

Exhibit No.:

Issue:

Witness:

Sponsoring Party:

Type of Exhibit:

Case No.:

Date:

Depreciation

Donald S. Roff

Empire District

Rebuttal Testimony

ER-2004-0570

November 4, 2004

FILED³

DEC 2 8 2004

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

**Missouri Public
Service Commission**

REBUTTAL TESTIMONY

OF

DONALD S. ROFF

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2004-0570

Exhibit No. 19
Case No(s) ER-2004-0570
Date 12-06-04 Rptr KF

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**BEFORE THE PUBLIC SERVICE COMMISSION
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REBUTTAL TESTIMONY

OF

DONALD S. ROFF

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2004-0570

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In The Matter of the Tariff Filing of The Empire)
District Electric Company to Implement a)
General Rate Increase for Retail Electric)
Service Provided to Customers in its)
Missouri Service Area.)

Case No. ER-2004-0570

AFFIDAVIT OF DONALD S. ROFF

STATE OF TEXAS)

) ss.

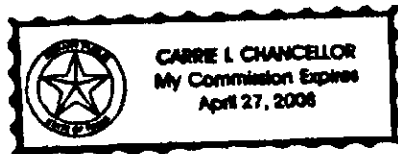
COUNTY OF DALLAS)

Donald S. Roff, being of lawful age, on his oath states: that he has participated in the preparation of the following rebuttal testimony in question and answer form to be presented in the above case; that the answers in the following 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.

Donald S. Roff
Donald S. Roff

Subscribed and sworn to me this 15th day of November 2004

Carrie L Chancellor
Notary



DONALD S. ROFF
REBUTTAL TESTIMONY

REBUTTAL TESTIMONY
OF
DONALD S. ROFF

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DONALD S. ROFF
REBUTTAL TESTIMONY

REBUTTAL TESTIMONY
OF
DONALD S. ROFF
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2004-0570

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS**
3 **ADDRESS.**

4 A. My name is Donald S. Roff and I am a Director with the public accounting
5 firm Deloitte & Touche LLP. My business address is 2200 Ross Avenue,
6 Suite 1600, Dallas, Texas 75201.

7 **Q. ARE YOU THE SAME DONALD S. ROFF THAT FILED DIRECT**
8 **TESTIMONY IN THIS PROCEEDING?**

9 A. Yes, I am.

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 A. The purpose of my rebuttal testimony is to respond to the direct testimony and
12 positions put forth by Missouri Public Service Commission Staff ("Staff")
13 witnesses Mr. Gregory E. Macias and Ms. Leasha S. Teel and Missouri Office
14 of the Public Counsel ("OPC") witness Mr. Michael J. Majoros, Jr. on the
15 subjects of depreciation and depreciation accounting. I shall demonstrate that
16 the Staff proposal is improper, is lacking in support, ignores regulatory rules,
17 and represents virtually no change to the existing, approved depreciation rates

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1 for many asset categories. While no change to the existing approved
2 depreciation rates may be an acceptable result if no outside factors or
3 requirements are in place, it is a totally unacceptable result when such factors
4 and requirements are in effect. I shall demonstrate that the OPC testimony
5 and proposal is without merit as Mr. Majoros incorrectly commingles
6 accounting principles, regulatory accounting requirements and ratemaking
7 concepts, as well as presents misleading and incorrect interpretations of
8 accounting standards and regulatory rules. In both instances, the opposing
9 parties propose depreciation expense levels that are inadequate by any
10 reasonable measure.

11 **Q. WHAT DID YOU DO TO DEVELOP THIS REBUTTAL**
12 **TESTIMONY?**

13 A. In general, I read Mr. Majoros', Mr. Macias' and Ms. Teel's testimonies and
14 reviewed their various Schedules and Exhibits. I reviewed the work papers
15 developed in my depreciation study. I reviewed and evaluated various data
16 requests and responses prepared in this proceeding. I reviewed Missouri
17 Statutes and Rules concerning asset accounting and depreciation, in particular
18 4 CSR 240-20, as well as the Report and Order from Case No. ER-2001-299.
19 I also re-examined Order No. 631 of the Federal Energy Regulatory
20 Commission ("FERC") and the provisions and requirements of Statement of
21 Financial Accounting Standards No. 143, *Accounting for Asset Retirement*
22 *Obligations*. I have also read various testimonies in other proceedings before
23 this Commission on the topic net salvage, in particular Case No. GR-99-315.

1 **Q. DO YOU SPONSOR ANY EXHIBITS?**

2 A. Yes. Rebuttal Exhibit DSR-1R has been prepared to summarize the
3 depreciation proposals of the various parties in this proceeding. Exhibit DSR-
4 2R is a similar summary but utilizes the actual depreciation rates requested by
5 the Company's filing. This issue will be address later in my rebuttal
6 testimony. Additional exhibits in the form of workpapers will be described
7 later in my rebuttal testimony.

8 **Q. CAN YOU SUMMARIZE THE MOST IMPORTANT DEPRECIATION**
9 **ISSUE IN THIS PROCEEDING?**

10 A. There is no dispute as to this matter. The single, most important issue related
11 to depreciation in this proceeding is the subject of net salvage¹ and its
12 inclusion in depreciation rates.

13 **POSITION OF STAFF WITNESSES MR. MACIAS AND MS. TEEL**

14 **Q. PLEASE SUMMARIZE THE POSITION OF STAFF WITNESSES MR.**
15 **MACIAS AND MS. TEEL.**

16 A. Mr. Macias has, in my opinion, performed a very limited review of historical
17 depreciation data. With respect to Production Plant, Mr. Macias recommends
18 continuation of the use of the existing depreciation rates, with the exception of
19 those asset categories for which the accumulated depreciation balance exceeds
20 the plant balance. For Transmission, Distribution and General Plant (mass
21 asset accounts), he has relied solely upon historical analysis results with little
22 or no interpretation of results, consideration of asset mix, or evaluation of

¹ Net salvage is the difference between salvage and cost of removal; when cost of removal exceeds salvage, negative net salvage occurs.

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1 Company plans and expectations. More importantly, he has neglected to
2 incorporate net salvage into his depreciation rate proposals. Ms. Teel
3 proposes to recover net salvage as a separate expense item based upon a five-
4 year average of historic net salvage costs. As shown on Exhibit DSR-1R, use
5 of the Staff proposed depreciation rates applied to June 30, 2004 test year
6 jurisdictional balances results in a decrease in annual depreciation expense of
7 about \$788,000 from the level of depreciation expense developed by
8 application of the existing depreciation rates to the same balances, (i.e., the
9 difference between Column 5 and Column 11). Use of the Staff proposed
10 depreciation rates results in a reduction in annual depreciation expense of over
11 \$25.9 million compared with the application of my recommended depreciation
12 rates applied to the same balances (i.e., the difference between Column 7 and
13 Column 11).

14 **Q. DO YOU HAVE ANY COMMENTS REGARDING THE LIFE**
15 **ANALYSES CONDUCTED AND UTILIZED BY MR. MACIAS FOR**
16 **THE TRANSMISSION, DISTRIBUTION AND GENERAL PLANT**
17 **ASSET CATEGORIES?**

18 **A.** Yes. I am concerned with Mr. Macias' rather strict reliance solely on history.
19 There are general conditions that must be met in order to judge the value of
20 inferences drawn from data used in statistical life analysis. These include:

- 21 1. Some uniform and consistent relationship between retirements
22 and age exists;
- 23 2. Experience be homogeneous throughout the period of study;
24 and

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1 3. No material changes in conditions affecting the series of data
2 have taken place.²
3

4 I have reviewed the life analysis plots provided by Mr. Macias in his
5 workpapers. While I have no quarrel with the visible quality of the curve fits
6 provided, there is little or no qualitative information contained in Mr. Macias'
7 workpapers or testimony. My study, on the other hand, encompassed both an
8 evaluation of history and an evaluation of future expectations.

9 **POSITION OF OPC WITNESS MR. MAJOROS**

10 **Q. DO YOU HAVE ANY COMMENTS REGARDING THE LIFE**
11 **ANALYSIS OF PRODUCTION PLANT CONDUCTED BY MR.**
12 **MAJOROS?**

13 A. Yes. First, I would point out that the life analysis of Production Plant
14 conducted by Mr. Majoros suffers the same data constraints as described
15 above. It is unclear to me that the data utilized for the life analysis of
16 Production Plant meets these data constraints. Second, while it is true that
17 Empire has the aged property accounting data from which to construct
18 actuarial life tables, it does not follow that such data produce reliable and
19 predictive life analysis indications. The number of surviving units contained
20 in the life analysis of the Steam Production function is no more than five. By
21 this I mean there are only five generating units contained in the actuarial
22 population. This is truly a limited sample and makes reliance on the output
23 results tenuous, at best. I believe that Mr. Majoros has conducted a
24 technically correct actuarial life analysis of each of the accounts within the

² *Methods of Estimating Utility Plant Life*, Edison Electric Institute, 1952, page 5.

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1 Production Plant function; that is, Mr. Majoros has utilized aged retirement
2 and survivor information in developing historical life tables. However, such
3 results are unreliable and, more importantly, inconclusive with respect to their
4 relevance to future service life patterns and depreciation calculations because
5 the results are predicated on a limited sample population not predictive of
6 future activity. More to the point, a valid and predictive actuarial analysis
7 should contain past retirements of full generating units. The actuarial data for
8 Steam Production Plant does not contain such activity, making survivor curve
9 predictions inaccurate. The life span approach that I have employed more
10 properly reflects the survival relationship of these asset groups, and, in turn,
11 develops more appropriate depreciation rates.

12 **Q. CAN YOU EXPLAIN THIS LAST POINT FURTHER?**

13 A. Yes. For example, Mr. Majoros has selected an R2.0 retirement dispersion
14 with an average service life of 93 years for Account 311, Steam – Structures
15 and Improvements, based *solely* on history. This curve and life combination
16 indicates a final retirement for this asset group at age 172 years! And over
17 54% of the original asset base will attain an age of 93 years prior to
18 retirement. Such a result is illogical and the associated life is excessive for the
19 determination of appropriate depreciation rates. The investments in Account
20 311 for the Iatan Plant, installed in 1980, will not become fully depreciated
21 until the year 2152, and will only become 50% depreciated some 34 years
22 from today. The life span procedure that I have utilized will result in the Iatan
23 Plant being fully depreciated in the 2020. This dramatic difference is cause

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1 for concern. It should be noted that the Staff's average service life
2 recommendation for Account 311 is even longer than the OPC selection.
3 Taking Production Plant as a whole, the composite average service life
4 developed by the Staff in this proceeding is over 49 years. This is exceeded
5 by the composite average service life of over 52 years developed by the OPC.
6 My composite average service life is just under 36 years. These differences
7 are too large to ignore.

8 **Q. ARE THE LIFE ANALYSES THAT WERE CONDUCTED BY OPC IN**
9 **THIS PROCEEDING MEANINGFUL?**

10 A. They may be meaningful in that they reflect what history has occurred, but
11 they are NOT conclusive or predictive for estimating services lives to be used
12 for calculating depreciation rates. In fact, on several of his work papers Mr.
13 Majoros has included notes saying "Not enough data for Actuarial Analysis"
14 or "insufficient retirements/exposures".

15 **Q. WHY DID YOU USE A LIFE SPAN FORECAST APPROACH?**

16 A. I utilized a life span forecast approach because such a methodology best
17 matches what happens in real life to generation facilities. What happens to
18 generation facilities in real life is that they die (retire) at one point in time.
19 My approach is designed to recognize this eventuality.

