

**STATE OF MISSOURI  
PUBLIC SERVICE COMMISSION  
JEFFERSON CITY  
February 13, 2001**

**CASE NO: WO-98-223**

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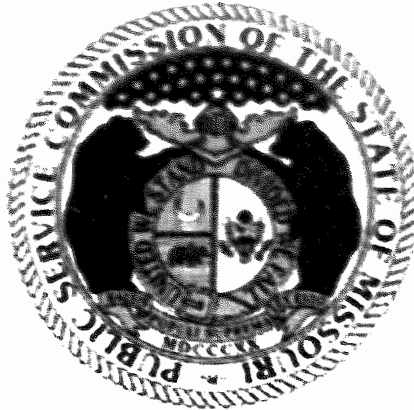
**Enclosed find certified copy of a REPORT AND ORDER in the above-numbered case(s).**

**Sincerely,**



**Dale Hardy Roberts  
Secretary/Chief Regulatory Law Judge**

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



In the Matter of the Consideration of an )  
Accounting Authority Order Designed to Accrue )  
Infrastructure Replacement Costs for St. Louis )  
County Water Company. )

**Case No. WO-98-223**

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**REPORT AND ORDER**

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**Issue Date:** February 13, 2001

**Effective Date:** February 23, 2001

# BEFORE THE PUBLIC SERVICE COMMISSION

## OF THE STATE OF MISSOURI

In the Matter of the Consideration of an Accounting Authority Order Designed to Accrue Infrastructure Replacement Costs for St. Louis County Water Company. ) Case No. WO-98-223

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### APPEARANCES

**Richard T. Ciottone, Jr.**, Senior 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.

**W.R. England, III**, and **Dean L. Cooper**, Attorneys at Law, Brydon, Swearngen & England, P.C., 312 East Capital Avenue, Post Office Box 456, Jefferson City, Missouri 65102, for St. Louis County Water Company.<sup>1</sup>

**John B. Coffman**, Deputy 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.

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<sup>1</sup> Mr. England and Mr. Cooper entered their appearances on November 2, 1999, as additional counsel for Company.

William E. Haas, Deputy General Counsel, Missouri Public Service Commission, Post Office Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

**REGULATORY LAW JUDGES:**

Nancy Dippell, Senior, and Kevin A. Thompson, Deputy Chief.<sup>2</sup>

**REPORT AND ORDER**

**Procedural History**

This case was established on December 4, 1997, as a "spin-off docket" by the Report and Order issued by the Commission in Case No. WR-97-382, St. Louis County Water Company's (Company) general rate case. That case was resolved by a Unanimous Stipulation and Agreement, filed on October 6, 1997. In the rate case, Company sought to "be allowed to accrue infrastructure replacement costs in an accounting authority order (AAO), as initially authorized in Case No. WR-95-145[.]" However, the Staff of the Missouri Public Service Commission (Staff) and the Office of the Public Counsel (Public Counsel) were unwilling to agree to the AAO; therefore, that issue was spun off into this separate case and the rate case was settled by agreement.

On February 25, 1998, Staff moved for the establishment of a procedural schedule. On March 30, 1998, Public Counsel filed Direct Testimony; Company and Staff filed Direct Testimony the following day. The Commission adopted a procedural schedule by order issued on April 9, 1998. The parties filed Rebuttal Testimony on April 23, 1998, and a Hearing Memorandum on April 29, 1998.

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<sup>2</sup> Judge Dippell presided over the hearing; Judge Thompson prepared the Report and Order.

An evidentiary hearing was held on May 18, 1998, Senior Regulatory Law Judge Nancy Dippell, presiding. All parties were represented at the evidentiary hearing and were afforded a full and fair opportunity to be heard in accordance with the Commission's practice rules. Thereafter, Late-filed Exhibits 9, 10 and 11 were filed on May 26, 1998. The Commission issued its Order establishing a briefing schedule and directing the filing of exhibits on June 19, 1998. Thereafter, Late-filed Exhibits 9, 10 and 11, and a Memorandum were filed on June 24, 1998. The parties filed their Briefs on July 13, 1998, and their Reply Briefs on July 27, 1998. On July 23, 1998, Staff moved to strike portions of the Company's Brief. The Company responded in opposition to Staff's motion on July 30, 1998.

