BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of St. Louis County Water Company's Tariff Designed to Increase Rates for Water Service to Customers in the Company's Service Area.	)))))	**Case No. WR-96-263**

REPORT AND ORDER

Issue Date: December 31, 1996

Effective Date: January 9, 1997

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of St. Louis County Water Company's Tariff Designed to Increase Rates for Water Service to Customers in the Company's Service Area.	)))))	**Case No. WR-96-263**

APPEARANCES

Richard T. Ciottone, Vice President and General Counsel, and **David P. Abernathy**, Assistant General Counsel, St. Louis County Water Company, 535 North New Ballas Road, St. Louis, Missouri 63141, for St. Louis County Water Company.

Robert C. Johnson and **Diana M. Schmidt**, Peper, Martin, Jensen, Maichel and Hetlage, 720 Olive Street, 24th Floor, St. Louis, Missouri 63101, for Barnes-Jewish Hospital, Emerson Electric Company, McDonnell Douglas Corporation, and Monsanto Company.

John B. Coffman, Senior Public Counsel, Office of the Public Counsel, Post Office Box 7800, Jefferson City, Missouri 65102, for the Office of the Public Counsel and the public.

William K. Haas, Senior Counsel, and **Cherlyn D. McGowan**, Assistant General Counsel, Missouri Public Service Commission, Post Office Box 360, Jefferson City, Missouri 65102, for the staff of the Missouri Public Service Commission.

ADMINISTRATIVE LAW JUDGE: **Joseph A. Derque, III.**

Table of Contents

REPORT AND ORDER

Procedural History

On February 9, 1996, St. Louis County Water Company (County Water) filed tariffs with the Commission reflecting proposed increased rates for water service provided to customers in the Missouri service area of the company. On February 16, 1996, the Commission suspended the tariffs and issued an order providing for notice and intervention of proper parties. Subsequently, the Commission granted intervention jointly to Barnes-Jewish Hospital, Emerson Electric Company, McDonnell Douglas Corporation and Monsanto Company (referred to as the Industrial Consumers).

On April 9, 1996, the Commission ordered the adoption of a historical test year to be set at the calendar year ending December 31, 1995, with adjustments for known and measurable isolated changes to be made through May 31, 1996. Further, upon the recommendation of the Staff of the Commission (Staff), the Commission ordered a true-up and true-up hearing. In its order of August 6, 1996, the Commission ordered a true-up audit of all factors relating to revenue, expense, and rate base to be conducted through September 30, 1996, with resulting schedules to be filed by the Staff no later than October 31, 1996. An evidentiary hearing regarding the result of the true-up was held on November 4, 1996.

Initial and reply briefs were filed by the parties on October 31, 1996 and November 12, 1996, respectively, and this matter was finally submitted to the Commission for decision on November 12, 1996.

On December 23, 1996 the Commission issued a notice requesting completed reconciliations based on specific scenarios. The scenarios and responses by the Staff and County Water are made a part of this record and entered into evidence as Exhibit 54, attached to this Report And Order as Attachment C.

Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact.

The Commission has reviewed and considered all of the evidence and argument presented by the various parties and intervenors in this case. Due to the volume of material presented to the Commission, some evidence and positions of parties on some issues may not be addressed by the Commission. The failure of the Commission to mention a piece of evidence or a position of a party indicates that, while the evidence or position was considered, it was not found relevant or necessary to the resolution of the particular issue.

The issues in this case, for purposes of organization and ease of understanding, will be addressed in the order that the dollar amounts appear on the reconciliation, to be found at the end of this Report And Order as Attachment A, with the exception of the issue involving the rate of return. Rate of return will be dealt with after the rate base, expense, and true-up items for the reason that the correct rate of return, based partly on the risk factor to be assigned to County Water, cannot be properly assessed until the Commission determines the outcome of the expense, rate base, and true-up issues before it.

County Water is a closely-held Missouri corporation and public utility regulated by this Commission, and provides water service to approximately 298,000 customers in St. Louis and Jefferson Counties. In calendar year 1995 County Water had operating revenues of approximately $88,000,000 and a net income of over $10,000,000.

County Water has filed four consecutive annual tariffs requesting rate increases. County Water made this tariff filing on February 9, 1996, requesting an annual revenue increase of $14.3 million, or approximately 15.73 percent, later revised to $11.1 million. In the attached reconciliation, the Staff proposed an annual increase in revenue of $5.9 million, with the Office of the Public Counsel (OPC) proposing a somewhat lower amount of $4.3 million.

The Commission takes notice of the recent rate case history for County Water as follows: In Case No. WR-93-204, County Water received an annual increase in revenue of $7.1 million by stipulation and agreement; in Case No. WR-94-166, County Water received an annual increase in revenue of $10 million, also by stipulation and agreement; and in Case No. WR-95-145, County Water received an increase in revenue of $2.9 million through a hearing and subsequent report and order.

Stipulated Issues

On September 13, 1996, a stipulation and agreement was filed. This agreement, signed by County Water and OPC, purports to settle the OPC issue styled "distribution planning." This issue was presented by OPC principally in the testimony of OPC witness Barry F. Hall. In that testimony Mr. Hall asserted that County Water neglected its responsibility to properly manage and maintain its distribution system and, as a result, the ratepaying public is facing unreasonable annual rate increases. Mr. Hall also stated that, as a result of County Water's failure to invest in its distribution facilities, safe and adequate service to the ratepayers is being jeopardized.

As a result of the OPC concerns, the stipulation and agreement was executed by OPC and County Water. The Staff, while not a signatory to the agreement, supported the agreement on the record at the evidentiary hearing of this matter. The stipulation and agreement is attached to this Report And Order as Attachment B.

The Commission has examined the relevant testimony and reviewed the stipulation and agreement settling the issue of distribution planning. There is abundant evidence of record in regard to the state of the County Water system, some of which will be discussed in greater detail later in this Report And Order. Suffice it to say that the Commission is concerned over the apparent state of the County Water system and the lack of a cohesive and reasonable plan for infrastructure maintenance and replacement. In spite of the Commission's best efforts to encourage County Water to present such a plan in the course of this rate filing, no comprehensive plan has been submitted.

The Commission is gratified that the OPC took up the issue of proper infrastructure replacement planning and would encourage County Water to fully cooperate in developing and executing an efficient and economic plan to ameliorate the current situation.

The Commission is also of the opinion that the Staff should fully participate in the review and monitoring of County Water's progress in complying with the terms and conditions of the stipulation and agreement. The Commission instructs the Staff to fully review all documents provided during the course of this agreement and to participate fully in all meetings and other matters.