20 **Q. IS MR. MAJOROS CORRECT IN SAYING THAT THIS**
21 **COMMISSION FOUND THE LIFE SPAN METHOD TO BE**

1 **INAPPROPRIATE IN CASE NO. ER-2001-299 AND THAT IT WAS**
2 **SPECIFICALLY REJECTED BY THIS COMMISSION³?**

3 A. No. I believe the Order and Report in that case stated that the Commission
4 found the unit retirement dates sponsored by Empire's consultant were not
5 credible. The Commission did not reject the life span methodology.

6 **Q. WHAT MAKES THE RETIREMENT DATES THAT YOU HAVE**
7 **USED IN YOUR LIFE SPAN METHODOLOGY CREDIBLE?**

8 A. Based upon my discussions with Company personnel, the retirement dates
9 provided to me were based upon consideration of economic and operating
10 factors in force today and represent the Company's best estimate of a life span
11 for cost allocation purposes for depreciation expense determination
12 recognizing routine maintenance and normal capital replacements. Thus these
13 dates represent Empire's particular experience and planning.

14 **Q. PLEASE SUMMARIZE THE POSITION OF OPC WITNESS MR.**
15 **MAJOROS.**

16 A. Mr. Majoros makes no changes to my service life recommendations for mass
17 asset categories (Transmission, Distribution and General Plant functional
18 categories)⁴. For the Production Plant categories, he claims Empire's
19 proposed depreciation rates are excessive because they are based on lives that
20 are too short or unsupportable net salvage allowances.⁵ As shown on Rebuttal
21 Exhibit DSR-1R, the effect on annual depreciation expense resulting from
22 application of the OPC proposed depreciation rates is an increase of about

³ Majoros Testimony, page 4, lines 9 and 10.

⁴ Majoros Direct Testimony, page 5, line 10.

⁵ Ibid, page 12, lines 12 through 15.

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1 \$630,000 (i.e., the difference between Column 5 and Column 9), when
2 compared with the level of depreciation expense developed by application of
3 the existing depreciation rates. The OPC proposed depreciation expense is
4 approximately \$24.5 million lower when compared to the application of my
5 recommended depreciation rates to the same balances (i.e., the difference
6 between Column 7 and Column 9).

7 Mr. Majoros effectively proposes the use of a "cash" basis for the net salvage
8 component of depreciation expense. Mr. Majoros also claims that Empire's
9 filing, through my direct testimony, reverses several decisions made by this
10 Commission just three years ago. I will demonstrate that this is not the case.
11 Finally, Mr. Majoros makes a very restrictive and incorrect interpretation of
12 the provisions of SFAS No. 143 and FERC Order No. 631. I will provide a
13 proper interpretation and demonstrate the flaws contained in his testimony.

14 **Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING THE**
15 **TESTIMONY OF MR. MAJOROS ON THE ISSUE OF NET**
16 **SALVAGE?**

17 A. Yes. A careful reading of his testimony and a knowledgeable understanding
18 of depreciation accounting reveals that Mr. Majoros has provided incorrect
19 interpretations of regulatory rules and accounting pronouncements and
20 commingled regulatory accounting requirements with financial reporting
21 standards and ratemaking principles. Further, Mr. Majoros makes
22 unsupported claims and comments in his testimony. My rebuttal testimony
23 sorts out these misinterpretations, and properly segregates the separate

1 components of regulatory accounting, financial reporting and ratemaking, as
2 well as highlights the areas where Mr. Majoros provides unsupported
3 statements. In order to understand the significance of these comments, a
4 discussion of regulatory accounting principles, financial reporting principles
5 and ratemaking concepts will follow. The purpose of these discussions is to
6 illustrate how regulatory accounting, financial reporting and ratemaking are
7 separate and distinct concepts and activities, and that it is improper to
8 combine them.

9 **NET SALVAGE REGULATORY ACCOUNTING PRINCIPLES**

10 **Q. WHAT ARE THE PERTINENT REGULATORY ACCOUNTING**
11 **PRINCIPLES WITH RESPECT TO NET SALVAGE AS A**
12 **COMPONENT OF DEPRECIATION?**

13 A. The Uniform System of Accounts ("USOA") provides the regulatory
14 accounting framework for depreciation. The pertinent definitions are listed on
15 page 1 of Schedule DSR-3, as part of my direct testimony. These regulatory
16 definitions clearly include net salvage as a component of depreciation. In
17 addition, there are basic accounting instructions within the USOA that
18 indicate the intent of the USOA with respect to depreciation and net salvage,
19 e.g.,

20 When a retirement unit is retired from electric plant, with or without
21 replacement, the book cost thereof shall be credited to the electric
22 plant account in which it was included, determined in the manner set
23 forth in paragraph D, below. If the retirement unit is of a depreciable
24 class, the book cost of the unit retired and credited to electric plant
25 shall be charged to the accumulated provision for depreciation
26 applicable to such property. *The cost of removal and the salvage*

1 *shall be charged or credited, as appropriate, to such depreciation*
2 *account.*⁶ (Emphasis added)
3

4 Also under the description for Account 403, Depreciation Expense,

5 The utility shall keep such records of property and property
6 retirements as will reflect the service life of property which has been
7 retired and aid in estimating probable service life by mortality,
8 turnover, or other appropriate methods; and also such records as will
9 reflect *the percentage of salvage and costs of removal for property*
10 *retired from each account, or subdivision thereof, for depreciable*
11 *electric plant.* (Emphasis added).
12

13 Also, General Instruction 22 states the following:

14 Depreciation Accounting.

15 A. Method. Utilities must use a method of depreciation that allocates
16 in a systematic and rational manner the service value (difference
17 between original cost and net salvage value of utility plant) of
18 depreciable property over the service life of the property.

19 B. Service lives. Estimated useful service lives of depreciable
20 property must be supported by engineering, economic, or other
21 depreciation studies.

22 C. Rates. Utilities must use percentage rates of depreciation that are
23 based on a method of depreciation that allocates in a systematic and
24 rational manner the service value of depreciable property to the service
25 life of the property. Where composite depreciation rates are used, they
26 should be based on the weighted average estimated useful lives of the
27 depreciable property comprising the composite group.
28

29 **Q. WHY HAVE YOU EMPHASIZED THESE INSTRUCTIONS?**

30 A. These instructions have been emphasized to demonstrate that the regulatory
31 rules require inclusion of net salvage in the depreciation rate calculation.

32 **Q. ARE THERE ANY OTHER REGULATORY RULES RELATIVE TO**
33 **DEPRECIATION OR NET SALVAGE?**

34 A. Yes. FERC Order No. 631 provides the regulatory framework for the
35 accounting, financial reporting and ratemaking related to Asset Retirement

⁶ Electric Plant Instruction ("EPI") 10.B.2

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Obligations ("ARO's") defined for financial reporting purposes in Statement of Financial Accounting Standards ("SFAS") No. 143, *Accounting for Asset Retirement Obligations*. Essentially Order No. 631 amended the various USOA's promulgated by the FERC, and added certain new accounts to record ARO's asset retirement costs ("ARC's") and accretion expense. Contrary to Mr. Majoros' interpretation, Order No. 631 did not address the accounting for non-legal obligations, as clearly demonstrated by the following two statements:

The Commission did not propose any changes to its existing accounting requirements for cost of removal for non-legal retirement obligations.⁷

The accounting for removal costs that do not qualify as legal retirement obligations falls outside the scope of this rule. The Commission is aware that there is an ongoing discussion in the accounting community as to whether the cost of removal should be considered as a component of depreciation. However, this issue is beyond the scope of this rule and we are not convinced that there is a need to fundamentally change accounting concepts at this time.⁸ (Emphasis added)

This calls into question the underlying premise of Mr. Majoros' testimony concerning Order No. 631. There is a significant difference between *accounting* for cost of removal and *maintaining* subsidiary records^{9,10}. As a

⁷ Order No. 631, Paragraph 36.

⁸ Ibid, Paragraph 37.

⁹ Ibid, Paragraph 38. "Instead we will require jurisdictional entities to maintain separate subsidiary records for cost of removal for non-legal retirement obligations that are included as specific identifiable allowances recorded in accumulated depreciation in order to separately identify such information to facilitate external reporting and for regulatory analysis, and rate setting purposes. Therefore, the Commission is amending the instructions for account 108 and 110 in Parts 101, 201 and account 31, Accrued depreciation – Carrier property, in Part 352 to require jurisdictional entities to maintain separate subsidiary records for the purpose of identifying the amount of specific allowances collected in rates for non-legal retirement obligations included in the depreciation accruals."

1 result, Mr. Majoros has reached an incorrect conclusion and provided
2 misleading testimony. For example, a company likely maintains time cards to
3 support payroll expense (i.e., subsidiary records), but it does not account for
4 each person's payroll costs on its Balance Sheet or Income Statement.
5 Moreover, only specific identifiable allowances collected in rates must be
6 separately quantified. Empire has no specific identifiable cost of removal
7 component in any of its approved depreciation rates making this requirement
8 moot. A further discussion regarding net salvage will be provided later in my
9 rebuttal.

10 **FINANCIAL REPORTING PRINCIPLES**

11 **Q. WHY DO YOU SEGREGATE REGULATORY ACCOUNTING FROM**
12 **FINANCIAL REPORTING?**

13 A. I differentiate regulatory accounting from financial reporting because they are,
14 in fact, two different concepts. In my view, regulatory accounting refers to
15 the process of recording cost information as prescribed by the USOA and
16 Missouri Public Service Commission Rules. Financial reporting deals with
17 the preparation of financial statements consistent with Generally Accepted
18 Accounting Principles ("GAAP") as mandated by the Securities and Exchange
19 Commission ("SEC") for public companies, and includes application of the

⁹ Ibid, Paragraph 39. "Jurisdictional entities must identify and quantify in separate subsidiary records the amounts, if any, of previous and current accrued accumulated removal costs for other than legal retirement obligations recorded as part of the depreciation accrual in accounts 108 and 110 for public utilities and licensees, account 108 for natural gas companies, and account 31 for oil pipeline companies. If jurisdictional entities do not have the required records to separately identify such prior accruals for specific identifiable allowances collected in rates for non-legal asset retirement obligations recorded in accumulated depreciation, the Commission will require that the jurisdictional entities separately identify and quantify prospectively the amount of current accruals for specific allowances collected in rate for non-legal obligations."

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1 Financial Accounting Standards Board's ("FASB") various standards.
2 Regulatory accounting develops similar financial statements only reflective of
3 the rules and reporting requirements of the Missouri Public Service
4 Commission.

5 **Q. WHAT IS THE PRIMARY DIFFERENCE BETWEEN UTILITY**
6 **REGULATORY ACCOUNTING AND GAAP FINANCIAL**
7 **STATEMENTS?**

8 A. In my view, the only difference is the ability to create and record regulatory
9 assets and regulatory liabilities. These two items represent deferrals on the
10 balance sheet that would not be allowed under conventional GAAP.

11 **Q. CAN YOU PROVIDE AN EXAMPLE OF A REGULATORY ASSET**
12 **OR REGULATORY LIABILITY?**

13 A. Yes. At page 28 of its 2003 Annual Report, Empire states the following with
14 respect to SFAS No. 143:

15 Upon adoption of this statement in the first quarter of 2003, we
16 recorded a non-recurring discounted liability and a regulatory asset of
17 approximately \$630,000 because we expect to recover these costs of
18 removal in electric rates. This liability will be accreted over the period
19 up to the estimated settlement date. The balance at the end of 2003
20 was approximately \$656,000. Also, we reclassified the accrued cost of
21 dismantling and removing plant from service upon retirement, which is
22 not considered an asset retirement obligation under FAS 143, from
23 accumulated depreciation to a regulatory liability.