On November 2, 1999, new counsel entered an appearance on behalf of Company and moved to extend the AAO deferral period and to postpone decision. Staff responded in opposition on November 12, 1999, and Public Counsel responded in opposition on November 15, 1999. Company replied to both Staff and Public Counsel on November 24, 1999. On November 30, 1999, the Commission denied Company's motion and notified the parties that the case had been transferred to Deputy Chief Regulatory Law Judge Kevin A. Thompson. Thereafter, on February 23, 2000, Company filed a clarification of its motion to extend the AAO deferral period and to postpone decision. No party responded.

### **Late-Filed Exhibits:**

Late-filed Exhibits 9, 10 and 11 were filed on May 26, 1998, and again on June 24, 1998. A Memorandum was also filed on June 24, 1998. No party objected to the receipt of these items and the time for doing so

has long since passed.<sup>3</sup> Therefore, they are received and made a part of the record of this proceeding.

### **Motion to Strike:**

Staff moved on July 23, 1998, to strike from Company's initial brief "numerous citations to testimony from Case Nos. WR-95-145, WR-96-263, and WR-97-282, and to the Company's Brief in Case No. WR-95-145," on the grounds that these items are outside of the record of this case. Company replied on July 30, 1998, providing a citation to the record of the present case for each challenged statement in its brief and characterized the citations to the records of other cases as "historical references."

Section 536.070(5), RSMo 2000, provides that:<sup>4</sup>

Records and documents of the agency which are to be considered in the case shall be offered in evidence so as to become a part of the record, the same as any other evidence, but the records and documents may be considered as a part of the record by reference thereto when so offered.

Likewise, Commission Rule 4 CSR 240-2.130(2) provides that "information contained in a document on file as a public record with the commission" need not be produced, but may be "received in evidence by reference, provided that the particular portions of the document are specifically identified and are relevant and material." The particular items in question were never offered or specifically identified during the hearing of this matter and, consequently, are not part of this record. See A.S. Neely, *Administrative Practice & Procedure* (20 Missouri Practice Series), § 11.04 (1995). Both Section 536.070(5) and Rule 4 CSR 240-2.130(2) require that matter contained in the agency's files actually

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<sup>3</sup> Pursuant to the Commission's Order of June 19, 1998, objections were due on or before July 6, 1998.

<sup>4</sup> All statutory references, unless otherwise specified, are to the Revised Statutes of Missouri (RSMo), revision of 2000.

be offered during the hearing in order to become part of the record. Therefore, the motion to strike must be granted.

Staff has requested only that the citations to matter outside the record be stricken. Company's arguments, however, are unaffected. Arguments need not be supported with citations and, furthermore, Company has provided replacement citations to the record of this case.

### **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 positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to specifically address a piece of evidence, position or argument of any party does not indicate that the Commission has failed to consider relevant evidence, but indicates rather that the omitted material was not dispositive of this decision.

#### **An Aging Infrastructure:**

St. Louis County Water Company is nearly 100 years old. Its first generation mains, in its oldest service areas like University City, are simply wearing out. Consequently, the Company is experiencing an exponential increase in water main breaks and repair costs. The worn-out piping and mains require replacement. However, the cost of replacing these mains is great. The Company states that it will require a large amount of new capital to invest in infrastructure replacement.

The high cost of water main replacements makes a water utility the most capital-intensive type of utility. The Company paid about \$5.00 per foot to install its first generation mains. However, it presently costs about \$100.00 per foot to replace these mains. The replacement of only

1 percent of the Company's infrastructure will cost about \$20 million. The replacement of all of the Company's aging infrastructure will literally cost billions of dollars. Additionally, about 32 percent of the Company's first generation piping was contributed by others (about \$70 million of a total \$219 million) and is excluded from rate base. Thus, the Company must raise capital to replace mains that it did not originally finance.

Compounding the problem for the Company is the fact that it can expect no additional revenues. In 1993, the Company's customer base was still growing at an annual rate of 1.0 to 2.0 percent. However, St. Louis County is now losing population on an annual basis. The replacement of worn out infrastructure does not generate any new revenue, but serves only to maintain service at its present level. Water is distributed today in the same way that it was 100 years ago, and there are no technological innovations on the horizon which will permit the Company to distribute water in a different manner, thereby avoiding the need to replace the old mains. Likewise, unlike the telecommunications industry, technological innovation has not resulted in new products for the water industry to sell, thereby raising new revenue.

The Company's witnesses testified that the need to invest large amounts of new capital with no resulting new revenues has placed the Company in a difficult situation. Moreover, the Company insists that the situation is greatly exacerbated by regulatory lag. Regulatory lag is "the lapse of time between a change in revenue requirement and the reflection of that change in rates." *In the Matter of St. Louis County Water Company*, Case No. WR-96-263 (*Report & Order*, issued December 31, 1996), at p. 8. A main replacement job is typically completed, and the new pipe placed in service, in a two-month period. However, no return can be earned on the new utility assets placed in service until the Commission permits the Company to add the new assets to its rate base. This requires a general



rate case and a delay, after the case is filed, of 11 months. Yet, depreciation and other expenses associated with the new assets begin as soon as they are placed in service. Thus, during the lag period, the Company experiences diminished earnings. The Company contends that regulatory lag causes the investment of large amounts of new capital to replace worn out mains to be unattractive to its shareholders and to investors in general.

### **The 1994 Main Replacement Plan:**

On September 24, 1994, the Company presented its Main Replacement Plan (1994 Plan) to the Commission. The 1994 Plan called for the replacement of 30 miles of obsolete main per year, a rate of 0.7 percent, at an annual new capital cost of \$15 million. This represented, according to the Company, an increase of 26 miles, and \$13.5 million, over its existing main replacement effort in 1993. Company further noted in the 1994 Plan that it expected main replacement costs to increase at a rate of 5 percent per year, leading to annual program costs of \$20 million annually by the end of the century. The 1994 proposal noted that the Company was then already in difficult financial circumstances and that it had been unable to meet the interest coverage ratios specified in its mortgage for well over a year.

The 1994 Plan stated that the Company installed approximately seven miles of replacement piping annually, evenly distributed between obsolete main replacement and relocations caused by highway construction. This level of infrastructure replacement was inadequate. The Company's analysis showed that it needed to install approximately 30 miles of replacement piping annually. At \$100 per foot, this would cost about

\$15,840,000 annually.<sup>5</sup> In addition, the 1994 Plan stated that aging infrastructure would continue to cause increased maintenance costs.

In 1993, the Company served about 295,000 customers with 3,882.27 miles of main, a density of 75.9 customers per mile of main. Also by 1993, the Company had only retired 305.74 miles of main throughout its history. Much of the Company's network is of an older vintage. About 81.5 percent of the total mileage consists of pipes of 8 inches or less in diameter; 95 percent consists of cast iron or ductile cast iron pipes. The Company asserts that the best type of main is polywrapped ductile cast iron with a cement lining and a rubber ring joint; 19.6 percent of Company's network is comprised of such pipe.

As the Company's network has aged, maintenance calls have increased exponentially. At the same time, the cost per maintenance call has also increased. In 1985, the Company spent \$2.61 million on maintenance; by 1993, the figure was \$5.76 million. Many factors contribute to main breaks. The primary one is simply a pipe's loss of metal over time due to corrosion. Accounted-for-water<sup>6</sup> had also declined from 87.5 percent in 1980 to 84.5 percent in 1993, suggesting increasing water loss from breaks and leaks. Likewise, longitudinal main failures had increased over the ten years ending in 1993. A longitudinal main failure is a break along the length of a pipe. Such breaks are more expensive to repair and cause more water loss.

The vintage of mains most subject to breakage are the 1,226 miles of centrifugally-cast iron, rigid-joint mains installed between 1929 and 1956. In 1993, this 30 percent of the total network accounted for

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<sup>5</sup>  $\$100.00 \times 5,280 \times 30 = \$15,840,000$ .

<sup>6</sup> "Accounted-for-water" is a comparison of pumped quantities to sold quantities. The difference between the two is unaccounted for water.

69 percent of the main breaks. The 1929 to 1956 vintage mains experience 52 breaks per year for every 100 miles of pipe. Ironically, the oldest mains in the system, built of pit-cast iron pipe, experience only eight breaks per year per 100 miles of pipe. The 1957 through 1972 vintage pipe experiences about 16 breaks per 100 miles of pipe, while the ductile iron pipe experiences only two breaks per 100 miles of pipe. The Company's 1994 average break rate of 60.0 per 100 miles of pipe per annum greatly exceeded the industry average for systems of similar size of 29.4 breaks per annum per 100 miles of pipe. In 1993, the Company experienced about 2,000 breaks per year. By 2000, the Company expected to experience 3,000 to 4,000 breaks per year. The Company also predicted that the cost for each such incident would reach \$4,000 by 1999.

The 1994 Plan stated that maintenance costs were increasing, not just because the number of breaks was increasing, but also because the number of man-hours required to repair each break was increasing. In 1993, the Company devoted 103,675 man-hours to repairing main breaks and leaks, the equivalent of eight maintenance crews. By 1999, the Company expected 4,000 breaks to consume 240,000 man-hours, the equivalent of 19 full maintenance crews. Thus, the Company predicted that it would need to devote as much as \$12 million to \$16 million annually to maintenance by the year 2000.

Assuming a useful life of 80 years for the 1929 to 1956 vintage mains, the Company calculated in 1993 that it needed to replace 30 miles of such pipe annually over a 40-year period.<sup>7</sup> At that time, its obsolete main replacement rate amounted to about 3.6 miles annually, for a replacement rate of 0.26 percent. This level of obsolete main replacement was significantly below the 1993 industry average of 0.6 percent annually.

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<sup>7</sup>  $30 \times 40 = 1200$ . There are 1,226 miles of 1929 to 1956 vintage pipe to replace.

To mitigate rate shock, and to permit the Company to gradually gear up for the new program, the 1994 Plan recommended that the increase from 4 miles to 30 miles be phased in over a five-year period. Starting in 1996, the Company proposed to add three construction crews annually, reaching a total of 18 in 1999. As one crew can replace 1.6 miles of pipe in a year, 18 crews are necessary to replace 30 miles of pipe annually.

The 1994 Plan reported that the Company would increase its obsolete main replacement program to 5 miles annually, even without implementation of the proposed Main Replacement Plan. Under the 1994 Plan, the Company proposed to increase the mileage of obsolete mains replaced each year, reaching an annual level of 30 miles in 1999. The Company projected the capital costs of these alternatives as follows:

<u>Year:</u>	<u>Main Replacement Capital Costs at Flat 5-Miles/Year:<sup>8</sup></u>	<u>Main Replacement Capital Costs of Proposed 1994 Plan:<sup>9</sup></u>
1995	\$ 2,500,000	\$ 3,750,000
1996	\$ 2,800,000	\$ 8,400,000
1997	\$ 3,100,000	\$ 11,900,000
1998	\$ 3,400,000	\$ 15,500,000
1999	\$ 3,700,000	\$ 19,200,000

Central to the Company's proposed 1994 Plan was the minimization of regulatory lag. The Company calculated the increased capital outlay required by the 1994 Plan as \$43,250,000 over five years. The Company stated that it would only commit to this outlay if the Commission would act to minimize or eliminate regulatory lag. The Company proposed several alternatives to accomplish this, including the use of a future test year in

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<sup>8</sup> Five miles of main replaced each year; costs per mile increased by 10 percent each year.

<sup>9</sup> Starting with 7.5 miles in 1995 and reaching 30 miles annually in 1999; costs per mile increased by 10 percent each year.

ratemaking, the extension of post-test year plant adjustments up to the suspension date, the implementation of an infrastructure adjustment clause, and the implementation of a deferral mechanism.

One aspect of the 1994 Plan was an Accounting Authority Order (AAO). The Company proposed to seek an AAO under which to accrue main maintenance costs, in order to reduce the negative impact of regulatory lag while the Company replaced its first generation mains. The Company proposed to credit a level amount of expense monthly, based on maintenance expenses incurred during a test year ending November 1993, to a regulatory liability and to debit that amount to maintenance of mains expense. As actual costs were incurred, Company proposed to debit the costs to the regulatory liability and to credit them to cash. The Company stated that the effect of the AAO would be to match actual main maintenance expenses to the amounts collected from ratepayers for that purpose.

### **The Company's Rate Cases, 1994 to 2000:**

The Company filed its general rate case, Case No. WR-95-145, on October 28, 1994. In that case, Company proposed the use of a future test year, its favored option from the 1994 Plan. The Commission rejected the Company's proposed future test year methodology as necessarily including speculative amounts in the rate calculation, as well as the Accelerated Cost Recovery (ACR) methodology proposed by the Public Counsel. Instead, the Commission determined that Company's planned level of infrastructure replacement expenditure for the five years ending in 1999, as described in the 1994 Plan, constituted "a significant and unusual increase in County Water's business-as-usual construction expenditures, and is extraordinary in nature." *In the Matter of St. Louis County Water Company*, Case No. WR-95-145 (*Report & Order*, issued September 19, 1995), at pp. 7-9. The Commission granted the Company an AAO for a period of 24 months, beginning

on October 1, 1995, and applying only to main replacement. The AAO authorized the Company to defer depreciation and carrying costs associated with main replacement until its next rate case, thereby mitigating the effect of regulatory lag.<sup>10</sup> *Id.*, and Ordered Paragraph 3.

The Commission also rejected the 1994 proposed Main Replacement Plan as lacking "sufficient specificity and detail about the program and its implementation[.]" *Id.*, at p. 12. The Commission advised the Company "in County Water's next appearance before the Commission, [to] 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." *Id.* The Commission further advised the Company that, in such a case, "it would be more receptive to including in rate base the expenditures associated with County Water's infrastructure replacement program[.]" *Id.*, at p. 11. However, the Company did not present such a revised plan to the Commission until June 23, 2000.

The Company filed its next general rate case, Case No. WR-96-263, on February 9, 1996. The Commission again refused to adopt a future test year methodology as urged by the Company, noting "County Water is currently unable to sufficiently and accurately determine the location and type of distribution pipeline in its system. [The Company] apparently does not possess the necessary information to execute an effective and efficient replacement plan." *Supra*, at p. 9. The Commission again advised the

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<sup>10</sup> The Commission also alleviated the Company's financial situation by permitting it to amortize a \$36.3 million depreciation reserve deficiency over ten years. *In the Matter of St. Louis County Water Company*, Case No. WR-95-145 (*Report & Order*, issued September 19, 1995), at pp. 17-20.

Company that "[u]ntil such a plan can be created . . . the Commission is unwilling to include anticipated capital expenditures in rate base." *Id.*

The Commission permitted the Company to recover the remaining amount deferred under the AAO granted in Case No. WR-95-145 over a 20-year period beginning in January 1997.<sup>11</sup> *Id.*, at pp. 15-17. The Commission also refused to grant an AAO for maintenance expenses because it found those expenses were not extraordinary in nature. *Id.*, at pp. 9-15. However, in a subsequent order, the Commission authorized a second AAO for main replacement capital expenditures "[b]ecause the infrastructure replacement costs appear to be of such an extraordinary, infrequent and unusual nature when the rate of their increases is considered[.]" *In the Matter of St. Louis County Water Company*, Case No. WR-96-263 (*Order Regarding Clarification and Rehearing*, issued March 7, 1997), at p. 2.

The Company filed its next general rate case, Case No. WR-98-237, on March 14, 1997. That case was settled by the unanimous agreement of the parties, excepting only the Company's request for a third AAO for infrastructure replacement, which issue was spun off and forms the subject of the present case. *In the Matter of St. Louis County Water Company*, Case No. WR-98-237 (*Report & Order*, issued December 4, 1997), at p. 4 and Ordered Paragraph 4. The spinoff was necessary because the Public Counsel refused to agree to a third infrastructure replacement AAO.<sup>12</sup>

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<sup>11</sup> The "remaining amount" was that portion not included in rate base. *In the Matter of St. Louis County Water Company*, Case No. WR-96-263 (*Report & Order*, issued December 31, 1996), at p. 16.

<sup>12</sup> Public Counsel appealed the first two infrastructure replacement AAOs.

On June 23, 2000, the Company filed its next rate case, Case No. WR-2000-844.<sup>13</sup> That case is now pending. These proposed tariffs, Tariff File No. 200001199, seek an annual increase in water service revenue of \$17,558,149, approximately 17 percent. In the Matter of St. Louis County Water Company, Case No. WR-2000-844 (Suspension Order and Notice, issued July 5, 2000). Company maintains that this increase is necessary due to increased capital expenditures and operating costs. The increased capital expenditures primarily relate to infrastructure replacement, while the increased operating costs are related to the costs of maintaining Company's existing facilities. The Commission has suspended these proposed tariffs until May 20, 2001. In the Matter of St. Louis County Water Company, Case No. WR-2000-844 (Suspension Order and Notice, issued July 5, 2000).

Together with its proposed tariff sheets, the Company also filed prepared direct testimony in support of its requested rate increase. The prefiled testimony includes a new Main Replacement Plan (New Plan). This testimony indicates that Company will embark on its Main Replacement Plan in 2001, raising its infrastructure replacement budget from \$7 million in 1999 to \$9 million. The annual budget will increase thereafter, to \$15 million in 2002, to \$20 million in 2003, and to \$25 million in 2004 and later years. The figure of \$25 million equates to 47.5 miles of mains replaced annually, about a 1.0 percent replacement level. Company suggests that this figure compares favorably to the national average of 0.7 percent.

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<sup>13</sup> In order to bring the story of the Company's infrastructure replacement efforts up to date, the Commission hereby takes notice of the pleadings and prepared testimony filed in Case No. WR-2000-844.



## The Accounting Authority Order:

Company herein seeks its third successive infrastructure replacement AAO because "main replacement requires multiple projects rather than a single large one," resulting in regulatory lag that is too large for the Company to absorb and still attract capital. Company views an AAO as a temporary expedient until such time as the Commission approves a detailed infrastructure replacement plan which will recognize some portion of projected costs in rates.

Company's preferred solution is the use of a future test year. Alternatively, Company suggests the increased use of *pro forma* data.

Since 1995, the Commission has twice provided the Company with the opportunity to earn a return on equity of 11.6 percent. However, the Company was not able to actually realize that level of earnings in practice. Its actual earned return on equity in 1995 was 10.82 percent; for 1996, 7.43 percent; for 1997, 10.78 percent. The Company considers these return levels to be insufficient. Had the first and second infrastructure replacement AAOs not been in place, the Company projects that actual earnings would have been significantly lower:

1995	10.80 percent
1996	7.26 percent
1997	10.67 percent

Under traditional cost of service ratemaking, the Company routinely fails to earn its authorized rate of return. In fact, the Company achieved its authorized rate of return only four times in the 29 years ending 1998. Capital expenditure on infrastructure replacement simply exacerbates the existing problem. The ongoing nature of main replacement, as a series of short projects rather than one massive project, prevents the Company from timing its rate cases to reduce lag. Company contends that it is this aspect of the problem that makes the AAO

necessary. Further, traditional ratemaking assumes that lag between rate orders will be ameliorated by the ongoing expansion of the system, resulting in increased earnings from new customers and increased sales. However, the Company is experiencing dwindling growth. Further, the replacement of the first generation of mains will be necessary to maintain existing service and will not result in new customers, increased sales, or new revenue. Water service is a rising-cost industry. Even with the two infrastructure replacement AAOs in place, the Company claims it has not been able to achieve its authorized rate of return.

For a utility, a sufficient return not only covers operating costs, but also capital costs, that is, the debt and equity funds supporting the utility assets actually used in the public service. Inadequate earnings, in turn, endanger the utility's ability to attract capital at reasonable rates and terms. In 1993, for example, the Company had an actual overall earned return of 6 percent and an earned equity return of only 4.5 percent. This level of return is inadequate to attract the capital necessary to fund an infrastructure replacement program over an extended period of time.

### **A Large Undertaking:**

The Company suggests that main replacement is an extraordinary undertaking in terms of expense and duration. It is a difficult problem for the entire water utility industry, not just for the Company. In 1997, the United States Environmental Protection Agency reported that the water industry needed to invest over \$77.2 billion in infrastructure replacement over the next 20 years. The replacement of 1 percent of the pipeline infrastructure will cost approximately \$19.9 million,<sup>14</sup> while the Company's annual capital budget is only \$20 million. While each

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<sup>14</sup> 1998 dollars.

replacement project may not itself be extraordinary, all of the projects taken together are extraordinary. The Company has increased its main replacement budget from \$2.5 million in 1995 to \$6.7 million in 1998, an increase of 268 percent. The main replacement program represents 30 percent of Company's investor-supplied capital budget. The Company has added 30 full-time employees and 14 temporary employees to its infrastructure replacement effort, as well as provided necessary equipment such as backhoes and trucks.

However, Company has not increased its annual infrastructure replacement program above \$6.7 million, despite the two AAOs granted by the Commission, because of the climate of legal uncertainty created by the Public Counsel's challenge of those AAOs. In Company's view, the infrastructure replacement program will continue to be a risky and unattractive investment until its legality is settled. For example, by December 1997, \$385,000 had accumulated under the two AAOs. If the courts held against the AAOs, that amount, equal to five percent of Company's 1996 net income, would have had to be written off.

Main replacement is not within the scope of the ordinary course of business of a water utility. First of all, the need to replace infrastructure does not arise at all within the first 80 years of the life of a water utility. Just as the infrastructure was added gradually over that 80-year period, so the infrastructure must be gradually replaced as the useful life of the pipes is reached. For each pipe, replacement is necessarily an extraordinary event.

The Company has not, in fact, achieved the level of capital expenditure on main replacement projected in the 1994 Plan. However, the Commission specifically rejected the 1994 Plan. Furthermore, although the two AAOs have assisted the Company in maintaining financial integrity, they have not eliminated the effects of regulatory lag or provided for the

recovery of the true costs of maintenance. The Company presented the 1994 Plan with the caveat that these conditions must be met for the plan to be implemented.

The Company's 1997 Five-Year Plan (1997 Plan) is an internal planning document used to provide guidance to Company management regarding future capital requirement needs. The 1997 Plan includes projections of main replacement investments through 2002. Under the 1997 Plan, main replacement expenditures start in 1998 at \$6.7 million and increase to \$7.9 million by 2002. The 1997 Plan assumes that the AAO mechanism continues and does not show the increased level of expenditure on main replacements that Company claims it will initiate once various uncertainties surrounding the issue are resolved.

### **A New Plan:**

In the context of Case No. WR-96-263, the Company and Public Counsel entered into a Stipulation and Agreement (1996 S&A) on September 13, 1996, regarding distribution planning, including both infrastructure replacement and maintenance. The Commission approved the 1996 S&A in Case No. WR-96-263 and the Company has met all relevant milestones set by this agreement.

Pursuant to the 1996 S&A, the Company is developing a new infrastructure replacement plan. As a first step, Company is developing information systems necessary to support and monitor an effective infrastructure replacement program with the assistance of a consultant, EMA, Inc. The Company is seeking vendors for a work management system (WMS) and a geographic information system (GIS). The WMS and GIS will contain details of pipelines and maintenance histories and will permit Company to evaluate distribution system performance and to develop

replacement plans. After the software is obtained, Company must then convert all of its data and input it into the new system.

Company filed its New Plan on June 23, 2000, as part of its current rate case, Case No. WR-2000-844. The basis of the New Plan is the use of information systems to identify pipes for replacement at the "point it makes more economic sense to replace a given length of pipe than to keep repairing it when it breaks." Company's rate increase request includes revenue required for the infrastructure replacement program as well as for completion of the GIS. The GIS is not expected to be operational until 2002 and will require additional investment of approximately \$3.5 million to complete. Company has indicated that \$4,809,134 is required in additional revenue for each of the years 2001 through 2003 solely to support the infrastructure replacement program and the completion of the GIS. The figure of \$4,809,134 is the average for the three-year period.

### **Conclusions of Law**

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

#### **Jurisdiction:**

Company is a water corporation within the meaning of Section 386.020(58) and is, therefore, subject to the supervision of the Commission. Sections 386.250(3) and 393.140.

#### **What is an Accounting Authority Order (AAO)?**

The Commission is authorized to "prescribe uniform methods of keeping accounts, records and books, to be observed by . . . water corporations[.]" Section 393.140(4). Pursuant to this authority, the Commission has promulgated its Rule 4 CSR 240-50.030, which requires water

corporations to utilize the Uniform System of Accounts (USOA) issued by the National Association of Regulatory Utility Commissioners (NARUC) in 1973. The Commission is also authorized "after hearing, to prescribe by order the accounts in which particular outlays and receipts shall be entered, charged or credited." Section 393.140(8).

An Accounting Authority Order (AAO) is an order of the Commission authorizing an accounting treatment for a transaction or group of transactions other than that prescribed by the USOA. It is an accounting mechanism that is generally used to permit deferral of costs from one period to another. *In the Matter of Missouri Public Service*, 1 Mo.P.S.C.3d 200, 202 (Dec. 20, 1991). The items deferred are booked as a regulatory asset rather than as an expense, thus improving the financial picture of the utility in question during the deferral period. *Id.* During a subsequent rate case, the Commission determines what portion, if any, of the deferred amounts will be recovered in rates.

For example, expenses associated with a large project, such as a new utility plant, must be booked under the USOA from the day that the plant is first placed in service. These expenses include depreciation and the carrying costs of construction financing and can be quite significant in size. However, the new plant cannot be included in rate base until after a general rate case has been completed, an 11-month process. An AAO may be used in such a situation to assist the utility through the lag period between the on-line date and the effective date of the new rate order. *See, e.g., In the Matter of Missouri-American Water Company*, Case Nos. WR-2000-281 and SR-2000-282 (Report & Order, issued August 31, 2000), at pp. 48-50.