An agreement was also reached between the parties in regard to the depreciation treatment to be afforded the installation of concrete stabilization structures to protect two 12-inch distribution mains on the Meramec River.

The parties agree to the following:

The Commission should: (1) authorize County Water to book these structures to a new Account 341.63, Structures and Improvements - River Crossing; (2) approve a depreciation rate of 10 percent for that account; and (3) authorize County Water to accrue depreciation on these structures at that rate retroactive to January 1, 1996.

The Commission finds the stipulated issues and stipulation and agreement to be reasonable and in the public interest. The Commission will approve the issues and stipulation and agreement, and order compliance with all terms and conditions.

True-Up

On August 6, 1996, the Commission issued its Order Directing True-Up and establishing the true-up cutoff date as September 30, 1996. The Staff of the Commission was also instructed to file the resulting schedules no later than October 31, 1996. A true-up hearing, if necessary, was scheduled to begin on November 4, 1996. In its order, the Commission stated that the proper relationship between revenue, expense, and rate base must be maintained and therefore determined that the true-up audit should include all factors related to revenue, expense, and rate base.

On October 31, 1996, the Staff filed a motion stating that the true-up schedules and reconciliation were filed concurrent with the filing of the motion and that the parties agreed that the calculation of the dollars associated with the various issues was correct. The Staff requested advice as to whether the Commission would still require a formal true-up hearing.

The Commission found that no further proceeding was necessary in regard to the true-up in this case and agreed to waive the formal true-up hearing. The Commission finds that the true-up and resultant reconciliation represent a proper relationship between the elements of revenue, expense and rate base, and are known and measurable. The true-up is in full compliance with the Commission's Order Directing True-Up save for any additional adjustments as set out in this Report And Order.

The Commission, by its own motion, enters the reconciliation filed October 31, 1996 into evidence in this case, and incorporates the reconciliation into this Report And Order as Attachment A.

1. Rate Base

A. Plant Levels

As set out in the direct testimony of County Water witness James M. Jenkins, County Water has included in its filing a recovery of both capital investment and expenses related to plant of 100 percent through the operation of law date, January 9, 1997, as well as budgeted plant additions through June 1997. The Staff has proposed three adjustments for the period from the operation of law date through June 30, 1997, those being the plant level adjustment of $1,156,547 from rate base, and depreciation and property tax adjustments from expenses totaling another $578,522.

In support of its original filing, County Water maintains that in order to avoid regulatory lag and synchronize capital investment with rate recovery, it is necessary to employ a method referred to in testimony as a "budgeted test year" or "future plant" adjustment. County Water maintains that it will be unable to recapture the first year's depreciation expense, property tax expense, and rate of return on its capital investment unless the budgeted capital expenditure is included in the revenue requirement.

Regulatory lag is generally defined as the lapse of time between a change in revenue requirement and the reflection of that change in rates. County Water maintains that any increase in capital investment will not be reflected in revenue during the period of time between rate case decisions. As a result, County Water maintains that its earnings, and therefore its return to stockholders, will drop below the level authorized by the Commission unless there is a reduction in operating costs.

The Staff disagrees, stating that the instant method creates items that (1) are not known and measurable and (2) do not reflect the proper balance of revenue, expense and rate base appropriate in cost of service, rate base/rate of return regulation.

Testimony reveals that County Water has been relatively unpredictable in its capital expenditures. Testimony also reveals that in recent years County Water has actually only spent approximately 90 percent of its budgeted amount for future plant, and only about 41 percent of that in the first six months of the calendar year.

Staff testimony shows that inclusion of the proposed expenditures creates a situation of imbalance in rates. This results from the inclusion in revenue requirement of budgeted amounts for future plant. The Staff states that these amounts, if included, would not be properly and accurately offset by auditable revenue amounts and other factors and adjustments that are included in the accurate calculation of revenue requirement and, thereby, customer rates.

Finally, the Staff points out that if the Commission would adopt the budgeted test year approach, County Water would be under no obligation to actually spend budgeted amounts for the purposes for which they were budgeted and for which rate treatment was afforded. This would clearly create an imbalance and likely overearnings situation. This is particularly true in light of the current state of County Water's infrastructure replacement plan. While a plan involving replacement priorities was presented to the Commission in Case No. WR-95-145, testimony from County Water in this case indicates that, in fact, County Water is currently unable to sufficiently and accurately determine the location and type of distribution pipeline in its system. Thus, County Water apparently does not possess the necessary information to execute an effective and efficient replacement plan. Until such a plan can be created, as contemplated in the stipulation and agreement, the Commission is unwilling to include anticipated capital expenditures in rate base.

The Commission finds that the Staff proposed deductions from rate base for plant levels and from expense for depreciation and property taxes are reasonable and appropriate and will be approved.

B. Main Incident Deferral\Repair Expense

Substantial evidence was presented by County Water, the Staff, and the OPC regarding the ongoing state of the County Water distribution system and the treatment of capital expenditures and expenses necessary to replace, repair and maintain the system.

These expenses include repair expenses for various daily distribution equipment failures, referred to as main incidents. As stated in Case No. WR-95-145, main incidents are generally defined for accounting purposes as "all breaks including main breaks, joint leaks, flush valve and blocking valve failures, and any other type of event requiring a maintenance call, except main breaks caused by others." (Report And Order of September 19, 1995, at page 11). Included in main incident repair costs are premium labor, outside contractors, transportation, materials and supplies, stores expense, and claims paid for damages.

The testimony reflects agreement among the parties that main incidents tend to occur in relationship to the weather in combination with soil type, local water pressure, and age and type of main. Testimony reveals that main incidents have, typically, been higher than average in the County Water system for the winter months of December, January, and February.

In addition, over a period of time from 1965 to the present, a gradual increase, or "trend," can be observed in the annual number of main incidents, with monthly peaks, if any, occurring during the three winter months. County Water refers to these monthly peaks as "main spikes." County Water has proposed specific accounting recognition over and above the current normalized repair expenses for a portion of the monthly expenses incurred for three "main spikes" during this test year, those being the months of December 1995 and January and February 1996.

In the previous rate case, WR-95-145, the Commission granted County Water an Accounting Authority Order (AAO), limited in time and scope. The Commission allowed County Water a deferral of capital expenditures, not expenses, associated with its infrastructure replacement program incurred during January 1994. This was done in order to protect County Water from regulatory lag. In addition, the Commission found the imminent necessity to replace the County Water infrastructure to be limited, unusual and unique, and neither predictable nor recurring, per the Commission's policy regarding the appropriate application of AAOs. ***In re Missouri Public Service***, 1 MPSC3rd 200, 205 (1992).

