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MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

UNION ELECTRIC COMPANY
D/B/A AMERENUE

CASE NO. ER-2008-0318

Staff Exhibit No. 200 NP
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Jefferson City, Missouri
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** Denotes Highly Confidential Information **

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REVENUE REQUIREMENT COST OF SERVICE REPORT

COST OF SERVICE REPORT

I. Executive Summary

The Staff has conducted a review in Case No. ER-2008-0318 of all revenue requirement cost of service components (capital structure and return on rate base, rate base, depreciation expense and operating expenses) which comprise Union Electric Company's d/b/a AmerenUE (AmerenUE or Company) Missouri jurisdictional revenue requirement. This audit was in response to AmerenUE's filing made on April 4, 2008, seeking to increase its Missouri jurisdictional retail rates to recover an additional approximately $251 million on an annual basis.

The Staff's recommended increase in revenue requirement is based upon an adjusted test year for the twelve months ending March 31, 2008, with a true-up estimate through September 30, 2008. The Staff's recommended revenue requirement of $51,395,678 for AmerenUE is based on a return on equity (ROE) of 9.50%, within the Staff's recommended ROE range of 9.00% to 9.75%.

The impact of the Staff's recommended revenue requirement for each retail rate customer class will be addressed in the Staff's rate design direct testimony and report that is to be filed on September 11, 2008.

II. Background of AmerenUE

AmerenUE provides electric utility service to approximately 1.2 million retail customers primarily in the eastern half of Missouri, but also to a limited extent in northwestern Missouri. AmerenUE is wholly owned by Ameren Corporation, which also provides utility service in Illinois through the AmerenIP, AmerenCIPS and AmerenCILCO operating subsidiaries. AmerenUE also operates a natural gas distribution business in Missouri, which serves approximately 127,000 customers.

AmerenUE last sought to change its Missouri jurisdictional electric retail rates when it filed for a $361 million increase on July 7, 2006, in Case No. ER-2007-0002. In its Report and Order in that proceeding, which was effective June 1, 2007, the Commission granted AmerenUE a total annual increase in rates of approximately $43 million.

III. Test Year/True-Up Period

Though AmerenUE filed its case based upon a March 31, 2008, test year, it made adjustments to its case to reflect the impact of changes through June 30, 2008; its requested update period. In the "Jointly Proposed Procedural Schedule, Request For Other Procedural Items And Recommendation For True-Up" (Joint Recommendation) filed on May 21, 2008, the Parties to the case agreed to a test year of March 31, 2008, and a true-up through September 30, 2008. The Joint Recommendation included the following language regarding the items that would be considered in the true-up.

> Anticipated true-up items would include revenues, customer growth, off-system sales revenues, payroll, depreciation expense, fuel and transportation prices, purchased power costs, income taxes, rate base excluding cash working capital lead/lag days, and other significant items that maintain a proper matching of revenues, expenses and rate base. No party is precluded from proposing such significant additional item(s) as a proper true-up item, but the other parties should be timely notified in writing of a party's decision to propose an additional item(s) as a proper true-up item(s). The inclusion of an item in the preceding list of anticipated true-up items shall not preclude or limit any party from objecting to a specific item or event as inappropriate for treatment as a true-up item or as inappropriate for inclusion in the Commission's determination of the revenue requirements in this case. Further, inclusion of an item in the preceding list of anticipated true-up items shall not preclude or limit any party's discovery rights in any way as to the listed items or any other items or matters involved in this case.

On May 29, 2008, in its "Order Adopting A Procedural Schedule And Establishing A Test Year" the Commission ordered a true-up through September 30, 2008. Subsequently, in a Supplemental direct filing, AmerenUE adjusted its case to replace budgeted data for the first quarter of 2008, with actual results for January through March of 2008. In addition, the test year ending March 31, 2008, was adjusted to reflect anticipated changes through the September 30, 2008, ordered true-up period.

The Staff has included an amount on Accounting Schedule 1 - Revenue Requirement for its estimate of the value of true-up through September 30, 2008. The Staff believes that its true-up estimate includes the significant items that will be addressed during the true-up audit. However, the Staff expects to address additional items during the true-up, consistent with the Joint Recommendation discussed above. The Staff is not endorsing the items listed and quantified in the Staff's true-up estimate. These items are placeholders, pending the completion of the true-up audit. A quantification of the items included in the Staff's true-up estimate are shown below.

Return on Additional Net Plant	$15.3 million
Depreciation Expense	$ 8.4 million
Fuel Expense	$20.3 million
Revenue Growth	$(9.3) million
Additional Employees	$ 5.3 million
Total	$40.0 million

IV. Major Issues

The following are the major issues that exist between the Staff and the Company as a result of their respective direct case filings. These issues are discussed here because of their estimated revenue requirement dollar value. A brief explanation for each issue follows, with an estimate of its dollar value.

Return on Equity (ROE) – Issue Value – ($70 million difference-based on Company's rate base). The Staff is recommending a 9.50% ROE. AmerenUE is recommending a 10.90% ROE. This issue is addressed in detail in the pre-filed direct testimony of consultant Steven Hill appearing as a witness on behalf of the Staff.

Fuel, Purchased Power and Off System Sales – Issue Value – ($12 million difference). The majority of this difference relates to the level of off-system sales determined by AmerenUE and the Staff as appropriate for the test year and the update.

Incentive Compensation and Restrictive Stock Programs – Issue Value – ($14 million difference). The Staff eliminated the cost of the incentive compensation programs and the restrictive stock program from the cost of service.

Payroll and Benefits – Issue Value – ($14 million difference). Staff normalized and annualized payroll, payroll taxes and benefits including pensions and OPEBs.

Tree Trimming, PowerOn and Other Distribution Cost – Issue Value – ($20 million difference). The Staff has recognized the test year levels for these items rather than the Company's budgeted amounts

MISO Day 2 Revenues – Issue Value – ($12 million difference). The Staff is recognizing a portion of the Revenue Sufficiency Guarantee (RSG) payments received during the test year from MISO, while the Company has eliminated these payments.

There are various other issues between the Staff and the Company, based upon their respective direct filings, which are of lower dollar magnitude. These issues are discussed as well in this Report, but are not highlighted for the size of the difference between the Staff's and AmerenUE's positions.

V. Rate of Return

The Staff is recommending an ROE range of 9.00% to 9.75%, with a specific ROE recommendation of 9.50%. To develop the weighted cost of capital, the Staff used the Company's capital structure and embedded costs. The Staff's cost of capital position is developed and supported by Steven Hill, whose testimony is filed separate from this report. Mr. Hill was the Staff's rate of return witness in AmerenUE's last rate case.

Staff Expert/Witness: Stephen M. Rackers, Sections I, II, III, IV and V

VI. Rate Base

A. Plant in Service and Depreciation Reserve

1. Plant in Service as of March 31, 2008

a. Accounting Schedule 3, Plant in Service

This Schedule reflects the rate base value of AmerenUE's plant in service at March 31, 2008, by account. The Staff has adjusted AmerenUE's plant balances to assign a portion of the Company's distribution plant to the wholesale jurisdiction, which is designated to serve AmerenUE's sales for resale customers. The Staff has also adjusted AmerenUE's plant balances to allocate a portion of the Company's general plant to AmerenUE's retail natural gas business.

Staff Expert/Witness: Erin M. Carle

b. Sioux Generating Station Water Plant

AmerenUE is installing scrubber facilities at its Sioux Generating Station (Sioux Plant). The first scrubber unit is scheduled to be in service in December 2009 and the second scrubber unit is scheduled to be in service in April 2010. Staff engineers have visited the Sioux Plant where they observed the construction site, met with plant personnel and reviewed related documentation. Due to the Staff's insistence that information about this project should be available to the Staff, AmerenUE personnel made a presentation to the Staff and a representative from the Office of Public Counsel on August 20, 2008, regarding the progress of the scrubber project.

The old water treatment plant at the Sioux Plant was not capable of meeting the needs of both the existing generating plant and the new scrubber facilities. In addition, the old water treatment plant was partially blocking the scrubber facilities construction area. Therefore, AmerenUE installed a new water treatment plant that was located away from the construction area, which could meet the needs of both the existing generating station and the new scrubber facilities. AmerenUE retired and demolished the old water treatment plant and included the new water treatment plant in plant in service when it was completed in February 2008. The old water treatment plant was part of the original Sioux Plant that was placed in-service in 1967.

The installation of the new water treatment plant could be viewed as cost of constructing the new scrubber facilities, since the installation of the scrubber facilities accelerated the retirement of the old water treatment plant. If this position was taken it could be argued that the new water treatment plant should remain in construction work in progress (CWIP) until the first scrubber unit is placed in service in December 2009 and the retirement of the old water treatment plant would be reversed and would remain in plant in service. In light of the age of the old water treatment plant and the need for a new treatment plant to operate the existing Sioux Plant, the Staff is not proposing such an adjustment.

Staff Expert/Witness: Stephen M. Rackers

c. Nuclear Licensing

i. Callaway I

AmerenUE is in the process of completing for filing with the U.S. Nuclear Regulatory Commission (NRC) an application to re-license the Callaway Nuclear Generating Station Unit I. When the application is completed, the cost of this item will be booked to Intangible Plant in Service. However, the license is not expected to be submitted to the NRC until 2011 for approval by 2013. Therefore, the Staff has not included this item in the cost of service and recommends that it remain in CWIP.

ii. Callaway II

On July 28, 2008, AmerenUE submitted a combined Construction and Operating License Application (COLA) to the NRC for a potential new nuclear power plant in Callaway County, Missouri, to be completed in the 2018 – 2020 timeframe. The cost of the COLA is currently booked to CWIP, and will eventually be carried in Account 303, Intangible Plant. AmerenUE has made no decision to actually build a second nuclear power plant at this time, and the regulatory process for a COLA involves a comprehensive review, estimated by the NRC to require up to 42 months for completion. The Staff views this item as a cost of the new nuclear plant, should it ever be completed. Therefore, the Staff has not included this item in the cost of service and recommends that it remain in CWIP. In addition, on advice from Staff counsel, the Staff believes that including this item in the cost of service would violate Missouri Statute, Section 393.135 RSMo. This statute, better known as Proposition 1, prohibits any charge made by an electrical corporation for service, which is associated with owning, operating, maintaining, or financing any property before it is "fully operational and used for service."

Staff Expert/Witness: Stephen M. Rackers

2. Depreciation Reserve as of March 31, 2008

Accounting Schedule 5, Depreciation Reserve, reflects the rate base value of AmerenUE's depreciation reserve at March 31, 2008, by account. As it did with Plant in Service, the Staff has adjusted AmerenUE's depreciation reserve balances to assign a portion of the Company's distribution plant reserve to the wholesale jurisdiction, and a portion of the Company's general plant to AmerenUE's retail natural gas business.

Staff Expert/Witness: Erin M. Carle

B. Cash Working Capital (CWC)

1. Calculation of Revenue and Expense Lags

In certain instances, after examining the appropriateness of the calculations, the Staff has used the same expense lag factors as those recommended by the Company. In certain other situations, the Company did not calculate a lag, or the Staff determined that the lag AmerenUE calculated was not appropriate. In these instances, the Staff either used the lag it calculated in the last rate case, Case No. ER-2007-0002, or developed a new lag based on updated information from the current case, if it determined that a new lag was more appropriate. For example, the Company based its income tax expense lags on statutory payment dates. The Staff also used a similar calculation in the last case. However, in the current rate case, the Staff based its expense lags on a review of the actual frequency of the payments made by the Company during the last three calendar years. These expense lags more accurately reflect the CWC requirements of the Company for income taxes. For the revenue lag, the Staff updated the Company's calculation, based on actual data reflecting the test year ending March 31, 2008. The Staff also included a component for off-system sales revenue in the determination of the overall revenue lag.

2. Vacation Payroll

The major difference between the Company and the Staff regarding CWC is the recognition of vacation payroll. In general, wages are earned during a two week payroll period and paid at the end of the week following the payroll period. This equates to a 14 day payroll lag (midpoint of the payroll period 7 days + payment 7 days following the payroll period). However, a portion of employees' current wages represent paid vacation that was earned during prior payroll periods. For example, union employees earn vacation when they begin employment, but are required to wait one year before being allowed to take vacation. As a result, union wages, which represent paid vacation, were earned far in advance of payment. The Staff has calculated that on average, paid vacation is earned 385 days prior to being paid. Failure to recognize this situation will result in excess CWC being included in the determination of revenue requirement.

Staff Expert/Witness: Erin M. Carle

C. Prepayments, and Materials and Supplies

The Company has utilized shareholder funds for prepaid items such as insurance premiums and materials and supplies. By including these items in rate base, this up-front investment made by the Company is recognized in customers' rates. The Staff has included prepayments in rate base at the 13-month average level ending March 31, 2008. The Staff eliminated some of the prepayment balances to be consistent with the positions it has taken on related issues. For example, the Staff disallowed certain insurance policies from expense. As a result, the Staff it is not recognizing the related prepayment balance in rate base.

The Company also maintains a variety of materials and supplies in inventory to meet its day-to-day needs in performing its utility operations. The Staff has included AmerenUE's average balance of materials and supplies inventory that was maintained during the 13 months ending March 31, 2008.

Staff Expert/Witness: Erin M. Carle

D. Fuel Inventories

1. Coal Inventory

The Staff included a 65-day supply of coal for the Company's Labadie, Rush Island and Sioux plants based on the Staff's average daily burn for each of the generation facilities, as calculated by the RealTime™ production cost model. The Company's Meramec plant currently has a limited storage capability and, therefore, the Staff has included approximately a 51-day supply of coal, based on the average daily burn for the Meramec plant, in recognition of that storage limitation. The Company is currently in the process of making capital improvements at its Meramec plant to access coal stored at its barge loading terminal to be reclaimed for use at its Meramec plant. However, these improvements are currently not in service and are not scheduled to be completed until after the September 30, 2008 true-up cut-off date approved by the Commission for this case. As part of its true-up audit, the Staff will examine coal inventory balances through September 30, 2008, to determine if additional adjustments to coal inventory balances are required. All of the Staff's coal inventory levels included in the cost of service calculation reflect the coal prices in effect through March 31, 2008, which were used as inputs to the Staff's production cost model.

2. Nuclear Fuel, Gas and Oil Inventories

For nuclear fuel inventory, the Staff used an 18-month average of the value of the nuclear fuel that was contained in the fuel core of the Callaway Nuclear Generating unit, consistent with the Company's calculation. This inventory level reflects the average value during a complete fuel cycle, since Callaway is refueled every 18 months. The Staff used 13-month averages to determine the inventory quantities for gas and oil. A 13-month average reflects the activity in the inventory accounts during the Staff's test year ending March 31, 2008.

Staff Expert/Witness: John P. Cassidy

E. FAS 87 – Pensions and FAS 106 OPEB Trackers

See the discussion of these items in Section VIII.F.1., FAS 87/Pension Expense and Section VIII.F.2, FAS 106/OPEBs Expense.

Staff Expert/Witness: Roberta A. Grissum

F. Customer Demand Programs Regulatory Asset

In AmerenUE's last rate case, Case No. ER-2007-0002, the Commission, by its Order Approving Tier I Partial Stipulation and Agreement, filed On March 15, 2007, issued April 11, 2007, approved the Stipulation and Agreement as to Certain Issues/Items ("Stipulation and Agreement") which provides that "[t]he treatment of Demand Side Management Costs proposed in the Direct Testimony of Staff witness Lena Mantle shall be adopted." Her testimony was filed in Case No. ER-2007-0002 on April 20, 2007 as Exhibit 219.

Thus, the Stipulation and Agreement provided for the creation of a regulatory asset account for expenditures by AmerenUE on programs for Demand Side Management (DSM). These DSM expenditures by AmerenUE could include expenditures for identifying, developing, screening, implementing, and evaluating energy efficiency and demand response programs. The regulatory asset account allows AmerenUE to treat the DSM expenditures on energy efficiency as a depreciable asset. The regulatory asset account diminishes any advantage AmerenUE might perceive in investing in new generation over investing in demand-side resources.

In its Report and Order in Case No. ER-2007-0002, the Commission ordered AmerenUE to file tariff sheets revising its Industrial Demand Response (IDR) Program. The Commission established Case No. ET-2007-0459 as the place for AmerenUE to file those tariff sheets. In that case, the Commission approved a stipulation and agreement where AmerenUE agreed to a pilot IDR program for which it would only book its net expenditures on the IDR pilot to the DSM regulatory asset account. The pilot IDR program became effective February 24, 2008, when the tariff sheets for the program became effective. This summer, AmerenUE has asked for, and received, curtailment from customers participating in that program.

Staff asks that the Commission clarify the net expenditures to be included in the regulatory asset account. Specifically, some demand response programs may give AmerenUE the ability to compensate participating customers for reducing their demand for a short period of time (four to eight hours) at AmerenUE's request. The subsequent reductions in demand by those customers could be used by AmerenUE to increase its off-system sales at a time when the market value of energy is high. In such a situation, the resulting revenues from off-system sales should be credited to the DSM regulatory asset account. Otherwise, AmerenUE's ratepayers would be paying AmerenUE's expenditures to recruit and compensate AmerenUE customers for reducing usage as participants in AmerenUE's demand response program, while AmerenUE's shareholders reap the benefits AmerenUE receives from the increased off-system sales revenues.

Demand response programs can, and have been, used to reduce the need for generating, or purchasing, additional high cost energy to meet system requirements. As a result, demand response programs could benefit AmerenUE ratepayers. Therefore, AmerenUE's net expenditures for AmerenUE's demand response programs should be included in the regulatory asset account.

In AmerenUE's last resource plan case, Case No. EO-2006-0240, AmerenUE agreed to work with the Staff, Public Counsel and the interveners in that case "to develop a process to provide the opportunity for public input" into AmerenUE's resource plan.

AmerenUE has accepted input on processes to be used for identifying, screening, implementing and evaluating the energy efficiency programs, and is doing so in its pending resource plan case that it filed in February 2008, Case No. EO-2007-0409. As part of developing its current resource plan, AmerenUE retained a consultant to identify and screen DSM and affordability programs for AmerenUE's ratepayers. Actual costs associated with the new DSMprograms identified in this process will be included in rate base in AmerenUE's regulatory asset account. However, no DSM program was implemented by the end of the test year, and no costs associated with energy efficiency or demand response programs are currently in the Staff's cost-of-service for AmerenUE.

The Staff will re-examine costs in the regulatory asset account as part of its true-up through September 30, 2008.

Staff Expert/Witness: Henry E. Warren

G. Customer Deposits

The amount of this item in Accounting Schedule 2, Rate Base, represents a 13-month average (March 2007 – March 2008) of AmerenUE's customer deposits. Customer deposits represent funds received from the utility company's customers as security against potential loss arising from failure to pay for utility service. Until refunded, customer deposits represent a source of funds available to the company, and are included as an offset to the rate base investment. Generally, interest is calculated on customer deposits and paid to customers for the use of their money. The Staff adjusted expenses to include interest calculated on the level of customer deposits reflected on Staff Accounting Schedule 10.

Staff Expert/Witness: Erin M. Carle

H. Customer Advances

Customer advances are funds provided by individual customers of the Company to assist in the costs of the provision of electric service to them. These funds represent interest-free money to the Company. Therefore, it is appropriate to include these funds as an offset to rate base. No interest is paid to customers for the use of their money, unlike customer deposits. The amount of customer advances reflected on Accounting Schedule 2, Rate Base, represents a 13-month average (March 2007 – March 2008).

Staff Expert/Witness: Erin M. Carle

I. Deferred Income Taxes

AmerenUE's deferred tax reserve represents, in effect, a prepayment of income taxes by AmerenUE's customers prior to payment by the Company. As an example, because AmerenUE is allowed to deduct depreciation expense on an accelerated basis for income tax purposes, depreciation expense used for income taxes paid by the Company is considerably higher than depreciation expense used for ratemaking purposes. This results in what is referred to as a "book-tax timing difference," and creates a deferral of income taxes to the future. The net credit balance in the deferred tax reserve represents a source of cost-free funds to the Company. Therefore, AmerenUE's rate base is reduced by the deferred tax reserve balance to avoid having customers pay a return on funds that are provided cost-free to the Company. **

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____________________ ** The Staff does not believe the deferred tax balance should be reduced for the determination of rates until a final determination has been made regarding these items by the Internal Revenue Service. The revenue requirement value of this issue is approximately ** __________. **

Staff Expert/Witness: John P. Cassidy

VII. Allocations

A. Jurisdictional Allocations

Jurisdictional allocation factors are used to allocate demand-related and energy-related costs to the applicable jurisdictions. In this case, demand-related and energy-related costs are divided among two jurisdictions: retail operations and wholesale operations. The particular allocation factor applied is dependent upon the types of costs to be allocated.

Staff, as well as the Company, is utilizing a Twelve Coincident Peak (12 CP) methodology in determining demand allocation factors. Staff has calculated the following demand allocation factors for the particular jurisdictions:

Retail Operations:	0.9840
Wholesale Operations	0.0160

The energy allocation factor for an individual jurisdiction is the ratio of the normalized annual kilowatt-hour (kWh) usage in the particular jurisdiction to the total normalized AmerenUE kWh usage adjusted for losses and anticipated growth, as well as an annualization adjustment. Growth and annualization adjustments were obtained from Staff Witnesses Jeremy Hagemeyer and Curt Wells, respectively. Staff has calculated the following energy allocation factors for the particular jurisdictions:

Retail Operations:	0.9846
Wholesale Operations:	0.0154

Staff Expert/Witness: Alan J. Bax

B. Corporate Allocations

A subsidiary of Ameren Corporation, Ameren Management Services (AMS), provides various management and administrative functions for AmerenUE. In this audit, the Staff reviewed the methods used by AMS for assigning and allocating its costs to AmerenUE electric operations. Under the corporate cost allocation system employed by AMS, costs are either directly assigned to business units, directly allocated, indirectly allocated by function, or indirectly allocated from corporate to the business units. The direct assignment and allocation of costs, and the methods used to allocate costs from AMS, are provided in Ameren's cost allocation manual (CAM).

Direct assignment is the preferred method of assigning costs, whenever possible. Certain costs are directly assigned to AmerenUE's electric operations when the cost benefits AmerenUE only. An example of this type of cost is the specific maintenance of AmerenUE's asset records by AMS.

AMS allocates costs that benefit more than one business unit through direct allocation. General Rate Accounting Activities is an example of a cost that benefits more than one business unit. Ameren allocates this cost based on Distribution Customer Activities because customer levels identify those who directly benefit from this cost. Other allocation factors that may be utilized for direct allocation of costs include number of employees, total assets and number of customers.

Any cost that cannot be directly assigned, or directly allocated, by Ameren is allocated as indirect functional or indirect corporate. Indirect functional costs are accumulated by each department within a functional group, and allocated based upon the amount of service a particular business unit, such as AmerenUE, receives of that particular function. Indirect functional cost, such as office supplies, are accumulated by function and allocated to a client company such as AmerenUE. The basis of allocation is the ratio of the total direct and directly allocated costs charged to AmerenUE from a particular function compared to all such costs charged to all client companies. Indirect costs identified as corporate in nature, such as AMS property taxes, are allocated based on the ratio of the total direct and directly allocated costs charged to AmerenUE compared to all such costs charged to all client companies.

Allocation factors based upon such items as customers, or number of employees, are determined annually, unless a significant change in circumstances occurs. The percentage of various costs that were allocated by AMS to AmerenUE, such as payroll and employee benefits, were used by the Staff to develop its annualizations for these expenses in the determination of revenue requirement in this case.

Staff Expert/Witness: Roberta A. Grissum

VIII. Income Statement

A. Rate Revenues

1. Introduction

Since the largest component of operating revenues result from rates charged AmerenUE's Missouri retail customers, a comparison of operating revenues with cost of service is fundamentally a test of the adequacy of the currently effective Missouri jurisdictional retail electricity rates. If the overall cost of providing service to Missouri retail customers exceeds operating revenues, an increase in the current rates AmerenUE charges its Missouri retail customers for electricity is required.

