

MGE - REGULATORS (383)

TOM SULLIVAN'S ASL - 40 YRS

LACLEDE'S ASL - 41 YRS

LAST 5 YEARS - AVERAGE NET SALVAGE - \$62

12-31-98 PLANT BALANCE - \$9,219,139

$$DR_{wL} (LACLEDE) = \frac{1}{41} - \frac{\$62}{9,219,139}$$

$$= .024 - 6.7^{-6}$$

$$= .024 \text{ or } 2.4\%$$

STAFF proposes a depreciation rate of 2.4% for account 383, (REGULATORS).



MGE - EGM - MEASUREMENT & REGULATING EQUIPMENT (3850)

TOM SUCREMAN'S ASH - 30 YEARS
LACRODE'S ASH - 38 YEARS
U. E.'s ASH - 33 YEARS

(Note Sucuman Calculated An ASH Average of
31 Years From His File of GAS COMPANIES.)

AV. NET SALVAGE - No History
LACRODE'S - Net Salvage - $< 8\%$
ANDERSON U.E.'s - Net Salvage - 0%

$$DR_{wc}(\text{SUCREMAN}) = \frac{1}{30} - 0$$
$$= 5\%$$

$$DR_{wc}(\text{STAFF}) = \frac{1}{30} - 0$$
$$= 3.3\%$$

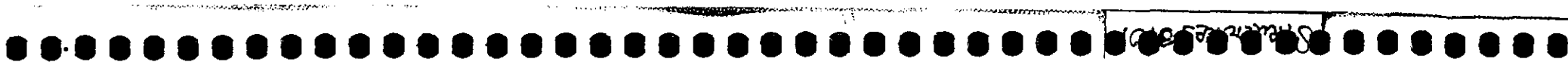
Staff proposes a rate of 3.3% for
this account. An ASH of 30 years has
been established by two Missouri
gas companies. There is no data
to verifiably support a net salvage
value other than zero. COR and Gross
Salvage should be negligible.

Other Eq. 387

M G E - OTHER EQUIPMENT (387)

Tom Sweeney's ASL - 35 YEARS

STOFF'S POSITION: There is a zero plant balance for this account. Staff proposes that the depreciation rate be set at zero until plant is acquired that will be booked to this account. At such time, the specific plant placed in this account can be evaluated for ASL and net salvage and then a depreciation rate can be calculated and assigned to this account.



Shakespeare

MGE - Structures & Improvements (3901)

Tom Sullivan's ASL - 35 YRS

LACLEDE'S ASL - 50 YRS

NET SALVAGE = ~~0%~~ 1993, 1986/1997 (concurrent)
building retirements are not expected to
reoccur. There are no know or
planned building retirements.

PLANT BALANCE - 12-31-98 - \$439,273

$$\begin{aligned} DR_{wl}(\text{SULLIVAN}) &= \frac{1}{35} - \cancel{0} \\ &= 0.0286 \text{ or } 2.9\% \end{aligned}$$

$$\begin{aligned} DR_{wl}(\text{LACLEDE ASL}) &= \frac{1}{50} - \cancel{0} \\ &= 0.02 - \cancel{0} \\ &= 2\% \end{aligned}$$

The Staff proposes ~~a~~ a depreciation rate of 0.02. The ASL of 50 years is established in the state of Missouri from historical data submitted to Staff by Laclede. MGE's historical data is not adequate to make a life determination.

Forensic 391

MGE - FURNITURE & EQUIPMENT (391)

TOM SULLIVAN'S CALCULATIONS:

	<u>Total</u>	<u>% of Total</u>
Furniture	4,299,354	11.30%
Office Equipment	1,450,560	3.81%
Mainframe	22,062,586	57.98%
Personal Computer	10,239,092	26.91%
Total	38,051,592	100.00%

	<u>% of Total</u>	<u>Net Salvage</u>	<u>Average Service Life</u>	<u>Whole Life Rate</u>
Furniture	11.30%	10.00%	25	3.60%
Office Equipment	3.81%	0.00%	10	10.00%
Mainframe	57.98%	20.00%	10	8.00%
Personal Computer	26.91%	10.00%	5	18.00%
Weighted Average Rate for Account 391				10.27%

<u>LACLEDE'S ASLs</u>	<u>NET SALVAGE</u>
OFFICE FURNITURE - 31 YRS	0%
MECHANICAL EQUIPMENT - 10 YRS	3%
DATA PROCESSING - 10 YRS	0%

$$\begin{aligned}
 DR_{ASC-WC} &= \frac{1}{31} * (.113) + \frac{1}{10} * (.0381) + \frac{1}{10} * (.8489) \\
 &= .0036 + .00381 + .08489 \\
 &= .092 \text{ or } 9.2\% \text{ minus net salvage}
 \end{aligned}$$

$$\begin{aligned}
 DR_{WC} &= .092 - \frac{2999}{3,196,378} \\
 &= .091 \text{ or } \underline{\underline{9.1\%}}
 \end{aligned}$$

Staff proposes a rate (depreciation) of 9.1% for this account. of personal computers

then the plant left in this account will
need to be recalculated to determine
a reasonable depreciation rate.

10152-10153-10154



MGE - TRANSPORTATION

(392) ^{LAGGERS}

Class 1 - Less Than 1 Ton - 11 yrs 3.5%

Class 2 - Greater Than 1 Ton - 12 yrs 78.6%

Class 3 - Autos - 6 yrs 1.5%

Class 6 - Trailers - 12 yrs 16.4%
100.0%

$$\text{Prepared ASL} = (11 \text{ yrs}) * (.035) + (12 \text{ yrs}) * (.786) + (6 \text{ yrs}) * (.015) + (12 \text{ yrs}) * (.164)$$

= 11.5 yrs

Tom Succow's ASL - 8 yrs
Laggers ASL (Prepared) - 11.5 yrs

Last 5 Years - Average Net Salvage - \$36,863

12-31-98 Plant Balance - \$2,699,553⁰⁰

$$DR_{MC}(\text{Successor's}) = \frac{1}{8} - \frac{36,863}{2,689,553}$$

$$= .125 - .0137$$

$$= .1113 \text{ or } 11.1\%$$

$$DR_{MC}(\text{Incurred ASC}) = \frac{1}{11.5} - \frac{36,863}{2,689,553}$$

$$= .0869 - .0137$$

$$= .055 \text{ or } \underline{\underline{5.5\%}}$$

Staff proposes a depreciation rate of .055 for this account. The ASL of 11.5 years is established in the State of Missouri from historical data submitted to ~~the~~ Staff by Incurred. MG's historical data is not adequate to make a life determination.

SEP. 20. 1999 2:18PM
AIC 332

MGE COMMNTY RELATION

NO. 1107 P. 2/2

<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Class 5</i>	<i>12/31/1998</i>
<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Class 5</i>	<i>Total 3920</i>
\$ 93,864.03	\$ 2,113,356.12	\$ 41,475.50	\$ 440,857.26	\$ 2,689,552.91

FAR-
Paul Adam MRC
Tom Sullivan RSV

Paul - per your fax 9/16/99 requesting
As by class.

Charley

CLASS 5 - Backhoes booked to AIC ³⁹⁶ 356 Per Op. EG.



MISSOURI GAS ENERGY

FACSIMILE

DATE:

9/20/99

SENT TO:

Attention:

Paul Adam (mpsc) Tom Sullivan (Btu)

Company _____

City _____

State _____

Fax Number:

573-751-1847913-458-3817

Number of Pages:

2

(Including Cover Sheet)

SENT BY:

Rob Hack

Vice President

Pricing & Regulatory Affairs

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☒Charles B. Hernandez

Director

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MISSOURI GAS ENERGY
Pricing & Regulatory Affairs
3420 Broadway, 7th Floor
Kansas City, MO 64111
Fax Number: (816) 360-5536

MGE

Auto Policy
Criteria

Missouri Gas Energy

1 Year 2000

Criteria for Replacement

	IT↓ Class 1	↑ 1 Ton Class 2	Passenger Cars Class 3	backhoes Class 5	Trailers Class 6
Criteria 1 - Mileage/Hours	95,000	8,500	95,000	4,500	*
Criteria 2 - Age (years)	6	9	5	10	10

\$ →

MGE

* Equipment being transported weighs more than trailers original specs.

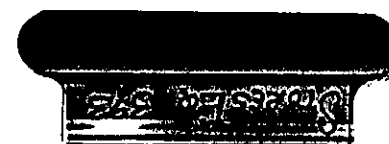
Criteria is based on industry standards, manufacturer suggested replacement mileage, wholesale liquidators

Auto
Policy

TO GET

CHARICE IS TO SEND ME

BREAKOUT OF \$ BY CLASS



MGE - STORES EQUIPMENT (393)

Tom Suckevan's ASL - 20 Yrs.
LACEDÉ'S ASL - 37 YRS

NET SALVAGE - 0

12-31-98 PLANT BALANCE - \$527,647

$$DR_{WL}(\text{SUCKEVAN}) = \frac{1}{20} - 0$$

$$= .05 \text{ or } 5\%$$

$$DR_{WL}(\text{LACEDÉ}) = \frac{1}{37} - 0$$

$$= .027 \text{ or } \underline{\underline{2.7\%}}$$

Staff proposes the rate of .027 for this account. The ASL of 37 years is established in the state of Missouri from historical data submitted to Staff by LACEDÉ. MGE's historical data is not adequate to make a life determination.

10045-374



MGE - Tools (394)

TOM SULLIVAN'S ASL - 10 YRS

LACED'S ASL - 42 YRS

NET SALVAGE - ~~0~~

12-31-98 PLANT BALANCE - \$4,310,432

$$DR_{MC} (\text{SULLIVAN}) = \frac{1}{10} - 0$$

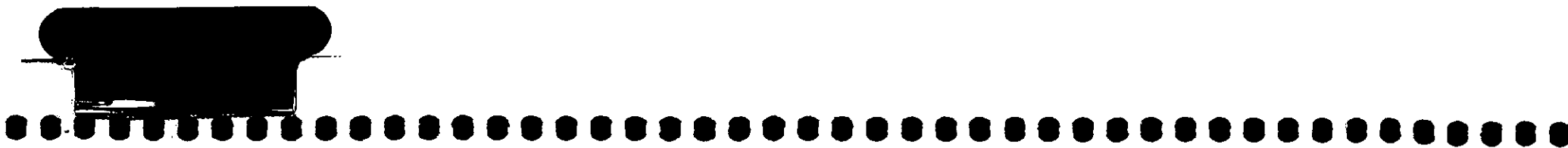
$$= .10 = 10\%$$

$$DR_{MC} (\text{LACED}) = \frac{1}{42} - 0$$

$$= .0238 - 0$$

$$= 2.38 \text{ or } \underline{\underline{2.4\%}}$$

The staff proposes a depreciation rate of 2.4% for this account. The ASL of 42 years is established per the Estate of Missouri from historical data submitted to Staff by Laced. MGE's historical data is not adequate to make a life determination



MGE - POWER OPERATED EQUIPMENT (396)

Tom SULLIVAN'S ASL - 10 YRS

LACLEDE'S ASL - 12 YRS

LAST 5 YEARS AVERAGE SALVAGE - \$30,056

12-31-98 PLANT BALANCE - \$1,134,135

$$\begin{aligned} DR_{WL}(\text{SULLIVAN}) &= \frac{1}{10} - \frac{30,056}{1,134,135} \\ &= 0.10 - 0.026 \\ &= 0.073 \text{ or } 7.3\% \end{aligned}$$

$$\begin{aligned} DR_{WL}(\text{LACLEDE'S ASL}) &= \frac{1}{12} - \frac{30,056}{1,134,135} \\ &= 0.0833 - 0.026 \\ &= 0.057 \text{ or } \underline{\underline{5.7\%}} \end{aligned}$$

Staff proposes a depreciation rate of .057 for this account. The ASL of 12 years is established in the state of Missouri from historical data submitted to Staff by Laclede. MGE's historical data is not adequate to make a life determination.



MGE - COMMUNICATION EQUIPMENT (397)

TOM SULLIVAN'S ASL - 15 YRS

LACLEDE'S ASL - 16 YRS

LAST 5 YEARS - AVERAGE NET SALVAGE - $\langle \$1,138 \rangle$

12-31-98 PLANT BALANCE - \$ 2,036,629

$$DR_{WL} (\text{SULLIVAN}) = \frac{1}{15} - \frac{\langle 1,138 \rangle}{2,036,629}$$

$$= .0666 + .000068$$

$$= .067 \text{ or } 6.7\%$$

$$DR_{WL} (\text{LACLEDE ASL}) = \frac{1}{16} - \frac{\langle 1,138 \rangle}{2,036,629}$$

$$= .0625 - .000068$$

$$= .063 \text{ or } \underline{\underline{6.3\%}}$$

Staff proposes the rate of .063 for this account. The ASL of 16 years is established in the state of Missouri from historical data submitted to Staff by Laclede. MGE's historical data is not adequate to make a life determination.

ERT E. 3971

TOM SULLIVAN'S ASL - 20 YRS

LACREDE'S ASL - (Lacrede does not have this type of equipment)

WAST 5 YEARS - AVERAGE NET SALVAGE - (NO HISTORY YET)

12-31-98 PLANT BALANCE - \$30,865,129⁰⁰

$$\begin{aligned} DR_{MGE} (SULLIVAN) &= \frac{1}{20} - 0 \\ &= 0.05 - 0 \\ &= 0.05 \text{ or } 5\% \end{aligned}$$

DR_{MGE} (LACREDE ASL) - NOT APPROPRIATE

The establishment of an ASL is difficult due to the lack of historical data. Tom Sullivan's proposal of 20 years can be considered reasonable for two reasons. First, electronic equipment of this type should last at least 20 years. Only new, more advanced, equipment that would give MGE lower cost would justify a shorter life. The life may be adjusted to a longer period at a future date. Second, the reserve ratio is low, 4.44%. The 5% depreciation rate should allow the accrual to build to a more comfortable level of about 20% over the next

several years. Continued evaluation of
this account is important and
necessary.



MGE - MISCELLANEOUS EQUIPMENT (398)

TOM SULLIVAN'S ASL - 20

LACHEDE'S ASL - 26

LAST 5 YEARS - AVERAGE NET SALVAGE - $\# 0$

12-31-98 PLANT BALANCE - \$ 161,119

$$\begin{aligned} DR_{WC} (\text{SULLIVAN}) &= \frac{1}{20} - 0 \\ &= 0.05 \text{ or } 5\% \end{aligned}$$

$$\begin{aligned} DR_{WL} (\text{LACHEDE ASL}) &= \frac{1}{26} - 0 \\ &= 0.038 \text{ or } \underline{\underline{3.8\%}} \end{aligned}$$

Staff proposes the rate of 0.038 for this account. The ASL of 26 years is established in the state of Missouri from historical data submitted to Staff by Lachede. MGE's historical data is not adequate to make a life determination.

SCHEDULE TJS-3

**Missouri Gas Energy
Comparison of Depreciation Rates**

Reference	Company Name	Location	12 Months Ended	Property/Plant/ Equipment and Intangibles \$ million	Depreciation/ Amortization Expense \$ million	Indicated Depreciation Rate
(1)	AGL Resources	Tennessee, Georgia, Virginia	09/30/2000	2,459.70	83.20	3.38%
(1)	Cascade Natural Gas	Washington, Oregon	09/30/2000	473.90	13.30	2.81%
(1)	EnergySouth, Inc.	Southwest Alabama	09/30/2000	189.20	6.70	3.54%
(1)	New Jersey Resources Corp.	Gulf Coast to New England	09/30/2000	1,009.60	31.00	3.07%
(1)	Peoples Energy Corporation	Chicago, Northeastern Illinois	09/30/2000	2,517.10	100.90	4.01%
(1)	Piedmont Natural Gas Co.	North and South Carolina, Tennessee	10/31/2000	1,466.60	48.90	3.33%
(1)	South Jersey Industries	New Jersey	12/31/2000	769.90	20.20	2.62%
(1)	WGL Holdings	Washington, D.C., Virginia, Maryland	09/30/2000	2,225.30	65.50	2.94%
	Average					3.21%
(2)	Missouri Gas Energy					
	Existing Rates	Missouri	06/30/2000	683.18	24.16	3.54%
	Company Filing	Missouri	06/30/2000	683.18	23.16	3.39%
	Staff Recommendation	Missouri	06/30/2000	683.18	16.43	2.40%
	B&V Recommendation	Missouri	06/30/2000	683.18	22.13	3.24%

(1) Source: yahoo.marketguide.com

(2) Schedule TJS - 8.

SCHEDULE TJS-4

Schedule TJS-4

[illegible]

SCHEDULE TJS-5

Missouri Gas Energy
Analysis of Account 380 - Services

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Line No.	Year	Beginning Balance	Additions	Retirements	Transfers/Adj	Ending Balance	Laclede
1	1987	66,535,405	5,247,891	547,248	-2,252	71,233,796	
2	1988	71,233,796	5,232,196	1,082,965	-2,412	75,380,615	
3	1989	75,380,615	5,974,783	224,688	-18,639	81,112,071	161,871,193
4	1990	81,112,071	19,552,514	3,109,855	-34,589	97,520,141	
5	1991	97,520,141	16,471,586	1,918,419	-541,804	111,531,504	
6	1992	111,531,504	17,312,702	2,247,798	-758,768	125,837,640	
7	1993	125,837,640	15,531,128	1,799,170	-27,963	139,541,635	
8	1994	139,541,635	17,318,472	1,141,206	-238,083	155,480,818	
9	1995	155,480,818	18,214,631	2,064,532	-1,509,986	170,120,931	
10	1996	170,120,931	16,487,207	3,098,103	501	183,510,535	
11	1997	183,510,535	16,767,115	5,666,727	-56,492	194,554,431	
12	1998	194,554,431	19,921,220	3,696,469	-18,926	210,760,256	
13	1999	210,760,256	16,123,650	3,867,327	551	223,017,129	
14	2000	223,017,129	15,257,656	4,494,777	-24,901	233,755,108	301,084,219
15	Total Since 1989		188,957,880	33,104,383	-3,210,460		
16	Percent of 1989 Ending Balance		233%	41%	-4%		
17	Percent Change in Plant Balance					188%	86%

SCHEDULE TJS-7



APR-25-2001 10:31

MO PUBLIC SERV COMM

816 325 0109 P.01/02

(913) 458-3817

Missouri Gas Energy - GR 2001-292

5 year average of Salvage and Cost of Removal

	Salvage	Removal Cost	Net Salvage
1996	(\$221,087)	\$877,840	\$656,753
1997	(\$124,973)	\$895,255	\$770,282
1998	(\$210,219)	\$949,005	\$738,786
1999	(\$68,905)	\$887,720	\$818,815
2000	(\$155,925)	\$739,411	\$583,486

			\$3,568,122
Divided by 5 years			5

Average Net Salvage/COR			\$713,624
			=====

Source: Updated response to DR 179

APR-25-2001 10:31

MO PUBLIC SERV COMM

816 325 0109 P.02/02

DR Request 0179

1. Net Salvage by account (cost of removal less salvage) by year.

Cost of Removal

Acct	Type Code	Amount	Year
3780	004	(\$4,545.23)	1996
3820	004	(\$196.12)	1996
3830	004	(\$1,655.05)	1996
3901	004	(\$196,260.14)	1996
3920	004	(\$18,420.00)	1996
3901	004	(\$12,016.00)	1997
3910	004	(\$893.54)	1997
3920	004	(\$14,477.00)	1997
3940	004	(\$525.00)	1997
3960	004	(\$96,960.00)	1997
3751	004	(\$135,800.00)	1998
3810	004	(\$10,885.00)	1998
3820	004	(\$650.77)	1998
3910	004	(\$177.00)	1998
3920	004	(\$29,415.00)	1998
3960	004	(\$33,290.00)	1998
3810	004	(\$2,320.00)	1999
3920	004	(\$35,342.87)	1999
3940	004	(\$18,242.38)	1999
3960	004	(\$13,000.00)	1999
3810	004	(\$800.00)	2000
3920	004	(\$36,235.00)	2000
3960	004	(\$118,890.00)	2000

221,086.55

877,840 - 1996

124,972.54

895,255 - 1997

210,218.77

949,005 - 1998

68,905.25

887,120 - 1999

155,925

739,411 - 2000

2. Identify the amount of reimbursements for line relocations credited to each depreciation reserve account by year.

Acct	Type Code	Amount	Year
3760	009	(\$705,313.77)	1996
3800	009	(\$535.91)	1996
3820	009	\$240.44	1996
3760	009	(\$1,110,490.11)	1997
3800	009	(\$5,293.80)	1997
3760	009	(\$822,008.98)	1998
3780	009	\$12,136.22	1998
3800	009	(\$92.67)	1998
3820	009	(\$4,552.29)	1998
3760	009	(\$591,276.24)	1999
3780	009	(\$7,167.19)	1999
3800	009	(\$10,446.32)	1999
3820	009	(\$2,368.16)	1999
3960	009	(\$42,320.00)	1999
3760	009	(\$1,487,501.76)	2000
3780	009	(\$25,157.40)	2000
3800	009	(\$31,742.64)	2000
3820	009	(\$7,435.35)	2000
3960	009	\$42,320.00	2000

1,509,517

SCHEDULE TJS-8

DATA INFORMATION REQUEST
Missouri Gas Energy
GR-2001-292

REQUESTED FROM: Rob Hack

DATE REQUESTED: 12-28-00

INFORMATION REQUESTED: For account 376, what dollar amount has been added to the reserve balance each year as a result of relocation payments since the ownership change to Southern Union? Do any other accounts have relocation booked in the same manner as account 376? If yes, please list the accounts and the dollar amounts added each year to each account's reserve since Southern Union took ownership of MGE.

REQUESTED BY: Paul Adam

INFORMATION PROVIDED

Please refer to Attachment 4601. This attachment contains workpapers summarizing cost of removal, salvage, and reimbursements by FERC account for the period 1978 through 1999.

Reimbursements have been booked in association with Accounts 375, 376, 378, 380, 381, 382, and 383.

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. GR-2001-292 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location, (2) make arrangements with requestor to have documents available for inspection in the Missouri Gas Energy, Kansas City, Missouri office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g., book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request, the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to Missouri Gas Energy and its employees, contractors, agents or others employed by or acting in its behalf.

Signed by: _____

Date Response Received: _____

Prepared by: _____

DATA INFORMATION REQUEST
Missouri Gas Energy
GR-2001-292

REQUESTED FROM: Rob Hack

DATE REQUESTED: 12-28-00

INFORMATION REQUESTED: Please submit a digital file in the Gannett-Fleming format through year 1999 (fiscal) to verify compliance with 4 CSR 240-40.040 and agreements made as a result of Case No. GR-98-140.

In table 3-4 of The Black & Veatch depreciation study, transmitted to Mr. Rob Hack on 6-8-2000, the column (H) Net Salvage Allowance for account 3760 MAINS is \$450,000. Is this dollar amount the net of Cost of Removal, Gross Salvage and Reimbursements for mains relocation? Please state the three dollar amounts that sum up to \$450,000.

REQUESTED BY: Paul Adam

INFORMATION PROVIDED

The net salvage allowance of \$450,000 for Account 376 is approximately equal to the 10-year average of salvage less cost of removal plus reimbursements of \$437,594 ($337,251 - 17,182 + 77,525$). Considering that the 5-year average of \$546,231 ($563,529 - 17,298$) is significantly higher, the 10-year average was rounded up to \$450,000. All of these figures are shown in Attachment 4601. The \$450,000 figure was not determined based on a separate consideration of salvage, cost of removal, and reimbursements; therefore, separate figures were not computed for these three components to sum up to the \$450,000.

The attached information provided to the Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. GR-2001-292 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location, (2) make arrangements with requestor to have documents available for inspection in the Missouri Gas Energy, Kansas City, Missouri office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g., book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request, the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to Missouri Gas Energy and its employees, contractors, agents or others employed by or acting in its behalf.

Signed by: _____

Date Response Received: _____

Prepared by: _____



MISSOURI GAS ENERGY

3420 Broadway • Kansas City, MO • 64111-2404 • (816) 360-5605

CHARLES B. HERNANDEZ
DIRECTOR, PRICING AND REGULATORY AFFAIRS

August 12, 1999

Mr. Paul Adam, P.E.
Missouri Public Service Commission
301 West High Street
P. O. Box 360
Jefferson City, Missouri 65102-0360

Dear Paul:

Enclosed are revised Tables 1 through 7 that supercede the tables attached to MGE's May 27, 1999 transmittal to you. Even though there is a complete set of tables, only Tables 3 and 5 have been changed.

MGE previously supplied you with workpapers supporting cost of removal, salvage and reimbursements as part of MGE's depreciation study. Your follow-up inquiry about certain account swings between years has revealed two necessary corrections, which were caused by input errors during the development of those workpapers. The years effected were 1996 for reimbursements and 1998 for cost of removal.

As such, in preparing the revised workpapers, property accounting provided me with complete source documentation to verify the numbers for 1994 through 1998, which I reviewed in detail. Per your request, we have updated the workpapers to reflect results through June 1999 (six months). This general ledger detail is available for your review. Accordingly, Tom Sullivan has revised the depreciation study analysis and Tables to reflect the corrections and to reflect the removal of account 395 - lab equipment, as I stated in my August 3, 1999 letter.

If I can be of further assistance, please call me.

Sincerely,

Enclosures

C: Doug Micheel
Tom Sullivan
Rob Hack

Table 1
Missouri Gas Energy
Summary of Simulated Plant Balance Analysis
Starting with a Zero Beginning Balance in 1968

Acct. No.	Account Description	Number 1 Rank		Number 2 Rank		Number 3 Rank	
		Curve Type	Avg. Service Life	Curve Type	Avg. Service Life	Curve Type	Avg. Service Life
			Years		Years		Years
Distribution Plant							
037400	Land Rights (1)	S 6.0	15	S 5.0	15	L 5.0	15 (3)
037500	Structures (2)	S 6.0	11	S 5.0	12	L 5.0	12 (3)
037600	Mains	SC 0.0	43	R 0.5	36	S -0.5	35
037800	Measuring and Regulating Station	SC 0.0	29	R 0.5	26	L 0.0	27
037900	City Gate Station	S 6.0	10	R 5.0	10	S 5.0	10 (3)
038000	Services	SC 0.0	27	R 0.5	24	L 0.0	25
038100	Meters	L 0.0	9	SC 0.0	10	L 0.5	9 (4)
038200	Meter/Regulator Installations	Program could not converge - large positive transfers.					
038300	Regulators	L 0.0	16	L 0.5	15	L 1.0	14 (4)
038700	Other Equipment	L 0.0	15	SC 0.0	17	L 0.5	15 (4)
General Plant							
039000	Structures (2)	L 3.0	8	L 2.0	9	L 1.5	9 (4)
039100	Office Furniture & Equipment	R 0.5	12	SC 0.0	12	R 1.0	11
039200	Transportation Equipment	L 3.0	8	S 2.0	8	S 1.5	8
039300	Stores Equipment	R 2.5	20	R 3.0	19	S 1.5	21
039400	Tool, Shop & Garage Equipment	L 0.0	15	SC 0.0	18	L 0.5	15
039500	Lab Equipment	Not enough data.					
039600	Power Operated Equipment	L 0.0	8	L 0.5	8	SC 0.0	9
039700	Communication Equipment	S 5.0	9	L 5.0	9	R 5.0	9
039800	Miscellaneous Equipment	L 1.0	12	L 0.5	14	L 0.0	15

(1) Includes land because before 1984 there was no separation between land and land rights

(2) Includes leasehold improvements because before 1984 there was no separation between structures and leasehold improvements.

(3) High modal curves - unreasonably low life.

(4) Unreasonably low value.

Missouri Gas Energy
Summary of Simulated Plant Balance Analysis
Starting with 1968 Beginning Balance

Acct. No.	Account Description	Number 1 Rank		Number 2 Rank		Number 3 Rank	
		Curve Type	Avg. Service Life	Curve Type	Avg. Service Life	Curve Type	Avg. Service Life
			Years		Years		Years
Distribution Plant							
037400	Land Rights (1)	S 6.0	23	S 5.0	23	R 5.0	23
037500	Structures (2)	S 5.0	20	R 5.0	8	L 5.0	20
037600	Mains	Could not Converge					
037800	Measuring and Regulating Station	S 6.0	26	S 5.0	27	L 5.0	28
037900	City Gate Station	Could not Converge					
038000	Services	S 6.0	21	S 5.0	22	R 5.0	22
038100	Meters	S 6.0	19	S 5.0	19	R 5.0	19
038200	Meter/Regulator Installations	Balances same as above. Not run again.					
038300	Regulators	Could not Converge					
038700	Other Equipment	R 1.5	19	S 0.5	19	S 0.0	19
General Plant							
039000	Structures (2)	S 2.0	12	S 1.5	13	S 3.0	12
039100	Office Furniture & Equipment	S 6.0	13	S 5.0	13	R 5.0	13
039200	Transportation Equipment	Balances same as above. Not run again.					
039300	Stores Equipment	S 6.0	21	S 5.0	21	R 5.0	22
039400	Tool, Shop & Garage Equipment	S 6.0	18	S 5.0	18	R 5.0	18
039500	Lab Equipment	Balances same as above. Not run again.					
039600	Power Operated Equipment	L 0.5	10	L 1.0	10	L 1.5	10
039700	Communication Equipment	L 2.0	15	L 1.0	17	L 1.5	16
039800	Miscellaneous Equipment	S 5.0	29	R 5.0	29	S 4.0	30

(1) Includes land because before 1984 there was no separation between land and land rights

(2) Includes leasehold improvements because before 1984 there was no separation between structures and leasehold improvements.

Table 2
Missouri Gas Energy
Summary of Comparable Midwestern Gas Companies

Account Description	Applied Depreciation Rate									
	ONEOK (Western Resources)					Ammos Energy Corp. (United Cities Gas Company)				
	No Indiana Public Service Co		Kansans		Oklahoma		Missouri		Missouri	
	Indiana Service Co	Energy K N	Rate	Analysis	Rate	Analysis	Rate	Analysis	Rate	Analysis

374	2.27	3.00	2.77	Actuarial	Whole Life	3.04	Actuarial	Whole Life	2.78	Actuarial	Whole Life	49.0	0.00	2.04	R-3	Actuarial	Whole Life
375	2.27	3.00	2.86	Actuarial	Whole Life	1.93	Actuarial	Whole Life	2.47	Actuarial	Whole Life	44.0	(10.00)	2.50	R-3	Actuarial	Whole Life
376	3.43	3.00	3.65	Actuarial	Whole Life	3.16	Actuarial	Whole Life	4.72	Actuarial	Whole Life	36.0	0.00	2.61	R-3	Actuarial	Whole Life
379	7.00	3.00	3.46	Actuarial	Whole Life	2.40	Actuarial	Whole Life	7.75	Actuarial	Whole Life	36.0	0.00	2.61	R-3	Actuarial	Whole Life
380	7.00	3.00	4.65	Actuarial	Whole Life	6.67	Actuarial	Whole Life	10.45	Actuarial	Whole Life	44.0	(79.00)	4.06	R-3	Actuarial	Whole Life
381	3.46	3.00	2.37	Actuarial	Whole Life	2.20	Actuarial	Whole Life	3.09	Actuarial	Whole Life	45.4	0.00	2.20	R-2	Actuarial	Whole Life
382	16.55	3.00	2.40	Actuarial	Whole Life	1.90	Actuarial	Whole Life	6.01	Actuarial	Whole Life	65.8	0.00	1.52	L-2	Actuarial	Whole Life
383	9.94	3.00	2.47	Actuarial	Whole Life	1.74	Actuarial	Whole Life	4.39	Actuarial	Whole Life	2.50	0.00	2.70	L-2	Actuarial	Whole Life
384	7.83	3.00	3.00	Actuarial	Whole Life	2.00	Actuarial	Whole Life	2.00	Actuarial	Whole Life	2.70	0.00	2.22	R-3	Actuarial	Whole Life
385	3.51	3.00	3.00	Actuarial	Whole Life	2.22	Actuarial	Whole Life	4.62	Actuarial	Whole Life	33.0	0.00	3.05	R-3	Actuarial	Whole Life
386	17.90	3.00	3.26	Actuarial	Whole Life	2.46	Actuarial	Whole Life	5.76	Actuarial	Whole Life	5.27					
Total	5.62	3.00	5.26	Actuarial	Whole Life	2.46	Actuarial	Whole Life	5.76	Actuarial	Whole Life	5.27					
390	2.78	2.50	2.37	Actuarial	Whole Life	3.05	Actuarial	Whole Life	2.52	Actuarial	Whole Life	2.00		2.13			
391	7.37	7.50	12.31	Actuarial	Whole Life	2.38	Actuarial	Whole Life	7.58	Actuarial	Whole Life	[3]		[7]			
392	6.27	[6]	6.13	Actuarial	Whole Life	7.69	Actuarial	Whole Life		Actuarial	Whole Life	[4]		7.04			
393	2.35	7.50	3.66	Actuarial	Whole Life	4.21	Actuarial	Whole Life	2.91	Actuarial	Whole Life	7.14	0.00	1.97			
394	3.22	7.50	4.98	Actuarial	Whole Life	5.36	Actuarial	Whole Life	1.22	Actuarial	Whole Life	8.33	0.00	5.13			
395	4.69	7.50	3.80	Actuarial	Whole Life	4.56	Actuarial	Whole Life	4.01	Actuarial	Whole Life	6.67	0.00	2.22			
396	10.00	10.00	7.43	Actuarial	Whole Life	5.55	Actuarial	Whole Life	3.29	Actuarial	Whole Life	[5]	11.00	6.14			
397	7.50	7.50	5.74	Actuarial	Whole Life	3.57	Actuarial	Whole Life	6.21	Actuarial	Whole Life	3.40	0.00	5.28			
398	3.37	7.50	5.68	Actuarial	Whole Life	5.59	Actuarial	Whole Life	4.83	Actuarial	Whole Life	6.00					
Total	3.95	4.98	5.44	Actuarial	Whole Life	3.66	Actuarial	Whole Life	5.19	Actuarial	Whole Life	4.83					

- [1] Office furniture is depreciated at 3.44% and computer equipment is depreciated at 12.3%
 [2] Transportation and power operated equipment is depreciated over anticipated useful lives of 5 - 10 years.
 [3] Office furniture is depreciated at 7.0% and computer equipment is depreciated at 22.5%
 [4] Cars depreciated at 10.44%, light trucks at 9.8%, heavy trucks at 8% and trailers at 5.25%
 [5] Power operated equipment with short life depreciated at 13% and with long life at 5.56%
 [6] Transportation equipment is depreciated over anticipated useful lives of 5 - 10 years until anticipated salvage equals 20%
 [7] Office Furniture: ASL 23.9 years, 4.00% net salvage, depreciated at 4.01%; and computer equipment: ASL 9.0 years, 7.00% net salvage, depreciated at 10.33%.

Table 2
Missouri Gas Energy
Summary of Comparable Midwestern Gas Companies

Account Description	Alliant Energy (Interstate Power Company)				Peoples Natural Gas							MidAmerican Energy (Iowa - Illinois Gas and Electric Company)						
	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate	Average Remaining Life	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate	Mortality Curve Type	Average Remaining Life	Type of Analysis	Life Basis	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate	Mortality Curve Type	Average Remaining Life	Type of Analysis	Life Basis
	Iowa				Iowa							Iowa						
	%	%	Years	Years	%	%	Years		Years			Years	%	%		Years		
Distribution																		
374												75.00		1.34	S6	52.80	SPB	Remain. Life
375	29.00		9.59	10.90	45.00	(10.00)	3.48	S4	30.89	Actuarial	Whole Life	55.00		1.83	R2	37.40	SPB	Remain. Life
376	42.00	(10.00)	2.35	29.00	40.00	(45.00)	3.48	R4	30.89	Actuarial	Whole Life	50.00	(15.00)	2.22	R3	33.30	SPB	Remain. Life
378	28.00		3.72	21.10	27.00	(5.00)	3.48	R2	30.89	Actuarial	Whole Life	35.00	(10.00)	3.57	R1	24.20	SPB	Remain. Life
379	26.00		3.88	14.40								35.00	(10.00)	2.88	R1	28.00	SPB	Remain. Life
380	26.00	(25.00)	4.85	17.20	38.00	(125.00)	3.48	S2	30.89	Actuarial	Whole Life	43.00	(90.00)	4.69	R4	27.00	SPB	Remain. Life
381	31.00	(40.00)	5.05	20.80	35.00	0.00	3.48	S4	30.89	Actuarial	Whole Life	35.00	10.00	2.94	S2	23.00	SPB	Remain. Life
382					38.00	(30.00)	3.48	R2	30.89	Actuarial	Whole Life							
383	32.00		3.34	23.20	29.00	0.00	3.48	S3	30.89	Actuarial	Whole Life	35.00		2.72	S2	22.20	SPB	Remain. Life
384					29.00	15.00	3.48	S4	30.89	Actuarial	Whole Life							
385	16.00		6.50	7.20	30.00	30.00	3.48	R2	30.89	Actuarial	Whole Life	25.00	5.00	4.24	S0	19.00	SPB	Remain. Life
386	35.00		0.00	10.90														
387	25.00		0.00	1.80	12.00	(20.00)	3.48	R1	30.89	Actuarial	Whole Life							
Total			3.61				3.48							3.06				
General																		
390												40.00	5.00	2.25	S1	27.90	SPB	Remain. Life
391	10.00		3.97	3.00		5.00	[1]	R4		Actuarial	Whole Life	11.44	5.00	17.19	SQ	7.29	SPB	Remain. Life
392	11.74	10.28	7.49	6.75			[2]	R4		Actuarial	Whole Life							
393	35.00		1.98	2.90								20.00	13.00	5.53	SQ	14.40	SPB	Remain. Life
394	24.00		4.67	16.80		5.00		R4		Actuarial	Whole Life	25.00	5.00	4.00	SQ	18.00	SPB	Remain. Life
395	22.00		4.56	16.50								25.00		5.05	SQ	17.00	SPB	Remain. Life
396	13.00	30.00	4.53	6.60		40.00	[2]	R4		Actuarial	Whole Life							
397	30.00		2.62	15.60								20.00		5.50	SQ	10.70	SPB	Remain. Life
398	13.00		16.25	7.30								20.00		4.53	SQ	12.00	SPB	Remain. Life
Total			5.49											3.06				
Total			3.72											3.06				

[1] Office furniture is depreciated at 3.44% and computer equipment is depreciated at 12.3%.

[2] Transportation and power operated equipment is depreciated over anticipated useful lives of 5 - 10 years.

[3] Office furniture is depreciated at 7.0% and computer equipment is depreciated at 22.5%.

[4] Cars depreciated at 10.44%, light trucks at 9.5%, heavy trucks at 5% and trailers at 5.28%.

[5] Power operated equipment with short life depreciated at 13% and with long life at 5.56%.

[6] Transportation equipment is depreciated over anticipated useful lives of 5 - 10 years until anticipated salvage equals 20%.

[7] Office Furniture: ASL 23.9 years, 4.00% net salvage, depreciated at 4.01%; and computer equipment: ASL 9.0 years, 7.00% net salvage, depreciated at 10.33%.

Table 2
Missouri Gas Energy
Summary of Comparable Midwestern Gas Companies

Account Description	MidAmerican Energy (Midwest Gas)							Alliant Energy (IES)				LaCade			Average		
	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate	Mortality Curve Type	Average Remaining Life	Type of Analysis	Life Basis	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate	Average Remaining Life	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate	Estimated Average Service Life	Net Salvage	Applied Depreciation Rate
	Iowa							Iowa				Missouri					
	Years	%	%		Years			Years	%	%	Years	Years	%	%	Years	%	%
Distribution																	
374															75		2.35
375	44.00	(54.21)	3.51	R2	34.14	SPB	Remain. Life					78.42	(13.69)	1.27	50	(19)	2.97
376	64.00	(54.21)	2.41	R1.5	52.29	SPB	Remain. Life					71.35	(21.68)	1.98	52	(26)	2.58
378	56.00	(54.21)	2.75	R1.5	45.40	SPB	Remain. Life					35.00	(29.00)	2.02	37	(20)	3.21
379	56.00	(54.21)	2.75	R1.5	45.40	SPB	Remain. Life					47.00	(5.00)	2.35	40	(18)	3.35
380	37.00	(54.21)	4.16	R3	26.03	SPB	Remain. Life					44.15	(21.58)	4.67	39	(66)	5.20
381	42.00	(54.21)	3.66	R2	29.17	SPB	Remain. Life					35.00	1.00	2.86	37	(14)	3.00
382	42.00	(54.21)	3.66	R2	29.17	SPB	Remain. Life								40	(42)	4.88
383	50.00	(54.21)	3.06	R0.5	41.57	SPB	Remain. Life					41.00	0.00	2.44	42	(14)	3.38
384	50.00	(54.21)	3.10	R0.5	41.57	SPB	Remain. Life								40	(20)	4.02
385	56.00	(54.21)	2.75	R1.5	45.40	SPB	Remain. Life					26.00	(8.00)	3.13	31	(5)	3.65
386															35		6.97
387												28.00	(206.00)	16.67	22	(113)	5.24
Total			3.13					43.00	(29.95)	4.01	24.00						
General																	
390	30.00	16.80	2.36	R3	27.35	SPB	Remain. Life					50.00	0.00	2.00	40	7	2.40
391	18.00	16.80	3.54	S3	15.63	SPB	Remain. Life					15.10	0.13	9.65	14	7	7.94
392	7.00	16.80	10.51	S0	4.04	SPB	Remain. Life					9.80	5.96	10.45	10	11	8.25
393	32.00	16.80	(5.55)	S2	10.67	SPB	Remain. Life					37.00	6.00	3.46	35	9	3.20
394	33.00	16.80	1.85	S0	28.13	SPB	Remain. Life					42.00	1.00	3.38	29	6	4.51
395	25.00	16.80	0.73	S2	16.58	SPB	Remain. Life					22.00	0.00	3.45	28	6	4.29
396	13.00	16.80	1.18	L1	8.50	SPB	Remain. Life					12.00	5.05	8.95	13	21	5.88
397	16.00	16.80	4.28	S0	14.35	SPB	Remain. Life					16.00	0.00	3.73	20	6	4.76
398	30.00	16.80	2.49	L1	28.08	SPB	Remain. Life					26.00	3.00	3.45	22	10	5.12
Total			3.72					19.00	8.08	1.70	7.00						
Total			3.23														

[1] Office furniture is depreciated at 3.44% and computer equipment is depreciated at 12.3%.

[2] Transportation and power operated equipment is depreciated over anticipated useful lives of 5 - 10 years.

[3] Office furniture is depreciated at 7.0% and computer equipment is depreciated at 22.5%.

[4] Cars depreciated at 10.44%, light trucks at 9.8%, heavy trucks at 8% and trailers at 5.28%.

[5] Power operated equipment with short life depreciated at 13% and with long life at 5.56%.

[6] Transportation equipment is depreciated over anticipated useful lives of 5 - 10 years until anticipated salvage equals 20%.

[7] Office Furniture: ASL 23.9 years, 4.00% net salvage, depreciated at 4.01%; and computer equipment: ASL 9.0 years, 7.00% net salvage, depreciated at 10.33%.

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Table 3
Missouri Gas Energy
Existing and Proposed Accrual Rates

Acct. No.	Account	Existing Annual Accrual Rate	Depreciable Plant 12/31/98	Existing Annual Depreciation Expense	Accumulated Depreciation Reserve	Reserve Ratio	Net Salvage Allowance	Proposed Average Service Life	Proposed Accrual Rate	Proposed Depreciation Expense
		%	\$	\$	\$	%	(1)	Years	%	\$
Distribution Plant										
3742	Land Rights	2.17%	893,182	19,382	212,119	23.75%	0	50	2.00%	17,864
3751	Structures	2.28%	5,738,444	130,837	1,161,780	20.25%	15,000	50	1.74%	99,769
3760	Mains	1.88%	242,567,793	4,560,275	72,474,929	29.88%	450,000	40	2.31%	5,614,195
3780	Measuring & Regulating Stations	3.00%	10,163,614	304,908	2,348,188	23.10%	(5,000)	30	3.38%	343,787
3790	City Gate Stations	2.66%	2,686,494	71,461	523,090	19.47%	1,000	40	2.46%	66,162
3800	Services	5.50%	223,017,129	12,265,942	81,509,178	36.55%	(720,000)	30	3.66%	8,153,904
3810	Meters	2.05%	25,113,112	514,819	1,814,317	7.22%	(2,500)	35	2.87%	720,017
3820	Meter/Regulator Installations	2.05%	42,168,249	864,449	5,362,806	12.72%	(15,000)	35	2.89%	1,219,807
3830	Regulators	2.05%	9,219,139	188,992	1,467,656	15.92%	1,000	40	2.49%	229,478
3850	EGM-Meas/Reg Equip	5.00%	255,152	12,758	9,955	3.90%	0	20	5.00%	12,758
3870	Other Equipment	6.33%	0	0	0	0.00%	0	35	2.86%	0
Total Distribution Plant		3.37%	561,822,308	18,933,822	166,884,016	29.70%	(275,500)		2.93%	16,477,742
General Plant										
3901	Structures & Improvements	3.33%	439,273	14,628	125,746	28.63%	40%	35	1.71%	7,530
3910	Furniture & Equipment	3.06%	3,196,378	97,809	(575,380)	-18.00%	0%	10	10.27%	328,268
3920	Transportation Equipment	10.13%	2,689,553	272,452	579,306	21.54%	10%	8	11.25%	302,575
3930	Stores Equipment	3.33%	527,647	17,571	186,766	35.40%	0%	20	5.00%	26,382
3940	Tools	4.00%	4,310,432	172,417	1,123,483	26.06%	0%	10	10.00%	431,043
3960	Power Operated Equipment	6.25%	1,134,135	70,883	92,974	8.20%	20%	10	8.00%	90,731
3970	Communication Equipment	4.50%	2,036,629	91,648	(406,340)	-19.95%	0%	15	6.67%	135,775
3971	Electronic Reading-ERT	5.00%	30,865,129	1,543,256	1,369,709	4.44%	0%	20	5.00%	1,543,256
3980	Miscellaneous Equipment	6.25%	161,119	10,070	55,943	34.72%	0%	20	5.00%	8,056
Total General Plant		5.05%	45,360,295	2,290,735	2,552,209	5.63%			6.34%	2,873,617
Total Depreciable Plant		3.50%	607,182,602	21,224,557	169,436,225	27.91%			3.19%	19,351,359

(1) \$/year salvage allowance or percent of plant.

(2) Proposed accrual rate of 10.27% for Account 391 is based on accrual rate determined for corporate Acct. 391.

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Table 4
Missouri Gas Energy
Alternative Treatments of Reimbursements

Year	Gross Plant (1)	Utility 1 Accumulated Depreciation (3) 3.33%	Net Plant	Gross Plant (2)	Utility 2 (MGE) Accumulated Depreciation (4) 3.00%	Net Plant
1970	900	0	900	1,000	100	900
1971	900	30	870	1,000	130	870
1972	900	60	840	1,000	160	840
1973	900	90	810	1,000	190	810
1974	900	120	780	1,000	220	780
1975	900	150	750	1,000	250	750
1976	900	180	720	1,000	280	720
1977	900	210	690	1,000	310	690
1978	900	240	660	1,000	340	660
1979	900	270	630	1,000	370	630
1980	900	300	600	1,000	400	600
1981	900	330	570	1,000	430	570
1982	900	360	540	1,000	460	540
1983	900	390	510	1,000	490	510
1984	900	420	480	1,000	520	480
1985	900	450	450	1,000	550	450
1986	900	480	420	1,000	580	420
1987	900	510	390	1,000	610	390
1988	900	540	360	1,000	640	360
1989	900	570	330	1,000	670	330
1990	900	600	300	1,000	700	300
1991	900	630	270	1,000	730	270
1992	900	660	240	1,000	760	240
1993	900	690	210	1,000	790	210
1994	900	720	180	1,000	820	180
1995	900	750	150	1,000	850	150
1996	900	780	120	1,000	880	120
1997	900	810	90	1,000	910	90
1998	900	840	60	1,000	940	60
1999	900	870	30	1,000	970	30
2000	900	900	(0)	1,000	1,000	0
Retirement	(900)	(900)		(1,000)	(1,000)	

- (1) Initial gross plant is \$1000 minus \$100 reimbursement.
- (2) Initial accumulated depreciation equals \$100 reimbursement.
- (3) Depreciation rate equals $(1-0)/30 = 3.33$ percent
- (4) Depreciation rate equal $(1-.1)/30 = 3.00$ percent

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Table 5
Missouri Gas Energy
Accumulated Analysis of Depreciation Reserve

Acct. No.	Account	Existing Annual Accrual Rate	Depreciable Plant 12/31/98	Existing Annual Depreciation Expense	Accumulated Depreciation Reserve	Proposed Depreciation Expense	Weighted Age	Calculated Reserve Ratio Based On Weighted Age	Calculated Depreciation Reserve	Actual Less Calculated Reserve	Redistribute Services to Deficient Accounts	Restated Accumulated Depreciation Reserve
		%	\$	\$	\$	\$	Years	%	\$	\$	\$	\$
Distribution Plant												
3742	Land Rights	2.17%	893,182	19,382	212,119	17,864	15	30.00%	267,955	(55,836)	0	212,119
3751	Structures	2.28%	5,738,444	130,837	1,161,780	99,769	13	26.00%	1,491,995	(330,216)	200,000	1,361,780
3760	Mains	1.88%	242,567,793	4,560,275	72,474,929	5,614,195	15	37.50%	90,962,922	(18,487,993)	10,000,000	82,474,929
3780	Measuring & Regulating Stations	3.00%	10,163,614	304,908	2,348,188	343,787	10	33.33%	3,387,871	(1,039,684)	700,000	3,048,188
3790	City Gate Stations	2.66%	2,686,494	71,461	523,090	66,162	8	20.00%	537,299	(14,209)	0	523,090
3800	Services	5.50%	223,017,129	12,265,942	81,509,178	8,153,904	8	26.67%	59,471,234	22,037,944	(22,000,000)	59,509,178
3810	Meters	2.05%	25,113,112	514,819	1,814,317	720,017	14	40.00%	10,045,245	(8,230,928)	4,100,000	5,914,317
3820	Meter/Regulator Installations	2.05%	42,168,249	864,449	5,362,806	1,219,807	7	20.00%	8,433,650	(3,070,844)	1,500,000	6,862,806
3830	Regulators	2.05%	9,219,139	188,992	1,467,656	229,478	9	22.50%	2,074,306	(606,650)	400,000	1,867,656
3850	EGM-Meas/Reg Equip	5.00%	255,152	12,758	9,955	12,758					0	9,955
3870	Other Equipment	6.33%	0	0	0	0	0	0.00%	0	0	0	0
Total Distribution Plant		3.37%	561,822,308	18,933,822	166,884,016	16,477,742			176,672,478	(9,798,416)	(5,100,000)	161,784,016
General Plant												
3901	Structures & Improvements	3.33%	439,273	14,628	125,746	7,530	21	60.00%	263,564	(137,818)	100,000	225,746
3910	Furniture & Equipment	3.06%	3,196,378	97,809	(575,380)	328,268	9	92.43%	2,954,412	(3,529,792)	2,000,000	1,424,620
3920	Transportation Equipment	10.13%	2,689,553	272,452	579,306	302,575	2	25.00%	672,388	(93,082)	50,000	629,306
3930	Stores Equipment	3.33%	527,647	17,571	186,766	28,382	12	60.00%	316,588	(129,822)	100,000	286,766
3940	Tools	4.00%	4,310,432	172,417	1,123,483	431,043	9	90.00%	3,879,389	(2,755,905)	1,500,000	2,623,483
3960	Power Operated Equipment	6.25%	1,134,135	70,883	92,974	90,731	9	90.00%	1,020,721	(927,747)	500,000	592,974
3970	Communication Equipment	4.50%	2,036,629	91,648	(406,340)	135,775	5	33.33%	678,876	(1,085,216)	750,000	343,660
3971	Electronic Reading-ERT	5.00%	30,865,129	1,543,256	1,369,709	1,543,256	1	5.00%	1,543,256	(173,547)	100,000	1,469,709
3980	Miscellaneous Equipment	6.25%	161,119	10,070	55,943	8,056	6	30.00%	48,336	7,607	0	55,943
Total General Plant		5.05%	45,360,295	2,290,735	2,552,209	2,873,617			11,377,531	(8,825,322)	5,100,000	7,652,209
Total Depreciable Plant		3.50%	607,182,602	21,224,557	169,436,225	19,351,359			188,050,009	(18,623,739)	0	169,436,225

Table 6
Missouri Gas Energy
Southern Union Corporate (Co. 20) Existing and Recommended Depreciation Rates
Using Whole and Remaining Life Methodology

Account No.	Depreciable Plant 12/31/98	Existing Annual Depreciation Expense	Existing Annual Accrual Rate	Accumulated Depreciation Reserve	Reserve Ratio	Whole Life Method		Remaining Life Method	
						Whole Life Rate	Depreciation Expense	Remaining Life Rate	Depreciation Expense
	\$	\$	%	\$	%	%	\$		\$
390	742,817	21,044	2.83%	472,006	64%	2.75%	20,427	2.75% (3)	20,427
391	20,594,145	2,059,415	10.00%	6,648,495	32%	10.27% (2)	2,115,007	10.27% (3)	2,115,007
392	113,054	14,132	12.50%	102,030	90%	10.60%	11,982	10.60% (3)	11,982
393	2,201	220	10.00%	(4,275)	-194%	0.00%	0	0.00% (3)	0
394	21,652	613	2.83%	358	2%	3.33%	722	3.33% (3)	722
397	289,428	8,199	2.83%	61,332	21%	6.67%	19,295	6.67% (3)	19,295
398	160,627	4,551	2.83%	75,050	47%	5.00%	8,031	5.00% (3)	8,031
Total	21,923,925	2,108,174	9.62%	7,354,995	34%	9.92%	2,175,464	9.92%	2,175,464

(1) Existing rate

(2) Weighted whole life rate for Account 391.

(3) Use whole life rates.

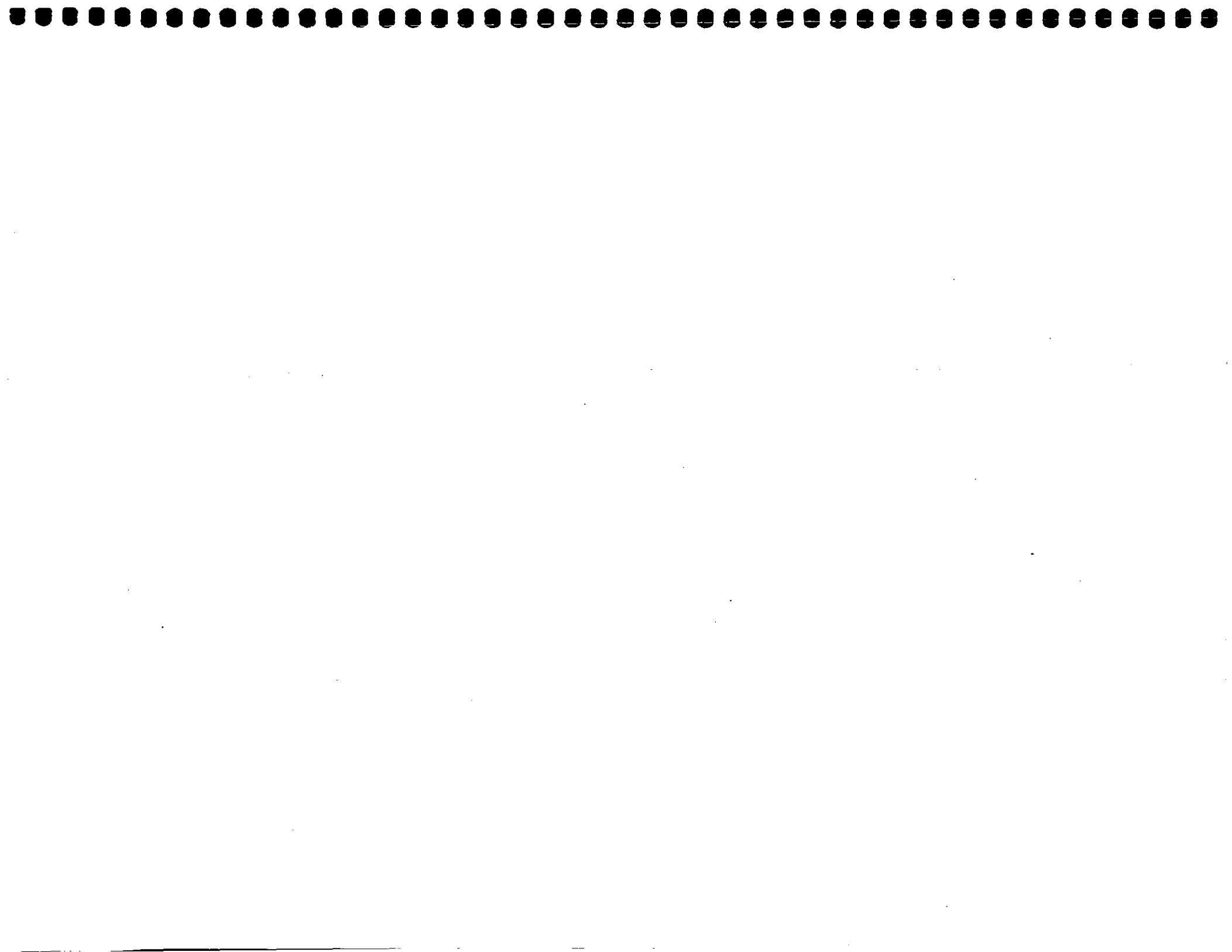
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Table 7
Missouri Gas Energy
Calculation of Whole Life Rate for Account 391
Southern Union Corporate

	<u>Total</u>	<u>% of Total</u>		
Furniture	4,299,354	11.30%		
Office Equipment	1,450,560	3.81%		
Mainframe	22,062,586	57.98%		
Personal Computer	10,239,092	26.91%		
Total	38,051,592	100.00%		

	<u>% of Total</u>	<u>Net Salvage</u>	<u>Average Service Life</u>
Account 391.1	11.30%	10.00%	25
Account 391.2	3.81%	0.00%	10
Account 391.3	57.98%	20.00%	10
Account 391.4	26.91%	10.00%	5

Weighted Rate for Account 391



COST OF REMOVAL

	Distribution Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
374.1	Land	0	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	166	0	6,170	36,015	0	324	(944)	0	356	0	4,800	116,312
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	17,601	25,814	25,455	32,770	46,626	61,168	31,961	40,265	45,519	19,970	59,238	63,253
376.2	Mains- Cast Iron	18,539	13,568	41,314	0	24,481	54,436	14,234	23,678	12,853	5,930	8,595	8,694
376.9	Mains- Contributions	0	0	0	0	0	0	0	0	0	0	0	0
378	Meas./Reg. Stations	1,654	4,151	4,854	5,860	7,756	4,469	5,346	10,879	4,292	6,848	13,291	8,787
379	City Gate Stations	0	430	(846)	(148)	1,320	264	0	1,830	104	1,276	(13)	572
380	Services	306,663	305,919	330,607	309,059	336,762	355,046	246,790	278,127	356,583	415,611	652,359	1,172,943
380.9	Services-Contributions	0	0	45	0	0	0	0	0	0	0	0	0
381	Meters	240	746	2,142	(7,435)	5,175	(165)	3,674	10,096	(89,001)	6,775	5,218	1,389
382	Meter/Regulator Installations	55	967	2,018	3,092	2,326	(285)	767	1,242	375	832	6,844	9,095
383	Regulators	1,467	1,772	2,403	6,934	16,632	3,708	3,049	3,734	4,973	3,512	529	(302)
387	Other	0	18	0	0	0	(2)	0	0	0	0	66	0
	Total Distribution Plant	346,383	353,386	414,162	386,147	441,079	478,963	304,877	369,851	336,055	460,754	750,926	1,380,743
	General Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
389	Land	0	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	0	0	73	0	0	0	0	0	0	0	0	225
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	0	0	1	0	0	0	0	1,398	0	0	0	0
392	Transportation Equipment	0	192	3,157	262	256	626	170	55	(8,901)	0	156	0
393	Stores Equipment	0	0	0	0	0	0	0	0	0	0	0	0
394	Tools, Shop, & Garage Equipment	0	0	38	0	31	354	34	0	(1,679)	2	0	820
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	0	0	0	13	0	98	0	0	0	0	15,000	0
397	Communication Equipment	0	1,132	35	783	0	0	0	0	0	0	65	0
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0	0
	Total General Plant	0	1,324	3,303	1,059	288	1,078	204	1,453	(10,580)	2	15,221	1,044
	Total Company	346,383	354,710	417,466	387,206	441,367	480,041	305,081	371,304	325,475	460,756	766,147	1,381,788

COST OF REMOVAL

Distribution Plant		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
374.1	Land	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	0	0	0	0	0	0	0	0	0	0	163,199
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	23,169	30,023	46,618	75,399	167,296	10,518	301,503	171,090	124,342	41,396	1,460,995
376.2	Mains- Cast Iron	29,431	13,473	5,712	41,665	0	0	0	19,815	45,935	31,689	414,042
376.9	Mains- Contributions	0	0	0	0	0	0	0	0	0	0	0
378	Meas/Reg. Stations	10,685	21,684	17,413	30,761	7,772	(2,861)	23,359	23,720	17,021	3,380	231,122
379	City Gate Stations	0	524	0	0	1,658	(3,937)	1,726	0	0	0	4,760
380	Services	66,975	1,273,371	942,407	751,727	768,142	1,006,950	678,723	650,470	746,903	390,135	12,342,272
380.9	Services-Contributions	0	0	0	0	0	0	0	0	0	0	45
381	Meters	1,385	4,453	2,415	26,847	5,477	4,758	692	1,113	0	72	(13,937)
382	Meter/Regulator Installations	2,043	5,863	9,011	20,924	10,410	17,570	34,696	23,803	12,837	3,304	167,790
383	Regulators	8,426	1,733	953	(13)	0	530	1,726	126	1,967	37	63,895
387	Other	0	0	0	0	0	0	0	0	0	0	82
Total Distribution Plant		142,114	1,351,124	1,024,528	947,309	960,755	1,033,529	1,042,425	890,136	949,005	470,013	14,834,264
General Plant		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
389	Land	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	0	0	0	0	0	0	0	0	0	0	297
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	25	0	0	0	0	0	0	0	0	0	1,424
392	Transportation Equipment	0	0	0	0	0	0	0	0	0	0	(4,026)
393	Stores Equipment	0	0	0	0	0	0	0	0	0	0	0
394	Tools, Shop, & Garage Equipment	82	0	0	29,956	0	0	0	0	0	0	29,637
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	0	0	0	0	0	0	0	0	0	0	15,112
397	Communication Equipment	0	0	0	0	0	0	0	5,119	0	0	7,134
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0
Total General Plant		107	0	0	29,956	0	0	0	5,119	0	0	49,578
Total Company		142,221	1,351,124	1,024,528	977,265	960,755	1,033,529	1,042,425	895,255	949,005	470,013	10,493,616

SALVAGE

	Distribution Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
374.1	Land	0	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	0	0	0	6,842	0	0	0	377	0	0	0	0
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	2,557	15,677	17,345	903	9,200	20,597	34,788	68,186	35,185	213	110	1,866
376.2	Mains- Cast Iron	379	(2,835)	713	0	343	3,233	157	340	108	0	0	53
376.9	Mains- Contributions	0	0	0	0	0	0	0	0	0	0	0	0
378	Meas./Reg. Stations	5,339	5,259	8,461	4,069	4,822	7,431	3,862	13,398	5,392	6,911	12,782	15,976
379	City Gate Stations	0	762	862	500	1,692	1,576	88	3,192	309	1,831	735	3,243
380	Services	13,814	8,404	3,506	(492)	781	1,091	20,243	9,820	11,377	0	1,053	0
380.9	Services-Contributions	0	0	0	0	0	0	0	0	0	0	0	0
381	Meters	6,727	21,174	35,398	2,691	23,880	108,477	42,119	59,959	(31,375)	4,255	4,395	0
382	Meter/Regulator Installations	270	811	1,490	2,364	3,049	2,919	3,026	1,832	1,626	1,080	1,478	1,330
383	Regulators	4,389	3,551	11,839	9,001	5,154	6,405	9,457	5,915	4,410	3,765	4,778	3,940
387	Other	105	140	96	341	206	260	525	61	15	0	0	0
	Total Distribution Plant	33,580	52,943	79,709	26,220	49,128	151,990	114,264	163,081	27,045	18,056	25,331	26,407
	General Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
389	Land	0	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	200	0	45	0	0	0	0	0	0	0	0	0
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	1,434	593	1,933	197	15	28,527	320	370	226	51	1,055	3,066
392	Transportation Equipment	51,202	64,470	30,017	12,022	33,525	0	9,142	92,482	21,371	41,920	72,197	135,021
393	Stores Equipment	0	30	0	4,500	150	0	0	0	0	500	0	0
394	Tools, Shop, & Garage Equipment	6,389	4,197	1,476	3,264	2,700	1,152	0	3,898	400	765	6,329	1,673
395	Laboratory Equipment	0	0	0	0	0	0	0	65,107	0	0	0	0
396	Power Operated Equipment	23,051	48,940	74,991	22,033	72,807	43,088	73,241	0	0	130,656	34,593	35,302
397	Communication Equipment	180	3,299	777	346	0	0	0	0	600	0	0	0
398	Miscellaneous Equipment	433	0	500	0	0	0	0	0	0	0	0	0
	Total General Plant	82,889	121,528	109,738	42,361	109,197	72,767	82,703	161,857	22,597	173,892	114,174	175,062
	Total Company	116,469	174,471	189,448	68,581	158,325	224,757	196,967	324,937	49,642	191,948	139,505	201,469

SALVAGE

Distribution Plant		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
374.1	Land	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	0	0	0	0	0	0	0	0	135,800	0	143,019
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	1,389	(398)	1,281	488	0	0	0	0	0	0	209,385
376.2	Mains- Cast Iron	(181)	181	0	0	0	0	0	0	0	0	2,491
376.9	Mains- Contributions	0	0	0	0	0	0	0	0	0	0	0
378	Meas/Reg. Stations	6,388	6,410	2,962	6,684	0	13,386	4,545	0	0	0	134,075
379	City Gate Stations	4,673	2,037	4,906	0	0	0	0	0	0	0	26,407
380	Services	936	6,407	2,188	0	0	0	0	0	0	0	79,128
380.9	Services-Contributions	0	0	0	0	0	0	0	0	0	0	0
381	Meters	3,626	4,544	780	1,070	0	0	0	0	10,885	1,520	298,604
382	Meter/Regulator Installations	115	1,329	23	2,800	0	0	196	0	651	0	26,389
383	Regulators	4,354	4,624	3,431	4,878	445	2,999	1,665	0	0	0	95,000
387	Other	0	0	0	0	0	0	0	0	0	0	1,749
							0	0	0	0	0	
	Total Distribution Plant	21,301	25,133	15,572	15,916	445	16,384	6,406	0	147,336	1,520	1,016,248
General Plant		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
389	Land	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	0	0	0	99,693	0	0	196,260	12,016	0	0	308,214
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	200	0	2,122	0	25,125	0	0	894	177	0	66,304
392	Transportation Equipment	125,167	61,170	37,545	13,880	3,595	80,610	18,420	14,477	29,415	22,963	947,647
393	Stores Equipment	0	342	0	0	0	0	0	0	0	0	5,522
394	Tools, Shop, & Garage Equipment	7,666	2,572	4,910	1,430	0	0	0	626	0	700	49,446
395	Laboratory Equipment	0	0	0	0	0	241,352	0	0	0	0	306,459
396	Power Operated Equipment	71,028	7,040	18,785	132,855	0	0	0	96,960	33,290	5,000	918,659
397	Communication Equipment	0	327	0	0	0	0	0	0	0	0	5,529
398	Miscellaneous Equipment	300	0	0	0	0	0	0	0	0	0	1,233
	Total General Plant	204,361	71,451	63,362	247,858	28,720	321,962	214,680	124,973	62,882	28,663	2,609,014
	Total Company	225,662	96,584	78,934	263,774	29,165	338,347	221,087	124,973	210,218	30,183	2,730,639

REIMBURSEMENTS

	Distribution Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
374.1	Land	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	0	0	0	83,183	0	0	0	0	0	0	0
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	84,851	68,836	288,415	0	736,529	646,852	0	293,072	97,409	174,555	43,750
376.2	Mains- Cast Iron	0	0	0	0	0	0	0	0	0	0	0
376.9	Mains- Contributions	0	0	0	0	0	0	0	0	0	(9,234)	0
378	Meas./Reg. Stations	0	6,186	378	4,204	0	0	0	0	0	0	0
379	City Gate Stations	0	0	0	0	0	0	0	0	0	0	0
380	Services	15,025	0	0	2,113	0	0	0	0	0	47,902	10,400
380.9	Services-Contributions	0	0	0	0	0	0	0	0	0	(33,064)	0
381	Meters	0	0	0	0	0	0	0	0	0	0	0
382	Meter/Regulator Installations	0	0	0	2,052	0	0	0	0	0	0	42,616
383	Regulators	0	0	0	0	0	0	0	0	0	0	149
387	Other	0	0	0	0	0	0	0	0	0	0	0
	Total Distribution Plant	99,876	75,022	288,793	91,551	736,529	646,852	0	293,072	97,409	180,159	96,915

	General Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
389	Land	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	0	0	0	0	0	0	0	0	0	0	0
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	0	0	0	0	0	0	0	0	0	0	0
392	Transportation Equipment	0	0	0	0	0	0	0	0	0	0	0
393	Stores Equipment	0	0	0	0	0	0	0	0	0	0	0
394	Tools, Shop, & Garage Equipment	0	0	0	0	0	0	0	0	0	0	0
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	0	0	0	0	0	0	0	0	0	0	0
397	Communication Equipment	0	0	0	0	0	0	0	0	0	0	0
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0
	Total General Plant	0	0	0	0	0	0	0	0	0	0	0
	Total Company	99,876	75,022	288,793	91,551	736,529	646,852	0	293,072	97,409	180,159	96,915

REIMBURSEMENTS

	Distribution Plant	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
374.1	Land	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	0	0	2,793	0	0	0	0	0	0	0	0
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	253,257	382,779	302,293	(9,355)	125,857	493,039	489,337	666,625	1,110,490	804,732	395,313
376.2	Mains- Cast Iron	200	4,624	329	0	0	0	0	0	0	0	10,949
376.9	Mains- Contributions	0	24,297	0	41,418	709,537	0	0	0	0	0	0
378	Meas./Reg. Stations	5,000	9,054	5,946	0	30,260	0	717	0	0	5,141	7,167
379	City Gate Stations	0	0	0	0	0	0	0	0	0	0	0
380	Services	67,126	67,804	(34,028)	0	13,214	847	11,759	1,634	5,294	93	11,689
380.9	Services-Contributions	0	(742)	0	0	0	0	0	0	0	0	0
381	Meters	0	(154)	0	0	0	0	0	0	0	0	0
382	Meter/Regulator Installations	1,052	4,496	507	1,480	(41,964)	(127)	9,641	(1,277)	0	4,552	2,368
383	Regulators	0	(15)	0	0	799	0	0	0	0	0	0
387	Other	0	0	0	0	0	0	0	0	0	0	0
	Total Distribution Plant	326,635	492,143	277,840	33,543	837,703	493,759	511,454	666,982	1,115,784	814,518	427,487
	General Plant	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1998
389	Land	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	0	0	0	0	5,000	0	0	0	0	0	0
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	0	0	0	0	0	0	0	0	0	0	0
392	Transportation Equipment	0	0	0	0	0	0	0	0	0	0	0
393	Stores Equipment	0	0	0	0	0	0	0	0	0	0	0
394	Tools, Shop, & Garage Equipment	0	0	0	0	0	0	0	0	0	0	0
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	0	0	0	0	0	0	0	0	0	0	0
397	Communication Equipment	0	0	0	0	0	0	0	0	0	0	0
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0
	Total General Plant	0	0	0	0	5,000	0	0	0	0	0	0
	Total Company	326,635	492,143	277,840	33,543	842,703	493,759	511,454	666,982	1,115,784	814,518	427,487

**SALVAGE LESS COST OF REMOVAL
PLUS REIMBURSEMENTS**

	Distribution Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
374.1	Land	0	0	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	(166)	0	(6,170)	54,009	0	(324)	944	377	(356)	0	(4,800)	(116,312)	0
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	69,807	58,699	280,305	(31,867)	699,104	606,282	2,827	320,992	87,074	154,798	(15,377)	191,870	360,998
376.2	Mains- Cast Iron	(18,160)	(16,403)	(40,601)	0	(24,138)	(51,203)	(14,077)	(23,338)	(12,745)	(5,930)	(8,595)	(8,441)	(24,989)
376.9	Mains- Contributions	0	0	0	0	0	0	0	0	0	(9,234)	0	0	24,297
378	Meas./Reg. Stations	3,685	7,294	3,985	2,412	(2,935)	2,962	(1,483)	2,519	1,100	63	(509)	12,189	4,758
379	City Gate Stations	0	332	1,708	648	372	1,312	88	1,362	205	555	748	2,671	4,673
380	Services	(277,823)	(297,515)	(327,101)	(307,438)	(335,982)	(353,955)	(226,547)	(268,306)	(345,207)	(367,709)	(640,907)	(1,105,817)	1,765
380.9	Services-Contributions	0	0	(45)	0	0	0	0	0	0	(33,064)	0	0	(742)
381	Meters	6,488	20,428	33,256	10,127	18,705	108,643	38,445	49,863	57,626	(2,520)	(823)	(1,389)	2,087
382	Meter/Regulator Installations	216	(156)	(528)	1,324	723	3,204	2,259	590	1,250	248	37,250	(6,713)	2,568
383	Regulators	2,922	1,779	9,436	2,067	(11,479)	2,697	6,409	2,182	(563)	253	4,399	4,242	(4,087)
387	Other	105	122	96	341	206	262	525	61	15	0	(66)	0	0
	Total Distribution Plant	(212,927)	(225,420)	(45,660)	(268,376)	344,578	319,879	(190,612)	86,301	(211,601)	(262,539)	(628,680)	(1,027,701)	371,330

	General Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
389	Land	0	0	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	200	0	(28)	0	0	0	0	0	0	0	0	(225)	0
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	1,434	593	1,932	197	15	28,527	320	(1,028)	226	51	1,055	3,066	175
392	Transportation Equipment	51,202	64,278	26,860	11,759	33,269	(626)	8,972	92,426	30,272	41,920	72,041	135,021	125,167
393	Stores Equipment	0	30	0	4,500	150	0	0	0	0	500	0	0	0
394	Tools, Shop, & Garage Equipment	6,389	4,197	1,438	3,264	2,669	798	(34)	3,898	2,079	763	6,329	854	7,584
395	Laboratory Equipment	0	0	0	0	0	0	0	65,107	0	0	0	0	0
396	Power Operated Equipment	23,051	48,940	74,991	22,020	72,807	42,990	73,241	0	0	130,656	19,593	35,302	71,028
397	Communication Equipment	180	2,166	742	(437)	0	0	0	0	600	0	(65)	0	0
398	Miscellaneous Equipment	433	0	500	0	0	0	0	0	0	0	0	0	300
	Total General Plant	82,889	120,204	106,435	41,303	108,910	71,690	82,499	160,404	33,177	173,890	98,953	174,018	204,253
	Total Company	(130,038)	(105,217)	60,775	(227,073)	453,488	391,568	(108,114)	246,705	(178,424)	(88,649)	(529,727)	(853,683)	575,584

**SALVAGE LESS COST OF REMOVAL
PLUS REIMBURSEMENTS**

SALVAGE LESS COST OF REMOVAL PLUS REIMBURSEMENTS												1978-1999	1990-1999	1995-1999
Distribution Plant		1991	1992	1993	1994	1995	1996	1997	1998	1999	Total	22 Yr Avg	10 Yr Avg	5 Yr Avg
374.1	Land	0	0	0	0	0	0	0	0	0	0	0	0	0
374.2	Land Rights	0	0	0	0	0	0	0	0	0	0	0	0	0
375.1	Structures	2,793	0	0	0	0	0	0	135,800	0	65,796	2,991	13,859	27,160
375.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
376.1	Mains	271,873	(54,692)	50,943	325,743	478,818	365,122	939,400	680,390	353,917	6,197,026	281,683	377,251	563,529
376.2	Mains- Cast Iron	(12,964)	(5,712)	(41,665)	0	0	0	(19,815)	(45,935)	(20,739)	(395,449)	(17,975)	(17,182)	(17,298)
376.9	Mains- Contributions	0	41,418	709,537	0	0	0	0	0	0	766,018	34,819	77,525	0
378	Meas./Reg. Stations	(9,329)	(14,451)	6,183	(7,772)	16,964	(18,814)	(23,720)	(11,880)	3,787	(22,993)	(1,045)	(5,427)	(6,733)
379	City Gate Stations	1,513	4,906	0	(1,658)	3,937	(1,726)	0	0	0	21,647	984	1,165	442
380	Services	(1,300,992)	(940,219)	(738,513)	(767,295)	(995,192)	(677,089)	(645,176)	(746,810)	(378,446)	(12,042,273)	(547,376)	(718,797)	(688,543)
380.9	Services-Contributions	0	0	0	0	0	0	0	0	0	(33,851)	(1,539)	(74)	0
381	Meters	91	(1,634)	(25,777)	(5,477)	(4,758)	(692)	(1,113)	10,885	1,448	313,908	14,269	(2,494)	1,154
382	Meter/Regulator Installations	(4,027)	(7,507)	(60,089)	(10,537)	(7,929)	(35,777)	(23,803)	(7,634)	(936)	(116,004)	(5,273)	(15,567)	(15,216)
383	Regulators	2,890	2,478	5,690	445	2,469	(60)	(126)	(1,967)	(37)	32,038	1,456	770	56
387	Other	0	0	0	0	0	0	0	0	0	1,667	76	0	0
Total Distribution Plant		(1,048,151)	(975,413)	(93,690)	(466,551)	(505,691)	(369,036)	225,648	12,848	(41,006)	(5,212,469)	(236,930)	(288,971)	(135,447)
General Plant		1991	1992	1993	1994	1995	1996	1997	1998	1999	Total	21 Yr Avg	10 Yr Avg	5 Yr Avg
389	Land	0	0	0	0	0	0	0	0	0	0	0	0	0
390.1	Structures	0	0	104,693	0	0	196,260	12,016	0	0	312,917	14,223	31,297	41,655
390.2	Leasehold Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
391	Furniture and Equipment	0	2,122	0	25,125	0	0	894	177	0	64,880	2,949	2,849	214
392	Transportation Equipment	61,170	37,545	13,880	3,595	80,610	18,420	14,477	29,415	22,963	974,637	44,302	40,724	33,177
393	Stores Equipment	342	0	0	0	0	0	0	0	0	5,522	251	34	0
394	Tools, Shop, & Garage Equipment	2,572	4,910	(28,526)	0	0	0	626	0	700	20,509	932	(1,213)	265
395	Laboratory Equipment	0	0	0	0	241,352	0	0	0	0	306,459	13,930	24,135	48,270
396	Power Operated Equipment	7,040	18,785	132,855	0	0	0	96,960	33,290	5,000	908,548	41,298	36,496	27,050
397	Communication Equipment	327	0	0	0	0	0	(5,119)	0	0	(1,605)	(73)	(479)	(1,024)
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	1,233	56	30	0
Total General Plant		71,451	63,362	222,902	28,720	321,962	214,680	119,854	62,882	28,663	2,593,099	117,868	133,873	149,608
Total Company		(976,700)	(912,051)	129,211	(437,831)	(183,728)	(154,356)	345,502	75,730	(12,343)	(2,690,175)	(2,743,865)	(2,793,005)	(2,508,278)

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**SALVAGE LESS COR PLUS REIMB.
AS PERCENT OF RETIREMENTS**

	Distribution Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
374.1	Land	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
374.2	Land Rights	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
375.1	Structures	-2.33%	0.00%	-20.27%	1083.14%	0.00%	-28.22%	28.38%	1.74%	-1.39%	0.00%	0.00%	-90.66%	0.00%
375.2	Leasehold Improvements	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
376.1	Mains	15.74%	16.37%	73.55%	-6.66%	504.28%	217.15%	2.32%	157.51%	36.75%	83.53%	-4.94%	106.31%	147.16%
376.2	Mains- Cast Iron	-62.22%	-70.38%	-99.27%	0.00%	-84.80%	-52.67%	-36.04%	-106.63%	-77.60%	-23.18%	-28.80%	-6.67%	-24.61%
376.9	Mains- Contributions	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
378	Meas/Reg. Stations	15.61%	49.80%	26.06%	13.61%	-8.73%	26.48%	-8.30%	4.13%	3.98%	0.20%	-1.10%	22.59%	8.43%
379	City Gate Stations	0.00%	13.71%	75.36%	143.16%	4.31%	35.38%	10.11%	24.33%	4.27%	15.26%	10.16%	45.28%	62.15%
380	Services	-78.70%	-76.26%	-79.51%	-67.46%	-68.04%	-71.16%	-50.16%	-59.51%	-63.08%	-33.95%	-285.24%	-35.56%	0.09%
380.9	Services-Contributions	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
381	Meters	12.14%	17.79%	12.80%	6.28%	6.79%	96.57%	13.66%	17.58%	24.56%	-0.99%	-0.28%	-0.46%	0.31%
382	Meter/Regulator Installations	15.01%	-8.39%	-3.84%	14.04%	6.06%	14.13%	10.70%	5.63%	5.74%	0.34%	46.19%	-17.57%	10.16%
383	Regulators	37.81%	25.94%	19.59%	16.49%	-35.92%	8.25%	38.92%	12.83%	-3.43%	2.18%	17.80%	29.76%	-17.92%
387	Other	0.72%	0.57%	1.04%	18.44%	3.87%	0.88%	4.71%	0.69%	0.14%	0.00%	-0.21%	0.00%	0.00%
	Total Distribution Plant	-46.22%	-30.84%	5.52%	1221.04%	327.82%	246.81%	14.29%	58.31%	-70.07%	43.39%	-246.43%	53.03%	185.76%
	General Plant	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
389	Land	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
390.1	Structures	2.52%	0.00%	-0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.23%	0.00%
390.2	Leasehold Improvements	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
391	Furniture and Equipment	16.48%	6.62%	14.73%	1.11%	0.48%	566.19%	2.09%	-2.53%	0.63%	0.91%	1.68%	13.16%	16.55%
392	Transportation Equipment	16.37%	22.38%	12.80%	17.00%	13.79%	-0.51%	12.13%	15.42%	7.97%	5.48%	-6.65%	14.27%	20.83%
393	Stores Equipment	0.00%	64.12%	0.00%	52.21%	9.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
394	Tools, Shop, & Garage Equipment	17.01%	12.03%	7.79%	14.38%	13.74%	5.96%	-0.09%	6.64%	3.55%	0.94%	5.24%	0.66%	6.86%
395	Laboratory Equipment	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
396	Power Operated Equipment	43.36%	41.39%	67.17%	74.34%	43.92%	31.89%	34.14%	0.00%	0.00%	54.92%	5.73%	30.61%	23.45%
397	Communication Equipment	3.03%	24.41%	9.44%	-17.85%	0.00%	0.00%	0.00%	0.00%	6.16%	0.00%	-0.57%	0.00%	0.00%
398	Miscellaneous Equipment	75.04%	0.00%	58.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Total General Plant	19.42%	26.23%	29.08%	27.31%	25.16%	25.73%	24.00%	18.00%	6.54%	15.94%	6.09%	13.58%	20.04%
	Total Company	-9.55%	-7.55%	3.85%	-17.19%	30.97%	28.67%	-8.26%	12.49%	-10.82%	-3.20%	-19.80%	-16.27%	14.16%

**SALVAGE LESS COR PLUS REIMB.
AS PERCENT OF RETIREMENTS**

											1990-1998	1994-1998
Distribution Plant											Average	5 Year Avg.
374.1	Land	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
374.2	Land Rights	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
375.1	Structures	31.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.80%	0.00%	5.11%	13.09%
375.2	Leasehold Improvements	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
376.1	Mains	91.88%	-49.69%	26.88%	73.14%	27.32%	32.52%	156.99%	77.61%	0.00%	69.20%	60.65%
376.2	Mains- Cast Iron	-20.81%	-35.55%	-24.29%	0.00%	0.00%	0.00%	-4.18%	-35.49%	0.00%	-22.80%	-12.30%
376.9	Mains- Contributions	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
378	Meas./Reg. Stations	-13.25%	-18.72%	14.67%	-7.39%	12.63%	-11.07%	-17.82%	-7.41%	0.00%	-1.76%	-6.12%
379	City Gate Stations	46.07%	64.60%	0.00%	-8.46%	20.65%	-3.01%	0.00%	0.00%	0.00%	11.39%	8.13%
380	Services	-57.88%	-52.26%	-64.71%	-38.56%	-32.12%	-11.95%	-17.45%	-19.32%	0.00%	-35.53%	-26.78%
380.9	Services-Contributions	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
381	Meters	0.02%	-0.40%	-4.21%	-1.55%	-0.42%	-0.06%	-0.18%	0.53%	0.00%	3.13%	-0.36%
382	Meter/Regulator Installations	-5.17%	-10.12%	-93.56%	-12.52%	-2.86%	-11.63%	-6.97%	-2.24%	0.00%	-6.11%	-9.71%
383	Regulators	10.57%	23.38%	102.24%	0.15%	5.92%	-0.05%	-0.01%	-0.71%	0.00%	1.52%	0.41%
387	Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.91%	0.00%
Total Distribution Plant		82.65%	-78.75%	-42.98%	4.82%	31.11%	-5.26%	110.37%	43.77%	0.00%	25.04%	-6.15%
General Plant											Average	5 Year Avg.
389	Land	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
390.1	Structures	0.00%	0.00%	25.66%	0.00%	0.00%	0.00%	5.91%	0.00%	0.00%	40.99%	43.07%
390.2	Leasehold Improvements	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
391	Furniture and Equipment	0.00%	37.00%	0.00%	1.47%	0.00%	0.00%	0.92%	0.06%	0.00%	2.64%	1.28%
392	Transportation Equipment	16.10%	21.89%	3.69%	0.31%	0.00%	15.59%	9.11%	19.49%	0.00%	11.86%	12.30%
393	Stores Equipment	7.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.39%	0.45%
394	Tools, Shop, & Garage Equipment	8.56%	10.25%	-96.01%	0.00%	0.00%	0.00%	0.08%	0.00%	0.00%	0.87%	-0.74%
395	Laboratory Equipment	0.00%	0.00%	0.00%	0.00%	59.19%	0.00%	0.00%	0.00%	0.00%	75.15%	59.19%
396	Power Operated Equipment	6.97%	11.75%	44.47%	0.00%	0.00%	0.00%	26.06%	22.39%	0.00%	24.35%	17.80%
397	Communication Equipment	0.98%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.29%	0.00%	0.00%	-0.08%	-0.25%
398	Miscellaneous Equipment	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.33%	0.62%
Total General Plant		12.63%	13.72%	18.87%	0.68%	63.28%	69.30%	3.49%	8.78%	0.00%	12.79%	10.55%
Total Company		-25.51%	-30.73%	3.76%	-5.60%	-2.45%	-1.73%	3.32%	0.77%	0.00%	-3.25%	-2.62%

SCHEDULE TJS-9

Table 3-4
Missouri Gas Energy
Existing and Proposed Accrual Rates

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]
Acct. No.	Account	Existing Annual Accrual Rate	Depreciable Plant 12/31/1998	Existing Annual Depreciation Expense	Accumulated Depreciation Reserve	Reserve Ratio	Net Salvage Allowance	Proposed Average Service Life	Proposed Accrual Rate	Proposed Depreciation Expense
		%	\$	\$	\$	%	(1)	Years	%	\$
Distribution Plant										
3742	Land Rights	2.17%	893,182	19,382	212,119	23.75%	0	50	2.00%	17,864
3751	Structures	2.28%	5,738,444	130,837	1,161,780	20.25%	0	50	2.00%	114,769
3760	Mains	1.88%	242,567,793	4,560,275	72,474,929	29.88%	0	40	2.50%	6,064,195
3780	Measuring & Regulating Stations	3.00%	10,163,614	304,908	2,348,188	23.10%	0	30	3.33%	338,787
3790	City Gate Stations	2.66%	2,686,494	71,461	523,090	19.47%	0	40	2.50%	67,162
3800	Services	5.50%	223,017,129	12,265,942	81,509,178	36.55%	0	30	3.33%	7,433,904
3810	Meters	2.05%	25,113,112	514,819	1,814,317	7.22%	0	35	2.86%	717,517
3820	Meter/Regulator Installations	2.05%	42,168,249	864,449	5,362,806	12.72%	0	35	2.86%	1,204,807
3830	Regulators	2.05%	9,219,139	188,992	1,467,656	15.92%	0	40	2.50%	230,478
3850	EGM-Meas/Reg Equip	5.00%	255,152	12,758	9,955	3.90%	0	20	5.00%	12,758
3870	Other Equipment	6.33%	0	0	0	0.00%	0	35	2.86%	0
Total Distribution Plant		3.37%	561,822,308	18,933,822	166,884,016	29.70%	0		2.88%	16,202,242
General Plant										
3901	Structures & Improvements	3.33%	439,273	14,628	125,746	28.63%	0%	35	2.86%	12,551
3910	Furniture & Equipment	3.06%	3,196,378	97,809	(575,380)	-18.00%	0%	8	12.01%	383,978
3920	Transportation Equipment	10.13%	2,689,553	272,452	579,306	21.54%	0%	8	12.50%	336,194
3930	Stores Equipment	3.33%	527,647	17,571	186,766	35.40%	0%	20	5.00%	26,382
3940	Tools	4.00%	4,310,432	172,417	1,123,483	26.06%	0%	10	10.00%	431,043
3960	Power Operated Equipment	6.25%	1,134,135	70,883	92,974	8.20%	0%	10	10.00%	113,413
3970	Communication Equipment	4.50%	2,036,629	91,648	(406,340)	-19.95%	0%	15	6.67%	135,775
3971	Electronic Reading-ERT	5.00%	30,865,129	1,543,256	1,369,709	4.44%	0%	20	5.00%	1,543,256
3980	Miscellaneous Equipment	6.25%	161,119	10,070	55,943	34.72%	0%	20	5.00%	8,056
Total General Plant		5.05%	45,360,295	2,290,735	2,552,209	5.63%			6.59%	2,990,650
Total Depreciable Plant		3.50%	607,182,602	21,224,557	169,436,225	27.91%			3.16%	19,192,892

(1) \$/year salvage allowance or percent of plant.

(2) Proposed accrual rate of 12.01% for Account 391 is based on accrual rate determined for corporate Acct. 391.

Table 3-7
Missouri Gas Energy
Calculation of Whole Life Rate for Account 391
Southern Union Corporate

[A] Description	[B] Total \$	[C] Percent of Total	[D] Net Salvage	[E] Average Service Life Years	[F] Whole Life Rate
Account 391.1 - Furniture	4,299,354	11.30%	0.00%	25	4.00%
Account 391.2 - Office Equipment	1,450,560	3.81%	0.00%	10	10.00%
Account 391.3 - Mainframe	22,062,586	57.98%	0.00%	10	10.00%
Account 391.4 - Personal Computer	10,239,092	26.91%	0.00%	5	20.00%
Total	38,051,592	100.00%			
Weighted Rate for Account 391					12.01%