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January 16, 1997

Blanca S. Bayo, Director
Division of Records & Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

HAND DELIVERY

Re: Docket No. ~~960258~~-WS
Petition of the Florida Waterworks Association to Adopt Rules
on Margin Reserve and Imputation of Contributions-in-aid-of-
Construction on the Margin Reserve Calculation

Dear Ms. Bayo:

Enclosed on behalf of Florida Waterworks Association for
filing in the above docket are an original and 15 copies of:

1. Response to Exhibit 7;
2. Post-Hearing Comments; and
3. our Certificate of Service.

Please acknowledge receipt of the foregoing by stamping the
enclosed extra copy of this letter and returning same to my
attention. Thank you for your assistance.

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Very truly yours,

Wayne L. Schiefelbein
Wayne L. Schiefelbein

exhibit
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FPSC-RECORDS/REPORTING

Post-hearing comments 905
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00556 JAN 16 97

FPSC-RECORDS/REPORTING

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of the Florida)
Waterworks Association to Adopt Rules)
on Margin Reserve and Imputation of)
Contributions-in-Aid-of-Construction)
on the Margin Reserve Calculation)

Docket No. 97-258-WS
Filed: January 16, 1997

POST-HEARING COMMENTS
OF
FLORIDA WATERWORKS ASSOCIATION

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FPSC-RECORDS/REPORTING

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Our industry needs rules that match regulatory policy with real world needs, rules that coordinate PSC regulation with FDEP regulation, rules that allow us to recover the cost of investment actually necessary to meet statutory obligations instead of a formulated theoretical level of investment artificially determined to keep rates low. Existing nonrule policies and the proposed rule do not do this.

In real world planning, we prefer -- and your charge to our industry should be -- that our engineers design the most economical and efficient facilities that meet our continuing obligations to the public, consistent with high state and federal health and environmental requirements.

Unfortunately, the signal we have been getting does not support this approach. The signal we have been getting is it doesn't matter what the most economical choice over the long term may be, utilities will still only be allowed to earn on a formulated investment equal to capacity for today's load plus 18 months' growth....

Our member utilities have been denied, time and again, rates sufficient to cover economically sized additions. We have reacted to that signal by downsizing our additions and making them smaller and more frequently and at higher unit costs. The FWA believes the Commission should correct this problem, which is generic, by adopting rules that encourage prudent, long-term economic development. The simplest way to do this is by increasing the margin reserve to five years so that we can meet both FDEP and other regulatory requirements and benefit concurrently from lower unit costs.

Just as important, the Commission needs to stop imputing CIAC against the margin reserve. Not only is it wrong as a period matching accounting procedure, but it makes it impossible for a utility to ever recover the cost of its investment necessary to meet its obligations and as a result attract the debt and equity necessary to fund the required plant and necessary investment in plant and equipment.

Commissioners, as regulated utilities, we know we have certain responsibilities. We must provide safe, efficient and adequate service to our customers. We must protect the environment. We must be ready to serve all potential customers in our certificated areas, an obligation we bear in exchange for being provided with a protected service area. We know full well we have an obligation to do all this in an economical way, over a realistic period of time.

But you also have obligations. You must assure the public that a utility meets its obligations in an economic manner. But you must also provide the utility with an opportunity to earn on the utility's investment necessary to meet its obligations in serving the public. And you must set rates that allow a utility to maintain its financial integrity, so that it can pay its legitimate debts and have an opportunity to earn a reasonable return on capital.

EXCERPTED FROM THE COMMENTS OF JIM MOORE, PRESIDENT OF FLORIDA WATERWORKS ASSOCIATION. (T. 39-41)

INTRODUCTION

Florida Waterworks Association (FWA) initiated the instant docket by its Petition to Adopt Rules, filed on March 1, 1996. FWA seeks substantial reform of long-standing policies of the Florida Public Service Commission (PSC) regarding the rate-making treatment of reserve capacity of water and wastewater utilities.¹

FWA proposes that the PSC establish presumptively valid margin reserve periods of five years for source of supply, water and wastewater treatment and traditional effluent disposal facilities; and two years for onsite distribution lines and services and onsite collection lines and laterals. FWA further proposes that qualifying reuse facilities, prudently sized transmission and offsite distribution mains, and offsite force and gravity collectors and pump stations, be deemed 100% used and useful. Thus, no margin reserve would be necessary for such facilities. Finally, FWA proposes that the PSC abolish its practice of negating recognition of investment in reserve capacity through the imputation of future customers' contributions-in-aid-of-construction (CIAC) against margin reserve.²

The PSC has proposed a rule which codifies its traditional practices of far-shorter margin reserve periods, offset by the

¹For a brief summary of the historical background to previous rulemaking efforts on the instant issues and general used and useful policy, please see paragraph 13 through 18 of said petition.

²The FWA's proposed rule is attached to these post-hearing comments.

imputation of CIAC. (Order No. 96-0966-NOR-WS (July 26, 1996)³ In doing so, the PSC approved a Staff recommendation which was submitted because it was deemed by Staff to be "the most expedient way" to get the matter before the PSC and to have a formal rulemaking hearing. (T. 12)

Comments of interested persons were prefiled and a hearing was held before the PSC on December 10, 1996. It is fair to state that seldom if ever in contested rulemaking proceedings before the PSC has the resulting record been as overwhelmingly one-sided. FWA and SSU submitted in-depth analyses of the real world context and effect of longstanding PSC policy. The Florida Department of Environmental Protection (DEP), the St. Johns River Water Management District, the South Florida Water Management District, and the Southwest Florida Water Management District all expressed unbridled opposition to the PSC proposed rule, while supporting the substance of FWA's rule proposal. PSC Staff itself advocated doubling the PSC's proposed margin reserve periods for treatment facilities, and abandoning the CIAC imputation policy.