One of the major tasks in a rate case is to not merely determine whether a deficiency (or excess) between cost of service and operating revenues exists, but to determine the magnitude of any deficiency (or excess) between cost of service and operating revenues. Once determined, the deficiency (or excess) can only be made up (or otherwise addressed) by adjusting Missouri retail rates (i.e., rate revenues) prospectively.

2. Definitions

Operating Revenues are composed of Rate Revenue, Margin from Off-System Sales, and Other Operating Revenue.

Rate Revenue: Test year rate revenues consist solely of the revenues derived from AmerenUE's charges for providing electric service to its Missouri retail customers (native load). AmerenUE's charges are determined by each customer's usage and the (per unit) rates that are applied to that usage. In Missouri, different rates apply to different times of the year (summer vs. winter); different types of charges (demand vs. energy); and to customers in different rate classes (differentiation by type and amount of use).

Margin from Off-System Sales: Margin from off-system sales is the profit that AmerenUE makes conducting sales of electricity to other utilities at non-regulated prices. The profit (margin) is calculated as the gross revenues from the sale less the generation or purchased power expense AmerenUE incurs in order to make the sale. The rationale for assigning the profit to ratepayers is that the electricity being sold is generated by power plants being paid for by ratepayers.

Other Operating Revenue: This category included the revenue from such items as the rental of electric facilities and other miscellaneous charges.

3. The Development of Rate Revenue in this Case

The objective of this section is to determine annualized, normalized test year sales and revenues by rate classes.

The intent of the Staff's adjustments to test year Missouri sales and rate revenues is to determine the level of revenue that the Company would have collected on an annual, normal-weather basis, based on information "known and measurable" at the end of the update period.

The two major categories of revenue adjustments are known as "normalizations" and "annualizations". Normalizations deal with test year events that are unusual and unlikely to be repeated in the years when the new rates from this case are in effect. Test year weather is an example. Annualizations are adjustments that re-state test year results as if conditions known at the end of the update period had existed throughout the entire test year.

4. Regulatory Adjustments to Test Year Sales and Rate Revenue

a. Adjustment to Remove Unbilled Revenues

The recording of unbilled revenue on the books of the Company is an attempt to recognize the sales of electricity that have occurred, but have not been billed to the customer. Since the Staff has adjusted revenues to assure that it includes only 365 days of revenue, and since the revenues have been restated to a billed basis, it is unnecessary to recognize unbilled revenue. Therefore, Staff has removed unbilled revenue from its determination of revenue requirement.

Staff Expert/Witness: Jeremy K. Hagemeyer

b. Adjustment to Remove Gross Receipts Tax (GRT)

The Company acts as a collector for taxes imposed on utility service revenues by municipalities or other taxing jurisdiction. The GRT included on a customer's bill is collected by the Company which, in turn, remits the collections to the appropriate taxing jurisdiction. The GRT included on a customer's bill is recorded as revenue on the books of the Company with a corresponding charge to GRT expense. Theoretically, the revenue and expense offset one another and, therefore, have no effect on net income. However, the expense accrual for GRT does not always match perfectly the GRT included in revenue. Eliminating the GRT recorded in revenue through an adjustment and the GRT recorded in expense through a companion adjustment assures that GRT will have no impact on net income or revenue requirement.

Staff Expert/Witness: Jeremy K. Hagemeyer

c. Preliminary Adjustments to Test Year

A data check was done for billing errors prior to making adjustments. Starting with revenue based on Revenue Month, (the month in which sales and revenue were reported in the Company billing system), Staff adjusted AmerenUE's revenue in all rate classes except the lighting class to account for billing corrections and to reclassify revenues to Primary Month (the month reflecting the rates and revenue when service actually occurred). Lighting had no billing corrections and, because it was not metered, required no Primary month adjustment. The total annual preliminary adjustment to test year revenues is a reduction to revenues of $15,035.

Staff Expert/Witnesses: Curt Wells and Manisha Lakhanpal

d. Annualization of Rate Switching

During the test year, one customer switched from the Small Primary Service Time of Use (SPS-TOU) rate class to the Large Primary Service Time of Use (LPS-TOU) rate class. This adjustment was made by moving that customer's test year usage data for the affected months from the SPS-TOU class data to the LPS-TOU class data. For the customer who switched rate classes during the test year, the annualization adjustment to test year revenues is a reduction to revenues of $21,628.

Staff Expert/Witness: Manisha Lakhanpal

e. Annualization of Rate Change

Test year rate revenues do not reflect any of the changes to AmerenUE's rates made on June 4, 2007, and July 23, 2007 as a result of Case No. ER-2007-0002. Thus, test year revenues are understated by the difference between the amount that was actually billed to customers during the test year and the amount that would have been billed to customers by the Company if the current rates (effective July 23, 2007) had been in effect throughout the entire test year. The Staff's method of computing annualized revenues for each rate class is to multiply test year billing units by current rates. The difference between these computed annualized revenues and the amounts billed during the test year under the prior rates provides the amount of the adjustment. The total annualization for rate change to test year revenues is an increase to revenues of $11,486,637.

Staff Expert/Witness for LPS and LTS Classes: Manisha Lakhanpal

Staff Expert/Witness for All Other Classes: Curt Wells

f. Weather Normal Variables

The actual weather experienced during the test year is unique and unlikely to be repeated exactly in each of the years when the new rates from this case are in effect. Thus sales are adjusted to the level that would be expected under "normal" weather.

NOAA[1] states that "A climate normal is defined, by convention, as the arithmetic mean of a Climatological element computed over three consecutive decades". The Climatological elements being computed in this case are observed daily temperatures. To conform to the NOAA's three consecutive decades, the time period used in the case in determining the normal values of temperature, is the 30-year period (January 1, 1971 through December 30, 2000). However, we cannot directly use the NOAA normal temperatures due to inconsistencies and biases that have resulted from weather instruments being moved, (either horizontally, vertically, or both), replaced or updated, and changes in observation procedures. To account for such inconsistencies and biases, certain adjustments have been made to the actual daily temperatures based on the adjusted daily temperature data from the Midwestern Regional Climate Center's ("MRCC") database for St. Louis Lambert International Airport weather station. The

[1] National Oceanic and Atmospheric Administration

adjustments made to the actual daily temperatures were agreed upon by Company and Staff in Case No. EM-96-149.

The data required to weather normalize sales are the actual and normal two-day weighted mean daily temperatures. To calculate the two-day weighted mean temperature, the current day's mean temperature is averaged with the prior day's mean temperature applying a 2/3 weight on the current day and 1/3 weight on the prior day. This is done in order to bring forward the previous day's residual effect on the current day's usage.

The test year (April 1, 2007 through March 31, 2008) in this case has a leap day, which increases the observed days count in the test year to 366. Since revenues and costs are all calculated based on a 365 day year, temperature normals are calculated for 365 days. Summer and winter temperatures lend uniqueness to any given test year, and since Leap Day is likely to be cold, observed temperatures for February 29, 2008, have been retained in the current test year observation. But in order to have a 365 day count, a day with a weighted mean daily temperature close to the average annual weighted mean daily temperature, and a nominal impact on usage is removed from the test year observation. The underlying assumption is that it is like any average day in the year and does not have a huge impact on usage. March 31, 2008, which borders the "shoulder months"[2], was removed from the dataset because its observed two-day weighted mean daily temperature (56.83 deg) was close to the average annual weighted mean daily temperature (57.7 deg).

Normal weather ranking - For this case, Staff followed the methodology used by both the Company and the Staff in the Company's most recent rate case (Case No. ER-2007-0002). Staff uses normal weather temperature to normalize both class usage and hourly net system loads. This ranking method estimates daily normal temperature values, ranging from the temperature that is "normally" the hottest to the temperature that is "normally" the coldest, thus estimating normal extremes. The daily temperature normals are calculated by averaging the ranked temperatures in each year of the 30-year normals period, irrespective of the calendar date. This results in the normal extreme being the average of the most extreme temperatures in each year of the normals period. The second most extreme temperature is based on the average of the second most extreme day of each year, and so forth.

[2] April and May are considered shoulder months because heating demand has almost ended and cooling demand hasn't yet started.

Because actual temperatures do not smoothly move up and down during the year,[3] these normal temperatures are then assigned to the days of the test year based on the rankings of the actual temperatures of the test year.

This information was provided to Staff witness Shawn E. Lange for weather normalization.

Staff Expert/Witness: Manisha Lakhanpal

g. Normalization of Usage

Electricity use is very sensitive to weather conditions. Because of the high saturation of air conditioning and the presence of significant electric space heating in Union Electric Company d/b/a AmerenUE (AmerenUE) service territories, the consumption of AmerenUE's customers is directly related to daily temperatures. The weather during the test year differed from normal conditions. The months of December, 2007, and January, 2008, were warmer than normal. The warmer than normal temperatures resulted in decreased energy consumption due to lower than normal heating usage. The months of June, August, and September 2007 were warmer than normal. These warmer than normal temperatures resulted in increased energy consumption due to higher than normal cooling usage.

Since the actual daily temperatures during the test year varied from normal conditions, the Staff performed a weather impact analysis to adjust for these abnormal conditions.

A complete independent weather impact analysis was not performed on hourly class load data. However, both AmerenUE's weather normalization process and its resulting weather normalization were reviewed by the Staff. The methodology used by AmerenUE contained the characteristics important in the class level weather normalization process; e.g., the use of daily load research data to determine non-linear class responses to weather, the incorporation of different base usage parameters for different times of the year, and "clean" billing usage.

As a check of the resulting weather adjustments, they were compared to the independent net system weather normalization Staff conducted, which is described in the Weather Normalization of Net System Input section of this report. Comparisons of the magnitude and direction of the adjustments of the class usages were made to the magnitude and direction of the net system input weather normalization.

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[3] For example, In July a Monday and Tuesday may be hot days but it cools down on Wednesday. However, it is still likely that on the weekend it will be hot again.

From this review, it was determined that AmerenUE's methodology was reasonable for the Staff to use in the normalization of the revenues of the following classes: Residential (RES), Small General Service (SGS), Large General Service (LGS), and Small Primary Service (SPS).

However, for the Large Power Service Class (LPS), each customer's individual monthly demand and energy use, measured over multiple years prior to the test year and the 12 months of the test year, were examined graphically to determine whether an adjustment was needed. The Staff then weather normalized the customers that were weather sensitive at the individual customer level.

Staff Witnesses Curt Wells and Manisha Lakhanpal used their respective class weather normalization adjustment to calculate the weather normalization revenue adjustment.

Staff Expert/Witness: Shawn E. Lange

h. Weather Normalization of Sales and Revenue

Test year sales data for the RES, SGS, LGS, SPS, and LPS rate classes provided by AmerenUE were normalized for weather by applying weather normalization factors provided by Staff Witness Shawn Lange for each class for each month. The billing units were adjusted by these factors and current rates were applied to determine weather normalized revenue. The difference between these weather-normalized revenues and the test year revenues, as adjusted above, determined the amount of the adjustment. The total annual weather normalization of test year revenues is a reduction to revenues of $74,798,546.

Staff Expert/Witness for LPS Class: Manisha Lakhanpal

Staff Expert/Witness for All Other Classes: Curt Wells

i. 365-Days Adjustment

Since billing months are an aggregation of bill cycles, they will differ from calendar months in the time period they cover. To account for this difference, Staff Witness Shawn Lange calculated a "days" adjustment to each weather sensitive class to adjust the level of annual weather normalized billing month kWh sales to coincide with the annual, weather normalized, calendar month kWh sales. In addition, the test year was a leap year and had to be adjusted to a normal 365-day year. The days adjustment was calculated by taking the difference between the weather normalized calendar month sales over the test-year, minus the usage for March 31, 2008, and the weather normalized revenue month sales over the test-year. Revenues for the weather sensitive classes were adjusted by allocating the days adjustment proportionately to the appropriate monthly kWh sales for each class and then applying current rates. The difference between the revenues calculated in this way for each class, and the test year revenues for the class, determined the amount of the 365-days adjustment.

For the LPS and LTS (Large Transmission Service) classes, depending on the number of usage days in a bill cycle, an adjustment is made by either adding days of usage when there are less than 365 days of usage, or subtracting days of usage when there are more than 365 days of usage to a customer's annual sales. The differences between the revenues produced by the days adjusted billing units and the actual billing units are the days adjustments.

"Days" adjustments are also known as adjustments to "unbilled" sales and "unbilled" revenues on financial statements. The total annual days adjustment of test year revenues is a reduction of $7,037,818.

Staff Expert/Witness for LPS and LTS Classes: Manisha Lakhanpal

Staff Expert/Witness for All Other Classes: Curt Wells

j. Customer Growth Annualization

The Staff made customer growth adjustments to test year kWh sales and rate revenue to reflect the additional kWh sales and rate revenue that would have occurred if the number of customers taking service at the end of the test year (March 31, 2008) had existed throughout the entire test year. Customer growth was calculated for the Residential Non-Time-of-Use, Small General Service Non-Time-of-Use, Large General Service Non-Time-of-Use customer classes. The customer growth annualization takes into account weather and usage normalizations, as well as the adjustments for 365 days and rate changes that occurred during the test year. Other customer classes did not exhibit growth and were left at test year customer levels instead of being annualized to end of test year levels. These classes include Residential Time-of-Use, Small General Service Time-of-Use, Small General Service Unmetered, Large General Service Time-of-Use, Small Primary Service, Large Primary Service, Outdoor Lighting and Large Transmission Service.

Staff Expert/Witness: Jeremy K. Hagemeyer

k. Removal of 12M Contribution Charge

As part of the Company's last rate proceeding, there was a tariff change for the Large Transmission Service (12M) customer class. This change eliminated the contribution charge billed to the Company's large transmission customer. The Staff has made an adjustment to remove the contribution charge from the Company's revenues.

Staff Expert/Witness: Jeremy K. Hagemeyer

B. Off-System Sales and Transmission Revenue

1. Off-System Sales (OSS)

a. Energy

Off-system sales are sales of electricity made at times when AmerenUE has met all obligations to serve its native load customers (retail and full requirements wholesale customers) and has excess energy to sell to other utilities. By engaging in off-system sales, AmerenUE generates profits or net margin, which represent total proceeds from the sales less associated generation or purchased power cost. It is appropriate to include off-system sales in the cost of service because AmerenUE's customers are already paying for all the costs associated with the generating facilities that produce electricity, as well as the purchased power that is necessary to meet native load. To the extent that off-system sales are made using these facilities, as well as by purchasing power, the customers should benefit from these sales. Off-system sales represent an efficient utilization of the electric facilities/system that has been put in place to meet the electricity needs of AmerenUE's customers.

Off-system sales revenues were calculated in the production cost model by using the hourly market energy prices that were determined by Staff witness Erin Maloney of the Commission's Energy Department. Staff's adjustment for off-system sales revenue represents the inclusion of additional revenue in order to annualize the off-system sales revenues that were calculated by Staff witness Michael Rahrer using the RealTime™ production cost model. This was recorded in the Staff's revenue requirement cost of service calculation by subtracting AmerenUE's test year ending March 31, 2008, per book off-system sales revenues from the Staff's annualized level of off-system sales revenues as determined by the production cost model using Staff's hourly market energy prices The Staff will continue to examine off-system sales revenues through September 30, 2008, which represents the true-up cutoff date as approved by the Commission as part of this rate proceeding.

Staff Expert/Witness: John P. Cassidy

b. Capacity and Ancillary Sales

When unneeded to serve its own load, AmerenUE is able to sell capacity to other utility companies. The Staff included the level of capacity sales that are contracted through September 30, 2008 in its revenue requirement cost of service. In addition the Company receives revenues for the reservation fee associated with holding back capacity for ancillary services. The Staff has included the known ancillary service sales through June 2008 in its determination of revenue requirement. The additional capacity sales associated with Taum Sauk are discussed in the testimony of Staff witness Stephen M. Rackers.

Staff Expert/Witness Stephen M. Rackers.

2. MISO Day 2

a. Revenues

AmerenUE participates in the Midwest Independent Transmission System Operator (MISO) transmission operations (often referred to as Day 1) and the MISO day-ahead and real-time energy markets (also called MISO Day 2). As part of its participation in the MISO Day 2 market, during the test year the Company received payments from the MISO related to the Revenue Sufficiency Guarantee (RSG) provision of MISO's tariff. These payments are designed to ensure that companies participating in the MISO Day 2 market recover start-up and no-load costs in the event that the market price received does not cover these costs.

Start-up costs are the costs associated with bringing a generation unit on-line. No-load costs are the costs incurred by a generation unit, after start-up, but prior to providing any output. These two components are the fixed costs of running a generation unit.

The market price will always cover the Company's offer price for energy, but in some instances it may not cover the fixed cost of running the unit that are also submitted as a part of AmerenUE's offer price. When the Company's total offer prices are not covered by the market prices, AmerenUE receives RSG payments. For AmerenUE, the RSG payments received from MISO during the test year totaled $16,513,421.

The RSG payments are funded by billings to market participants based on their loads. Thus, AmerenUE is billed for RSG payments as a Day 2 market expense, and these expenses were included in the Staff's revenue requirement cost of service.

Both the Company's and the Staff's model will not dispatch a unit to make sales unless the market price is sufficient to cover start-up and no-load costs. However, these models are based on costs, not offer prices that may be higher than costs. When the Company's offer price is higher than cost, AmerenUE does not require revenue from off-system sales to cover the difference between revenues received from the market prices and revenues required to cover the Company's offer prices.

If the RSG payments were only make-whole payments that covered only the difference between the cost of running the units and the market price received, then the Staff's production cost model results would be consistent with excluding all RSG payments received from MISO by AmerenUE. If the RSG payments only covered cost, then there would be no profit received by AmerenUE from actually running a generation unit at times when the production cost model would not dispatch the unit. However, RSG payments cover offer prices made by market participants and those offer prices can include adders to costs. To the extent that AmerenUE made offers that are above its costs, the RSG payments more than cover costs, they also include a contribution to profit that is not included in the Staff's modeling of net production costs. It is the understanding of the Staff, from discussion with AmerenUE, that offer prices of generation from the Company's gas-fired combustion turbine generators include an adder to cost. Therefore, a portion of the RSG payments related to start-up and no-load costs should be eliminated from test year revenue because they relate to recovery of the Company's costs, but the portion related to the difference between the costs and offer prices should not be removed as this represents profit that the Company receives from its participation in the MISO Day 2 market. It is important not to exclude this profit, as the Company must make RSG payments to other companies through MISO to not only cover their start-up and no-load costs, but to also cover their offers that include a margin for profits.

The determination of the RSG payments are dependent on multiple variables and amounts related to each of the components that can vary significantly. For example, assume the fixed costs for a combustion turbine generating unit are $2,000, the cost of producing energy is $50 per MWh, and the offer made by the Company to the MISO is $55 per MWh. MISO asks the Company to dispatch this unit for 100 MWhs for two hours for which it is paid its offer of $55 per MWh. For this generation, the Company receives revenues of $11,000 ($55/MWh * 200 MWh) and the total cost is $12,000 ($2,000 + $50/MWh * 200 MWh). While this payment of $11,000 covers the $10,000 cost of producing energy (200 MWhs * $50/MWh), it only covers $1,000 of the $2,000 amount for fixed costs. However, the RSG payment for this sale would be $2,000, $13,000 from the fixed cost plus offer price ($2,000 + 200 MWh * $55/MWh), minus the payment of $11,000from the market, (200 MWh * $55/MWh). The result is that of the $2,000 RSG payment, $1,000 is needed to cover costs ($12,000 - $11,000) while the remaining $1,000 is profit. In this case, the amount of profit is 50% of the total RSG payment.

Assuming the same costs and offer structure, but increasing the amount of energy to 1,000 MWh, the amount of RSG payment remains $2,000 ([$2,000 + $55 * 1,000 MWh] – [$55 * 1,000MWh]). Since the total cost of $52,000 ($2,000 + $50/MWh * 1,000 MWh) is more than covered by the amount received from the market, which is $55,000 ($55 * 1,000MWh), the entire RSG payment is profit.

In an effort to determine the amount of RSG payment that relates to profit and the amount that is devoted to cost recovery, the Staff recently has asked the Company for the following information in Staff Data Request No. 302:

> For each time a UE Combustion Turbine unit received RSG payments from MISO during the 12 months ended March 31, 2008, please provide:
>
> (A) The revenue received by UE and the MWh generated by the Unit. Please provide this information on an hourly basis for each event.
>
> (B) The cost incurred by UE for operating the unit. Please provide this information for each component of cost.
>
> (C) The offer submitted by UE to MISO and used as the basis for the RSG payments. Please provide this information for each offer component and
>
> (D) The RSG payment received by UE from MISO and the reconciliation of the RSG payment to the revenue as specified in part (A) and the offers as specified in part (C).

Pending receipt of this information, the Staff has removed 25 % of the test year RSG revenues as an assumed level of cost recovery.

b. Expenses

During the test year, the Company's MISO RSG expenses were increased due to a resettlement of prior years' bills. When the MISO Day 2 market began in 2005, MISO charged market participants rates that were not in agreement with MISO's FERC tariff. In late 2006, FERC required MISO to resettle the amounts paid with market participants. As a result, AmerenUE's expenses for the test year were increased. This resettlement cost for prior years' bills is no longer in effect, and the Company's MISO Day 2 expense is no longer being increased due to resettlement. Therefore, the Staff has reduced expense to eliminate any recognition of the RSG resettlement costs for prior years' bills.

Also during the test year, MISO experienced a meter error which affected the determination of the RSG expense. The Staff has eliminated the effect of this meter error in its revenue requirement cost of service.

Staff Expert/Witness: Jeremy K. Hagemeyer

3. Transmission Revenue and Expense

The Staff is recommending adjustments to the test year level of MISO transmission revenues. This adjustment eliminates test year revenues that are non-recurring and revenue associated with a billing error. The adjustment also increases the level of revenue experienced during the first two months of the test year. These two months were significantly lower than the rest of the test year and were increased based on an average of the non-summer months.

The Staff is also recommending an adjustment to the level of test year MISO transmission expense. This adjustment eliminates a billing error that occurred during the test year. The adjustment also annualizes transmission expenses to reflect increases in expense levels that occurred during the first quarter of 2008.

Staff Expert/Witness: Jeremy K. Hagemeyer

C. Miscellaneous Revenues

1. SO_2 Allowance Sales and Tracker

As part of its Report and Order issued in Case No. ER-2007-0002, (Report and Order), the Commission established an accounting mechanism to track AmerenUE's SO_2 emission allowance sales revenues net of SO_2 expenses. The Company realizes SO_2 revenues from gains on the sale of SO_2 emission allowances. SO_2 expenses are realized from the premiums paid, net of the discounts received, as a result of variations from the terms of the contacts through which AmerenUE purchases its coal supply. Beginning on January 1, 2007, the Company was required to account for all SO_2 premiums, net of any SO_2 discounts in a regulatory liability account. The Commission also ordered that all gains from SO_2 allowance sales, in excess of $5,000,000, be recorded in this same regulatory liability account. This regulatory liability account, referred to as the SO_2 Tracker, also accumulates interest at AmerenUE's short-term borrowing rate. The Report and Order states that the balance of this account will be addressed as part of fuel expense in the current rate case.