24
25 **Q. WHAT IS THE GAAP FRAMEWORK FOR DEPRECIATION**
26 **ACCOUNTING?**

27 A. The GAAP framework for depreciation accounting is described at page 8 of
28 my direct testimony and quoted again as follows:

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1 Depreciation accounting is a system of accounting which aims to
2 distribute the cost or other basic value of tangible capital assets, less
3 salvage (if any), over the estimated useful life of the unit (which may
4 be a group of assets) in a systematic and rational manner. It is a
5 process of allocation, not of valuation.
6

7 This definition of depreciation accounting contains several key concepts.

8 First, that salvage (net salvage) is to be recognized. A review of the history of
9 regulation reveals that regulatory accounting rules predate this GAAP

10 definition and the terms "salvage" and "net salvage" were often used

11 interchangeably.¹¹ Second, that depreciation accounting is a cost allocation

12 process. Third, that the cost allocation is over the useful life of the asset(s).

13 Thus, an estimate of useful life is required. Fourth, that grouping of assets is

14 permissible. Fifth, that depreciation accounting is NOT a valuation process.

15 This includes the net salvage component of cost. And sixth, that depreciation

16 accounting must be systematic and rational. Systematic means something

17 other than discretionary and implies the use of a formula. The depreciation

18 rate formulas that I have used are shown on Exhibit DSR-1, page 5. Rational

19 means that the pattern of depreciation should match either the revenues

20 produced by the asset, or the consumption of the asset. Asset consumption in

21 my depreciation study is measured by either interim retirement factors for

22 Production Plant or Iowa curves and average service life combinations for

23 mass assets.

¹¹ Reports of Committee on Depreciation for the Years 1943 and 1944, National Association of Railroad and Utilities Commissioners, page 42. "The cost of removing many materials which constitute the operating units of property often results in a very small net salvage. In many individual cases and possibly in the cases of some entire classes of property the salvage may be negative."

1 **Q. WHY HAVE YOU DEVOTED SO MUCH EFFORT TO THESE**
2 **CONCEPTS?**

3 A. It was necessary to lay this background so I can now explain how Mr.
4 Majoros has misapplied these principles and produced improper results which
5 are inconsistent with regulatory rules and accounting principles. And, as will
6 be discussed next, he has incorrectly commingled both regulatory and
7 financial accounting concepts with ratemaking concepts. Also, the
8 recommendations of Mr. Macias and Ms. Teel ignore certain regulatory
9 accounting rules.

10 **RATEMAKING CONCEPTS**

11 **Q. WHAT RATEMAKING CONCEPTS HAVE RELEVANCE TO**
12 **DEPRECIATION?**

13 A. There are two ratemaking concepts that have relevance to depreciation. The
14 first is that a utility is entitled to fair and reasonable recovery of its prudently
15 incurred costs. The second is that of intergenerational equity, meaning that
16 the generation of customers that caused costs to be incurred should provide
17 revenues for those costs.

18 **Q. HAVING PROVIDED THE CONCEPTUAL BACKGROUND AND**
19 **RELATED PRINCIPLES, WHAT DO YOU INTEND TO**
20 **DEMONSTRATE?**

21 A. There are a number of issues and areas where Mr. Majoros has provided
22 testimony that is based upon incorrect commingling of these separate concepts
23 and results in improper recommendations that should be rejected by this

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1 Commission. I will address areas where Mr. Majoros has incorrectly applied
2 these separate concepts. In addition, I believe that the regulatory accounting
3 rules of this Commission are clear with respect to requiring net salvage as a
4 component of appropriate depreciation rates. Because Staff witness Macias
5 has not included such an allowance in his depreciation rate recommendations,
6 those recommendations must be dismissed by this Commission as they
7 produce an inadequate level of depreciation expense.

8 **Q. CAN YOU PROVIDE SPECIFIC EXAMPLES WHERE MR.**
9 **MAJOROS HAS COMMINGLED THE SEPARATE CONCEPTS OF**
10 **REGULATORY ACCOUNTING, FINANCIAL REPORTING AND**
11 **RATEMAKING?**

12 **A.** Yes. While I will not list or discuss all such examples, the first instance is at
13 page 4, line 12 of his testimony where Mr. Majoros asserts that Empire has
14 bundled future net salvage into depreciation rates even though such a practice
15 was rejected in Case No. ER-2001-299 and Empire has no obligation or
16 liability to incur these costs. This assertion stems from Mr. Majoros' attempt
17 to link the identification and measurement of an Asset Retirement Obligation
18 ("ARO") under SFAS No. 143 with the regulatory accounting requirements of
19 the USOA and FERC Order No. 631. In my reading of the Report and Order
20 in Case No. ER-2001-299, I could find no language that requires Empire to
21 segregate its depreciation rates into components. SFAS No. 143 recognizes
22 that current regulatory accounting and ratemaking allow for costs that fall
23 within the scope of SFAS No. 143 and other costs that do not fall within the

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1 scope of SFAS No.143. The fact that Empire has not recorded a legal liability
2 (under financial accounting and reporting) does not mean that such costs are
3 incorrectly recorded under regulatory accounting, i.e., negative net salvage.

4 The second instance begins at page 12, lines 1 through 8. Here Mr. Majoros
5 confuses regulatory accounting and associated bookkeeping (the recording of
6 depreciation expense) with ratemaking (the recovery of the revenue
7 requirement). Capital recovery only occurs when expenses (or other costs) are
8 incorporated into a revenue stream. His assertions regarding excessive
9 depreciation are misplaced and unfounded, and are addressed below.

10 A third example occurs at page 13, lines 5 and 6, where Mr. Majoros asserts
11 that "depreciation expense is a charge to operating expense to reflect recovery
12 of a company's previously expended capital". In the regulatory accounting
13 world, depreciation expense is a charge to operating expense. In the
14 ratemaking world, depreciation becomes capital recovery. On the same page
15 at line 18, he goes on to say that depreciation is a non-cash expense
16 (regulatory accounting) and then makes depreciation expense a component of
17 the revenue requirement (ratemaking). It is important that these separate
18 concepts not be confused and haphazardly lumped together.

19 A fourth example is shown at page 34, lines 14 through 18. Mr. Majoros
20 states that "Empire had collected \$3.8 million in excess net salvage." It may
21 well be true that Empire has *recorded* depreciation accruals for cost of
22 removal that were different from the actual cost of removal that Empire
23 incurred over the period 1980 through 2003, but there is no way to tell how

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1 much Empire has actually *collected*. The point here is that, once again, Mr.
2 Majoros has commingled accounting concepts with ratemaking concepts. The
3 fact is that there is merely a difference between the recorded depreciation
4 accrual for cost of removal and the actual incurrence of cost of removal. This
5 is a common situation. This is because the accrual for cost of removal relates
6 to ALL future retirements of presently surviving property, and the actual
7 incurred cost of removal relates to the retirements in just one year. Further,
8 and at least as important, this amount represents a *difference*, not *excess* net
9 salvage. Empire has recorded only the level of depreciation expense
10 consistent with its authorized depreciation rates.

11 **Q. YOU SEEM TO BE DWELLING ON THESE DIFFERENT**
12 **CONCEPTS, WHAT IS THEIR SIGNIFICANCE TO YOUR**
13 **DEPRECIATION RECOMMENDATIONS AND THOSE OF MR.**
14 **MACIAS AND MR. MAJOROS?**

15 A. The significance to Mr. Macias' testimony and depreciation recommendations
16 is quite simple. I believe that regulatory rules require the inclusion of net
17 salvage in the depreciation rate. Mr. Macias has included no such allowance
18 and therefore his depreciation rate recommendations are improper, and in this
19 case, inadequate.

20 Mr. Majoros takes a different and somewhat novel approach by
21 misinterpreting the provisions of SFAS No. 143 (a financial reporting
22 requirement) and weaving this misinterpretation into the *regulatory*
23 *accounting* requirements of FERC Order No. 631 and then claiming that

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1 SFAS No. 143 supersedes regulatory accounting rules. His entire logic is first
2 misdirected, second inconsistent with regulatory accounting rules, and third,
3 just plain wrong. Finally, his claims regarding this Commission's Order in
4 Case No. ER-2001-299 fall somewhat short of accurate.

5 **Q. WHAT IS YOUR READING OF THE COMMISSION'S REPORT AND**
6 **ORDER IN CASE NO. ER-2001-299?**

7 A. My interpretation of the Report and Order is much different from that of Mr.
8 Majoros. I do agree that Mr. Majoros has correctly cited the language
9 contained in the Report and Order issued September 20, 2001. However, the
10 only reference that I see in the Report and Order related to depreciation is
11 under the Section entitled "IT IS THEREFORE ORDERED:

- 12 1. That the Commission adopts the average service lives that
13 are attached as Appendix A to this Report and Order."

14 What Mr. Majoros references at page 6, lines 9 through 11, is merely a finding
15 based on the facts of that particular case. I have violated neither of these
16 findings by incorporating net salvage into my depreciation rate
17 recommendations. As stated there, my depreciation rate recommendations,
18 including net salvage, are based on historical net salvage cost (related to
19 retirements) and have been treated as an expense (a portion of depreciation
20 expense). Thus my rates do not violate any Commission practice, nor have I
21 "reversed" any Commission decisions. The most compelling discussion on
22 the topics of net salvage and depreciation in that Report and Order was in the
23 Dissenting Opinion of Commissioner Connie Murray, summarized best in the

1 last paragraph: "Empire should be allowed to include the cost of net
2 salvage in its calculation of whole life depreciation for both the existing
3 and the SLCC plant." (Emphasis added).

4 **SFAS NO.143 – ACCOUNTING FOR ASSET RETIREMENT OBLIGATIONS**

5 **Q. WHY IS SFAS NO. 143 SIGNIFICANT TO YOUR REBUTTAL**
6 **TESTIMONY?**

7 A. SFAS No. 143 is significant to my rebuttal testimony because of the incorrect
8 interpretation of this Standard made by Mr. Majoros and the inferences he
9 makes to his depreciation recommendations, as well as the further incorrect
10 conclusions he makes relative to FERC Order No. 631.

11 **Q. PLEASE EXPLAIN.**

12 A. Mr. Majoros correctly describes the treatment of legal obligations under
13 Statement 143 (financial accounting) and the associated treatment of legal
14 obligations under Order No. 631 (regulatory accounting). Mr. Majoros
15 apparently assumes that if a legal obligation does not exist (a financial
16 accounting determination) then no future cost of removal can be contained in
17 depreciation expense (a regulatory accounting determination).¹² This is NOT
18 what either the accounting standard (Statement 143) or the regulatory standard
19 (Order No. 631) requires. In fact, Statement 143 recognizes just the opposite
20 and includes provisions for handling the regulatory accounting differences.

21 At paragraph B73, the Statement says:

22 Many rate-regulated entities currently provide for the costs related to
23 asset retirement obligations in their financial statements and recover

¹² See Majoros Testimony, page 26, lines 12 through 14.

