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Witness: Rosella L. Schad
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

ROSELLA L. SCHAD

LACLEDE GAS COMPANY

CASE NO. GR-2002-356

Jefferson City, Missouri
June 2002

****Denotes Highly Confidential Information****

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In The Matter of Laclede Gas Company's Tariff	)	
To Revise Natural Gas Rate Schedules	)	Case No. GR-2002-356

AFFIDAVIT OF ROSELLA L. SCHAD

STATE OF MISSOURI)
ss.
COUNTY OF COLE

Rosella L. Schad, being of lawful age, on her oath states: that she has participated in the preparation of the following Direct Testimony in question and answer form, consisting of 26 pages to be presented in the above case; that the answers in the following Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Rosella L. Schad
Rosella L. Schad

Subscribed and sworn to before me this 19th day of June 2002.

TONI M. CHARLTON
NOTARY SEAL
NOTARY PUBLIC
STATE OF MISSOURI

Toni M. Charlton

TONI M. CHARLTON
NOTARY PUBLIC STATE OF MISSOURI
COUNTY OF COLE
My Commission Expires December 28, 2004

TABLE OF CONTENTS

DIRECT TESTIMONY OF

ROSELLA L. SCHAD

CASE NO. GR-2002-356

DIRECT TESTIMONY

OF

ROSELLA L. SCHAD

LACLEDE GAS COMPANY

CASE NO. GR-2002-356

Q. What is your name and business address?

A. Rosella L. Schad, P.O. Box 360, Jefferson City, MO 65102.

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

A. I am employed by the Missouri Public Service Commission (PSC or Commission) as an Engineer I in the Engineering and Management Services Department.

Q. What are your duties as an Engineer in the Engineering and Management Services Department?

A. I am responsible for engineering analyses and depreciation determinations of companies regulated by the Commission.

Q. What are your qualifications, educational background and experience?

A. In 1978, I earned a Bachelor of Science degree in Mechanical Engineering from the University of Missouri-Columbia. I am a registered Professional Engineer in Missouri. I was employed by Union Electric (now d/b/a AmerenUE) as an engineer intern during the summer of 1977 and employed as a mechanical engineer by Union Electric in its Nuclear Construction Department from 1978-1980. I joined the Missouri Public Service Commission Staff in the Depreciation Department in 1999.

Q. Have you previously filed testimony before this Commission?

A. Yes. Schedule 1 attached to my testimony provides a list of cases in which I have previously filed testimony.

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

A. The purpose of my testimony in this case is to present Staff's proposed depreciation rates for Laclede Gas Co. (Laclede or Company); annual accrual reductions; negative amortizations to reduce the Company's over-accrued depreciation reserve; transfer of $5 million of depreciation reserve over-accrual to the reserve for the Gas Holders, and quarterly updates of the dismantling of the four gas holders.

Staff's proposal in this case is:

1. That Staff's Proposed Depreciation Rates, as shown in the attached Schedule 2, be effective on the date of the Commission order in this case with an annual accrual reduction of approximately $500,000 that results from Staff plant ASLs[1] and that the Company's ordered depreciation rate be 0% for accounts 352.01, 361.00, 362.00, 363.30, 371.70 and 386.01;

2. That the Company's depreciation rates recover only the original capital plant cost;

3. That the Company's current level of net salvage expense, approximately $4,200,000 be treated as an annual expense and not as an adjustment to depreciation rates;

4. That the Company book a negative annual amortization of $2.4 million per year to the over-accrued depreciation reserve of account 376.01, Steel Mains and a

[1] ASL (Average Service Life) = Average expected life of all units in an account

negative annual amortization of $1 million per year to the over-accrued depreciation reserve of account 380.02, Plastic and Copper Services;

5. That the Company transfer $5 million from the over-accrued depreciation reserve of account 380.01, Steel Services to the depreciation reserve of account 362.00, Gas Holders'[2];

6. That the Company provide quarterly updates to the PSC's Engineering and Management Services Department of the dismantling of the four gas holders from the date of the Order of this case until the last gas holder is dismantled.