During the period covering January 1, 2007, through March 31, 2008, AmerenUE realized $2,959,612 from the gains on the sales of emission allowances. This resulted in a $2,040,388 shortfall from the $5,000,000 established base level in Case No. ER-2007-0002. During the same period covering January 1, 2007 through March 31, 2008, AmerenUE recorded $5,452,345 of SO_2 premiums net of discounts. By including $110,566 of carrying cost based upon AmerenUE's short term borrowing rate at December 31, 2007, this results in a $7,603,298 SO_2 regulatory asset balance. Staff's adjustment includes $3,801,649, one-half of the $7,603,298 SO_2 regulatory asset balance, as part of fuel expense in its cost of service calculation. Since the regulatory asset balance at March 31, 2008 represents an accumulation of 15 months, and 21 months through the September 30, 2008 true-up, the Staff believes it would be inappropriate to recognize the entire balance in a 12-month annual period. Therefore, the Staff recommends spreading this cost over a two year period. The Staff will examine the actual results for all of the components of the SO_2 tracker through September 30, 2008, as part of its true-up audit.

The Staff also recommends that the current SO_2 tracking mechanism be continued, with two modifications, and be re-examined as part of the Company's next rate proceeding. The first modification that Staff recommends is reducing the $5,000,000 base amount originally established for the tracker to the $2,959,612 level of emission allowance sales that the Company experienced during the test year. The Staff's cost of service calculation reflects a $2,959,612 base level of emission allowance sales. The second modification involves a dispute over new pass-through equalization charges that AmerenUE paid to Entergy, beginning in July 2007 for service beginning in June 2007, as part of its purchased power agreement with

Entergy. While AmerenUE has made payments for these new pass through charges, it is disputing these charges, and has filed an appeal with the Federal Energy Regulatory Commission (FERC). AmerenUE has the potential to receive a refund for these payments based upon a pending ruling by the FERC. Payment for these equalization charges were reflected in the Staff's cost of service calculation through inclusion of these charges in its purchased power prices associated with the Entergy contract. The Staff recommends that all refunds received by AmerenUE from Entergy for all equalization payments be included as part of the SO_2 tracker and be addressed as a part of fuel and purchased power expense in the Company's next rate proceeding.

Staff Expert/Witness: John P. Cassidy

2. Other Revenues

AmerenUE allows a cable television provider to attach its lines to its poles. The rental fee that AmerenUE charges the cable provider has changed, as has the number of poles rented. The Staff has adjusted AmerenUE's other revenues to account for these changes.

Staff Expert/Witness: Jeremy K. Hagemeyer

D. Fuel and Purchased Power Expense

The Staff's annualized and normalized fuel and purchased-power expense is sufficient to serve native load and to make off-system sales. The Staff's fuel expense adjustment includes all increases in commodity coal and coal transportation costs, as well as the nuclear fuel prices that are in place through March 31, 2008. The Staff's fuel expense annualization also incorporates natural gas and fuel oil commodity prices through March 31, 2008. The Staff also included in the fuel cost calculation the fixed demand cost of natural gas. The Staff's annualized purchased power expense levels reflect contractual purchased power energy prices as well as hourly spot market energy prices through March 31, 2008.

1. Fuel and Purchased-Power Prices

The Staff reviewed all of AmerenUE's coal commodity and coal transportation contracts. The Staff reviewed nuclear, natural gas and fuel oil prices as reflected in Company fuel reports, workpapers and responses to Staff data requests. The Staff also reviewed purchased power energy prices associated with the Company's long term purchase power agreement with Entergy. The Staff annualized fuel and purchased-power expenses using prices that were in effect through the end of the test year ending March 31, 2008.

a. Coal Prices

i. Accounting Coal Prices

The Staff's accounting coal prices are used to compute the fuel costs based on the coal unit generation that is determined by the production cost model. The Staff performed a review of all of AmerenUE's current accounting coal commodity and coal transportation contracts. The Staff's coal prices reflect AmerenUE's mine specific coal commodity and coal rail and barge transportation contracts that were in effect at March 31, 2008. The Staff also included the costs associated with hedging for the cost of rail transportation fuel surcharges that are tied to the prices of on-highway diesel as reported by the Energy Information Administration, an independent statistical agency of the US Department of Energy. The Staff also included all railcar related costs as a component of the coal price used in the production cost model. In addition, the Company uses a fuel additive, magnesium oxide, to minimize slagging and fouling in the boilers at coal plants. Staff adjusted the test year level of this fuel additive expense to include an ongoing level in its cost of service calculation.

Staff Expert/Witness: John P. Cassidy

ii. Dispatch Coal Prices

Consideration of coal dispatch prices is necessary in determining fuel and purchased-power expense because environmental costs need to be included in the decision regarding whether or not a plant should be dispatched. Therefore, dispatch costs are higher than the actual fuel cost. While the fuel cost of two different plants may be the same, the dispatch cost may be different depending on the environmental emissions equipment at the plant.

AmerenUE uses three types of coal: Powder River Basin (PRB) 8400, PRB 8800, and Illinois. A twelve-month day weighted average commodity (or spot) coal price was determined for each of the three types of coal, as well as transportation and incidental costs. Different AmerenUE plants use different blends of the three types of coal. After selecting the appropriate coal blend for each plant, the spot, transportation and incidental costs were combined and finally the environmental costs of SO_2 and NOx were added. The final result is a dispatch price per turbine as listed in the following table:

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Staff Expert/Witness: Erin L. Maloney

b. Nuclear Fuel Prices

The Staff used the average actual test year nuclear fuel prices for the Callaway nuclear plant as were reported in the Company's monthly statistical reports that were provided in its response to Staff Data Request No. 60. The Staff's test year average nuclear fuel price compares closely to the budgeted March 2008 nuclear fuel price that was used by the Company in its fuel model. The Staff also included the costs associated with the disposal of spent nuclear fuel, consistent with the Company's calculation. Changes in the Company's nuclear fuel cost resulting from the planned 2008 refueling will be examined as part of the Staff's September 30, 2008, true-up audit.

Staff Expert/Witness: John P. Cassidy

c. Natural Gas Prices

i. Variable Natural Gas Cost

The Staff analyzed the trend in natural gas prices over a two-year period using twelve-month moving averages and could determine no discernable trends in price. These 12-month moving averages were very constant over this two-year period indicating relative natural gas price stability on an annual basis over this two-year period. This can be seen in the following table:

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Therefore, Staff used an average of the actual prices from the three pipelines that supply the Company as listed in the following table:

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NGP - Natural Gas Pipeline
PEPL - Panhandle Eastern Pipeline
MRT - Mississippi River Transmission

Staff Expert/Witness: Erin L. Maloney

ii. Fixed Natural Gas Cost

Staff adjusted expenses to include the fixed demand cost of gas in its revenue requirement cost of service. This amount must be added to the Staff's production cost model results which are based on only the variable commodity cost of gas.

Staff Expert/Witness: John P. Cassidy

d. Oil Prices

Fuel oil plays a very small part in the total fuel costs of AmerenUE. The fuel oil dispatch cost was calculated as the average of the monthly average fuel oil costs in the test year. The fuel oil cost used was ** ______ ** per MMBtu.

Staff Expert/Witness: Erin L. Maloney

e. Purchased Power Prices

i. Hourly Market Energy Prices

In April of 2005 AmerenUE joined the Midwest ISO market (MISO) which records actual hourly power prices by location; therefore, actual prices were available for each hour of the test year. Power prices are different depending on location because of transmission and congestion issues resulting in a locational marginal price (LMP) for each generating node. Staff has analyzed three years of power prices using the weighted LMP averages provided by AmerenUE. The weights were determined using kilowatt hour sales at each plant as provided by the Company. A large peak in the price shape was observed in the July 2006 data as can be observed in the following chart titled Market Price 2006:

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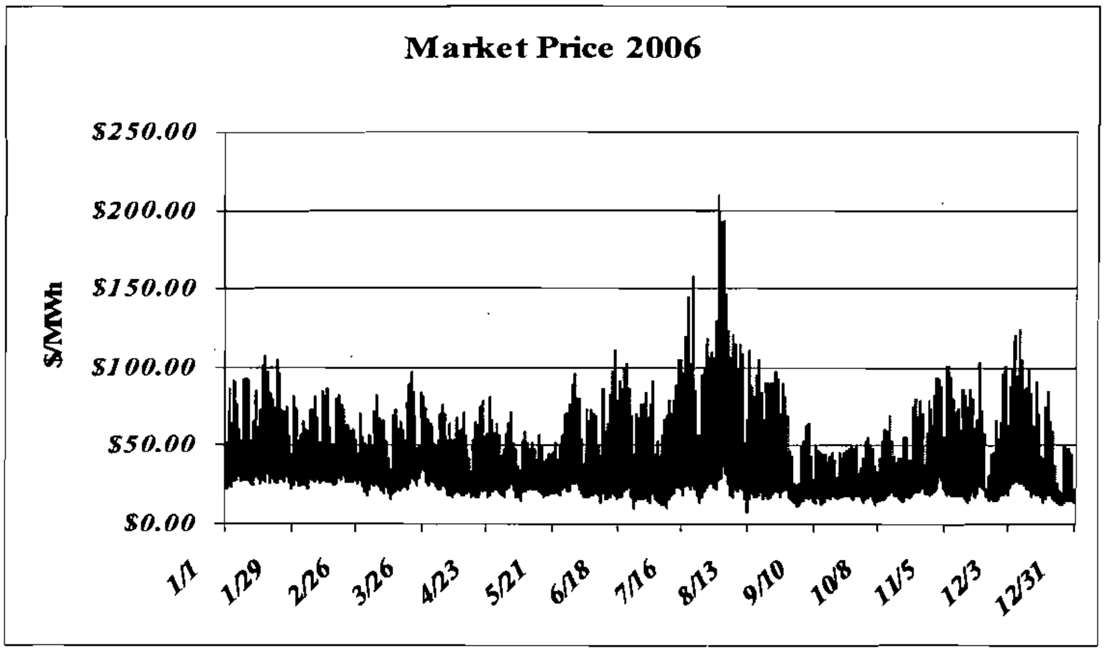
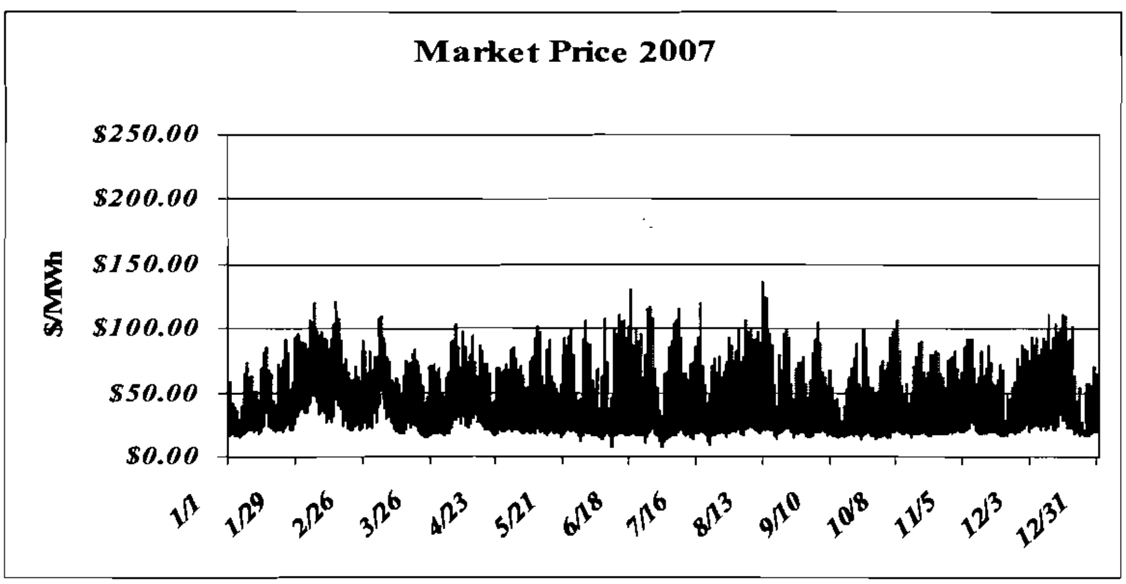
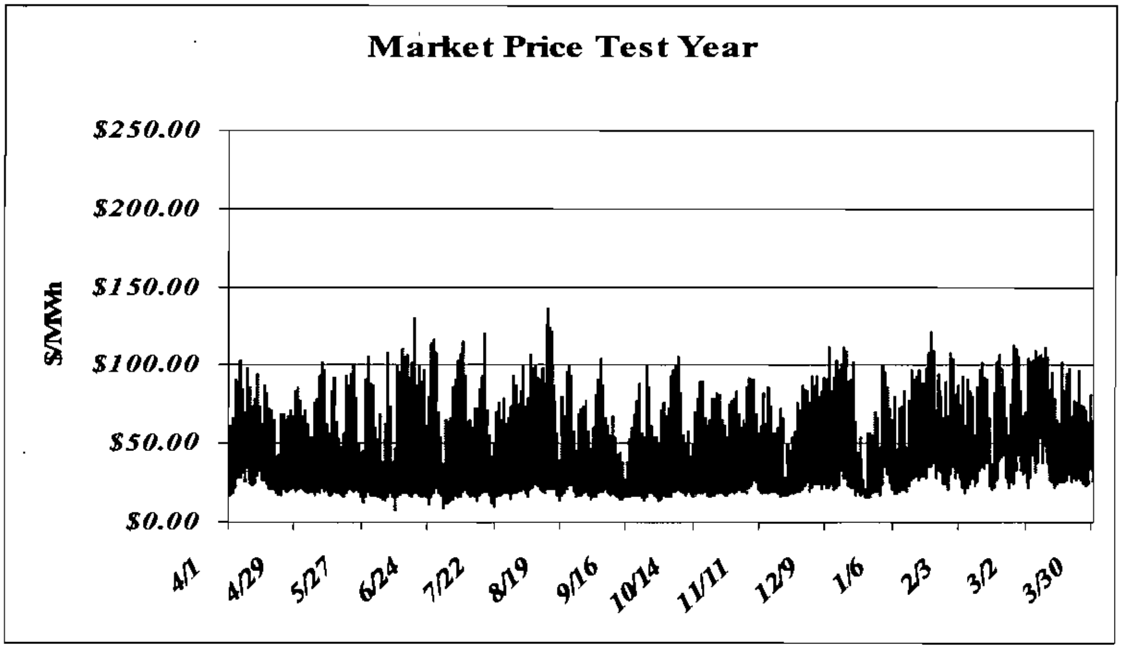


By comparison the 2007 calendar year and Test Year data do not include a large unexplained peak, as can be seen in the following charts labeled Market Price 2007 and Market Price Test Year:





The actual hourly prices which occurred in the test year more accurately represent the fluctuation in market prices on a day-to-day and month-to-month basis than the use of any kind of daily-peak and off-peak averages. Staff did not include 2006 data because of the large unexplained peak in prices that occurred in July of 2006. Therefore, the purchased-power prices that Staff used are the actual hourly purchased-power prices as they occurred in the test year.

Staff Expert/Witness: Erin L. Maloney

ii. Capacity Charges

AmerenUE is contractually required to pay Entergy a fixed component and an energy component for the power that it purchases from Entergy. The fixed component represents a "demand charge" that is paid on a monthly basis, regardless of the level of power that AmerenUE purchases from Entergy. This amount represents payment for the right to purchase power under the terms stated in the contract with Entergy. Staff has included the test year amount experienced by the Company.

Staff Expert/Witness: John P. Cassidy

2. Production Cost Modeling

a. Description of the Model

RealTime™ is a production cost model that the Staff has been using since 1994 respecting the electrical corporations over which the Commission has ratemaking jurisdiction. A production cost model is a computer program used to determine energy costs and fuel consumption by simulating a utility's economic dispatch of it generation and power contracts to meet its own load and contracts for energy. The model takes into account operational constraints of the utilities generation such as ramp up rates and minimum run times. The Staff uses the RealTime™ production cost model to perform an hour-by-hour chronological simulation of a utility's generation and power purchases as well as to make off-system sales. The Staff uses the RealTime™ model to determine annualized and normalized fuel and purchased power costs, as well as revenues associated with making off-system sales, within the operating constraints of the utility's resources. The Staff used RealTime™ in the recent AmerenUE rate case, Case No. ER-2007-0002, in recent rate cases filed by Kansas City Power & Light Company, and in recent and older rate cases filed by Aquila, Inc. and The Empire District Electric Company.

As a developer and the current owner of the RealTime™ production cost model, Michael Rahrer was hired as a consultant by the Missouri Public Service Commission Staff. His duties to the Staff include benchmarking the RealTime™ model output to the AmerenUE (PROSYM) model output; perform an hour by hour chronological simulation of AmerenUE's generation, power purchases and off-system sales based on inputs provided by the Staff and to explain how the Staff assumptions affect the model output. The annualized and normalized fuel and purchased power costs, as well as revenues associated with making off-system sales, determined using RealTime™, were supplied to Staff Auditing Department expert/witness John P. Cassidy, and these calculations were used in the development of the Staff's revenue requirement cost of service calculation.

The RealTime™ model operates in a chronological fashion, meeting each hour's energy demand and economically making off-system sales before moving to the next hour. A chronological model is one that handles each hour in sequence. For example, hour six (6) on January 19 is processed and then hour seven (7) for January 19 is processed. This process continues until every hour in the study period is processed sequentially, first hour to the last hour. A chronological model will schedule generating units to dispatch in a least cost manner for each hour based upon that hour's fuel costs and purchased power costs and make off-system sales while taking into account generation unit operation constraints and hourly market energy prices. This model closely simulates the way a utility should dispatch its generating units and purchase purchased-power to meet the net system load and to make off-system sales in a least cost manner.

Staff Expert/Witness: Michael Rahrer

b. Calibration of Model Results to AmerenUE

The RealTime™ model was benchmarked to AmerenUE model results in order to see if the RealTime™ model produces results that very closely match the Company's PROSYM model results, given the same set of inputs. Benchmarking occurs when one model yields very similar results as another model given the same set of inputs. Benchmarking is important in general because it establishes the validity of one model compared to another. In this case, benchmarking is important because it establishes the validity of the RealTime™ production cost model results compared to the Company's PROSYM model results, i.e., assuming at the first that the Company's PROSYM model results are valid.

Based on information obtained from AmerenUE through meetings, data requests and workpapers, the Staff benchmarked RealTime™ to the AmerenUE PROSYM model results in two ways. The first way that the RealTime™ model matched PROSYM results involved using 2007 historical year inputs used by AmerenUE in order to verify the model's ability to closely match actual costs, or what Company witness Timothy D. Finnell describes as its "calibration run" on pages 5 through 7 of his direct testimony that was filed on April 4, 2008. Calendar year 2007 historical data supplied by AmerenUE was input into the Staff's model to validate its ability to successfully model the AmerenUE system. Results from this calibration run are shown in Appendix 4, Schedule 1. The results demonstrate that the Staff's model benchmarked closely to AmerenUE's production cost model assuming the same modeling scenarios. Using the same inputs as AmerenUE, the Staff's model calculated total generation output for AmerenUE to be 50,414,168 MWhs in comparison to 50,459,800 MWhs calculated by PROSYM, putting Staff model results within 0.1% of the total generation output determined by AmerenUE. AmerenUE's 2007 actual total generation was 50,319,199 MWhs. Overall, the results of the

RealTime™ production cost model run compared almost exactly matched with that of AmerenUE's production cost model.

The second way that Staff benchmarked to AmerenUE results involved using the inputs that AmerenUE used to develop its rate case run as discussed on page 3, lines 1 through 7, of Company witness Timothy D. Finnell's direct testimony, submitted on April 4, 2008. AmerenUE data from its rate case model was input into the RealTime™ model to further validate its ability to model in a manner consistent with PROSYM. The Staff assumed as appropriate/correct all of the AmerenUE model inputs including, but not limited to, load, fuel prices, market prices (for economic purchase and sale contracts), generation unit operational parameters (e.g., heat rate curves, start up costs, capacities, etc.), hydro generation, pumped storage generation (Taum Sauk) and fixed values for the Entergy purchase and sale contracts. All of these inputs were supplied by AmerenUE. The Staff's model generation results are shown on Appendix 4, Schedule 2, and the cost results are shown on Appendix 4, Schedule 3. The Staff would note that while the total generation output and total cost values are extremely close, there are some variations between the output of individual generating units and the output from purchases and sales comparing the RealTime™ production cost model results to the AmerenUE production cost model results. It is common to see these variations, which result from the difference between the way that the two models handle unit unplanned outages. Overall, the Staff model shows a total generation output of 50,731,856 MWhs compared to the AmerenUE model results of 50,715,400. The difference in total generation output results is 0.03%. The Staff model net fuel cost[4] is $290,511,400 compared to the AmerenUE model net fuel cost of $290,457,600, a difference of 0.019%. Once again, the Staff's RealTime™ model demonstrated the ability to produce overall results that virtually matched the results produced by the Company's PROSYM model. Therefore, there is no significant difference overall between the RealTime™ and PROSYM production cost models given the same set of inputs. The Staff's RealTime™ production cost model run very closely matches AmerenUE's PROSYM production cost model run and the RealTime™ production cost model simulations used for this case are closely calibrated to the AmerenUE PROSYM model.

Staff Expert/Witness: Michael Rahrer

[4] Net fuel costs equals total fuel expense plus purchased power costs less revenues from off-system sales.

c. Staff's Modeling Process and Results

Inputs calculated by Staff include: (1) dispatch and accounting fuel prices; (2) hourly market energy prices to purchase power and to make off-system sales; and (3) hourly net system input (NSI). The Staff relied on AmerenUE workpapers, meetings with the Company, and responses to data requests for factors relating to each generating unit such as: (1) capacity of the unit; (2) unit heat rate curve; (3) primary and startup fuels; (3) ramp-up rate; (4) startup costs; and (5) fixed operating and maintenance expense.

Staff expert/witness Erin Maloney provided hourly market energy prices, and coal, gas and fuel oil dispatch prices. Dispatch prices for gas and fuel oil were also used as accounting prices by the production cost model. Staff expert/witness John P. Cassidy provided accounting and dispatch prices for nuclear fuel, accounting prices for coal and purchased power prices associated with a purchased power contract that AmerenUE entered into with Entergy. The fuel dispatch costs are used in a decision process performed by the production cost model to economically dispatch the units, while the fuel accounting prices are used to compute the fuel costs based on the generation that is determined by the production cost model. Net system input reflecting normalized, annualized hourly load was provided by Staff Expert/Witness Shawn E. Lange. The load time period provided covered April 1, 2007 through March 30, 2008. The Staff eliminated load from March 31, 2008 in order to address the effect of leap year which occurred during the test year ending March 31, 2008.

A 30 iteration model run was made using all of these inputs, and the results are shown in Appendix 4, Schedule 4 (Generation) and Appendix 4, Schedule 5 (Cost). The results shown on Appendix 4, Schedule 4 are a comparison between the AmerenUE Rate Case volume (in MWhs) and Staff's RealTime™ model run. The total net generation output from the Staff's model was 49,624,883 MWhs from a native system load[5] of 40,953,667 MWhs. Sales volume was 9,990,609 MWhs and purchase amount was 2,210,241 MWhs. The fuel and purchased power cost results as well as the revenues resulting from off-system sales are shown at the bottom of Appendix 4, Schedule 5, in a grid labeled "Staff, Ameren and Difference". In summary, the

[5] Native system load is retail customers plus wholesale all requirements customers.

RealTime™ production cost model determined the following fuel, purchased power and off-system sales revenue results:

Total Unit Fuel Cost	$644,939,100
Purchased Power Cost	$ 76,680,660
Off-System Sales Revenue	$449,948,200
Net Fuel Cost	$271,671,600

Staff Expert/Witness: Michael Rahrer

d. Planned Outages, Unplanned Outages and Unit Deratings

Planned outages are major unit outages that occur at scheduled intervals. The length of planned outages can differ due to the differences in types of generating units and the plant modifications being performed. The Staff normalized planned outages for AmerenUE coal generating units by using a six-year average of actual data from 2002 through 2007. The Staff also normalized planned outages for AmerenUE's Callaway nuclear power unit by using a six-year average of actual data, excluding the unusual 2005 Callaway nuclear refueling. Consistent with the Company, the Staff excluded the 2005 refueling outage from its six-year average because this outage included non-recurring outage work related to the replacement of the steam generators at the Callaway nuclear plant.