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1 those amounts in rates charged to their customers. Some of those costs
2 relate to asset retirement obligations within the scope of this
3 Statement; others are not within the scope of this Statement and,
4 therefore, cannot be recognized as liabilities under its provisions. The
5 objective of including those amounts in rates currently charged to
6 customers is to allocate costs to customers over the lives of those
7 assets. The amount charged to customers is adjusted periodically to
8 reflect excess or deficiency of the amounts charged over the amounts
9 incurred for the retirement of long-lived assets. The Board concluded
10 that is asset retirement costs are charged to customers of rate-regulated
11 entities but no liability is recognized, a regulatory liability should be
12 recognized if the requirements of Statement 71 are met.

13
14 He goes on to say, at page 27, lines 17 through 20, that such costs cannot be
15 included in the company's depreciation expense on its general purpose
16 financial statements. Statement 143 says no such thing nor does it require
17 such treatment. Mr. Majoros' interpretation is flatly wrong and must be
18 rejected.

19 **Q. DOES MR. MAJOROS MAKE ANY OTHER INCORRECT CLAIMS**
20 **REGARDING STATEMENT 143?**

21 A. Yes. At page 28, line 7, Mr. Majoros misstates the facts. He claims that a
22 regulated utility must "determine the amount of any prior cost of removal
23 collections relating to non-ARO's that is now included in their accumulated
24 depreciation accounts, and record these and any such future charges as a
25 regulatory liability to ratepayers". The truth is that such "reclassification"
26 occurs only on the financial books, and nothing is done differently for
27 regulatory accounting. He seems to hint that Empire improperly implemented
28 Statement 143 and that Empire is not entitled to recovery of such amounts.
29 The first argument is emphatically wrong and the second argument is up to
30 this Commission, not Mr. Majoros to decide.

1 **EXCESSIVE DEPRECIATION**

2 **Q. AT VARIOUS PLACES THROUGHOUT HIS TESTIMONY, MR.**
3 **MAJOROS MAKES NUMEROUS REFERENCES TO THE CONCEPT**
4 **OF “EXCESSIVE DEPRECIATION” AND EVEN PROVIDES**
5 **EXCERPTS FROM A UNITED STATES’ SUPREME COURT CASE.**
6 **DO YOU HAVE ANY COMMENTS?**

7 **A.** Yes. This is a recurrent theme in his testimonies where depreciation is the
8 subject. It would seem that when there is disagreement between
9 recommended depreciation rates, Mr. Majoros’ lower depreciation rates
10 must be correct and all other depreciation rates are “excessive”. In the
11 Supreme Court case cited, Mr. Majoros confuses the concept of excessive
12 depreciation due to past accumulations of depreciation expense with the use of
13 estimated service lives and net salvage allowances used to make prospective
14 revisions to depreciation rates. My understanding of the *Lindheimer* case is
15 that the Supreme Court was addressing a claim of confiscation by the
16 company and that, with “confiscation being the issue”, the company had the
17 burden of showing that its past accumulation of depreciation had not been
18 excessive. In Empire’s case, the past accumulation of depreciation is not an
19 issue, nor could not have been excessive because it was predicated on the
20 application of Commission authorized depreciation rates. Empire has
21 recorded (accounting) and the customer has paid (ratemaking) precisely what
22 has been allowed through the regulatory process. As the Court indicated,
23 depreciation rates are based on estimates of the future and those estimates

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1 must unquestionably be reviewed from time to time, with mid-stream
2 adjustments applied prospectively to reflect the controlling test of experience.
3 A more careful review of the Lindheimer case and decision also reveals that
4 the Supreme Court was reviewing a rate order based on a "fair value" rate
5 base. This means that at least some significant portion of the rate base would
6 reflect the reconstruction cost new ("RCN") value of plant. With such an
7 approach to valuation, the determination of the appropriate depreciation
8 reserve and whether a booked reserve that reflects original cost can be deemed
9 to be "excessive" or "confiscatory" is particularly problematic in Empire's
10 case. In my view, Mr. Majoros' reliance on the Lindheimer decision is
11 severely misplaced.

12 **Q. WHY DO YOU SAY THAT EXCESSIVE DEPRECIATION IS A**
13 **RECURRENT THEME IN MR. MAJOROS' TESTIMONIES?**

14 A. In the past few years, in other proceedings, Mr. Majoros has provided to me
15 through the discovery process, several prior testimonies he submitted on the
16 issue of depreciation. These included three testimonies in New Jersey, one in
17 Oklahoma (not really testimony, but more of a position paper and a stipulation
18 agreement), one in Kentucky, two in Kansas, one in Vermont, one in Hawaii
19 and one in Nevada. The following statements were made in these various
20 testimonies:

21 Yes. In my opinion, the Company's depreciation proposal is
22 unreasonable. It will produce excessive depreciation in this rate case
23 and unnecessarily increase the revenue requirement.¹³

¹³ Direct Testimony of Michael J. Majoros, Jr. BPU Docket No. ER02100724, Rockland Electric Company, page 3, line 4. (emphasis added)

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1 Yes. In my opinion, the Company's depreciation proposal is
2 unreasonable. It will produce excessive depreciation expense in this
3 rate case and unnecessarily increase the revenue requirement.¹⁴

4 The Company's proposal produces excessive depreciation because it
5 includes an unsupportable and unreasonable request for negative net
6 salvage in its depreciation rate calculations.¹⁵

7 The Company filed a depreciation study conducted by Mr. Spanos
8 indicating that the existing depreciation rates are excessive. Mr.
9 Spanos proposed a depreciation rate reduction. Yes, I agree that
10 the Company's depreciation rates are excessive.¹⁶

11 The proposals are unreasonable because they produce excessive
12 depreciation and thereby unnecessarily increase the revenue
13 requirement.¹⁷

14 Yes. In my opinion, the Company's depreciation proposal is
15 unreasonable. It will produce excessive depreciation in this rate case
16 and unnecessarily increase the revenue requirement.¹⁸

17 The Company's depreciation proposal is unreasonable because the
18 proposal produces excessive depreciation expense which will, in turn,
19 be charged to ratepayers in this rate case.¹⁹

20 In my opinion, the Company's depreciation proposal is: unreasonable
21 because the proposal produces an excessive depreciation expense
22 which will, in turn, be charged to ratepayers in the next case.²⁰

23
24 It should be apparent that the only non-excessive depreciation rate is one
25 proposed by Mr. Majoros on behalf of the Office of the Public Counsel. The
26 Commission needs to view the OPC testimony on the subject of excessive
27 depreciation with skepticism. Given Mr. Majoros' line of reasoning, I would

¹⁴ Direct Testimony of Michael J. Majoros, Jr. BPU Docket No. ER02080506, Jersey Central Power & Light Company, page 2, line 18. (emphasis added)

¹⁵ Direct Testimony of Michael J. Majoros, Jr. BPU Docket No. GR02040245, Elizabethtown Gas Company, page 5, line 28. (emphasis added)

¹⁶ Direct Testimony of Michael J. Majoros, Jr. Kentucky Public Service Commission Docket No. 2002-00145, Columbia Gas of Kentucky, page 7, lines 16 and 19. (emphasis added)

¹⁷ Direct Testimony of Michael J. Majoros, Jr. Kansas Corporation Commission Docket No. 02-MDWG-922-RTS, Midwest Energy, Inc., page 2, line 13. (emphasis added)

¹⁸ Direct Testimony of Michael J. Majoros, Jr. State of Nevada Public Utilities Commission Docket No. 01-11031, Sierra Pacific Power Company, page 3, line 11. (emphasis added)

¹⁹ Direct Testimony of Michael J. Majoros, Jr. Kansas Corporation Commission Docket No. 02-0391, Kansas Gas Service, page 2, line 22 and page 3, line 1. (emphasis added)

²⁰ Direct Testimony of Michael J. Majoros, Jr., Hawaii Public Service Commission Docket No. 02-0391, Hawaiian Electric Company, Inc., page 3, line 17. (emphasis added)

1 conclude that his proposed depreciation rates are inadequate simply because
2 they are lower those proposed by the Company.

3 **Q. HOW DID THE REGULATORY BODIES ASSOCIATED WITH THE**
4 **ABOVE CASES REACT TO MR. MAJOROS'**
5 **CHARACTERIZATION?**

6 A. I could find no Order that supported the contention by Mr. Majoros that the
7 respective company's depreciation rates were excessive.

8 **NET SALVAGE**

9 **Q. HAVE EITHER MR. MACIAS, MS. TEEL OR MR. MAJOROS**
10 **INCLUDED A PROVISION FOR NET SALVAGE IN THEIR**
11 **DEPRECIATION RECOMMENDATIONS?**

12 A. Mr. Macias did not include a provision for net salvage in his depreciation
13 recommendations. Ms. Teel proposes to include a provision for net salvage as
14 a current expense included in cost of service, based upon the five-year average
15 of actual net salvage. Mr. Majoros did include a provision for net salvage.
16 However, the net salvage allowance provided by Mr. Majoros is inadequate
17 and inconsistent with regulatory accounting rules.

18 **Q. WHY DO YOU BELIEVE THAT NET SALVAGE SHOULD BE A**
19 **COMPONENT OF DEPRECIATION RATES?**

20 A. There are several reasons why I believe that net salvage should be a
21 component of depreciation rates. First, I believe that Empire is properly
22 entitled to recovery of these costs. Second, I believe that making net salvage a
23 component of the depreciation rate is required by regulatory rules. Third, I

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1 believe that such accounting treatment appropriately allocates all components
2 of cost over useful life in a consistent manner. Fourth, I believe that treating
3 these net salvage costs as a component of depreciation rates (depreciation
4 expense for ratemaking purposes) results in intergenerational equity, such that
5 no generation of customers is improperly charged. Finally, such treatment is
6 consistent with the way depreciation rates and depreciation expenses are
7 handled in the vast majority of jurisdictions where I have testified.

8 **Q. HAS MR. MAJOROS ACCURATELY AND CORRECTLY**
9 **IDENTIFIED YOUR DEPRECIATION RECOMMENDATIONS WITH**
10 **RESPECT TO NET SALVAGE?**

11 A. I would hesitate to characterize Mr. Majoros' testimony with respect to my
12 depreciation recommendations as either accurate or correct. Let me begin
13 with the question and answer starting at the top of page 35 of his testimony.
14 Here Mr. Majoros states that I am proposing to charge Empire's customers
15 about \$20.8 million in additional future removal costs. First, my
16 recommended depreciation rates are designed to allocate Empire's plant costs,
17 including net salvage, over the life of the associated assets, consistent with
18 regulatory accounting rules, nothing more or nothing less. I am not proposing
19 to charge Empire's customers anything but a fair and reasonable depreciation
20 expense. I have built net salvage ratios into depreciation rates as required by
21 regulatory accounting rules. Depreciation expense will increase as plant
22 balances increase. This is merely a fact of asset growth, not an anomaly nor
23 an intended "penalty" to customers. In fact, under current ratemaking

1 provisions, the fact that depreciation expense will increase is NOT even
2 reflected in the revenue requirement calculation! It is true, however, that the
3 reclassified regulatory liability (a financial reporting requirement) may
4 increase. Lastly, while Mr. Majoros may not like my recommendations, they
5 are reasonable and consistent with regulatory accounting rules.