County Water has now filed three requests for AAOs seeking deferral, and ultimate inclusion in rates, of main incident expenses ("main spikes") incurred for the months of December 1995 and January and February 1996. County Water seeks rate recognition of that portion of monthly expense which was over and above the normalized main incident expense currently included in rates. The Staff refers to this proposal as a two-step methodology. It has also been referred to in testimony as deferral accounting.

Alternatively, County Water proposes the establishment of a main maintenance reserve account. This account, according to testimony, would be used to accrue a certain level of maintenance repair costs and collect that representative amount in rates. This normalized level would also be collected in maintenance expense. The reserve account would be periodically balanced and adjusted in rate proceedings.

In implementing its two-step methodology, County Water included in repair expense a normalized level for main incidents and placed in rate base the unamortized deferral balance relating to the increased incidents during the months January 1994, December 1995, and January and February 1996.

Staff and OPC disagree with each of the alternative rate treatments proposed by County Water. Staff and OPC have employed a normalization process for calculation of main repair expense. The Staff reviewed seven years of past main incident repair expense but determined that the most recent twelve-month history, through May 1996, produced the most appropriate normalized amount. This was in recognition of the upward trend in main incidents.

Application of the resulting normalized amount of expense caused two proposed adjustments to the County Water filing by the Staff. The first is an increase in expense for main incident repair in the amount of $803,406. The second is a reduction in capital expense in rate base for main incident deferral in the amount of $232,847.

The OPC takes the same general position as the Staff in regard to the rate treatment to be afforded the main incident expense but, as a result of using a seven-year normalization average rather than one derived from the last twelve months' experience, proposes a larger adjustment to main incident repair expense of approximately $150,000 more than the Staff.

The Staff supports its position by pointing out that it is inappropriate for County Water to attempt to include the purported main spike amounts in rate base and, consequently, in rates by either the AAO deferred accounting method or the reserve accounting method. The Staff maintains that the main incidents should be dealt with solely as a normalized expense. The Staff takes the position that on an annual basis the level of main incidents shows a general upward trend. However, the Staff points out that there have been both upward and downward fluctuations in incidents from year to year. The Staff states that the general upward trend in annual incidents has been taken into consideration, along with the most recent levels of main incidents for the December through February period, in calculating the Staff normalized level for main repair expense.

The OPC points out that the Commission has set out a clear standard for the inclusion of costs deferred by an AAO in rates. This standard is restated in the most recent County Water rate case, Case No. WR-95-145, as follows:

> ". . . issuance of AAOs have historically been tied to the occurrence of extraordinary items, events impacting a utility that are unusual in nature and infrequent in occurrence. The Commission has previously specified that AAOs should only be reserved for extraordinary expenditures."

As both the OPC and the Staff point out, the Commission has, to date, granted AAO accounting treatment exclusively for one-time outlays of capital caused by unpredictable events, acts of government, and other matters outside the control of the utility or the Commission. It is also pointed out that the terms "infrequent, unusual and extraordinary" connote occurrences which are unpredictable in nature.

In regard to the use of reserve accounting, the Staff raises strong objection to the County Water plan on several grounds basic to cost of service, rate base/rate of return regulation. The Staff states that allowing recovery in future rates of current expense items creates imbalance in the expense/revenue/rate base formula. Application of a balanced formula is essential in maintaining equity in resulting rates. Recovery in future rates of current expense items would cause ratepayers in the future to pay for maintenance enjoyed by current consumers. This concept is also referred to as "intergenerational inequity."

The Staff states that the setting of rates in order to allow a utility to recover the specific costs of past events so as to make the utility's shareholders whole constitutes retroactive ratemaking. Retroactive ratemaking is prohibited by the statute in the state of Missouri. The current practice is to set rates based on an ongoing balance of revenue, expenses and rate base to allow the utility to recover its costs plus a reasonable rate of return to service its debt and reward its shareholders.

The Commission has carefully reviewed the facts as set out in the record together with its decision in Case No. WR-95-145, and finds the Staff's position, as supported and augmented by the OPC, to be both a factually correct reflection of the record before the Commission and an accurate interpretation of the Commission's order in WR-95-145.

The Commission has periodically granted AAOs and subsequent ratemaking treatment for various unusual occurrences such as flood-related costs, changes in accounting standards, and other matters which are unpredictable and cannot adequately or appropriately be addressed within normal budgeting parameters. This is not the case with County Water's main expense. Evidence presented by the Staff, OPC and County Water all reflect an annual trend in main incidents. The record does not, however, support the contention that the monthly peaks during the winter months are anything other than seasonal high points in this overall annual trend. As both the Staff and OPC evidence shows, this trend is amenable to reasonably accurate prediction on an annual basis. Therefore, for purposes of ratemaking, the normalization as proposed by the Staff and OPC is the most appropriate method of accurately reflecting main repair expense in rates.

The Commission agrees with the Staff and OPC that inclusion of past expense in future rates will do damage to the revenue/expense/rate base balance and could conceivably be regarded as retroactive ratemaking. Regardless, the Commission can find no persuasive evidence of record to conclude that the ongoing main expense incurred by County Water merits the treatment that County Water suggests.

For the reasons set out above, the Commission finds that the Staff adjustments are reasonable and will adopt the Staff adjustments. The Commission would note that the OPC position is also, generally, a sound one. The Commission declines to adopt the lower adjustment proposed by the OPC, as the Commission is of the opinion that the Staff-proposed adjustment more accurately reflects the current trend in main incidents. The Staff main incident repair expense of $803,406 and the Staff proposed reduction of $232,847 in rate base for main incident deferral are hereby adopted.

As an ancillary matter, the Commission will also order the two pending AAO applications, Case Nos. WO-96-279 and WO-96-306, dismissed as moot for reasons as set out above.

C. Amortization Period for Deferral of Infrastructure Replacement

As a result of the Commission granting a limited AAO in Case No. WR-95-145 allowing the deferral of capital expenditures associated with County Water's replacement of infrastructure, an issue has been presented in this case regarding the appropriate length of amortization to be afforded as a recovery period.

County Water believes it is appropriate to amortize the expenditure over a one-year period. In support of this position, County Water maintains that a lengthy amortization period unreasonably postpones recovery for plant currently placed in service. This burden is in the form of accumulated carrying charges (i.e., depreciation expense). When coupled with ongoing capital investment, the financial burden of infrastructure replacement is unfairly placed on future ratepayers.