The Office of Public Counsel (OPC) opposed recognition of any margin reserve, and to the extent one is approved, its offset through imputation of CIAC. OPC prefiled brief comments, no expert testimony, and no exhibits. The commentary offered by Associate Public Counsel McLean throughout the hearing, however spirited,

³FWA and Southern States Utilities, Inc. (SSU) have both filed Petitions for Administrative Determinations of Invalidity of the PSC's proposed rule with the Division of Administrative Hearings. (Composite Exh. 1 (4) and (5)) The petitions are currently in abatement.

fell far short of offering competent, substantial evidence for any policy on the instant issues.

The FWA Study conclusively shows that traditional PSC policy does not allow utilities to recover prudent, mandated investment. The Study's financial model of utility cost recovery, based on a "best case" scenario (no regulatory lag, full recovery of operation and maintenance expenses, and predictable customer growth and plant utilization), demonstrates that if only 18-month margin reserve is allowed and CIAC is imputed, utilities will never be able to earn their authorized rate of return. In the example presented, actual return on investment, including monthly rates and AFPI, never exceeds 70% of the authorized weighted cost of capital, over a 25-year period. (Composite Exh. 1 (9), DS-2, pp. 4, 15-18)

In these post-hearing comments, FWA first submits that adoption of a rule is mandatory under the Administrative Procedure Act. This is followed by an analysis of what a rule on reserve capacity should provide. FWA then contrasts the record evidence against the myths that unfortunately have pervaded - or threaten to pervade - the PSC's reasoning on the instant issues.

UNDER THE ADMINISTRATIVE PROCEDURE ACT, THE PSC MUST ADOPT A RULE ON MARGIN RESERVE AND THE OFFSETTING IMPUTATION OF CIAC.

The PSC is confronted with a "continuing dilemma in virtually every water and wastewater rate case that goes to hearing": the issues of recognition of the appropriate margin reserve period and the offsetting imputation of CIAC against that margin reserve. (T. 10, 260) In response, the PSC has "consistently adhered" to the

practice of allowing a margin reserve, typically of 18 months, in the used and useful calculation, and of imputing CIAC against the margin reserve. (T. 11) These policy considerations have been at the forefront of PSC water and wastewater rate cases for the last ten to twelve years. (T. 10, 260; Composite Exh. 1 (11), p. 4)

The PSC's consistent adherence to these practices are without a doubt agency statements of general applicability that implement, interpret or prescribe law or policy. They are, therefore, as a matter of law, rules, albeit unadopted through the rulemaking process. Sec. 120.52(15), Fla. Stat. (1996)

Rulemaking is not a matter of agency discretion. Each agency statement defined as a rule under Section 120.52 is required to be adopted by the prescribed rulemaking procedure "as soon as feasible and practicable." Sec. 120.54(1)(a), Fla. Stat. (1996)

Rulemaking on the instant issues is feasible and practicable. The PSC has had more than sufficient time to acquire the knowledge and experience reasonably necessary to address these issues by rulemaking. Clearly, related matters are sufficiently resolved to enable the PSC to adopt pertinent rules. Detail or precision in the establishment of principles, criteria and standards for PSC decisions is clearly available and therefore practicable. Codification of the generally applicable policies would be of near-universal application and benefit to utilities and their customers.

WHAT THE RULE SHOULD PROVIDE, AND WHY

Definition of Margin Reserve

The PSC proposed rule narrowly defines the purpose of Margin

Reserve as meeting the needs of customer growth. FWA has proposed that the definition be broadened to mean "the investment needed to meet the changing demands of existing customers and the demand of potential customers in a reasonable time and in an economic manner." At the hearing, FWA endorsed SSU's refinement of this definition, as follows:

"Margin reserve" is defined as the amount of plant capacity needed to preserve and protect the ability of utility facilities to provide service to existing and future customers in an economically feasible manner that will preclude a deterioration in quality of service and prevent adverse environmental and health effects. (Exh. 6; T. 234)

The rule's definition should recognize that Margin Reserve represents capacity that has several functions.

It represents the capacity necessary to protect existing customers and the capacity necessary to be ready to serve future customers. In addition, by recognizing that economics must be considered in how a utility meets its obligations, the definition addresses that capacity necessary to furnish adequate service during the course of the prudent operation of the utility's business. (Composite Exh. 1 (10), p. 15; see also pp. 16-23)(emphasis added)

Definition of Margin Reserve Period

The PSC proposed rule defines Margin Reserve Period as "the time period needed to install the next economically feasible increment of plant capacity that will preclude a deterioration in the quality of service." As FWA witness Seidman testified,

The definition is too limiting. It recognizes only the period necessary to "install" the next increment of capacity and ignores the period necessary to plan, design and obtain land and permits for that capacity and the economic time span between additions. A utility must maintain adequate capacity during all of that time, not just while additions are being installed. If the definition is limited as proposed, then a portion of

capacity economically sized, and needed by the utility to meet its obligations, will be excluded from used and useful plant and therefore from the rate base upon which it will be allowed the opportunity to earn a return. (Composite Exh. 1 (10), pp. 25-26)

FWA therefore proposes to define Margin Reserve Period as "the period during which current capacity is required to be available until the next economic capacity addition can be placed in service without causing a deterioration in the quality of service." (Composite Exh. 1 (10), pp. 23-28)

Default Margin Reserve Periods

The PSC proposed rule establishes presumptively valid margin reserve periods that would be accepted by the PSC "unless otherwise justified."

FWA supports this "default" approach. Longer margin reserve periods may be appropriate if justified.⁴ Shorter margin reserve periods may also be appropriate where justified. Nonetheless, the purpose of the rule should be to prescribe that which is generally applicable.

The PSC proposed rule prescribes default margin reserve periods of 18 months for water source and treatment facilities and wastewater treatment and effluent disposal facilities, and 12 months for water distribution and transmission lines and the wastewater collection system.