Unplanned outages occur due to unforeseen operational problems where a generating unit must be taken completely out of service for shorter periods of time. The Staff normalized unplanned outage rates based upon a six-year average of actual data from 2002 through 2007, consistent with the Company. However, the Staff's model handles unplanned outages in a different manner than the Company's model. In the Staff's model unplanned outages may occur at any time during the modeling period and total unplanned outage hours may vary from iteration to iteration.

A date shift in some of the unit planned outage schedules was required, but planned outage durations did not change. The date shift was required because Staff's model period was April 1, 2007, through March 30, 2008, while the AmerenUE model period was January 1, 2008, through December 31, 2008. The planned outages for Callaway, Labadie 1, Sioux 1, Meramec 3 and Meramec 4 were shifted from 2008 to 2007 starting on the nearest Saturday to their original dates. The AmerenUE versus Staff planned outage start dates were shifted as follows:

Callaway	AmerenUE Start: 04/05/2008	Staff Start: 04/07/2007
Labadie 1	AmerenUE Start: 09/27/2008	Staff Start: 09/29/2007
Sioux 1	AmerenUE Start: 10/04/2008	Staff Start: 10/06/2007
Meramec 3	AmerenUE Start: 09/27/2008	Staff Start: 09/29/2007
Meramec 4	AmerenUE Start: 10/25/2008	Staff Start: 10/27/2007

Planned outage start dates for Rush Island 1 and Meramec 1 were not affected.

Deratings occur temporarily when a generating unit can continue to operate at a reduced level of output of power but cannot reach its prior maximum level output due to operational factors such as periodic testing. The Staff normalized deratings based upon a six-year average of actual data from 2002 through 2007, consistent with the Company.

Staff Experts/Witnesses: Michael Rahrer and John P. Cassidy

3. Hourly Net System Input

Hourly net system load is the hourly electric supply necessary to meet the energy demands of both the company's customers and the company's own needs. The hourly loads used in the analysis of the test year April, 2007, through March, 2008, were provided to Staff in response to Data Request number 151. Hourly load data submitted monthly by AmerenUE in compliance with the Commission's rule 4 CSR 240-3.190 was used to cross check and correct errors found in the data request response.

Due to the high saturation of air conditioning, and the presence of significant electric space heating in AmerenUE's electric service territory, the magnitude and shape of AmerenUE's net system input is directly related to daily temperatures. The actual daily temperatures for the test year differed from normal conditions. Therefore, to reflect normal weather, daily peak and average net system loads are adjusted independently, but using the same methodology. Independent adjustments are necessary because average loads and peak loads respond differently to weather.

Daily average load is calculated as the daily energy divided by twenty-four hours and the daily peak is the maximum hourly load for the day. Separate regression models estimate both a base component, which is allowed to fluctuate across time, and a weather sensitive component, which measures the response to daily fluctuations in weather for daily average loads and peak loads. The regression parameters, along with the difference between normal and actual cooling and heating measures, are used to calculate weather adjustments to both the average and peak loads for each day. The adjustments for each day are added respectively to the actual average and peak loads for each day. Staff witness Manisha Lakhanpal provided actual and normal daily temperatures used in this analysis.

The starting point for allocating both the weather-normalized daily peak and the weather-normalized average loads to the hours is the actual hourly loads. A unitized load curve is calculated for each day as a function of the actual peak and average loads for that day. The corresponding weather-normalized daily peak and average loads, along with the unitized load curves, are used to calculate weather-normalized hourly loads.

This process includes many checks and balances, which are included in the spreadsheets that are used. In addition, the analyst is required to examine the data at several points in the process. For more information, the process is described in greater detail in the document "Weather Normalization of Electric Loads, Part A: Hourly Net System Loads"[6].

Once Staff's normalized, annualized test year usage for AmerenUE's retail customer classes is completed, weather-normalized wholesale usage is added. Then, the non-LTS class annual usage was increased by the average annual loss factor supplied by Staff witness Alan Bax. The LTS class' annual usage was increased by the losses used in calculating the revenues for that class. The loss adjusted LTS class usage was added to the loss adjusted non-LTS annual usage to produce an annual sum of the hourly net system loads that equals the adjusted test year usage, plus losses, and is consistent with Staff's normalized revenues.

A factor was applied to each hour of the weather-normalized loads to produce an annual sum of the hourly net-system loads that equals the adjusted test year usage, plus losses, and consistent with normalized revenues. A table showing each of these adjustments to attain the annual sum of the net-system hours is shown in Appendix 3, Schedule 1. A monthly summary of the adjusted loads is shown on Appendix 2, Schedule 2.

[6] Weather Normalization of Electric Loads, Part A: Hourly Net System Loads" (November 28, 1990), written by Dr. Miehael Proctor, Manager of the Economic Analysis Department.

Once completed, the test-year hourly normalized system loads were given to Staff witness Michael Rahrer to be used in developing the test year fuel and purchased-power expense. Staff witness Alan Bax used the annual requirement of the net system hours in developing Staff's jurisdictional energy allocator.

Staff Expert/Witness: Shawn E. Lange

4. Losses

System energy losses largely consist of the energy losses that occur in the electrical equipment (e.g., transmission and distribution lines, transformers, etc.) of AmerenUE's system between its generating sources and the customers' meters. In addition, small, fractional amounts of energy either stolen (diversion) or not metered are included as system energy losses.

The basis for calculating system energy losses is that Net System Input (NSI) equals the sum of "Total Sales," and "System Energy Losses." This can be expressed mathematically as:

- NSI = Total Sales + System Energy Losses

NSI and Total Sales are known; therefore, system energy losses may be calculated as follows:

- System Energy Losses = NSI – Total Sales

The system energy loss percentage is the ratio of system energy losses to NSI multiplied by 100%:

- System Energy Loss Percentage = (System Energy Losses ÷ NSI) X 100%

NSI is also equal to the sum of the Company's net generation and net interchange. Net interchange is the difference between interchange purchases and off-system sales. Net generation is the total energy output of each generating plant minus the energy consumed internally to enable the production of electricity at each plant. The output of each generating plant is monitored continuously, as is the net of off-system purchases and sales.

Utilizing data obtained from the Company Responses to Staff Data Request No. 76, Data Request No. 262, Data Request No. 271, Company's workpapers, and FERC Form 1, Staff has calculated a loss percentage for the twelve months ending March 2008 of 5.2% of NSI. This line loss percentage is being used by Staff Witness Shawn Lange in the development of hourly loads used in Staff's fuel model.

Staff Expert/Witness: Alan J. Bax

E. Payroll and Benefits

1. Payroll and Payroll Taxes

Staff's Annualized Payroll was based upon the test year ending March 31, 2008, actual payroll expense adjusted for the normalization of overtime, the Callaway refueling, elimination of the extra pay day included in the test year, elimination of the one-time lump sum payout to union contract employees in 2007, wage increases that occurred during the year and a change in the AMS allocation percentage to AmerenUE.

Overtime payroll for AmerenUE was calculated based upon a five-year average of overtime hours for 2003 though 2007. The Staff removed from its calculation of this average the overtime hours associated with any storm costs previously recovered as part of the Stipulation and Agreement approved by the Commission in AmerenUE's last rate case, Case No. ER-2007-0002. This Stipulation and Agreement established an amortization over five years of the excess storm costs incurred during the test year in the last rate case. The Staff also removed from its calculation of the overtime average the overtime hours associated with the 2006 storm costs events that were deemed recovered through the sale of SO_2 credits as part of the Stipulation and Agreement in Case No. ER-2007-0002. Staff's overtime average was also reduced for the overtime hours related to the storm that occurred in January of 2007, which was included in an Accounting Authority Order (AAO) issued in Case No. EU-2008-0141. In addition, the Staff removed any labor overtime costs associated with the Callaway Refueling Outages that occurred in calendar years 2004, 2005, and 2007. All of the above overtime hours were removed from the Staff's average to derive a normalized level of overtime hours, unrelated to recovered storm costs and Callaway outages.

The Staff also made two adjustments related to union employee payroll. The first adjustment removes one day of payroll expense related to the additional pay day that occurred on February 29, 2007, included in the test year ending March 31, 2008. The second adjustment removes a non-recurring lump sum payout that was distributed to union contract employees during the test year.

The Staff also adjusted payroll expense to reflect a change in allocation percentage from AMS to AmerenUE from 39.35% for the twelve months ending December 31, 2007, to 39.031% for the test year ending March 31, 2008. Finally, the Staff adjusted payroll to annualize the wage increases that occurred during the test year.

After an allocation between expense and construction, the Staff's adjustment for payroll was distributed by account based upon the actual distribution experienced by AmerenUE for the test year ending March 31, 2008. The Staff's Accounting Schedule 10, Adjustments to the Income Statement, reflects approximately 77 adjustments to restate the test year payroll to an annualized level as of March 31, 2008.

FICA payroll taxes were annualized by applying the respective tax rate (FICA payroll tax rate = 6.20% and FICA-Medicare payroll tax rate = 1.45%) to Staff's annualized payroll adjustment of a negative ($2,359,580) to develop a FICA payroll tax adjustment of ($168,516) for the test year ending March 31, 2008.

2. FAS 87 Pension Costs

a. FAS 87 Pension Tracker

The Staff, AmerenUE and other parties entered into a Stipulation and Agreement in Case No. ER-2007-0002 (Agreement) that addresses the ratemaking treatment for annual pension cost under Financial Accounting Standard (FAS) 87. The Agreement required AmerenUE to fund its annual FAS 87 pension expense and track the difference between the annual FAS 87 pension expense and the level included in rates. In future cases, the difference between the annual FAS 87 pension cost and the amount included in rates, as accumulated in the tracker, will be included in rate base and amortized over a period of five years as an addition or reduction to pension expense. Consistent with the Agreement from Case No. ER 2007-0002, the Staff's rate base for AmerenUE is reduced for a regulatory liability in the amount of $4,043,179 which represents the overcollection in rates of FAS 87 pension expense, compared to the actual expense incurred. The Staff has also included a reduction to pension expense in its income statement in the amount of $808,635, for the annual amortization, over five years, of the amount accumulated in the FAS 87 pension tracker.

b. Annualization

The Staff also annualized pension expense to reflect the 2008 FAS 87 cost provided by AmerenUE's actuary, Towers Perrin. This level will be the amount used in the pension tracker, after rates are established in this case, to determine the difference between FAS 87 expense included in rates and the amount actually incurred and funded by AmerenUE.

Staff Expert/Witness: Roberta A. Grissum

3. FAS 106 Other Post Retirement Benefit Costs (OPEB's)

a. FAS 106 OPEBs Tracker

The Agreement in ER-2007-0002 also addresses the ratemaking treatment for the annual OPEBs cost under Financial Accounting Standard (FAS) 106. As with FAS 87, the Agreement requires funding of the annual FAS 106 expense and establishes a tracker for the difference between the amount of FAS 106 expense in rates and the actual expense incurred. Consistent with the Agreement from Case No. ER 2007-0002, the Staff's rate base for AmerenUE is reduced for a regulatory liability in the amount of $10,165,391, which represents the overcollection in rates of FAS 106 OPEBs expense, compared to the actual expense incurred. The Staff has also included a reduction to pension expense in its income statement in the amount of $2,033,078 for the annual amortization, over five years, of the amount accumulated in the FAS 106 OPEBs tracker.

b. Annualization

The Staff also annualized OPEB expense to reflect the 2008 FAS 106 cost provided by AmerenUE's actuary, Towers Perrin. This level will be the amount used in the OPEB tracker, after rates are established in this case, to determine the difference between FAS 106 expense included in rates and the amount actually incurred and funded by AmerenUE.

Staff Expert/Witness: Roberta A. Grissum

4. Other Employee Benefits

AmerenUE currently offers its employees dental and vision, healthcare and life insurance, long-term disability and 401k benefits. The Staff performed an analysis of the employee benefit costs included in Account 926 from the general ledger for the test year, as well as information from the Company's 2008 budget. AmerenUE's budget for 2008 indicates employee benefit plans are increasing in cost. The Staff has examined the assumptions underlying the Company's budgeted increases based on responses to data requests and meetings with Company personnel. Based on this information, the budgeted increase in benefits appears reasonable. However, based on information provided by the Company, AmerenUE experienced a high number of claims during the test year. The Staff is continuing to examine data related to historical medical and pharmacy claims experience compared to the experience that occurred during the test year. As a result of this continuing analysis, the Staff may propose further adjustment to employee benefits. The Staff is currently recommending an adjustment to increase employee benefits expense by $3,808,776.

Staff Expert: Roberta A. Grissum

5. Incentive Compensation

The company has five incentive plans:

- Executive Incentive Plan - Officers level (EIP - Officers)
- Executive Incentive Plan - Managers and Directors level (EIP- Managers and Directors)
- Ameren Manager Incentive Plan (AMIP)
- Ameren Incentive Plan (AIP)
- Exceptional Performance Benefit Plan (EPBP)

The Executive Incentive Plan (EIP) –Awards for the Officers level are based upon both earnings per share and business segment and individual performance. The Company determines the total amount of award to be funded at three levels of earnings per share (EPS) performance, threshold, target and maximum levels of EPS performance. To achieve any award, the Company's EPS must at least meet the threshold level. The business segment and individual component are determined by supervisors.

Much like the Officers level, the EIP – Managers and Directors level has its funding dependent upon the level of EPS. However, determination of individual awards is based on the following three factors: EPS levels, meeting the business segment "Key Performance Indicators" (KPIs) and meeting individual performance measures. The assessment of individual performance is through the Company's performance appraisal process.

The Ameren Manager Incentive Plan (AMIP) also determines the level of payouts on the achievement of EPS levels. However, the payouts are calculated as percentages of salary, with different salary percentages for achieving threshold, target and maximum EPS levels and Career Band. There are three different Career Bands: People Leadership, Project Leadership and Support. Once the payout percentage has been established, individual awards are dependent upon the achievement of Business Segment KPIs and by individual performance. Similar to individual performance for the EIP – Managers and Directors level, individual performance is determined by supervisors through the performance appraisal process.

The Ameren Incentive Plan (AIP) is offered only to contract employees and funding is again determined by attaining a specified EPS goal. Unlike the previous incentive compensation plans discussed, the AIP begins funding when EPS exceeds the target level. At the targeted level, an employee "earns" a bonus of zero percent of his/her yearly salary. However, if the EPS for the year meets or exceeds the maximum level, a three percent of yearly salary bonus is possible. When EPS falls between the target and maximum levels, a possible bonus of percentages of yearly salary are calculated for contract employees by interpolation. Once the level of funding is determined, an employee's award depends wholly on his or her business segment meeting its KPIs.

Unlike the other plans, the Exceptional Performance Bonus Plan (EPBP) funding is not determined by meeting a certain level of EPS. Awards are determined after a management employee's supervisor submits a recommendation that the employee be considered for a bonus on the basis of exceptional performance. If this recommendation is approved, the employee is eligible for a bonus ranging from $1,000 to $3,000.

The criteria the Staff uses to evaluate employee incentive plans were established in the Commission's Report and Order for *Re Union Electric Co.*, Case No. EC-87-114:

> At a minimum, an acceptable management performance plan should contain goals that improve existing performance, and the benefits of the plan should be ascertainable and reasonably related to the plan.
> 29 Mo. P.S.C. (N.S.) 313, 325 (1987).)

The Staff recommends that all incentive compensation directly tied with meeting EPS be disallowed from the cost of service. This recommendation is consistent with past Commission rulings. In its Report and Order in *Re Kansas City Power& Light Company*, Case No. ER-2006-0314, at page 58, the Commission noted that, among other things, "because maximizing EPS could compromise service to ratepayers, such as by reducing customer service or tree-trimming costs, the ratepayers should not have to bear that expense."

The Staff has received and reviewed a sample of performance appraisals that are used for the individual performance component of the EIP – Managers and Directors level and the AMIP. The Staff has disallowed the incentive compensation associated with these programs because the criteria are not related to specific tasks and the measurements of performance appear to be subjective determinations by supervisors.

The Staff has received the titles of the KPIs, but has not received the criteria by which they are applied or otherwise effectuated. Therefore, the Staff has disallowed this component of incentive compensation.

In addition to the adjustment in the Operation and Maintenance expenses, the Staff has made corresponding reductions in AmerenUE's plant in service and reserve balances to eliminate capitalized Incentive Compensation. Since the Staff does not believe the cost of these plans should be borne by ratepayers, no amount of compensation from these plans should be recognized in rates by including the capitalized amount in the Company's plant accounts. Therefore, the Staff removed the incentive compensation that was capitalized from 2002 through the end of March 2008 from the plant in service and reserve balances. In the Company's last rate case, the Staff requested all available historical data and was provided information from this time period. The Staff would have analyzed any prior data had it been made available. Since the Staff was unable to allocate the total amount to specific plants accounts, the Staff applied a composite depreciation rate, based on the Company's current rates, to calculate the total amount of related accumulated depreciation in the plant reserve. A composite rate based on the Staff's proposed depreciation rates was used to remove the annualized depreciation expense related to this disallowance.

6. Restrictive Stock and Performance Share Units

In addition to the other compensation available (base and incentive), Ameren also offers its executives the possibility of restrictive stock awards and performance share units. Conditions are placed on the receipt of restrictive stock awards related to employee performance. The performance share units program is based on the market performance of the Company's common stock, relative to a peer group of other companies' common stock, over a three-year period. The Staff has an outstanding data request to obtain information to ascertain the appropriateness of this expense for recovery. Until this information is provided and the Staff has an opportunity to evaluate it, the Staff is recommending a disallowance of the expense associated with restrictive stock and performance share units. Should the award conditions for both programs meet the Commission's guidelines from Case No. EC-87-114, as previously discussed, the Staff will reconsider its proposed disallowance of this expense.

Staff Expert/Witness: Jeremy K. Hagemeyer

F. Other Non-Labor Expenses

1. Rate Case Expenses

The Staff surveyed other large utilities in Missouri to see what these companies spent to process recent rate cases. The largest amount the Staff found was $848,971 for Missouri Gas Energy in Case No. GR-2006-0422. Based on this survey, the Staff has determined that $1,000,000 should be sufficient for AmerenUE to process Case No. ER-2008-0318.

Staff Expert/Witness: Erin Carle

2. Dues and Donations

The Staff reviewed the list of membership dues paid, and donations made, to various organizations that AmerenUE charged to its utility accounts during the test year. The Staff proposes adjustments to disallow various dues and donations that were included by AmerenUE in test year expenses. Such dues and donations were disallowed by the Staff because they were not necessary for the provision of safe and adequate service, and thus do not have any direct benefit to ratepayers. Allowing the Company to recover these expenses through rates causes the ratepayer to involuntarily contribute to these organizations. Examples of items disallowed by the Staff are amounts paid to the St. Louis Repertory Theatre and The Muny.

In *Re: Missouri Public Service, a Division of UtiliCorp United, Inc.*, Case Nos. ER-97-394, et al., Report and Order, 7 Mo.P.S.C.3d 178, 212 (1998), the Commission stated:

> The Commission has traditionally disallowed donations such as these. The Commission finds nothing in the record to indicate any discernible ratepayer benefit results from the payment of these donations. The Commission agrees with the Staff in that membership in the various

> organizations involved in this issue is not necessary for the provision of safe and adequate service to the MPS ratepayers.

Staff Expert/Witness: Erin M. Carle

3. Edison Electric Institute (EEI) Dues

According to information obtained from the Edison Electric Institute's (EEI's) website (www.eei.org), EEI is an association of investor-owned electric utilities and industrial affiliates. From the information concerning EEI reviewed by the Staff in this case, it is clear that part of EEI's function is to represent the interests of the electric utility industry in the legislative and regulatory arenas. By necessity, this role includes engagement in lobbying activities by EEI.

In Case No. ER-83-49, a KCPL rate increase case, 26 Mo.P.S.C. 104, 155 (1983), the Commission stated its position respecting EEI dues:

> ...In the Company's last rate case, ER-82-66, the Commission reiterated its position that while there may be some possible benefit to the Company's ratepayers from Company's membership in EEI, the dues would be excluded as an expense until the Company could better quantify the benefit accruing to both the Company's ratepayers and shareholders.

This position has been re-affirmed by the Commission in subsequent rate proceedings.

In *Re: Kansas City Power & Light Co.*, Case Nos. EO-85-185 et al., Report and Order, 28 Mo.P.S.C.(N.S.) 228, 259 (1986), the Commission stated:

> . . . The argument that allocation is not necessary if the benefits lessen the cost of service to the ratepayers by more than the cost of the dues, misses the point.
>
> It is not determinative that the quantification of benefits to the ratepayer is greater that the EEI dues themselves. The determining factor is what proportion of those benefits should be allocated to the ratepayer as opposed to the shareholder. It is obvious that the interests of the electric industry are not consistently the same as those of the ratepayers. The ratepayers should not be required to pay the entire amount of EEI dues if there is benefit accruing to the shareholders from EEI membership as well. The Commission finds this to be the case. The Company has been informed in prior rate cases that it must allocate its quantified benefits from membership in EEI. That has not been done herein. Therefore, no portion of EEI dues will be allowed in this case.

Bases on the above criteria, the Staff disallowed the entire amount of EEI dues.

Staff Expert/Witness: Erin M. Carle

4. Insurance Expense

a. Annualization

Insurance expense is the cost of protection obtained from third parties by utilities against the risk of financial loss associated with unanticipated events or occurrences. Utilities, like non-regulated entities, routinely incur insurance expense in order to minimize their liability (and, potentially, that of its customers) associated with unanticipated losses. The Staff adjusted AmerenUE's insurance expense to annualize that expense based on the premiums paid as of March 31, 2008, the end of the test year.

b. Replacement Power

The Company has established a new policy of carrying additional coverage for replacement power insurance. This type of insurance protects the Company from loss due to the unavailability of generating plants when purchased-power costs surpass a price threshold. The Company has indicated that it is uncertain of the level of the actual ongoing premiums and has eliminated the cost of this insurance from expense. The Staff is also recognizing the elimination of replacement power insurance in the determination of revenue requirement.

Staff Expert/Witness: Jeremy K. Hagemeyer

c. Property Liability

The Staff's examination of insurance premiums for property liability revealed a significant increase since 2006. Based on discussions with the Company, AmerenUE has taken steps to reduce this cost and expects a significant decline in the September 2008-2009 premium. In an attempt to estimate the level of the September 2008-2009 premium, the Staff escalated the September 2005-2006 premium by 5% annually for three years. The Staff reduced the actual September 2007-2008 premium to the level it calculated. This item will be reexamined during the true-up audit, when the new premium is available for review.

Staff Expert/Witness: Stephen M. Rackers

5. Tree Trimming and Other Reliability Programs

The Staff is not proposing an increase to the test year expense level for tree trimming and other reliability programs. Through March 31, 2008, the Company is not currently meeting its budgeted increases for these expenses. The Staff has not received sufficient documentation, in response to data requests, to warrant an adjustment in this area. The Staff will examine these expenses as part of its true-up and determine if an adjustment is necessary and/or appropriate.

Staff Expert/Witness: Jeremy K. Hagemeyer

6. Customer Deposit Interest Expense

See the discussion in Section VII.H, Rate Base-Customer Deposits.

Staff Expert/Witness: Erin M. Carle

7. Property Tax Expense

For property assessment purposes, each utility company is required to file with its respective taxing authority a valuation of utility property at the beginning of each assessment year, which is January 1st. Several months later, based on the information provided by the utility, the taxing authority will in turn send the company what is known as "assessed values" for every category of the company's property. The taxing authority will issue to the utility company a property tax rate later in the year. The final step in the process is when the taxing authority issues a property tax bill to the company late in each calendar year with a "due date" of December 31. The billed amount of property taxes is based on the property tax rate applied to the previously determined assessed values of the utility's plant in service balances as of January 1 of the same year. The Staff developed its property tax rate based on the Company's estimate of the 2008 taxes, which are paid based on investment at January 1, 2008. The reasonableness of this estimate was verified based on an examination of the taxes paid during the test year and the increases in both plant and assessed values.