The Staff proposes adjustments to both rate base and expenses. These adjustments, including an addition of $15,972 to rate base and a

$269,289 deduction from expense, are the result of the application of a 20-year amortization period to the infrastructure replacement expenditure.

In support of the 20-year amortization period, the Staff states that the nature of the costs calls for a much longer period than a one-year amortization. The Staff points out that the Staff has included, in rate base, the unamortized portion of the deferral. The Staff remarks that it agrees with the position of County Water in that, if possible, some inter-generational equity should be reflected in rates. The Staff states, however, that the proposed 20-year amortization more accurately reflects the ratepayers who will benefit from the capital improvements.

The Staff states that the Commission has consistently used a 20-year amortization standard for ratemaking treatment of capital expenditures resulting in AAOs. The Staff notes that various cases involving 20-year amortization have been approved in gas safety and service line upgrades ordered as a result of the initiation of gas safety rules, capital costs for electric generating unit rehabilitation work, and Western coal conversion. It is the Staff's position that the infrastructure replacement costs are analogous to the above examples so far as application of an amortization period is concerned.

The OPC is opposed to the granting of AAOs and of the establishment of those costs in rates. Generally, the Commission has already set out and discussed the OPC's position regarding AAOs in issue B.

The Commission favors the establishment of amortization periods which tend to spread capital investment costs over a reasonable anticipated service life. Testimony of County Water and of the Staff indicates that current installations may have a service life extending to as much as 80 years, depending on the type of installation and other factors. This being the case, the Commission accepts the County Water position that intergenerational equity should be maintained, but finds the Staff proposal of a 20-year amortization period to be far more reasonable in achieving that end.

The Commission will adopt the Staff proposal to apply a 20-year amortization period to the instant costs and, therefore, adopts the proposed Staff adjustments as set out above.

II. Expenses

A. FAS 106/FAS 87

This issue addresses Staff-proposed adjustments to pension benefits (pensions), accounted for under Statement of Financial Accounting Standard No. 87 (FAS 87), and other postretirement benefits (OPEBs) accounted for under Statement of Financial Accounting Standard No. 106 (FAS 106).

As the Staff explains in its testimony, the Commission is not required to use Generally Accepted Accounting Principles (GAAP) for ratemaking purposes. However, in accordance with Section 386.315, R.S. Mo. (1994), the Commission is required to adopt the accrual accounting method in determining OPEB expense for ratemaking purposes. For the sake of consistency, the Staff also prefers to apply the same accrual method for pensions as specified in FAS 87.

The purpose of both FAS 106 and FAS 87 is to provide uniform financial statement recognition of a utility's total estimated liability for pensions and OPEBs, and to reflect an accurate annual cost to the utility of these benefits in the income statement, in rates, over the service life of the employee(s). In this regard the Staff has recommended changes to County Water's calculation of pension costs and OPEBs. The first Staff recommendation is to adjust the proposed ten-year amortization period for recognition of gains and losses on both accounts to a five-year amortization period. The second Staff recommendation is to evaluate the expected return on funded assets based on actual market value, not market-related value as County Water proposes.

Pension expense represents a future obligation to an employee which accrues to the employee's benefit over a term of service with the utility. Postretirement benefits other than pensions include all benefits provided to employees after their termination of service, other than pension benefits. OPEB expense is mainly considered to be postretirement medical benefits.

The Staff proposes four adjustments to expense as a result of the above two recommendations, as follows:

Benefits - FAS 106, five-year amortization --	(\$136,956)
Benefits - FAS 87, five-year amortization --	(\$463,732)
FAS 106 - at actual market value --	(\$43,876)
FAS 87 - at actual market value --	\$185,261

In regard to the five- versus ten-year amortization of gains and losses, testimony reveals that unrecognized gains and losses are defined as cumulative net gains or losses that have not yet been recognized through amortization as part of the pension or OPEB expense balance. These gains and losses occur annually, primarily as a result of changes in the actuarial assumptions necessary to establish a valuation of the pension or OPEB account. An actuarial gain lowers the expense calculation, and thus the cost to the ratepayers, while an actuarial loss raises the expense calculation.

County Water objects to the shortening of the amortization period based on the argument that a shorter time period will cause expense volatility. County Water maintains that this is due partly because valuation of pension and OPEB benefits relies on actuarial assumptions which may differ radically from actual experience, and partly because of changes in the loss/gain calculations as a result of fluctuating market conditions. County Water concludes that rapid recognition of changes in valuation can significantly alter the appropriate annual gain or loss expense calculation.

County Water states that its market-related value approach, coupled with a ten-year amortization period, levelizes, or "smooths out," market fluctuations and differences between actuarial assumptions and actual experience, thus avoiding volatility in expense calculations.

The Staff argues that the five-year amortization period and actual market valuation method both serve to more accurately reflect current expense in current rates. In addition, the Staff states that amortization of gains and losses over such a lengthy period of time can result in rates which are not adjusted in a timely fashion and therefore become grossly inaccurate over time.

Further, the Staff states that the Commission has frequently used a five-year amortization period for "abnormal expenses" and points out that the choice of five years is based partly on the Internal Revenue Code requirement that gains and losses from pension funds be amortized over five years for tax purposes.

The Staff supports the actual market value method for valuation purposes for the reason that it is the most accurate and reliable method for valuation of assets, and points out that the Commission has consistently used this method.

The Commission concurs with the Staff in that fair and reasonable ratemaking requires the use of the most accurate information available. The Commission finds that the use of the actual market value for purposes of valuation of pension and OPEB accounts is the more reliable method of the two alternatives. The Commission has traditionally employed this method for ratemaking purposes and finds nothing in the record to convince it that the value-related method proposed by County Water is preferable.

The Commission further finds that the five-year amortization period proposed by the Staff is preferable to the longer ten-year period suggested by County Water. It is the Commission's opinion that resulting gains and losses in pension and OPEB expenses should be reflected in current rates as closely as possible. This helps to ensure that the ratepayers are not paying for pension expense which does not currently exist. As testimony shows, it is quite rare for pension or OPEB funds to incur increasingly large expenses. The shorter amortization period assists in reflecting true losses or gains contemporaneous with rates, therefore preventing any overstatement of expense.

The Staff position is also supported by the use of the same period of time in the Internal Revenue Service Code and by the Commission's own longstanding practice. The Commission sees no convincing evidence of record to support a change.

The Commission agrees with the position of the Staff in regard to the treatment of FAS 87 pensions and FAS 106 OPEBs, and will adopt the Staff adjustments as set out above.

III. True-Up Items

In the Commission's Order Directing True-Up dated August 6, 1996, the Commission established the end date for a true-up of County Water at September 30, 1996. The Commission stated that this would include all factors relating to revenue, expense, and rate base.

County Water has sought to include a number of expense items in its calculation of rates which will not actually be incurred until after the September 30, 1996 cutoff date. The specific items include:

(1) Union and non-union wage increases;

(2) Health, life, and dental benefits;

(3) FAS 87 and 106 benefit expense;

(4) Company insurance expense; and

(5) Capital structure changes related to new debt issuance and the retirement of high coupon debt.

County Water anticipated a true-up period through November 1996 rather than the September 30, 1996 date set by the Commission. County Water maintains that the above five items would have been known and measurable, or predictable to a standard of absolute certainty, if true-up would have been performed through November 1996.

County Water now takes the position that a standard of reasonableness should have been applied to prospective items and that the above items are, in fact, capable of being determined to a reasonable certainty sufficient to include them in rate calculations for this test period. County Water defines "known and measurable" as being "verifiable" and "certain of effectuation."

The Staff states that the traditional standard normally applied in historic test year ratemaking is one in which the adjustment must: (1) be known and measurable, and (2) maintain the relationship between revenue, expense, and rate base. The Staff continues that the term "known" means that the cost in question will definitely be incurred, and the term "measurable" means that the rate impact can be calculated with a high degree of accuracy.

The Staff takes the position that the only items which fit these requirements are the union and non-union wage increases. The union wage increases, negotiated by contract, take effect November 1, 1996, only 30 days after the true-up cutoff date. The amount of the wage increase is reflected in the union contract and can be measured with a high degree of certainty. The rate impact can also be calculated accurately. It is not at all likely that this union contract, already negotiated, will be altered.

The OPC states that it does not object to the inclusion of any item in the true-up process if the cost of the item becomes known prior to the October 31, 1996 cutoff date and its effect on revenue requirement can be accurately measured. OPC continues that, in order to accurately maintain this measurable balance in the calculation of revenue requirement, complete and contemporary financial statements must be available for audit. The OPC points out that, at base, this is the reason the Commission chooses a specific point in time as a true-up cutoff date.

In further support the Staff states that it is fundamental in cost of service ratemaking that all elements of a utility's revenue requirement must be measured at a consistent point in time because constant changes in each factor cause changes in revenue requirement. Therefore, consideration of isolated adjustments without consideration of possible offsetting changes in other components will likely lead to improper rates, and cause over- or underearning by the utility.

Based on the above analysis, the Staff has offered four adjustments in County Water's five true-up items, including adjustments for FAS 87, FAS 106, the company insurance, and the benefit package. The Staff is not opposed to either the union wage increase or the non-union wage increases.

The union increase is the result of a contractual negotiation with the labor union and consists of a 3.5 percent increase for both the physical and clerical unions. This increase is effective November 1, 1996, and the amount is capable of accurate measurement.

The non-union increase is an annual wage increase for non-union employees, budgeted to be given on December 1, 1996. County Water states that it has consistently given this proposed increase over the past 15 years. County Water also claims it can provide the remainder of the parties with documentation that this wage increase is "determinable and certain to occur" on December 1, 1996.

The health, life, and benefit premiums will not go into effect until January 1, 1997. County Water has made arrangements with its outside insurance carrier to determine the actual benefit premium.

Both the FAS 87 and FAS 106 expenses will not go into effect until January 1, 1997, pending the establishment of an accrual amount by the outside actuary for County Water. Again, County Water has contacted the outside actuary to establish the amount of accrual prior to the true-up hearing.

The company insurance refers primarily to general liability, worker's compensation, blanket building and contents, and umbrella coverage. The premiums for this coverage will also not take effect until January 1, 1997. As above, County Water has contacted its insurance carrier to determine the amount of premium in advance.

The capital changes related to new debt issuance and the retirement of high coupon debt refer to the planned redemption of Series J and K bonds and the issuance of a Series V mortgage bonds. The redemption of the J and K Series and the issuance of the V Series were all scheduled to occur in November and December, 1996.

The Staff did not believe an adjustment for the redemption and reissuance was appropriate due to mismatching problems which would be caused in the ratemaking process as set out above. The Staff recommended that the Commission use the actual capital structure, including cost of debt, for the period ending September 30, 1996, the true-up cutoff date.

The Commission has considered all the evidence in regard to the true-up items in both the evidentiary hearing and true-up hearing. The Commission finds little real argument regarding items which are appropriate for adjustment and items which are not. The Commission finds nothing in the record to convince it that the principles of (1) known and measurable and (2) contemporaneous balance between expenses, revenue, and rate base should be abandoned in favor of anticipated or future adjustments, particularly those which are not capable of accurate measurement. In addition it was pointed out in testimony, and the Commission agrees, that expenditures should be certain to occur. Only the union contract wage increase and non-union wage increase are certain to occur in the amount and at the time they are planned. All the remainder of the items proffered are volitional on the part of County Water and subject to substantial variance in amount and timing.

The Commission would also emphasize that legitimate adjustments to revenue requirement must include accurate assessments of all the components which go into establishing just and reasonable rates, including contemporary, audited results showing complete revenue, expense, capital structure and rate base amounts.

The Staff believes the union contract wage increase and non-union wage increase are close enough in time to the true-up date to maintain the balance between components, and are certain to occur. The Commission will accept the expert opinion of the Staff on that item and order that the rates set in this case reflect the union and non-union wage increases.

In regard to the remainder of the true-up items proposed by County Water as set out above, the Commission finds the Staff adjustments will be adopted, and, with regard to the proposed bond redemption and reissuance, the capital structure as of September 30, 1996. The Commission is of the opinion that these items do not meet the standards as set out above by which the Commission has traditionally measured isolated items for inclusion in revenue requirement. While it is anticipated by County Water that these items will all take effect between December 1, 1996 and January 1, 1997, the Commission finds that all are volitional on the part of County Water as to timing and actual amount of expense incurred. The Commission finds, therefore, that none are known and measurable for purposes of this rate case.

Further, even if some assurance would be made that all items are certain to occur at a specific time and in a specific amount, no balance is suggested, or even capable of being maintained, between the proper components of revenue requirement necessary for fair and reasonable rate-making, including capital structure. For these reasons the Commission will adopt the Staff adjustments for FAS 87, FAS 106, company insurance, and benefits as set out in the revised (or true-up) reconciliation.

IV. Rate of Return/Return on Equity

In calculation of the overall rate of return, three major components are used, those being the cost of equity, cost of debt, and the capital structure of the utility. When factored together by an appropriate cost of service ratemaking method, an overall rate of return percentage is developed. A reasonable and adequate overall rate of return gives the utility the opportunity to earn an appropriate amount of revenue to both service its debt and adequately compensate its shareholders.

In this case, only the return on equity (ROE) component is in issue. The rate of return on common equity, necessary in the calculation of the overall rate of return, must accurately reflect an investor's required return on common equity sufficient to allow the utility to publicly trade its stock in the marketplace and thereby be able to raise sufficient equity capital.

Adjustments in calculating a proper ROE were made by the parties as County Water is a closely held corporation and not publicly traded. The Staff, OPC, and County Water all took into consideration the closely held nature of County Water in selecting investor-owned water and other utilities for comparability analysis.

The current return on equity for County Water, set by the Commission in Case No. WR-95-145, is 11.60 percent. County Water is asking for an increased return on equity of 12.75 percent, without the benefit of a future test year. The Staff recommends a return on equity in the range of 10.74 percent to 11.05 percent. The OPC recommends a return on equity of 10.50 percent.

In calculating its recommended ROE, the Staff employed the continuous growth form of the Discounted Cash Flow (DCF) model, which has been consistently used by the Commission in rate proceedings. This model relies on the fact that the utility's common stock price is dependent upon the expected cash dividends and upon cash flow received through capital gains or losses that result from stock price changes. The rate, which discounts the sum of the future expected cash flow to the current market price of the common stock, is the cost of equity. This is rendered in the Staff testimony as an algebraic formula. This formula is adjusted to reflect the comparative risk in potential equity investment in the utility.

The Staff offered its recommended ROE range after taking into consideration the ROE obtained by application of the algebraic formula, adjusted for difference in comparable publicly traded companies and, more importantly in this case, for various specific risk factors. The OPC used the same DCF method but produced a slightly lower ROE recommendation, mainly as the result of application of a lower risk factor. Both the Staff and OPC verified their results by calculating an ROE using the Capital Asset Pricing Model (CAPM).

County Water employed an outside consultant to develop its recommended ROE. Testimony of that consultant reveals that four different analyses were used to develop the recommendation, including the DCF model, CAPM model, risk premium analysis, and comparable earnings approach. Included in the County Water testimony is a summary of those results, showing an average market cost of common equity (ROE) of the four methods of 11.83 percent. Comparison of a selected group of twelve water utilities results in a recommended ROE of 12.75 percent, adjusted for additional risk for lack of a partial future test year program. It should be noted that County Water's current ROE, as a result of Case No. WR-95-145, is 11.60 percent.

After careful review of the testimony of all parties regarding the details of the various methods used to derive recommended ROE figures, the Commission finds the DCF analysis to be thorough, complete, accurately based on current economic conditions, and reasonably based on forward-looking market projections. It has been the experience of the Commission over a substantial period of time that the continuous growth DCF model as employed by the Staff, taken together with various reasonableness and accuracy verification checks, has proven to be substantially more reliable than any other method or combination of methods presented by County Water. To adopt one of the other methods proffered by County Water, the Commission would require unimpeachable evidence that the proposed alternative method was more reliable, accurate, and superior to the one employed by the Staff and the OPC.

In its comparative DCF analysis, County Water obtained an ROE of 11.40 percent. In doing so, the testimony of the County Water consultant indicated that the DCF analysis was as valid as, and made more sense than, any other single approach.

The Commission does not find the substantial evidence of record necessary to convince it to abandon the DCF method. The Commission will note the recommended ROE figures derived from the various applications of the DCF method by the parties in this case, and use those figures as a basis for its decision.

However, the application of the risk factor is significant in setting an appropriate ROE for this utility. Testimony of the County Water consultant indicates that it was his opinion that the DCF analysis, while reliable, "does not recognize the risk associated with small water companies." Risk, as defined in testimony, includes both business risk and financial risk. OPC witness Mark Burdette defines the two categories of risk as follows:

> **Business risk** is the uncertainty (variability) associated with earnings due to fundamental business conditions faced by the company, such as cyclical demand, replacement of infrastructure components, unforeseen events, or competition. Business risk is the inherent riskiness of a firm's assets if that firm uses no financial leverage (i.e. no debt in the firm's capital structure) because every dollar earned is available to common shareholders. In other words, business risk is not connected to the way the firm finances its assets.
>
> **Financial risk** is the uncertainty associated with earnings available to common shareholders (the owners of the firm) due to debt and/or preferred stock being used to finance the firm's assets. This additional risk stems from the fact that cash flows to common shareholders are subordinate to the firm's required debt service (i.e. a firm must pay its debt service and any preferred dividends before it can pay common dividends). If the firm faces no business risk (earnings are known with 100 percent certainty) there is also no financial risk - even with 100 percent debt financing - because earnings would not fluctuate. From a common shareholder's perspective, a firm with less debt and preferred stock in its capital structure has fewer bills to pay before it can allocate earnings to common dividends, and is therefore less risky.
>
> Any investment made by a company or special regulatory treatment granted a company which results in any portion of earnings becoming assured and therefore not variable, or shielded from the various risks faced by a company, reduces the overall level of risk faced by the firm.

Mr. Burdette notes that a well-regulated utility is entitled to "a return reasonably sufficient to assure financial soundness, support existing credit, and attract new capital." (Burdette Direct, page 6, lines 12-13).

The testimony of Staff witness Randy Z. Wright reveals that the current Standard and Poor's credit rating for senior debt of County Water is "A-." Testimony also reveals that County Water has had a history in recent years of low payout ratios as a result of capital spending requirements to upgrade the distribution system. As Mr. Wright points out, the current pretax interest coverage ratio of 2.51 times, while an improvement over past years, is below the mean of 3.18 times for the water utility industry, and 3.48 times for the comparable company group used by the Staff. Finally, the Staff employed a combination of the following four risk areas in adjusting its ROE recommendation: (1) financial leverage risk differences; (2) capital expenditures differences; (3) composite depreciation rate differences; and (4) current ability to issue debt differences.

The Commission is well aware of the relationship between a reasonable ROE and the utility's ability to raise capital. The Commission is also aware of the effect of the utility's pretax interest coverage ratio and secured debt rating on that ability.

The Commission is concerned over County Water's ability to raise capital, principally to fund infrastructure replacement. The Commission is unwilling at this time to include any future, or "budgeted," items in current revenue requirement in this decision. The Commission finds that this increases the risk associated with County Water and should be fully reflected in determining the current ROE. Setting a proper ROE will also assist in raising County Water's current interest coverage ratio, thereby making County Water's current bond rating of "A-" more secure. County Water complains that it has repeatedly been unable to pay out its full ROE to stockholders. While maintaining a higher ROE will not necessarily alleviate that apparent problem, it will enable County Water to maintain its A- rating and assist in allowing the company to continue to be able to raise sufficient capital in the form of both debt and equity.

The ROE of County Water should be set to reflect increased business risk, principally because of replacement of infrastructure, and financial risk, principally because of borderline pretax interest coverage ratio and lack of special regulatory treatment. The Commission finds that the testimony of County Water is insufficient to convince the Commission to raise the current ROE, while the Staff and OPC testimony is insufficient to convince the Commission to lower the current ROE. The Commission, therefore, retains the current ROE of 11.60 percent. The rates established pursuant to this order shall reflect the current ROE of 11.60 percent.

Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law.

St. Louis County Water Company is a public utility engaged in the provision of public water service in the state of Missouri and, therefore, subject generally to the jurisdiction of the Commission pursuant to Chapters 386 and 393, R.S. Mo. (1994).

The Commission has the authority, under Chapter 393, R.S. Mo. (1994), to set just and reasonable rates for the provision of water service by regulated water companies.

Orders of the Commission must be based on substantial and competent evidence, taken on the record as a whole, and must be reasonable and not arbitrary, capricious, or contrary to law. In this regard, and in setting rates which are just and reasonable, the Commission has considered all relevant evidence and determines, as set out in the findings of fact, that St. Louis County Water Company's revenue requirement will be raised in the amount of $7,321,702.00, as set out in this Report And Order and as reflected in the Staff's Schedule D and County Water's Scenario No. 4, both a part of Exhibit 54, which is attached.

IT IS THEREFORE ORDERED:

1. That the Commission's scenarios of December 23, 1996 and the responses of the Staff and St. Louis County Water Company are made a part of the record and entered into evidence as Exhibit 54.

2. That the proposed tariffs submitted by St. Louis County Water Company on February 9, 1996 are hereby rejected, and St. Louis County Water Company is hereby ordered to file, in lieu thereof, revised tariffs in accordance with the findings of fact in this Report And Order for service on and after January 9, 1997.

3. That the stipulation and agreement and other stipulated issues are hereby approved, and the parties are ordered to comply with all terms and conditions as contained therein and set out in this Report And Order.

4. That this Report And Order shall become effective on the 9th day of January, 1997.

BY THE COMMISSION

Cecil I. Wright
Executive Secretary

(S E A L)

Zobrist, Chm., McClure, Kincheloe, Crumpton and Drainer, CC., concur and certify compliance with the provisions of Section 536.080, R.S. Mo. (1994).

Dated at Jefferson City, Missouri, on this 31st day of December, 1996.

St. Louis County Water Company
Case No. WR-96-263
True-up Reconciliation

Company's Original Request	$14,302,498
Company Agreed Upon Numbers	($3,122,517)
Revised Recommendation before hearing	$11,179,981
Revisions due to true-up	($975,022)
Company Position After True-up	$10,204,959

Staff Issues	Company	Staff	Public Counsel	Difference	Revenue Requirement
Income Statement					
Infrastructure replacement					
deferral (1 yr. vs. 20 yrs.)	$275,949	$6,660		($269,289)	($269,289)
Main incident repair expense	$5,432,316	$6,235,722		$803,406	$803,406
Depreciation/Increased Plant Levels	$10,107,672	$9,717,731		($389,941)	($389,941)
Prop. taxes/Increased Plant Levels	$4,925,759	$4,737,178		($188,581)	($188,581)
FAS 106/FAS 87 issues:					
FAS 106 - 5 Year Amort.	$1,370,715	$1,233,759		($136,956)	($136,956)
FAS 106 - Market related value	$1,233,759	$1,189,883		($43,876)	($43,876)
FAS 87 - 5 year Amort.	$557,990	$94,258		($463,732)	($463,732)
FAS 87 - Market related value	$94,258	$279,519		$185,261	$185,261
Rate Base					
Plant levels	$258,495,635	$248,849,706		($9,645,929)	($1,156,547)
Main incident repair deferral	$1,959,837	$0		($1,959,837)	($232,847)
Infrastructure replacement					
deferral	$0	$133,208		$133,208	$15,972
Rate of Return (9.57%-9.01%) *	$31,216,580	$28,969,566		($2,247,014)	($2,247,014)
True up Items:					
FAS 106	($147,989)	$0		$147,989	$147,989
FAS 87	$202,958	$0		($202,958)	($202,958)
Company Insurance	$78,300	$0		($78,300)	($78,300)
Dental Insurance	$16,442	$0		($16,442)	($16,442)
Staff Position After True-up					$5,931,104

Public Counsel Issues	Company	Staff	Public Counsel	Difference	Revenue Requirement
Rate of Return (9.01% vs 8.87%) **	$31,216,580	$28,969,566	$26,450,482	($639,660)	($639,660)
Main incident repair expense (3 year average)	$5,665,163	$6,235,722	$5,276,862	($958,860)	($958,860)
Infrastructure Replacement deferral	(Rate Base & Amortization)				($22,632)
Public Counsel Position					$4,309,952

*Value of Issue calculated using Company's Rate Base
**Value of Issue calculated using Staff's Rate Base

FILED
OCT 31 1996
MISSOURI
PUBLIC SERVICE COMMISSION

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of St. Louis County Water Company's tariff designed to increase rates for water service to customers in the Company's service area.	))))	Case No. WR-96-263

STIPULATION AND AGREEMENT

COMES NOW the Office of the Public Counsel ("Public Counsel") and St. Louis County Water Company ("StLCW" or "Company") and herewith attempt to devise a mutually acceptable approach to infrastructure replacement and maintenance so that dollars available can be spent in the most efficient and economically advantageous way. It is the intention of the parties to develop a working relationship with respect to the below which will improve communications and minimize future disagreements, to the benefit of the public. This agreement will be provided to the Staff of the Public Service Commission ("Staff"), but is expressly devised to particularly address the concerns of Public Counsel in WR-96-263. It is not binding on parties other than Public Counsel and StLCW.

The Company is subject to varying opinions of parties with various interests. The Public Service Commission ("Commission") itself is the arbiter of the final product. Any commitments of the parties herein contained are binding on the parties only to the extent that the Commission does not determine that the course of action described is unacceptable or inappropriate, or that another course of action is preferable, or makes any other determination which reflects negatively on the course of action outlined.

Accordingly, Public Counsel and StLCW agree to the following:

1. StLCW will provide a selective graphical depiction of the cumulative breaks for a historical duration including as many years as possible up to twelve but not less than eight, by "sub-grid". Number of replacements by sub-grid will be recorded on the sheets by year for the same number of years. StLCW may limit the graphical depiction to those sub-grids which have either significant breaks or significant growth in breaks. All data files utilized will be supplied in a format specified by the parties to the extent feasible. Files exist currently in Lotus 1 2 3. StLCW will assess the cost of preparing estimates of the total length of pipe in each pertinent "sub-grid."

2. StLCW will pursue an AM/FM system capable of spatial monitoring of the state of its distribution system. To that end, StLCW will, within 6 months following the issuance of a Report and Order in WR-96-263 provide a time line including when the AM/FM system will be specified, estimated internal time to install from start to finish, and estimated cost. This plan will include discussion of how the AM/FM system will be used to improve distribution system planning, especially the scheduling of main repairs and replacements. Ultimate completion times of the AM/FM system could vary subject to financial feasibility considerations.

3. Economic Criteria - StLCW will agree to study economic criteria for the replacement of water mains vs. maintenance. This study will include evaluations of net present value methods, nominal cost methods, and any other viable economic options. The study is not expected to be exhaustive. Within 6 months of the Report and Order in WR-96-263, the Company will provide a report to all parties of the results of that study. These results, along with any other new theory available, will be incorporated into the considerations utilized to develop main replacement theory of the Company.

4. StLCW will work with Public Counsel to develop potential goals for replacement and maintenance strategies based upon developing evidence of differing break pattern and timing characteristics. StLCW will, within 6 months of the Report and Order in WR-96-263, provide a general discussion document of some potential goals as they relate to the above described break pattern and timing characteristics.

The identification of the above potential goals anticipates the future selection of a system-wide set of goals. This selected set of goals will be used by StLCW to produce a strategic long-term plan for main replacements, including anticipated methods of financing. The main replacement plan will give reasonable consideration to minimizing, over the long-term, the revenue requirements associated with both main replacements and main break repairs. The plan will also consider explicitly the potential for rate shock and any other factors deemed relevant by the parties or the Commission.

5. StLCW will continue to pursue courses of action which may potentially control increasing costs of main maintenance. StLCW will continue to communicate to Public Counsel regarding actions it is taking to that end.

6. StLCW and Public Counsel agree that, with respect to WR-96-263 only, the issue of "Distribution Planning" is settled between them. Public Counsel agrees not to pursue the recommendation that the Commission order StLCW to provide an assessment and to produce a long-term plan for main replacements in this case since this agreement represents a major step forward in satisfying Public Counsel's recommendations.

7. All written documents will be provided to the Staff and they will be invited to all meetings between StLCW and Public Counsel.

Respectfully submitted,

OFFICE OF THE PUBLIC COUNSEL

By: [signature]
John B. Coffman (#36591)
Senior Public Counsel
P. O. Box 7800
Jefferson City, MO 65102
(573) 751-5565

ST. LOUIS COUNTY WATER CO.

By: [signature]
Richard T. Ciottone (#21530)
Vice President & General Counsel
535 North New Ballas Road
St. Louis, MO 63141
(314) 991-3404, ext. 273

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed or hand-delivered to the following this 13th day of September, 1996:

Cherlyn McGowan
Assistant General Counsel
Public Service Commission
P. O. Box 360
Jefferson City, MO 65102

Richard T. Ciottone
Vice President & General Counsel
St. Louis County Water Company
535 North New Ballas Road
St. Louis, MO 63141

Diana M. Schmidt
Peper, Martin, et al.
720 Olive Street, 24th Floor
St. Louis, MO 63101

[signature]

Exhibit 54

St. Louis County Water Company
Case No. WR-96-263
Scenario 4
11.60%

	Decision Staff	Revenue
Company Position at True-up		**10,204,959**
Income Statement		
Infrastructure Replacement Deferral (1 Yr. Vs. 20 Yrs.)	(269,289)	
Main Incident Repair Expense	803,406	
Depreciation/ Increased Plant Levels	(389,941)	
Property Taxes/ Increased Plant Levels	(188,581)	
FAS 106/FAS 87 Issues:		
FAS 106 - 5 Year Amortization	(136,956)	
FAS 106 - Market Related Value	(43,875)	
FAS 87 - 5 Year Amortization	(463,732)	
FAS 87 - Market Related Value	185,260	(503,708)
Rate Base		
Plant Levels	(1,156,547)	
Main Incident Repair Deferral	(232,847)	
Infrastructure Replacement Deferral	15,972	(1,373,422)
True-Up Items		
FAS 106	147,989	
FAS 87	(202,958)	
Company Insurance	(78,300)	
Dental Insurance	(16,442)	(149,711)
Rate of Return Impact		
At 11.60%		(856,416)
Total Additional Revenue Requirement		7,321,702

Note: This does not reflect the new series V issuance and the J&K bond series redemptions.

St. Louis County Water Company
Case No. WR-96-263
Scenario

	Decision Staff	Revenue
Company Position After True-up		$10,204,959
Income Statement		
Infrastructure replacement		
deferral (1 yr. vs. 20 yrs.)	($269,289)	($269,289)
Main incident repair expense	$803,406	$803,406
Depreciation/Increased Plant Levels	($389,941)	($389,941)
Prop. taxes/Increased Plant Levels	($188,581)	($188,581)
FAS 106/FAS 87 issues:		
FAS 106 - 5 Year Amort.	($136,956)	($136,956)
FAS 106 - Market related value	($43,876)	($43,876)
FAS 87 - 5 year Amort.	($463,732)	($463,732)
FAS 87 - Market related value	$185,261	$185,261
Rate Base		
Plant levels	($9,645,929)	($1,156,547)
Main incident repair deferral	($1,959,837)	($232,847)
Infrastructure replacement		
deferral	$133,208	$15,972
True up items:		
FAS 106	$147,989	$147,989
FAS 87	($202,958)	($202,958)
Company Insurance	($78,300)	($78,300)
Dental Insurance	($16,442)	($16,442)
Return on Equity - 11.60%		**($856,416)**
TOTAL ADDITIONAL REVENUE REQUIREMENT		$7,321,702