According to Staff witness Crouch:

⁴See, for example, the comments of the water management districts regarding alternative water supplies (Exh. 3), and SSU witness Hartman's analysis of various plant components. (Composite Exh. 1 (14), GCH-4)

In the early 1980's, the PSC staff conducted research and found that the average planning, permitting, and construction time for plant was 1.5 years, and for distribution/collection systems, 1 year.⁵ These time frames allow for design, bids, actual construction and clearance for service from the appropriate regulatory agency. More recent cases, however, have shown that additional time is needed in order to meet the more stringent requirements imposed by EPA and other regulatory agencies such as the Florida Department of Environmental Protection. Preliminary design through construction completion now takes much longer for most wastewater plant construction or expansion projects. Current Commission policy as specified in this proposed margin reserve rule is to allow eighteen months for wastewater treatment plant planning and construction as a margin reserve. Staff, however, is more comfortable with a three year Margin Reserve due to the regulatory requirements mentioned above. (Composite Exh. 1 (12), p. 6)

Mr. Crouch favors a three-year margin reserve period for wastewater treatment plants, given the planning requirements of DEP's Rule 62-600.405. At the hearing, Mr. Crouch recognized that the DEP rule governs planning for disposal as well as treatment facilities. (T. 274-276) Mr. Crouch also testified that subsequent to submission of his written comments, PSC staff had decided to support a three-year margin reserve period for water treatment plant as well, given DEP intentions of adopting a rule for such plant comparable to the wastewater rule. (T. 274) Mr. Crouch's recommended margin reserve periods are, as he put it, "a compromise between the DEP rule and how much we should make existing customers pay." (T. 275)

Mr. Crouch acknowledges that "(i)t would be unduly burdensome,

⁵ Compare with Mr. Crouch's remarks at T. 260-261 as to the origins of traditional margin reserve periods.

unrealistic, as well as very costly to a utility company to constantly be in some phase of construction in order to add new customers." (Composite Exh. 1 (12), p. 6) However, when asked that given what is now known about what it takes to design, construct, and permit a plant, whether a three-year margin reserve period for treatment and disposal would allow a utility to escape a cycle of constant construction, Mr. Crouch only responded that his recommendation was a "compromise" and "a step in that direction." (T. 278)

The PSC's proposed default margin periods, even as modified by Staff, are far too short to allow a utility to plan, construct, and permit capacity additions in an economical manner or, in some cases, to operate in compliance with DEP regulations.

Source of supply, treatment and traditional disposal facilities

FWA proposed a five-year margin reserve period for water source of supply and treatment facilities, wastewater treatment facilities, and effluent disposal facilities other than reuse facilities.

DEP and the three water management districts participating in the proceeding endorsed the FWA proposal. (Composite Exh. 1 (13); Exh. 3) According to DEP, a shorter margin reserve period " will create a disincentive for complying with the DEP's rules regarding public health and water quality protection." (Composite Exh. 1 (13), p. 3) Mr. Seidman agreed, explaining that:

In today's environmentally conscious society, it can take several months to several years to go through the process of acquiring a site or readying an existing site for use. Whether new or existing, a utility must perform the

required tests on the site, obtain permits for its use, work out buffer requirements, obtain the necessary consumptive use permits and gain approval for disposal of effluent. Obtaining a consumptive use permit alone may well take four years. A utility must maintain a level of capacity sufficient to adequately serve its customers during this planning and permitting process.

Another reason for selecting the five year margin reserve period is because it is compatible with the planning regulations for wastewater facilities set out by FDEP in Rule 62-600.405.... That rule requires a utility to initiate planning and design for capacity expansion if the currently permitted capacity will be equalled or exceeded within the next five years. Therefore, regardless of whether this Commission recognizes the investment the utility must make to maintain capacity during that five year period, the utility is obligated to move ahead with a capacity expansion. (Composite Exh. 1 (10), pp. 30-31)

Rule 62-600.405 became effective January 30, 1991. The rule requires each permittee to routinely compare flows being treated at its wastewater facilities with the permitted capacity of the facilities and to submit capacity analysis reports to DEP at specified times. The rule further requires permittees to submit documentation of timely planning, design and construction of needed wastewater facility expansions according to the following schedule:

- (1) if a capacity analysis report indicates that the permitted capacity of a facility will be equalled or exceeded within the next five years, the report shall include a statement, signed and sealed by a professional engineer, that planning and preliminary design of the needed expansion have been initiated;
- (2) if a capacity analysis report indicates that the permitted capacity of a facility will be equalled or exceeded within the next four years, the report shall include a statement, signed and sealed by a professional engineer, that plans and specifications for the needed expansion are being prepared; and

- (3) if a capacity analysis report indicates that the permitted capacity of a facility will be equaled or exceeded within the next three years, the permittee shall submit to the DEP, within 30 days after submittal of the capacity analysis report, a permit application for the needed expansion.

The foregoing schedule clearly sets a five-year time period for the planning, design and construction of needed expansion of wastewater facilities. (Composite Exh. 1 (13), p. 3; (14), pp. 33-36; (16), pp. 28-30)

DEP intends to implement a similar rule regulating community public water systems "in order to ensure the timely planning, design and construction of water facilities necessary to provide proper supply and treatment of drinking water." (Composite Exh. 1 (13), p. 3; T. 36) Mr. Hartman observed that in his experience, DEP currently inquires "with increased regularity if 5 years of water plant capacity is available or planned" in its review of water plant permit applications. (Composite Exh. 1 (14), p. 36; see also (16), pp. 27-28)

The FWA Study analyzed the real world impact of environmental regulations on specific water and wastewater utilities. (Composite Exh. 1 (9), DS-2, pp. 7-14) The Study found that, particularly in recent years, such regulations have substantially extended the time it takes to obtain permits, increasing the associated costs. As shown below, it typically requires three and a half to five years to plan, design, permit, construct, test and certify water and wastewater facility expansions.