Staff Expert/Witness: Erin M. Carle

8. Uncollectible Expense

Uncollectible expense is the portion of retail revenues that AmerenUE is unable to collect from retail customers by reason of bill non-payment. After a certain amount of time has passed, delinquent customer accounts are written off and turned over for collection; AmerenUE is subsequently successful in collecting some portion of the delinquent amounts owed. The Staff calculated the uncollectible rate by examining the actual five-year (2003-2007) history of billed revenues that were never collected (net write-offs). Until February 2007, the Company had booked recoveries from its gas operations to the accounts of its electric operations. The Staff developed an average gas recovery utilizing the gas recoveries recorded from February 2007 through March 2008. The Staff then reduced electric recoveries in order to account for this commingling of data. The Staff then developed its annualized uncollectible expense by using a five-year average of the adjusted electric net write-offs.

Staff Expert/Witness: Jeremy K. Hagemeyer

9. Advertising Expense

In forming its recommendation of the allowable level of AmerenUE's advertising expense, the Staff relied on the principles it has consistently applied adhering to the Commission's decision *Re: Kansas City Power and Light Company*, Case Nos. EO-85-185, et al., 28 Mo. P.S.C. (N.S.) 228, 269-71 (1986). In that case, the Commission adopted an approach that classifies advertisements into five categories and provides rate treatment of recovery or disallowance based upon a specific rationale. The five categories of advertisements recognized by the Commission are as follows:

1. General: informational advertising that is useful in the provision of adequate service;
2. Safety: advertising which conveys the ways to safely use electricity and to avoid accidents;
3. Promotional: advertising used to encourage or promote the use of electricity;
4. Institutional: advertising used to improve the company's public image;
5. Political: advertising associated with political issues.

The Commission adopted these categories of advertisements explaining that a utility's revenue requirement should: 1) always include the reasonable and necessary cost of general and safety advertisements; 2) never include the cost of institutional or political advertisements; and 3) include the cost of promotional advertisements only to the extent that the utility can provide cost-justification for the advertisement (Report and Order in KCPL Case Nos. EO-85-185, et al., 28 Mo.P.S.C. (N.S.) 228, 269-271 (April 23, 1986)).

Accordingly, in the current rate case, the Staff has proposed an adjustment to exclude the costs of institutional and promotional advertising from recovery in rates. (The Staff found no evidence that AmerenUE engaged in any political advertising.) Costs for safety advertising and general advertising directed towards the benefit of existing customers were unadjusted by the Staff.

Staff Expert/Witness: Erin M. Carle

10. On-going Osage Expense

During the test year, costs associated with the Osage Hydro Plant were reclassified from expense to plant in service. As a result, test year expenses were reduced below the normal ongoing annual level. In order to rectify this situation, the Staff is proposing an adjustment to restore the expense account to a normal ongoing annual level.

Staff Expert/Witness: Jeremy K. Hagemeyer

11. Outside Services

Various outside (independent) contractors and vendors provide legal, auditing and other services to AmerenUE to assist the Company in carrying out its operational activities. The Staff reviewed AmerenUE's outside services expense during the test year ended March 31, 2008. The Staff is currently waiting on additional information from the Company regarding its outside services expense. Based on its review of that information, Staff may propose an adjustment to the test year expense level.

Staff Expert/Witness: Erin M. Carle

12. Accrued Legal and Environmental Expenses

AmerenUE accrues expense that result in establishing a reserve for both legal and environmental costs. When payments for actual costs are incurred, the reserve is reduced. The Staff believes that the cost of service should reflect ongoing actual costs rather than accrued expenses. The Staff has adjusted the accrued test year expense, based on a three year average of actual payments to reflect the ongoing level of expenses for both legal and environmental expense.

Staff Expert/Witness: Stephen M. Rackers

13. Franchise Taxes

The Staff has eliminated the franchise taxes (otherwise known as gross receipt taxes) from AmerenUE's expense; as such taxes are merely a pass-through item to AmerenUE. AmerenUE bills and collects the taxes from its customers, and then passes the taxes on to the municipal taxing authorities. The Staff proposes an adjustment in an identical amount to remove franchise taxes from AmerenUE's test year revenues, so that these taxes have no effect on the Company's revenue requirement.

Staff Expert/Witness: Jeremy K. Hagemeyer

14. Test Year Storm Cost

Staff is normalizing test year non-labor related storm costs based on a three-year average of the non-labor related storm costs that occurred between July 1, 2005, and June 30, 2008. The Staff excluded all costs related to storms that occurred between July 1, 2006, and December 31, 2006 from its three-year average. The Commission's decision, on page 77 of its Report and Order from Case No. ER-2007-002 stated that AmerenUE's storm costs from this period are to be offset against its 2006 SO_2 allowance sales revenue. The Commission also ruled that thereafter these storm related operation and maintenance costs shall not be considered in any manner in any future rate proceeding. The Staff also excluded all costs related to the January 13, 2007 storm that is addressed in an Accounting Authority Order (AAO), established in Case No. EU-2008-0141, which is discussed in section VIII F 15.b of this report.

Staff Expert/Witness: John P. Cassidy

15. Storm Cost Amortization Expense

a. Storm Cost from ER-2007-0002

As part of the Stipulation and Agreement that was approved by the Commission in Case No. ER-2007-0002, AmerenUE's cost of service was reduced by $4,442,000 in storm costs and the Company was allowed to recover an amortization of $800,000 annually from July 1, 2007, through June 30, 2012. During the test year ending March 31, 2008, the Company had only recorded nine months or $600,000 of the $800,000 annual amortization. Staff has adjusted expenses to annualize the test year storm amortization that was established as part of AmerenUE's last rate proceeding.

b. Storm Cost AAO

As a result of Case No. EU-2008-0141, the Commission granted AmerenUE an AAO to defer the costs related to the storm that occurred on January 13, 2007. The Commission approved deferring a dispute regarding the starting point of the amortization period for the storm costs deferred through the AAO to be dealt with as an issue in the current rate case.

The Staff recommends that the five-year amortization of the costs deferred through the AAO should begin in January 2007. AmerenUE proposes that the five-year amortization of deferred costs should begin to be amortized upon the effective date of rates established as part of this rate case. AAOs are designed to mitigate the effect of extraordinary items on the financial results of the utility. However, mitigation does not mean guaranteed recovery. AmerenUE could have pursued recovery of this item in the last rate case, by proposing that the Commission recognize an isolated adjustment or could have filed the current case sooner to address these costs. The Staff's proposal to begin the five-year amortization immediately after the ice storm event, avoids an unnecessary delay and ensures the timely recognition of the cost of the storm in the Company's financial statements. The Staff's proposal is consistent with the position it has taken in the three most recent AAO ice storm events involving, Kansas City Power and Light (KCPL), Aquila Inc. (Aquila) and The Empire District Electric Company (Empire).

On April 24, 2002, KCPL filed an application for an AAO to defer costs caused by an ice storm that occurred on January 30 and 31, 2002, in Case No. EU-2002-1048. KCPL requested that the deferrals be amortized for financial reporting beginning with the receipt of the Commission's AAO Order and continue over a five-year period. The Staff recommended that a five year amortization begin on February 1, 2002 (immediately after the two-day ice storm). This case ultimately was resolved through a joint recommendation filed by the parties to the case. The parties agreed to begin the amortization period upon the effective date of the Commission's Order granting an AAO. This was as a result of the fact that KCPL had made representations to the financial community (based on KCPL's understanding of past Commission practice) that the amortization period would begin after the effective date of a Commission AAO Order. The Commission order in that case became effective August 9, 2002.

Therefore, the amortization period began within 6 ½ months, and within the same calendar year, as the time of the ice storm event.

On April 24, 2002, Aquila filed its application for an AAO to defer operation and maintenance costs for a January 30 and 31, 2002 ice storm event, in Case No. EU-2002-1053. Aquila also requested that the deferrals be amortized beginning with the effective date of the Commission's Order authorizing the AAO and continue over a five-year period. The Staff recommended that a five year amortization begin on February 1, 2002. This case was ultimately resolved when all parties to the case stated that they did not object to the Staff's proposed February 1, 2002 starting point for the five-year amortization period for these deferred costs.

In Case No. ER-2008-0093, Empire requested that operation and maintenance costs associated with an ice storm that occurred during January 2007 be amortized over a five year period. In that rate case the Staff recommended that the amortization begin April 2007, within a reasonable time after the extraordinary expenses were incurred. The issue was resolved as part of a non-unanimous stipulation and agreement approved by the Commission in that case. The five-year amortization period approved by the Commission in that case began February 2007.

Consistent with this past practice, the Staff recommends that amortization period for the AmerenUE January 13, 2007 ice storm event begin within a reasonable time period after the extraordinary event occurred. The Staff contends that it is not appropriate to unnecessarily delay the beginning of the amortization period to address this extraordinary event to the date that new rates are established as part of this rate case as AmerenUE has proposed. If rates for this case are implemented on the operation of law date in this case, then the beginning of the amortization period for these deferred costs will have been unnecessarily delayed by over 26 months. Such a proposal is designed to guarantee AmerenUE full recovery of these deferred costs, and also presents a substantial opportunity for AmerenUE to over-recover these deferred costs in rates.

Staff adjusted expense to include $4.9 million in its cost of service calculation, which represents a five-year amortization of these storm costs over the Staff's recommended amortization period covering January 15, 2007, through January 14, 2012.

During the course of its audit, the Company and Staff have identified a small portion of straight-time labor costs that should be excluded from the AAO. Straight-time labor costs were included in rates through the Staff's payroll annualization and do not represent an extraordinary cost that should be deferred through an AAO. The Company and the Staff agree that the total extraordinary storm costs eligible for inclusion in the AAO should be $24.6 million.

Staff Expert/Witness: John P. Cassidy

16. Lease Expense

During the test year, AmerenUE incurred lease expense on various buildings and equipment it uses in the provision of service. The Staff reviewed AmerenUE's test year lease expense for the test year ended March 31, 2008. AmerenUE has not supplied support for several leases. The Staff has therefore disallowed these charges. The Staff will reconsider its position if the Company is able to supply support for these charges.

Staff Expert/Witness: Erin M. Carle

17. Taum Sauk Expenses

During the test year ending March 31, 2008, the Company incurred and charged to expense, costs associated with the Taum Sauk reservoir failure and clean-up activities. AmerenUE has agreed to hold ratepayers harmless for this event. Under this "hold harmless" commitment any expenses related to the reservoir failure or the clean-up activities have been eliminated from the cost of service.

Staff Expert/Witness: Stephen M. Rackers

18. Callaway Refueling Adjustment

AmerenUE's Callaway nuclear power plant undergoes a refueling and maintenance outage process approximately every 18 months. While refueling takes place, the Company typically completes numerous maintenance activities, performs inspections and testing and also completes any necessary capital improvements. The Company refueled the Callaway nuclear power plant during the time period covering April 1, 2007, through May 10, 2007, which is within the test year ending March 31, 2008. Since the Company refuels the Callaway nuclear power plant on an eighteen-month cycle, the cost of refueling must be normalized to reflect the amount incurred during a twelve-month period. The normalization adjustment removes one third of approximately $25.9 million of the test year level of non-labor maintenance project costs. All labor related costs associated with the Callaway refueling are addressed in the Staff's payroll annualization as discussed by Staff witness Roberta A. Grissum. The Staff adjusted expense to eliminate approximately $8.6 million from the Staff's cost of service calculation in order to normalize non-labor related maintenance expenses associated with the Company's refueling of the Callaway nuclear power plant.

Staff Expert/Witness: John P. Cassidy

G. Depreciation

The Staff recommends the depreciation rates that were used to establish the overall revenue requirement ordered by the Commission in Case No. ER-2007-0002, and reflected in the Staff's final accounting schedules in that case supporting the Company's current tariff rates.

Staff Expert/Witness: Rosella L. Schad

H. Income Tax

Income tax has been calculated consistent with the methodology used in AmerenUE's most recent Missouri rate case, Case No. ER-2007-0002. In that case, the only dispute was the treatment of cost of removal and salvage. Consistent with the Stipulation and Agreement in that case, cost of removal and salvage is being normalized in the calculation of income tax expense in the current case.

Staff Expert/Witness: John P. Cassidy

IX. Fuel Adjustment Clause (FAC)

Section 386.266 gives the Commission authority to approve, modify or reject an electric utility's request for a fuel adjustment clause (FAC). Criteria for Commission exercise of that authority are set out in the statute, Commission rules and Commission orders. In this case, AmerenUE does not meet some of the criteria; therefore, the Staff recommends that the Commission not grant AmerenUE a FAC.

In the recent rate cases of Aquila, Inc. (Aquila) (Case No. ER-2007-0004), and The Empire District Electric Company (Empire) (Case No. ER-2008-0093), the Commission utilized three criteria for determining whether an electric utility should be allowed to implement a FAC pursuant to Section 386.266 and 4 CSR 240-3.161 and 4 CSR 240-20.090. On page 37 of its Report and Order in the Empire case, the Commission concluded that a cost or revenue change should be tracked and recovered through a FAC only if the cost or revenue change is:

1. Substantial enough to have a material impact upon revenue requirements and the financial performance of the business between rate cases;

2. Beyond the control of management, where utility management has little influence over experienced revenue or cost levels; and

3. Volatile in amount, causing significant swings in income and cash flows if not tracked.

In Union Electric Company, d/b/a AmerenUE's last rate case before this Commission, Case No. ER-2007-0002, the Commission concluded in its Report and Order that "AmerenUE's fuel and purchased power costs are not volatile enough to justify the implementation of a fuel adjustment clause at this time" and that "[a] future rate case, not a fuel adjustment clause, is the proper means by which AmerenUE should recover its rising fuel costs." The fuel and purchased power costs and revenues of AmerenUE still do not meet these criteria. Therefore, the Staff recommends that the Commission not grant AmerenUE a FAC in this case.

The cost of fuel and purchased-power necessary to serve net system input is AmerenUE's largest item of expense. It comprises approximately 25% of AmerenUE's operations and maintenance expense. The Commission found in the Aquila and Empire rate cases that two components of fuel and purchased-power expense, the cost of natural gas, and spot purchased-power costs, have fluctuated significantly in the past and are expected to continue to be volatile in the future. However, AmerenUE uses a much smaller percentage of natural gas-based power and spot purchased-power to serve its load than either Aquila or Empire. Table LM1 shows a comparison of the generation resources (including purchased-power) required to meet net system input[7] by fuel type from the Staff's final fuel runs for Aquila and Empire in their recent rate cases, where the Commission did allow a FAC; for AmerenUE in its recent rate case, Case No. ER-2007-0002, where the Commission did not allow a FAC; and for this rate case.

[7] Net system input is the electric supply necessary to meet the energy demands of the company's customers and the company's own internal needs. In addition to AmerenUE's retail customers, net system input includes AmerenUE's wholesale customers and its off-system sales.

Table LM1

	Aquila ER-2007-0004		Empire ER-2008-0093		AmerenUE ER-2007-0002		AmerenUE ER-2008-0318	
	MWh	$	MWh	$	MWh	$	MWh	$
Nuclear					21.5%	8.4%	22.2%	8.9%
Coal	67.5%	42.5%	42.2%	24.7%	68.8%	79.6%	69.8%	82.5%
Hydro			1.2%	0.0%	4.9%	0.0%	4.7%	0.0%
Natural Gas	1.0%	3.8%	20.7%	38.1%	0.2%	3.5%	0.2%	1.2%
Purchased-power (Contract)	17.9%	13.3%	30.2%	22.0%	3.1%	5.4%	2.0%	3.6%
Purchased-power (Spot)	13.7%	40.4%	5.7%	15.2%	1.5%	5.1%	1.2%	3.8%

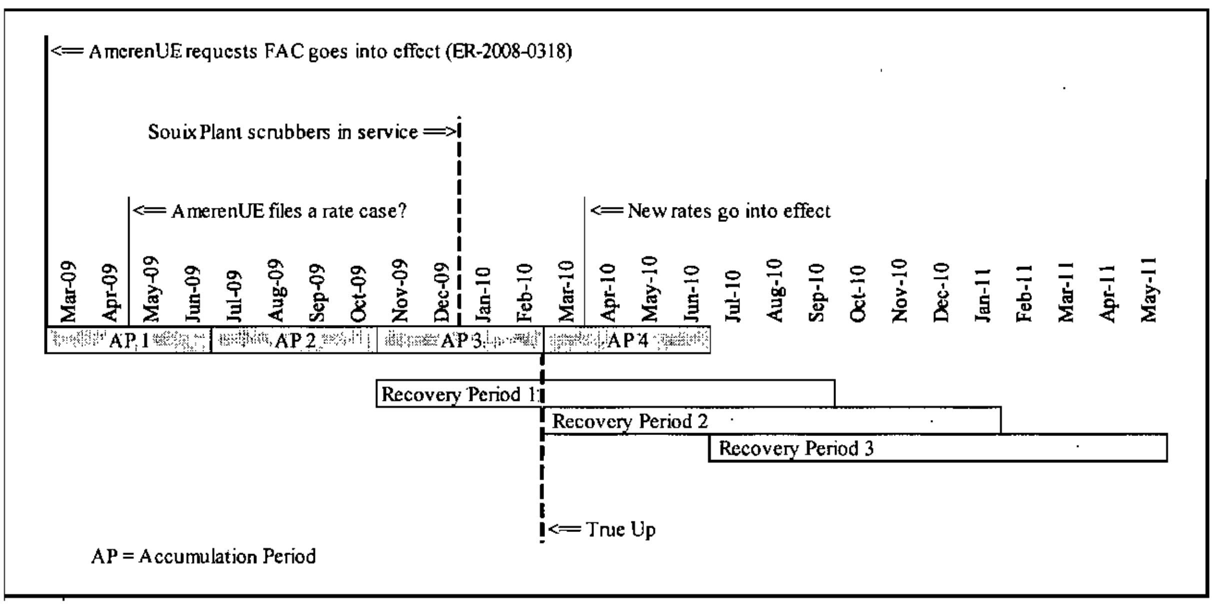
This table shows that AmerenUE meets a much smaller percentage of its net system input needs with gas-fired generation and spot purchased-power than either Aquila or Empire. In fact, the Staff's current AmerenUE rate case fuel run estimates that approximately 5% of AmerenUE's net system input requirements are met with fuel and spot purchased-power. AmerenUE's resulting natural gas and spot purchased-power costs are less than 6% of its total fuel costs. In contrast, Aquila and Empire meet over 14% of their net system input requirements with natural gas and spot purchased-power, and their resulting natural gas and spot purchase power costs comprise in excess of 44% of their fuel costs.

Table LM1 also shows little change since AmerenUE's last rate case in the percent of net system requirements met by the different fuel types. In that case the Commission did not allow AmerenUE a FAC.

For AmerenUE fluctuations in natural gas prices and spot purchased-power prices have not been substantial enough to have a material impact upon AmerenUE's revenue requirements. Given that fuel and purchased-power expense to meet net system input comprises approximately 25% of AmerenUE's operation and maintenance expense, the total percentage of AmerenUE's expenses attributed to volatile natural gas and spot purchased-power prices is less than 1.5%.

Because of investments in environmental upgrades that AmerenUE is presently installing, it is likely that AmerenUE will initiate another rate case not long after the operation of law date in this case, i.e., shortly after rate changes resulting from this case would take effect. According to the Ameren Corp. / AmerenUE website (http://www.ameren.com/PowerOn/ADC_EmissionsControl.asp), AmerenUE is currently in the process of investing $500 million to reduce sulfur dioxide and mercury emissions from its Sioux plant. The Sioux plant's new scrubbers are scheduled to be in place by 2009. It is highly probable that AmerenUE will want to place these scrubbers in rate base as soon as possible, i.e., after the scrubbers are "fully operational and used for service" and, as a consequence, AmerenUE is no longer able to accrue construction work in progress (CWIP) on them. AmerenUE would also in all likelihood file at the same time for an environmental cost recovery mechanism (ECRM). The following chart is the timeline of the FAC as proposed by AmerenUE and the likely timing of a rate increase case to include in rate base the cost of the Sioux scrubbers.

Chart LM1



Under this scenario, AmerenUE would ask for another rate increase that would go into effect before April 3, 2010. Since AmerenUE has much of its fuel costs and transportation costs hedged **___________**, AmerenUE does not need a FAC from this rate case. Higher fuel costs can be adequately and appropriately addressed in the next rate case. Hedging is the offsetting of a position with the intent of managing risk. It is accomplished by protecting one transaction with another transaction. Hedging is the initiation of a position in a futures or options market that is intended as a temporary substitute for the sale or purchase of the actual commodity. The purpose of hedging is to protect, as much as possible, against adverse price movements. Hedging does not always result in the lowest cost, but is designed to create more price stability and certainty.

While the costs of all of AmerenUE's fuel types are not within AmerenUE's total control, it does have some control over the price it pays for fuel as a result of its fuel purchasing policies and the large quantities of fuel it purchases. Hedging is intended to reduce the very volatility that a FAC is also intended to address. That AmerenUE has already addressed fuel price volatility through hedging, and therefore does not need a FAC, is demonstrated by the amount of coal, transportation of coal, uranium and the conversion, enrichment and fabrication of uranium that AmerenUE already has hedged ** ____________**. Approximately ninety-seven percent of AmerenUE's generation in the test year came from coal, hydro, and nuclear sources.

The Staff's fuel model estimates that AmerenUE generates approximately 70% of the energy it needed to meet its net system input during the test year from coal. Coal prices are continuing to rise, but coal prices have not been volatile like natural gas and spot purchased-power prices. According to AmerenUE's response to Staff Data Request No. 219, as of June 30, 2008, AmerenUE ** ____

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____________** Also important is the coal transportation costs. In the same AmerenUE response to Staff Data Request No. 219, AmerenUE ** ______________________________

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Like its coal fuel and transportation costs, the costs of uranium are increasing. Also, like it has done with coal, AmerenUE has hedged the costs of uranium, including conversion, enrichment and fabrication. ** ____

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Fuel for AmerenUE generation is purchased by Ameren Energy Fuel Services. AmerenUE stated in a presentation to the National Coal Transportation Association on April 23, 2008 (provided in response to Staff Data Request No. 299) that Ameren Corporation is the fifth largest consumer of coal and the largest consumer of Powder River Basin coal in the United States. While Ameren cannot "control" the price of coal, the sheer amount of Powder River Basin coal that Ameren purchases should enhance its ability to negotiate both coal and transportation prices.

Since a large percentage of AmerenUE's capacity is low-variable cost baseload plants, AmerenUE makes significant off-system sales. Without a FAC there is an incentive for AmerenUE to exceed the off-system margin revenues included in this rate case to increase its earnings. With a FAC, its fuel cost will be recovered even it does not reach the off-system sales margin included in revenues. AmerenUE would have less incentive to aggressively pursue off-system sales.