6 **Q. MR. MAJOROS ATTEMPTS TO DEMONSTRATE THAT YOUR**
7 **PROPOSAL IS UNREASONABLE AT PAGE 35, LINES 12 THROUGH**
8 **18. IS HE CORRECT?**

9 A. Mr. Majoros is only correct that the Company has incurred actual removal
10 costs over the last 24 years. My records indicate that the actual cost of
11 removal incurred between 1980 and 2003 is in excess of \$36 million

12 **Q. MR. MAJOROS ASSERTS AT PAGE 22 THAT THE RESULTS OF**
13 **YOUR SALVAGE AND COST OF REMOVAL ANALYSES ARE "SO**
14 **ASTRONOMICAL AS TO DEFY REASON". IS THIS STATEMENT**
15 **TRUE?**

16 A. No. Net salvage is the "netting" of gross salvage and cost of removal. As
17 quoted in the National Association of Regulatory Utility Commissioners
18 ("NARUC") text Public Utility Depreciation Practices (1996 Edition), at page
19 18:

20 Net salvage is expressed as a percentage of plant retired by dividing
21 the dollars of net salvage by the dollars of original cost of plant retired.

22 I have made this exact net salvage calculation for every asset category in my
23 depreciation study. The fact that the result of these calculations is a large ratio
24 or percentage is no reason to dismiss the validity of the result. For certain
25

1 asset groups, net salvage is a significant percentage and should be
2 appropriately recognized in the depreciation rate calculation. It has been my
3 personal experience that net salvage ratios of 250% are not unusual for certain
4 asset categories and to characterize them as astronomical takes the concept of
5 hyperbole to a new level.

6 **Q. FROM A RATE MAKING PERSPECTIVE, HOW IS THE COMPANY**
7 **AFFECTED BY EITHER INADEQUATE OR EXCESSIVE**
8 **DEPRECIATION RATES AND RELATED DEPRECIATION**
9 **EXPENSE?**

10 A. Depreciation expense is recorded into the accumulated provision for
11 depreciation account. For rate making purposes, the accumulated provision
12 for depreciation is deducted from the original cost plant in service to
13 determine rate base, the base upon which earnings are allowed. The deduction
14 insures that, if past depreciation expense has been greater than required, the
15 Company will be provided with an effective return on such lower amounts
16 until reduced depreciation rates correct the imbalance. Similarly, the
17 Company receives a greater return to the extent that such depreciation
18 accruals were less than required. In either case, the customer is assured the
19 same balanced treatment.

20 **Q. IN YOUR OPINION, IS MR. MAJOROS' INTERPRETATION OF**
21 **SFAS 143 CORRECT?**

22 A. No. Mr. Majoros seems to believe that you must have a legal obligation to
23 recognize negative net salvage. If such a legal obligation exists, then an asset

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1 retirement liability is recorded (financial accounting). The flaw in Mr.
2 Majoros' interpretation is that negative net salvage does exist even without the
3 legal obligation threshold of SFAS 143, and such costs are required to be
4 included in depreciation rates. I have made no attempt to hide this. There is a
5 flaw in Mr. Majoros' logic. At page 45, line 3 he makes reference to the term
6 "this money"²¹ when talking about asset retirement obligations, implying that
7 these liabilities are a source of cash ripe for the utility's picking. When we
8 discuss these accounts, (e.g., the accumulated provision for depreciation and
9 regulatory liabilities) we are discussing figures recorded on the Company's
10 Balance Sheet, not money or cash. Mr. Majoros admits this fact when he
11 states that accumulated depreciation is an "unfunded account."²² So there is
12 no cash or money that can flow to income. His own testimony is
13 contradictory on this point.

14 **Q. IS THE APPROACH TO THE TREATMENT OF NET SALVAGE**
15 **EMPLOYED BY MR. MAJOROS WIDELY USED?**

16 A. No. In fact, to the best of my knowledge, only three jurisdictions have
17 approved such an approach or similar approaches. They are Pennsylvania,
18 Kentucky (I believe on a test basis) and here in Missouri. Accordingly, the
19 testimony provided by Mr. Majoros at page 45 and 46 is somewhat
20 misleading.

21 **REMAINING LIFE DEPRECIATION TECHNIQUE**

²⁰ If this Commission were to accept such an excess charge, GAAP and the SEC will require that it be recorded as a regulatory liability and if recent activity is indicative of any utility's intent with respect to this money, they will try everything in their power to take it into income and never return it to ratepayers.

²² Majoros testimony, page 17, line 18.

1 **Q. WHAT IS THE DIFFERENCE BETWEEN A REMAINING LIFE**
2 **RATE AND A WHOLE LIFE RATE?**

3 A. Let me first say that with respect to depreciation theory, the technique refers
4 to the portion of the service life used in the depreciation rate calculation.
5 Whole life rates depreciate gross investment, adjusted for net salvage, over the
6 average service life of an asset category.²³ Remaining life rates depreciate net
7 investment (gross investment adjusted for net salvage less accumulated
8 depreciation) over the average remaining life of an asset category.²⁴

9 **Q. WHY IS A REMAINING LIFE RATE DESIRABLE?**

10 A. There are two reasons. First, a remaining life rate gives consideration to past
11 depreciation. Second, an asset category cannot be depreciated beyond its
12 gross cost adjusted for net salvage. Third, a remaining life rate automatically
13 adjusts for past experience being slightly different from expectations. Each of
14 these characteristics encompasses principles of equity and fairness.

15 **Q. WHAT DEPRECIATION TECHNIQUE HAVE YOU**
16 **RECOMMENDED AND WHY?**

17 A. I have recommended the use of the remaining life technique. I believe the
18 remaining life technique possesses the characteristics described above,
19 making it a superior choice to the whole life technique. Roughly a third of the
20 increase in annual depreciation indicated by my study is due to inadequate
21 past depreciation compared to my study parameters. The remaining life
22 technique captures this depreciation difference in an appropriate manner.

²³ See Exhibit DSR-3, bottom of page 5.

²⁴ Ibid.

1 **Q. HAS MR. MAJOROS EVER PROPOSED DEPRECIATION RATES**
2 **DEVELOPED USING THE REMAINING LIFE TECHNIQUE?**

3 A. Yes. To the best of my knowledge, Mr. Majoros has proposed remaining life
4 rates for the vast majority of the proceedings listed on Schedule MJM-1 for
5 the last two years.

6 **Q. HAS THIS COMMISSION CONSIDERED THE ISSUE OF**
7 **REMAINING LIFE DEPECIATION RATES IN OTHER**
8 **PROCEEDINGS?**

9 A. Yes. In 1982, in Case No. TYO-82-3, this Commission deliberated a number
10 of issues related to depreciation and depreciation rates. In that Report and
11 Order, the Commission reached the following conclusion regarding the
12 remaining life technique:

13 The most significant advantage of SLRL (straight-line remaining life)
14 is that it adjusts the depreciation rate to effect (sic) fuller recovery
15 during the period when the investment is still used in providing
16 telephone service. Any adjustment during such period is not
17 retroactive rate-making, because the rates are prospectively recovered
18 on investment which is still in use. Underestimating service lives or
19 making post-mortem adjustments after the investment as (sic) retired
20 do not fulfill the objective of return of capital in a rational and
21 systematic manner over the investment's service life. Such methods
22 also create a situation wherein the telephone utilities would be required
23 to wait until investment retires before a corrective adjustment is made.
24 SLRL appears to be a reasonable solution to any capital recovery
25 deficiency in Missouri.

26
27 The Commission goes on to say and order:

28
29 This Commission's rules permit the use of SLRL and SLELG
30 (straight-line equal life group), and the same are consistent with the
31 statutory directive that this Commission follow the Uniform System of
32 Accounts for a telephone corporation as nearly as may be. Section
33 392.210(2), RSMo 1978.
34

1 It is, therefore,
2

3 ... Ordered: 3. That the use of straight-line remaining life depreciation
4 technique is hereby approved for Missouri Class A and B jurisdictional
5 telephone utilities.
6

7 Clearly, the remaining life technique is a viable and approved methodology in
8 the State of Missouri.

9
10 **CASH FLOW CONCERNS**

11 **Q. MR. MAJOROS CLAIMS THAT THE GOAL OF MANY PUBLIC**
12 **UTILITIES WITH RESPECT TO THE OBJECTIVE OF**
13 **DEPRECIATION IS TO MAXIMIZE CASH FLOW.²⁵ DO YOU**
14 **AGREE?**

15 **A.** No. I can find no evidence or documentation that supports that this is true for
16 Empire District. Further, I can find no evidence or documentation that
17 supports that this is true for any other of my other clients. Cash flow is
18 important to both the Company and the financial community. While
19 depreciation expense is a *non-cash* item, it does have significant *cash flow*
20 impacts. I have specifically reviewed the Company's capital activity for the
21 past five years (1999 through 2003) to evaluate the level of internal and
22 external financing sources relative to this activity. I have removed the
23 significant additions and retirements relative to the State Line units, as this
24 activity should rightly be financed through new external sources. The average
25 annual expenditure on plant is approximately \$43.7 million. The average
26 annual depreciation expense is approximately \$28.0 million. Thus on annual

²⁵ Majoros Testimony, page 14, line 23.

1 basis, Empire District must seek additional external financing of over \$15
2 million per year. Clearly, the internal cash flow effect of depreciation expense
3 is significant, but has been inadequate in the recent past. Empire's cash flow
4 situation would be enhanced by an upward adjustment to depreciation rates.
5 But my recommended depreciation rates are in no way based on the need for
6 greater cash flow, rather they are based on a valid analysis of historical data
7 and future expectations. Mr. Knapp provides additional rebuttal testimony
8 relative to this topic.

9 **ADEQUACY OF STAFF AND OPC DEPRECIATION PROPOSALS IN**
10 **LIGHT OF INDUSTRY APPROVED RATES**

11 **Q. IS THERE ANY OTHER TOPIC THAT YOU WISH TO ADDRESS?**

12 **A.** Yes. Because neither the Staff nor the OPC witness testimony discusses this
13 issue, I ask this Commission to review my direct testimony at pages 6 and 7
14 addressing depreciation rate comparisons and their adequacy. I repeat here
15 the observations that I made then with particular reference to the Staff and
16 OPC depreciation proposals. A composite depreciation rate of at least 3.00%
17 seems to be in the normal range for an electric utility (See Schedule DSR-4).
18 With the exception of the Empire District line, shown at the top, the remaining
19 Company depreciation rate calculation information is arranged in ascending
20 order by the magnitude of the depreciation rate. There is no doubt that the
21 Empire District composite depreciation rate falls into the bottom quartile of
22 this distribution. In addition the depreciation rates proposed by the Staff and
23 OPC fall dramatically below the 3.00% composite average level. The Staff

1 composite depreciation rate is roughly 2.40%; and the OPC composite
2 depreciation including net salvage allowance is barely 2.50%. These
3 proposals are unreasonable because they are inadequate. Under any
4 circumstance, it is difficult for me to accept any claim that Empire's
5 depreciation rates have been excessive.

6 **ALTERNATIVE METHODOLOGY**

7 **Q. AS ADDRESSED IN MR. WILLIAM L. GIBSON'S DIRECT**
8 **TESTIMONY AT PAGE 5, WHAT MEASURES CAN BE TAKEN TO**
9 **MITIGATE THE INCREASE IN DEPRECIATION EXPENSE THAT**
10 **YOU PROPOSE?**

11 **A.** It is my understanding that the Company still supports the depreciation
12 recommendations that I have made and filed in conjunction with my direct
13 testimony which result in a total increase in annual depreciation expense of
14 about \$25.6 million. One measure that can be taken to mitigate this increase
15 is simply to reduce the depreciation rates by a percentage amount so that
16 instead of generating \$25.6 million in additional depreciation expenses, they
17 only increase annual depreciation expense by \$10.2 million. In fact, it is my
18 understanding that the Company's rate revenue tariffs filed in this case are
19 based on an increase in depreciation expense of only \$10.2 million as opposed
20 to the \$25.6 million supported by my study.

