68.2	369.1	114.4	0.0	0.0	0.0	0.0
32																
33		SUBTOTAL		$4,158	$1,289	$5,448	$2,586	$802	$532	$165	$766	$238	$156	$48	$119	$37
34																
35	595	UNDERGROUND TRANSFORMERS														
36		CUSTOMER	A.F.20	355.6	156.2	511.8	312.4	137.3	40.5	17.8	2.7	1.2	0.0	0.0	0.0	0.0
37		SECONDARY	A.F.21	249.1	109.5	358.6	149.1	65.5	36.3	16.0	63.8	28.0	0.0	0.0	0.0	0.0
38																
39		SUBTOTAL		$605	$266	$870	$462	$203	$77	$34	$66	$29	$0	$0	$0	$0
40																
41	596	LIGHTING	A.F.29	$1,400	$251	$1,651	$723	$130	$173	$31	$291	$52	$116	$21	$96	$17
42																
43	597	METERS	A.F.7	$485	$288	$773	$278	$165	$150	$89	$39	$23	$16	$9	$2	$1
44																
45		DIST MAINTENANCE EXPENSE SUBTOTA														
46		CUSTOMER A593-A597		$5,189	$8,022	$13,212	$4,410	$6,957	$685	$968	$75	$82	$18	$14	$2	$2
47		DEMAND A593-A597		$22,150	$28,828	$50,977	$11,535	$14,685	$2,784	$3,613	$4,856	$6,332	$1,659	$2,245	$1,315	$1,751

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUD
YEAR: 12 MONTHS ENDED JUNE 2001
AVERAGE & EXCESS FOUR NONCOINCIDENT PEAK
($000's)

LINE #	ACCOUNT #	ITEM	ALLOCATION BASIS	TOTAL MISSOUR LABOR	TOTAL MISSOUR OTHER	TOTAL MISSOUR TOTAL	RESIDENTIAL LABOR	RESIDENTIAL OTHER	SMALL G. S LABOR	SMALL G. S OTHER	LARGE G. S LABOR	LARGE G. S OTHER	PRIMARY LABOR	PRIMARY OTHER	L. PRIMARY LABOR	L. PRIMARY OTHER
1																
2	590	SUPERVISION & ENGR														
3		CUSTOMER	A.F.32	425.7	142.9	569.6	362.6	123.9	56.3	17.2	6.1	1.5	1.5	0.2	0.0	0.0
4		DEMAND	A.F.33	1,821.3	513.4	2,334.7	948.5	265.1	228.9	64.4	399.3	112.8	136.4	40.0	108.2	31.2
5																
6		SUBTOTAL		$2,248	$656	$2,904	$1,311	$389	$285	$82	$405	$114	$138	$40	$108	$31
7																
8	598	MISCELLANEOUS														
9		CUSTOMER	A.F.32	2.0	313.2	315.1	1.7	271.6	0.3	37.8	0.0	3.2	0.0	0.5	0.0	0.1
10		DEMAND	A.F.33	8.4	1,125.4	1,133.8	4.4	581.1	1.1	141.0	1.8	247.2	0.6	97.6	0.5	68.4
11																
12		SUBTOTAL		$10	$1,439	$1,449	$6	$853	$1	$179	$2	$250	$1	$98	$1	$68
13		DIST MAINTENANCE EXPENSE SUBTOTA														
14		CUSTOMER A590-A59E		$5,618	$8,478	$14,097	$4,774	$7,353	$741	$1,023	$81	$86	$20	$14	$2	$2
15		DEMAND A590-A59E		$23,980	$30,466	$54,446	$12,488	$15,732	$3,014	$3,818	$5,258	$6,692	$1,796	$2,373	$1,424	$1,851
16																
17		TOTAL MAINTENANCE OPERATING EXPENS		$29,598	$38,945	$68,542	$17,262	$23,084	$3,755	$4,842	$5,339	$6,779	$1,815	$2,387	$1,427	$1,853
18																
19		TOTAL DISTRIBUTION EXPENSE:		$51,780	$54,216	$105,997	$28,087	$31,883	$6,992	$7,876	$8,299	$8,839	$4,537	$3,208	$3,864	$2,412

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
AVERAGE & EXCESS FOUR NONCOINCIDENT PEAK
($000's)