Fuel and purchased-power expense necessary to serve net system input are the largest item of expense AmerenUE incurs. However, the portion of the fuel and purchased-power expense that is volatile, i.e., natural gas cost and purchased-power expense, is small compared to Empire or Aquila so that if not recovered in a FAC, it does not impact income and cash flow for AmerenUE, as it does for Empire or Aquila. While it is expected that AmerenUE's cost of coal and uranium will increase in the future, the costs are not volatile and will not fluctuate greatly. The Commission, in its Report and Order in the last AmerenUE rate case, found that

> ... rising, but known, fuel costs are the worst reason to implement a fuel adjustment clause because such a fuel adjustment clause allows the utility to recover a single known rising cost while avoiding a rate case in which all its other expenses and revenue, which are changing in the background, will be examined and perhaps used to offset all or part of the rising fuel cost to avoid an unnecessary rate increase.[8]

In response to Staff Data Request No. 201, AmerenUE stated that "[n]o significant changes were made to AmerenUE's coal and transportation hedging strategy since the last case." In addition, the percentage of AmerenUE's cost attributable to each type of fuel has not changed significantly since the last AmerenUE rate case. AmerenUE is likely to come back to the

[8] *Re Union Electric Co., d/b/a AmerenUE*, Case No. ER-2007-0002, Report and Order, page 23, footnote omitted (2007).

Commission within the next year for another rate increase to place the cost of the Sioux scrubbers in rate base.

AmerenUE does not meet the criteria previously used by the Commission in determining the authorization of a fuel adjustment clause mechanism. It is clear in Section 386.266 that the granting of a FAC is not automatic; it is discretionary by the Commission. For the reasons stated above, the Staff recommends that the Commission not grant AmerenUE a fuel adjustment clause.

Staff Expert/Witness: Lena M. Mantle

Appendices

Appendix 1: Staff Credentials

Appendix 2: Summary of Annualized and Normalized Sales/Rate Revenue

Appendix 3: Component of Annual Net System Input/Load

Appendix 4: Calibration Run/Rate Case Run/Rate Case Statistics/Run Comparisons

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)	Case No. ER-2008-0318

AFFIDAVIT OF ALAN J. BAX

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Alan J. Bax, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 12, 42, 43; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Alan J Bax
Alan J. Bax

Subscribed and sworn to before me this 27th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2008-0318

AFFIDAVIT OF ERIN M. CARLE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Erin M. Carle, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Staff Report in pages 4, 6-8, 11, 49, 50, 52-54 and 58; that she has knowledge of the matters set forth in such Report; and that such matters are true to the best of her knowledge and belief.

Erin M. Carle

Erin M. Carle

Subscribed and sworn to before me this 27th day of August, 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF JOHN P. CASSIDY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

John P. Cassidy, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 8, 12, 23, 26-30, 32, 34, 39, 40, 55-59; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

John P. Cassidy

John P. Cassidy

Subscribed and sworn to before me this 28th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2008-0318

AFFIDAVIT OF ROBERTA A. GRISSUM

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Roberta A. Grissum, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Staff Report in pages 9, 14, 43-46; that she has knowledge of the matters set forth in such Report; and that such matters are true to the best of her knowledge and belief.

Roberta A. Grissum

Roberta A. Grissum

Subscribed and sworn to before me this 27th day of August, 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF JEREMY K. HAGEMEYER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Jeremy K. Hagemeyer, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 15,16,21-23,26,28,46-49,51-55; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Jeremy K. Hagemeyer

Subscribed and sworn to before me this 27th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2008-0318

AFFIDAVIT OF MANISHA LAKHANPAL

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Manisha Lakhanpal, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Staff Report in pages 16 - 21; that she has knowledge of the matters set forth in such Report; and that such matters are true to the best of her knowledge and belief.

Manisha Lakhanpal
Manisha Lakhanpal

Subscribed and sworn to before me this 27th day of August, 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF SHAWN E. LANGE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Shawn E. Lange, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 20, 40-42 ; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Shawn E. Lange
Shawn E. Lange

Subscribed and sworn to before me this 27th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2008-0318

AFFIDAVIT OF ERIN L. MALONEY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Erin L. Maloney, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Staff Report in pages 29 – 34; that she has knowledge of the matters set forth in such Report; and that such matters are true to the best of her knowledge and belief.

Erin L. Maloney

Erin L. Maloney

Subscribed and sworn to before me this 27th day of August, 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2008-0318

AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Lena M. Mantle, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Staff Report in pages 59-65; that she has knowledge of the matters set forth in such Report; and that such matters are true to the best of her knowledge and belief.

Lena M Mantle
Lena M. Mantle

Subscribed and sworn to before me this 27th day of August, 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF STEPHEN M. RACKERS

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

Stephen M. Rackers, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 4-6, 23, 51, 54-58; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Stephen M. Rackers

Stephen M. Rackers

Subscribed and sworn to before me this 28th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF MICHAEL RAHRER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Michael Rahrer, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 35 – 40; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Michael Rahrer

Subscribed and sworn to before me this 26 day of AUG 2008.

Notary Public

Driver Lic# R660552513800

MASHALLAH C. IZADI
Notary Public - State of Florida
My Commission Expires Jan 2, 2012
Commission # DD 744070
Bonded Through National Notary Assn.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	))))	Case No. ER-2008-0318

AFFIDAVIT OF ROSELLA L. SCHAD, PE, CPA

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Rosella L. Schad, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Staff Report in page(s) 59; that she has knowledge of the matters set forth in such Report; and that such matters are true to the best of her knowledge and belief.

Rosella L. Schad
Rosella L. Schad

Subscribed and sworn to before me this 28th day of August, 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF HENRY WARREN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Henry Warren, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 10; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Henry Warren

Henry Warren

Subscribed and sworn to before me this 27th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2008-0318

AFFIDAVIT OF CURT WELLS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Curt Wells, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 16, 17, 20 and 21 ; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Curt Wells

Curt Wells

Subscribed and sworn to before me this 27th day of August 2008.

NIKKI SENN
Notary Public - Notary Seal
State of Missouri
Commissioned for Osage County
My Commission Expires: October 01, 2011
Commission Number: 07287016

Nikki Senn

Notary Public

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

APPENDIX 1

UNION ELECTRIC COMPANY
D/B/A AMERENUE

CASE NO. ER-2008-0318

APPENDIX 1

STAFF CREDENTIALS

ALAN J. BAX

I graduated from the University of Missouri - Columbia with a Bachelor of Science degree in Electrical Engineering in December 1995. Concurrent with my studies, I was employed as an Engineering Assistant in the Energy Management Department of the University of Missouri – Columbia from the Fall of 1992 through the Fall of 1995. Prior to this, I completed a tour of duty in the United States Navy, completing a course of study at the Navy Nuclear Power School and a Navy Nuclear Propulsion Plant. Following my graduation from the University of Missouri - Columbia, I was employed by The Empire District Electric Company (Empire or Company) as a Staff Engineer until August 1999, at which time I began my employment with the Staff of the Missouri Public Service Commission (Staff). I am a member of the Institute of Electrical/Electronic Engineers (IEEE).

**TESTIMONY AND REPORTS FILED
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION**

BY ALAN J. BAX

COMPANY	CASE NUMBER
Aquila, Inc. d/b/a Aquila Networks – MPS	ER-2004-0034
Union Electric Company d/b/a AmerenUE	EO-2004-0108
The Empire District Electric Company	ER-2002-0424
Kansas City Power & Light Company	EA-2003-0135
Union Electric Company d/b/a AmerenUE	EO-2003-0271
Aquila, Inc. d/b/a Aquila Networks – MPS	EO-2004-0603
Union Electric Company d/b/a AmerenUE	EC-2002-0117
Three Rivers and Gascosage Electric Coops	EO-2005-0122
Union Electric Company d/b/a AmerenUE	EC-2002-1
The Empire District Electric Company	ER-2001-299
Aquila, Inc. d/b/a Aquila Networks – MPS	EA-2003-0370
Union Electric Company d/b/a AmerenUE	EW-2004-0583
Union Electric Company d/b/a AmerenUE	EO-2005-0369
Trigen-Kansas City Energy Corporation	HA-2006-0294
Union Electric Company d/b/a AmerenUE	EC-2005-0352
Missouri Public Service	ER-2001-672
Aquila, Inc. d/b/a Aquila Networks – MPS	EO-2003-0543
Macon Electric Cooperative	EO-2005-0076
Aquila, Inc. d/b/a Aquila Networks – MPS	EO-2006-0244
Union Electric Company d/b/a AmerenUE	EO-2003-0271
Union Electric Company d/b/a AmerenUE	EC-2004-0556
Union Electric Company d/b/a AmerenUE	EC-2004-0598
The Empire District Electric Company	ER-2004-0570
Union Electric Company d/b/a AmerenUE	EC-2005-0110
Union Electric Company d/b/a AmerenUE	EC-2005-0177
Union Electric Company d/b/a AmerenUE	EC-2005-0313
The Empire District Electric Company	EO-2005-0275
Aquila, Inc. d/b/a Aquila Networks – MPS	EO-2005-0270
Union Electric Company d/b/a AmerenUE	EO-2006-0145
Aquila, Inc. d/b/a Aquila Networks – MPS	ER-2005-0436
Union Electric Company d/b/a AmerenUE	EO-2006-0096
Union Electric Company d/b/a AmerenUE	EO-2004-0108
The Empire District Electric Company	ER-2008-0093
Union Electric Company d/b/a AmerenUE	EO-2008-0310

Erin Carle

Educational and Employment Background and Credentials

I am currently employed as a Utility Regulator Auditor I for the Missouri Public Service Commission (PSC). I was hired as a member of the PSC in January 2008. I graduated from Maryville University with a Bachelor of Science Degree in Accounting, ranked Cum Laude. I am in the process of getting my Masters of Business Administration Degree with an emphasis in Accounting.

Most recently, I was employed by the Meramec Valley R-III School District from October 2001 to January 2008. My job title was Computer Aid. I was responsible for setting up the computers, guiding students through specific programs and assisting teachers with computer program questions. Through December 2005 to April 2006, I was also employed by Fitzgerald & Fitzgerald P.C. My duties included: Preparing personal income tax returns, reviewing corporate accounting procedures, and preparing corporate income tax returns.

As a Utility Regulator Auditor I, I perform rate audits and prepare miscellaneous filings as ordered by the PSC. In addition, I review all exhibits and testimony on assigned issues, develop accounting adjustments and issue positions which are supported by workpapers and written testimony. I also audit telephone annual reports. ER-2008-0318 is my first rate case assignment.

JOHN P. CASSIDY

Present Position

I am a Utility Regulatory Auditor V in the Auditing Department, Utility Services Division. My business address is 9900 Page Avenue, Suite 103, Overland, Missouri, 63132. Since joining the Missouri Public Service Commission's Staff in 1990, I have assisted with and directed audits and examinations of the books and records of utility companies operating within the State of Missouri. I have also conducted numerous audits of small water and sewer companies in conjunction with the Commission's informal rate proceedings. Please refer to the attached Schedule JPC-1 for a list of rate case proceedings in which I have previously filed testimony.

Education

Southeast Missouri State University
Cape Girardeau, Missouri
Bachelor of Science Degree in Business Administration
Double Major: Marketing 1989 and Accounting 1990

RATE CASE PROCEEDING PARTICIPATION

JOHN P. CASSIDY

COMPANY	CASE NO.
Missouri Cities Water Company	**WR-91-172**

Payroll and Related
Pensions
OPEBS
General Insurance Expense
Advertising Expense
Miscellaneous Expenses

Type of Testimony Filed: Direct and Surrebuttal

St. Louis County Water Company	**WR-91-361**

Tank Painting
Main Failures
Residue Removal
General Insurance Expense
PSC Assessment
Miscellaneous Expenses

Type of Testimony Filed: Direct

Southwestern Bell Telephone Company	**TC-93-224**

Advertising Expenses
Promotional Giveaways
Miscellaneous Expenses

Type of Testimony Filed: Direct and Surrebuttal

COMPANY	CASE NO.
Laclede Gas Company	**GR-94-220**

Payroll and Payroll Taxes
Incentive Compensation
401 (K)
Dental and Vision Insurance
Data Processing

Type of Testimony Filed: Direct

The Empire District Electric Company	**ER-95-279**

Revenues
Uncollectibles Expense
Municipal Franchise Taxes
Postage Expense
Emission Credits

Type of Testimony Filed: Direct

Imperial Utility Corporation	**SC-96-247**

Rate Base
Depreciation Reserve
Depreciation Expense
CIAC
Property Taxes
Property Insurance
Lab Testing Expense
Sludge Removal Expense

Type of Testimony Filed: Rebuttal

St. Louis County Water Company	**WR-97-382**

Payroll and Payroll Taxes
Employee Benefits
Employee Savings
Shared Employees

Type of Testimony Filed: Direct

COMPANY	CASE NO.
Laclede Gas Company	**GR-98-374**

Payroll and Payroll Taxes
401 (K)
Health Care Costs
Pension Plan
Director's Pension Plan
Trustee Fees
SERP
Outside Consulting
Incentive Compensation
Advertising Expense

Type of Testimony Filed: Direct

United Water Missouri, Inc.	**WR-99-326**

Payroll and Payroll Taxes
401 (K)
Health Care Costs
Employee Relocation
Corporation Franchise Tax
Advertising Expense
Dues and Donations
Miscellaneous Expenses

Type of Testimony Filed: Direct

Union Electric Company	**EC-2000-795**

Injuries and Damages
Legal Expense
Environmental Expense

Type of Testimony Filed: Direct

Union Electric Company	**GR-2000-512**

Revenues
Uncollectibles Expense
Customer Deposits

Type of Testimony Filed: Direct

COMPANY	CASE NO.
Laclede Gas Company	**GR-2001-629**

Revenues
Gross Receipts Tax
Gas Supply Incentive Plan
Gas Costs
Uncollectibles Expense
Non-Utility Operations

Type of Testimony Filed: Direct

Union Electric Company, d/b/a AmerenUE	**EC-2002-01**

Fuel Expense
Callaway Refueling
Legal Expense
Environmental Expense
Capacity Purchases
Midwest ISO
Payroll and Related
Incremental Overtime

Type of Testimony Filed: Direct and Surrebuttal

Union Electric Company, d/b/a AmerenUE	**EC-2002-1025**

Legal Expense
Environmental Expense
Midwest ISO

Type of Testimony Filed: Direct

Laclede Gas Company	**GR-2002-356**

Revenues
Gross Receipts Tax
Gas Supply Incentive Plan
Gas Costs
Uncollectibles Expense
Income Taxes

Type of Testimony Filed: Direct

COMPANY	CASE NO.
Laclede Gas Company	**GT-2003-0117**

Financial Aspects

Type of Testimony Filed: Direct

Missouri-American Water Company	**WR-2003-0500 & WC-2004-0168**

Allocation of Belleville Labs Cost to MAWC
National Call Center
Compensation for Services Provided from MAWC to AWR
Information Technology Services
Capitalization of Shared Services
Transition Costs
Cost Allocation Manual
Affiliate Transactions
Severance Costs
National Call Center Transition Costs
National Shared Services Transition Costs

Type of Testimony Filed: Direct & Surrebuttal

Missouri-American Water Company	**SM-2004-0275**

Acquisition Adjustment

Type of Testimony Filed: Direct

The Empire District Electric Company	**ER-2004-0572**

Interim Energy Charge
Fuel Expense
Purchased Power
Off System Sales
KCPL Transmission Expense
Income Taxes

Type of Testimony Filed: Direct & Surrebuttal

COMPANY	CASE NO.
Union Electric Company d/b/a AmerenUE	**GR-2007-0003**

Environmental Expense

Type of Testimony Filed: Direct

Union Electric Company d/b/a AmerenUE	**ER-2007-0002**

Fuel Expense
Fuel Inventories
Callaway Refueling Costs
Combustion Turbine Maintenance Expense
Environmental Expense
Gains on the Sale of Sulfur Dioxide Emission Allowances

Type of Testimony Filed: Direct, Rebuttal and Surrebuttal

Missouri-American Water Company	**WR-2007-0216**

Belleville Labs Allocation
Compensation for Services MAWC Provided to AWR
Income Taxes

Type of Testimony Filed: Direct

Background and Credentials

Roberta A. Grissum

I am currently employed as a Utility Regulatory Auditor III in the Commission's Auditing Department. From August 1, 2002 through February 2003, I was employed as a Utility Regulatory Auditor III in the Financial Analysis Department. From May 1998 to July 2002, I was employed as a Public Utility Financial Analyst in the Financial Analysis Department where I was responsible for rate of return analyses. Prior to my appointment to the Financial Analysis Department, I served in an administrative support position within the Utility Services Division, Accounting Department. In total, I have been with the Commission over thirteen (13) years. Schedule 1 attached to this report lists the cases in which I have filed testimony. Schedule 1 also lists the issues I was responsible for in each of those cases. In addition, I have attached a schedule of all cases to which I have been assigned that did not require the filing of testimony. It is attached as Schedule 2.

I earned a Masters of Business Administration degree from William Woods University on June 8, 2000. I earned a Bachelor of Science degree in Business Administration with an emphasis in Finance from Columbia College in July 1997 and acquired an emphasis in Accounting in October 2002. In addition, I have been an adjunct faculty member with William Woods University in the Adult Evening Business Program for the past eight years. I am certified to facilitate Fundamentals of Financial Management (undergraduate) and Financial Decisions (graduate).

Prior to employment with the Commission, I was employed by the State Emergency Management Agency for the state of Missouri. I also have previous experience in the areas of accounting, insurance, consumer protection and mortgage banking.

ROBERTA GRISSUM
SUMMARY OF TESTIMONY/STAFF RECOMMENDATION
SCHEDULE 1

Issue	Case Number	Witness	Case Name
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	GO-2008-0351	Grissum, Roberta	Laclede Gas Company
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	GO-2008-0155	Grissum, Roberta	Laclede Gas Company
Actual Cost Adjustment Review Staff Recommendation	GR-2008-0136	Grissum, Roberta A.	Missouri Gas Utility, Inc.
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	WO-2007-0272	Grissum, Roberta	Missouri-American Water Company
Bad Debt Expense, Chemical Expense, Fuel & Power Expense, Postage Expense, Purchased Water Expense, Revenues and Staff Accounting Schedules	WR-2007-0216 and WR-2007-0217	Grissum, Roberta A.	Missouri-American Water Company
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	GO-2007-0177	Grissum, Roberta	Laclede Gas Company
Revenue Requirement, Rate Design/Surcharge (ISRS Filing) Staff Rec Filed and Approved	WO-2007-0043	Grissum, Roberta	Missouri-American Water Company
Review of Company testimony related to rate case filings of AmerenCIPS, AmerenIP, and AmerenCILCO before the Illinois Commerce Commission	ER-2007-0002	Grissum, Roberta A.	Union Electric Company d/b/a AmerenUE
Revenue Requirement/Surcharge Rate Design (ISRS Filing) Staff Rec Filed and Approved	WO-2006-0284	Grissum, Roberta A.	Missouri-American Water Company, et al
Cash Working Capital, Rate Base and Related Issues, Depreciation and Amortization Expense, Revenues: Case Settled before testimony was Filed	GR-2005-0284	McKiddy, Roberta A.	Laclede Gas Company
Rate Base and Related Issues, Retired Plant, Depreciation and Amortization Expense, Property and Liability Insurance Expense, Property Tax, Banking Fees, Flotation Costs, PSC Assessment, and Rate Case Expense: Direct Testimony: All Issues Surrebuttal Testimony: Rate Case Expense & Energy Center 3&4 Issues Settled at Prehearing	ER-2004-0570	McKiddy, Roberta A.	The Empire District Electric Company

Prepared By: R. Grissum
Last Updated: 8/25/2008

ROBERTA GRISSUM
SUMMARY OF TESTIMONY/STAFF RECOMMENDATION
SCHEDULE 1

Issue	Case Number	Witness	Case Name
Cash Working Capital, Tank Painting Expense, Main Incident Expense, Facility Locates Expense and Advertising Expense: Direct Testimony Surrebuttal Testimony Most Issues Settled at Prehearing Cross-examined at Hearing re: Cash Working Capital	WR-2003-500	McKiddy, Roberta A.	Missouri-American Water Company
Cost of Capital: Direct Testimony Case Settled by S&A	GR-2002-356	McKiddy, Roberta A.	Laclede Gas Company
Surveillance Data Reporting	TM-2002-232	McKiddy, Roberta A.	Verizon Midwest /CenturyTel of Missouri, LLC
Cost of Capital Direct Testimony	ER-2002-217	McKiddy, Roberta A.	Citizens Electric Corporation
Cost of Capital: Direct Testimony Case Settled by S&A	GR-2001-629	McKiddy, Roberta A.	Laclede Gas Company
Evaluation of Transaction and Standard of Public Detriment Rebuttal Testimony Cross-examined at Hearing	GM-2001-585	McKiddy, Roberta A.	Gateway Pipeline Company Inc., et al
Surveillance Data Reporting	WM-2001-309	McKiddy, Roberta A.	Missouri-American Water Company, et al
Cost of Capital: Direct Testimony Rebuttal Testimony Surrebuttal Testimony True-up Direct Testimony True-up Rebuttal Testimony Cross-examined at Hearing	ER-2001-299	McKiddy, Roberta A.	The Empire District Electrie Company
Capital Structure, Cost of Capital, Embedded Cost, Return on Equity: Direct Testimony: All Issues Rebuttal Testimony: All Issues Surrebuttal Testimony: Return on Common Equity and Response to Depreciation Testimony of Company Witness Cross-Examined at Hearing	WR-2000-844	McKiddy, Roberta A.	St. Louis County Water Company
Rate of Return	GR-2000-512	McKiddy, Roberta A.	Union Electric Co d/b/a AmerenUE

Prepared By: R. Grissum
Last Updated: 8/25/2008

ROBERTA GRISSUM
SUMMARY OF TESTIMONY/STAFF RECOMMENDATION
SCHEDULE I

Issue	Case Number	Witness	Case Name
Surveillance Data Reporting: Rebuttal Testimony Cross-examined at Hearing	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / The Empire District Electric Company
Merger Overview: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / The Empire District Electric Company
History of the UtiliCorp United Inc. / Empire Electric Company Merger: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / The Empire District Electric Company
Financial Theory of Utility Merger: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / The Empire District Electric Company
Electric Utility Industry Merger History: Rebuttal Testimony	EM-2000-369	McKiddy, Roberta A.	UtiliCorp United Inc. / The Empire District Electric Company
Surveillance Data Reporting Rebuttal Testimony Cross-examined at Hearing	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Merger Rationale: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Merger Overview: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
History of the UtiliCorp United / St. Joseph Light and Power Merger: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Financial Theory of Utility Mergers: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Electric Utility Industry Merger History: Rebuttal Testimony	EM-2000-292	McKiddy, Roberta A.	UtiliCorp United Inc. / St. Joseph Light and Power
Capital Structure, Cost of Capital, Embedded Cost, Return on Equity: Direct Testimony Rebuttal Testimony Surrebuttal Testimony True-up Direct Cross-examined at Hearing	SR-2000-282	McKiddy, Roberta	Missouri-American Water Company
Capital Structure, Cost of Capital, Embedded Cost, Return on Equity: Direct Testimony Rebuttal Testimony Surrebuttal Testimony True-up Direct Cross-Examined at Hearing	WR-2000-281	McKiddy, Roberta	Missouri-American Water Company