Timetables for Water & Wastewater Facility Expansion

	Water	Wastewater
Planning	3-6 Months	3-18 Months
Design	3-6 Months	6-24 Months
Permitting	3-6 Months	6-36 Months
Construction	18-36 Months	12-36 Months
Testing & Certification	6 Months	6 Months

(Composite Exh. 1 (9), DS-2, p. 4; see also SSU witness Hartman's analysis at Composite Exh. 1 (14), pp. 28-31; GCH-9.)

Another compelling reason for selecting a five year margin reserve period is economies of scale. As Mr. Seidman testified:

when a utility is limited to building capacity that is adequate only for short periods - periods less than five years - it cannot take advantage of the economies of scale in system design and equipment sizing that will provide long run economic benefits. For water and wastewater facilities, there are still significant economies of scale in building larger units and five years provides a minimum incentive. The staff of FDEP has both acknowledged and recommended that water and wastewater systems should be planned for periods of ten years or longer.⁶ Yet there is no incentive to consider the long run and build larger, lower unit cost facilities if a portion of the investment cannot be earned on because it results in capacity in excess of that allowed through an 18 month margin reserve period. (Composite Exh. 1 (10) pp. 32-33)

The analysis submitted by FWA and SSU strongly support the existence of significant economies of scale.

As FWA witness Swain testified,

In the long run it is better for both the utility investor and the utility customers to incorporate the economy of scaling a plant by constructing a larger size plant and providing for some reasonable amount of extra capacity. To demonstrate this, we prepared financial

⁶T. 19-21; Composite Exh. 1 (16), pp. 33-34. Similarly, the water management districts review utility planning over a twenty-year horizon, and typically issue consumptive use permits ranging from five to ten to fifteen year periods. (T. 146, 148)

models which compared two alternative scenarios for construction of water and wastewater treatment plant additions over a 30 year period. We used actual construction cost data provided by FWA utility members. We also assumed that the utility would fully recover all other costs, including AFPI. Under both model scenarios we found that the economically sized construction resulted in lower rates and service availability charges than the smaller sized plants -- in the short term and over the long-term. In addition, the net present value of revenue requirements, including CIAC and AFPI, is lower when economically sizing plant. (Composite Exh. 1 (9), pp. 5-6; DS-2, DS-3 and DS-4)

Mr. Hartman submitted an in-depth evaluation of economies of scale that clearly demonstrates the decreased unit costs attained through construction of a vast array of components of water and wastewater treatment facilities. Mr. Hartman's presentation includes a series of graphs which illustrate the appropriate margin reserve periods needed to promote and preserve the economies of scale for many of those plant components. (Composite Exh. 1 (14), pp. 11-20; GCH-2 through GCH-8)

FWA witness Milian described the dilemma he experienced as a utility company executive, in choosing between a 500,000 gallons per day and one million gallons per day wastewater treatment plant capacity:

[t]he economic evaluation... found that the half a million gallons would cost them \$1.7 million, while the 1 million would only cost them [\$]1.9. So they will have twice as much capacity with an additional \$200,000, which was less than 10 percent of the additional cost to build the sewage treatment plant, for half a million dollars. Now, the utility had to make the decision based on the fact that if I go with a 1 million gallons a day plant, then they will give me 50 percent capacity, used and useful, and therefore my rate base would be approximately \$900,000. If I go with the .5, then the whole thing will be 100 percent, and therefore I will obtain the \$1.7 million. So these are the kind of things that ultimately the customers, the present customers and the future

customers, are going to be suffering if the economies of scale are not taken into consideration. (T. 74-75)

In many cases utilities have chosen to expand in smaller increments in order to achieve a higher level of cost recovery, rather than in larger increments which would provide economies of scale, but on which cost recovery is unlikely. Additional costs which are incurred and passed along to customers as a result of these decisions include:

- higher construction costs associated with smaller incremental expansions
- duplicative engineering, permitting and contractor mobilization costs
- higher rate case expense from more frequent rate hearings

The result is higher customer rates, in both the short and long term. The Study compares two alternative scenarios for incremental expansion of wastewater treatment facilities, and finds that the net present value of revenue requirements over 25 years is 16% higher if plant is expanded in smaller increments. Service availability charges and AFPI are also higher. Rates are higher from the first year. The results of a similar comparison for water treatment facilities is even more dramatic: the net present value of revenue requirements over 25 years is 41% higher if plant is expanded in smaller increments. While rates are initially lower, they become higher by the fourth year. (Composite Exh. 1 (9), DS-2, pp. 5, 19-23; DS-3; DS-4)

At the hearing, DEP informed the PSC about the new State Revolving Fund which will provide grants and, primarily, loans to water systems, for construction of infrastructure. Unlike the

existing wastewater State Revolving Fund, which is accessible only by governmentally-owned systems, the State Revolving Fund for water will be available to eligible investor-owned systems as well. Annual funding of \$40 to 45 million is anticipated. (T. 15-16)

DEP will be looking at a 20-year planning horizon and employing a present worth or cost-effectiveness analysis before it awards a loan for any project. In such evaluation, alternatives that call for staging for less than five years are not cost-effective and therefore would be ineligible to receive loans. (T. 19-20) As Mr. Hoofnagle testified,

I think the bottom line is our concern... that utilities... that because of the margin reserve issue only come in for staging of facilities for 18 months, or two years, or even three years, will not be eligible for an SRF loan under our program, because inevitably they will fail the cost-effectiveness analysis for staging of those alternatives. It's sort of obvious when you look at a facility that decides on ten-year staging, therefore in a 20-year period, they do construction twice. At 18 months they would do construction about 14 times. And the cost-effectiveness of -- involved with the mobilization and expanding of plant 14 times, or even ten times, or even seven times, in a planning period would not be cost-effective by our criteria. (T. 20-21)

Distribution and collection systems

The rule should recognize that prudently constructed water transmission mains and off-site wastewater force and gravity collector mains and pumping stations should be considered 100% used and useful, regardless of how many years of growth they can accommodate, with consideration of a margin reserve therefore unnecessary. As Mr. Seidman testified,

These facilities are added to or expanded on the basis of system configuration, not strictly on the basis of the capacity of the mains. Margin reserve should not be a

consideration for... [these facilities] which are designed for relatively long periods of time, even for total buildout. It is expensive and impractical to lay parallel mains or change out small mains for larger ones in order to track annual growth patterns when these facilities are usually buried beneath paved roads and running through built up areas. (Composite Exh. 1 (10), p. 35)

However, a margin reserve period is appropriate for on-site distribution and collection lines and laterals. FWA proposes that the default period for these facilities be increased from one to two years. As Mr. Seidman explained,

This would help to recognize that on-site mains must go where the customers go and as a result, a utility, in order to maintain continuity of flow, often must have more lines in the ground than a customer count would indicate. Water cannot flow through unconnected sections of line. Two customers on a street with ten lots, but not located on contiguous lots, will require more than 2/10ths of the line to serve them. Increasing the margin reserve period to the equivalent of two years of growth is a fair means of partially compensating the utility for the cost of meeting its obligation to serve under this most common of conditions, while, at the same time, responding to Commission concerns that developers bear the risk of, and not be rewarded for running lines to every lot. (Composite Exh. 1 (10), p. 36; see also (14), pp. 24-26; GCH-8)

Reuse facilities

The PSC's proposed rule does not specifically address policy regarding reuse facilities. It appears that the PSC intends to continue to apply an 18-month margin reserve period to such facilities, like other effluent disposal facilities.

Sections 367.0817 and 403.064, Florida Statutes, require the PSC to allow utilities to recover the full, prudently incurred cost of reuse facilities through their rate structure. This is consistent with the State objective of encouraging and promoting

reuse, pursuant to Sections 373.250 and 403.064, Florida Statutes. DEP, the St. Johns Water Management District, the South Florida Water Management District and the Southwest Water Management District therefore joined FWA in proposing that the PSC's margin reserve rule provide that calculation of a margin reserve is not applicable to reuse facilities but that such facilities "shall be considered 100 percent used and useful." DEP also submitted definitions of reuse facilities and cross-references to the statutes and rules which it administers to ensure consistency between the PSC and DEP regulatory approaches and state-wide water policy. (Composite Exh. 1 (13), pp. 4-6; see also Exh. 3)

Imputation of CIAC

The final matter that should be addressed by the rule is the imputation of CIAC. The PSC proposed rule codifies the imputation policy, with the sole limitation being that imputed CIAC shall not exceed the margin reserve.

Staff witness Walker explained how CIAC is imputed from a mechanical perspective, and how the imputation affects the reserve requirement calculation in a rate proceeding. Mr. Walker established that commonly the net effect of the imputation of CIAC is to entirely offset the plant balance associated with the margin reserve. (Composite Exh.1 (11), pp. 2-3; T. 259)

Mr. Walker testified that about twelve years ago, when the practice of imputing CIAC against the margin reserve began, there was considerable support for the policy among PSC accounting staff. Over time, that support "has eroded to the point of dissolution":

the imputation practice is no longer advocated by any member of the accounting staff of the Division of Water and Wastewater. (Composite Exh. 1 (11), p. 4)

Mr. Walker recognized that a margin reserve is:

an investment pool that is constantly being replenished; when new customers are added, the investment needed to serve still future connections must be planned and completed. This investment may take the form of plant that was previously considered property held for future use.... In this sense, margin reserve is constantly being updated with expenditures to fund plant improvements preceding receipt of customer contributions.... The utility cannot stand still when growth necessitates added expenditures to serve customers. (Composite Exh. 1 (11), p. 4)

Mr. Seidman agreed that the need for a margin reserve in a growing utility is a continuing one:

Each existing customer has a margin reserve requirement associated with it that protects its quality of service as other customers are added to the system and assures that the utility has sufficient capacity to meet any additional demands that it may place on the system. As each new customer joins the system, it utilizes existing margin reserve, and that margin reserve must be replaced. Therefore, the utility must maintain a continuing investment in margin reserve in order to maintain the status quo as new customers become existing customers. (Composite Exh. 1 (10), p. 44)

The imputation or offset of future customer contributions against current investment in reserve capacity is therefore:

an illogical practice that not only defeats the purpose of margin reserve, but also is confiscatory in that it denies the utility the ability to ever earn a return on its investment in plant used and useful in the public interest. (Composite Exh. 1 (10), p. 42)

For example, if CIAC is derived from service availability

charges set at the PSC 75% guideline,⁷ a utility that is allowed a 10% return on rate base will earn a 2.5% return on its actual investment in margin reserve, when CIAC is imputed for the same number of years as the margin reserve period. (Composite Exh. 1 (10), (FS-4))

The FWA Study found that imputation of CIAC substantially reduces - and can eliminate - cost recovery on prudent, mandated investment. The net effect of imputation is to remove most of the benefit of margin reserve from rate base. In the Study's model, imputation removes 84% of margin reserve from rate base over the 25-year period. It is not uncommon for the entire margin reserve to be eliminated by the imputation. (Composite Exh. 1 (9), pp. 24-25)

If the PSC merely extends the margin reserve period and continues to offset imputed CIAC against it, nothing is gained. In fact, with a five year margin and five year imputation, a utility would be in a worse financial position. (Composite Exh. 1 (10), p. 47)

FWA maintains that the imputation of CIAC is indefensible. The practice should be abolished.