DEPRECIATION STUDY

Q. Did you conduct and complete a depreciation study of Laclede's plant?

A. Yes. The Company has provided historical plant data for 48 accounts current to 9-30-2000. In a recent case, Case No. GR-2001-629, Laclede Gas Company, I studied eight accounts, which were the seven largest accounts (listed on page 8) and one smaller account, 305.00, Structures & Improvements. Six of the other 40 accounts (numbers 352.01, 361.00, 362.00, 363.30, 371.70 and 386.01) have an accrued reserve greater than plant balance; therefore, these six accounts should not accrue depreciation expense (i.e., 0% depreciation rate). When accrued reserve no longer exceeds plant balance, a depreciation study should be performed to determine the appropriate ASL and depreciation rates. This may never occur for all or part of these accounts.

During this depreciation study, I analyzed the other 34 accounts using the historical plant data Laclede provided to me. I have submitted all my work papers, including my results, to the Company.

[2] Gas Holders are life span type plant and final removal is addressed by Staff Depreciation Engineers

Q. Would you identify the 48 accounts for which Staff is proposing depreciation rates?

A. Yes. Laclede's 48 accounts and Staff's proposed depreciation rates are shown on Schedule 2 attached to this direct testimony. Based on Staff's analysis on eight accounts (305.00, 376.01, 376.02, 376.03, 380.01, 380.02, 381.01 and 383.01) in Case No. GR-2001-629, Staff is proposing that the depreciation rates and ASLs that Staff proposed and the Company adopted in November of 2001 for these eight accounts be ordered. For six accounts Staff recommends a zero depreciation rate because the accrued depreciation balance exceeds the plant balance. Staff has performed and presents in this testimony a depreciation analysis of the remaining 34 accounts.

Q. How does Staff treat depreciation?

A. Staff supports the position of depreciation as a "cost of operation" as stated in Depreciation Systems[3]:

> One goal of accrual accounting is to match the timing of expenses with the activities associated with the expense. Thus, *the initial cost of a capital asset should be allocated to accounting periods* in a way that results in a logical match of the depreciation expense with the life of the asset. These ideas lead to the concept of depreciation as a 'cost of operation.' (emphasis added)

Staff calculates depreciation so that a utility's original capital plant cost is recovered in equal amounts annually as a "cost of operation" (depreciation expense) over the expected life of the plant.

Q. Does Staff believe that depreciation should be designed to fund other financial objectives?

[3] Depreciation Systems, Frank K. Wolf and W. Chester Fitch, 1994 Iowa State University Press, p. viii.

A. No. Staff agrees with the text Public Utility Depreciation Practices[4], published in August 1996 by the National Association of Regulatory Utility Commissioners (NARUC), which indicates that depreciation is intended for a single purpose:

> … It is essential to remember that depreciation is intended only for the purpose of recording the periodic allocation of cost in a manner properly related to the useful life of the plant. It is not intended, for example, to achieve a desired financial objective or to fund modernization programs. …

Q. How are depreciation rates used in the Company's revenue requirement determination?

A. Depreciation rates are used to determine the annual accrual for depreciation. This annual value, called the annual depreciation accrual or depreciation expense, is a portion of the Company's revenue requirement.

Q. Why is it necessary to determine the annual revenue requirement?

A. Annual revenue requirement is the amount of money the Company will need to collect from customers in its utility rates to cover its cost of providing service.

Q. How does Staff determine the annual depreciation accrual for an account?

A. The Staff determines the annual depreciation accrual by multiplying plant balance by the depreciation rate. Using Staff's proposed depreciation rate determination (see page 15), the annual accrual equals plant balance divided by the average service life (ASL) of the plant in that account. This is frequently called straight-line depreciation. Plant balance is the original capital plant cost currently on the Company's books. Straight-line depreciation recovers original capital plant cost in equal amounts over the average service life of the plant. For example, if a

[4] Public Utility Depreciation Practices, National Association of Regulatry Utility Commissioners, 1996, p. 23.

unit of plant has a 20-year ASL, the Company will recover 1/20th of the plant's original capital cost each year over the life of the plant.

Q. How is the ASL of each account determined?

A. There are a series of steps that the Professional Engineer performs to determine the ASL of each account.

First, the Company provides historical plant mortality data in a format that Staff depreciation engineers can utilize. The Company's mortality data is a historical record of plant additions and retirements by vintage. Using the Gannet-Fleming depreciation analysis program software, Staff develops a survivor plot that displays a percentage of plant dollars surviving for the age of each property in the account by analyzing the Company's mortality data. The survivor plot is fitted, using curve-fitting calculations, to an Iowa-type curve[5] to determine each account's ASL. Because plant in each account or sub-account is similar, plant in service is normally expected to have an ASL closely equal to the account's historical experience.

Second, Staff holds meetings with Company engineers and operations personnel and tours Company facilities. Past and present plant operations and plant maintenance are discussed so that the Staff depreciation engineer becomes knowledgeable about future projects anticipated by management, which may have an effect on ASLs of current plant.

Third, meetings are also held with other Staff professionals to discuss other areas of concern. In this case, the Company's Main and Service replacement programs are monitored by the PSC's Energy Department.

[5] Iowa curves are standard curves that were empirically developed to describe the life characteristics of most industrial and utility property.

Fourth, engineering judgment is applied to the information gathered in steps 2 and 3 to determine if the ASLs for plant currently in service should be adjusted from the ASLs Staff determined from historical experience alone.

The Professional Engineer evaluates these steps to arrive at Staff's proposed ASLs.

Q. Besides meeting with Company and Staff, what did you do in developing ASLs?

A. In addition to the meetings described above, I studied the Company's historical plant data and performed an actuarial analysis. Last year in Case No. GR-2001-629, most of my focus was spent on the seven largest accounts, which represent 87% of the Company's plant dollars, and I studied one small account. In the present case, most of my focus was spent on the remaining 40 small accounts. During the depreciation study that spanned these two cases, I performed these multiple steps to determine the appropriate ASL for each of the seven largest large accounts and 35 other accounts. The accrued reserve exceeds the plant balance for each of the other six accounts. I will refer to the seven largest accounts as the "Large" accounts. The "Large" accounts are:

1. [376.01] Steel Mains (Including [367.70] Transmission Mains)
2. [376.02] Cast Iron Mains
3. [376.03] Plastic & Copper Mains
4. [380.01] Steel Services
5. [380.02] Plastic & Copper Services
6. [381.01] Meters
7. [383.01] Regulators

Q. Were the ASLs, which are the basis for the both the "Large" accounts' and one small account's currently ordered depreciation rates, established in Staff's depreciation study for Case No. GR-2001-629?

A. Yes.

Q. Do you propose to change any of those ASLs for these eight accounts in this case?

A. No, I do not propose to change any of those ASLs for those accounts because the Company did not provide historical mortality data updated beyond the case last year. The analysis done in the last case utilized the most current data Staff has and supports Staff recommendation for depreciation rates for those eight accounts.

REDUCTION OF ANNUAL ACCRUAL DUE TO CHANGES IN AVERAGE SERVICE LIFE IN THE DEPRECIATION RATE DETERMINATION

Q. Did you perform the analysis described above for each of the 34 small accounts?

A. Yes. I have included Staff's recommended depreciation rates and ASLs for these 34 accounts in Schedule 2 attached to this direct testimony.

Q. For the 34 accounts that you studied for this case, are your proposed ASLs a change from their currently ordered lives (ASLs)?

A. For some of the 34 accounts, ASLs have changed since Staff studied Laclede's 1996 plant data. Four years of additional historical mortality data, 1996-2000, have been added since Staff depreciation engineers last performed a depreciation study on these accounts.

Q. Can specific events cause a plant account's ASL to change?

A. Yes. Specific events, such as a natural catastrophe, can contribute to shortening a plant account's ASL. However, it is important in depreciation analysis to realize that plant ASLs are dynamic and may change over time.

Q. Have you identified any other potential reasons that cause an account's ASL to change?

A. Yes. The history of the two accounts listed in the following Table IA and Table IB reflects how technology-related changes, regulatory requirements and changes in the material from which different vintages of plant were manufactured may contribute to changes to ASL.

In the first account, 376.01 steel mains, early vintages of steel mains were unprotected steel (58 year ASL), which was susceptible to corrosive forces. Recently, steel mains were installed with cathodic protection, which should reduce corrosion and metal fatigue of the pipe and result in a longer ASL for the account (77 year and 79 year ASL), as indicated in the following Table IA.

TABLE I

Average Service Life Analysis
Case No. GR-2001-629

A		**B**	
[376.01] Steel Mains		[376.03] Plastic & Copper Mains	
Year	ASL	Year	ASL
Mid -1980's	58	Mid -1980's	58
Early – 1990's	77	Early – 1990's	53
Current ASL	79	Current ASL	70

In the second account, 376.03 plastic & copper mains, only plastic has been installed recently. The earliest vintages of plant in this account were copper only (58 year ASL). Consequently, the account's ASL was at one time based on copper plant only. Early placement of new material, such as plastic, normally experiences a learning curve with changes in manufacturing processes and installation requirements (53 year ASL). Early placements of a

new technology may have failures that result in premature retirements and a shortened ASL, but the ASL tends to lengthen as the learning curve takes effect (70 year ASL), as indicated in Table IB above.