Prepared By: R. Grissum
Last Updated: 8/25/2008

Roberta (McKiddy) Grissum

Case Participation - Financial Analysis Department

Case No.	Utility Type	Company Name	Case Type
EA-2000-153	Electric	Westar Generating Inc.	Certificate
EA-2000-27	Electric	Union Electric Company dba AmerenUE	Asset Transfer
EA-2000-37	Electric	Union Electric Company dba AmerenUE	Certificate
EF-2001-282	Electric	Kansas City Power & Light Company	Finance Application
EM-2000-145	Electric	The Empire District Electric Co.	Asset Transfer
EM-2000-369	Electric	UtiliCorp United / Empire District	Merger
EM-2001-464	Electric	Kansas City Power & Light Company	Reorg-Holding Co.
EO-2003-0081	Electric	Kansas City Power & Light Company	Decommissioning Study
EO-2003-0083	Electric	Union Electric Company dba AmerenUE	Decommissioning Study
ER-2001-299	Electric	The Empire District Electric Company	Rate Case
ER-2002-217	Electric	Citizens Electric Company	Rate Case
GM-2000-312	Gas	Atmos Energy/Arkansas Western	Merger
GM-2001-585	Gas	Gateway Pipeline Company	Merger
GM-2002-295	Gas	Atmos Energy Corporation	Merger
GN-2003-0016	Gas	Missouri Gas Company	Renaming to LLC
GN-2003-0017	Gas	Missouri Pipeline Company	Renaming to LLC
GO-2002-1099	Gas	Laclede Gas Company	Transfer of Gas Supply Function
GR-2000-512	Gas	Union Electric Company dba AmerenUE	Rate Case
GR-2001-629	Gas	Laclede Gas Company	Rate Case
GR-2002-356	Gas	Laclede Gas Company	Rate Case
GR-97-302	Gas	Laclede Gas Company	Finance Application
RP99-485-000	Gas	Kansas Pipeline	FERC Rate Case
9900334	Sewer	Terre Du Lac Utilities Corp. (Sewer)	Small Rate Case (ROR)
QS-2002-0006	Sewer	Savannah Heights Industrial Treatment Inc.	Small Rate Case
QS-2003-0010	Sewer	KMB Utility	Small Company Rate Increase
QS-2003-0019	Sewer	North Oak Sewer District Inc.	Small Company Rate Increase
SA-2000-295	Sewer	Lake Region W&S	Certificate
SA-2000-417	Sewer	North Oak Sewer District Inc.	Certificate
SA-2003-0189	Sewer	TBJ Sewer Systems, Inc.	Certificate Case
SA-97-441	Sewer	TBJ Sewer Systems, Inc.	Certificate
SM-2000-214	Sewer	AquaSource Utility, Inc.	Stock Acquisition
SO-2002-1039	Sewer	Silverleaf Resorts, Inc.	Over-earnings Review
SR-2000-282	Sewer	Missouri-American Water Company	Rate Case
SR-2002-350	Sewer	So. Jefferson Co. Utility Co.	Small Rate Case
CA-2003-00109	Telephone	Integrated Telecommunications Services, LLC	CLEC Application
TA-2000-217	Telephone	HJN Telecom Inc.	CLEC Application
TA-2000-243	Telephone	Navigator Telecom LLC	Certificate (Request to Amend)
TA-2000-304	Telephone	BroadStream Corp	CLEC Application
TA-2000-32	Telephone	Computer Business Sciences	CLEC Application

Schedule 2-1

Roberta (McKiddy) Grissum

Case Participation - Financial Analysis Department

Case No.	Utility Type	Company Name	Case Type
TA-2000-372	Telephone	Snappy Phone of Texas, Inc.	CLEC Application
TA-2000-484	Telephone	Essential.com, Inc.	CLEC Application
TA-2000-496	Telephone	01 Communications of MO, LLC	CLEC Application
TA-2000-514	Telephone	Fair Point Communications	CLEC Application
TA-2000-521	Telephone	@LinkNetworks	CLEC Application
TA-2000-665	Telephone	Pathnet Inc.	CLEC Application
TA-2001-193	Telephone	Ntegrity Telecontent Inc.	CLEC Application
TA-2001-205	Telephone	Telegry Network Services	CLEC Application
TA-2001-285	Telephone	Southern Telcom Network	CLEC Application
TA-2001-289	Telephone	Arrival Communications Inc	CLEC Application
TA-2001-336	Telephone	eVulkan Inc.	CLEC Application
TA-2001-350	Telephone	Everest Midwest Licensee	CLEC Application
TA-2001-433	Telephone	PNG Telecommunications, Inc.	CLEC Application
TA-2001-596	Telephone	Tri-State Telecommunicaitons, Inc. dba The Phone Company	CLEC Application
TA-2002-139	Telephone	Local Line America, Inc.	CLEC Application
TA-2002-183	Telephone	Universal Telecom, Inc.	CLEC Application
TA2002-238	Telephone	Chariton Valley Telecom Corporation	CLEC Application
TA-2002-287	Telephone	Lockheed Martin Global	CLEC Application
TA-2002-42	Telephone	NTERA, Inc.	CLEC Application
TA-2002-453	Telephone	CD Telecommunications, LLC	CLEC Application
TA-99-171	Telephone	Level 3 Communications, LLC	Certificate
TA-99-173	Telephone	Gabriel Communications of Missouri, Inc.	Certificate
TA-99-298	Telephone	AllTel Communications, Inc.	Certificate
TA-99-405	Telephone	Payroll Advance Inc.	Certificate
TA-99-577	Telephone	KMC Telecom III, Inc.	Certificate
TF-98-549	Telephone	Ozark Telephone Company	Finance Application
TF-99-200	Telephone	Mark Twain Rural Telephone Co	Finance Application
TF-99-318	Telephone	Steelville Telephone Exchange, Inc.	Finance Application
TM-2001-239	Telephone	Everest Connections Corp.	Merger
TM-2002-232	Telephone	Verizon Midwest /CenturyTel of Missouri, LLC	Sale of Assets
TM-2002-299	Telephone	Alma Telephone Company	Merger
TM-95-134 et al	Telephone	Ozark Telephone Company	Merger Case
9900156	W&S	Hickory Hills Water & Sewer (Water)	Small Rate Case (ROR)
200001187/1188	W&S	Silverleaf Resorts, Inc.	Small Rate Case (ROR)
200101207&01208	W&S	So. Jefferson Co. Utility Co.	Small Rate Case (ROR)
9900157	W&S	Hickory Hills Water & Sewer (Sewer)	Small Rate Case (ROR)
9900333	Water	Terre Du Lac Utilities Corp. (Water)	Small Rate Case (ROR)
9900946	Water	RDE Water Company	Small Rate Case (ROR)
20000777	Water	Raytown Water Company	Small Rate Case (ROR)

Schedule 2-2

Roberta (McKiddy) Grissum

Case Participation - Financial Analysis Department

Case No.	Utility Type	Company Name	Case Type
200100966/00967	Water	The Meadows Water Company	Small Rate Case (ROR)
QW-2003-0007	Water	Cedar Hills Estates Water Company Inc.	Small Company Rate Increase
QW-2003-0009	Water	KMB Utility Corporation	Small Company Rate Increase
WA-2000-321	Water	Bear Creek Water & Sewer	Certificate
WA-2000-405	Water	Missouri-American Water Company	Certificate
WA-99-256	Water	Osage Water Company	Certificate
WF-2000-383	Water	Missouri-American Water Company	Finance Application
WF-2002-1096	Water	Missouri-American Water Company	Finance Application
WF-2002-359	Water	Missouri-American Water Company	Finance Application
WF-99-300	Water	St Louis County Water Company	Finance Application
WM-2000-318	Water	United Water Missouri, Inc.	Sale of Stock
WM-2001-309	Water	MAWC/SLCWC/JC Waterworks	Merger
WM-2003-0133	Water	Philadelphia Suburban Corporation	Merger
WM-99-119	Water	Woodland Manor Water Co.	Merger
WM-99-238	Water	AquaSource, Inc./CU/RU/FU	Merger
WO-00-406	Water	Raytown Water Company	Informal Rate Case
WO-2002-1040	Water	Silverleaf Resorts, Inc.	Over-earnings Review
WR-2000-281	Water	Missouri-American Water Company	Rate Case
WR-2000-416	Water	RDE Water Company	Rate Case
WR-2000-68	Water	Terre Du Lac Utilities	Informal Rate Case
WR-2000-69	Water	Terre Du Lac Utilities	Informal Rate Case
WR-2000-844	Water	St. Louis County Water Co.	Rate Case
WR-2001-291	Water	Raytown Water Company	Rate Case
WR-2001-452	Water	The Empire District Electric Company	Interim Rate Case
WR-2001-457	Water	RDE Water Company	Small Rate Case Review (Con't)
WR-99-361	Water	Hickory Hills Water & Sewer	Rate Case

Background, Education and Credentials
Jeremy Hagemeyer

I am a Utility Regulatory Auditor with the Missouri Public Service Commission (PSC or Commission).

I graduated from Southwest Missouri State University, Missouri, earning a Bachelor of Science degree in both Accounting and German in May of 2001. I have also earned a Master Business Administration from Fontbonne University in May of 2008. I was inducted into both Phi Kappa Phi and Delta Mu Delta honor societies.

My duties at the Commission include performing audits of the books and records of regulated public utilities under the jurisdiction of the PSC, in conjunction with other Commission Staff (Staff) members. Acting in that capacity, I am also required to prepare testimony and serve as a Staff expert witness on cases involving the ratemaking issues that I am assigned. In conjunction with other members of the Staff, I examine information provided by the Company in response to Staff data requests, portions of the Company's general ledger, other Company financial and statistical reports, as well as workpapers supplied by utilities to support their case filing.

I have been a Utility Regulatory Auditor within the Auditing Department of the Commission's Staff since January 16, 2002. In addition to acquiring general knowledge of these topics through my education, I've acquired experience in prior rate cases before the Commission as well as through formal and informal training.

I attended the National Association Regulatory Utilities Commissioner's "NARUC On the Missouri" 2003 seminar conducted in Jefferson City, Missouri in January 2003. I have successfully completed each of my assigned issues, as listed in an attachment to this report and have had the opportunity to interact with other auditors and Commission Staff members concerning these and other issues that have involved the Auditing Department of the Commission. I have also attended training with the Midwest Independent System Operator.

I have attended in-house training classes, reviewed Auditing Department position papers, training manuals and technical manuals pertaining to the ratemaking issues in this and other cases. I have reviewed the Commission's Report and Orders, testimony and transcripts of cases filed by this and other utilities within the jurisdiction of this Commission.

Case Participation for Jeremy Hagemeyer

PARTICIPATION		TESTIMONY
COMPANY	CASE NO.	ISSUES
Missouri-American Water Company	WR-2007-0216	Direct – Tank Painting, Main Break, Insurance, Pensions and OPEBs, Leases, Waste Disposal, Rate Case Expense, STEP Cost and Penalties Surrebuttal – Tank Painting, Capitalized Software, Insurance other than Group, Rate Case Expense, Amortization of OPEB and Pension Assets, Pension and OPEBs, Main Breaks, Vehicle Leases, Franchise Tax
Union Electric Company d/b/a AmerenUE	ER-2007-0002 and GR-2007-0003	Direct – Revenues, Pay Stations, Advertising, Dues and Donations, Insurance, Leases, Uncollectibles
Atmos Energy Corporation	GR-2006-0387	Direct – Employee Benefits including Pensions and OPEBs; Incentive compensation & Katrina; Bonus; Injuries and Damages, Insurance, Lobbying, Advertising, Dues, Donations and Miscellaneous Expenses
Missouri-American Water Company	WR-2003-0500 and WC-2004-0168	Direct – Payroll, Payroll-Related Benefits; Rents, Leases and Software Licenses; Rate Case Expense; PSC Assessment; Governmental Affairs/ Lobbying Rebuttal – Employee Expense; Relocation Expense; Customer Service Bonus Surrebuttal – Employee Expense; Relocation Expense; Equipment Leases; Annual Incentive Plan; Customer Service Bonus; Lobbying Expense
Laclede Gas Company	GR-2002-356	Direct – Plant and Reserve; Other Rate Base and Related Expense (Except Cash Working Capital); Depreciation Expense; Dues, Donations, Membership Fees and Miscellaneous Expense

Manisha Lakhanpal

Present Position:

I joined Missouri Public Service Commission in August 2007 as a Regulatory Economist II in the Economic Analysis Section of the Energy Department, Operations Division.

Educational Background:

In December 2005, I graduated with a Masters of Science in Applied Economics, specializing in Electricity, Natural Gas and Telecommunication, from Illinois State University, Normal, Illinois. I have a Post Graduate Diploma in Business Management from Chetana's Institute of Management and Research, Mumbai, and an undergraduate degree in Political Science and History from University of Delhi, New Delhi, India.

Work Experience:

I first joined Missouri Public Service Commission as an intern in 2006 (May 2006 - August 2006). Prior to returning to PSC I was employed by the Indiana Utility Regulatory Commission, Indianapolis, as a Utility Analyst (September 2006- August 2007). During my time in Indiana I worked on a variety of cases and projects, including a major rate case, wholesale power cost trackers for municipal utilities, environmental cost recovery cases, a certificate of need for the first wind power project in Indiana as well as a related case involving the purchase of output from the facility, and annual report to the legislature on the state of the industry in Indiana.

In the summer of 2005 (May 2005-July 2005), I worked as an Intern at CommonWealth Edison, Chicago, on projects related to deregulation of electric markets in Illinois.

In India I have worked as an Operations Executive for an insurance company (June 2001 - December 2003).

Case Proceeding Participation

Company	Case Number	Issue
Missouri Gas Utility	GR-2008-0060	Weather normal variables for weather normalization
The Empire District Electric Company	ER-2008-0093	Weather normal variables for weather normalization and Large Customer Analysis
Trigen-Kansas City Energy Corporation-(Steam/Heat)	HR-2008-0300	Weather normal variables and weather normalization factors

SHAWN E. LANGE

PRESENT POSITION:

I am a Utility Engineering Specialist III in the Engineering Analysis Section, Energy Department, Utility Operations Division.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

In December 2002, I received a Bachelor of Science Degree in Mechanical Engineering from the University of Missouri, at Rolla. Since then, I have pursued dual Masters Degrees in Mechanical Engineering at the University of Missouri, at Columbia and Business Administration at William Woods University. I joined the Commission Staff in January 2005. I am a registered Engineer-in-Training in the State of Missouri.

TESTIMONY FILED:

Case Number	Testimony	Utility	Issue
ER-2005-0436	Direct Rebuttal Surrebuttal	Aquila Inc.	Weather Normalization Weather Normalization Weather Normalization
ER-2006-0315	Direct Rebuttal	The Empire District Electric Company	Weather Normalization Weather Normalization
ER-2006-0314	Direct Surrebuttal	Kansas City Power & Light Company	Weather Normalization Weather Normalization
ER-2007-0002	Direct	Union Electric Company d/b/a AmerenUE	Weather Normalization
ER-2007-0004	Direct	Aquila Inc.	Weather Normalization
ER-2007-0291	Staff Report Rebuttal	Kansas City Power & Light Company	Weather Normalization Weather Normalization
ER-2008-0093	Staff Report	The Empire District Electric Company	Weather Normalization

Erin L. Maloney

Education

Bachelor of Science Mechanical Engineering
University of Las Vegas Nevada, May 1992

Professional Experience

Missouri Public Service Commission, Jefferson City, MO
January 2005 – Present
Utility Engineering Specialist II

Electronic Data Systems, Kansas City, Missouri
August 1995 – November 2002
System Engineer

Previous Testimony Filed Before the Commission

Case Number	Type of Testimony	Issue
ER-2005-0436	Direct	Reliability
ER-2006-0315	Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2006-0314	Direct, Rebuttal, Surrebuttal, True-up Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2007-0002	Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2007-0004	Direct	System Losses and Jurisdictional Demand and Energy Allocation
ER-2007-0291	Staff Report	System Losses and Jurisdictional Demand and Energy Allocation
ER-2008-0093	Staff Report	System Losses and Jurisdictional Demand and Energy Allocation

Education and Work Experience Background for
Lena M. Mantle, P.E.
Energy Department Manager
Utility Operations Division

I received a Bachelor of Science Degree in Industrial Engineering from the University of Missouri, at Columbia, in May 1983. I joined the Research and Planning Department of the Missouri Public Service Commission in August 1983. I became the Supervisor of the Engineering Analysis Section of the Energy Department in August, 2001. In July 2005, I was named the Manager of the Energy Department. I am a registered Professional Engineer in the State of Missouri.

In my work at the Commission from May 1983 through August 2001, I worked in many areas of electric utility regulation. Initially I worked on electric utility class cost-of-service analysis. As a member of the Research and Planning Department, I participated in the development of a leading edge methodology for weather normalizing hourly class energy for rate design cases. I applied this methodology to weather normalize energy in numerous rate increase cases. I was actively involved in the writing of the Commission's Chapter 22, Electric Resource Planning rules in the early 1990's and have been a part of the review of every electric resource plan submitted or filed.

My responsibilities as the Supervisor of the Engineering Analysis section considerably broadened my work scope. This section of the Commission Staff is responsible for a wide variety of engineering analysis including electric utility fuel and purchased power expense estimation for rate cases, generation plant construction audits, review of territorial agreements, and resolution of customer complaints. As the Manager of the Energy Department, I oversee the activities of the Engineering Analysis section, the activities of the electric and natural gas utility tariff filings, the Commission's natural gas safety staff, and the class cost-of-service and rate design for natural gas and electric utilities.

In my work at the Commission I have participated in the development or revision of the following Commission rules:

4 CSR 240-3.130	Filing Requirements and Schedule of Fees for Applications for Approval of Electric Service Territorial Agreements and Petitions for Designation of Electric Service Areas
4 CSR 240-3.135	Filing Requirements and Schedule of Fees Applicable to Applications for Post-Annexation Assignment of Exclusive Service Territories and Determination of Compensation
4 CSR 240-3.161	Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms Filing and Submission Requirements
4 CSR 240-3.162	Electric Utility Environmental Cost Recovery Mechanisms Filing and Submission Requirements
4 CSR 240-3.190	Reporting Requirements for Electric Utilities and Rural Electric Cooperatives
4 CSR 240-14	Utility Promotional Practices
4 CSR 240-18	Safety Standards
4 CSR 240-20.015	Affiliate Transactions
4 CSR 240-20.090	Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms
4 CSR 240-20.091	Electric Utility Environmental Cost Recovery Mechanisms
4 CSR 240-22	Electric Utility Resource Planning

I have testified before the Commission in the following cases:

CASE NUMBER	TYPE OF FILING	ISSUE
ER-84-105	Direct	Demand-Side Update
ER-85-128, et. al	Direct	Demand-Side Update
EO-90-101	Direct, Rebuttal & Surrebuttal	Weather Normalization of Sales; Normalization of Net System

CASE NUMBER	TYPE OF FILING	ISSUE
ER-90-138	Direct	Normalization of Net System
EO-90-251	Rebuttal	Promotional Practice Variance
EO-91-74, et. al.	Direct	Weather Normalization of Class Sales; Normalization of Net System
ER-93-37	Direct	Weather Normalization of Class Sales; Normalization of Net System
ER-94-163	Direct	Normalization of Net System
ER-94-174	Direct	Weather Normalization of Class Sales; Normalization of Net System
EO-94-199	Direct	Normalization of Net System
ET-95-209	Rebuttal & Surrebuttal	New Construction Pilot Program
ER-95-279	Direct	Normalization of Net System
ER-97-81	Direct	Weather Normalization of Class Sales; Normalization of Net System; TES Tariff
EO-97-144	Direct	Weather Normalization of Class Sales; Normalization of Net System;
ER-97-394, et. al.	Direct, Rebuttal & Surrebuttal	Weather Normalization of Class Sales; Normalization of Net System; Energy Audit Tariff
EM-97-575	Direct	Normalization of Net System
EM-2000-292	Direct	Normalization of Net System; Load Research;
ER-2001-299	Direct	Weather Normalization of Class Sales; Normalization of Net System;
EM-2000-369	Direct	Load Research
ER-2001-672	Direct & Rebuttal	Weather Normalization of Class Sales; Normalization of Net System;

CASE NUMBER	TYPE OF FILING	ISSUE
ER-2002-1	Direct & Rebuttal	Weather Normalization of Class Sales; Normalization of Net System;
ER-2002-424	Direct	Derivation of Normal Weather
EF-2003-465	Rebuttal	Resource Planning
ER-2004-0570	Direct	Reliability Indices
ER-2004-0570	Rebuttal & Surrebuttal	Energy Efficiency Programs and Wind Research Program
EO-2005-0263	Spontaneous	DSM Programs and Integrated Resource Planning
EO-2005-0329	Spontaneous	DSM Programs and Integrated Resource Planning
ER-2005-0436	Direct	Resource Planning
ER-2005-0436	Rebuttal	Low-Income Weatherization and Energy Efficiency Programs
ER-2005-0436	Surrebuttal	Low-Income Weatherization and Energy Efficiency Programs; Resource Planning
EA-2006-0309	Rebuttal & Surrebuttal	Resource Planning
EA-2006-0314	Rebuttal	Jurisdictional Allocation Factor
ER-2006-0315	Supplemental Direct	Energy Forecast
ER-2006-0315	Rebuttal	DSM and Low-Income Programs
ER-2007-0002	Direct	DSM Cost Recovery
GR-2007-0003	Direct	DSM Cost Recovery
ER-2007-0004	Direct	Resource Planning
ER-2008-0093	Rebuttal	Fuel Adjustment Clause, Low-Income Program

Contributed to Staff Direct Testimony Report

ER-2007-0291	DSM Cost recovery
ER-2008-0093	Fuel Adjustment Clause, Experimental Low-Income Program

CREDENTIALS AND BACKGROUND OF

STEPHEN M. RACKERS

I attended the University of Missouri in Columbia, Missouri, and received a Bachelor of Science degree in Business Administration, with a major in Accounting, in 1978. I have been employed by the Missouri Public Service Commission (Commission) since June 1, 1978 within the Auditing Department.

I passed the Uniform Certified Public Accountant examination and, I am licensed in the state of Missouri as a CPA. The Uniform CPA examination consisted of four parts: Accounting Practice, Accounting Theory, Auditing and Business Law.

I have been employed by this Commission as a Regulatory Auditor for over 30 years, and have submitted testimony on revenue, expense, and rate base ratemaking matters numerous times before the Commission. I have also been responsible for the supervision of other Commission employees in rate cases and other regulatory proceedings many times. I also participate in proceedings that involve the enforcement, interpretation and writing of the Commission's rules. I have received continuous training at in-house and outside seminars on technical ratemaking matters since I began my employment at the Commission. My responsibilities auditing the books and records of the utilities regulated by the Commission require that I review statutes applicable to the Commission or the utilities regulated by the Commission, the Commission's rules, utility tariffs, and contracts and other documents relating to the utilities regulated by the Commission. A listing of the cases in which I have previously filed testimony before this Commission, and the issues I have addressed in testimony in cases from 1997 to current, is attached as Schedule SMR 1.