Myth # 1: Florida's statutory mandate to consider "used and useful" is unique to water and wastewater utilities.

Since 1959, when privately-owned water and wastewater utilities in various counties first became subject to rate

⁷See Rule 25-30.580, Florida Administrative Code. The PSC encourages utilities to design service availability charges to ultimately yield 75% of net plant when facilities are at design capacity.

regulation by the PSC, the empowering statute has always required the PSC to consider the investment of the utility in property "used and useful" in serving the public.⁸

The concept of "used and useful" is not unique to water and wastewater utilities. Chapter 366 of the Florida Statutes, which regulates electric and gas utilities, requires the PSC "to investigate and determine the actual legitimate costs of the property of each utility company, actually used and useful in the public service...." For ratemaking purposes, the net investment in such property is "the money honestly and prudently invested by the public utility company in such property used and useful in serving the public...." Sec. 366.06(1), Fla. Stat. This happens to be the same language as in Florida Laws 67-496, the 1967 water and sewer law.

While similar statutory language has been adopted throughout the country, SSU witness Guastella testified that "it's hard to find decisions in other states that make used and useful adjustments. They all seem to recognize that if the plant and facilities are necessary to some needs of the customers, that should be allowed in rate base because it's a cost of providing service." (T. 201-203)

⁸Florida Laws 59-372; 67-496; 71-278. The 1959 law referred to "a fair return on the fair value of the property of the public utility used and useful in the public service." The 1967 revision referred to "the money honestly and prudently invested by the public utility in property used and useful in serving the public." The 1971 version, which has been amended considerably, still retains the language "the utility's investment in property used and useful in the public service."

Myth # 2: Margin reserve for water and wastewater utilities does not serve the same function as reserve margin for electric utilities.

A capacity reserve, to assure a utility's ability to provide reliable service and meet statutory requirements, is a necessity long recognized by the PSC for water, wastewater and electric utilities. Mr. Seidman observed that:

Although the purpose of the reserve is similar for these types of utilities, they have different names and are measured in different ways. The investment in capacity reserve for water and wastewater utilities is called a margin reserve and has historically been expressed in terms of equivalent annual growth. The investment in capacity reserve for electric utilities is called a reserve margin and has historically been expressed as a percentage of annual peak load demand. However, either reserve can be expressed in terms of percentage of peak load demand or equivalent annual growth. (Composite Exh. 1 (10), p. 27)

Reserves for water and wastewater utilities should be treated consistently with electric utilities,

because the purposes or end results are consistent. The means of expressing the measurement of reserve may be different, and the names of the reserve may be different, but the reserves are equivalent in purpose. The difference in expressing the reserve reflects the different engineering approaches to how capacity requirements are determined.

Regardless of how we get there, the result is the same. With regard to electric utilities, the capacity necessary to maintain reliability at a minimum level and on a continuing and economic basis is determined. The resulting capacity requirement, based on an economic analysis, is expressed as a percent of current peak demand. But that capacity, relative to demand, is adequate for some period of time - some number of years at the projected rate of growth. The length of time into the future that capacity will serve is equivalent to margin reserve, in water and wastewater utility terms. (Composite Exh. 1 (10), pp. 26-27)

The PSC is far more attuned to the relationship between reserve capacity requirements and economics in its regulation of electric utilities, wherein its guiding principle has long been "what alternative results in the lowest long run cost?" (Composite Exh. 1 (10), p. 22)

As Mr. Seidman testified, the purposes of reserve requirements of electric utilities and water and wastewater utilities are similar, and the PSC should treat them similarly, but it has not.

This has been primarily because the Commission has viewed the reserves for these respective utilities from different perspectives. The Commission views reserves for electric utilities as providing reliability for existing customers, but no capacity for growth. And it views reserves for water and wastewater utilities as providing capacity for future growth but no degree of reliability for existing customers. In fact, both perceptions are incorrect. Reserves for electric, water and wastewater utilities, as previously observed by staff, serve both purposes. Reserves provide reliability for existing customers and capacity for future growth.

The result has been that for electric utilities, the Commission has expected, even required, a minimum reserve level to be maintained and has included as used and useful, capacity resulting in reserves above the minimum, if it is reasonable, prudent and economical in the long run. But for water and wastewater utilities, except for a few limited cases, the Commission has set a maximum reserve, and has not included capacity resulting in reserves above the maximum as used and useful, even if it is reasonable, prudent and economical in the long run.

The meaning of the treatment of margin reserve for water and wastewater utilities should parallel that for reserve margin for electric utilities. That is, if capacity is reasonable, prudent and economical in the long run, it should be treated as used and useful for ratemaking purposes. (Composite Exh. 1 (10), pp. 22-24)

Mr. Seidman provided an analysis showing that the FWA proposal of a five-year margin reserve period for source, treatment and disposal related plant is compatible with the reserve margins that

the PSC has accepted for electric utilities. Mr. Seidman reviewed the planning documents of the three privately-owned electric generating utilities serving peninsular Florida to compare the number of years of growth that can be accommodated by their planned reserve margins as filed with the PSC in their most recent ten-year site plans. The planned reserves for Florida Power & Light, Florida Power Corporation and Tampa Electric Company for the next ten years provide capacity that ranges from the equivalent of 6.5 years to 24.3 years of growth. (Composite Exh. 1 (10), p. 37; FS-2) Using only the minimum level required by the PSC to be maintained by electric generating utilities, the reserves provide capacity that range from the equivalent of 4 years to 17 years of growth. (Composite Exh. 1 (10), p. 38; FS-3)

The electric utilities include reserves in excess of the minimum required generally because "the combination of capacity additions that result in the higher level of reserves represent the best economic choice of alternatives for serving the growing demand over the long run." (Composite Exh. 1 (10), p. 38)

In its comments, OPC characterized the comparison of PSC regulation of electric and water and wastewater utilities as a "flawed analogy."

