

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the matter of St. Louis County Water )  
Company's tariff revisions designed to )  
increase rates for water service provided )  
to customers in the Missouri service area )  
of the company. )

Case No. WR-95-145

**REPORT AND ORDER**

*Issue Date: September 19, 1995*

*Effective Date: September 30, 1995*

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**APPEARANCES**

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

**Diana M. Schmidt**, Attorney at Law, Peper, Martin, Jensen, Maichel and  
Hetlage, 720 Olive Street, 24th Floor, St. Louis,  
Missouri 63101, for Barnes-Jewish, Inc./Christian  
Health Service, Emerson Electric Company,  
McDonnell Douglas Corporation, and Monsanto  
Company.

**Lewis R. Mills, Jr.**, Deputy Public Counsel, and **John B. Coffman**, Senior  
Public Counsel, P.O. Box 7800, Jefferson City,  
Missouri 65102, for the Office of the Public  
Counsel and the Public.

**David Woodsmall**, Assistant General Counsel, and **Cherlyn D. McGowan**,  
Assistant General Counsel, P.O. Box 360, Jefferson  
City, Missouri 65102, for the Staff of the  
Missouri Public Service Commission.

**ADMINISTRATIVE LAW JUDGE: Mark A. Grothoff**

**REPORT AND ORDER**

On October 28, 1994, St. Louis County Water Company (County  
Water) filed tariff sheets reflecting increased rates for water service  
provided to customers in its Missouri service area. On November 9, 1994,  
the Commission suspended the tariff sheets until September 30, 1995, and  
established a partial procedural schedule.

On December 30, 1994, the Commission granted intervention to  
the Utility Workers Union of America, Local 335, AFL-CIO (Union), Public  
Water Supply District No. 1 of Jefferson County (Water District), and  
Barnes-Jewish, Inc./Christian Health Services, Emerson Electric Company,

McDonnell Douglas Corporation and Monsanto Company (Industrial Customers). In addition, the Commission established a complete procedural schedule.

Prepared testimony was filed by the parties pursuant to the established procedural schedule. Concurrent with its direct testimony, County Water filed its recommendation as to the proper test year in this case. On January 9, 1995, the Staff of the Commission (Staff) filed its test year recommendation. On January 25, 1995, the Commission adopted the twelve months ending October 31, 1994, as updated through February 28, 1995, as the test year to be used in this case.

Concurrent with its direct testimony, Staff filed a recommendation for a true-up in this case. On April 21, 1995, County Water filed a response to Staff's recommendation. On May 18, 1995, the Commission directed a true-up audit and scheduled a hearing concerning the true-up audit.

On May 1, 1995, a prehearing conference was convened as scheduled. On May 31, 1995, a hearing memorandum and a reconciliation of the issues were filed by the parties. On June 19, 1995, a hearing was convened as scheduled. The hearing was adjourned on June 22, 1995, and briefs were subsequently filed by the parties. On September 1, 1995, a hearing concerning the true-up audit was held as scheduled.

#### 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:

On October 28, 1994, County Water filed tariff sheets reflecting increased rates for water service provided to customers in its Missouri service area. The proposed tariff sheets were designed to produce an increase in revenue of \$11,930,354 or approximately 13.41%. The reconciliation filed by the parties on May 31, 1995, indicated that County

Water was seeking an increase of approximately \$10,229,079 while Staff supported an increase in the amount of \$2,048,651 and the Office of the Public Counsel (Public Counsel) supported a \$537,925 decrease in revenues. The reconciliation filed by the parties in connection with the true-up audit in this case shows that County Water is seeking an increase of approximately \$8,888,094 while Staff supports an increase in the amount of \$1,663,351 and Public Counsel supports a \$181,298 increase in revenues.

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

The ultimate issue to be determined in this case is the establishment of just and reasonable rates to be charged to County Water's customers. In addressing that issue, the parties have presented several specific issues to the Commission for consideration. Each issue will be discussed in turn.

#### ***Stipulated Issues***

Within the hearing memorandum filed by the parties on May 31, 1995, the parties indicate agreement on three issues. Concerning rate design, the parties have agreed that rates should be established in this case consistent with the cost of service allocation as determined by the Base Extra Capacity method of cost allocation as set forth in the Direct Testimony of Wess A. Henderson (Exhibit 53). Regarding depreciation, the parties have agreed that the depreciation rates used by County Water should be set in accordance with the individual depreciation rates set forth in

the document attached to this Report and Order as Attachment 1 and incorporated herein by reference. In addition, Staff and County Water have agreed that the capitalization methods used to determine County Water's rates in this case will be used by them to set County Water's rates in the future absent any change in County Water's operations.

Upon review of the testimony and evidence concerning the stipulated issues, the Commission finds that the agreements are just and reasonable. Thus, the Commission finds that the stipulations should be approved.

### ***Contested Issues***

#### **Regulatory Treatment of Capital Expenditures**

During the course of this proceeding, extensive evidence was presented concerning the deterioration of County Water's distribution system. In recent years, County Water has experienced an increasing number of main breaks resulting in escalating expenses. In response to the main break situation, County Water has developed a water main infrastructure program. As presented to the Commission, County Water's replacement program would start at a level of 7.5 miles of pipe with a cost of \$3.75 million in the first year and increase to thirty miles of pipe with a cost of \$19.2 million in the fifth year.

County Water anticipates instituting its replacement program in two phases. The first phase would be replacement of those portions of pipe with a high leak rate and the second phase would be more systematic replacement of pipe on an area by area basis. County Water anticipates that replacing high leakage pipe will require most of its efforts in the first several years of the infrastructure program.

County Water has expressed concern about the effect of regulatory lag associated with its infrastructure expenditures on its earnings. Regulatory lag may be defined as the lapse of time between a

change in a utility's revenue requirement and reflection of that change in the utility's rates. County Water's concern regarding regulatory lag is that the reduction in its earned rate of return as a result of the increases in capital investment for the infrastructure program will not be offset by reductions in its operating costs. County Water expects the delay in reflecting infrastructure additions in rates to depress its earnings below the authorized level set by the Commission.

The parties have proposed several solutions to address County Water's problems with regulatory lag. County Water has proposed the utilization of future or projected test years; the acceptance of pro forma construction during the period rates will be in effect; or sequential tariffs which would become chargeable upon completion of a preordained construction investment.

Staff recommends that County Water be permitted to defer, through the use of an Accounting Authority Order (AAO), those capital expenditures associated with any incremental increase in County Water's main replacement program. As an alternative to the AAO, Staff recommends the implementation of a mini-audit procedure for recovery of County Water's infrastructure replacement expenditures. The mini-audit procedure would reduce the rate increase process to a maximum of sixty days.

Public Counsel proposes to condense an eleven month rate case into six months using a predetermined format based on the Commission's decisions in this case.

Upon consideration of the different solutions proposed by the parties, and in the context of this case, the Commission finds the use of an AAO to be the best solution in terms of mitigating regulatory lag while avoiding recognition of speculative costs in rates. County Water's situation with its infrastructure replacement program is analogous to the situation of many of Missouri's natural gas utilities which were required

to implement replacement programs when the Commission promulgated new gas service line safety standards. 4 CSR 240-40.030. The Commission issued several AAOs to defer depreciation expense and carrying costs associated with gas service line replacement programs. See: Case Nos. GO-90-51, GO-90-115, GO-90-215, GO-91-359, GO-92-67, GO-92-185, GO-94-133, and GO-94-234.

Although County Water has assured the Commission of its commitment to the stated level of its infrastructure replacement, the costs associated with the infrastructure replacement program are necessarily speculative. There is a risk that including such investment in rates before it is incurred could result in poorly crafted rates which could conceivably be recovered by County Water regardless of whether the construction was ever completed.

The beneficial effect of an AAO is its ability to partially protect the utility from regulatory lag associated with plant additions. An AAO lessens the impact of regulatory lag associated with plant additions by deferring the required carrying charges and depreciation expense in the company's balance sheet, where the amounts will be held for future recovery in rate cases. The amounts deferred through an AAO are usually given recovery in subsequent rate cases through an amortization with the unamortized portion being given rate base treatment. In this manner, an AAO can be used to protect a utility from earnings shortfalls associated with extraordinary construction programs.

County Water has proposed that the terms of any AAO be extended to all of its capital expenditures. However, 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. "Deferral of cost from one

period to a subsequent rate case... should be allowed only on a limited basis. This limited basis is when events occur during a period which are extraordinary, unusual and unique, and not recurring." Re: Missouri Public Service, 1 Mo. P.S.C. 3d 200, 205 (1992).

Based on County Water's planned infrastructure expenditures for the period of 1995-1999, the Commission is of the opinion that the infrastructure program represents a significant and unusual increase in County Water's business-as-usual construction expenditures, and is extraordinary in nature. Thus, the Commission finds that County Water should be granted an AAO allowing deferral of its capital expenditures associated with its infrastructure replacement program. All business-as-usual capital expenditures will remain subject to normal rate procedures.

The Commission further finds that the AAO granted to County Water should be in effect for a period of twenty-four months following the effective date of this Report and Order. As the Commission has stated in previous cases, a time limitation on AAOs is reasonable since deferrals cannot be allowed to continue indefinitely. A rate case must be filed within a reasonable time after the deferral period for recovery of the deferral to be allowed. If County Water does not file a rate case by September 30, 1997, no recovery of these costs will be allowed unless said costs were incurred in the approved test year.

#### **Plant Levels**

This issue concerns whether the pro forma plant adjustments made to rate base by County Water should be allowed. County Water has included a future plant adjustment consisting of a \$40 million increase in plant-in-service to reflect both operation of law and test period additions. The \$40 million includes \$24 million associated with plant additions expected to be completed by the operation of law date (September 30, 1995); \$13 million associated with plant additions expected to be

completed during the succeeding year in which rates will be in effect (September, 1995 - September, 1996); and \$3 million associated with implementation of County Water's infrastructure replacement program.

Initially, Staff included plant levels through the end of the test year as updated (February 28, 1995). With the true-up audit, Staff adjusted its plant levels through July 31, 1995, adding \$7,204,975 in net plant since February 28, 1995.

Historically, the Commission has allowed adjustments for events which are known and measurable; events which are certain to occur and the impact of which can be calculated with a high degree of accuracy. Likewise, the Commission has consistently required that adjustments maintain the proper revenue-expense-rate base match.

The record does not show that the plant additions associated with the County Water's proposed adjustments are certain to occur. Although County Water has assured the Commission of its commitment to the budgeted level of new plant, the expenditures associated with these planned additions are necessarily based on estimates. There are innumerable unforeseen events which could affect the projected level of plant additions. Priorities change. Some projects originally budgeted will be delayed or cancelled. Others will be initiated. An example of the tenuous nature of future plant adjustments such as County Water has proposed is found in County Water's projection of \$24 million in plant to be added by September 30, 1995. As of July 31, 1995, only approximately \$7.2 million in new plant has been added, leaving some \$17 million in plant to be added in the two remaining months before County Water's projected deadline. Including such speculative investment in rates before it is incurred could result in poorly crafted rates recoverable by County Water regardless of whether the construction was ever completed. In addition, the record shows County Water's proposed adjustments project through September, 1996, while

other revenue requirement components are left at a point no later than September, 1995.

The Commission finds County Water's proposed plant adjustments to rate base are not known and measurable and distort the matching of revenues, expenses and rate base. The Commission further finds that the plant levels calculated by Staff through July 31, 1995, are known and measurable and do not violate the matching principle. Thus, the Commission finds that the level of plant proposed by Staff through July 31, 1995, is the appropriate adjustment to rate base in this case.

At this point, the Commission wishes to note that it would be more receptive to including in rate base the expenditures associated with County Water's infrastructure replacement program if it was able to approve the program and order its implementation. The Commission took this approach in the most recent rate case for United Telephone Company of Missouri (United), Case No. TR-93-181 et al., Report and Order, October 27, 1993. The Commission, expressing concern over the condition of United's system and for United's commitment to the prompt completion of the project, approved United's detailed modernization plan and recognized a portion of the projected cost of the plan within United's revenue requirement. Re: United Telephone Company of Missouri, id. pp. 38-40.

However, the evidence in the record in this case concerning the replacement program lacks sufficient specificity and detail about the program and its implementation for the Commission to approve it. The Commission suggests that in County Water's next appearance before the Commission, it present its replacement program for approval and provide specific, detailed evidence on the systematic implementation of the program during each year of each phase of the program.

### Main Incident Maintenance

This issue revolves around the proper ratemaking methodology for maintenance expense associated with main incidents. Main incidents have been defined in testimony as all breaks including main breaks, joint leaks, flush valve and blocking failures, and any other type of event requiring a maintenance call, except main breaks caused by others. Expenses reflected in this issue include costs of premium labor, outside contractors, transportation, materials, supplies, and stores costs. Additional expenses reflected in this issue are overhead costs for liability insurance, workers compensation insurance, payroll taxes, and claims paid for damages. As stated previously, because of the deteriorating nature of its distribution system, County Water's level of maintenance expense has exhibited a general upward trend in recent years. This upward trend is further complicated by the random appearance of "spikes" in the maintenance expense level. In the past six years, County Water has experienced two such spikes, one in December, 1989, and another in January, 1994.

To ensure recovery of its maintenance costs, County Water has proposed several alternatives, including reserve accounting, accrual accounting, and self insurance. County Water contends that some type of alternative treatment is necessary because past rates have resulted in an under-recovery of maintenance expenses. Staff has calculated the normalized level of maintenance expense using data from the twelve months ending February, 1995, the update period. Staff argues that a utilization of such data adequately reflects the increased trend in maintenance expense while eliminating the nonrecurring impact of the main break spike experienced in January, 1994.

While the Commission understands County Water's desire to guarantee recovery of the exact amount of its maintenance expense, County

Water's proposals run contrary to existing policy against retroactive ratemaking. In expressing the rule, Missouri's Supreme Court defined retroactive ratemaking as "...the setting of rates which permit a utility to recover past losses or which require it to refund past excess profits collected under a rate that did not perfectly match expenses plus rate of return with the rate actually established." State ex rel. Utility Consumers Council of Missouri, Inc. v. Public Service Commission, 585 S.W.2d 41, 59 (Mo. 1979). The policy against retroactive ratemaking has been adopted by the Commission in several previous decisions. For example, See: Kansas City Power & Light Company, 26 Mo. P.S.C. (N.S.) 104 (1983). The only recognized exception to the rule against retroactive ratemaking is for extraordinary, nonrecurring expenses.

County Water has made no claim in the record that any of its maintenance expense is extraordinary in nature. Each of County Water's proposals is designed to employ future rates to recover nonextraordinary cost of service items.

In addition to its proposals violating the policy against retroactive ratemaking, County Water's basis for requesting alternative treatment appears to be flawed. County Water contends that past rates have been inadequate in recovering maintenance expenses. Yet, the record indicates that County Water's last three rate proceedings were resolved by stipulation. With County Water's rates set by stipulation, the amount of maintenance expense reflected in rates cannot be calculated. The flaw within County Water's attempt to estimate its perceived maintenance expense shortfall is that it is looking at an isolated cost of service item within a vacuum. To the extent any cost of service item is analyzed in a vacuum, such an analysis precludes the possibility of offsetting changes occurring in other accounts.

While County Water's proposals on this issue are flawed, Staff's methodology is a viable alternative. Staff's normalization does not recognize the main break incidents spike experienced by County Water in January, 1994. The record indicates that the cause of the spike is speculative and this combined with the relative infrequency of such spikes makes main incident spikes such as occurred in January, 1994, improper for full inclusion in a normalized expense calculation.

Nonetheless, in normalizing the level of main incidents, the Commission finds that a portion of the January, 1994, maintenance expense spike should be recognized. The record shows that County Water does experience such spikes and it must deal with them within its established rate structure. It is appropriate then, in this particular case, that Staff's normalization should include a portion of the maintenance spike which occurred during the test year.

In calculating what portion of the January, 1994, main incident spike should be recognized, the Commission used the figures included in Schedule 1 of Exhibit 8 in this case, the surrebuttal testimony of Arlene Westerfield. The Commission divided the test year number of incidents, 2908, by 12 to get a test year monthly average of approximately 242. Then, the monthly average of 242 was subtracted from 664, the number of incidents in January, 1994. The difference, 422, was then multiplied by \$2,761, the test year cost per incident. The result, \$1,165,142, is the cost of the difference between the test year monthly average of main incidents and the level of incidents in January, 1994.

The record indicates that County Water has experienced maintenance spikes about once every four years. So, the Commission calculated one-fourth or 25% of \$1,165,142, resulting in approximately \$291,285 to be included with Staff's normalization.

The Commission finds that, in this case, 25% of the cost differential between County Water's January, 1994, main incident levels and the test year monthly average of main incidents should be included with Staff's normalization. Thus, in addition to Staff's normalized amount, the maintenance expense calculation in this case will include \$291,285.

At this point, the Commission wishes to encourage County Water to seriously consider requesting an AAO should it encounter such main incident spikes in the future. In view of the uncertain and infrequent nature of main incident spikes, such occurrences would merit consideration as extraordinary and nonrecurring. As such, they would be exempt from the rule against retroactive ratemaking and would likely qualify for recognition under an AAO. Such an option would capture on the balance sheet the effect of a main incident spike thereby eliminating any deleterious effects.

It is County Water's responsibility to request an AAO from the Commission for expense spikes. The Commission has demonstrated that it is willing to issue AAOs where appropriate expenditures are shown to be extraordinary.

#### **Amortization of Depreciation Reserve Deficiency**

Depreciation accounting is a system of accounting which generally aims to distribute costs or other basic values of tangible capital assets less salvage, over the estimated useful life of the unit or group of assets in a systematic manner. It is a process of allocation, not of valuation. Depreciation is an attempt to match capital recovery with capital consumption. The emphasis is upon a systematic and rational allocation of the expense of capital consumption. The accounting does not purport to follow the actual rate of consumption of property during individual accounting periods. It is an equitable and sound accounting method to spread the depreciation expense in equal annual charges over the

useful life of the property, but the actual rate of consumption may be different. Re: Depreciation, 25 Mo. P.S.C. (N.S.) 331.

Any attempt to allocate such costs over a period of time requires an analysis of expected future events such as useful life, salvage value, and cost of removal. To the extent such analyses prove incorrect, depreciation rates will fail to match capital recovery with capital consumption resulting in a depreciation reserve deficiency.

In this case, it is undisputed that County Water has a \$36.3 million reserve deficiency. While Public Counsel characterizes the reserve deficiency as "alleged", at no point does Public Counsel challenge the validity of the \$36.3 million figure. In fact, Public Counsel recommends recovery of the deficiency. The only dispute is the time period over which such recovery should occur.

County Water has proposed a ten year phased in amortization of the \$36.3 million depreciation reserve deficiency. With a ten year amortization, County Water seeks to avoid a significant rate spike that could occur should the deficiency be recovered over a three to five year period. Moreover, County Water believes that any amortization longer than ten years would be inappropriate. County Water maintains that the deficiency is largely a result of increasing property removal costs and that while depreciation charges at any one time can be more or less than originally estimated, the \$36.3 million reserve deficiency is a significant impairment to its shareholders' original investment.

Staff agrees with County Water's proposed phased in ten year amortization of the reserve deficiency. Staff cites the impact of environmental and other regulatory mandates associated with the proper disposal of various types of water plant and the escalating cost of removal.

Public Counsel proposes two amortization periods for the recovery of the reserve deficiency. In direct testimony, Public Counsel states that the reserve deficiency should be amortized over a time frame based on County Water's composite depreciation rate. Because the composite depreciation rate is calculated based upon the average service life of the property, Public Counsel's position would effectively amortize the deficiency over the average service life which in the case of County Water is 39.4 years. Along with its proposal to amortize over the average service life of the assets, Public Counsel, in its rebuttal testimony, proposes an amortization based upon the remaining life of the assets in question. Public Counsel contends that using the composite depreciation rate effectively calculates to the same result as using remaining life.

The Commission finds that County Water's depreciation reserve deficiency should be recovered through a ten year phased in amortization as proposed by Staff and County Water. The ten year amortization will prevent capitalization once for retired property and again for new property, and prevents County Water from earning on capital which is not represented by undepreciated plant in service. It will in addition, ease the impact of the reserve deficiency on the original investment and mitigate the impact of plant removal costs.

In making its two recommendations, Public Counsel apparently assumes that average service life equals the average remaining life. Additionally, the record indicates that within its amortization proposals, Public Counsel failed to account for a variable in the depreciation rate equation, net salvage. Furthermore, Public Counsel's extended amortization would exacerbate intergenerational inequity. Though the ten year amortization would have some inequity as well, the record indicates that any shorter recovery period would result in an undesirable rate spike.

Alternatively, Public Counsel's proposals further distance those who carry the burden of the depreciation expense from those who receive the benefit of the service provided. Public Counsel's method to recover the deficiency would not make County Water whole for 39.4 years, by which many of those customers who enjoyed the service will no longer be customers of County Water and the cost burden will unnecessarily be passed on to County Water's future customer base. The scenario recommended by Public Counsel would exacerbate the intergenerational inequity that already exists.

The Commission finds that the proposal of County Water and Staff results in an appropriate amortization of the reserve deficiency while Public Counsel's proposals are flawed. Thus, the Commission finds that County Water's \$36.3 million depreciation reserve deficiency should be recovered through a ten year phased in amortization as proposed by County Water and Staff.

#### Lapsing Advances

This issue concerns Staff's adjustment to disallow depreciation expense associated with promoter advances that will eventually lapse into contributed plant. Advances represent funds collected from promoters/developers for reimbursement of certain plant that is placed in service. These advances are subject to refund over a defined period of time, as customers are added to the system. After a period of time, any amount not refunded to the developers "lapses" and is retained by the company and subsequently transferred to Contributions in Aid of Construction. Staff has disallowed the depreciation expense associated with those advances that will eventually lapse into Contributions in Aid of Construction.

County Water makes several arguments in opposition to the adoption of Staff's lapsed advance methodology, including that the

adjustment is a projection and not allowed in the context of historic test years; that the adjustment is not in the ratepayers best interest as it possibly could overstate rate base; and that tax savings associated with lapsed advances should inure solely to the benefit of the shareholder.

County Water criticizes Staff for allegedly using projections for lapsed advances to calculate its depreciation expense. The Commission finds County Water's characterization to be inaccurate. Staff has performed an analysis of historical data to identify that portion of already existing advances which will not be refunded and presently represents contributed capital. Staff has used an average of past percentages of lapsing advances to determine an appropriate normalization of test year depreciation expense. The Commission finds nothing prospective in nature about Staff's calculations and nothing improper about using this method within the historical test year model.

In contrast, County Water makes the assumption that no current advances will lapse into Contributions in Aid of Construction. In light of the historical percentage of lapsed advances, the Commission finds County Water's assumption to be inaccurate.

Another of County Water's criticisms is that with the possibility of understating depreciation, the ratepayers could pay a return on an overstated rate base. However, the Commission agrees with Staff that the possibility of this occurrence is minimal. The record indicates that Staff's adjustment is a conservative estimation of the amount of the advances that will lapse to Contributions in Aid of Construction. Only once in the last ten years would Staff's methodology have resulted in underdepreciation, and in that situation, in the amount of only \$30,895. Furthermore, County Water's position ignores the likelihood that some portion of advances will lapse to Contributions in Aid of Construction resulting in overstated depreciation expense to the ratepayer.

Finally, County Water argues that tax deductions associated with depreciation on plant supported by lapsed advances should solely benefit the shareholders. However, the Commission finds County Water's argument to be erroneous. The United States Tax Code treats advances in contributions as revenues and as an increase to taxable income. Any subsequent refunds of advances are treated as an expense and as a deduction to taxable income. In addition, the Tax Code permits a deduction for depreciation expense associated with plant supported by both advances and contributions. The Tax Code does not distinguish between plant supported by advances and plant supported by contributions. Staff has treated contributions and advances identically to the Tax Code. While advances and contributions received during the year were included as taxable income, depreciation expense associated with contributions and advances were deducted from the taxable income.

County Water would have the Commission recognize a distinction between plant supported by lapsed advances and contributed plant. County Water takes the position that plant supported by lapsed advances is different than that supported by contributions and, therefore, the depreciation expense income tax deduction associated with such lapsed advances should inure solely to the benefit of the shareholder.

County Water apparently assumes that the shareholders provided the funds associated with such plant and that they should receive all tax benefits. Such assumption is incorrect. As previously stated, advances are paid by promoters/developers.

County Water further ignores the Commission's general approval of flow-through treatment for the depreciation associated with basis differences. Despite County Water's contentions, Staff's adjustment is not one-sided. Staff's revenue requirement calculation recognizes the portion of advances which represent contributions in the same manner as County

Water treats other contributions. Further, Staff has recognized both positive and negative deferred taxes associated with advances and refunds. Furthermore, Staff has disallowed depreciation expense and recognized its accumulated disallowances in past cases through an increase to rate base. In this manner Staff is recognizing both negative and positive effects of advances.

The Commission finds that Staff's adjustment for lapsing advances reflects good accounting practices and is the proper adjustment. Staff's treatment serves to prevent the ratepayer from having to supply funds to County Water for recovery of depreciation expense on plant in service that is supported by contributed capital. In addition, since the contributors of the capital are not responsible for the cost of removal associated with Contributions in Aid of Construction, Staff's methodology allows County Water to recover the removal expenses related to this plant. The Commission further finds that Staff's proposed adjustment will more accurately reflect County Water's actual depreciation expense regarding these accounts and, as a result, will better reflect County Water's need to recover its expense through rates. Thus, the Commission finds that Staff's adjustment for lapsing advances should be approved.

#### Unamortized Flood Deferral

In Case No. WO-94-195, the Commission authorized the creation of an Account 186 regulatory asset to accumulate County Water's costs associated with damage from the flood of 1993 and ordered a five year amortization of such costs beginning on January 1, 1994. Each of the parties have included in its cost of service twelve months of the five year amortization, but there is disagreement as to how the unamortized portion should be treated. Whereas County Water has included the unamortized portion in rate base, Staff contends that it is inappropriate to do so.

Based upon the record in this case, the Commission agrees with Staff that it would be inappropriate to include the unamortized portion of County Water's flood costs in rate base. County Water is attempting to amortize the expense associated with the damage caused by the 1993 flood over a period of five years and simultaneously include in rate base a portion of that expense. County Water may not capitalize an item in rate base and at the same time recover the item as an expense from the ratepayers, particularly where the item claimed is retrospective in nature such as flood expense. In addition, inclusion of the unamortized expense would serve to shield the shareholders from the risk of such a natural disaster while imposing such a risk entirely on ratepayers. The cost incurred as a result of the flood of 1993 was a natural disaster, an "act of God", and the expenditures were not intended to produce any benefit other than restoring the system to its pre-flood operating condition. The burden of "acts of God" should not have to be borne solely by the ratepayers. In the case of a natural disaster, the shareholders should not be completely shielded from the risk, but should share in the cost with the ratepayer. Allowing County Water to recover the cost through an amortization, without the inclusion of the unamortized balance in rate base, achieves that sharing. Thus, the Commission finds that the unamortized portion of the expenses associated with damage from the flood of 1993 should not be included in rate base.

#### Phantom Stock

County Water participates in the Phantom Stock plan sponsored by its corporate parent and sole shareholder, Continental Water Company (Continental). Phantom Stock is similar to a deferred compensation plan and provides monetary awards to certain key employees. The total value of the awards given in any year is based on the total consolidated earnings for Continental for the preceding calendar year and is broken up into

units. An awards committee determines the number of units each participant receives. The awards mature ten years after the date of the award and are then paid to the participants. The maturity value is the initial value of the award plus an amount equal to the earnings per share of Continental in each of the ten years. The plan further provides for one time lump sum payments to be made to a participant upon attaining the age of seventy or to a beneficiary upon death. The maturity value of the lump sum payments is the initial value plus the earnings per share to date.

There are actually two issues concerning Phantom Stock presented for Commission consideration. First, the Commission must decide whether the current year Phantom Stock maturities of those participants who are eligible for lump sum payments should be included in the calculation of regular Phantom Stock maturities or considered as a lump sum payment. Second, the Commission must decide whether 1995 one time lump sum Phantom Stock payments should be normalized at an ongoing level of expense or deferred and amortized over a three year period.

County Water proposes that the current year Phantom Stock maturities of those participants who are eligible for lump sum payments be included in the calculation of regular Phantom Stock maturities. Staff contends that the best available data should be used for both types of Phantom Stock payments. Staff considers the actual 1995 maturities as representative of the current ongoing level of expense and argues that they should be considered a lump sum payment.

The evidence suggests that current year Phantom Stock maturities should be considered a lump sum payment. The record indicates that County Water is not strongly opposed to removing those maturity values associated with age seventy distributions and normalizing such payments with lump sum payments. County Water suggests that these payments be treated in a manner consistent with its proposed treatment of other lump

sum payments. County Water's suggestion is consistent with Staff's position. In addition, County Water's inclusion of what would have been the current year maturities in one check with the rest of the lump sum payments is further evidence that these payments should be considered as a lump sum payment. Thus, the Commission finds that the current year Phantom Stock maturities of those participants who are eligible for lump sum payments should be considered a lump sum payment.

As with current year Phantom Stock maturities, Staff argues that the best available data should be used to determine the current ongoing level of expense for lump sum Phantom Stock payments. Staff proposes that a normalized level of expense should be calculated for lump sum payments. Staff contends that the actual 1995 lump sum payments were abnormally high and do not represent a normal, ongoing expense. County Water estimates that no lump sum payments will be paid out in 1996, 1997 or 1998. Staff calculated a ten year average using the actual lump sum payments from 1991 to 1995 and estimated payments from 1996 to 2000.

County Water disagrees with Staff's treatment of lump sum distributions and maintains that Staff is using projected data and is being inconsistent with regard to other issues. County Water's proposal is to defer and amortize the lump sum payments associated with Phantom Stock over three years.

The Commission agrees with Staff that a normalized level of expense should be calculated for lump sum payments. The Commission is unpersuaded by County Water's arguments on this issue. The estimated payments utilized in the ten year average used known information. The number of units awarded to each participant and the current value of each unit is determined as of the date of the award. The only remaining calculation is to add the consolidated earnings per share to the value of each unit of Phantom Stock. In addition, Staff used an average to

determine a normalized level that best represents ongoing cost and not to project future expense. Had Staff used a projection of future payments, the level would have been set at zero because County Water estimates that no payments will be made in 1996, 1997 or 1998.

Furthermore, County Water's proposal is contrary to the Uniform System of Accounts (USOA) and Commission precedent in that these lump sum payments are recurring items. Requests to defer costs from one period to another are usually accounted for as AAOs. This characterization occurs because what is proposed is the booking of certain costs in Account 186 under the USOA rather than a traditional account for the type of costs incurred. The booking of costs in Account 186 creates an asset rather than a liability and so improves the financial picture of the company for the period when the costs were booked. Re: Missouri Public Service, 1 Mo. P.S.C. 3d 200, 202 (1992).

The deferral of costs from one period to another period for the development of a revenue requirement violates the traditional method of setting rates. Accordingly, the deferral of costs from one period to a subsequent rate case should be allowed only on a limited basis. Id. at 205. This limited basis is when events occur during a period which are extraordinary, unusual and unique, and not recurring. These types of costs have traditionally been associated with extraordinary losses resulting from storm damages or outages, conversions or cancellations. Id. at 205.

The decision to defer costs associated with an event turns on whether the event is in fact extraordinary and nonrecurring. Nowhere in the record has County Water alleged that lump sum Phantom Stock payments will not be recurring. In fact, the record shows that Phantom Stock lump sum payments are not extraordinary and nonrecurring. Thus, the Commission finds that County Water's 1995 lump sum Phantom Stock payments should be normalized at an ongoing level of expense as proposed by Staff.

### WUSCO Service Agreement

Continental, County Water's parent company, formed a separate company in 1990 to perform various management services for each of its four subsidiaries. This new company, WUSCO, performs such duties as maintenance of a bank line of credit, negotiation and placement of long-term debt, income tax research, assistance with employee benefit planning and compliance, rate case review and assistance, data processing service, environmental compliance, long range planning, and other general assistance for County Water and its sister companies.

WUSCO keeps monthly time sheets to track any hours worked or associated costs that can be identified exclusively with one of the operating companies. These direct expenses are charged directly to that operating company. Additionally, the time sheets record nonchargeable time and designate all remaining time as allocable. The allocable time and associated costs are distributed among the operating companies based on the number of customers. During the test year, WUSCO employees spent approximately 60% of their time working exclusively with one of the operating companies. Of the remaining 40%, approximately 28% of the hours worked is designated as allocable time. The issue presented for Commission consideration is whether the allocable costs associated with WUSCO should be divided equally among the four sister utility companies or on a per customer basis.

Continental uses customer counts to distribute the allocable time and associated costs among the four subsidiary companies while Staff's position is that the allocable costs should be divided equally among the four subsidiaries. Staff maintains that the allocable costs are not specifically assignable to any one water utility company, but that these types of duties and functions would be necessary for any company regardless

of size. County Water contends that distribution of the allocable costs on anything but a per customer basis would result in unfair treatment.

The record indicates that County Water considers the following functions as allocable:

**Environmental** - Establishing guidelines and standards that all companies must follow with regard to environmental issues;

**Financial** - General financial matters which pertain to all operating companies. For example, generic income tax situations, general benefit situations, financial standards, establishing budgeting and reporting standards, and generic accounting issues;

**Engineering and Operations** - Establishing general design and construction standards, establishing capital expenditure justification standards, establishing standards of operation, and establishing budgeting and reporting standards.

The Commission understands both parties' positions and acknowledges the propriety of both, but makes no finding as to which position is better or preferable. Both are accepted accounting methods for allocating such costs as those associated with WUSCO. The use of either method would not be imprudent.

In this case, County Water has negotiated the use of customer counts to allocate the costs associated with WUSCO. The Commission finds that the use of this method is not imprudent. Thus, the Commission finds that the level of expense proposed by County Water on this issue is appropriate.

#### Customer Awareness Program

The issue presented for Commission consideration is whether County Water should be allowed a \$144,000 adjustment to its cost of service for its Customer Awareness Program (CAP). County Water argues that the expenses of Fleischman-Hillard, the public relations firm retained by County Water, should be a recoverable operating expense because unless the public understands and accepts the necessity and desirability of the infrastructure program and its unavoidable rate costs, negative reaction

will jeopardize the program's feasibility. Staff contends the \$144,000 adjustment for County Water's CAP should not be allowed because competitive bids were not taken in selecting a public relations firm; County Water already has a mechanism available to distribute information to every customer at little or no extra cost through the new paper billing format; and the content of the material to be presented by the public relations firm is designed to bolster County Water's corporate image and is a form of institutional advertising. Public Counsel agrees with Staff's position that the CAP is institutional advertising.

The Commission has previously delineated five types of advertisement for determining proper expenditures: general, safety, promotional, institutional, and political. Re: Kansas City Power & Light Company, 28 Mo. P.S.C. (N.S.) 228, 278 (1986); Re: Missouri Cities Water Company, Case No. WR-92-207, Report and Order, January 8, 1993, Page 47. The Commission has further determined that institutional and political advertising should never be included in a utility's revenue requirement. Re: Missouri Cities Water Company, at Page 47.

General advertising has been defined by the Commission as "informational advertising that is useful in the provision of adequate service." Re: Kansas City Power & Light Company, at 269. The Commission has defined safety advertising as advertising which conveys the ways to safely use a company's service and to avoid accidents. Re: Kansas City Power & Light Company, at 270.

County Water contends that the CAP represents general or public safety advertising. However, the record includes very little evidence of the actual content of the CAP. The small amount of direct evidence available does not reflect primarily general or safety advertising.

The information and documents prepared by Fleischman-Hillard which are in the record go beyond providing general information associated

with replacing mains. The evidence shows the program's information provides several general reasons for an increase in rates besides the upcoming infrastructure replacement program and emphasizes County Water's history of quality. The record indicates that the CAP is not merely informational, but rather designed to bolster County Water's image to its customers. General information regarding the infrastructure replacement program would communicate to the customer when and where temporary service interruptions will occur. It is not essential to the provision of adequate service to remind customers of County Water's past service record. The Commission finds the evidence in the record is insufficient to show that the CAP primarily constitutes general informational advertising.

Likewise, the record concerning the CAP does not reflect safety advertising. The evidence provided in the record shows that the program provides no information on safety concerns and fails to identify a single precaution to be taken in response to the infrastructure program. County Water has not identified any public safety concerns which are exclusive to the infrastructure program justifying a separate advertising program. The Commission finds the evidence in the record is insufficient to show that the CAP primarily constitutes safety advertising.

The Commission recognizes a need to educate the public on the necessity of the infrastructure program and on the details of its implementation. However, the evidence produced in the record does not show the CAP as an attempt to so educate the public. The Commission finds that the evidence produced in the record is insufficient to show County Water's CAP constitutes general or safety advertising. Thus, the Commission finds that County Water's proposed \$144,000 adjustment to its cost of service for the CAP should be disallowed.

### Five Year Average Overtime

This issue involves whether County Water's test year amount or Staff's adjusted five year average should be used to normalize regular nonunion overtime, regular clerical union overtime, and regular physical union overtime. Staff contends the use of an adjusted five year average for overtime is more reflective of ongoing expense levels because of the abnormally high level of overtime during the test year. County Water, though, recommends test year levels of overtime expenses and maintains that Staff's overtime adjustment method differs from the methods Staff has used in prior cases, is arbitrary, and is designed to get County Water the lowest possible return.

The Commission's objective is to develop rates based on a normal ongoing level of expense. In each case, an evaluation must be made to determine whether the test year or an averaging method will best reflect an ongoing level of overtime expense. If the analysis indicates a definite trend, whether it be increasing or decreasing, the Commission typically utilizes the most recent experience. But if the expense levels are fluctuating, an average is normally used.

In this case, the test year level of overtime best reflects the ongoing level of that expense. County Water's overtime hours during the period of 1991 through 1994 indicates a definite upward trend, moving from 85,327 hours in 1991 to 106,387 hours in 1994.

The Commission finds that in this case the test year level of overtime best reflects the ongoing level of overtime expense. Thus, the Commission finds that the test year level of overtime expense proposed by County Water should be utilized in this case.

### Rate J Revenue Normalization

In Case No. WR-88-5, the Commission ordered that County Water's rate J customers be divided into "large" and "other" groups based on

patterns of actual usage. The Commission further determined that "it is more reasonable to normalize the usage of the large category by means of the average of the last four years." Re: St. Louis County Water Company, 29 Mo. P.S.C. (N.S.) 425, 451 (1989). The issue presented for Commission consideration is whether usage of the large rate J customers should again be normalized using a four year average or set at test year levels.

In this case, Staff has followed the normalization method directed by the Commission in Case No. WR-88-5. The rate J user classification was separated into "large" and "other" categories based on patterns of actual usage to calculate a normalized level of sales. Staff normalized the usage of the "large" category by means of an average of the last four years. County Water argues that it is now appropriate to use test year figures for calculating rate J revenues for "large" users in view of declining usage in that category of over 27% since 1988.

The Commission understands Staff's adherence to the method used in Case No. WR-88-5. However, in this case, the test year level of usage best reflects the relatively stable ongoing level of usage by "large" rate J customers during the period of 1992 through 1994. Further, while most of the 27% decrease occurred prior to 1991 and the declining usage appears to be leveling off, the usage of "large" rate J customers during the period of 1991 through 1994 still indicates a definite downward trend, moving from 11,491,000 gallons per day in 1991 to 10,085,000 gallons per day in 1994, a 12% decrease.

The Commission finds that in this case the test year level of usage best reflects the ongoing level of usage by "large" rate J customers. Thus, the Commission finds that the test year level of usage by "large" rate J customers proposed by County Water should be utilized in this case.

### Income Tax Offset/Cash Working Capital

The question in this issue is how to calculate the amount of income tax to be recognized within rate base as an offset to cash working capital. Staff is proposing to use the amount of income taxes calculated at the low end of the rate of return which includes the income taxes associated with Staff's recommended rate increase in this case. The amount of income tax would be adjusted based on the outcome of the issues in this case. In contrast, County Water proposes to include income taxes based upon the adjusted test year level prior to any rate increase. County Water would not reflect the income tax aspect of any rate increase granted in this case in cash working capital contending that inclusion of that amount is an inappropriate adjustment beyond the test year. Specifically, County Water believes Staff's position on this issue is inconsistent with its opposition to the use of projected plant balances beyond the operation of law date to set rates.

The Commission finds Staff's proposals to be reasonable and County Water's argument to be fallacious. The income tax offset calculation results from Staff's annualized revenue, expense, and rate base amounts used in its case which do not reflect any projected revenue requirement component amounts. Whenever a revenue deficiency is found after examination of test year operating results in a rate proceeding, the additional revenues to be granted by the Commission must be calculated including the income taxes payable on them or the utility will not derive the full benefit of the rate increase. It follows that appropriate matching of revenue expense and rate base in a rate proceeding requires that the cash working capital calculation reflect the rate base impact of the additional income taxes granted the utility in rates by the Commission. Because both the revenue deficiency and the additional income taxes associated with it are related to test year operations, as adjusted, it is

nonsensical of County Water to claim that reflecting the income tax consequences of a rate increase in cash working capital constitutes going beyond the test year or is comparable to the inclusion of projected plant balances in rate base.

Staff's proposal is not dependent on or consistent with the use of future plant beyond the operation of law date. The income tax amount is matched to Staff's annualized revenue requirement calculation as determined on the historic test year basis. The Commission has traditionally used the method proposed by Staff for calculating the income tax offset in rate base. This method does not distort the matching principle and will more accurately reflect County Water's true cost of service.

While the inclusion of costs is generally stopped at the true-up cut-off date or at the end of the test year update period, the Commission has at times accepted isolated adjustments such as government mandates. A postage stamp increase is an example of when the Commission has come closer to the operation of law date to reflect such an item in the case. There is not a problem with matching for these types of costs because they do not affect the other elements of cost of service.

The income tax issue is similar to that of a postage stamp increase. Both are government mandates and neither provides a concern with matching in that they do not affect the other elements of cost of service. The Commission is of the opinion that the government mandate concerning income taxes should be recognized in setting rates. Such recognition will not distort the matching principle and will more accurately reflect County Water's true cost of service. Thus, the Commission finds that Staff's proposal to calculate the income tax offset in this case is appropriate.

### Capitalized Interest

This issue concerns the amount of County Water's tax deductible interest expense. In its calculation of income taxes, Staff included an interest expense deduction equal to the interest expense provided by the ratepayer through the rate of return calculation. This method has been known as "interest synchronization". County Water's position is that the portion of the interest expense deduction associated with plant under construction must be in fact capitalized and is therefore not available as a tax deduction. County Water's position recognizes that a portion of the interest was associated with debt used to finance construction. County Water asserts that a reduction is required in the amount of interest expense used as a deduction in the calculation of income taxes for regulatory purposes.

Interest synchronization provides a tax deduction which is consistent with the amount of interest included in rates through a rate of return times rate base calculation. Interest synchronization has been adopted by the Commission in several previous decisions. For example, See: Missouri-American Water Company, Case No. WR-93-212, Report and Order, November 18, 1993. As the Commission has noted in previous cases, any other method would result in an inequity to the ratepayer.

With the synchronization method, the interest expense is calculated by multiplying the rate base by the weighted cost of debt included in the capital structure. This method assures that the amount of interest expense used in the calculation of income tax expense for ratemaking purposes equals the interest expense the ratepayer is required to provide in rates. Since the revenue requirement is based on a rate of return computation, the interest synchronization method allows an interest deduction consistent with the rate of return computation which is applied to rate base. This method is utilized to match or synchronize the interest

rate charged to the ratepayers with the interest used in the income tax calculation.

County Water has capitalized interest associated with various plant projects. Both Staff and County Water have included this interest as a component of the plant and service balances recognized in rate base. It is not Staff's position that such capitalized interest should be recognized as a tax deduction. Staff's calculation only addresses plant which is in service. Plant which is under construction has not been included in the rate base used for Staff's calculation of interest expense. Staff's calculation of interest expense attempts to maintain the synchronization between income taxes and the authorized return on rate base. Failing to synchronize the interest expense included in the rate of return with the level used in the calculation of income taxes would have the effect of providing a higher authorized return on rate base.

County Water concedes the need to recognize the tax deductibility of the interest component of the rate of return. In its own proposed capital structure and rate of return, County Water shows only the equity portion of the rate of return being factored for income taxes and not the debt portion. Although County Water has proposed a rate of return consisting of equity and tax deductible income, it seeks to recognize something else for the calculation of income taxes. County Water seeks to devise a capital structure and a rate of return which includes an additional component characterized as nondeductible debt. Such a capital structure is unheard of in the regulatory process and would place the calculation of income taxes out of synchronization with the authorized rate of return.

The Commission finds that any method other than interest synchronization would result in an inequity to the ratepayer because of the tax benefit accorded County Water that results from the amount of interest

included in rates. Thus, the Commission finds that Staff's calculation of County Water's tax deductible interest expense is appropriate and should be utilized.

**True-up/Union Electric Refund**

On May 18, 1995, the Commission directed that a true-up audit be conducted in this case with the true-up accounting schedules to be filed on or before August 30, 1995, and a true-up hearing to be held on September 1, 1995. The Commission additionally stated that any changes from the test year must be known and measurable, must be auditable, and must not violate the relationship of revenues, rate base, and expenses.

A true-up hearing was held as scheduled. Staff presented its true-up accounting schedules containing changes to the rate components in this case through July 31, 1995. Public Counsel requested that the Commission direct County Water to refund to ratepayers the credit of \$124,999.77 it received from Union Electric Company (UE) as a result of the Commission's recent order in Case No. ER-95-411. Public Counsel proposed that the refund take place over the twelve months subsequent to the effective date of this Report and Order.

County Water presented no true-up data but stated that it has already filed an application for an AAO to refund the UE credit to the ratepayers. County Water's AAO application has been docketed as Case No. WO-96-59. County Water stated that it has requested an AAO in order to conform to applicable accounting standards and not raise additional issues during the true-up proceeding. County Water asserted that Generally Accepted Accounting Principals (GAAP) requires that an AAO be issued because the power credit is a one time occurrence and no regulatory precedent exists to record a regulatory liability for external reporting purposes.

The Commission's order in Case No. ER-95-411 resulting in the UE credit was issued on July 21, 1995. In August, 1995, County Water received a credit of \$124,999.77 from UE. There is no doubt that the transaction occurred and the amount involved is known and measurable. Thus, the Commission finds that the power credit received by County Water from UE is a proper adjustment to be included in this case through the true-up process.

The Commission further finds that County Water should refund the UE power credit to its ratepayers through a one time credit on their water bills. The Commission finds this method to be the simplest, most cost-effective way to refund the UE power credit. Allowing County Water to retain the refunds for an extended period of time would only result in ratepayers providing cost free capital to County Water.

No opposition was voiced to Staff's true-up of the rate components in this case. The Commission finds that Staff's true-ups, some of which have been specifically referenced in this Report and Order, are known and measurable changes occurring beyond the test year as updated and do not violate the relationship of revenues, rate base, and expenses.

#### **Rate of Return**

Compensation to a company and its shareholders is expressed in terms of a percentage rate of return. Determining a rate of return entails the estimation of the cost of common equity and combination of that number with the costs for debt and preferred stock as well as the relative proportion of these elements comprising capital structure. In this case, only the return on equity is in dispute. The 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 a company to raise adequate equity capital.

In calculating the return on equity, Staff presented the continuous growth form of the discounted cash flow (DCF) model. This model is a market-based approach relying on the assumption that common stock prices are dependent upon expected cash flows and dividends received through gains or losses resulting from stock price fluctuations. This 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 presented in the record as an algebraic formula. This formula is adjusted to reflect the comparative risk involved in potential equity investment.

Public Counsel similarly used the continuous growth DCF model, but obtained a different result from Staff. County Water, though, derived its proposed return on equity using an adjusted average of the DCF, Capital Asset Pricing Model (CAPM), and risk premium methods.

Based upon its use of an adjusted average of the DCF, CAPM, and risk premium methods, County Water initially proposed a return on equity of 13.5%. In its rebuttal testimony, County Water reduced its recommended return on equity to 12.75% because of changing economic conditions.

Because County Water does not have publicly traded stock, within its analysis, Staff used a comparison group of publicly traded companies with similar business and financial risk to perform costing methodologies and evaluate the market risk associated with County Water compared to the comparison group. Staff's DCF cost of equity estimate produced a range of 10.60 to 11.60% return on equity with a mid-point of 11.10%. Staff shifted its recommended return on equity to the upper end of that range, 11.10 to 11.60%, to account for increased market risk to County Water over the comparison group by virtue of County Water's below industry average pre-tax interest coverage ratio during the last two years.

While also using the DCF method, Public Counsel recommends a return on equity of 10.75%. Public Counsel checked the reasonableness of

its DCF calculation by using a variety of other methods, including a CAPM calculation. Public Counsel made no adjustment to its DCF cost of equity estimate, and criticized Staff's adjustment contending that a DCF calculation may by itself yield an appropriate return on equity.

Based upon the record in this case, the Commission will adopt the analysis and resultant return on equity range as proposed by Staff. Upon review of the testimony of the parties in regard to the details of the analytical methods used, the Commission finds Staff's analysis to be thorough, complete, accurately based on the 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 Staff has proven to be substantially more reliable than any other method or combination of methods presented in testimony. In addition, Staff's analysis reasonably considered various risk and liability factors which exist for water companies in general and for County Water specifically.

Thus, the Commission finds that the appropriate return on equity for County Water in this case is within the range of 11.10 to 11.60%. Furthermore, in light of County Water's unique circumstances and market risk, the Commission finds that 11.60%, the upper end of the range, is the most just and reasonable return on equity for County Water.

#### Revenue Requirement

County Water claims the evidence establishes its revenue requirement as \$8,856,222. Staff asserts the record shows County Water's revenue requirement to be \$1,663,351. Public Counsel argues a revenue increase of \$181,298 is warranted by the evidence.

The completed scenario filed in this case (Exhibit 61) provides the revenue effect of the issues decided in this proceeding. The chart

below begins with the revenue requirement recommended by County Water and that amount is adjusted based upon the Commission's decision on each issue.

	<b>Revenue Requirement</b>
County Water's Request	<u>11,930,354</u>
Settled Items (through true-up)	<u>3,074,132</u>
County Water's Revised Recommendation	<u>8,856,222</u>

ISSUE	REVENUE EFFECT
1. Plant Levels	- 2,472,000
2. Main Incident Maintenance	- 96,210
3. Amortization of Reserve Deficiency	0
4. Lapsing Advances	- 252,978
5. Unamortized Flood Deferral	- 73,921
6. Phantom Stock	- 66,741
7. WUSCO Service Agreement	0
8. Customer Awareness Program	- 144,000
9. Five Year Average Overtime	0
10: Rate J Revenue	0
11. Income Tax Offset	- 59,574
12. Capitalized Interest	- 45,899
13. Union Electric Refund	0
14. Rate of Return	- 1,263,818
<b>REVENUE REQUIREMENT</b>	4,380,981
<b>TAX EFFECT</b>	(1,445,747)
<b>TOTAL REVENUE REQUIREMENT</b>	<b>2,935,234</b>

Based upon the record as a whole and the Commission's findings on the contested issues in this case, the Commission finds that a revenue requirement for County Water of \$2,935,234 is just and reasonable. Thus,

the Commission finds that County Water should file tariff sheets designed to produce an increase in its revenues of \$2,935,234.

**Conclusions of Law**

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

The Commission has jurisdiction over this matter pursuant to Chapters 386 and 393, RSMo 1994. The Commission must consider all matters which come before it which have a bearing on the determination of the price to be charged for utility service.

The ultimate issue to be determined by the Commission is the establishment of just and reasonable rates. Section 393.150, RSMo 1994 places upon County Water the burden of proof to show the proposed increase in rates is just and reasonable.

Based upon the Commission's findings in this case, the Commission concludes that the proposed tariff sheets filed by County Water on October 31, 1994, are not just and reasonable and should be rejected. Furthermore, the Commission concludes that an increase in County Water's revenues of \$2,935,234 is just and reasonable. Thus, the Commission concludes that County Water should file tariff sheets designed to produce an increase in its revenues of \$2,935,234.

**IT IS THEREFORE ORDERED:**

1. That the tariff sheets filed by St. Louis County Water Company on October 31, 1994, reflecting an increase in its annual revenues of approximately \$11,930,354 are hereby rejected.

2. That St. Louis County Water Company is hereby authorized to file revised tariff sheets and rate schedules designed to produce an increase in its annual revenues of \$2,935,234, consistent with this Report and Order, to become effective for service on and after September 30, 1995.

3. That St. Louis County Water Company is hereby granted authority to defer and book to Account 186 the required carrying charges and depreciation expense associated with its infrastructure replacement program beginning September 30, 1995 and continuing through September 30, 1997.

4. That the stipulations agreed to by the parties on the issues of rate design, depreciation, and capitalization are hereby approved and adopted.

5. That late-filed Exhibit 61 is hereby received into the record.

6. That this Report and Order shall become effective on September 30, 1995.

BY THE COMMISSION



David L. Rauch  
Executive Secretary

(S E A L)

Mueller, Chm., McClure, Kincheloe,  
Crumpton and Drainer, CC., Concur  
and certify compliance with the  
provisions of Section 536.080,  
RSMo 1994.

Dated at Jefferson City, Missouri,  
on this 19th day of September, 1995.

ST. LOUIS COUNTY WATER COMPANY  
SUMMARY OF ANNUAL AVERAGE LIFE DEPRECIATION RATES  
CASE NO. WR-95-145

Account Number	DESCRIPTION	Curve Type	% Net Salvage	Average Life	Average Life Rate
	<u>Intangible Plant</u>				
301	Organization				
302	Franchises & Consents				
	<u>Source of Supply Plant</u>				
310	Land & Rights				
311	Structures & Improvements	R3-45	-35	45.0	3.00%
316.1	Supply Mains - North Plant	SQ-100	-25	T/D	3.00%
316.2	Supply Mains - Central Plant	L4-45	-25	T/D	3.14%
316.3	Supply Mains - South Plant	L 2-150	-25	T/D	2.23%
316.4	Supply Mains - Meramec Plant	L 2-150	-25	T/D	2.31%
	<u>Pumping Plant</u>				
320	Land & Land Rights				0.00%
321.1	Structures & Improvements-Plant	R3-75	-46	75.0	1.95%
321.2	Structures & Improvements-Boosters	R2-75	-36	75.0	1.81%
325.1	Electric Pumping Equipment-Prior 1-1-46	Fully Depreciated			
325.2	Electric Pumping Equipment-Post 1-1-46	R1.5-40	-12	40.0	2.80%
325.3	Electric Pumping Equipment-Boosters	L 1-24	-4	24.0	4.33%
326.1	Diesel Pumping (Stratmann & Lackland)	Fully Depreciated			
326.2	Diesel Pumping (Central Plant)	SQ-100	0	28.6	3.50%
	<u>Water Treatment</u>				
330	Land & Land Rights				
331.1	Structures & Improvements - North Plant	L 2-150	-45	T/D	2.66%
331.2	Structures & Improvements - Central 1 & 2	R 3-70	-45	T/D	4.64%
331.3	Structures & Improvements - Central 3	L 3-100	-45	T/D	3.06%
331.4	Structures & Improvements - South Plant	L 2-150	-45	T/D	3.42%
331.5	Structures & Improvements - Meramec Plant	L 2-150	-45	T/D	2.74%
332.1	Water Treatment Equipment - North Plant	R 2-50	-22	T/D	3.34%
332.2	Water Treatment Equipment - Central 1&2	R 0.5-65	-22	T/D	3.50%
332.3	Water Treatment Equipment - Central 3	R 2-40	-22	T/D	3.47%
332.4	Water Treatment Equipment - South Plant	R 2-50	-22	T/D	3.43%
332.5	Water Treatment Equipment - Meramec Plant	R 3-40	-22	T/D	3.09%

T/D - Termination date established for this group of plant in service

ST. LOUIS COUNTY WATER COMPANY  
SUMMARY OF ANNUAL AVERAGE LIFE DEPRECIATION RATES  
CASE NO. WR-95-145

Account Number	DESCRIPTION	Curve Type	% Net Salvage	Average Life	Average Life Rate
<u>Transmission &amp; Distribution</u>					
340	Land & Land Rights				
341	Structures & Improvements	R4-30	-18	30.0	3.93%
342.11	Dist. Reservoirs & Standpipes (ground)	S1.5-45	-24	45.0	2.76%
342.12	Dist. Reservoirs & Standpipes (elevated)	S0.5-55	-24	55.0	2.25%
343.11	Transmission Mains - Ductile (Wrap & Unwrap)	L0.5-80	-2	80.0	1.28%
343.12	Transmission Mains - Lock Joint	R1-125	-410	125.0	4.08%
343.13	Transmission Mains - Cast Iron	L1.5-95	-13	95.0	1.19%
343.21	Distr. Mains - Cast Iron <=10" (1900-1928)	L 2 -155	-314	155.0	2.67%
343.22	Distr. Mians - Cast Iron <=10" (1929-1956)	R 3-80	-154	80.0	3.18%
343.23	Distr. Mains - Cast Iron <=10" (1957-1993)	R 3-85	-70	85.0	2.00%
343.24	Distr. Mains - Asbestos Cement	R 2-90	-185	90.0	3.17%
343.25	Distr. Mains - Duct/Pltc (Wrap & Unwrap) <=10"	L 2-45	-21	45.0	2.69%
343.26	Distr. Mains - 12" Ductile Iron (Wrap & Unwrap)	L 0.5-50	-9	50.0	2.18%
343.27	Distr. Mains 12" Cast Iron	R1.5-105	-21	105.0	1.15%
343.03	Distr. Mains-Galv	L1-43	-15	44.1	2.61%
345	Services	R3-55	-15	55.5	2.07%
346.1	Meters	S4-50	22	50.0	1.56%
346.2	Meters-ARB Equipment	SQ-20	0	20.0	5.00%
347.1	Meter Installation	S4-50	0	50.0	2.00%
347.2	Meter Installations-ARB Equipment	SQ-20	0	20.0	5.00%
348	Fire Hydrants	R2-60	-52	60.0	2.53%
<u>General Plant</u>					
390	Structures & Improvements	S2-50	0	50.0	2.00%
391.11	Office Furniture	SC-45	3	45.0	2.16%
391.12	Office Equipment	L1-17	1	17.0	5.86%
392.01	Transportation Equipment-Autos	R4-3.5	37	3.5	17.98%
392.02	Transportation Equipment-Trucks	L1.5-7	17	7.0	11.86%
393	Stores Equipment	L1-33	0	33.0	3.03%
394.1	Shop Equipment	L0-25	54	25.0	6.16%
394.2	Tools	L0.5-14	4	14.0	6.86%
395.1	Laboratory Furniture	R5-39	0	39.0	2.56%
395.2	Laboratory Equipment	L0.5-19	-1	19.0	5.32%
396	Power Operated Equipment				***
397	Communication Equipment	L2-16	-2	16.0	6.38%
398	Miscellaneous Equipment	L1-30	0	30.0	3.33%
399	Other Tangible Property				4.75%

\*\*\* - To be determined annually based on equipment hours of use.