Regulatory Case Proceeding Participation

Stephen M. Rackers

Issue	Case Number	Exhibit	Case Name
Pension Liability, Income Tax Expense, Deferred Income Taxes, Income Tax Expense, Deferred Income Taxes – Rate Base Offset, Pension Liability, Income Taxes, Territorial Agreements	EC-2002-1	Direct, Surrebuttal	Union Electric Company d/b/a AmerenUE
Income Taxes, Pension Liability	EC-2002-1025	Direct	Union Electric Company d/b/a AmerenUE
Income Tax, Territorial Agreement, Overview, Income Taxes, Alternative Regulation Plan and Agreements, Pension Liability	EM-96-149	Direct, Surrebuttal	Union Electric Company
Overview, Income Tax, Territorial Agreements, Alternative Regulation Plan and Agreement	EO-96-14	Direct, Surrebuttal	Union Electric Company
Territorial Agreements	EO-99-599	Rebuttal	Union Electric Company / Ozark Border Electric Cooperative
Purchase Power	ER-2002-217	Direct	Citizens Electric Corporation
Application Recommendation	GM-2001-342	Rebuttal	Laclede Gas Company
ISRS Income Taxes	GO-2004-0443	Direct	Laclede Gas Company
Incentive Compensation, Post-Retirement Benefits Other than Pensions, Prepaid Pension Assets, Pensions	GR-2001-629	Direct	Laclede Gas Company
Copper Surveys, Net Salvage Expense, Environmental Cost, Test Year & True-Up, Accounting Authority Orders, Laclede Pipeline, Safety and Copper Service Replacement Program	GR-2002-356	Direct, Rebuttal, Surrebuttal	Laclede Gas Company
True-Up, Other Rate Base Items, MGP Sites, Income Taxes	GR-2006-0387	Direct	Atmos Energy Corporation
Safety Deferral, FAS 87, FAS 88, FAS 106, Prepaid Pension Asset, Environmental Cost, Computer Cost, Supplemental Pension, Accounting Authority Orders	GR-99-315	Direct, Rebuttal, Surrebuttal	Laclede Gas Company
Financial Aspects	GT-2003-0117	Direct	Laclede Gas Company
Staff's Explanation and Rationale for Supporting the Stipulation Agreement	SR-2000-282	Direct in Support of Stipulation Agreement	Missouri-American Water Company

Regulatory Case Proceeding Participation

Stephen M. Rackers

Issue	Case Number	Exhibit	Case Name
Pension Liability, AFUDC, Deferred OPEB Asset, Pension Expense – FAS 87, New St. Joseph Treatment Plant Phase-In, OPEBS – FAS 106, Phase-In, Accounting Authority Order, Phase-In	SR-2000-282	Direct, Rebuttal, Surrebuttal	Missouri-American Water Company
Lease Classification & Terms	WA-97-46	Rebuttal	Missouri-American Water Company
St. Joseph Treatment Plant, AAOs, Depreciation, Transaction Costs, Old St. Joseph Treatment Plant, Security Accounting Authority Order, Acquisition Adjustments	WC-2004-0168	Direct, Surrebuttal	Missouri-American Water Company
Lease Classification & Terms	WF-97-241	Rebuttal	Missouri-American Water Company
Merger Recommendation, Cost Allocation Manual	WM-2001-309	Rebuttal, Surrebuttal	Missouri-American Water Company, et al
Main Replacement Program, Order-Infrastructure, Accounting Authority, Main Replacement Programs	WO-98-223	Direct	St. Louis County Water Company
Staff's Explanation and Rationale for Supporting the Stipulation Agreement	WR-2000-281	Direct in Support of Stipulation Agreement	Missouri-American Water Company
Pension Expense-FAS 87, Pension Liability, AFUDC, Deferred OPEB Asset, New St. Joseph Treatment Plant Phase-In, OPEBS-FAS 106, Accounting Authority Order, Phase-In, St. Joseph Treatment Plant	WR-2000-281	Direct, Rebuttal, Surrebuttal	Missouri-American Water Company
Merger Cost and Savings, Infrastructure Replacement Deferrals, Income Taxes, Net Salvage Expense, Revenue Requirement, Merger Costs and Savings, Accounting Authority Orders (AAO's), Infrastructure Replacement, Depreciation	WR-2000-844	Direct, Rebuttal, Surrebuttal	St. Louis County Water Company
Transaction Costs, Depreciation, AAO's, Acquisition Adjustment, Security Accounting Authority Order, Old St. Joseph Treatment Plant	WR-2003-0500	Direct, Surrebuttal	Missouri-American Water Company

Regulatory Case Proceeding Participation

Stephen M. Rackers

Issue	Case Number	Exhibit	Case Name
Amortization of Depreciation Reserve Deficiency, Appointment Meter Reading, Main Incident Expense, Income Tax, Infrastructure Replacement Deferral, Property Tax	WR-97-382	Direct	St. Louis County Water Company
Affidavit in Support of the Stipulation and Agreement on various issues.	GR-2005-0284	Affidavit	Laclede Gas Company
True-Up, Income Taxes, MGP Sites, Other Rates Base Items, Revenue Requirement and OPEB	GR-2007-0387	Direct, Rebuttal	ATMOS Energy Company
Income Taxes, Accumulated Deferred Income Taxes in Rate Base, Taum Sauk Generating Plant, Pinckneyville and Kinmundy Generating Plants, Accumulated Income Deferred Income Tax Balance, Income Tax Expense	ER-2007-0002	Direct, Rebuttal	Union Electric Company d/b/a AmerenUE
True-up, Security AAO, Joplin Surcharge	WR-2007-0216	Direct, Rebuttal, Supplemental True-up Direct	Missouri-American Water Company

Michael L. Rahrer
The Emelar Group

I received a Bachelor of Science degree in Computer Science in June 1973 from Virginia Polytechnic Institute (Virginia Tech). After college, I was employed for several years by CACI (Arlington, Virginia) where I worked on various consulting assignments for the U.S. Federal Energy Administration (FEA), predecessor agency to the Department of Energy. These assignments were my initiation into fuel and electric generation. In 1976, I was a cofounder of CEXEC, a company initially formed to consult in the energy sector. I left that company in 1980 to pursue a career as an independent consultant. In 1983, I teamed with another company to develop a set of models for the electric utility industry. The first model was the System Generation model, a production cost model, the second was the Revenue Requirements model and the final model was the Capacity Expansion model. The original models were designed for the Apple IIe personal computer. As personal computer power increased, the models were migrated to the IBM PC and enhanced. I remained involved in all phases of development of the System Generation model that was eventually renamed RealTime®. I acquired all rights to the model in 1997 and currently market and maintain the model.

I also update and maintain a database for PA Consulting that contains hourly operating data for most generating units in the United States. This database contains fuel cost, emission, generation and unit operating values collected from various U.S. Energy Information Administration (EIA) and U.S. Environmental Protection Agency (EPA) sources, including the hourly data EDR files submitted for the Clean Air Act. I run a similar system for NRG Energy that collects real time generation and emission data from the units it owns.

Rate Case Experience

1. Rebuttal testimony, The Empire District Electric Company, Case No. ER-2002-0424
2. Direct testimony, Union Electric Company d/b/a/ AmerenUE, Case No. ER-2007-0002

ROSELLA SCHAD, PE, CPA

Education

University of Missouri-Columbia
The Gordon E. Crosby, Jr., MBA Program
Emphasis: Finance
Candidate for Master's of Business Administration, May 2008

Columbia College
27-hours Accounting

University of Missouri-Columbia
The Truman School of Public Affairs
Master's of Public Administration, May 2004
Emphasis: Public Management

University of Missouri-Columbia
Bachelor's of Science in Mechanical Engineering, Honors Scholar, May 1978

Professional Experience

3/99 to Present *Engineer*, **Missouri Public Service Commission,** Jefferson City, Missouri

- Perform depreciation reserve studies using statistical analysis techniques, engineering judgment, familiarity of the regulated industries, and knowledge of company specific operations and maintenance resulting in equitable utility rates for the Missouri consumers
- Prepare recommendations and provide written and oral testimony supporting staff regulated utility depreciation rates
- Facilitate engineering "quality of service" inspections and audits
- Review other staff depreciation analyses, including auditing documentation
- Develop a telecommunications industry seminar to address technical issues for legislators, regulators, businesses, educators, and other state agencies

6/78 to 11/80 *Engineer*, **Union Electric, Callaway Nuclear Plant,** Fulton, Missouri

- Evaluated procurement contracts with construction contractors and equipment and material suppliers resulting in substantial savings for the construction project.
- Audited construction projects for adherence to applicable standards and codes
- Surveyed equipment and materials specifications for manufacturing, distribution, and installation requirements and criteria

Certification

Missouri Professional Engineer (P.E.)
Missouri Certified Public Accountant (C.P.A.)

Professional Membership

National/Missouri Society of Professional Engineers
Missouri Society of Certified Public Accountants
Society of Depreciation Professionals

CASE PROCEEDING PARTICIPATION

ROSELLA L. SCHAD, PE, CPA

COMPANY	CASE NO./ FILING	ISSUES
Missouri-American Water Company	WR-2008-0311 Direct	Report - Depreciation
The Empire District Electric Company	ER-2008-0093 Direct (Report), Rebuttal	Depreciation
Missouri Gas Utility, Inc.	GR-2008-0060 Direct	Report - Depreciation
Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P	ER-2007-0004 Direct	Depreciation
Algonquin Water Resources of Missouri, LLC	WR-2006-0425 & SR-2006-0426 (Consolidated) Direct, Rebuttal, Surrebuttal	Depreciation
Kansas City Power & Light Company	ER-2006-0314 Direct and Surrebuttal	Depreciation
Silverleaf Resorts, Inc. and Algonquin Water Resources of Missouri, LLC	WO-2005-0206 Rebuttal	Depreciation
Laclede Gas Company	GR-99-315 Supplemental Rebuttal	Depreciation, Cost of Removal, and Net Salvage
Laclede Gas Company	GR-99-315 Supplemental Direct	Depreciation, Cost of Removal, and Net Salvage
Aquila, Inc. d/b/a Aquila Networks-MPS (Electric) and Aquila Networks-L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Surrebuttal	Production Plant Retirement Dates; Accumulated Depreciation; Cost of Removal and Depreciation
Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P	GR-2004-0072 Rebuttal	Depreciation; Accumulated Depreciation; Cost of Removal and Production Plant Retirement Dates
Aquila, Inc. d/b/a Aquila Networks-MPS (Electric) and Aquila Networks-L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Rebuttal	Production Plant Retirement Dates; Accumulated Depreciation Reserve Balances; Cost of Removal and Depreciation

Schedule 1-1

CASE PROCEEDING PARTICIPATION

ROSELLA L. SCHAD, PE, CPA

COMPANY	CASE NO./ FILING	ISSUES
Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P	GR-2004-0072 Direct	Depreciation and Accumulated Depreciation Reserve
Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P	ER-2004-0034 and HR-2004-0024 (Consolidated) Direct	Depreciation and Accumulated Depreciation Reserve
Laclede Gas Company	GR-2002-356 Rebuttal	Decommissioning
Laclede Gas Company	GR-2002-356 Direct	Depreciation
Union Electric Company d/b/a AmerenUE	EC-2002-1 Surrebuttal	Depreciation; Steam Production Plant Retirement Dates; Decommissioning Costs; Callaway Interim Additions
Laclede Gas Company	GR-2001-629 Direct	Depreciation
Ozark Telephone Company	TC-2001-402 Direct	Depreciation Rates
Northeast Missouri Rural Telephone Company	TR-2001-344 Direct, Surrebuttal	Depreciation Rates
Oregon Farmers Mutual Telephone Company	TT-2001-328 Rebuttal	Depreciation Rates
KLM Telephone Company	TT-2001-120 Rebuttal	Depreciation Rates
Holway Telephone Company	TT-2001-119 Rebuttal	Depreciation Rates
Peace Valley Telephone Company	TT-2001-118 Rebuttal	Depreciation Rates
lamo Telephone Company	TT-2001-116 Rebuttal	Depreciation Rates
Osage Water Company	WR-2000-557 Direct	Depreciation
Osage Water Company	SR-2000-556 Direct	Depreciation

Schedule 1-2

HENRY WARREN, PHD

REGULATORY ECONOMIST
UTILITY OPERATIONS DIVISION
ENERGY DEPARTMENT

EDUCATION AND EXPERIENCE

I received my Bachelor of Arts and my Master of Arts in Economics from the University of Missouri-Columbia, and a Doctor of Philosophy (PhD) in Economics from Texas A&M University. Prior to joining the PSC Staff (Staff), I was an Economist with the U.S. National Oceanic and Atmospheric Administration (NOAA). At NOAA I conducted research on the economic impact of climate and weather.

I began my employment at the Commission on October 1, 1992 as a Research Economist in the Economic Analysis Department. My duties consisted of calculating adjustments to test-year energy use based on test-year weather and normal weather, and I also assisted in the review of Electric Resource Plans for investor owned utilities in Missouri. From December 1, 1997, until May 2001, I was a Regulatory Economist II in the Commission's Gas Department, where my duties included analysis of issues in natural gas rate cases and were expanded to include reviewing tariff filings, applications and various other matters relating to jurisdictional gas utilities in Missouri. On June 1, 2001 the Commission organized an Energy Department and I was assigned to the Tariff/Rate Design Section of the Energy Department. My duties in the Energy Department include analysis of issues in rate cases of natural gas and electric utilities, tariff filings, applications, and various other matters relating to jurisdictional gas and electric utilities in Missouri, including review of Electric Resource Plans and Regulatory Plans for investor owned electric utilities in Missouri. I have also served on various task forces, collaboratives, and working groups dealing with issues relating to jurisdictional natural gas and electric utilities.

MISSOURI PUBLIC SERVICE COMMISSION

CASES IN WHICH PREPARED TESTIMONY,

REPORT, OR REVIEW WAS SUBMITTED BY:

HENRY E. WARREN, PHD

COMPANY NAME	CASE NUMBER
St. Joseph Light and Power Company	GR-93-042[1]
Laclede Gas Company	GR-93-149
Missouri Public Service	GR-93-172[1]
Western Resources	GR-93-240[1]
Laclede Gas Company	GR-94-220[1]
Kansas City Power & Light Company	EO-94-3601[2]
United Cities Gas Company	GR-95-160[1]
UtiliCorp United, Inc.	EO-95-187[2]
The Empire District Electric Company	ER-95-279[1]
The Empire District Electric Company	EO-96-56[2]
St. Joseph Light and Power Company	EO-96-198[2]
Laclede Gas Company	GR-96-193[1]
Missouri Gas Energy	GR-96-285[1]
The Empire District Electric Company	ER-97-081[1]
Union Electric Company	GR-97-393[1]
Missouri Gas Energy	GR-98-140[1]
Laclede Gas Company	GR-98-374[1]
St. Joseph Light & Power Company	GR-99-246[1]
Laclede Gas Company	GR-99-315[1]
Union Electric Company (d/b/a AmerenUE)	GR-2000-512[1]
Missouri Gas Energy	GR-2001-292[1]
Laclede Gas Company	GR-2001-629[1]

[1]Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

[2]Staff Report or Review

MISSOURI PUBLIC SERVICE COMMISSION

CASES IN WHICH PREPARED TESTIMONY,

REPORT OR REVIEW WAS SUBMITTED BY:

HENRY E. WARREN, PHD

(CONTINUED)

COMPANY NAME	CASE NUMBER
Laclede Gas Company	GC-2002-0110[2]
Laclede Gas Company	GR-2002-0356[1]
Aquila, Inc.	GC-2003-0131[2]
Laclede Gas Company	GC-2003-0212[2]
Laclede Gas Company	GT-2003-0117
Aquila, Inc., (d/b/a Aquila Networks MPS and L&P)	GR-2004-0072[1]
Missouri Gas Energy	GR-2004-0209
Laclede Gas Company	GC-2004-0240[2]
Kansas City Power & Light Company	EO-2005-0329[2]
Union Electric Company (d/b/a AmerenUE)	EO-2006-0240[2]
The Empire District Electric Company	ER-2006-0315
The Atmos Energy Corporation	GR-2006-0387[1]
Missouri Gas Energy	GR-2006-0422[1]
Union Electric Company (d/b/a AmerenUE)	GR-2007-0003[1]
Kansas City Power & Light Company	EO-2007-0008[2]
Aquila, Inc., (d/b/a Aquila Networks MPS and L&P)	EO-2007-0298[2]
Laclede Gas Company	GR-2007-0208[2]
Missouri Gas Energy – The Empire District Gas Company	GA-2007-0289, et al
Union Electric Company (d/b/a AmerenUE)	EO-2007-0409[2]
The Empire District Electric Company	EO-2008-0069[2]
Union Electric Company (d/b/a AmerenUE)	EO-2008-0318[2]

[1]Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

[2]Staff Report or Review

Curt Wells

Present Position:

I am a Regulatory Economist in the Economic Analysis Section, Energy Department, Operations Division of the Missouri Public Service Commission.

Educational Background and Work Experience:

I have a Bachelor's degree in Economics from Duke University, a Master's degree in Economics from The Pennsylvania State University, and a Master's degree in Applied Economics from Southern Methodist University. I have been employed by the Missouri Public Service Commission since February, 2006. Prior to joining the Commission, I completed a career in the U.S. Air Force, which included assignments as an aircraft navigator, and later in the Purchasing/Contracting area as Contract Negotiator and Administrator, Installation Purchasing Department Chief, Contracting Policy Manager, Director of the Air Force warranty center, and Program Manager responsible for developing and awarding technical support contracts.

CURT WELLS

TESTIMONY/REPORTS FILED BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

Case Number / Type of Testimony	Company	Issue
ER-2006-0315 Direct/Rebuttal	The Empire District Electric Company	Revenue
ER-2006-0314 Direct/ True-up Direct	Kansas City Power & Light Company	Calculation of Normal Weather, Revenue
GR-2006-0387 Direct	ATMOS Energy Corporation	Calculation of Normal Weather
GR-2006-0422 Direct/Rebuttal/ Surrebuttal	Missouri Gas Energy	Calculation of Normal Weather
ER-2007-0002 Direct/Rebuttal	Union Electric Company d/b/a AmerenUE	Calculation of Normal Weather, Large Customer Annualization
GR-2007-0003 Direct	Union Electric Company d/b/a AmerenUE	Calculation of Normal Weather
ER-2007-0004 Direct/ Supplemental Direct	Aquila, Inc	Calculation of Normal Weather, Revenue
GR-2007-0208 Direct	Laclede Gas Company	Calculation of Normal Weather
ER-2007-0291 Direct/Rebuttal	Kansas City Power & Light Company	Calculation of Normal Weather, Large Power Revenue
ER-2008-0093 Direct (Report)/ Surrebuttal	The Empire District Electric Company	Revenue, Rate Design

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

APPENDIX 2

UNION ELECTRIC COMPANY
D/B/A AMERENUE

CASE NO. ER-2008-0318

UNION ELECTRIC COMPANY D/B/A AMERENUE - CASE NO. ER-2008-0318
SUMMARY OF ANNUALIZED AND NORMALIZED SALES

Rate Class	Test Year Sales (kWh)	Adjustment for Rate Switchers	Weather Normalization Adjustment	Days Adjustment	Growth Adjustment	Total MO Normalized kWh
Residential	14,438,468,455		(728,657,872)	(14,754,403)	76,756,225	13,771,812,405
Small General Service	3,798,650,430		(110,253,766)	(16,445,642)	28,816,430	3,700,767,451
Large General Service	8,457,830,546		(160,121,756)	(62,819,158)	32,430,444	8,267,320,075
Small Primary Service	4,099,763,550	(12,966,000)	(56,099,964)	(35,804,917)	-	3,994,892,669
Large Primary Service*	4,253,793,427	12,966,000	(35,907,365)	(21,035,673)	-	4,209,816,389
Lighting & Other	225,960,652		-	(610,612)	-	225,350,040
LTS* [Includes line losses]	4,259,659,495		-	(11,638,414)	-	4,248,021,081
TOTALS	39,534,126,555	-	(1,091,040,723)	(163,108,819)	138,003,098	**38,417,980,111**

*From Staff Witness Manisha Lakhanpal

Appendix 2-1

UNION ELECTRIC COMPANY D/B/A AMERENUE - CASE NO. ER-2008-0318 SUMMARY OF ANNUALIZED AND NORMALIZED RATE REVENUE								
Rate Class	**Billed Revenue Net of GRT****	**Test Year Adjustments**	**Adjustment for Rate Switchers**	**Annualization for Rate Change**	**Weather Normalization Adjustment**	**Days Adjustment**	**Growth Adjustment****	**Total MO Normalized Revenues**
Residential	$ 945,646,052	$ 800		$ 5,836,384	$ (54,705,146)	$ (868,850)	$ 5,021,273	$ 900,930,512
Small General Service	$ 245,314,514	$ 244,546		$ 1,225,495	$ (7,813,443)	$ (997,378)	$ 1,867,550	$ 239,841,284
Large General Service	$ 444,775,585	$ 519,106		$ 1,497,334	$ (8,829,941)	$ (2,876,037)	$ 1,713,445	$ 436,799,491
Small Primary Service	$ 188,357,308	$ (1,253,573)	$ (484,073)	$ 1,721,511	$ (2,624,005)	$ (1,504,645)	$ -	$ 184,212,524
Large Primary Service*	$ 162,392,936	$ 258,482	$ 462,445	$ 813,299	$ (826,010)	$ (466,694)		$ 162,634,458
Lighting & Other	$ 28,638,242	$ -		$ 105,569	$ -	$ (76,198)		$ 28,667,613
LTS*	$ 130,452,287	$ 215,604		$ 287,045		$ (248,017)		$ 130,706,920
TOTALS	$ 2,145,576,924	$ (15,035)	$ (21,628)	$ 11,486,637	$ (74,798,546)	$ (7,037,818)	$ 8,602,268	**$ 2,083,792,801**

*From Staff Witness Manisha Lakhanpal
**From Staff Witness Jeremy Hagemeyer

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

APPENDIX 3

UNION ELECTRIC COMPANY
D/B/A AMERENUE

CASE NO. ER-2008-0318

UNION ELECTRIC COMPANY d/b/a AmerenUE
COMPONENTS OF ANNUAL NET SYSTEM INPUT
Case No. ER-2008-0318

	Test Year Sales (kWh)	Adjustment for Rate Switchers	Weather Normalization Adjustment	Days Adjustment	Large Customer Annualization	Growth Adjustment	Total MO Normalized kWh
Mo Retail (non-LTS)	35,274,467,060	-	(1,091,040,723)	(151,470,405)	-	138,003,098	34,169,959,030
Wholesale	650,157,895		(18,641,213)	(4,506,432)			627,010,250
NSI w/o losses	35,924,624,955	-	(1,109,681,936)	(155,976,837)	-	138,003,098	34,796,969,280
5.20 % loss adj NSI	37,895,174,003	-	(1,170,550,565)	(164,532,529)	-	145,572,888	36,705,663,797
LTS (with losses)	4,259,659,495		-	(11,638,414)	-	-	4,248,021,081
NSI with Losses	42,154,833,498	-	(1,170,550,565)	(176,170,943)	-	145,572,888	40,953,684,878

Appendix 3-1

Union Electric Company d/b/a AmerenUE
Net System Load
Normalized for Test Year April 2007 through March 2008*
Case No. ER-2008-0318

Month	Monthly Usage (MWh)				Monthly Peaks (MW)				Load Factor	
	Actual	Normal	Adj	% Adj	Actual	Normal	Adj	% Adj	Actual	Normal
Apr-07	3,001,320	2,863,765	(137,555)	-4.58%	5,832	5,044	(788)	-13.51%	0.71	0.79
May-07	3,322,567	3,061,793	(260,775)	-7.85%	6,317	5,764	(553)	-8.75%	0.71	0.71
Jun-07	3,701,626	3,531,147	(170,479)	-4.61%	7,470	7,134	(337)	-4.51%	0.69	0.69
Jul-07	4,038,926	4,062,258	23,332	0.58%	7,907	7,948	41	0.52%	0.69	0.69
Aug-07	4,610,748	3,956,195	(654,553)	-14.20%	8,780	7,726	(1,054)	-12.00%	0.71	0.69
Sep-07	3,494,471	3,205,125	(289,346)	-8.28%	7,503	7,043	(460)	-6.13%	0.65	0.63
Oct-07	3,188,028	2,997,570	(190,458)	-5.97%	6,748	5,617	(1,131)	-16.76%	0.64	0.72
Nov-07	3,090,169	3,090,236	67	0.00%	5,465	5,503	39	0.71%	0.79	0.78
Dec-07	3,639,175	3,677,664	38,488	1.06%	6,037	6,481	444	7.35%	0.81	0.76
Jan-08	3,796,842	3,895,881	99,039	2.61%	6,546	6,959	413	6.31%	0.78	0.75
Feb-08	3,561,999	3,472,056	(89,942)	-2.53%	6,562	6,660	97	1.48%	0.78	0.75
Mar-08	3,198,235	3,139,995	(58,240)	-1.82%	5,854	5,599	(255)	-4.36%	0.76	0.78
Annual	42,644,106	40,953,685	(1,690,422)	-3.96%	8,780	7,948	(832)	-9.48%	0.55	0.59

* Normalized for weather, days, growth, annualizations

Appendix 3-2

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

APPENDIX 4

UNION ELECTRIC COMPANY
D/B/A AMERENUE

CASE NO. ER-2008-0318

APPENDIX 4

HAVE BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY