Exhibit No.: Issue: Depreciation Witness: David Williams Sponsoring Party: MoPSC Staff Type of Exhibit: RebuttalTestimony Case No.: GR-2010-0171 Date Testimony Prepared: June 24, 2010

### MISSOURI PUBLIC SERVICE COMMISSION

## UTILITY SERVICES DIVISION

## **REBUTTAL TESTIMONY**

OF

## DAVID WILLIAMS

## LACLEDE GAS COMPANY

CASE NO. GR-2010-0171

Jefferson City, Missouri June, 2010

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| 1  | <b>REBUTTAL TESTIMONY OF</b>  |
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| 2  | DAVID WILLIAMS  |
| 3  | LACLEDE GAS COMPANY   |
| 4  | CASE NO. GR-2010-0171   |
| 5  | Q. Please state your name and business address.   |
| 6  | A. David Williams, 200 Madison Street, Jefferson City, Missouri, 65101.                           |
| 7  | Q. Are you the same David Williams who sponsored the depreciation section of                      |
| 8  | the Missouri Public Service Commission Staff's (Staff) Revenue Requirement Cost of                |
| 9  | Service Report that was filed on May 10, 2010?  |
| 10 | A. Yes, I am.   |
| 11 | EXECUTIVE SUMMARY   |
| 12 | Q. Please state the purpose of your rebuttal testimony.   |
| 13 | A. The purpose of my rebuttal testimony is to compare and contrast my                             |
| 14 | previously filed report regarding depreciation with the depreciation testimony filed by           |
| 15 | Laclede Gas Company's (Laclede or Company). In addition, I offer the Staff's position in          |
| 16 | response to Company witness Mr. John J. Spanos' testimony filed in the Company's direct           |
| 17 | case and to Missouri Industrial Energy Consumers (MIEC) witness Mr. Michael Gorman's              |
| 18 | direct testimony regarding policy issues that are in disagreement with the policy directives      |
| 19 | provided previously by the Commission. I recommend the Commission accept Staff's                  |
| 20 | revised depreciation rates, which are based on information Staff received after filing its direct |
| 21 | case. The Commission gave direction in Case No. ER-2004-0570 (The Empire District                 |
| 22 | Electric Company) regarding the parameters that should be part of the computation of              |
|    |   |

depreciation for utilities. The parameters delineated by the Commission included the book
 value of an asset, average service life, and net salvage.

Mr. Spanos disagrees with the Commission's previous order and seeks to introduce additional parameters and alternative methods that result in the Company appearing to require additional depreciation accruals.

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Q. In what ways does Mr. Spanos' testimony conflict with the Commission's Order in ER-2004-0570?

8 A. Mr. Spanos' position differs from the Commission's previous order and seeks 9 to introduce a remaining life component to the computation of depreciation rates. Use of 10 remaining life minimizes the time ratepayers have to return the Company's investment and net salvage, increasing depreciation rates. Mr. Spanos also includes an adjustment to the 11 computation of the depreciation accrual rate (depreciation rate) for any perceived over or 12 13 under accrual of the depreciation reserve based upon the Company's technique(s). 14 Mr. Spanos includes amortization of the General Plant accounts in direct contradiction to the 15 Commission's rules. The rules address the depreciation of plant accounts, not the amortization of plant accounts. 16

17 Q. Are there other differences between the Staff's depreciation analysis and18 Laclede's?

A. Yes. To date, Mr. Spanos has conducted two similar but separate depreciation
studies. In the first study, which I will address as Case 1, Mr. Spanos observed and studied
data only through December 13, 2003, but then applied those results to plant balances as of
September 30, 2009. In contrast, the second study, which I will address as Case 2, observed

Q.

**Q**.

and studied data through September 30, 2009, and applied the results to plant balances as of
 September 30, 2009.

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What are Staff's concerns regarding Laclede's depreciation studies?

A. First, the Staff is concerned that Mr. Spanos did not conduct a study using the
current additions and retirements, to develop the plant balances used in Case 1; i.e. through
September 30, 2009. Second, based upon inclusion of the data from 2004 through
September 2009, the Company's salvage costs have generally deteriorated. This garners
measured concern with respect to asset management and/or operations.

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Can you provide an example of these concerns?

10 The Company had initiated and conducted a copper service line A. Yes. replacement program, which is essentially complete, for replacement of copper mains 11 12 and services with plastic mains and services, Accounts 376.3 and 380.2, respectively. As a 13 result of this essentially complete replacement, the depreciation rates have actually increased. 14 It is not reasonable that this would be the case, because the new material should be 15 expected to deteriorate more slowly than the old. Furthermore with the inclusion of the 2004 16 to 2009 data, net salvage rates have generally increased in numerous accounts. See Schedule 17 DCW-R1.

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Q. What is the difference between the Company and Staff positions?

A. Based on data provided by the Company on December 4, 2009 (Case 1),
which included plant additions and retirements through December 31, 2003, and
plant balances as of September 30, 2009, the difference between the Staff and the
Company depreciation annual accrual in the present case is approximately \$5,017,567.
Schedule DCW-R2 Case 1 provides a detailed comparison by account.

On December 18, 2009 the Company provided results of a subsequent study,
 which included plant additions and retirements through September 30, 2009, and plant
 balances as of September 30, 2009 (Case 2). Under this second case, the difference between
 the Staff and the Company annual accrual is approximately \$5,443,026. See attached
 Schedule DCW-R3 for a detailed comparison.

In response to both Case 1 and Case 2, the Staff's recommended depreciation 6 7 rates for Accounts 376.3 (Mains - Plastic and Copper) and 380.2 (Services - Plastic and Copper) take into consideration information provided by the Company in its response on 8 9 May 17, 2010 to Data Request No. 0252 indicating that replacement of copper mains with 10 plastic was 99.99% complete and replacement of copper services with plastic was 97.08% Since the Company's replacement program is essentially complete and in 11 complete. 12 recognition of the stated inconsistencies between the Company's Case 1 and Case 2, the Staff 13 now recommends revised depreciation rates for the two above accounts rather than the rates 14 proposed in Staff's Direct testimony, before this information became available.

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Q. Are the Staff and Laclede in agreement with the basic parameters for the computation of depreciation rates, such as average service life, net salvage and Iowa curve?

A. Yes, as presented in Case 1 and with the exception of accounts 376.3 and
380.2, the only difference is the Company's failure to comply with the implementation of the
basic parameters of average service life, net salvage and Iowa curve. This similarity of
empirical data is shown in Schedule DCW-R4 for Case 1. A similar analysis is provided in
Schedule DCW-R5 for Case 2.

# 1 ADDITIONAL ADJUSTMENTS TO THE COMPUTATION OF DEPRECIATION 2 RATES

Q. Does Laclede propose additional methods and techniques for the computation of the depreciation rates based upon amounts resulting from estimated parameters?

A. Yes, Laclede uses the estimated lifespan and the resultant amortization periods to determine a rate for depreciation of certain General Plant accounts, plus an adjustment for the remaining life technique.

8 Q. How does Laclede derive its estimated adjustment for the depreciation9 reserve?

10 A. The actuarial analysis uses the same data sets, algorithms and software that 11 the Staff used. The analysis yields results that are interpreted by the depreciation analyst, 12 resulting in an average service life for that particular group or account of assets. This 13 interpretation is aided by engineering judgment and selection and interpretation of a survivor 14 curve. The Staff's analysis regarding depreciable life ends here. Laclede, however, takes 15 this average service life and estimates a remaining life that is used to adjust the period over 16 which the future depreciation amount and accruals will need to be made before everything in the account is retired. 17

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Q. What is the result of these additional estimated amounts and periods?

A. It constrains and limits the amount of time that the ratepayers have available
to return the investment made by the Company for service to the ratepayer, as if at some
certain date in the future the Company will be exiting the business of providing gas service.

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Q. Does the Staff recognize an excess in the theoretical reserve for depreciation?

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Q.

A. Yes. Staff recognizes the theoretical reserve for depreciation to be over-accrued by approximately \$57.5 million. However this is less than 13% of the current reserve. Given the uncertainties and lack of precision in the development of depreciation rates, Staff does not believe a true-up or additional reduction in depreciation reserves is warranted at this time.

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Does Staff have any other rebuttal it wishes to offer at this time?

A. Yes it does. Staff wishes to note that the written filed directed testimony of MIEC witness Gorman regarding the treatment of net salvage to be used in the computation of depreciation rates is in direct conflict with the Commission directive concerning this matter, in which the net salvage rate was stated to be net salvage expense (based on experience) divided by the original cost of the depreciable asset.

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What is Staff's recommendation with respect to depreciation at this time?

A. Staff recommends that the Commission order the Company to implement the
Staff's revised depreciation rates as stated in Schedule DCW-R6. The only change this
schedule reflects is Staff's revision of two accounts as originally filed in Staff's Revenue
Requirement Cost of Service Report in this case in response to the Company's initial direct
filed Case 1. These are for the previously mentioned accounts 376.3 and 380.2.

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Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

#### BEFORE THE PUBLIC SERVICE COMMISSION

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

In the Matter of Laclede Gas Company's Tariff to Increase Its Annual Revenues for Natural ) Gas Service

Case No. GR-2010-0171

#### AFFIDAVIT OF DAVID WILLIAMS

)

STATE OF MISSOURI ) ) SS. COUNTY OF COLE )

David Williams, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of \_/\_ pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David Williams

Subscribed and sworn to before me this

day of <u>June</u>, 20 <u>uzullankin</u> 2010.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 08, 2012 Commission Number: 08412071

#### Company Annual Depreciation Rates & Parameters Comparison

| 305         Str           307         Ott           311         Liq           311         L           311         L           311         L           311         L           311         L           351.2         Co           351.2         Co           352.4         We           352.3         No           354         Co           355         Me           356         Pu           357         Ott           371         Ott           371         Ott           371         Dts           375.1         Dis           375.2         Se           375.3         Ga           375.4         Ott | Ianufactured Gas Plant<br>tructures and improvements<br>ther power equipment<br>iquefied petroleum gas (LPG) equipment<br>PG storage caverns<br>Inderground Storage Plant<br>compressor station structures<br>ther structures - underground storage<br>/ells - underground storage<br>lon-recoverable gas<br>/ells - oil and vent gas<br>ines - underground storage | R0.5<br>R3<br>R1<br>S3<br>S1.5<br>R1.5<br>S2.5<br>S2.5 | R1<br>S2.5<br>R1.5<br>S3<br>S1.5 | 60<br>30<br>33<br>55 | 60<br>30<br>33<br>55 | -15%<br>-10%<br>-5% | -15%<br>-10%<br>-15% | 0.75%<br>3.01% | NA |
|--|---|--|----------------------------------|----------------------|----------------------|---------------------|----------------------|----------------|----|
| 307         Ott           311         Liq           311         Liq           311.1         LP           351.2         Co           351.4         Ott           352.2         Red           352.2         Red           352.3         No           352.4         We           353         Lin           354         Co           355         Me           357         Ott           367         Ma           371         Ott           375.1         Dis           375.2         Se           375.3         Ga           375.3         Ga           375.4         Ott                                    | ther power equipment<br>iquefied petroleum gas (LPG) equipment<br>PG storage caverns<br>Inderground Storage Plant<br>compressor station structures<br>ther structures - underground storage<br>Vells - underground storage<br>eservoirs - underground storage<br>lon-recoverable gas<br>Vells - oil and vent gas  | R3<br>R1<br>S3<br>S1.5<br>R1.5<br>S2.5                 | S2.5<br>R1.5<br>S3<br>S1.5       | 30<br>33             | 30<br>33             | -10%<br>-5%         | -10%                 |                |    |
| 311       Liq         311.1       LP         351.2       Co         351.4       Ott         352.1       We         352.2       Re         352.3       No         352.4       We         353       Lin         354       Co         355       Me         356       Pu         357       Ott         367       Ma         371       Ott         375.1       Dis         375.2       Se         375.3       Ga         375.4       Ott  | iquefied petroleum gas (LPG) equipment<br>PG storage caverns<br>Inderground Storage Plant<br>compressor station structures<br>ther structures - underground storage<br>Vells - underground storage<br>eservoirs - underground storage<br>lon-recoverable gas<br>Vells - oil and vent gas  | R1<br>S3<br>S1.5<br>R1.5<br>S2.5                       | R1.5<br>S3<br>S1.5               | 33                   | 33                   | -5%                 |                      | 3.01%          |    |
| 311.1     Im       351.2     Co       351.4     Ott       352.1     We       352.2     Re       352.3     No       352.4     We       353     Lin       354     Co       355     Me       356     Pu       357     Ott       367     Ma       371     Ott       375.1     Dis       375.2     Se       375.3     Ga       375.4     Ott  | PG storage caverns<br>Inderground Storage Plant<br>compressor station structures<br>ther structures - underground storage<br>Vells - underground storage<br>eservoirs - underground storage<br>lon-recoverable gas<br>Vells - oil and vent gas  | S3<br>S1.5<br>R1.5<br>S2.5                             | S3<br>S1.5                       |                      |                      |                     | -15%                 |                | NA |
| Un<br>351.2 Co<br>351.4 Ott<br>352.1 We<br>352.2 Re<br>352.3 No<br>352.4 We<br>353 Lin<br>354 Co<br>355 Me<br>355 Pu<br>357 Ott<br>357 Ott<br>367 Ma<br>371 Ott<br>371 Ott<br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott   | Inderground Storage Plant<br>compressor station structures<br>ther structures - underground storage<br>/ells - underground storage<br>eservoirs - underground storage<br>lon-recoverable gas<br>/ells - oil and vent gas  | S1.5<br>R1.5<br>S2.5                                   | S1.5                             | 55                   | 55                   |                     |                      | 2.33%          | NA |
| 351.2         Co           351.4         Ott           352.1         We           352.2         Re           352.3         No           352.4         We           353         Lin           354         Co           355         Me           356         Pu           357         Ott           367         Ma           367         Me           367         Dis           371         Ott           375.2         Se           375.3         Ga           375.4         Ott  | compressor station structures<br>ther structures - underground storage<br>/ells - underground storage<br>eservoirs - underground storage<br>lon-recoverable gas<br>/ells - oil and vent gas   | R1.5<br>S2.5   |                                  |                      |                      | 0%                  | 0%                   | 1.82%          | NA |
| 351.2         Co           351.4         Ott           352.1         We           352.2         Re           352.3         No           352.4         We           353         Lin           354         Co           355         Me           356         Pu           357         Ott           367         Ma           367         Me           367         Dis           371         Ott           375.2         Se           375.3         Ga           375.4         Ott  | compressor station structures<br>ther structures - underground storage<br>/ells - underground storage<br>eservoirs - underground storage<br>lon-recoverable gas<br>/ells - oil and vent gas   | R1.5<br>S2.5   |                                  |                      |                      |                     |                      |                |    |
| 351.4       Ott         352.1       We         352.2       Re         352.3       No         353       Lin         353       Lin         354       Co         355       Me         356       Pu         357       Ott         357       Ott         367       Ma         371       Ott         375.1       Dis         375.2       Se         375.3       Ga         375.4       Ott   | ther structures - underground storage<br>/ells - underground storage<br>eservoirs - underground storage<br>Ion-recoverable gas<br>/ells - oil and vent gas  | R1.5<br>S2.5   |                                  | 45                   | 45                   | -15%                | -10%                 | 1.30%          | NA |
| 352.1         We           352.2         Re           352.3         No           352.4         We           353         Lin           354         Co           355         Me           356         Pu           357         Ott           357         Ott           357         Ott           357         Dis           371         Ott           375.1         Dis           375.2         Se           375.3         Ga           375.4         Ott   | /ells - underground storage<br>eservoirs - underground storage<br>Ion-recoverable gas<br>/ells - oil and vent gas   | S2.5   | R1.5                             | 55                   | 60                   | -10%                | -10%                 | 0.73%          | NA |
| 352.2         Re           352.3         No           352.4         We           353         Lin           354         Co           355         Me           356         Pu           357         Ott           371         Ott           375.1         Dis           375.2         Se           375.3         Ga           375.4         Ott  | eservoirs - underground storage<br>Ion-recoverable gas<br>/ells - oil and vent gas  |  | R2.5                             | 90                   | 90                   | -10%                | -15%                 | -0.72%         | NA |
| 352.3       No         352.4       We         353       Lin         354       Co         355       Me         356       Pu         357       Ott         357       Tra         367       Ma         371       Ott         375.1       Dis         375.2       Se         375.3       Ga         375.4       Ott  | lon-recoverable gas<br>/ells - oil and vent gas   |  | R2.5                             | 90                   | 90                   | -10%                | 0%                   | -0.72%         | NA |
| 352.4         We           353         Lin           354         Co           355         Me           356         Pu           357         Ott           357         Tra           367         Ma           371         Ott           375.1         Dis           375.2         Se           375.3         Ga           375.4         Ott   | /ells - oil and vent gas  | S2.5   | R2.5                             | 90                   | 90                   | 0%                  | 0%                   | 0.14%          | NA |
| 353         Lin           354         Co           355         Me           356         Pu           357         Ott           357         Ott           367         Ma           371         Ott           375.1         Dia           375.2         Se           375.3         Ga           375.4         Ott  |   | S2.5   | R2.5                             | 90                   | 90                   | -10%                | -15%                 | 0.44%          | NA |
| 355         Me           356         Pu           357         Ott           357         Ott           367         Ma           371         Ott           375.1         Dis           375.2         Se           375.3         Ga           375.4         Ott   |   | R2.5   | R2.5                             | 70                   | 70                   | -20%                | -25%                 | 0.32%          | NA |
| 356         Pu           357         Ott           367         Ma           371         Ott           375.1         Dia           375.2         Se           375.3         Ga           375.4         Ott  | compressor station equipment  | S2   | S2                               | 55                   | 55                   | -5%                 | -10%                 | 0.77%          | NA |
| 357 Ott<br>77<br>367 Ma<br>371 Ott<br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott   | leasuring and regulating equipment  | S0.5   | R2.5                             | 50                   | 50                   | 0%                  | -5%                  | 0.07%          | NA |
| Tra<br>367 Ma<br>371 Ott<br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott   | urification equipment   | R2   | R2                               | 42                   | 42                   | -5%                 | -5%                  | 1.66%          | NA |
| 367 Ma<br>371 Ott<br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott  | ther equipment  | L2.5   | L2.5                             | 20                   | 20                   | 0%                  | -5%                  | 6.69%          | NA |
| 367 Ma<br>371 Ott<br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott  |   |  |                                  |                      |                      |                     |                      |                |    |
| 371 Ott<br>Dis<br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott   | ransmission Plant   |  |                                  |                      |                      |                     |                      |                |    |
| <b>Dis</b><br>375.1 Dis<br>375.2 Se<br>375.3 Ga<br>375.4 Ott   | lains   | R2   | R2                               | 80                   | 85                   | -20%                | -30%                 | 0.32%          | NA |
| 375.1         Dis           375.2         Se           375.3         Ga           375.4         Ott  | ther equipment  | S3   | S3                               | 45                   | 45                   | -5%                 | -5%                  | 2.33%          | NA |
| 375.2 Se<br>375.3 Ga<br>375.4 Ott  | istribution Plant   |  |                                  |                      |                      |                     |                      |                |    |
| 375.3 Ga<br>375.4 Ott  | istrict Measuring and Regulating  | R0.5   | R1                               | 40                   | 45                   | -10%                | -10%                 | 3.29%          | NA |
| 375.4 Otl  | ervice centers  | R0.5   | R1.5                             | 50                   | 55                   | -15%                | -15%                 | 2.29%          | NA |
|  | arage   | S0   | S0                               | 50                   | 55                   | -10%                | -10%                 | 2.40%          | NA |
| 376.1 Ma   | ther small structures   | R0.5   | S0                               | 40                   | 40                   | 0%                  | -5%                  | 1.69%          | NA |
|  | lains - steel   | R2   | R2                               | 80                   | 85                   | -20%                | -30%                 | 0.65%          | NA |
| 376.2 Ma   | lains - cast iron   | S1   | S1                               | 80                   | 85                   | -80%                | -90%                 | 5.34%          | NA |
| 376.3 Ma   | lains - plastic and copper  | R3   | R3                               | 70                   | 70                   | -15%                | -15%                 | 1.54%          | NA |
| 378.1 Me   | leasuring and regulating station equip. (gen.)  | O1   | 01                               | 35                   | 35                   | -30%                | -30%                 | 4.46%          | NA |
| 379.1 Me   | leasuring and regulating station equip. (CGCS)  | R0.5   | S0                               | 31                   | 33                   | -30%                | -30%                 | 4.94%          | NA |
| 380.1 Se   | ervices - steel   | R0.5   | R0.5                             | 44                   | 45                   | -90%                | -100%                | 4.57%          | NA |
|  | ervices - plastic and copper  | R2.5   | R2.5                             | 40                   | 42                   | -65%                | -70%                 | 4.66%          | NA |
|  | leters  | S1   | S0.5                             | 37                   | 33                   | 5%                  | 3%                   | 3.24%          | NA |
|  | louse regulators  | R3   | R3                               | 50                   | 50                   | 0%                  | 0%                   | 1.75%          | NA |
|  | commercial and industrial regul. equipment  | S0   | S0                               | 39                   | 41                   | -10%                | -15%                 | 2.63%          | NA |
|  | ther property on customers' premises  | L3   | L3                               | 13                   | 14                   | 0%                  | 0%                   | 5.35%          | NA |
| 387.1 Otl  | ther equipment  | R0.5   | R0.5                             | 30                   | 32                   | 0%                  | -10%                 | 1.61%          | NA |
| Ge   | ieneral Plant   |  |                                  |                      |                      |                     |                      |                |    |
|  | tructures and improvements  | S1   | S0.5                             | 30                   | 30                   | -5%                 | -5%                  | 4.82%          | NA |
|  | office furniture and equipment  | SQ   | SQ                               | 20                   | 20                   | 0%                  | 0%                   | 7.05%          | NA |
|  | ata processing systems  | SQ   | SQ                               | 5                    | 5                    | 0%                  | 0%                   | 13.18%         | NA |
| 391.3 Me   | lechanical office equipment   | SQ   | SQ                               | 15                   | 15                   | 0%                  | 0%                   | 34.02%         | NA |
|  | computers and peripheral equipment  | SQ   | SQ                               | 5                    | 5                    | 0%                  | 0%                   | 83.55%         | NA |
| 392.1 Tra  | ransportation Equipment - automobiles   | L3   | L2.5                             | 6                    | 6                    | 15%                 | 15%                  | 13.90%         | NA |
| 392.2 Tra  | ransportation Equipment - trucks  | S2.5   | L3                               | 11                   | 11                   | 10%                 | 10%                  | 9.32%          | NA |
| 393.1 Sto  | tores equipment   | SQ   | SQ                               | 25                   | 25                   | 0%                  | 0%                   | 2.01%          | NA |
| 394.1 То   | ools, shop and garage equipment   | SQ   | SQ                               | 20                   | 20                   | 0%                  | 0%                   | 8.34%          | NA |
| 395.1 La   | aboratory equipment   | SQ   | SQ                               | 20                   | 20                   | 0%                  | 0%                   | 3.57%          | NA |
| 396.1 Po   | ower operated equipment   | L2   | L2.5                             | 13                   | 13                   | 15%                 | 15%                  | 4.20%          | NA |
|  |   | SQ   | SQ                               | 15                   | 15                   | 0%                  | 0%                   | 10.44%         | NA |
| 398.1 Mis  | communication equipment   | SQ   | SQ                               | 15                   | 15                   | 0%                  | 0%                   | 8.05%          | NA |

#### Annual Accrual Comparison: Current, Staff, Company

|                |  |                              | Staff                      |                                  | Company                   |                    |   |
|----------------|--|------------------------------|----------------------------|----------------------------------|---------------------------|--------------------|---|
| Acct. No.      | Account  | Current<br>Annual<br>Accrual | Staff<br>Annual<br>Accrual | Company<br>Annual<br>Accrual (E) | added amortization<br>(F) | E+F                | Company<br>less Staff<br>Annual<br>Difference |
|                | Manufactured Gas Plant                             |                              |                            |                                  |                           |                    |   |
| 305            | Structures and improvements                        | 18,081                       | 20,793                     | 20,787                           | -12,646                   | 8,141              | -12,652                                       |
| 307            | Other power equipment                              | 5,566                        | 5,825                      | 5,820                            | -1,039                    | 4,781              | -1,044  |
| 311            | Liquefied petroleum gas (LPG) equipment            | 171,850                      | 147,369                    | 147,300                          | -39,335                   | 107,965            | -39,404                                       |
| 311.1          | LPG storage caverns                                | 53,610                       | 87,900                     | 87,900                           | 0                         | 87,900             | 0   |
|                | Underground Storage Plant                          |                              |                            |                                  |                           |                    |   |
| 351.2          | Compressor station structures                      | 20,453                       | 15,681                     | 15,662                           | -7,688                    | 7,974              | -7,707  |
| 351.4          | Other structures - underground storage             | 21,815                       | 20,034                     | 20,014                           | -12,723                   | 7,291              | -12,743                                       |
| 352.1          | Wells and reservoirs - underground storage         | 0                            | 77,818                     | 77,754                           | -123,562                  | -45,808            | -123,626                                      |
| 352.3          | Non-recoverable gas                                | 0                            | 68,457                     | 68,457                           | -59,673                   | 8,784              | -59,673                                       |
| 352.4          | Wells - oil and vent gas                           | 0                            | 9,050                      | 9,043                            | -5,796                    | 3,247              | -5,803  |
| 353            | Lines - underground storage                        | 33,761                       | 49,516                     | 49,632                           | -40,429                   | 9,203              | -40,313                                       |
| 354            | Compressor station equipment                       | 29,418                       | 46,080                     | 46,056                           | -27,555                   | 18,501             | -27,579                                       |
| 355            | Measuring and regulating equipment                 | 36,045                       | 40,274                     | 40,274                           | -38,951                   | 1,323              | -38,951                                       |
| 356            | Purification equipment                             | 5,546                        | 5,824                      | 5,826                            | -1,946                    | 3,880              | -1,944  |
| 357            | Other equipment                                    | 2,807                        | 3,085                      | 3,085                            | 1,045                     | 4,130              | 1,045   |
|                | Transmission Plant                                 |                              |                            |                                  |                           |                    |   |
| 367            | Mains  | 0                            | 30,208                     | 30,208                           | -23,749                   | 6,459              | -23,749                                       |
| 371            | Other equipment                                    | 0                            | 400                        | 400                              | 0                         | 400                | 0   |
|                | Distribution Plant                                 |                              |                            |                                  |                           |                    |   |
| 375.1          | District Measuring and Regulating                  | 7,393                        | 6,777                      | 6,777                            | 1,326                     | 8,103              | 1,326   |
| 375.2          | Service centers                                    | 241,158                      | 184,725                    | 184,888                          | -700                      | 184,188            | -537  |
| 375.3          | Garage   | 19,778                       | 14,504                     | 14,504                           | 1,327                     | 15,831             | 1,327   |
| 375.4          | Other small structures                             | 3,225                        | 2,688                      | 2,688                            | -867                      | 1,821              | -867  |
| 376.1          | Mains - steel                                      | 3,092,718                    | 3,221,582                  | 3,221,582                        | -1,826,505                | 1,395,077          | -1,826,505                                    |
| 376.2          | Mains - cast iron                                  | 474,470                      | 322,525                    | 322,525                          | 443,424                   | 765,949            | 443,424                                       |
| 376.3          | Mains - plastic and copper                         | 3,630,568                    | 3,064,014                  | 3,792,440                        | -220,888                  | 3,571,552          | 507,538                                       |
| 378.1          | Measuring and regulating station equip. (gen.)     | 339,589                      | 339,147                    | 339,981                          | 68,290                    | 408,271            | 69,124  |
| 379.1          | Measuring and regulating station equip. (CGCS)     | 78,204                       | 88,512                     | 88,533                           | 15,612                    | 104,145            | 15,633  |
| 380.1          | Services - steel                                   | 2,019,941                    | 1,665,775                  | 1,664,617                        | 98,688                    | 1,763,305          | 97,530  |
| 380.2          | Services - plastic and copper                      | 16,911,201                   | 16,890,908                 | 18,624,870                       | 2,379,536                 | 21,004,406         | 4,113,498                                     |
| 381.1          | Meters   | 2,800,290                    | 3,030,488                  | 3,024,786                        | 798,573                   | 3,823,359          | 792,871                                       |
| 383.1          | House regulators                                   | 430,659                      | 430,659                    | 430,659                          | -52,772                   | 377,887            | -52,772                                       |
| 385.1          | Commercial and industrial regul. equipment         | 368,992                      | 319,718                    | 320,172                          | -21,725                   | 298,447            | -21,271                                       |
| 386.1          | Other property on customers' premises              | 1,640                        | 1,230                      | 1,229                            | 0                         | 1,229              | -1  |
| 387.1          | Other equipment                                    | 11,183                       | 13,335                     | 13,355                           | -6,881                    | 6,474              | -6,861  |
|                | General Plant                                      |                              |                            |                                  |                           |                    |   |
| 390.1          | Structures and improvements                        | 15,082                       | 17,572                     | 17,596                           | 6,612                     | 24,208             |   |
| 391.1          | Office furniture and equipment                     | 165,542                      | 207,945                    | 207,798                          | 142,823                   | 350,621            | 142,676                                       |
| 391.2          | Data processing systems                            | 1,540,403                    | 1,334,131                  | 1,333,989                        | -318,893                  | 1,015,096          | -319,035                                      |
| 391.3          | Mechanical office equipment                        | 34,632                       | 9,579                      | 9,593                            | 108,232                   | 117,825            | 108,246                                       |
| 391.4          | Computers and peripheral equipment                 | 145,292                      | 95,030                     | 95,021                           | 1,118,886                 | 1,213,907          | 1,118,877                                     |
| 392.1          | Transportation Equipment - automobiles             | 0                            | 123,193                    | 123,233                          | 0                         | 123,233            | 40  |
| 392.2          | Transportation Equipment - trucks                  | 407,337                      | 394,527                    | 394,390                          | 69,648                    | 464,038            | 69,511  |
| 393.1          | Stores equipment                                   | 7,689                        | 7,877                      | 7,862                            | -907                      | 6,955              | -922  |
| 394.1          | Tools, shop and garage equipment                   | 276,436                      | 424,589                    | 424,640                          | 452,231                   | 876,871            | 452,282                                       |
| 395.1          | Laboratory equipment                               | 11,047                       | 8,736                      | 8,726                            | 2,315                     | 11,041             | 2,305   |
| 396.1          | Power operated equipment                           | 1,158,672                    | 1,093,735                  | 1,093,371                        | -390,895                  | 702,476            | -391,259                                      |
| 397.1<br>398.1 | Communication equipment<br>Miscellaneous equipment | 60,504<br>44,850             | 65,824<br>76,366           | 65,829<br>76,309                 | 60,551<br>28,399          | 126,380<br>104,708 | 60,556<br>28,342                              |
|                |  |                              |                            |                                  |                           |                    |   |
|                | TOTAL  | 34,697,448                   | 34,084,004                 | 36,540,178                       | 2,561,393                 | 39,101,571         | 5,017,567                                     |

#### Annual Accrual Comparison: Current, Staff, Company

|                |  |                              | Staff                      |                                  | Company                      |                    |   |
|----------------|--|------------------------------|----------------------------|----------------------------------|------------------------------|--------------------|---|
| Acct. No.      | Account  | Current<br>Annual<br>Accrual | Staff<br>Annual<br>Accrual | Company<br>Annual<br>Accrual (E) | added<br>amortization<br>(F) | E+F                | Company<br>less Staff<br>Annual<br>Difference |
|                | Manufactured Gas Plant                             |                              |                            |                                  |                              |                    |   |
| 305            | Structures and improvements                        | 18,081                       | 20,793                     | 20,793                           | -10,654                      | 10,139             | -10,654                                       |
| 307            | Other power equipment                              | 5,566                        | 5,825                      | 5,825                            | -1,228                       | 4,597              | -1,228  |
| 311            | Liquefied petroleum gas (LPG) equipment            | 171,850                      | 147,369                    | 161,404                          | -30,442                      | 130,962            | -16,407                                       |
| 311.1          | LPG storage caverns                                | 53,610                       | 87,900                     | 87,900                           | 0                            | 87,900             | 0   |
|                | Underground Storage Plant                          |                              |                            |                                  |                              |                    |   |
| 351.2          | Compressor station structures                      | 20,453                       | 15,681                     | 14,999                           | -8,470                       | 6,529              | -9,152  |
| 351.4          | Other structures - underground storage             | 21,815                       | 20,034                     | 18,383                           | -14,128                      | 4,255              | -15,779                                       |
| 352.1          | Wells and reservoirs - underground storage         | 0                            | 77,818                     | 80,947                           | -128,733                     | -47,786            | -125,604                                      |
| 352.3          | Non-recoverable gas                                | 0                            | 68,457                     | 68,457                           | -62,660                      | 5,797              | -62,660                                       |
| 352.4          | Wells - oil and vent gas                           | 0                            | 9,050                      | 9,462                            | -6,191                       | 3,271              | -5,779  |
| 353            | Lines - underground storage                        | 33,761                       | 49,516                     |                                  | -37,968                      | 13,611             | -35,905                                       |
| 354            | Compressor station equipment                       | 29,418                       | 46,080                     |                                  | -24,464                      | 23,810             | -22,270                                       |
| 355            | Measuring and regulating equipment                 | 36,045                       | 40,274                     |                                  | -29,387                      | 12,901             | -27,373                                       |
| 356            | Purification equipment                             | 5,546                        | 5,824                      |                                  | -1,946                       | 3,878              | -1,946  |
| 357            | Other equipment                                    | 2,807                        | 3,085                      |                                  | 1,317                        | 4,556              | 1,471   |
|                | Transmission Plant                                 |                              |                            |                                  |                              |                    |   |
| 367            | Mains  | 0                            | 30,208                     | 30,892                           | -22,390                      | 8,502              | -21,706                                       |
| 371            | Other equipment                                    | 0                            | 400                        |                                  | 0                            | 400                | 0   |
|                | Distribution Plant                                 |                              |                            |                                  |                              |                    |   |
| 375.1          | District Measuring and Regulating                  | 7,393                        | 6,777                      | 6,018                            | 1,238                        | 7,256              | 479   |
| 375.2          | Service centers                                    | 241,158                      | 184,725                    |                                  | 12,387                       | 180,635            | -4,090  |
| 375.3          | Garage   | 19,778                       | 14,504                     |                                  | 362                          | 13,560             | -944  |
| 375.4          | Other small structures                             | 3,225                        | 2,688                      |                                  | -606                         | 2,216              | -472  |
| 376.1          | Mains - steel                                      | 3,092,718                    | 3,221,582                  |                                  | -1,742,557                   | 1,552,047          | -1,669,535                                    |
| 376.2          | Mains - cast iron                                  | 474,470                      | 322,525                    |                                  | 430,233                      | 751,611            | 429,086                                       |
|                | Mains - plastic and copper                         | 3,630,568                    | 3,064,014                  |                                  | -220,888                     | 3,581,958          | 517,944                                       |
|                | Measuring and regulating station equip. (gen.)     | 339,589                      | 339,147                    |                                  | 68,290                       | 407,437            | 68,290  |
| 379.1          | Measuring and regulating station equip. (CGCS)     | 78,204                       | 88,512                     |                                  | 18,902                       | 101,933            | 13,421  |
| 380.1          | Services - steel                                   | 2,019,941                    | 1,665,775                  |                                  | 141,846                      | 1,856,672          | 190,897                                       |
| 380.2          | Services - plastic and copper                      | 16,911,201                   | 16,890,908                 |                                  | 2,279,747                    | 20,525,806         | 3,634,898                                     |
|                | Meters   | 2,800,290                    | 3,030,488                  |                                  | 984,027                      | 4,455,368          | 1,424,880                                     |
| 383.1          | House regulators                                   | 430,659                      | 430,659                    |                                  | -52,772                      | 377,887            | -52,772                                       |
| 385.1          | Commercial and industrial regul. equipment         | 368,992                      | 319,718                    |                                  | -21,250                      | 297,332            | -22,386                                       |
| 386.1          | Other property on customers' premises              | 1,640                        | 1,230                      |                                  |                              | 1,142              | -88   |
| 387.1          | Other equipment                                    | 11,183                       |                            |                                  |                              | 7,140              | -6,195  |
|                | General Plant                                      |                              |                            |                                  |                              |                    |   |
| 390.1          | Structures and improvements                        | 15,082                       | 17,572                     | 17,572                           | 5,514                        | 23,086             | 5,514   |
| 391.1          | Office furniture and equipment                     | 165,542                      | 207,945                    | · ·                              |                              | 350,768            | 142,823                                       |
| 391.2          | Data processing systems                            | 1,540,403                    | 1,334,131                  |                                  | -325,976                     | 1,008,155          | -325,976                                      |
|                | Mechanical office equipment                        | 34,632                       | 9,579                      |                                  | 108,232                      | 117,811            | 108,232                                       |
| 391.4          | Computers and peripheral equipment                 | 145,292                      | 95,030                     |                                  | 1,118,886                    | 1,213,916          | 1,118,886                                     |
| 392.1          | Transportation Equipment - automobiles             | 0                            | 123,193                    |                                  | 0                            | 125,622            | 2,429   |
| 392.2          | Transportation Equipment - trucks                  | 407,337                      | 394,527                    | · ·                              | 33,251                       | 434,677            | 40,150  |
| 393.1          | Stores equipment                                   | 7,689                        | 7,877                      |                                  | -907                         | 6,970              | -907  |
| 393.1<br>394.1 | Tools, shop and garage equipment                   | 276,436                      | 424,589                    |                                  | 452,231                      | 876,820            | 452,231                                       |
| 394.1<br>395.1 |  | 11,047                       | 424,309<br>8,736           |                                  | 2,315                        | 11,051             | 2,315   |
| 395.1<br>396.1 | Laboratory equipment                               | 1,158,672                    | 0,730<br>1,093,735         |                                  | -360,044                     | 733,691            |   |
|                | Power operated equipment                           |                              |                            |                                  |                              |                    | -360,044                                      |
| 397.1<br>398.1 | Communication equipment<br>Miscellaneous equipment | 60,504<br>44,850             | 65,824<br>76,366           |                                  | 60,551<br>28,399             | 126,375<br>104,765 | 60,551<br>28,399                              |
|                | TOTAL  | 34,697,448                   | 34,084,004                 |                                  |                              | 39,527,030         | 5,443,026                                     |

#### **Recommended Annual Depreciation Rates & Parameters Comparison**

|                          |   | Average                          | Average                                   |                               |                                 |                             |                               | Staff<br>Whole Life             | Company<br>Whole Life           |
|--------------------------|---|----------------------------------|---|-------------------------------|---------------------------------|-----------------------------|-------------------------------|---------------------------------|---------------------------------|
| Account<br><u>Number</u> | Account Description   | Service<br>Life (Years)<br>Staff | Service<br><u>Life (Years)</u><br>Company | lowa<br><u>Curve</u><br>Staff | lowa<br><u>Curve</u><br>Company | <u>Net Salvage</u><br>Staff | <u>Net Salvage</u><br>Company | Depreciation<br><u>Rate (%)</u> | Depreciation<br><u>Rate (%)</u> |
|                          | Manufactured Cas Plant  |                                  |   |                               |                                 |                             |                               |                                 |                                 |
| 305                      | Manufactured Gas Plant Structures and improvements                          | 60                               | 60  | R0.5                          | R0.5                            | -15%                        | -15%                          | 1.92%                           | 0.75%                           |
| 303                      | Other power equipment   | 30                               | 30  | R3                            | R3                              | -10%                        | -10%                          | 3.67%                           | 3.01%                           |
| 311                      | Liquefied petroleum gas (LPG) equipment                                     | 33                               | 33  | R1                            | R1                              | -5%                         | -5%                           | 3.18%                           | 2.33%                           |
| 311.1                    | LPG storage caverns   | 55                               | 55  | S3                            | S3                              | 0%                          | 0%                            | 1.82%                           | 1.82%                           |
|                          | Underground Storage Plant   |                                  |   |                               |                                 |                             |                               |                                 |                                 |
| 351.2                    | Compressor station structures   | 45                               | 45  | S1.5                          | S1.5                            | -15%                        | -15%                          | 2.56%                           | 1.30%                           |
| 351.4                    | Other structures - underground storage                                      | 55                               | 55  | R1.5                          | R1.5                            | -10%                        | -10%                          | 2.00%                           | 0.73%                           |
| 352.1                    | Wells and reservoirs - underground storage                                  | 90                               | 90  | S2.5                          | S2.5                            | -10%                        | -10%                          | 1.22%                           | -0.72%                          |
| 352.3                    | Non-recoverable gas   | 90                               | 90  | S2.5                          | S2.5                            | 0%                          | 0%                            | 1.11%                           | 0.14%                           |
| 352.4                    | Wells - oil and vent gas  | 90                               | 90  | S2.5                          | S2.5                            | -10%                        | -10%                          | 1.22%                           | 0.44%                           |
| 353                      | Lines - underground storage   | 70                               | 70  | R2.5                          | R2.5                            | -20%                        | -20%                          | 1.71%                           | 0.32%                           |
| 354                      | Compressor station equipment  | 55                               | 55  | S2                            | S2                              | -5%                         | -5%                           | 1.91%                           | 0.77%                           |
| 355                      | Measuring and regulating equipment  | 50                               | 50  | S0.5                          | S0.5                            | 0%                          | 0%                            | 2.00%                           | 0.07%                           |
| 356                      | Purification equipment  | 42                               | 42  | R2                            | R2                              | -5%                         | -5%                           | 2.50%                           | 1.66%                           |
| 357                      | Other equipment   | 20                               | 20  | L2.5                          | L2.5                            | 0%                          | 0%                            | 5.00%                           | 6.69%                           |
| 0.07                     | Transmission Plant  | 00                               | 0.0                                       | Da                            | Do                              | 000/                        | 000/                          | 4 500/                          | 0.000/                          |
| 367<br>371               | Mains<br>Other equipment  | 80<br>45                         | 80<br>45                                  | R2<br>S3                      | R2<br>S3                        | -20%<br>-5%                 | -20%<br>-5%                   | 1.50%<br>2.33%                  | 0.32%<br>2.33%                  |
| 571                      | Other equipment   | 40                               | 45  | - 33                          |                                 | -5 /6                       | -5 /6                         | 2.3376                          | 2.3376                          |
| 375.1                    | Distribution Plant  | 40                               | 40  | R0.5                          | R0.5                            | -10%                        | -10%                          | 2.75%                           | 3.29%                           |
| 375.2                    | District Measuring and Regulating<br>Service centers                        | 40<br>50                         | 40<br>50                                  | R0.5                          | R0.5                            | -15%                        | -15%                          | 2.30%                           | 2.29%                           |
| 375.3                    | Garage  | 50<br>50                         | 50<br>50                                  | S0                            | S0                              | -10%                        | -10%                          | 2.30%                           | 2.29%                           |
| 375.4                    | Other small structures  | 40                               | 40  | R0.5                          | R0.5                            | 0%                          | 0%                            | 2.50%                           | 1.69%                           |
| 376.1                    | Mains - steel   | 80                               | 80  | R2                            | R2                              | -20%                        | -20%                          | 1.50%                           | 0.65%                           |
| 376.2                    | Mains - cast iron   | 80                               | 80  | S1                            | S1                              | -80%                        | -80%                          | 2.25%                           | 5.34%                           |
| 376.3                    | Mains - plastic and copper  | 80                               | 70  | R2                            | R3                              | -6%                         | -15%                          | 1.32%                           | 1.54%                           |
| 378.1                    | Measuring and regulating station equip. (gen.)                              | 35                               | 35  | 01                            | 01                              | -30%                        | -30%                          | 3.71%                           | 4.46%                           |
| 379.1                    | Measuring and regulating station equip. (CGCS)                              | 31                               | 31  | R0.5                          | R0.5                            | -30%                        | -30%                          | 4.19%                           | 4.94%                           |
| 380.1                    | Services - steel  | 44                               | 44  | R0.5                          | R0.5                            | -90%                        | -90%                          | 4.32%                           | 4.57%                           |
| 380.2                    | Services - plastic and copper   | 44                               | 40  | R0.5                          | R2.5                            | -65%                        | -65%                          | 3.75%                           | 4.66%                           |
| 381.1                    | Meters  | 37                               | 37  | S1                            | S1                              | 5%                          | 5%                            | 2.57%                           | 3.24%                           |
| 383.1                    | House regulators  | 50                               | 50  | R3                            | R3                              | 0%                          | 0%                            | 2.00%                           | 1.75%                           |
| 385.1                    | Commercial and industrial regul. equipment                                  | 39                               | 39  | S0                            | S0                              | -10%                        | -10%                          | 2.82%                           | 2.63%                           |
| 386.1                    | Other property on customers' premises                                       | 13                               | 13  | L3                            | L3                              | 0%                          | 0%                            | 7.69%                           | 5.35%                           |
| 387.1                    | Other equipment   | 30                               | 30  | R0.5                          | R0.5                            | 0%                          | 0%                            | 3.33%                           | 1.61%                           |
|                          | General Plant   | 0.7                              | 0.7                                       | <b>.</b>                      |                                 |                             |                               |                                 |                                 |
| 390.1                    | Structures and improvements   | 30                               | 30  | S1                            | S1                              | -5%                         | -5%                           | 3.50%                           | 4.82%                           |
| 391.1                    | Office furniture and equipment  | 20                               | 20  | SQ                            | SQ                              | 0%                          | 0%                            | 5.00%                           | 7.05%                           |
| 391.2                    | Data processing systems   | 5                                | 5   | SQ                            | SQ                              | 0%                          | 0%                            | 20.00%                          | 13.18%                          |
|                          | Mechanical office equipment   | 15<br>5                          | 15  | SQ                            | SQ                              | 0%                          | 0%                            | 6.67%                           | 34.02%                          |
| 391.4<br>392.1           | Computers and peripheral equipment  | 5<br>6                           | 5<br>6                                    | SQ<br>L3                      | SQ<br>L3                        | 0%<br>15%                   | 0%<br>15%                     | 20.00%<br>14.17%                | 83.55%<br>13.90%                |
| 392.1<br>392.2           | Transportation Equipment - automobiles<br>Transportation Equipment - trucks | ь<br>11                          | о<br>11                                   | L3<br>S2.5                    | S2.5                            | 10%                         | 15%                           | 8.18%                           | 9.32%                           |
| 392.2<br>393.1           | Stores equipment  | 25                               | 25  | S2.5<br>SQ                    | S2.5<br>SQ                      | 0%                          | 0%                            | 4.00%                           | 9.32%<br>2.01%                  |
| 393.1<br>394.1           | Tools, shop and garage equipment  | 20                               | 20  | SQ                            | SQ                              | 0%                          | 0%                            | 4.00 %<br>5.00%                 | 8.34%                           |
| 395.1                    | Laboratory equipment  | 20                               | 20  | SQ                            | SQ                              | 0%                          | 0%                            | 5.00%                           | 3.57%                           |
| 396.1                    | Power operated equipment  | 13                               | 13  | L2                            | L2                              | 15%                         | 15%                           | 6.54%                           | 4.20%                           |
| 397.1                    | Communication equipment   | 15                               | 15  | SQ                            | SQ                              | 0%                          | 0%                            | 6.67%                           | 10.44%                          |
| 398.1                    | Miscellaneous equipment   | 15                               | 15  | SQ                            | SQ                              | 0%                          | 0%                            | 6.67%                           | 8.05%                           |

#### **Recommended Annual Depreciation Rates & Parameters Comparison**

| Account<br><u>Number</u> | Account Description   | Average<br>Service<br><u>Life (Years)</u><br>Staff | Average<br>Service<br><u>Life (Years)</u><br>Company | lowa<br><u>Curve</u><br>Staff | lowa<br><u>Curve</u><br>Company | <u>Net Salvage</u><br>Staff | <u>Net Salvage</u><br>Company | Staff<br>Whole Life<br>Depreciation<br><u>Rate (%)</u> | Company<br>Whole Life<br>Depreciation<br><u>Rate (%)</u> |
|--------------------------|---|--|--|-------------------------------|---------------------------------|-----------------------------|-------------------------------|--|--|
|                          | Manufactured Gas Plant  |  |  |                               |                                 |                             |                               |  |  |
| 305                      | Structures and improvements   | 60   | 60   | R0.5                          | R1                              | -15%                        | -15%                          | 1.92%  | NA   |
| 307                      | Other power equipment   | 30   | 30   | R3                            | S2.5                            | -10%                        | -10%                          | 3.67%  | NA   |
| 311                      | Liquefied petroleum gas (LPG) equipment   | 33   | 33   | R1                            | R1.5                            | -5%                         | -15%                          | 3.18%  | NA   |
| 311.1                    | LPG storage caverns   | 55   | 55   | S3                            | S3                              | 0%                          | 0%                            | 1.82%  | NA   |
|                          | Underground Storage Plant   |  |  |                               |                                 |                             |                               |  |  |
| 351.2                    | Compressor station structures   | 45   | 45   | S1.5                          | S1.5                            | -15%                        | -10%                          | 2.56%  | NA   |
| 351.4                    | Other structures - underground storage  | 55   | 60   | R1.5                          | R1.5                            | -10%                        | -10%                          | 2.00%  | NA   |
| 352.1                    | Wells - underground storage   | 90   | 90   | S2.5                          | R2.5                            | -10%                        | -15%                          | 1.22%  | NA   |
| 352.2                    | Reservoirs - underground storage  | 90   | 90   | S2.5                          | R2.5                            | -10%                        | 0%                            | 1.22%  | NA   |
| 352.3                    | Non-recoverable gas   | 90   | 90   | S2.5                          | R2.5                            | 0%                          | 0%                            | 1.11%  | NA   |
| 352.4                    | Wells - oil and vent gas  | 90   | 90   | S2.5                          | R2.5                            | -10%                        | -15%                          | 1.22%  | NA   |
| 353                      | Lines - underground storage   | 70   | 70   | R2.5                          | R2.5                            | -20%                        | -25%                          | 1.71%  | NA   |
| 354                      | Compressor station equipment  | 55   | 55   | S2                            | S2                              | -5%                         | -10%                          | 1.91%  | NA   |
| 355                      | Measuring and regulating equipment  | 50   | 50   | S0.5                          | R2.5                            | 0%                          | -5%                           | 2.00%  | NA   |
| 356                      | Purification equipment  | 42   | 42   | R2                            | R2                              | -5%                         | -5%                           | 2.50%  | NA   |
| 357                      | Other equipment   | 20   | 20   | L2.5                          | L2.5                            | 0%                          | -5%                           | 5.00%  | NA   |
|                          | Transmission Plant  |  |  |                               |                                 |                             |                               |  |  |
| 367                      | Mains   | 80   | 85   | R2                            | R2                              | -20%                        | -30%                          | 1.50%  | NA   |
| 371                      | Other equipment   | 45   | 45   | S3                            | S3                              | -5%                         | -5%                           | 2.33%  | NA   |
|                          | Distribution Plant  |  |  |                               |                                 |                             |                               |  |  |
| 375.1                    | District Measuring and Regulating   | 40   | 45   | R0.5                          | R1                              | -10%                        | -10%                          | 2.75%  | NA   |
| 375.2                    | Service centers   | 50   | 55   | R0.5                          | R1.5                            | -15%                        | -15%                          | 2.30%  | NA   |
| 375.3                    | Garage  | 50   | 55   | S0                            | S0                              | -10%                        | -10%                          | 2.20%  | NA   |
| 375.4                    | Other small structures  | 40   | 40   | R0.5                          | S0                              | 0%                          | -5%                           | 2.50%  | NA   |
| 376.1                    | Mains - steel   | 80   | 85   | R2                            | R2                              | -20%                        | -30%                          | 1.50%  | NA   |
| 376.2                    | Mains - cast iron   | 80   | 85   | S1                            | S1                              | -80%                        | -90%                          | 2.25%  | NA   |
| 376.3                    | Mains - plastic and copper  | 80   | 70   | R2                            | R3                              | -6%                         | -15%                          | 1.32%  | NA   |
| 378.1                    | Measuring and regulating station equip. (gen.)                                      | 35   | 35   | 01                            | 01                              | -30%                        | -30%                          | 3.71%  | NA   |
| 379.1                    | Measuring and regulating station equip. (CGCS)                                      | 31   | 33   | R0.5                          | S0                              | -30%                        | -30%                          | 4.19%  | NA   |
| 380.1<br>380.2           | Services - steel  | 44   | 45<br>42   | R0.5                          | R0.5<br>R2.5                    | -90%                        | -100%<br>-70%                 | 4.32%<br>3.75%   | NA   |
| 380.2<br>381.1           | Services - plastic and copper   | 44<br>37   | 42<br>33   | R0.5<br>S1                    | S0.5                            | -65%<br>5%                  | -70%                          | 2.57%  | NA<br>NA   |
| 383.1                    | Meters  | 50   | 50   | R3                            | 80.5<br>R3                      | 5%<br>0%                    | 3%<br>0%                      |  | NA   |
| 385.1                    | House regulators  | 39   | 50<br>41   | S0                            | S0                              | -10%                        | -15%                          | 2.00%<br>2.82%   | NA   |
|                          | Commercial and industrial regul. equipment<br>Other property on customers' premises |  |  |                               |                                 |                             |                               |  |  |
| 386.1<br>387.1           | Other equipment   | 13<br>30   | 14<br>32   | L3<br>R0.5                    | L3<br>R0.5                      | 0%<br>0%                    | 0%<br>-10%                    | 7.69%<br>3.33%   | NA<br>NA   |
|                          | General Plant   |  |  |                               |                                 |                             |                               |  |  |
| 390.1                    | Structures and improvements   | 30   | 30   | S1                            | S0.5                            | -5%                         | -5%                           | 3.50%  | NA   |
| 391.1                    | Office furniture and equipment  | 20   | 20   | SQ                            | SQ                              | 0%                          | 0%                            | 5.00%  | NA   |
| 391.2                    | Data processing systems   | 5  | 5  | SQ                            | SQ                              | 0%                          | 0%                            | 20.00%   | NA   |
| 391.3                    | Mechanical office equipment   | 15   | 15   | SQ                            | SQ                              | 0%                          | 0%                            | 6.67%  | NA   |
| 391.4                    | Computers and peripheral equipment  | 5  | 5  | SQ                            | SQ                              | 0%                          | 0%                            | 20.00%   | NA   |
| 392.1                    | Transportation Equipment - automobiles  | 6  | 6  | L3                            | L2.5                            | 15%                         | 15%                           | 14.17%   | NA   |
| 392.2                    | Transportation Equipment - trucks   | 11   | 11   | S2.5                          | L3                              | 10%                         | 10%                           | 8.18%  | NA   |
| 393.1                    | Stores equipment  | 25   | 25   | SQ                            | SQ                              | 0%                          | 0%                            | 4.00%  | NA   |
| 394.1                    | Tools, shop and garage equipment  | 20   | 20   | SQ                            | SQ                              | 0%                          | 0%                            | 5.00%  | NA   |
| 395.1                    | Laboratory equipment  | 20   | 20   | SQ                            | SQ                              | 0%                          | 0%                            | 5.00%  | NA   |
| 396.1                    | Power operated equipment  | 13   | 13   | L2                            | L2.5                            | 15%                         | 15%                           | 6.54%  | NA   |
| 397.1                    | Communication equipment   | 15   | 15   | SQ                            | SQ                              | 0%                          | 0%                            | 6.67%  | NA   |
| 398.1                    | Miscellaneous equipment   | 15   | 15   | SQ                            | SQ                              | 0%                          | 0%                            | 6.67%  | NA   |

#### **Recommended Annual Depreciation Rates**

|                |  |              |       |             | Staff        |
|----------------|--|--------------|-------|-------------|--------------|
|                |  | Average      |       |             | Whole Life   |
| Account        |  | Service      | lowa  |             | Depreciation |
| Number         | Account Description                            | Life (Years) | Curve | Net Salvage | Rate (%)     |
|                |  | Staff        | Staff | Staff       |              |
|                |  |              |       |             |              |
| 0.05           | Manufactured Gas Plant                         |              | Do F  | 450/        | 1.000/       |
| 305            | Structures and improvements                    | 60           | R0.5  | -15%        | 1.92%        |
| 307            | Other power equipment                          | 30           | R3    | -10%        | 3.67%        |
| 311            | Liquefied petroleum gas (LPG) equipment        | 33           | R1    | -5%         | 3.18%        |
| 311.1          | LPG storage caverns                            | 55           | S3    | 0%          | 1.82%        |
|                | Underground Storage Plant                      |              |       |             |              |
| 351.2          | Compressor station structures                  | 45           | S1.5  | -15%        | 2.56%        |
| 351.4          | Other structures - underground storage         | 55           | R1.5  | -10%        | 2.00%        |
| 352.1          | Wells - underground storage                    | 90           | S2.5  | -10%        | 1.22%        |
| 352.2          | Reservoirs - underground storage               | 90           | S2.5  | -10%        | 1.22%        |
| 352.3          | Non-recoverable gas                            | 90           | S2.5  | 0%          | 1.11%        |
| 352.4          | Wells - oil and vent gas                       | 90           | S2.5  | -10%        | 1.22%        |
| 353            | Lines - underground storage                    | 70           | R2.5  | -20%        | 1.71%        |
| 354            | Compressor station equipment                   | 55           | S2    | -5%         | 1.91%        |
| 355            | Measuring and regulating equipment             | 50           | S0.5  | 0%          | 2.00%        |
| 356            | Purification equipment                         | 42           | R2    | -5%         | 2.50%        |
| 357            | Other equipment                                | 20           | L2.5  | 0%          | 5.00%        |
|                |  |              |       |             |              |
| ~~~            | Transmission Plant                             |              | 5.0   | <b></b>     | . =          |
| 367            | Mains  | 80           | R2    | -20%        | 1.50%        |
| 371            | Other equipment                                | 45           | S3    | -5%         | 2.33%        |
|                | Distribution Plant                             |              |       |             |              |
| 375.1          | District Measuring and Regulating              | 40           | R0.5  | -10%        | 2.75%        |
| 375.2          | Service centers                                | 50           | R0.5  | -15%        | 2.30%        |
| 375.3          | Garage   | 50           | S0    | -10%        | 2.20%        |
| 375.4          | Other small structures                         | 40           | R0.5  | 0%          | 2.50%        |
| 376.1          | Mains - steel                                  | 80           | R2    | -20%        | 1.50%        |
| 376.2          | Mains - cast iron                              | 80           | S1    | -80%        | 2.25%        |
| 376.3          | Mains - plastic and copper                     | 80           | R2    | -6%         | 1.32%        |
| 378.1          | Measuring and regulating station equip. (gen.) | 35           | 01    | -30%        | 3.71%        |
| 379.1          | Measuring and regulating station equip. (CGCS) | 31           | R0.5  | -30%        | 4.19%        |
| 380.1          | Services - steel                               | 44           | R0.5  | -90%        | 4.32%        |
| 380.2          | Services - plastic and copper                  | 44           | R0.5  | -65%        | 3.75%        |
| 381.1          | Meters   | 37           | S1    | 5%          | 2.57%        |
| 383.1          | House regulators                               | 50           | R3    | 0%          | 2.00%        |
| 385.1          | Commercial and industrial regul. equipment     | 39           | S0    | -10%        | 2.82%        |
| 386.1          | Other property on customers' premises          | 13           | L3    | 0%          | 7.69%        |
| 387.1          | Other equipment                                | 30           | R0.5  | 0%          | 3.33%        |
|                | Conorol Plant                                  |              |       |             |              |
| 390.1          | General Plant                                  | 20           | S1    | -5%         | 3.50%        |
|                | Structures and improvements                    | 30           |       |             |              |
| 391.1          | Office furniture and equipment                 | 20           | SQ    | 0%          | 5.00%        |
| 391.2          | Data processing systems                        | 5            | SQ    | 0%          | 20.00%       |
| 391.3          | Mechanical office equipment                    | 15           | SQ    | 0%          | 6.67%        |
| 391.4<br>392.1 | Computers and peripheral equipment             | 5            | SQ    | 0%<br>15%   | 20.00%       |
|                | Transportation Equipment - automobiles         | 6            | L3    | 15%<br>10%  | 14.17%       |
| 392.2          | Transportation Equipment - trucks              | 11           | S2.5  | 10%         | 8.18%        |
| 393.1          | Stores equipment                               | 25           | SQ    | 0%          | 4.00%        |
| 394.1          | Tools, shop and garage equipment               | 20           | SQ    | 0%          | 5.00%        |
| 395.1          | Laboratory equipment                           | 20           | SQ    | 0%          | 5.00%        |
| 396.1          | Power operated equipment                       | 13           | L2    | 15%         | 6.54%        |
| 397.1          | Communication equipment                        | 15           | SQ    | 0%          | 6.67%        |
| 398.1          | Miscellaneous equipment                        | 15           | SQ    | 0%          | 6.67%        |