TITLE: OPERATING EXPENSES - PAGE 5

LINE #	ACCT #	ITEM	ALLOCATION BASIS	TOTAL MISSOURI LABOR	TOTAL MISSOURI OTHER	TOTAL	RESIDENTIAL LABOR	RESIDENTIAL OTHER	SMALL G. S. LABOR	SMALL G. S. OTHER	LARGE G. S. LABOR	LARGE G. S. OTHER	PRIMARY LABOR	PRIMARY OTHER	L. PRIMARY LABOR	L. PRIMARY OTHER
1																
2		**CUSTOMER ACCOUNT EXPENSES**														
3																
4																
5	902	METER READING	A.F.7A	$1,568	$17,004	$18,572	$1,252	$13,578	$277	$3,000	$33	$360	$6	$61	$0	$5
6	905	MISCELLANEOUS	A.F.7A	$110	$781	$891	$88	$623	$19	$138	$2	$17	$0	$3	$0	$0
7	903	CUSTOMER RECORDS	A.F.40	$12,032	$7,578	$19,610	$9,640	$5,704	$893	$944	$1,566	$856	$123	$67	$11	$6
8	904	UNCOLLECTIBLE ACCOUNTS	A.F.13	$0	$3,752	$3,752	$0	$3,420	$0	$213	$0	$109	$0	$9	$0	$1
9	903	CREDIT AND COLLECTION	A.F.13	$3,158	$1,989	$5,147	$2,878	$1,813	$180	$113	$92	$56	$7	$5	$1	$0
10		INTEREST ON SURETY DEPOSITS	A.F.12	$0	$1,150	$1,150	$0	$490	$0	$383	$0	$168	$0	$35	$0	$75
11																
12		SUBTOTAL		$16,867	$32,254	$49,121	$13,858	$25,628	$1,168	$4,791	$1,693	$1,568	$136	$180	$12	$88
13																
14	901	SUPERVISION	A.F.34	$387	$61	$448	$318	$48	$27	$9	$39	$3	$3	$0	$0	$0
15																
16		TOTAL CUSTOMER ACCOUNT EXPENSES		$17,255	$32,315	$49,570	$14,176	$25,676	$1,195	$4,800	$1,732	$1,571	$139	$180	$12	$88
17																
18																
19																
20		**CUSTOMER SERVICE & SALES EXPENSES**														
21																
22																
23	908-1 & 908	RCS	DIRECT	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	908-916	CUSTOMER SERVICES	A.F.34	$2,746	$3,501	$6,247	$2,256	$2,782	$190	$520	$276	$170	$22	$19	$2	$9
25																
26		SUBTOTAL		$2,746	$3,501	$6,247	$2,256	$2,782	$190	$520	$276	$170	$22	$19	$2	$9
27																
28	907	SUPERVISION	A.F.38	$55	$15	$70	$45	$12	$4	$2	$6	$1	$0	$0	$0	$0
29																
30		TOTAL CUSTOMER SERVICE EXPENSES		$2,801	$3,516	$6,317	$2,301	$2,793	$194	$522	$281	$171	$23	$20	$2	$10
31																
32		TOTAL PROD, T&D,CUST EXPENSES		$220,424	$507,596	$728,020	$109,110	$225,653	$25,965	$61,093	$44,871	$109,829	$21,871	$59,669	$18,607	$51,352
33																
34		**A & G EXPENSES**														
35																
36																
37		EPRI	A.F.14	$0	$2,085	$2,085	$0	$840	$0	$256	$0	$489	$0	$272	$0	$228
38		OTHER	A.F.35	$30,936	$210,700	$241,636	$15,313	$104,296	$3,644	$24,819	$6,298	$42,892	$3,070	$20,906	$2,611	$17,786
39																
39		SUBTOTAL		$30,936	$212,784	$243,720	$15,313	$105,136	$3,644	$25,075	$6,298	$43,381	$3,070	$21,178	$2,611	$18,013
40																
41		TOTAL PROD,T&D,CUST,A&G EXPENSES		$251,360	$720,380	$971,740	$124,423	$330,789	$29,609	$86,168	$51,169	$153,210	$24,941	$80,847	$21,218	$69,365
42																

SCHEDULE 1-15

UNION ELECTRIC COMPANY
ELECTRIC COST OF SERVICE ALLOCATION STUDY
YEAR: 12 MONTHS ENDED JUNE 2001
AVERAGE & EXCESS FOUR NONCOINCIDENT PEAK
($000's)

TITLE: OPERATING EXPENSES - PAGE 6

LINE #	ACCT #	ITEM	ALLOCATION BASIS	TOTAL MISSOURI LABOR	TOTAL MISSOURI OTHER	TOTAL	RESIDENTIAL LABOR	RESIDENTIAL OTHER	SMALL G. S. LABOR	SMALL G. S. OTHER	LARGE G. S. LABOR	LARGE G. S. OTHER	PRIMARY LABOR	PRIMARY OTHER	L. PRIMARY LABOR	L. PRIMARY OTHER
1		**DEPREC & AMORTIZATION EXPENSES**														
2																
3																
4		DEPR-PRODUCTION PLANT	A.F.1	$0	$157,462	$157,462	$0	$74,792	$0	$19,272	$0	$35,811	$0	$14,984	$0	$12,602
5		*DEPR-COMMON PLANT*	A.F.1	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6		DEPR-TRANSMISSION PLANT	A.F.17	$0	$9,282	$9,282	$0	$4,389	$0	$1,063	$0	$2,034	$0	$949	$0	$827
7		DEPR-DISTRIBUTION PLANT	A.F.18	$0	$90,540	$90,540	$0	$54,875	$0	$11,881	$0	$15,716	$0	$4,549	$0	$3,518
8		DEPR-GENERAL PLANT	A.F.35	$0	$21,715	$21,715	$0	$10,749	$0	$2,558	$0	$4,421	$0	$2,155	$0	$1,833
9																
10		SUBTOTAL		$0	$278,979	$278,979	$0	$144,806	$0	$34,774	$0	$57,982	$0	$22,637	$0	$18,780
11																
12				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13																
14		TOTAL DEPREC & AMORTIZ EXPENSES		$0	$278,979	$278,979	$0	$144,806	$0	$34,774	$0	$57,982	$0	$22,637	$0	$18,780
15																
16																
17		**OTHER**														
18																
19																
20		REAL ESTATE & PROPERTY TAXES	A.F.19	$0	$76,116	$76,116	$0	$40,683	$0	$9,750	$0	$18,210	$0	$8,273	$0	$5,201
21		INCOME TAXES	A.F.29	$0	$162,739	$162,739	$0	$84,096	$0	$20,159	$0	$33,864	$0	$13,459	$0	$11,161
22		RETURN	A.F.29	$0	$361,003	$361,003	$0	$186,551	$0	$44,718	$0	$75,120	$0	$29,856	$0	$24,759
23		PAYROLL TAXES	A.F.35	$0	$16,944	$16,944	$0	$8,387	$0	$1,996	$0	$3,449	$0	$1,681	$0	$1,430
24		ENVIRONMENTAL TAX	A.F. 1	$0	-$117	-$117	$0	-$56	$0	-$14	$0	-$27	$0	-$11	$0	-$9
25																
26		SUBTOTAL		$0	$618,685	$618,685	$0	$319,661	$0	$76,609	$0	$128,616	$0	$51,258	$0	$42,541
27																
28		TOTAL OPERATING & OTHER EXPENSES		$251,360	$1,618,045	$1,869,404	$124,423	$795,257	$29,609	$197,551	$51,169	$339,808	$24,941	$154,741	$21,218	$130,687
29																
30				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32																
33		TOTAL COST OF SERVICE		$251,360	$1,618,045	$1,869,404	$124,423	$795,257	$29,609	$197,551	$51,169	$339,808	$24,941	$154,741	$21,218	$130,687

UNION ELECTRIC COMPANY
EQUALIZED CLASS RATES OF RETURN ANALYSIS
TEST YEAR: 12 MONTHS ENDED JUNE 2001

TITLE: SUMMARY EQUAL ROR ($000's)

		MISSOURI	RESIDENTIAL	SMALL GEN SERV	LARGE GEN SERV	SMALL PRIMARY	LARGE PRIMARY
1	BASE REVENUE	$ 1,773,763	$ 867,085	$ 216,535	$ 373,097	$ 171,822	$ 145,223
2	OTHER REVENUE	$ 73,128	$ 40,919	$ 7,826	$ 13,203	$ 6,028	$ 5,153
3	LIGHTING REVENUE	$ 25,633	$ 13,246	$ 3,175	$ 5,334	$ 2,120	$ 1,758
4	SYSTEM REVENUE	$ (3,744)	$ (1,892)	$ (453)	$ (787)	$ (339)	$ (272)
5	BASE RATE REVENUE VARIANCE	$ 626	$ 323	$ 78	$ 130	$ 52	$ 43
6	TOTAL OPERATING REVENUE	$ 1,869,405	$ 919,680	$ 227,160	$ 390,977	$ 179,682	$ 151,905
7							
8	TOTAL PROD., T&D, CUSTOMER, AND A&G EXP.	$ 971,740	$ 455,212	$ 115,777	$ 204,379	$ 105,788	$ 90,583
9	TOTAL DEPR. AND AMOR. EXPENSES	$ 278,979	$ 144,806	$ 34,774	$ 57,982	$ 22,637	$ 18,780
10	REAL ESTATE AND PROPERTY TAXES	$ 78,116	$ 40,683	$ 9,750	$ 16,210	$ 6,273	$ 5,201
11	INCOME TAXES	$ 162,739	$ 84,096	$ 20,159	$ 33,864	$ 13,459	$ 11,161
12	PAYROLL TAXES	$ 16,944	$ 8,387	$ 1,996	$ 3,449	$ 1,681	$ 1,430
13	FEDERAL EXCISE TAX	$ (117)	$ (56)	$ (14)	$ (27)	$ (11)	$ (9)
14	REVENUE TAXES	$ -	$ -	$ -	$ -	$ -	$ -
15	TOTAL OPERATING EXPENSES	$ 1,508,401	$ 733,129	$ 182,442	$ 315,857	$ 149,826	$ 127,146
16							
17	NET OPERATING INCOME	$ 361,003	$ 186,551	$ 44,718	$ 75,120	$ 29,856	$ 24,759
18							
19	GROSS PLANT IN SERVICE	$ 8,145,416	$ 4,242,096	$ 1,016,695	$ 1,690,221	$ 654,097	$ 542,307
20	RESERVES FOR DEPRECIATION	$ 3,518,877	$ 1,833,165	$ 436,650	$ 732,878	$ 282,314	$ 233,870
21	NET PLANT IN SERVICE	$ 4,626,539	$ 2,408,931	$ 580,045	$ 957,343	$ 371,782	$ 308,437
22							
23	MATERIALS & SUPPLIES - FUEL	$ 125,294	$ 47,899	$ 14,244	$ 30,042	$ 17,701	$ 15,408
24	MATERIALS & SUPPLIES -LOCAL	$ 17,020	$ 10,316	$ 2,233	$ 2,954	$ 855	$ 661
25	CASH WORKING CAPITAL	$ 34,382	$ 16,106	$ 4,096	$ 7,231	$ 3,743	$ 3,205
26	CUSTOMER ADVANCES & DEPOSITS	$ (23,301)	$ (9,918)	$ (7,755)	$ (3,398)	$ (714)	$ (1,515)
27	ACCUMULATED DEFERRED INCOME TAXES	$ (810,067)	$ (421,879)	$ (101,111)	$ (168,094)	$ (65,050)	$ (53,933)
28	TOTAL NET ORIGINAL COST RATE BASE	$ 3,969,867	$ 2,051,454	$ 491,753	$ 826,080	$ 328,317	$ 272,264
29							
30	RATE OF RETURN	9.094%	9.094%	9.094%	9.094%	9.094%	9.094%

SCHEDULE 2

UNION ELECTRIC COMPANY
UNBUNDLED ELECTRIC COST OF SERVICE ANALYSIS
TEST YEAR: 12 MONTHS ENDED JUNE 2001

Unbundled Base Revenue ($000's)

	Total Missouri	Residential	Small Gen Serv	Large Gen Serv	Small Primary	Large Primary
Customer	$ 164,587	$ 130,171	$ 23,871	$ 8,826	$ 1,460	$ 258
Production -- Demand	$ 701,333	$ 333,223	$ 85,492	$ 159,629	$ 66,846	$ 56,142
Production -- Energy	$ 521,885	$ 199,480	$ 59,320	$ 125,147	$ 73,745	$ 64,192
Transmission -- Demand	$ 36,080	$ 17,200	$ 4,129	$ 7,921	$ 3,665	$ 3,166
Distribution -- Demand	$ 349,877	$ 187,010	$ 43,722	$ 71,574	$ 26,105	$ 21,465
Total Base Revenue	$ 1,773,762	$ 867,085	$ 216,535	$ 373,097	$ 171,822	$ 145,223

Unbundled Rate Revenue Variance ($000's)

Customer	$ 58	$ 48	$ 8	$ 2	$ 0	$ 0
Production -- Demand	$ 351	$ 167	$ 43	$ 80	$ 34	$ 28
Production -- Energy	$ 32	$ 12	$ 4	$ 8	$ 5	$ 4
Transmission -- Demand	$ 33	$ 16	$ 4	$ 7	$ 3	$ 3
Distribution -- Demand	$ 151	$ 81	$ 19	$ 34	$ 10	$ 8
Total Rate Revenue Variance	$ 626	$ 323	$ 78	$ 130	$ 52	$ 43

Total Unbundled Rate Revenue ($000's)

Customer	$ 164,645	$ 130,219	$ 23,880	$ 8,827	$ 1,461	$ 258
Production -- Demand	$ 701,684	$ 333,390	$ 85,535	$ 159,709	$ 66,879	$ 56,170
Production -- Energy	$ 521,917	$ 199,492	$ 59,324	$ 125,155	$ 73,749	$ 64,196
Transmission -- Demand	$ 36,114	$ 17,215	$ 4,133	$ 7,928	$ 3,669	$ 3,169
Distribution -- Demand	$ 350,028	$ 187,091	$ 43,741	$ 71,608	$ 26,115	$ 21,473
Total Rate Revenue	$ 1,774,388	$ 867,408	$ 216,613	$ 373,228	$ 171,873	$ 145,266

SCHEDULE 3