

Exhibit No.:  
Issues: Revenues  
Uncollectibles  
Customer Deposits  
Witness: John P. Cassidy  
Sponsoring Party: MoPSC Staff  
Type of Exhibit: Direct Testimony  
Case No.: GR-2000-512

**MISSOURI PUBLIC SERVICE COMMISSION**  
**UTILITY SERVICES DIVISION**

**DIRECT TESTIMONY**  
**OF**  
**JOHN P. CASSIDY**

**UNION ELECTRIC COMPANY**  
**d/b/a AmerenUE**

**CASE NO. GR-2000-512**

Jefferson City, Missouri  
August 2000

Exhibit No. 10  
Date 10-11-00 Case No. GR 2000-52  
Reporter xx

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**DIRECT TESTIMONY**  
**OF**  
**JOHN P. CASSIDY**  
**UNION ELECTRIC COMPANY**  
**d/b/a AmerenUE**  
**CASE NO. GR-2000-512**

Q. Please state your name and business address.

A. John P. Cassidy, 815 Charter Commons, Suite 100B, Chesterfield,  
Missouri 63017.

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

A. I am employed by the Missouri Public Service Commission (Commission)  
as a Regulatory Auditor.

Q. Please describe your educational background.

A. I graduated from Southeast Missouri State University, receiving a  
Bachelor of Science degree in Business Administration, with a double major in  
Marketing and Accounting in 1989 and 1990, respectively.

Q. What has been the nature of your duties while in the employ of this  
Commission?

A. Since joining the Commission Staff (Staff) in 1990, I have assisted with  
audits and examinations of the books and records of utility companies operating within

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1 the state of Missouri. I have also conducted numerous audits of small water and sewer  
2 companies in conjunction with the Commission's informal rate proceedings.

3 Q. Have you previously filed testimony before this Commission?

4 A. Yes, I have. Please refer to Schedule 1, which is attached to my direct  
5 testimony, for a list of cases in which I have previously filed testimony.

6 Q. With reference to Case No. GR-2000-512, have you made an examination  
7 of the books and records of AmerenUE (UE or Company)?

8 A. Yes, in conjunction with other members of the Staff.

9 Q. What test year has the Staff used in this case?

10 A. The Staff, as ordered by the Commission, has used a test year ending  
11 June 30, 1999. The test year was updated for certain material items (plant, depreciation  
12 reserve, customer levels, payroll and rate of return/capital structure) through April 30,  
13 2000, based on actual information available during the audit. Updating specific, material  
14 test year amounts enables the Staff to make its recommendation based on the most recent  
15 auditable information available.

16 Q. What is a test year?

17 A. The test year is a 12-month period used as the basis for the audit of any  
18 rate filing or complaint case. This period serves as the starting point for analyses and  
19 review of the utility's operations to set the reasonableness and appropriateness of the rate  
20 filing. The test year forms the basis for any adjustments necessary to remove  
21 abnormalities that may have occurred during the period and to reflect any increase or  
22 decrease to the financial records of the utility. Adjustments are made to the test year  
23 level of revenues, expenses and investment to determine a reasonable level of earnings.

1 After the recommended rate of return which the utility is permitted to earn is determined,  
2 a comparison to existing rates is made to see if any additional revenues are necessary. If  
3 the Commission concludes that the utility's earnings are deficient, it will authorize the  
4 Company to increase its rates. Sometimes, existing rates will generate earnings in excess  
5 of authorized levels which may suggest the need for rate reductions. In summary, the test  
6 year is the vehicle used to evaluate and determine the proper relationship between  
7 revenue, expenses and investment. This relationship is essential to determine the  
8 appropriate level of earnings for a utility.

9 Q. What are your areas of responsibility in this case?

10 A. My areas of responsibility in this case include the revenues, unbilled  
11 revenues, Purchase Gas Adjustment (PGA) revenues and gas costs, gross receipts taxes,  
12 uncollectibles and customer deposits.

