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DIRECT TESTIMONY OF BERT T. PHILLIPS
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
on behalf of
SOUTHERN STATES UTILITIES, INC.
AND DELTONA UTILITIES, INC.
DOCKET NO. 920199-WS

DOCUMENT NUMBER-DATE
08053 JUL 22 1992
FPSC-RECORDS/REPORTING

Q. **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Bert T. Phillips and my business address is 1000 Color Place, Apopka, Florida 32703.

Q. **WHAT IS YOUR POSITION WITH SOUTHERN STATES UTILITIES, INC. AND DELTONA UTILITIES, INC.?**

A. I am Chairman and President of Southern States Utilities, Inc. and Deltona Utilities, Inc. These companies were legally merged on July 15, 1992. Therefore, hereinafter I will refer to them collectively as "Southern States". I also serve as Chairman and President of Lehigh Utilities, Inc. ("Lehigh").

Q. **PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND?**

A. I hold a Bachelor of Science degree in marine engineering from the United States Merchant Marine Academy and a Masters in Business Administration from the University of Idaho. I also have attended numerous schools, seminars, conferences, workshops and short courses on utility management and engineering over the past 30 years which were sponsored by various professional associations, universities and engineering firms.

Q. **PLEASE DESCRIBE YOUR EXPERIENCE IN THE UTILITY**

A. I am a director of both the National Association of Water Companies ("NAWC") and the Florida Water Works Association as well as a member of the American Water Works Association ("AWWA"). Both the NAWC and AWWA concentrate on issues of public interest which impact investor-owned utilities and their customers. For instance, the cost of complying with federal and state regulatory requirements are passed through to our customers. The NAWC and AWWA participate actively in state regulatory arenas to provide regulators with customer rate-impact and environmental impact information. Through this participation, regulations may be moderated so as to reflect more reasonable risk and economic impact assessments. These organizations also provide a valuable resource for information sharing in areas such as new technology, new system designs, new solutions to water quality problems, water conservation, etc. The NAWC, like Southern States, has an unwavering and uncompromising commitment to participate in any and all matters that pose a threat to the safety and quality of drinking water. Through our participation in these organizations, Southern States and our

customers have an additional voice in federal and state affairs affecting our customers.

Q. HAVE YOU EVER TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION?

A. Yes. I testified before the Florida Public Service Commission in 1990 in support of the request for a rate increase of Southern States and United Florida Utilities Corporation in Docket No. 900329-WS. As the Commission is aware, United Florida Utilities Corporation was merged into Southern States Utilities, Inc. on April 1, 1992. I also have submitted pre-filed direct testimony on behalf of Lehigh in Docket No. 911188-WS.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS CHAIRMAN AND PRESIDENT OF SOUTHERN STATES.

A. I oversee the management of all aspects of Southern States' business operations including the utility operations, finance, engineering, administration, legal, ratemaking and customer service areas. I also am responsible for Southern States' long range strategic planning.

Q. PLEASE DESCRIBE SOUTHERN STATES' FILING IN THIS CASE.

A. On May 11 and June 17, 1992, Southern States

filed tariff changes for rate relief designed to increase annual water and wastewater revenues in the amount of $5,064,353 and $3,601,165, respectively (a total of $8,665,518). The filing was prepared in accordance with the Commission's minimum filing requirements and other applicable rules. The filing is based on an historic test year consisting of the twelve months ended December 31, 1991. This test year coincides with Southern States' 1991 fiscal year.

Q. WHEN DID SOUTHERN STATES' SYSTEMS LAST OBTAIN RATE RELIEF?

A. Volume I, Book 1, pages 4 through 6 of the MFRs identifies the docket number and date of the last Commission rate order for each water and wastewater system included in this docket. A review of these pages reveals that it has been as much as 22 years since Southern States has had rate relief (exclusive of indexing and/or pass-throughs) on certain systems. Southern States' last general rate filing for 32 of the systems included in this proceeding was rejected by the Commission in Order No. 24715 in Docket No. 900329-WS. On January 6, 1992, Southern States appealed the Commission's decision to the

First District Court of Appeals. The appeal was denied by the First District Court of Appeals on July 16, 1992. Southern States is contemplating an appeal to the Florida Supreme Court at the time of submission of this pre-filed testimony. On June 25, 1992, Southern States filed a test year letter concerning our Marco Island water and wastewater systems, thus initiating the rate case process for the two systems which had been included in Docket No. 900329-WS but which are not included in this proceeding. The test year request was approved by the Commission by letter dated July 7, 1992 and Docket No. 920655-WS has been assigned to that proceeding.

Q. **WHAT ARE THE CAUSES FOR SOUTHERN STATES' RATE FILING?**

A. As I just indicated, it has been as much as 22 years since Southern States has obtained rate relief for certain systems. Therefore, by the estimated effective date of new rates in this proceeding, some existing rates will have been in effect for approximately 23 years.

Such rates are inadequate as a result of new and amended regulatory requirements and ongoing increases in the costs incurred to provide

continued safe, efficient and sufficient service to our customers. Despite recent aggressive efforts to achieve new economies in the rendition of service, Southern States' current rates are not adequate to permit recovery of our costs, never mind any return on the rate base of approximately $57 million for the 127 systems included in this filing.

Q. IS IT TRUE THAT SOUTHERN STATES HAS MADE MORE THAN $50 MILLION (NET OF CIAC) IN CAPITAL INVESTMENTS IN UTILITY ASSETS SINCE THE LAST RATE ORDERS FOR THE SYSTEMS INCLUDED IN THIS FILING?

A. Yes. Southern States has invested a total of approximately $25 million in the water and $25 million in the wastewater systems included in this filing since rates were last established.

Q. I SHOW YOU EXHIBIT ___ (BTP-1) UNDER COVER PAGE ENTITLED "MAJOR ADDITIONS PLACED IN SERVICE IN 1990 AND 1991." WAS THIS EXHIBIT PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes, it was.

Q. COULD YOU BRIEFLY DESCRIBE THIS EXHIBIT?

A. This exhibit identifies a number of the more significant capital investment projects which Southern States placed in service in 1990 and

1991 alone as well as the approximate cost of such projects. Many of these improvements were necessary to meet increasingly stringent Environmental Protection Agency or Florida Department of Environmental Regulation ("DER") standards. Other capital improvement projects were undertaken to ensure reliability of service, to compensate for deteriorating water source conditions or to achieve a common goal maintained by the State of Florida and Southern States -- to protect our environment so that generations to come may enjoy its current treasures. For instance, the costs identified in this exhibit for Deltona wastewater system improvements represent costs incurred to stop the discharge of effluent into Lake Monroe, a practice carried out by the former owner of Deltona Utilities, Inc. which had generated a consent order from the DER. In cooperation with the DER and the local water management district, and in compliance with the terms of the consent order, Southern States successfully eliminated this discharge prior to November 1, 1990. Effluent from the Deltona wastewater system now meets DER public access requirements and now is 100% reusable.

Q. WHAT WAS THE RATE OF RETURN EXPERIENCED BY SOUTHERN STATES FOR THE FISCAL YEAR ENDED DECEMBER 31, 1991?

A. The rates of return for the fiscal year ended December 31, 1991 were 3.07% for the water system and 1.74% for the wastewater system. This is equivalent to a negative return on equity of -7.07% and -10.18%, respectively. These returns will not allow Southern States to remain viable much less attract capital to finance capital investments and operate the systems. We fear that customers ultimately would bear the brunt of these returns if the requested rate relief is not granted to Southern States. For example, as the Commission is aware, in December of 1984 the financial situation of Deltona Utilities, Inc. ("Deltona") was such that the only funding which lenders would provide to enable Deltona to finance construction and operate its facilities came at a high price. The lenders secured above-market interest rates from Deltona and included other stringent terms in the bond documents, all of which were favorable to the lenders. As the Commission is aware, the courts confirmed that utility customers must pay for

such interest and other debt related costs in rates.

Q. WHAT IS THE RETURN ON EQUITY REQUESTED BY SOUTHERN STATES IN THIS PROCEEDING?

A. The requested return on equity for water and wastewater operations combined is 12.83%. Scott Vierima will discuss how this return was determined. Joseph P. Cresse and Helena Loucks will discuss how we propose to recover this return in customer rates.

Q. PLEASE IDENTIFY THE OTHER WITNESSES WHO WILL TESTIFY IN THIS PROCEEDING ON BEHALF OF SOUTHERN STATES AND THE TOPICS THEY WILL ADDRESS.

A. The following is a list of the witnesses who will provide direct testimony in this proceeding. Of course, additional witnesses may be required to address issues not contemplated in our pre-filed direct testimony which subsequently may be raised by the Staff of the Public Service Commission (Staff) or intervenors in this proceeding.

Witness	Topics
Arend J. Sandbulte	-Minnesota Power Overview and Goals in Florida
Bert T. Phillips	-Overview of Filing
Forrest L. Ludsen	-Administrative and General

	Expenses
	-Application of the Commission's O & M Benchmark Guideline
	-Impact of Commission's 1988 Management Audit Review
	-Allocations of Common Costs
Charles K. Lewis	-Cost of Service
Scott W. Vierima	-Cost of Capital
Bruce E. Gangnon	-Taxes
	-FASB 106: Post Retirement Benefits
Charles L. Sweat	-Quality of Service
	-Unaccounted For Water
	-Impact of Commission's 1988 Management Audit on Operations
	-Customer Complaints received by the Commission during the Test Year
Gerald C. Hartman	-Used and Useful Utility Property
	-Margin Reserve
	-Depreciation Life of R.O. Permeators

Gary S. Morse	-Used and Useful Utility Property	
	-Margin Reserve	
Joseph P. Cresse	-Rate Design (Theory and Justification)	
Helena Loucks	-Rate Design (Mechanics)	

Q. **PLEASE DESCRIBE THE SCOPE OF YOUR TESTIMONY IN THIS PROCEEDING.**

A. I will discuss the present management of Southern States, describe Southern States' current corporate goals and philosophy and provide a brief overview of Southern States' filing in this proceeding. I also will briefly describe certain benefits which are offered to Southern States' customers, including high quality water and wastewater service consistent with regulatory requirements at the lowest possible cost. Southern States is a professional utility with the personnel and resources which enable it to provide such service. However, applicable federal, state and local laws, rules, ordinances and regulations have been and continue to be expanded and revised considerably. These new and revised laws, rules, etc., inevitably increase Southern States' operations and maintenance

expenses and often the level of capital investments which are required.

Q. COULD YOU BRIEFLY DESCRIBE THE CORPORATE GOALS AND PHILOSOPHY OF SOUTHERN STATES' MANAGEMENT?

A. Southern States' management is dedicated to ensuring that our customers receive the highest quality service at the lowest possible cost, while meeting or exceeding regulatory requirements. As the Commission recently reaffirmed in its order approving the transfer of Lehigh to the Southern States family of water and wastewater utilities, Southern States has the expertise and financial ability to provide quality service to our customers throughout the State. Unfortunately, as demonstrated in Exhibit ___ (BTP-1), we are in an era in which significant capital investments are required and cost increases are unavoidable for water and wastewater utilities primarily due to increased regulatory requirements. These investment requirements and cost increases must inevitably be reflected in higher rates.

Q. HAVE THERE BEEN ANY ACKNOWLEDGMENTS BY COMMISSION PERSONNEL OF THE INEVITABILITY OF HIGHER RATES DUE TO INCREASED REGULATION?

A. Yes, as Commissioner Betty Easley stated last year in her presentation to the Southeast Association of Regulatory Utility Commissioners: "Florida really comprises four distinct unique geographic and hydrologic makeup, and because of the uniqueness we have seen the cost of water and wastewater service for an average household reach $100 per month in some areas. Needless to say this doesn't go over very well with people who were used to paying nothing or $10 per month back home up north. And unfortunately, the water in most parts of Florida where people want to live isn't exactly Rocky Mountain quality." Commissioner Easley continued to state that "a major factor to be considered in approaching the Financial Challenge of the water and wastewater industry is to somehow gain customer acceptance of the increased cost of service to meet state and federal environmental requirements." We agree with the Commissioner's statements and we look forward to the participation of representatives of the Commission and the Florida Department of Environmental Regulation ("DER") during customer meetings and at hearings in this proceeding to perform the service Commissioner

Easley recommends:

> . . . to help in explaining that major capital expenditures are necessary to comply with the health standards mandated by the [Environmental Protection Agency] and the Congress.

Q. COULD YOU BRIEFLY DESCRIBE THE NEW HEALTH STANDARDS MANDATED BY THE ENVIRONMENTAL PROTECTION AGENCY AND CONGRESS TO WHICH COMMISSIONER EASLEY WAS REFERRING?

A. In 1986, Congress amended the Safe Drinking Water Act to require the establishment of new drinking water quality and treatment regulations. To fulfill this requirement, the Environmental Protection Agency ("EPA") developed new regulations and "maximum contaminant levels" for volatile organic chemicals, fluoride, surface water treatment, total coliform bacteria, radionuclides, additional synthetic organic and inorganic chemicals, disinfectants and disinfection by-products. The DER has implemented and is aggressively enforcing new regulations consistent with the federal laws and EPA regulations. As I will discuss later in my testimony, these new regulations not only have

significantly increased the capital requirements and corresponding treatment costs of water utilities but also have resulted in material increases in the cost of testing for compliance with maximum contaminant levels.

In addition, DER has enacted various new and amended rules affecting the cost of Southern States' wastewater operations, including new sludge rules, rules regarding tertiary treatment standards, etc. All of these statutory and rule changes have increased Southern States' cost of providing service to our customers.

Q. **CAN YOU OFFER ANY SUBSTANTIATION THAT THE LAWS AND REGULATIONS YOU HAVE REFERRED TO ARE HAVING THE ECONOMIC CONSEQUENCES YOU HAVE PORTRAYED?**

A. Certainly. A review of any number of periodicals and trade journals will confirm that the Safe Drinking Water Act and regulations enacted by the states to enforce it are increasing the cost of providing water and wastewater service throughout the country. For instance, in the June 15, 1992 issue of Standard & Poor's Creditweek, it is noted that:

> S&P has revised its public financial benchmarks for investor-owned water

utilities. The more stringent standards were implemented as a result of S&P's conclusion that credit risk has escalated in the water utility industry in recent years due to significant challenges related to developing future water supplies and assuring the quality of existing supplies , . . Another major challenge for many water utilities is the ongoing implementation of the 1986 amendment to the Safe Drinking Water Act (SDWA) of 1974. The SDWA amendments are imposing more stringent water quality standards relating to specific levels of substances found in both surface and groundwater supplies. Higher water quality standards are contributing to significant financing and regulatory pressures for the industry.

Ongoing evolution of the Act is expected as the Environmental Protection Agency (EPA) continues to review contaminants that may have an adverse impact on public health. Currently, the more significant proposed and anticipated rules are for testing and monitoring contaminants in water supply,

radionuclides, and disinfection/disinfection by-products. The EPA continues to promulgate slowly these standards, largely because of the time needed to review pertinent information and data before issuing additional standards.

Financial Stress

Unlike the Clean Air Act's impact on a select number of electric utilities, SDWA requires virtually the entire industry to improve existing treatment and related facilities. This will result in significant capital additions on top of already escalating spending on distribution infrastructure. Financing these large rate-base additions - which are nonrevenue-producing assets - will be difficult. Internal cash generation is weak, with low depreciation rates (usually about 2% versus around 3% for electric utilities), and low authorized return on equity. As a result, dependence on external financing and rate relief requirements will intensify.

Moreover, low authorized returns may affect the industry's ability to attract necessary

capital to develop new water supplies and upgrade the quality of existing supplies. Scott Vierima, Vice President of Finance and Administration, will address the impact of these laws and regulations on Southern States' cost of capital. However, I will beat him to the punch by quoting further from the article in Standard & Poor's Creditweek (June 15, 1992), wherein the perspective of potential lenders and other capital providers can be gleaned. The article continues:

> Poor internal cash generation along with modest demand growth of under 1% will require state utility regulators to play an even more significant role in the future financial well-being of the industry. Traditional ratemaking policy has not provided sufficient credit support during the construction cycle of the electric industry over the past 15 years. To avoid a repeat in the water industry, regulators must be aware of the increased challenges the industry faces. With large rate-base additions, along with increasing nonrevenue-producing assets to meet future and current

water needs and mandated water quality standards, regulators will need to implement innovative regulatory policy to allow for reasonable financial protection measures. Techniques to be considered to preclude financial erosion include future test year, automatic adjustment clauses (for large expense items), allowing a cash return on construction work in progress, higher earnable returns, and increased depreciation rates.

Q. **I SHOW YOU EXHIBIT _____ (BTP-2) UNDER COVER PAGE ENTITLED "WATER UTILITY BENCHMARKS REVISED - STANDARD & POOR'S CREDITWEEK DATED JUNE 15, 1992." WAS THIS EXHIBIT PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?**

A. Yes, it was.

Q. **IS THIS THE ARTICLE FROM WHICH YOU HAVE JUST QUOTED AT LENGTH?**

A. Yes, it is.

Q. **ARE THERE ANY OTHER REASONS WHY SOUTHERN STATES HAS FILED ITS APPLICATION FOR RATE RELIEF.**

A. Yes. As I previously noted, new laws and regulations have been enacted at both the federal and state levels which have dramatically

increased the level of investments Southern States has been required to make in its water and wastewater facilities. As a result of these investments, the cost of staffing, operating and maintaining the required additional facilities and testing our water and effluent also have increased dramatically.

Since it has been a number of years since the cost of serving our water and wastewater customers has been determined, millions of dollars of investments and expenses have not been recovered in the rates we have been charging our customers. Southern States can no longer afford to forego the required rate relief.

Q. COULD YOU DESCRIBE SOME OF THE REASONS FOR INCREASED INVESTMENTS AND EXPENSES YOU HAVE MENTIONED IN FURTHER DETAIL?

A. Yes, I would be glad to generally describe these factors. Various other witnesses for Southern States will provide additional details. First, new and amended federal and state laws and regulations require Southern States to perform more tests of its water and effluent, and often on a more frequent basis. The Florida Department of Environmental Regulation ("DER") recently has

promulgated new rules concerning the stabilization, removal and disposal of sludge. In addition, DER rules require advanced "tertiary" treatment of effluent to meet DER's "public access" standard for effluent reuse. Southern States is a strong advocate of public access reuse water and is providing 100% public access reuse at three systems and up to 88% public access reuse at five other systems. Public access reuse technologies reduce the need to extract potable (drinking) water from the underground aquifer system for irrigation purposes, thus conserving potable water supplies. In addition, Southern States utilizes spray irrigation and percolation ponds to dispose of effluent at virtually all of its remaining wastewater systems. These methods of effluent disposal also assist in recharging Florida's aquifers and are considered "reuse" by regulatory authorities. We believe these facts demonstrate Southern States' commitment to satisfy the State's, as well as Southern States' own, conservation goals.

Q. HAS SOUTHERN STATES' BEEN COMMENDED FOR ITS CONSERVATION EFFORTS BY VARIOUS ORGANIZATIONS IN

THE PAST?

A. Yes. Southern States recently has been commended for its conservation efforts, including the education of our customers in the benefits of xeriscaping, by several organizations including the American Water Works Association and the National Xeriscape Council, Inc. In addition, our Company sponsored a 4-H group from Florida which won both state and national competitions regarding conservation/xeriscaping programs. We are very proud of these achievements.

Q. **IS THERE A PRICE TO BE PAID FOR THE COMPANY'S CONSERVATION EFFORTS?**

A. Yes. Compliance with DER's tertiary treatment requirements for public access reuse requires Southern States' to make significant capital investments in its wastewater facilities. In addition, the reuse of effluent by former water customers will reduce water sales thus decreasing the sales base over which our fixed costs may be spread. However, Southern States agrees with the policy of the State of Florida and its regulatory agencies that although the treatment process for reuse is expensive, reuse frequently is both the lowest cost alternative available for effluent

disposal and a cost-effective alternative to depleting precious underground water sources.

Q. HAVE THERE BEEN OTHER CHANGES FOSTERED BY REGULATORY REQUIREMENTS WHICH HAVE INCREASED THE COST OF PROVIDING WATER AND WASTEWATER SERVICE?

A. Yes. Staffing requirements also have changed due both to changes in DER regulations as well as operational requirements (to meet higher demands associated with growth) to satisfy the daily needs of our customers. In addition, in September 1988 the Commission issued a management audit review (the "Audit Report") regarding Southern States. Forrest Ludsen, Vice President in charge of Customer Services, will describe the Audit Report and its impact on Southern States in detail. Generally, the Commission's Audit Report recognized that as of September 1988, Southern States had grown to such an extent that the internal management practices and procedures required a comprehensive overhaul. In short, the Staff audit admonished Southern States by recommending that it "act its size." The report contains seventy-nine recommendations for changes in Southern States' management practices and procedures which are rated high, medium and low

priorities. As Mr. Ludsen indicates, after careful consideration of the Audit Report findings and negotiation with the staff of modification to certain recommendations, Southern States agreed with and has implemented all but two of the Commission's recommendations. I feel strongly that the audit findings and recommendations were well-founded. After my arrival at Southern States, I would have implemented similar changes even had the Audit Report never been issued. It also must be noted that the import of Staff's 1988 recommendations has increased with the more than doubling in size of Southern States through the acquisition of Deltona and United Florida Utilities Corporation in 1989 and Lehigh in 1991.

Q. COULD YOU BRIEFLY DESCRIBE THE IMPACT OF IMPLEMENTING THE AUDIT RECOMMENDATIONS ON THE CORPORATE STRUCTURE OF SOUTHERN STATES?

A. In general, implementation of the recommendations has created a more defined corporate structure comprised of various new departments with clearly delineated areas of specialization. Mr. Ludsen will provide a detailed analysis of the costs and benefits associated with the implementation of

the audit recommendations. This analysis is important since many of these costs and benefits are associated with administrative and general ("A&G") matters. Mr. Ludsen's analysis also confirms that the level of A&G expenses allocated to each of our systems are reasonable for the services provided to our employees and our customers.

Q. ARE THERE ANY ADVANTAGES WHICH SOUTHERN STATES OFFERS TO ITS CUSTOMERS IN MEETING THE COSTS OF COMPLIANCE WITH THE LAWS AND REGULATIONS YOU HAVE DESCRIBED WHICH MIGHT NOT BE AVAILABLE TO OTHER CONSUMERS OF WATER AND WASTEWATER SERVICES IN FLORIDA?

A. Yes. Our customers can expect to be served by a professional utility company dedicated solely to providing high quality utility service. Our management goals and practices are not distracted by the desire to sell lots or achieve short term advantages. Rather, as confirmed by Mr. Arend Sandbulte, Chief Executive Officer of our parent company, Southern States is in the water and wastewater utility business for the long haul. Southern States represents a family of water and wastewater providers that obtain tax, accounting,

billing, collections, customer service, payroll, pensions and benefits and other administrative and general services on a consolidated basis primarily from one source. In addition to benefits in efficiency, the size of this family of utilities enables us to hire specialists who concentrate their efforts on certain limited fields of expertise and identify areas where costs can be decreased or the quality of service improved. In this way, Southern States is able to, among other things, keep abreast of the latest advances in water and wastewater treatment technology, capitalize on cost-saving measures in medical and health insurance as they arise, reduce or otherwise minimize increases in the cost of chemicals and other supplies through bulk purchases made under a bidding process, better monitor customer service orders and complaints so as to identify problem areas more quickly and increase customer satisfaction. In addition, membership in the Southern States family of utilities provides customers served by all of our approximately 150 systems with immediate access to considerable personnel resources during times of emergency or unusual occurrences thereby

reducing both the response time as well as the possibility that service to our customers ever would be interrupted. Also, Southern States' size has permitted us to develop a process by which spare utility equipment and accessories have been identified and may be made available to any system in emergency situations with a minimum amount of delay. This process often will eliminate the waiting period for equipment to be ordered from and delivered by a third-party supplier thus further reducing the possibility of service interruptions to Southern States' customers. As an example, soon after Lehigh joined the Southern States family of utilities, we discovered that the Lehigh water system was exceeding the standard for trihalomethanes. Due to our equipment sharing process, we were able to provide Lehigh with ammoniation equipment from another plant to reduce the trihalomethane problem on a temporary basis until new equipment could be obtained from the manufacturer. Thus, we were able to expedite the resolution of the trihalomethane problem at Lehigh and restore compliance with the state standard in the most expeditious manner possible. These are all

significant reasons why we believe our customers are benefitted by having Southern States as their water and wastewater service provider.

Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Exhibit ___ (BTP-1)
Cover Page

MAJOR ADDITIONS PLACED IN SERVICE IN 1990 AND 1991

Major Additions Placed in Service in 1990 and 1991

Amelia Island

1. Wastewater Treatment Plant Expansion. Approximate cost: $1,944,000

Chuluota

1. Water Transmission & Distribution Facilities (net of CIAC). Approximate cost: $165,000

Citrus Springs

1. Water Transmission & Distribution Facilities (net of CIAC). Approximate cost: $316,000

Deltona Lakes

1. Wastewater Treatment Plant Improvements. Approximate cost: $2,278,000

2. Wastewater Effluent Disposal Systems to Two Golf Courses. Approximate cost: $2,781,000

Fox Run

1. Water High Service Pumps. Approximate cost: $118,000

Hermit's Cove

1. Water Distribution Interconnect to Plant (net of CIAC). Approximate cost: $120,000

Marion Oaks

1. Water Transmission & Distribution Facilities (net of CIAC). Approximate cost: $745,000

2. Water Treatment Plant & Well Addition. Approximate cost: $222,000

Pine Ridge

1. Water Transmission & Distribution Facilities (net of CIAC). Approximate cost: $625,000

Rosemont

1. Water Treatment Plant, Well & Transmission Addition. Approximate cost: $253,000

Salt Springs

1. Water Treatment Plant & Well Addition. Approximate cost: $317,000

South Forty

1. Wastewater Treatment Plant & Effluent Disposal Addition. Approximate cost: $276,000

Spring Hill

1. Water Transmission & Distribution Facilities (net of CIAC). Approximate cost: $1,529,000

2. Water Distribution System Relocation required by Hernando County. Approximate cost: $596,000

Sugar Mill Woods

1. Water Treatment Plant & Well Additions. Approximate cost: $886,000

Sunny Hills

1. Wastewater Treatment Plant Improvements. Approximate cost: $114,000

University Shores

1. Water Treatment Plant & Reservoir Addition. Approximate cost: $324,000

2. Water Transmission & Distribution Facilities (net of CIAC). Approximate cost: $810,000

3. Wastewater Effluent Disposal Pumping. Approximate cost: $148,000

4. Wastewater Effluent Disposal at FPL R/W. Approximate cost: $448,000

5. Wastewater Treatment Plant Improvements. Approximate cost: $168,000

Woodmere

1. Wastewater Effluent Disposal Outfall. Approximate cost: $291,000

Exhibit ___ (BTP-2)
Cover Page

WATER UTILITY BENCHMARKS REVISED - STANDARD & POOR'S CREDITWEEK DATED JUNE 15, 1992

FERC turned down an agreed-upon rate for a 20-year transmission contract between Penelec and a QF customer. The proposed rate had been based on embedded cost with an opportunity cost "adder"; however, FERC would only agree to the higher of either embedded cost or opportunity cost.

In approving Entergy's transmission access filing, FERC set another precedent by allowing recovery of stranded investment. For this provision the key will be in adequately determining how much of the seller's generating or transmission capacity will actually be stranded by a noncontractual wholesale customer leaving the system, in other words, how long it will take for the seller's remaining native load to grow into the capacity.

As with opportunity cost pricing, FERC's implementation through price setting will determine whether native load customers end up subsidizing these wholesale customers. Should that happen, higher resulting rates could impair the utility's competitive position.

Philip Edwards, municipal finance (212) 208-1851
Debra Bromberg, corporate finance (212) 208-1657

WATER UTILITY BENCHMARKS REVISED

S&P has revised its public financial benchmarks for investor-owned water utilities. The more stringent standards *(see table on next page)* were implemented as a result of S&P's conclusion that credit risk has escalated in the water utility industry in recent years due to significant challenges related to developing future water supplies and assuring the quality of existing supplies.

In essence, S&P believes that increased business risk should be offset by a stronger financial profile to maintain the same rating, if all other factors remain the same. The new standards will be implemented gradually to provide water utility management and regulators the opportunity to reduce financial leverage or take other measures to address S&P's concerns.

The benchmarks are only guidelines and are not meant to be substituted for in-depth financial and credit analyses. The guidelines are designed to measure financial performance, risk, and protection, and to relate that information to S&P's bond ratings. While these ratios are deemed most important, S&P uses many other financial statistics in the rating process. A qualitative assessment of a water utility's business profile is just as vital to the final rating determination.

NEW CHALLENGES

Concerns over the adequacy of the water supply are particularly relevant in the western U.S. and have been highlighted by the six-year drought in California. Utilities are less likely to continue to develop and enhance water supply through the more traditional approach of large-scaled water projects consisting of a network of dams and reservoirs. This is due to less developable sites and increased environmental sensitivity. However, technological advances are providing alternatives to traditional approaches.

Thus far, desalination and water reclamation have been used to a small degree. These procedures require large capital investment and currently remain relatively uneconomical.

A more cost-effective method to develop or enhance current water supply is through conservation. However, with conservation comes reductions in earnings and higher expenses that need to be recovered.

Another major challenge for many water utilities is the ongoing implementation of the 1986 amendment to the Safe Drinking Water Act (SDWA) of 1974. The SDWA amendments are imposing more stringent water quality standards relating to specified levels of substances found in both surface and groundwater supplies. Higher water quality standards are contributing to significant financing and regulatory pressures for the industry.

Ongoing evolution of the Act is expected as the Environmental Protection Agency (EPA) continues to review contaminants that may have an adverse impact on public health. Currently, the more significant proposed and anticipated rules are for testing and monitoring contaminants in water supply, radionuclides, and disinfection/disinfection by-products. The EPA continues to promulgate slowly these standards, largely because of the time needed to review pertinent information and data before issuing additional standards.

FINANCIAL STRESS

Unlike the Clean Air Act's impact on a select number of electric utilities, SDWA requires virtually the entire industry to improve existing treatment and related facilities. This will result in significant capital additions on top of already escalating spending on distribution infrastructure. Financing these large rate-base additions—which are nonrevenue-producing assets—will be difficult. Internal cash genera-

S&P benchmarks
Previous water benchmarks

	AA	A	BBB	BB
Pretax interest coverage (x)	over 3.00	2.0-3.5	1.0-2.0	under 1.25
Total debt/total capital (%)	under 54	52-60	59-66	over 65
Funds flow interest coverage (x)	over 3.25	2.25-3.75	1.25-2.75	under 1.5
Funds from operations (FFO)/total debt (%)	over 25	16-27	10-20	under 10
Net cash flow (NCF)/capital expenditures (capex) (%)	over 70	55-85	30-65	under 30

Revised water benchmarks

	AA	A	BBB	BB
Pretax interest coverage (x)	over 3.65	2.25-3.75	1.25-2.75	under 1.50
Total debt/total capital (%)	under 50	48-55	54-62	over 62
Funds flow interest coverage (x)	over 3.50	2.50-4.00	1.50-3.00	under 1.75
FFO/total debt (%)	over 25	16-27	10-20	under 12
NCF/capex (%)	over 75	60-90	35-65	under 40

Utilities benchmarks
Pretax interest coverage (x)

	AA	A	BBB	BB
Electric utilities	over 3.5	2.5-4.0	1.5-3.0	under 1.75
Gas distributors	over 4.0	3.0-4.25	2.0-3.25	under 2.50
Gas pipelines	over 4.5	3.5-4.75	2.5-3.75	under 2.75
Telephones	over 4.5	3.5-6.5	2.5-4.0	

Total debt/total capital (%)

	AA	A	BBB	BB
Electric utilities	under 46	44-54	50-62	over 60
Gas distributors	under 46	42-50	47-60	over 58
Gas pipelines	under 40	40-50	45-58	over 55
Telephones	under 42	40-52	50-62	

Funds flow interest coverage (x)

	AA	A	BBB	BB
Electric utilities	over 3.75	2.75-4.25	1.75-3.25	under 2.0
Gas distributors	over 4.25	3.25-4.5	2.25-3.5	under 2.5
Gas pipelines	over 4.75	3.75-5.0	2.75-4.0	under 3.0
Telephones	over 6.5	5.0-7.0	3.5-5.5	

FFO/total debt (%)
NCF/long-term debt (%)

	AA	A	BBB	BB
Electric utilities	over 27	17-30	12-22	under 15
Gas distributors	over 30	20-35	15-25	under 17
Gas pipelines	over 40	30-45	20-30	under 25

NCF/long-term debt (%)

	AA	A	BBB
Telephones	over 32	25-32	20-30

NCF/capex (%)

	AA	A	BBB	BB
Electric utilities	over 80	65-85	40-70	under 45
Gas distributors	over 130	70-110	45-80	under 60
Gas pipelines	over 130	90-140	60-100	under 70

hon is weak, with low depreciation rates (usually about 2% versus around 3% for electric utilities), and low authorized return on equity. As a result, dependence on external financing and rate relief requirements will intensify.

Moreover, low authorized returns may affect the industry's ability to attract necessary capital to develop new water supplies and upgrade the quality of existing supplies.

REGULATORY CONCERNS

Poor internal cash generation along with modest demand growth of under 1% will require state utility regulators to play an even more significant role in the future financial well-being of the industry. Traditional rate-making policy has not provided sufficient credit support during the construction cycle of the electric industry over the past 15 years. To avoid a repeat in the water industry, regulators must be aware of the increased challenges the industry faces. With large rate-base additions, along with increasing nonrevenue-producing assets to meet future and current water needs and mandated water quality standards, regulators will need to implement innovative regulatory policy to allow for reasonable financial protection measures.

Techniques to be considered to preclude financial erosion include future test year, automatic adjustment clauses (for large expense items), allowing a cash return on construction work in progress, higher earnable returns, and increased depreciation rates.

ROLE OF MANAGEMENT

Water utility management must do its part by continuing to file aggressively for timely rate relief so that the financial profiles of their utilities are not negatively affected by regulatory lag. Moreover, management must continue to educate the public and regulators about the whole range of challenges facing the water industry.

Beyond these steps, it is even more important for management to position their utilities financially by maintaining reasonable capital structures during the construction phase to limit financial deterioration. This will help utilities maintain their financial profiles in line with S&P's revised benchmark guidelines and may prevent credit quality erosion.

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NEW RULES, POOR FINANCIALS IMPACT GAS PIPELINES

S&P recently concluded its evaluation of six natural gas pipeline companies that had been placed on CreditWatch with negative implications. The placement of the ratings on CreditWatch was triggered mainly by disappointment over the financial profile of each of these companies. Five of the six systems had their ratings downgraded, and certain specific security ratings fell into speculative-grade territory.

Nevertheless, four of the six operating pipelines maintained their investment-grade status, despite financials that are weak for these ratings. The maintenance of investment-grade ratings reflects S&P's opinion that financial im-