AAOs should be used sparingly because they can permit ratemaking consideration of items from outside the test year:

The deferral of cost from one period to another period for the development of a revenue requirement violates the traditional method of setting rates. Rates are usually established based upon a historical test year which focuses on four factors: (1) the rate of return the utility has an opportunity to earn; (2) the rate base upon which a return may be earned; (3) the depreciation costs of plant and equipment; and (4) allowable operating expenses. *State ex. rel. Union Electric Company v. PSC*, (UE), 765 S.W.2d 618, 622 (Mo. App. 1988).

*In the Matter of Missouri Public Service*, 1 Mo.P.S.C.3d at 205.

The USOA authorizes utilities to defer extraordinary and nonrecurring expenses without prior permission of the Commission. See USOA, Section 186; *State ex rel. Office of the Public Counsel v. Public Service Commission*, 858 S.W.2d 806, 810 (Mo. App., W.D. 1993); *In the Matter of Missouri Public Service*, 1 Mo.P.S.C.3d at 203. The Commission has previously taken the position that, where authority from the Commission is not necessary for deferral, the Commission need not hold an evidentiary hearing prior to granting an AAO authorizing deferral. *In the Matter of Missouri Public Service*, 1 Mo.P.S.C.3d at 204.<sup>15</sup>

### **Should the Commission Grant the Requested AAO?**

The record makes it abundantly clear that the Commission should not grant the requested third AAO for infrastructure replacement because the circumstances are recurring, not nonrecurring. The Company has presented ample evidence as to the magnitude of the infrastructure replacement undertaking in terms of cost. However, the record also shows that infrastructure replacement will necessarily continue for years as a series of successive projects. This is not an appropriate case for an AAO. To the extent that Company has deferred the costs concerned under the USOA

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<sup>15</sup> This theory has not yet been tested on appeal. See *Office of the Public Counsel v. Public Service Commission*, 858 S.W.2d 806, 809-10 (Mo. App., W.D. 1993).

without prior Commission authorization, Company may seek to recover those costs in its current general rate case.

Infrastructure replacement is a matter of such magnitude, in terms of cost and duration, that it should be dealt with within the ratemaking process. This requires a detailed, highly specific plan that can be appropriately included in ratebase. However, as noted, the Commission rejected the 1994 proposed Main Replacement Plan as lacking "sufficient specificity and detail about the program and its implementation[.]" In the *Matter of St. Louis County Water Company*, Case No. WR-95-145 (Report & Order, issued September 19, 1995), at p. 12. The Commission has been waiting for the presentation of an appropriate plan ever since.

Company is presently engaged in a general rate case and has presented an infrastructure replacement plan therein. That case is the proper place to address the merits of that proposal.

**IT IS THEREFORE ORDERED:**

1. That the Accounting Authority Order sought herein by St. Louis County Water Company, which now does business as Missouri-American Water Company, is denied.
2. That any other motions not previously determined herein are denied.
3. That this Report and Order shall become effective on February 23, 2001.



4. That this case may be closed on February 24, 2001.

**BY THE COMMISSION**



**Dale Hardy Roberts**  
**Secretary/Chief Regulatory Law Judge**

( S E A L )

Lumpe, Ch., Schemenauer, and  
Simmons, CC., concur;  
Drainer and Murray, CC., dissent;  
and certify compliance with the  
provisions of Section 536.080,  
RSMo 2000.

Dated at Jefferson City, Missouri,  
on this 13th day of February, 2001.

ALJ/Sec'y:

*Thompson/Pope*

Date Circulated

*2-7*

CASE NO. *00-98-223*

*1/14/04*  
Lumpke, Chair

*not p/0*  
Draher, Vice Chair

*CM 310 68*  
Murray, Commissioner

*Q 8-10, 8*  
Schemm, Commissioner

*KS*  
Stamm, Commissioner

*p. 12*

*2-13*  
Agenda Date

Action taken:

*3-2 A-5*

Must Vote Not Later Than

## STATE OF MISSOURI

### OFFICE OF THE PUBLIC SERVICE COMMISSION

I have compared the preceding copy with the original on file in this office and  
I do hereby certify the same to be a true copy therefrom and the whole thereof.

WITNESS my hand and seal of the Public Service Commission, at Jefferson City,  
Missouri, this 13<sup>th</sup> day of February 2001.

*Dale Hardy Roberts*

Dale Hardy Roberts  
Secretary/Chief Regulatory Law Judge