13 Q. Please identify the Accounting Schedules you are sponsoring.

14 A. I am sponsoring the following Accounting Schedules:

15 Accounting Schedule 1	Revenue Requirement
16 Accounting Schedule 9	Income Statement
17 Accounting Schedule 10	Adjustments to Income Statement

18 Q. Please explain Accounting Schedule 1.

19 A. Accounting Schedule 1 is the calculation of revenue requirement for the  
20 rate of return range sponsored by Staff witness Roberta A. McKiddy of the Commission's  
21 Financial Analysis Department. The rates of return determined by Staff witness  
22 McKiddy are applied to the Company's rate base, which is presented on Accounting  
23 Schedule 2, Rate Base, to determine the net income requirement. Please refer to the

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1 direct testimony of Staff Accounting witness James D. Schwieterman for further  
2 information regarding the development of rate base. The gross revenue requirement is  
3 then determined by adding the required income taxes, calculated on Accounting Schedule  
4 11, to the net income requirement. The testimony of Staff Accounting witness  
5 Schwieterman also explains the calculation of income taxes found on Accounting  
6 Schedule 11.

7 Q. Please explain Accounting Schedules 9 and 10.

8 A. Accounting Schedule 9, Income Statement, contains the Staff's adjusted  
9 UE Missouri jurisdictional gas revenues, expenses and net income for the test year ended  
10 June 30, 1999. Accounting Schedule 10, Adjustments to Income Statement, contains a  
11 listing of the specific adjustments that the Staff has made to the unadjusted test year  
12 income statement to derive the Staff's adjusted net income. A brief explanation for each  
13 adjustment and the name of the Staff witness sponsoring the adjustment is listed in  
14 Accounting Schedule 10.

15 Q. What Accounting Adjustments are you sponsoring?

16 A. I am sponsoring the following adjustments, which appear on the  
17 Adjustments to Income Statement, Accounting Schedule 10:

18 Revenues	S-1.2, S-1.4, S-1.5, S-1.6, S-1.7,
19	S-2.2, S-2.4, S-2.5, S-2.6, S-2.7,
20	S-2.8, S-3.2, S-3.3, S-3.4, S-3.5,
21	S-3.6, S-3.7 and S-4.1.
22	
23 Unbilled Revenues	S-1.3 and S-2.3
24	
25 PGA Revenues / Gas Costs	S-1.1, S-2.1, S-3.1, S-5.1 and S-6.1
26	
27 Uncollectibles	S-9.1
28	
29 Interest on Customer Deposits	S-9.2

Taxes Other than Income Taxes S-15.1

**REVENUES**

Q. Please give a general description of the territories served by UE's Missouri gas operations.

A. UE's Missouri gas operations consists of two regions, the Western region and the Southeast region. The Western region consists primarily of the cities of Wentzville, Columbia, Jefferson City and also includes the surrounding areas. Panhandle Eastern Pipeline Company (Panhandle) serves the Western region. The Southeast region includes the city of Cape Girardeau and its surrounding areas. The Southeast region is served by the Texas Eastern Transmission Corporation (Texas Eastern) and Natural Gas Pipeline Company of America (Natural Gas) pipelines.

Each region serves four classes of customers: residential, general service, interruptible and transportation customers. The Staff annualized and normalized UE's revenues for each of the above customer classes. This testimony will address the annualizations for residential and general service customer class revenues.

Q. Please provide a general discussion of the Staff's annualization of revenues, including the Staff witnesses who performed the various revenue analyses.

A. Company's test year revenues, like its expenses, must be annualized and normalized in order to develop a cost of service that is representative of the Company's operations. In the area of revenues, the following Staff members have performed certain analyses or annualizations:

<u>Staff Member</u>	<u>Area of Analysis or Adjustment</u>
Dennis Patterson	Thirty-Year Weather Normalization
Jim Gray	Normalized Usage Per Customer Through Regression Analysis
Henry Warren	Allocation of General Service Normal Volumes to Rate Blocks Through Regression Analysis
Dan Beck	Transportation, Interruptible and Special Contract Customer Annualizations
John Cassidy	Residential and General Service Customer Growth Annualizations and revenue adjustments to support Staff witnesses Jim Gray and Dan Beck

The majority of the Company's revenues are affected by weather. Staff witness Patterson of the Electric Department has developed normalized weather from a 30-year analysis. Mr. Patterson's normalized weather calculations were then given to Staff witness Gray of the Gas Department. Mr. Gray used Mr. Patterson's 30-year normalized weather calculations to develop normal gas usage (Ccf) by customer class and also by month for the Staff's test year.

Mr. Beck, also of the Gas Department, analyzed the Transportation, Interruptible and Special Contract customer classes by individual customer. Through his analysis, Mr. Beck can determine if customers have switched rate classes, come onto the system as a new customer or reduced demand on the system by a significant amount. If any of the three circumstances occurred, Mr. Beck developed an adjustment in Ccf's from the Company's records.

I am sponsoring the application of the adjustments that were developed by Mr. Gray and Mr. Beck. Mr. Gray and Mr. Beck will sponsor the methodology supporting the adjustments and I will sponsor the development of the revenue



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1 adjustments and their relationship to the Staff's cost of service calculation. Please refer  
2 to Mr. Gray's and Mr. Beck's testimony for a more detailed discussion of their areas.

3 I have also developed the revenue adjustments to reflect customer growth.  
4 The Company and Staff's test year was the 12 months ending June 30, 1999. The Staff  
5 has updated the test year through April 30, 2000. I have calculated the customer growth  
6 adjustments to reflect the increases in customers through April 30, 2000. These  
7 adjustments were again based on normal gas usage per customer as developed by  
8 Mr. Gray. A more complete discussion of the Staff's customer growth adjustments is  
9 included later in this direct testimony.

10 In summary, the Staff's annualized revenues generally reflect the effects  
11 of the following conditions:

- 12 1. Normalized Weather
- 13 2. Customer switching customer classes (rate switching)
- 14 3. Customer Growth

15 Q. What is the basis for pricing the revenue adjustments?

16 A. All revenue adjustments in the Staff's cost of service were priced on the  
17 margin (the total rate excluding PGA gas cost) included in the Company's tariffs.  
18 Therefore, no gas cost adjustments were made associated with the revenue adjustments.

19 Q. Why is it appropriate to adjust revenues for normalized weather?

20 A. Because a principal use of natural gas is for space heating, temperature  
21 levels experienced during any 12- month period could have a significant impact on the  
22 Company's revenues. If the overall temperature was very cold during the test period, the  
23 Company's revenues would be overstated in relation to normal weather. Conversely, if

1 the overall temperature was warm during the test period, the Company's revenues would  
2 be understated in relation to normal weather. Therefore, since the test year was warmer  
3 than normal, the Staff normalized revenues for weather to include the effects of above  
4 normal temperatures during the test year.

5 Q. What methodology did the Staff use to normalize weather?

6 A. The methodology and weather stations used by the Staff to normalize  
7 revenues for weather is discussed in the testimony of Staff witness Patterson. Based on  
8 that analysis, the Staff has adjusted revenue to reflect the normalization of weather.

9 Q. Please describe the Staff's adjustments relating to weather normalization.

10 A. Staff witness Gray developed the monthly weather normalized Ccf sales  
11 per customer for the weather-sensitive customer classes during the Staff's test year.  
12 Generally, these classes consisted of the residential and general service customers. The  
13 weather normalized Ccf sales per customer were developed for each of the above  
14 customer classes for both the Southeast and Western regions of the Company. Mr. Gray  
15 adjusted the actual monthly Ccf sales from the test year to reflect normalized weather.  
16 Staff adjustments S-1.5 and S-2.5 reflect the effect of weather normalization on revenues.

17 Q. Please describe the phenomenon of customers switching customer classes  
18 or rate switching.

19 A. Customers switching customer classes, or rate switching, can occur for  
20 several reasons. The nature of a customer's operations may have changed and another  
21 customer class is now more appropriate. The customer may find it to be economical to  
22 switch to another customer class. Finally, the customer may decide to procure its own  
23 gas, which would also make a rate switch necessary.

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1

2 Q. Please explain Staff adjustments S-2.7, S-2.8, S-3.4 and S-3.5.

3 A. Adjustments S-2.7 and S-3.5 reflect Staff witness Beck's analysis for  
4 customer rate switching which occurred for the Company's general service and special  
5 contract customer classes. Adjustments S-2.8 and S-3.5 reflect Staff witness Beck's  
6 analysis for customer rate switching as well as for customer growth or loss which  
7 occurred for the Company's interruptible and transportation customer classes. Mr.  
8 Beck's analysis is performed on a customer-by-customer basis and reflects ongoing  
9 levels of revenue.

10 Q. Please explain adjustment S-3.6.

11 A. Adjustment S-3.6 represents Staff witness Beck's inclusion of revenues  
12 related to special contract terms. Please refer to Mr. Beck's direct testimony for a more  
13 complete discussion regarding this adjustment.

14 Q. Please explain adjustment S-3.7.

15 A. Adjustment S-3.7 reflects Staff witness Beck's inclusion of additional  
16 revenues related to the Company's proposed electronic metering rental charge. Please  
17 refer to Mr. Beck's direct testimony for a more complete discussion regarding this  
18 adjustment.

19 Q. Please explain what adjustments were made to test year ending June 30,  
20 1999 per book revenues.

21 A. The Staff made several adjustments to the starting point of Company's per  
22 book revenues. Adjustments S-1.2, S-2.2 and S-3.2 remove the test year gross receipt  
23 taxes from the operating revenues. Gross receipts taxes are not operating revenues for

1 the Company. The Company acts merely as a collecting agent and remits the taxes to the  
2 appropriate taxing entities. The Staff also made adjustment S-15.1 to remove gross  
3 receipts taxes from the Taxes Other Than Income Taxes line item of the expense portion  
4 of the income statement. Gross receipts taxes are reported as both a revenue and expense  
5 item on the Company's books. Therefore, both revenue and expense adjustments are  
6 necessary.

7               Staff adjustments S-1.3 and S-2.3 represent adjustments to eliminate  
8 unbilled revenues from the test year. The unbilled revenue adjustment is made to reflect  
9 the Company's revenues on a billed basis for the test year. In the Staff's test year, there  
10 will exist gas sales to customers, at both the beginning and end of the test year, which  
11 either relate to usage periods outside the test year or which won't be recognized on the  
12 bills. To recognize this usage, companies generally book an unbilled adjustment to  
13 revenues. The purpose of the adjustment is to reflect an estimate of what the actual  
14 revenues are for that month. For purposes of a rate case, the adjustment for unbilled  
15 revenues must be eliminated from the Company's books, in order to reflect revenues  
16 during the test year on a billed basis.

17               Staff adjustments S-1.1, S-2.1, S-3.1 and S-5.1 reduce test year revenues  
18 to eliminate recovery of gas costs. Similarly, Staff adjustment S-6.1 reduces expense to  
19 eliminate the amount of gas purchased during the test year. These adjustments allow the  
20 revenues to be calculated on a margin basis as detailed in the Company's tariffs.

21               Once the above adjustments were made to per book revenues, the Staff  
22 restated test year revenues based on actual customers and actual usage. Staff adjustments

1 S-1.4, S.2.4 and S-3.3 restate the per book revenues to reflect actual customers and actual  
2 usage for the test year.

3 Q. Please explain how the Staff annualized gas operating revenues for the  
4 residential and general service class customers.

5 A. The Staff's annualization of residential customer revenues contains two  
6 components, the base charge and the commodity charge. The base charge is the  
7 minimum monthly charge that UE assesses to a customer for supplying the gas service.  
8 The monthly base charge revenue is calculated by multiplying the base charge by the  
9 Staff's monthly level of customers. The Staff's annualized base charge revenue is the  
10 sum of the 12 monthly base charge revenues. The commodity charge is the rate UE  
11 charges a customer for each Ccf of gas usage. Residential customers have only one  
12 commodity charge rate block, while general service customers have two commodity  
13 charge rate blocks. For general service customers, block one represents usage of 0  
14 through 7,000 Ccf and block two represents usage over 7,000 Ccf.

15 To annualize the residential and general service commodity charge  
16 revenues, the monthly level of customers were multiplied by Staff's normal usage per  
17 customer, based on normal weather, to derive monthly usages. Please refer to Staff  
18 witness Gray's direct testimony for the development of normal usage per customer based  
19 on normal weather. The residential normal monthly usages were then multiplied by the  
20 commodity charge to determine the monthly commodity charge revenues. For general  
21 service customers, the Staff allocated normal monthly usages to the Company's rate  
22 blocks based on the Company's bill frequency analysis for the 12 months ending June 30,  
23 1996. This bill frequency analysis was completed during the Company's last rate

1 proceeding in 1997. The sum of the 12 months was the Staff's annualized commodity  
2 revenue. The total annualized revenue for the residential and general service class was  
3 calculated by adding the annualized base charge revenues to the annualized commodity  
4 charge revenue.

5 Q. Please explain Staff adjustments S-1.6 and S-2.6 to the Company's  
6 Missouri gas operating revenues.

7 A. Staff adjustments S-1.6 and S-2.6 reflect the dollar impact of customer  
8 growth that UE experienced through the update period of April 30, 2000. These  
9 adjustments reflect overall customer growth in the residential and general service  
10 customer class for both the Western and Southeast regions. Test year Ccf sales and  
11 customer charge revenues were subtracted from the annualized Ccf sales and annualized  
12 customer charge revenues to derive the customer growth adjustments. Annualized  
13 customer charge and customer base revenues are derived after the annualized level of  
14 customers is determined.

15 Q. Please explain how the annualized level of customers was determined.

16 A. The annualized level of customers was determined by multiplying the  
17 April 30, 2000 level of customers by 12 to reach an annualized customer level. The Staff  
18 determined, through their audit, that the April 30, 2000 level of customers was very  
19 accurate in predicting the ongoing level of customers. Based on a six-year historical  
20 analysis of April customers to calendar year average customers, the Staff found that the  
21 average level of customers for any calendar year was very close to the level of customers  
22 at April. In fact, the analysis revealed that the April level of customers was over 99%  
23 accurate in predicting calendar year average level of customers. Please refer to Schedule

1 2, attached to this direct testimony, to see a depiction of customer levels for the past six  
2 years.

3 Q. How were the annualized level of customers distributed over a 12-month  
4 period?

5 A. The annualized customer level was multiplied by a six-year average  
6 percentage of monthly customer levels to total customers in a calendar year.

7 Q. Why was it necessary to distribute the customers through a 12-month  
8 period?

9 A. As can be seen from Schedule 2 of my direct testimony, customer levels  
10 fluctuate during any calendar year. Generally, customer levels are higher in the winter  
11 months and decrease during the summer months. Likewise, normal usage per customer is  
12 greater in the winter months than in the summer months. Distributing customers through  
13 the 12-month period enables the Staff to more accurately annualize revenues. Once the  
14 annualized level of customers was determined, the Staff then developed the annualized  
15 level of Ccf's for each district.

16 Q. How were the annualized levels of Ccf's developed?

17 A. The Staff multiplied the monthly customer levels by the normal Ccf sales  
18 per customer by month to develop monthly Ccf sales levels. The Staff then summed the  
19 monthly Ccf sales to develop an annualized level of Ccf sales.

20 Q. How was the customer charge annualized?

21 A. The Staff multiplied the annualized level of customers by the monthly  
22 customer charge to develop the annualized customer charge revenues.

1           Q.     Please explain Staff adjustment S-1.7 to the Company's residential  
2 revenues.

3           A.     Staff adjustment S-1.7 includes the annualized revenues for UE's yard  
4 light customers. Revenues for yard lights were annualized based on the number of yard  
5 light customers at April 30, 2000 and the tariffed usage per customer.

6           Q.     Please explain Staff adjustment S-4.1 to other revenues.

7           A.     Staff adjustment S-4.1 increases other revenues to eliminate the book  
8 provision for rate refunds that are applicable to prior periods.

9           **UNCOLLECTIBLE EXPENSE**

10          Q.     Please explain Staff adjustment S-9.1.

11          A.     Staff adjustment S-9.1 represents its adjustment to the Company's level of  
12 test year uncollectible expense. During the test year ending June 30, 1999, the Company  
13 accrued \$942,000 related to uncollectible expense. The Staff adjusted uncollectible  
14 expense by using the actual net write-off level of \$925,439 (at the end of the update  
15 period ending April 30, 2000) for the Company's test year level of uncollectible expense.  
16 The Staff believes that actual net write-off levels which occurred through the 12 months  
17 ending April 30, 2000 most accurately reflect ongoing levels of uncollectible expense.

18          **CUSTOMER DEPOSITS**

19          Q.     Please explain how the customer deposit balance was derived in Staff's  
20 rate base.

21          A.     The customer deposits are recorded on the books of UE in total for gas and  
22 electric customers. The balance was derived by allocating the 13-month average  
23 customer deposit balance at April 30, 2000, based on the billed revenues for the gas and



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1 electric operations of UE. The allocation methodology used by the Staff is consistent  
2 with the Company's method.

3 Q. Please explain Staff adjustment S-9.2.

4 A. Staff adjustment S-9.2 annualizes interest expense related to customer  
5 deposits. The Staff's adjustment is calculated by multiplying the 13-month average  
6 customer deposit balance at April 30, 2000 by 9 ½ % which represents the prime interest  
7 rate of 8 ½ % at December 31, 1999 plus 1%.

8 Q. Does this conclude your direct testimony at this time?

9 A. Yes, it does.

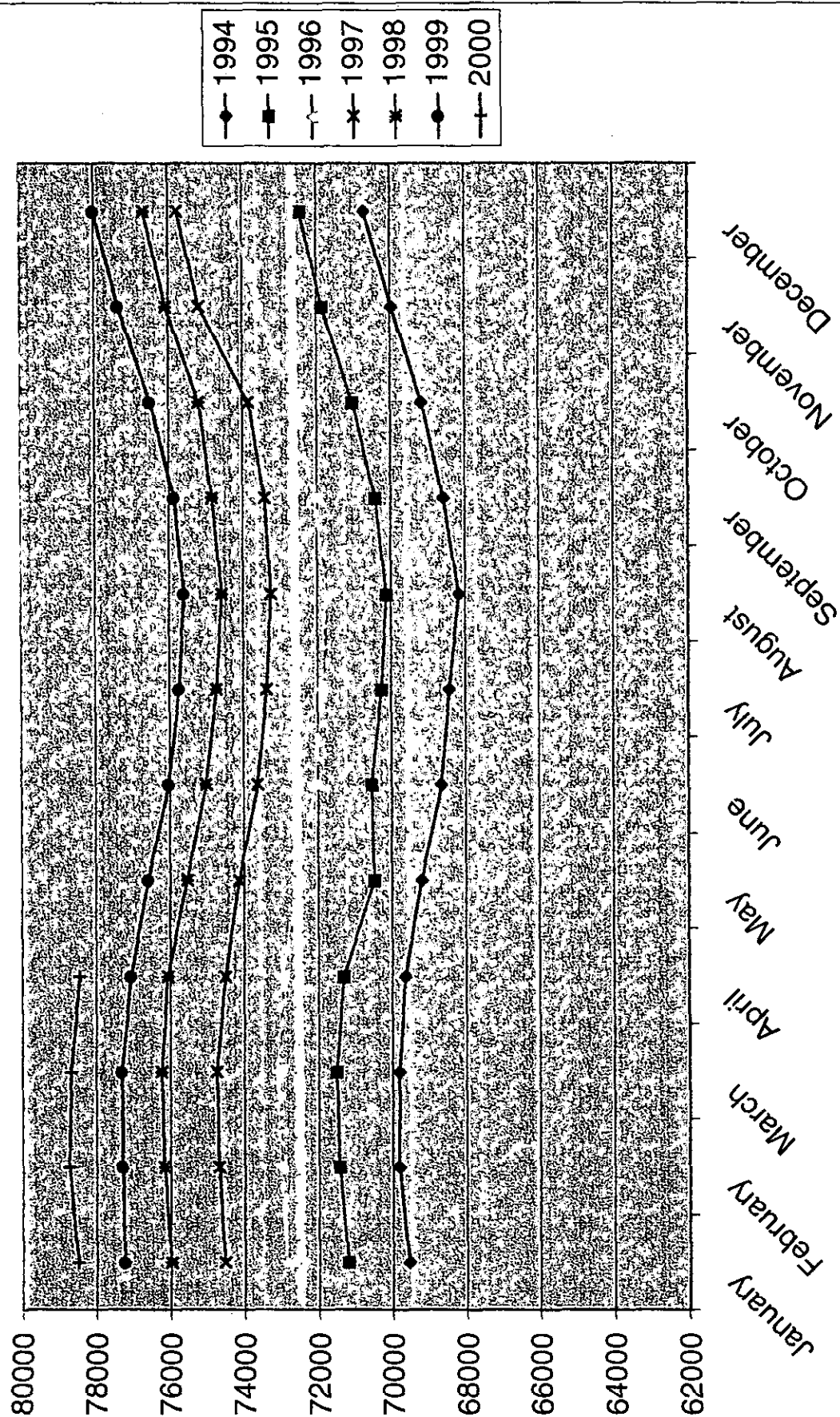
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RATE CASE PROCEEDING PARTICIPATION

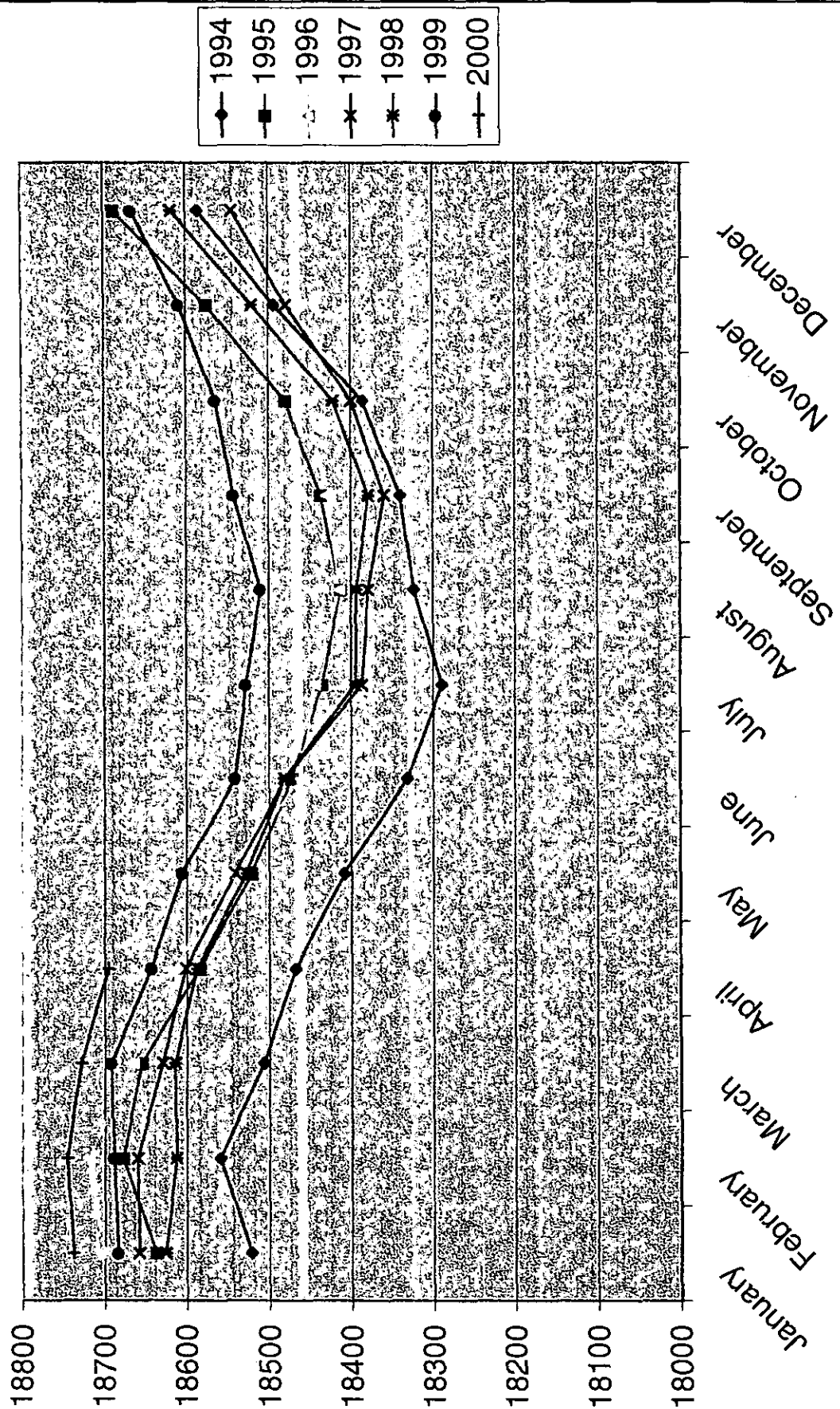
**JOHN P. CASSIDY**

<u>COMPANY</u>	<u>CASE NO.</u>
Missouri Cities Water Company	WR-91-172
Missouri Cities Water Company	SR-91-174
St. Louis County Water Company	WR-91-361
Southwestern Bell Telephone Company	TC-93-224
Laclede Gas Company	GR-94-220
Empire District Electric Company	ER-95-279
Imperial Utility Corporation	SC-96-247
St. Louis County Water Company	WR-97-382
Laclede Gas Company	GR-98-374
United Water Missouri, Inc.	WR-99-326
Union Electric Company	EC-2000-795

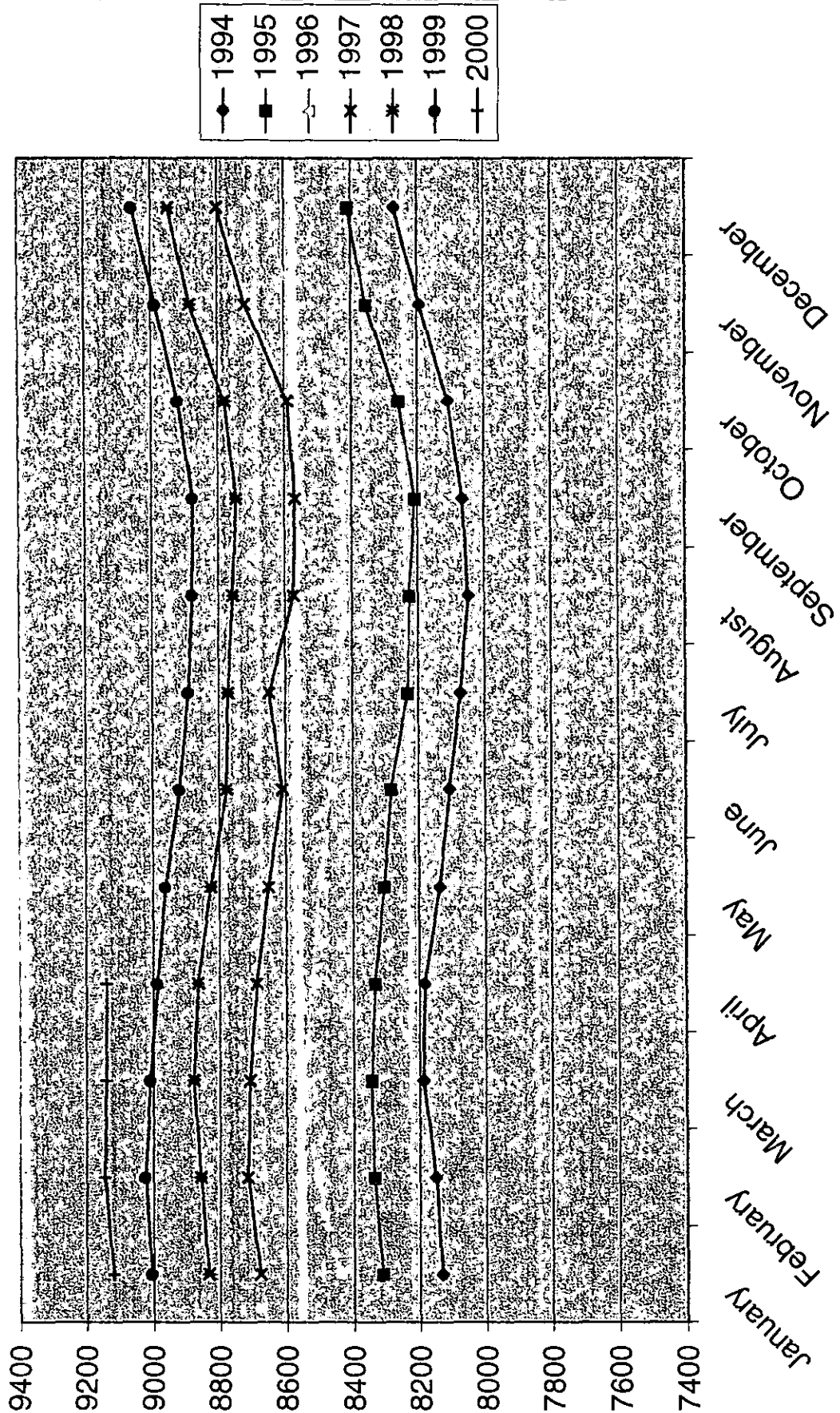
# Residential Customers-Panhandle



# Residential Customers-Texas Eastern & Natural Gas Pipeline



# General Service-Panhandle



# General Service-Texas Eastern & Natural Gas Pipeline