Q. Is it Staff's position that these events contributed to the change in the ASLs for the seven "Large" accounts it reviewed in Case No. GR-2001-629?

A. Yes.

Q. What was the effect of the changes in ASLs for those accounts?

A. In Case No. GR-2001-629, Staff determined the effect of the changes in ASLs for the seven "Large" accounts was approximately a $1 million reduction per year, based on 9-30-00 plant balances.

Q. For the 34 accounts studied in this case, how do Staff's proposed depreciation rates affect the annual depreciation accrual?

A. As seen in Table II below, the net effect of Staff's proposed depreciation rates for the 34 accounts results in a reduction of the annual depreciation accrual of approximately $500,000 per year, based on 3-31-02 plant balances.

TABLE II

Average Service Life Determination
34 Accounts

Annual accrual, ordered depreciation rates	$ 5,822,669
Annual accrual. Staff proposed depreciation rates	$ 5,309,610
Accrual reduction due to ASL changes	$ 513,059

Based on 3-31-02 Plant Balances

Q. What is Staff's recommendation for depreciation rates for the Company's remaining 34 accounts?

A. Staff's recommendation for the remaining 34 accounts is to assign depreciation rates, calculated using Staff's ASLs for each account.

OTHER ACCOUNTS

Q. Are there accounts that have accrued reserves that exceed their plant balance?

A. Yes. There are six accounts that have an accrued reserve that exceeds the account's plant balance. This represents a reserve over-accrual for each of these accounts. Staff is proposing a 0% depreciation rate for each of these accounts until new plant is added to one of these accounts, at which time a new ASL would be determined and a depreciation rate assigned if necessary. If the assets in a plant account should all be retired, the account's reserve over-recovery would be transferred to another account's reserve such that the Company and the Company's ratepayers would get the benefit of the previously paid depreciation expense. These six over-accrued accounts are:

1) [352.01] – Wells/Reservoirs-Underground Storage;
2) [361.00] - Structures-Other Store Plant;
3) [362.00] - Gas Holders;
4) [363.30] - Compressor Equipment;
5) [371.70] - Other Equipment-Transmission-Monat;
6) [386.01] - Other Property on Customers' Premises

Q. What is Staff's recommendation for depreciation rates for these six accounts?

A. Staff's recommendation for these six accounts is to assign 0% depreciation rates.

STAFF'S TREATMENT OF NET SALVAGE

Q. Can you briefly explain what Staff refers to as net salvage?

A. Yes. Net salvage is the difference between the gross salvage (value received) that will be realized when an asset is removed from service and disposed of, offset by the cost of removing that asset. For some accounts, gross salvage will exceed cost of removal and, in those cases, net salvage will be a positive value. For those accounts where net salvage is negative, because cost of removal is greater than gross salvage, Staff frequently uses the term "net salvage cost." Net salvage costs are associated with both mass property accounts and life span property accounts. "Mass Property" accounts experience "final net salvage costs" for "final retirement costs." "Mass Property" accounts are comprised of many, similar, individual items. Examples of "Mass Property" accounts include mains and services. A mass property final retirement occurs when an individual unit of plant retires.

"Life Span Property" accounts experience both "interim net salvage" for "interim retirements" and "final net salvage" for "final retirements." Final net salvage costs for life span property includes any necessary site remediation. An example of "Life Span Property" accounts is electric generation plants. A life span property interim retirement occurs when a unit of plant retires during the life of a life span property. A life span property final retirement occurs when all units of plant retire together at the end of the life span of the plant.

Q. Has Staff removed net salvage from the depreciation rate determination and included it with annual expenses?

A. Yes. Staff's depreciation rate determination is exclusive of all net salvage amounts. Staff's proposed depreciation accrual will only recover original capital plant cost. The

Company's current level of net salvage costs, based on recent historical amounts actually incurred, are included with other annual expenses by Staff.

Q. Why is it important to set recovery of net salvage costs at a current level experience by the Company?

A. It is important to set recovery of net salvage costs at a current level experienced by the Company because future net salvage costs cannot be specified and measured at the present time, either as to the time they will occur or the dollar amount that will be incurred.

Q. If net salvage recovery is set to current levels experienced by the Company, what benefits are there to the Company and its customers?

A. Setting net salvage recovery to current levels of cost of removal experienced by the Company provides the benefit that the ratepayer pays costs that are actually incurred and it ensures that the Company recovers the costs associated with plant that is actually removed.

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Q. How does this change of booking net salvage costs as an expense rather than to the depreciation accrual affect the depreciation rate determination?

A. This change of booking net salvage costs as an expense rather than to the depreciation accrual changes the numerator in the depreciation rate determination formula as shown in Table III below:

TABLE III

Depreciation Rate Determination

Traditional Whole Life:	Depreciation Rate % = {[100 % - Net salvage %] / ASL}
Current Level of Net Salvage:	Depreciation Rate % = {[100 % - X %*] / ASL}
No Net Salvage:	Depreciation Rate % = {100 % / ASL}

* In the formula, X % is also a net salvage % but it is calculated differently than in the Traditional Whole Life depreciation rate determination.

The depreciation rate determination illustration below will show how the net salvage % is derived.

Q. At this time does the Company recover cost of removal based on their "current" (at the time they filed their last rate case) level of spending for cost of removal or on their estimated future level?

A. Yes. They are recovering cost of removal based on their current level of spending for cost of removal.

Q. Can you provide an example that illustrates the differences in the three depreciation rate determinations you have presented?

A. Yes. The three depreciation rate determination formulas, as given in Table III above, will be applied to a possible set of plant data to illustrate the differences in methodology and outcome. It is important to note the difference between "**Current Net Salvage Cost"** and the "**Accrual for Net Salvage Annually"** amount for each of the three scenarios. In this illustration, the depreciation rates developed using the "Traditional Whole Life" determination accrues for net salvage costs at levels far exceeding current net salvage cost.

DEPRECIATION RATE DETERMINATION ILLUSTRATION

Plant Data for all examples:

Plant Balance = $500 M
Plant ASL = 50 yrs.
Current Net Salvage Cost = $100,000
Gross Salvage = $0
Current Dollars of Plant Retired = $50,000

EXAMPLE I

"Traditional Whole Life" depreciation rates

Annual Depreciation Rate % =
{[($original cost of plant retired / $original cost of plant retired) – (($gross salvage - $cost of removal) / $original cost of plant retired)] / ASL yrs}

= {[100 % - Net salvage %] / ASL yrs}
= {[100% - (-$100,000 / $50,000)] / 50 yrs}
= {[100% - <200 %>] / 50}
= {[300 %] / 50} = {3 / 50}
= 6.00 % Depreciation Rate

Annual Depreciation Accrual = Annual Depreciation Rate % * Plant Balance $
= {6 % Depreciation Rate * $500 M}
= {0.06 * 500,000,000}
= $30 Million Annual Accrual

(Annual Accrual for Net Salvage is $20 Million)
(Annual Accrual for original plant cost is $10 Million)

EXAMPLE II

"Laclede's post-GR-98-374" depreciation rates

Annual Depreciation Rate % = {[100 % - X %] / ASL}

X %, net salvage percentage, is determined by a separate calculation such that the current net salvage experienced by the Company equals the net salvage percentage divided by ASL and multiplied times current plant balance. The net salvage percentage is determined mathematically as follows:

{-$100,000 = [(X % / 50 yrs) * ($500M)]};

[X % = -1 %]

Therefore, a net salvage percent of negative one percent is used in the depreciation formula so that the Company is made whole for their $100,000 of net salvage costs. The calculation of the appropriate depreciation rate can now be determined.

Annual Depreciation Rate % = {[100 % - <1 %>] / 50}
= {[101 % / 50} = {1.01 / 50}
= 2.02 % Depreciation Rate

Annual Depreciation Accrual = {2.02 % Depreciation Rate * $500 M}
= {0.0202 * 500,000,000}
= $10.1 Million Annual Accrual

(Annual Accrual for Net Salvage is $100,000)
(Annual Accrual for original plant cost is $10 Million)

EXAMPLE III

"Laclede's post GR-2001-629" depreciation rates

Annual Depreciation Rate % = {100 % / ASL}
= {[100 %] / 50 yrs.}
= {[100 %] / 50} = {1 / 50}
= 2.00 % Depreciation Rate

Annual Depreciation Accrual = {2.00 % Depreciation Rate * $500 M}
= {0.02 * 500,000,000}
= **$10 Million Annual Accrual***

(Annual Accrual for Net Salvage is $ 0 Annually)
(Annual Accrual for original plant cost is $10 Million)

> *An additional annual expense of $100,000 for net salvage costs, based on recent historical actual amounts incurred, would also be included with other expenses by Staff auditors.

Q. Have you seen even other proposals on ways to establish the net salvage percent in the "Traditional Whole Life" depreciation rates?

A. Yes. Some companies estimate future decommissioning costs for life span plant and propose to build these costs in the depreciation rate formula as a negative net salvage percent; my illustration above did not present the effects of doing future net salvage estimates this way. However, Staff's concern with estimating future decommissioning costs for life span plant and building these costs in the depreciation rate formula as a negative net salvage percent is, as I stated earlier, because these costs cannot be specified and measured at the present time, either as to the time they will occur or the dollar amount that will be incurred.

Q. Have other depreciation experts stated concerns about estimations of future net salvage costs?

A. Yes. Thomas Sullivan of Black and Veatch, depreciation consultant for Missouri Gas Energy (MGE), presented this concern in his depreciation study for the recent Case No. GR-2001-292. Mr. Sullivan's statement mirrors Staff's concern regarding estimations of future net salvage costs that may never occur. With regard to the inclusion of net salvage cost in the depreciation accrual, he states:

> Problems may result (especially with mains and services) if the net salvage allowance is large and a relatively small amount of plant is being retired. A large depreciation reserve may be accumulated in anticipation of cost of removal expenses that may or may not occur. … (Sullivan, Executive Summary, p. 11, §3.4)

Q. Is it your conclusion that net salvage costs should be determined based on current experience, as exhibited by recent historical amounts actually incurred?

A. Yes.

Q. Is there any guarantee that the dollars a regulated utility has collected in the depreciation reserve for future net salvage costs will be available years from now when the company may have the liability for cost of removal of its plant?

A. The only arrangement that currently exists for future net salvage costs to be collected and guaranteed to exist when plant cost of removal occurs is the decommissioning fund for nuclear generation facilities.

Q. Is it possible for the utilities to establish a fund (so that the dollars collected for net salvage costs can be guaranteed to be available for plant cost of removal), that is designated with the sole purpose of collection and distribution of dollars for dismantling and, if necessary, brownfield reclamation of retired plant and sites?

A. Yes, if the Commission orders the utilities to establish such a fund.

Q. Would these dollars then be available for a utility's other infrastructure needs?

A. No.

Q. Is Staff's treatment of net salvage cost in this case consistent with recent Commission decisions?

A. Yes. In The Empire District Electric Company, Case No. ER-2001-299, the Commission stated, "The Commission finds that net salvage cost considered in setting rates should be based on historical net salvage cost that was actually incurred in the recent past and that it should be treated as an expense."

Q. Did Staff determine the effect of removing the net salvage from the depreciation rate in Case No. GR-2001-629?

A. Yes. As seen in Table IV below, the net effect of removal of net salvage from the depreciation rate was a reduction in annual depreciation accrual of approximately $2 million, based on 9-30-00 plant balances *and* relative to depreciation rates in effect at that time of Staff's study in that case.

TABLE IV

Net salvage Determination
"Large" Accounts
Case No. GR-2001-629

"Ordered" annual accrual (Life and Net Salvage)	$17,156,356
"Ordered" annual accrual, Life only	-$15,433,831
Accrual reduction due to expensing net salvage	$ 1,722,525

Based on 9-30-00 Plant Balances

Q. Has Staff determined an amount of net salvage cost that should be included as an annual expense in this case?

A. Yes. Staff has determined that approximately $4.2 million of net salvage cost should be included as an annual expense in this case. The determination of this value is discussed in Staff Accounting witness Stephen M. Rackers' testimony.

NEGATIVE AMORTIZATION OF THE ACCRUED RESERVE TO REVERSE DEPRECIATION RESERVE OVER-ACCRUALS

Q. Can you describe the relationship between the annual accrual and the accrued reserve?

A. Yes. The annual accrual is the amount booked to the accrued reserve each year.

Q. Can you briefly explain what is meant by an over-accrual and an under-accrual of the reserve?

A. Yes. An over-accrual and under-accrual of the reserve are terms comparing the amount currently in the reserve to a theoretical reserve amount. The theoretical reserve for an account is a determination of the level of accrued reserve that the Company should have received up to the present time such that the total original cost of in service plant will be recovered over the ASL. The theoretical reserve calculation is a determination of what total recovery should be for the date of the analysis, given the percent of plant surviving for each age of plant currently in service.

Q. Was the Gannet-Fleming program used by Staff to calculate the theoretical reserve for each account studied?

A. Yes.

Q. Is the Company's accrued reserve for the "Large" accounts greater than or less than the theoretical reserve determined in the depreciation study, based on 9-30-00 reserve balances?

A. As shown in Table V below, the accrued reserve for these seven accounts was greater than the theoretical reserve. The reserve was over-accrued by approximately $125 million.

TABLE V

Over-Accrual Determination
"Large" Accounts
Case No. GR-2001-629

Total accrued reserve	$301,682,337
Theoretical accrual	-$176,830,336
Reserve over-accrual	$124,852,001

Based on 9-30-00 Reserve Balances

Q. Is the Company's accrued reserve for the 35 small accounts greater than or less than the theoretical reserve determined in this depreciation study, based on 9-30-00 reserve balances?

A. The accrued reserve for these 35 accounts is greater than the theoretical reserve. For these 35 accounts, the reserve is over-accrued by approximately $16 million.

Q. Can you give Staff's determination for the Company's over-accrual?

A. Yes. Staff has determined that over time, the Company's depreciation rates, based on the "Traditional Whole Life" determination, have been too high creating an accrued reserve that is much larger than the theoretical reserve calculation.

The over-accrual is due to two components. The first is the ASL. Former depreciation rates, based on ASL that has underestimated the life of the plant in an account, generated an annual depreciation expense that was too high and an accrual that was too large. This has created a portion of the Company's over-accrual.

The second component is the determination of net salvage percentage. Net salvage percentage (as previously shown on page 15) is the ratio of "current net salvage experienced for retired plant" divided by the "original capital cost of that retired plant." In past years, the "traditional whole life" depreciation rate determination was used by Laclede, allowing a reserve "build-up" for estimated future removal costs.

Q. Can you provide an example that illustrates how estimated future removal costs causes a "build-up" in the reserve?

A. Yes. As shown in the example presented earlier, a company spends $100,000 to remove plant that originally cost $50,000 and there is no gross salvage, the net salvage percent is a negative 200%: **{(-$100,000/$50,000)*100%} = <200%>.** Even though it is unknown if, in

the future, net salvage will continue to be a negative 200%, the "traditional whole life" depreciation rate determination (as previously shown on page 15) incorporates this negative 200% to determine the depreciation rate on a going forward basis.

It is Staff's position that it is not reasonable to assume that the net salvage experience for a small span of time applies to all plant in the future. Observing the large magnitude of the over-accrual and low cost of removal expenses actually incurred, Staff's analysis has shown that former depreciation rates, which were based on large negative net salvage percentages experienced during a small span of time, have generated a depreciation accrual that was too high. Consequently, the accrued reserve balance is excessive. Therefore, the Commission should prescribe a depreciation rate to recover only the original capital cost of plant, as previously discussed. Laclede should recover any net salvage costs as an expense.

Q. What is the effect on the accrued reserve of a large annual over-accrual occurring over several years?

A. The effect on the accrued reserve of a large annual over-accrual occurring over several years is that the accrued reserve now exceeds the theoretical reserve by a significant amount.

Q. Is the current reserve over-accrual of approximately $141 million ($125 million + $16 million) consistent with past Staff depreciation studies?

A. Yes. In Case No. GR-99-315, Staff witness Paul W. Adam identified a reserve over-accrual of approximately $100 million.

Q. What is the benefit to the Company of a large over-accrual in the reserve?

A. The Company benefits by having cash to spend in any manner it wishes.

Q. How does Staff propose Laclede's reserve over-accrual of approximately $141 million be reduced?

A. Staff recommends reducing this large over-accrual by applying a negative amortization to the accrued reserve of the two accounts with the largest over-accruals, accounts 376.01, Steel Mains and 380.02 Plastic & Copper Services. Also, Staff recommends a transfer of $5 million of the over-accrual from the reserve account with the third largest over-accrual 380.01, Steel Services to the reserve account for 362.00, Gas Holders, leaving a $136 million over-accrual. Discussion of account 362.00, Gas Holders, follows later in the testimony. Staff proposes the Company amortize the remaining $136 million over a 40-year period. This annual amortization of $3.4 million is designed to eliminate the Company's existing over-accrual over the 40-year period. Staff recommends the Commission order a total negative annual amortization of $3.4 million, which will be divided into a negative annual amortization of $2.4 million from the accrued reserve of account 376.01, Steel Mains and a negative annual amortization of $1.0 million from the accrued reserve of account 380.02, Plastic & Copper Services

Q. Will Staff review the level of the Company's accrued reserve in future depreciation studies and recommend any necessary adjustments?