Residential electric customers do not contribute substantial sums of money up front when requesting service from an electric utility. Water and wastewater customers do. This contribution is ideally targeted at 75% of the cost of the "piece" of plant constructed to serve one customer. By investing in the utility up front, the water and/or wastewater customer has already paid for his or her share of the utility's requirement to stand ready to serve based on anticipated usage patterns. In addition to the initial contribution, the customer

pays the utility a return on the portion not contributed.
(Composite Exh. 1 (7), p. 3)

Mr. Seidman effectively debunked this rationalization of the PSC's discriminatory treatment of reserve capacity, as follows:

Whether or not a utility finances a portion of its plant through CIAC has no bearing on whether reserves are necessary for a utility to adequately meet its service obligations. Reserves are either needed or not needed. How the costs of reserves are accounted for is not a factor in determining whether they are needed. However, with regard to cost responsibility for necessary reserves, it should be clear that the CIAC paid by customers is a prorata share of the costs incurred to serve them. CIAC is not a "readiness to serve" charge as implied by OPC nor is any customer paying a premium or paying the same costs twice or paying for in rates what has already been paid for through CIAC. That is why rate base reflects the investment net of CIAC. OPC's allegations simply detract from the issue at hand; i.e. determining the extent of margin reserve necessary for a utility to function properly and [meet] its statutory obligations. (Composite Exh 1 (18), p. 15)

Myth # 3: There is a difference between margin reserve and reserve margin.

Staff witness Crouch differentiated between margin reserve and reserve margin, as follows:

Margin reserve is an economic consideration used by the PSC when determining rates for a utility. Reserve margin, also called reserve capacity, is a planning function used by DEP to determine the amount of capacity needed by a utility to function properly. DEP's reserve capacity is not the same as PSC's margin reserve. A legitimate reserve capacity may in fact be a prudent, wise investment by a utility but it might not be totally included in the margin reserve period covered by the PSC. (Composite Exh. 1 (12), p. 9)

As Mr. Seidman observed, Mr. Crouch's assertion is "illogical and sums up all that is wrong" with PSC margin reserve policy.

Whether it is called margin reserve or reserve margin is of no consequence. But whether being considered by DEP or PSC, the reserve indeed should be the capacity needed for a utility to function properly. Whatever capacity is

necessary to allow the utility to function properly until the next increment of plant comes on line and to meet its obligations to the public is the capacity for which the PSC should determine the cost and allow in rate base....

[Mr. Crouch's statement] clearly points out that Commission policy is not coordinated with DEP policy and apparently by design. Mr. Crouch's statement leads one to conclude that the ratemaking considerations for determining allowable reserves do not, and are not intended to, reflect the cost of providing service. If they were intended to reflect cost of providing service, they would include in rate base the cost of capacity, including reserves, necessary for the utility to function properly. And Mr. Crouch's statement is a blatant admission that the existing Commission policy, and the recommended policy, do not compensate, and do not intend to compensate a utility for "a prudent, wise investment."...

From the viewpoint of meeting its statutory obligations, maintaining reserves adequate for the utility to function properly is prudent and wise. But, from an economic viewpoint, it is clearly imprudent and unwise for a utility to invest in plant for which it knows it will not be compensated. (Composite Exh. 1 (18), pp. 6-8)

Myth # 4: Margin reserve periods should be limited to the time necessary for "construction" of facilities.

In the past, the PSC has restricted margin reserve periods to the time required to "construct" plant expansions. As the prefiled comments of SSU witness Harvey indicates, this focus ignores the real issue, that is:

what should the capacity be of the plant to be constructed or already constructed. The time necessary to construct the facilities has nothing to do with the capacity -- and bears no relation to what should be the primary reasons for the existence of the margin reserve - - to protect the public health and the environment by ensuring adequate capacity is available.... Certainly [construction] lead times must include the time to design, permit, bid out, contract as well as construct the facilities. (Composite Exh. 1 (16), pp. 11-12)

Mr. Hartman also disputed the PSC limitation of margin reserve to the time necessary to construct additional treatment of plant.

This theory assumes the utility has begun the construction phase as of the test year and that construction will come off without a hitch. In today's complex regulatory environment, I believe this presumption is incomplete, in error, and flawed. Moreover, this theory dictates that the utility be forever at the point of constructing an increment of capacity while it plans designs and permits the increment needed after the one under construction. (Composite Exh. 1 (14), pp. 30-31)

As Mr. Crouch himself testified, the traditional margin reserve periods as initiated in the early 1980's allowed for "design, bids, actual construction and clearance for service from the appropriate regulatory agency." (Composite Exh. 1 (12), p. 6) It is undisputed that under contemporary regulation, it now typically requires 3 1/2 to 5 years to plan, design, permit, construct and certify facility expansions. (Composite Exh. 1 (9), DS-2, p. 4)

Clearly, margin reserve periods need to be adjusted accordingly.

Myth# 5: Margin reserve is not used and useful in providing service to present customers.

As it has for many years, OPC steadfastly maintained in its comments that margin reserve is "neither used by, nor useful to, present customers, and, therefore, should not be included in the used and useful calculations." (Composite Exh. 1 (7), p. 1) OPC's argument is grounded on a misinterpretation of the governing statute. As Mr. Seidman testified,

Section 367.081, F.S. entitles a utility to the opportunity to earn a fair return on property used and useful in the public service. It doesn't say on property used and useful in serving existing customers or in serving future customers. It says "in the public service." The ability to be ready to serve is a

statutory obligation and makes the investment to be ready to serve an investment in the public service. (Composite Exh. 1 (18), p. 10)

OPC's argument ignores the utilities' statutory obligation to provide "safe, efficient and sufficient" water and wastewater service in compliance with applicable environmental laws and "the reasonable and proper operation of the utility in the public interest." Sec. 367.111(2), Fla. Stat. This obligation to serve applies to both existing and future customers located within the utility's certificated service area. Sec. 367.111(1), Fla. Stat. Compliance with these statutory obligations requires investment in plant well before it reaches capacity. See, for example, Rule 62-600.405, Florida Administrative Code. It is clear that a utility cannot operate safely, efficiently and sufficiently -- or lawfully -- without a sufficient reserve. As Mr. Seidman observed,

(m)argin reserve is necessary to protect the quality of service to existing customers as new customers hook up to the system. The most obvious test of the OPC argument would be to build a utility system with zero margin reserve and make the OPC phone number available to each customer for complaints. But that is not a viable option....