21 **Q. IS THERE ANOTHER APPROACH TO ARRIVE AT THE \$10.2**
22 **MILLION AMOUNT?**

23 **A.** Yes. In addition to the percentage reduction approach indicated above, I have

1 examined different depreciation methodologies to mitigate the full impact of
2 my proposal. In this regard, I began with an evaluation of where the
3 depreciation adjustment was the greatest and which depreciation parameters
4 or factors influenced that change. The cause of the greatest depreciation
5 expense change was net salvage. The first adjustment was to limit net salvage
6 to negative 100% for the four accounts where the negative net salvage
7 allowances were the greatest. These accounts are Account 355, Transmission
8 – Poles and Fixtures; Account 364, Distribution – Poles, Towers and Fixtures;
9 Account 365, Distribution – Overhead Conductors and Devices; and Account
10 369, Distribution – Services. The effect on annual depreciation expense by
11 implementing this limitation on net salvage factors is \$5.8 million. This
12 amount is determined on Exhibit DSR-3R.

13 **Q. WHAT WAS THE NEXT ADJUSTMENT THAT WAS CONSIDERED?**

14 A. The next adjustment that was considered was the use of whole life rates.
15 Whole life rates give no consideration to the reserve position as discussed
16 above at page 30. The effect of this adjustment on annual depreciation
17 expense is \$0.7 million as shown on Exhibit DSR-4R.

18 **Q. WAS THERE ANY OTHER ADJUSTMENT CONSIDERED?**

19 A. Yes. Because the second largest difference in my study related to Production
20 Plant, an adjustment was made to the estimated retirement date for the Asbury
21 Plant by extending the retirement date to 2020. The effect of this adjustment
22 on annual depreciation expense is \$2.6 million as shown on Exhibit DSR-5R.

23 **Q. IS THERE ANY OTHER FACTOR TO BE CONSIDERED?**

DONALD S. ROFF
REBUTTAL TESTIMONY

1 A. Yes. Due to the differences between the study balances (12/31/2003) and the
2 jurisdictional test year balances (6/30/2004), there is one additional impact on
3 annual depreciation expense. The effect of this adjustment is \$1.2 million and
4 is shown on Exhibit DSR-6R.

5 **Q. WHAT IS THE TOTAL IMPACT ON ANNUAL DEPRECIATION**
6 **EXPENSE OF THESE ADJUSTMENTS?**

7 A. The total impact on annual depreciation expense of these adjustments is the
8 sum of these four amounts, or \$10.3 million.

9 **Q. WHY DOES THIS DIFFERENCE NOT EQUAL THE CHANGE FROM**
10 **\$25.6 MILLION ANNUAL DEPRECIATION EXPENSE AMOUNT**
11 **PRODUCED BY YOUR STUDY AND THE \$10.2 MILLION**
12 **DEPRECIATION EXPENSE AMOUNT SUGGESTED BY MR.**
13 **GIBSON AND SHOWN ON EXHIBIT DSR-2R?**

14 A. The depreciation parameters and methodologies have inter-relationship
15 effects. While I have tried to isolate the impact of each singular adjustment,
16 when depreciation rates and related annual depreciation expenses are
17 determined, they are developed on the combination of each underlying
18 parameter and methodology. Quite simply the differences cannot be
19 completely segregated. For example, the change in net salvage parameters
20 affects not only the net salvage calculations, but also the whole life rates and
21 remaining life rates.

22 **SUMMARY AND CONCLUSION**

23 **Q. PLEASE SUMARIZE YOUR REBUTTAL TESTIMONY.**

DONALD S. ROFF
REBUTTAL TESTIMONY

1 A. My rebuttal testimony exposes the flaws, misstatements and inaccuracies
2 contained in the testimonies of Mr. Macias, Ms. Teel and Mr. Majoros. My
3 original recommendations in this proceeding are consistent with accounting
4 rules and regulatory principles and result in a fair and reasonable level of
5 depreciation expense. The proposals advanced by Mr. Macias, Ms. Teel and
6 Mr. Majoros are improper, inadequate and incorrect and should not be
7 endorsed by this Commission. While I and the Company stand behind my
8 study recommendations, I have been asked to consider an alternative position
9 that mitigates the change in annual depreciation expense in this proceeding. I
10 have provided such an.

11 **Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?**

12 A. Yes, it does. However, the fact that I have not addressed all of the topics or
13 issues raised by Mr. Majoros, Ms. Teel and Mr. Macias, does not necessarily
14 signify my agreement with their positions.

THE EMPIRE DISTRICT ELECTRIC COMPANY
COMPARISON OF DEPRECIATION RATES AND ANNUAL AMOUNTS

EXHIBIT DSR-1R

[1] Account Number	[2] Description	[3] 6/30/2004 Balance \$	[4] Existing Rate %	[5] Annual Amount \$	[6] Company Rate %	[7] Annual Amount \$	[8] OPC Rate %	[9] Annual Amount \$	[10] Staff Rate %	[11] Annual Amount \$
<u>STEAM PRODUCTION PLANT</u>										
<u>RIVERTON</u>										
311.0	Structures & Improvements	8,467,460	1.05	88,908	14.37	1,216,774	1.08	91,449	1.05	88,908
312.0	Boiler Plant Equipment	21,727,092	1.85	401,951	7.22	1,568,696	1.92	417,160	1.85	401,951
314.0	Turbogenerator Units	6,514,048	1.59	103,573	4.57	297,692	1.79	116,601	1.59	103,573
315.0	Accessory Electric Equipment	1,299,877	1.79	23,268	0.79	10,269	1.72	22,358	-	-
316.0	Misc. Power Plant Equipment	1,075,367	1.96	21,077	10.52	113,129	1.79	19,249	1.96	21,077
	Total Riverton	39,083,844	1.63	638,778	8.20	3,206,560	1.71	666,817	1.57	615,510
<u>ASBURY</u>										
311.0	Structures & Improvements	9,169,966	1.05	96,285	6.91	633,645	1.06	99,036	1.05	96,285
312.0	Boiler Plant Equipment	66,841,958	1.85	1,236,576	7.71	5,153,515	1.92	1,283,366	1.85	1,236,576
312.7	Unit Train	5,580,296	6.67	372,206	1.34	74,776	6.67	372,206	6.67	372,206
314.0	Turbogenerator Units	20,730,452	1.59	329,614	6.36	1,318,457	1.79	371,075	1.59	329,614
315.0	Accessory Electric Equipment	6,348,259	1.79	113,634	7.74	491,355	1.72	109,190	1.79	113,634
316.0	Misc. Power Plant Equipment	1,623,435	1.96	31,819	5.37	87,178	1.79	29,059	1.96	31,819
	Total Asbury	110,294,366	1.98	2,180,134	7.03	7,758,926	2.05	2,263,932	1.98	2,180,134
<u>IATAN</u>										
311.0	Structures & Improvements	3,997,069	1.05	41,969	3.30	131,903	1.08	43,188	1.05	41,969
312.0	Boiler Plant Equipment	31,103,431	1.85	575,413	2.21	687,386	1.92	597,186	1.85	575,413
314.0	Turbogenerator Units	8,252,043	1.59	131,207	3.14	259,114	1.79	147,712	1.59	131,207
315.0	Accessory Electric Equipment	3,689,765	1.79	66,047	2.88	106,265	1.72	63,464	1.79	66,047
316.0	Misc. Power Plant Equipment	872,216	1.96	17,095	4.16	36,284	1.79	15,613	1.96	17,095
	Total Iatan	47,914,524	1.74	831,732	2.55	1,220,953	1.81	867,142	1.74	831,732
	TOTAL STEAM PRODUCTION	197,292,734	1.85	3,650,644	6.18	12,186,438	1.93	3,797,891	1.84	3,627,376
<u>HYDRAULIC PRODUCTION PLANT</u>										
<u>OZARK BEACH</u>										
331.0	Structures & Improvements	556,389	1.64	9,125	4.06	22,589	1.56	8,680	1.64	9,125
332.0	Reservoirs, Dams & Waterways	1,461,404	1.67	24,405	0.99	14,468	1.22	17,829	1.67	24,405
333.0	Waterwheels, Turbines & Generators	1,305,038	1.47	19,184	4.06	52,985	1.14	14,877	1.47	19,184
334.0	Accessory Electric Equipment	812,324	1.43	11,616	5.27	42,809	1.27	10,317	1.43	11,616
335.0	Misc. Power Plant Equipment	348,853	2.44	8,512	3.67	12,803	2.33	8,128	2.44	8,512
	TOTAL HYDRAULIC PRODUCTION	4,484,008	1.62	72,843	3.25	145,654	1.33	59,831	1.62	72,843
<u>OTHER PRODUCTION PLANT</u>										
<u>RIVERTON CT</u>										
341.0	Structures & Improvements	193,357	1.82	3,519	4.97	9,610	1.82	3,519	1.82	3,519
342.0	Fuel Holders, Producers & Access.	87,123	3.85	3,354	4.78	4,164	3.85	3,354	3.85	3,354
343.0	Prime Movers	10,147,180	1.92	194,826	6.15	624,052	2.44	247,591	1.92	194,826
344.0	Generators	926,850	1.82	16,869	4.87	45,138	1.82	16,869	1.82	16,869
345.0	Accessory Electric Equipment	315,835	3.57	11,275	5.29	16,708	3.57	11,275	3.57	11,275
346.0	Misc. Power Plant Equipment	83,907	4.00	3,356	3.65	3,063	4.00	3,356	4.00	3,356
	Total Riverton CT	11,754,252	1.98	233,199	5.98	702,734	2.43	285,965	1.98	233,199
<u>ENERGY CENTER</u>										
341.0	Structures & Improvements	2,999,174	1.82	54,585	2.75	82,477	1.82	54,585	1.82	54,585
342.0	Fuel Holders, Producers & Access.	1,209,362	3.85	46,560	(1.77)	(21,406)	3.85	46,560	-	-
343.0	Prime Movers	25,638,096	1.92	492,251	4.69	1,202,427	2.44	625,570	1.92	492,251
344.0	Generators	44,338,097	1.82	806,953	3.35	1,485,326	1.82	806,953	1.82	806,953
345.0	Accessory Electric Equipment	2,571,511	3.57	91,803	2.89	74,317	3.57	91,803	3.57	91,803
346.0	Misc. Power Plant Equipment	13,530,044	4.00	541,202	3.33	450,550	4.00	541,202	4.00	541,202
	Total Energy Center	90,286,284	2.25	2,033,355	3.63	3,273,682	2.40	2,166,673	2.20	1,986,794

THE EMPIRE DISTRICT ELECTRIC COMPANY
COMPARISON OF DEPRECIATION RATES AND ANNUAL AMOUNTS

EXHIBIT DSR-1R

[1] Account Number	[2] Description	[3] 6/30/2004 Balance \$	[4] Existing Rate %	[5] Annual Amount \$	[6] Company Rate %	[7] Annual Amount \$	[8] OPC Rate %	[9] Annual Amount \$	[10] Staff Rate %	[11] Annual Amount \$
<u>STATE LINE CT</u>										
341.0	Structures & Improvements	4,130,748	1.82	75,180	3.23	133,423	1.82	75,180	1.82	75,180
342.0	Fuel Holders, Producers & Access.	3,380,804	3.85	130,161	3.24	109,538	3.85	130,161	3.85	130,161
343.0	Prime Movers	42,664,185	1.92	819,152	3.39	1,446,316	2.44	1,041,006	1.92	819,152
344.0	Generators	11,268,284	1.82	205,083	3.18	358,331	1.82	205,083	1.82	205,083
345.0	Accessory Electric Equipment	3,710,093	3.57	132,450	3.54	131,337	3.57	132,450	3.57	132,450
346.0	Misc. Power Plant Equipment	123,435	4.00	4,937	(0.80)	(987)	4.00	4,937	-	-
	Total State Line CT	65,277,549	2.09	1,366,963	3.34	2,177,958	2.43	1,588,817	2.09	1,362,026
<u>STATE LINE CC</u>										
341.0	Structures & Improvements	7,045,752	1.82	128,233	3.54	249,420	1.82	128,233	2.86	201,509
342.0	Fuel Holders, Producers & Access.	7,971,750	3.85	306,912	3.49	278,214	3.85	306,912	2.86	227,992
343.0	Prime Movers	83,979,493	1.92	1,612,406	3.56	2,989,670	2.44	2,049,100	2.86	2,401,813
344.0	Generators	23,328,557	1.82	424,580	3.49	814,167	1.82	424,580	2.86	667,197
345.0	Accessory Electric Equipment	7,782,686	3.57	277,842	3.50	272,394	3.57	277,842	2.86	222,585
346.0	Misc. Power Plant Equipment	64,665	4.00	2,587	3.61	2,334	4.00	2,587	2.86	1,849
	Total State Line CC	130,172,903	2.11	2,752,560	3.54	4,606,199	2.45	3,189,253	2.86	3,722,945
	TOTAL OTHER PRODUCTION	297,490,988	2.15	6,386,077	3.62	10,760,582	2.43	7,230,708	2.46	7,304,965
	TOTAL PRODUCTION PLANT	499,267,730	2.02	10,109,564	4.63	23,092,675	2.22	11,088,430	2.20	11,005,184
<u>TRANSMISSION PLANT</u>										
352.0	Structures & Improvements	2,335,614	1.37	31,998	1.95	45,544	1.82	42,508	1.37	31,998
353.0	Station Equipment	81,102,639	2.19	1,776,148	2.04	1,654,494	2.00	1,622,053	2.13	1,727,486
354.0	Towers & Fixtures	777,080	1.30	10,102	1.35	10,491	1.54	11,967	1.30	10,102
355.0	Poles & Fixtures	26,709,864	1.85	494,132	4.21	1,124,485	1.67	446,055	1.82	486,120
356.0	OH Conductors & Devices	50,847,710	1.43	727,122	2.19	1,113,565	1.54	783,055	1.59	808,479
	TOTAL TRANSMISSION PLANT	161,772,907	1.88	3,039,502	2.44	3,948,579	1.80	2,905,637	1.89	3,064,184
<u>DISTRIBUTION PLANT</u>										
361.0	Structures & Improvements	8,415,331	1.98	166,624	2.10	176,722	1.67	140,536	1.82	153,159
362.0	Station Equipment	54,447,597	2.44	1,328,521	1.53	833,048	2.22	1,208,737	2.44	1,328,521
364.0	Poles, Towers & Fixtures	75,481,042	2.43	1,834,189	8.15	6,151,705	2.17	1,637,939	2.33	1,758,708
365.0	OH Conductors & Devices	94,509,876	2.10	1,984,707	7.86	7,428,476	1.89	1,786,237	1.92	1,814,590
366.0	UG Conduit	16,005,260	2.97	475,356	4.01	641,811	2.70	432,142	2.63	420,938
367.0	UG Conductors & Devices	33,575,290	3.61	1,212,068	3.46	1,161,705	3.13	1,050,907	3.03	1,017,331
368.0	Line Transformers	61,194,572	2.51	1,535,984	2.76	1,688,970	2.22	1,358,519	2.33	1,425,834
369.0	Services	42,710,443	3.03	1,294,126	9.95	4,249,689	2.50	1,067,761	2.63	1,123,285
370.0	Meters	14,177,845	2.58	365,788	1.88	266,543	2.27	321,837	2.44	345,939
371.0	I.O.C.P.	10,523,506	5.15	541,961	5.50	578,793	4.00	420,940	4.17	438,830
373.0	Street Lighting & Signal Systems	9,520,690	2.36	224,688	3.09	294,189	2.08	198,030	2.13	202,791
	TOTAL DISTRIBUTION PLANT	420,561,452	2.61	10,964,013	5.58	23,471,652	2.29	9,623,585	2.38	10,029,926
<u>GENERAL PLANT</u>										
390.0	Structures & Improvements	9,234,589	4.27	394,317	2.24	206,855	2.50	230,865	3.57	329,675
391.1	Office Furniture & Equipment	3,271,691	4.81	157,368	3.85	125,960	5.00	163,585	4.55	148,862
391.2	Computer Equipment	8,804,676	14.29	1,258,188	12.08	1,063,605	10.00	880,468	8.62	758,963
392.0	Transportation Equipment	6,528,679	9.52	621,530	0.26	16,975	8.33	543,839	7.69	502,055
393.0	Stores Equipment	343,778	3.95	13,579	1.77	6,085	3.33	11,448	3.57	12,273
394.0	Tools, Shop & Garage Equipment	2,950,039	2.50	73,751	3.99	117,707	5.00	147,502	3.33	98,236
395.0	Laboratory Equipment	886,386	2.66	23,578	1.63	14,448	2.63	23,312	2.44	21,628
396.0	Power Operated Equipment	10,036,913	6.67	669,462	5.46	548,015	6.67	669,462	6.25	627,307
397.0	Communication Equipment	10,137,348	4.95	501,799	3.31	335,546	4.00	405,494	4.35	440,975
398.0	Miscellaneous Equipment	231,871	3.75	8,695	4.48	10,388	4.55	10,550	3.70	8,579
	TOTAL GENERAL PLANT	52,425,970	7.10	3,722,268	4.66	2,445,583	5.89	3,086,524	5.62	2,948,553
	TOTAL ELECTRIC PLANT	1,134,028,059	2.45	27,835,348	4.67	52,958,490	2.35	26,704,176	2.39	27,047,848

THE EMPIRE DISTRICT ELECTRIC COMPANY
COMPARISON OF DEPRECIATION RATES AND ANNUAL AMOUNTS

EXHIBIT DSR-1R

[1] Account Number	[2] Description	[3] 6/30/2004 Balance \$	[4] Existing Rate %	[5] Annual Amount \$	[6] Company Rate %	[7] Annual Amount \$	[8] OPC Rate %	[9] Annual Amount \$	[10] Staff Rate %	[11] Annual Amount \$
	Net Salvage Allowance					25,123,142		1,760,288		
							2.51	<u>28,464,464</u>		

THE EMPIRE DISTRICT ELECTRIC COMPANY
COMPARISON OF DEPRECIATION RATES AND ANNUAL AMOUNTS

EXHIBIT DSR-2R

[1] Account Number	[2] Description	[3] 6/30/2004 Balance \$	[4] Existing Rate %	[5] Annual Amount \$	[6] Company Rate %	[7] Annual Amount \$	[8] OPC Rate %	[9] Annual Amount \$	[10] Staff Rate %	[11] Annual Amount \$
STEAM PRODUCTION PLANT										
RIVERTON										
311.0	Structures & Improvements	8,467,460	1.05	88,908	2.64	223,541	1.08	91,449	1.05	88,908
312.0	Boiler Plant Equipment	21,727,092	1.85	401,951	2.44	530,141	1.92	417,160	1.85	401,951
314.0	Turbogenerator Units	6,514,048	1.59	103,573	1.84	119,858	1.79	116,601	1.59	103,573
315.0	Accessory Electric Equipment	1,299,877	1.79	23,268	1.72	22,358	1.72	22,358	-	-
316.0	Misc. Power Plant Equipment	1,075,367	1.96	21,077	3.20	34,412	1.79	19,249	1.96	21,077
	Total Riverton	39,083,844	1.63	638,778	2.38	930,310	1.71	666,817	1.57	615,510
ASBURY										
311.0	Structures & Improvements	9,169,966	1.05	96,285	2.49	228,332	1.08	99,036	1.05	96,285
312.0	Boiler Plant Equipment	66,841,958	1.85	1,236,576	4.25	2,840,783	1.92	1,283,366	1.85	1,236,576
312.7	Unit Train	5,580,296	6.67	372,206	3.58	199,775	6.67	372,206	6.67	372,206
314.0	Turbogenerator Units	20,730,452	1.59	329,614	2.97	615,694	1.79	371,075	1.59	329,614
315.0	Accessory Electric Equipment	6,348,259	1.79	113,634	4.31	273,610	1.72	109,190	1.79	113,634
316.0	Misc. Power Plant Equipment	1,623,435	1.96	31,819	3.48	56,496	1.79	29,059	1.96	31,819
	Total Asbury	110,294,366	1.98	2,180,134	3.82	4,214,690	2.05	2,263,932	1.98	2,180,134
IATAN										
311.0	Structures & Improvements	3,997,069	1.05	41,969	2.37	94,731	1.08	43,168	1.05	41,969
312.0	Boiler Plant Equipment	31,103,431	1.85	575,413	2.96	920,662	1.92	597,186	1.85	575,413
314.0	Turbogenerator Units	8,252,043	1.59	131,207	2.55	210,427	1.79	147,712	1.59	131,207
315.0	Accessory Electric Equipment	3,689,765	1.79	66,047	2.56	94,458	1.72	63,464	1.79	66,047
316.0	Misc. Power Plant Equipment	872,216	1.96	17,095	1.94	16,921	1.79	15,613	1.96	17,095
	Total Iatan	47,914,524	1.74	831,732	2.79	1,337,198	1.81	867,142	1.74	831,732
	TOTAL STEAM PRODUCTION	197,292,734	1.85	3,650,644	3.29	6,482,198	1.93	3,797,891	1.84	3,627,376
HYDRAULIC PRODUCTION PLANT										
OZARK BEACH										
331.0	Structures & Improvements	556,389	1.64	9,125	2.59	14,410	1.56	8,680	1.64	9,125
332.0	Reservoirs, Dams & Waterways	1,461,404	1.67	24,405	1.23	17,975	1.22	17,829	1.67	24,405
333.0	Waterwheels, Turbines & Generators	1,305,038	1.47	19,184	2.81	36,672	1.14	14,877	1.47	19,184
334.0	Accessory Electric Equipment	812,324	1.43	11,616	3.73	30,300	1.27	10,317	1.43	11,616
335.0	Misc. Power Plant Equipment	348,853	2.44	8,512	3.09	10,780	2.33	8,128	2.44	8,512
	TOTAL HYDRAULIC PRODUCTION	4,484,008	1.62	72,843	2.46	110,137	1.33	59,831	1.62	72,843
OTHER PRODUCTION PLANT										
RIVERTON CT										
341.0	Structures & Improvements	193,357	1.82	3,519	2.50	4,834	1.82	3,519	1.82	3,519
342.0	Fuel Holders, Producers & Access.	87,123	3.85	3,354	4.19	3,650	3.85	3,354	3.85	3,354
343.0	Prime Movers	10,147,180	1.92	194,826	3.02	306,445	2.44	247,591	1.92	194,826
344.0	Generators	926,850	1.82	16,869	2.47	22,893	1.82	16,869	1.82	16,869
345.0	Accessory Electric Equipment	315,835	3.57	11,275	4.19	13,233	3.57	11,275	3.57	11,275
346.0	Misc. Power Plant Equipment	83,907	4.00	3,356	3.88	3,256	4.00	3,356	4.00	3,356
	Total Riverton CT	11,754,252	1.98	233,199	3.01	354,311	2.43	285,965	1.98	233,199
ENERGY CENTER										
341.0	Structures & Improvements	2,999,174	1.82	54,585	2.48	74,367	1.82	54,585	1.82	54,585
342.0	Fuel Holders, Producers & Access	1,209,362	3.85	46,560	2.41	29,146	3.85	46,560	-	-
343.0	Prime Movers	25,638,096	1.92	492,251	2.71	694,792	2.44	625,570	1.92	492,251
344.0	Generators	44,338,097	1.82	806,953	3.26	1,446,404	1.82	806,953	1.82	806,953
345.0	Accessory Electric Equipment	2,571,511	3.57	91,803	3.33	85,658	3.57	91,803	3.57	91,803
346.0	Misc. Power Plant Equipment	13,530,044	4.00	541,202	3.51	463,712	4.00	541,202	4.00	541,202
	Total Energy Center	90,286,284	2.25	2,033,355	3.09	2,794,079	2.40	2,166,673	2.20	1,986,794