A. Yes.

GAS HOLDERS

Q. Does Staff's treatment of depreciation rates to only recover original capital plant cost include other issues?

A. Yes. If Company has final retirement of life span plant, the cost of dismantling needs to be addressed.

Q. Does the Company have life span plant that could possibly incur final retirement costs?

A. Yes. The Company has in the St. Louis area four gas holders, which are expandable above-ground storage facilities built more than 50 years ago.

Q. Does Staff have concerns with identifying specific and measurable costs for dismantling the four gas holders?

A. Yes. Laclede has suggested since at least 1996 that dismantling of the gas holders was imminent. In Case GR-96-193 Company witness Harry R. Haury, III identified its consultant's (Black and Veatch) estimate of total cost to remove the gas holders at $8,723,900. In Case No. GR-99-315 Company witness Richard A. Kottemann, Jr., identified its consultant's (Creamer Environmental, Inc.) estimate of total cost to remove the gas holders at $4,779,700. The gas holders are no longer used and useful according to the Company.

Q. Does Staff propose any actions for final retirement of the Company's four gas holders, which are "Life Span" type plant?

A. Yes. First, Staff proposes the Company transfer $5 million of the Company's over-accrued reserve for account 380.01, Steel Services to the reserve for account 362.00, Gas Holders, for the final removal costs of the four gas holders.

Second, the Staff proposes the Company provide to the PSC's Engineering and Management Services Department quarterly updates of the dismantling of the four gas holders from the date of the Order of this case until the last gas holder is dismantled.

Staff recommends the Commission order the Company to transfer $5 million to the gas holder reserve account to cover final removal costs and submit quarterly updates of gas holder dismantlement.

STAFF'S PROPOSAL

Q. Can you provide a summary of Staff's proposal for depreciation rates, annual accrual reductions; negative amortizations to reduce the Company's over-accrued depreciation reserve; transfer of $5 million of depreciation reserve over-accrual to the reserve for the Gas Holders, and quarterly updates of the dismantling of the four gas holders?

A. Yes. Staff recommends the Commission order:

1. That Staff's Proposed Depreciation Rates, as shown in Schedule 2 attached to this direct testimony, be effective on the date of the Commission Order in this case with an annual accrual reduction of approximately $500,000 that result from Staff plant ASLs and that the Company's depreciation rate be 0% for accounts 352.01, 361.00, 362.00, 363.30, 371.70 and 386.01;

2. That the Company's depreciation rates recover only the original capital plant cost;

3. That the Company's current level of net salvage expense, approximately $4,200,000, be treated as an annual expense and not as an adjustment to depreciation rates;

4. That the Company book a negative annual amortization of $2.4 million per year to the over-accrued depreciation reserve of account 376.01, Steel Mains and a negative annual amortization of $1 million per year to the over-accrued depreciation reserve of account 380.02, Plastic and Copper Services;

5. That the Company transfer $5 million from the over-accrued depreciation reserve of account 380.01, Steel Services to the accrued reserve of account 362.00, Gas Holders; and

6. That the Company provide to the PSC's Engineering and Management Services Department quarterly updates of the dismantling of the four gas holders from the date of the Order of this case until the last gas holder is dismantled.

Q. Does this conclude your direct testimony?

A. Yes, it does.

CASE PROCEEDING PARTICIPATION

ROSELLA L. SCHAD

COMPANY	CASE NO.
Iamo Telephone Company	TT-2001-116
Peace Valley Telephone Company	TT-2001-118
Holway Telephone Company	TT-2001-119
KLM Telephone Company	TT-2001-120
Ozark Telephone Company	TC-2001-402
Osage Water Company	SR-2000-556
Osage Water Company	WR-2000-557
Northeast Missouri Rural Telephone Company	TR-2001-344
Oregon Farmers Mutual Telephone Company	TT-2001-328
Laclede Gas Company	GR-2001-629