THE EMPIRE DISTRICT ELECTRIC COMPANY
COMPARISON OF DEPRECIATION RATES AND ANNUAL AMOUNTS

EXHIBIT DSR-2R

[1] Account Number	[2] Description	[3] 6/30/2004 Balance \$	[4] Existing Rate %	[5] Annual Amount \$	[6] Company Rate %	[7] Annual Amount \$	[8] OPC Rate %	[9] Annual Amount \$	[10] Staff Rate %	[11] Annual Amount \$
<u>STATE LINE CT</u>										
341.0	Structures & Improvements	4,130,748	1.82	75,180	2.80	115,661	1.82	75,180	1.82	75,180
342.0	Fuel Holders, Producers & Access.	3,380,804	3.85	130,161	3.34	112,919	3.85	130,161	3.85	130,161
343.0	Prime Movers	42,664,185	1.92	819,152	2.95	1,258,593	2.44	1,041,006	1.92	819,152
344.0	Generators	11,268,284	1.82	205,083	3.41	384,248	1.82	205,083	1.82	205,083
345.0	Accessory Electric Equipment	3,710,093	3.57	132,450	3.54	131,337	3.57	132,450	3.57	132,450
346.0	Misc. Power Plant Equipment	123,435	4.00	4,937	1.82	2,247	4.00	4,937	-	-
	Total State Line CT	65,277,549	2.09	1,366,963	3.07	2,005,006	2.43	1,588,817	2.09	1,362,026
<u>STATE LINE CC</u>										
341.0	Structures & Improvements	7,045,752	1.82	128,233	3.50	246,601	1.82	128,233	2.86	201,509
342.0	Fuel Holders, Producers & Access.	7,971,750	3.85	306,912	3.44	274,228	3.85	306,912	2.86	227,992
343.0	Prime Movers	83,979,493	1.92	1,612,406	3.51	2,947,680	2.44	2,049,100	2.86	2,401,813
344.0	Generators	23,328,557	1.82	424,580	3.39	790,838	1.82	424,580	2.86	667,197
345.0	Accessory Electric Equipment	7,782,886	3.57	277,842	3.46	269,281	3.57	277,842	2.86	222,585
346.0	Misc. Power Plant Equipment	64,665	4.00	2,587	3.57	2,309	4.00	2,587	2.86	1,849
	Total State Line CC	130,172,903	2.11	2,752,560	3.48	4,530,937	2.45	3,189,253	2.86	3,722,945
	TOTAL OTHER PRODUCTION	297,490,988	2.15	6,386,077	3.26	9,684,333	2.43	7,230,708	2.46	7,304,965
	TOTAL PRODUCTION PLANT	499,267,730	2.02	10,109,564	3.26	16,276,668	2.22	11,088,430	2.20	11,005,184
<u>TRANSMISSION PLANT</u>										
352.0	Structures & Improvements	2,335,614	1.37	31,998	2.09	48,814	1.82	42,508	1.37	31,998
353.0	Station Equipment	81,102,639	2.19	1,778,148	2.20	1,784,258	2.00	1,622,053	2.13	1,727,486
354.0	Towers & Fixtures	777,080	1.30	10,102	1.92	14,920	1.54	11,967	1.30	10,102
355.0	Poles & Fixtures	26,709,864	1.85	494,132	3.33	889,438	1.67	446,055	1.82	486,120
356.0	OH Conductors & Devices	50,847,710	1.43	727,122	2.15	1,093,226	1.54	783,055	1.59	808,479
	TOTAL TRANSMISSION PLANT	161,772,907	1.88	3,039,502	2.37	3,830,657	1.80	2,905,637	1.89	3,064,184
<u>DISTRIBUTION PLANT</u>										
361.0	Structures & Improvements	8,415,331	1.98	166,624	2.08	175,039	1.67	140,536	1.82	153,159
362.0	Station Equipment	54,447,597	2.44	1,328,521	1.89	1,029,060	2.22	1,208,737	2.44	1,328,521
364.0	Poles, Towers & Fixtures	75,481,042	2.43	1,834,189	4.35	3,283,425	2.17	1,637,939	2.33	1,758,708
365.0	OH Conductors & Devices	94,509,876	2.10	1,984,707	3.77	3,563,022	1.89	1,786,237	1.92	1,814,590
366.0	UG Conduit	16,005,260	2.97	475,356	3.92	627,406	2.70	432,142	2.63	420,938
367.0	UG Conductors & Devices	33,575,290	3.61	1,212,068	3.59	1,205,353	3.13	1,050,907	3.03	1,017,331
368.0	Line Transformers	61,194,572	2.51	1,535,984	2.78	1,701,209	2.22	1,358,519	2.33	1,425,834
369.0	Services	42,710,443	3.03	1,294,126	5.00	2,135,522	2.50	1,067,761	2.63	1,123,285
370.0	Meters	14,177,845	2.58	365,788	2.27	321,837	2.27	321,837	2.44	345,939
371.0	I.O.C.P.	10,523,506	5.15	541,961	5.80	610,363	4.00	420,940	4.17	438,830
373.0	Street Lighting & Signal Systems	9,520,690	2.36	224,688	3.12	297,046	2.08	198,030	2.13	202,791
	TOTAL DISTRIBUTION PLANT	420,561,452	2.61	10,964,013	3.55	14,949,282	2.29	9,623,585	2.38	10,029,926
<u>GENERAL PLANT</u>										
390.0	Structures & Improvements	9,234,589	4.27	394,317	2.74	253,028	2.50	230,865	3.57	329,675
391.1	Office Furniture & Equipment	3,271,691	4.81	157,368	5.00	163,585	5.00	163,585	4.55	148,862
391.2	Computer Equipment	8,804,676	14.29	1,258,188	10.00	880,468	10.00	880,468	8.62	758,963
392.0	Transportation Equipment	6,528,679	9.52	621,530	7.08	462,230	8.33	543,839	7.69	502,055
393.0	Stores Equipment	343,778	3.95	13,579	3.17	10,898	3.33	11,448	3.57	12,273
394.0	Tools, Shop & Garage Equipment	2,950,039	2.50	73,751	4.50	132,752	5.00	147,502	3.33	98,236
395.0	Laboratory Equipment	886,386	2.66	23,578	2.63	23,312	2.63	23,312	2.44	21,628
396.0	Power Operated Equipment	10,036,913	6.67	669,462	6.33	635,337	6.67	669,462	6.25	627,307
397.0	Communication Equipment	10,137,348	4.95	501,799	4.00	405,494	4.00	405,494	4.35	440,975
398.0	Miscellaneous Equipment	231,871	3.75	8,695	4.55	10,550	4.55	10,550	3.70	8,579
	TOTAL GENERAL PLANT	52,425,970	7.10	3,722,268	5.68	2,977,652	5.89	3,086,524	5.62	2,948,553
	TOTAL ELECTRIC PLANT	1,134,028,059	2.45	27,835,348	3.35	38,034,260	2.35	26,704,176	2.39	27,047,848

THE EMPIRE DISTRICT ELECTRIC COMPANY
COMPARISON OF DEPRECIATION RATES AND ANNUAL AMOUNTS

EXHIBIT DSR-2R

[1] Account Number	[2] Description	[3] 6/30/2004 Balance \$	[4] Existing Rate %	[5] Annual Amount \$	[6] Company Rate %	[7] Annual Amount \$	[8] OPC Rate %	[9] Annual Amount \$	[10] Staff Rate %	[11] Annual Amount \$
	Net Salvage Allowance					10,198,912		1,760,288		
							2.51	<u>28,464,464</u>		

EXHIBIT DSR-3R

Account Number	6/30/2004 Balance \$	ASL Yrs	Annual Amount \$	Study Net Salv. %	Annual Amount \$	Alternative Net Salv. %	Annual Amount \$
355.0	26,709,864	60.0	445,164	(135.0)	1,046,136	(100.0)	890,329
364.0	75,481,042	46.0	1,640,892	(210.0)	5,086,766	(100.0)	3,281,784
365.0	94,509,876	53.0	1,783,205	(250.0)	6,241,218	(100.0)	3,566,410
369.0	42,710,443	40.0	1,067,761	(225.0)	3,470,223	(100.0)	2,135,522
	<u>212,701,361</u>		<u>4,491,858</u>		<u>14,798,208</u>		<u>8,983,717</u> <u>(5,814,491)</u>

EXHIBIT DSR-4R

[illegible]

THE EMPIRE DISTRICT ELECTRIC COMPANY EXHIBIT DSR-5R
EFFECT OF ASBURY RETIREMENT DATE

	<u>12/31/2003</u> <u>Balance</u>	<u>Rate</u>	<u>Annual</u> <u>Amount</u>
	\$	%	\$
311.0	9,184,624	4.53	416,063
312.0	67,003,898	5.12	3,430,600
312.7	5,580,296	1.34	74,776
314.0	21,039,942	4.22	887,886
315.0	6,348,259	5.07	321,857
316.0	1,596,097	3.51	56,023
	<u>110,753,116</u>	4.68	<u>5,187,204</u>
	Study		<u>7,790,640</u>
	Difference		<u>(2,603,436)</u>

THE EMPIRE DISTRICT ELECTRIC COMPANY EXHIBIT DSR-6R
EFFECT OF JURISDICTIONAL DIFFERENCES AND TEST YEAR BALANCES

FUNCTION	12/31/2003 BALANCE \$	6/30/2004 BALANCE \$	DIFFERENCE \$	RATE %	ANNUAL AMOUNT \$
STEAM PRODUCTION	197,333,565	197,292,734	(40,831)	3.29	(1,343)
HYDRO PRODUCTION	4,310,784	4,484,008	173,224	2.46	4,261
OTHER PRODUCTION	297,567,516	297,490,988	(76,528)	3.26	(2,495)
TRANSMISSION	161,598,520	161,772,907	174,387	2.37	4,133
DISTRIBUTION	457,484,424	420,561,452	(36,922,972)	3.55	(1,310,766)
GENERAL	51,016,129	52,425,970	1,409,841	5.58	78,669
TOTAL ELECTRIC	<u>1,169,310,938</u>	<u>1,134,028,059</u>	<u>(35,282,879)</u>		<u>(1,227,540)</u>