A water and wastewater utility is not like a service company operating on the free market. It cannot choose whether to provide service; it is obligated to provide service. It cannot wait for expressed customer demand before it commits funds to provide service; it is obliged to be ready. A utility is obligated by law to be ready to serve, and in turn the law gives the utility the opportunity to earn on the investment necessary to [meet] its obligations. It is a two way arrangement. The OPC wants it to be a one way arrangement wherein the utility must commit to the investment but speculate as whether it can recover costs. (Composite Exh. 1 (18), pp. 9-11)

OPC purports to counter this line of argument by the observation that some present customers who would pay rates on an

investment in reserve capacity will die, or move to another service area before receiving value for his or her payments. (T. 173-174) The impracticality of this curious observation should be obvious. As Mr. Guastella testified,

aside from people dying, who no one takes credit for, most of future customers are going to be existing customers. I mean, in most normal circumstances, tomorrow's customers, the majority of them, are going to be existing customers, and there will also be some new customers. So when utilities are able to provide service in the future, they're providing service to all its customers, and that's why we've heard time and time again that it is necessary to design facilities with adequate capacity. (T. 196-197)

Mr. Seidman added that

... as utilities, we don't really serve customers on an individual basis. We don't design individual rates for an individual customer on an incremental basis. We designed for the growth in general. We have a 2 or 3 percent growth, net. That usually means that about 97, 98 percent of the people that were there this year are going to be there next year. Some people are going to die, some people are going to be born. Just part of life. (T. 176)

Myth # 6: PSC used and useful conventions already provide adequate recognition of changing load conditions of existing customers.

OPC's prefiled comments dispute FWA's assertion that a margin reserve is needed to provide a cushion for the utility to meet changing load conditions of existing customers. According to OPC, "averages used to calculate used and useful already take plant load fluctuations into consideration." (Composite Exh. 1 (7), p. 3)

On November 19, 1996, Staff witness Crouch appeared before a Reuse Committee with other members of Staff, and representatives of DEP and the water management districts. He distributed a handout at the committee meeting that purportedly explained PSC used and

useful policies. (T. 266-267; Exh. 8) According to his paper, the PSC's "normal policy" is to use the average daily flows in the maximum month of the test year to determine used and useful for wastewater treatment plant. (T. 268) Mr. Crouch was apparently unaware that the PSC has in recent rate cases abandoned that approach. The PSC rejected SSU's request to use such flow methodology for eight wastewater systems in its recent rate case, using instead average annual flows. (T. 268; Order No.96-1320-FOF-WS (October 30, 1996), at p. 53) The PSC similarly used annual average daily flows for wastewater treatment in recent rate cases for Palm Coast Utility Corporation and the North Fort Myers division of Florida Cities Water Company. (Order No. 96-1338-FOF-WS (November 7, 1996) at pp. 36-37; Order No. 96-1133-FOF-SU (September 10, 1996) at pp. 16-17) In both cases, the PSC disregarded the average daily flow for the maximum month methodology which it had approved in the utilities' previous rate cases.

As Mr. Harvey's comments indicate:

No reputable engineer would ever design a plant with capacity to meet only the average annual daily flow. To be 100% used and useful the plant would have to maintain flows every day of the year at 100% of capacity. This is not only impossible, it also flies in the face of the attempts by environmental regulators to ensure that this situation does not occur because overflows would be inevitable (Composite Exh. 1 (16), p. 12)

The inadequacies, and unpredictability, of current PSC used and useful policy aside, even if the PSC properly allows a utility sufficient capacity to meet peak demand, a margin reserve is still necessary. As Mr. Seidman testified:

Obviously, if a utility has sufficient capacity to meet its peak demand, it will have some reserve available during non-peak periods. But without a margin reserve it will have zero capacity to meet demands in excess of the historic peak to meet any increased demand from existing customers, to meet historic peak demand if any major component of the system becomes unavailable at the peak, or to serve even one new customer in a timely manner without [a]ffecting the service of existing customers.some reserve is always needed, even for a no growth utility, in order to have some capability to meet fluctuations in historic demand regardless of cause. (Composite Exh. 1 (10), pp. 28-29; (18), p. 14)

Mr. Seidman also testified that an increase in existing customer demand is a common occurrence.

An existing residential customer can increase water and wastewater demand in many ways, such as adding a bathroom or a jacuzzi, or adding a waste disposal unit, a dishwasher or washing machine, or even a sprinkler system or swimming pool. Existing commercial customers can expand their businesses... and their associated flows... can change at the same location. These types of demands can and do occur even without any increase in total customers. Any one of these changes in demand may seem inconsequential, but the cumulative effect can place additional demands on a system that the utility must be ready... and capable of serving. (Composite Exh. 1 (10), p. 17)

Mr. Hartman pointed out that:

(t)he variability of demand over the useful life of an asset (30-50 years) can be great, and only the existing customers create this variability, and smaller facilities demonstrate higher variability in demand than do larger facilities. To illustrate, if growth were only about 3% per year, in 3 years only 9% to 10% growth on the average would occur. For most water plants, the variability of the maximum day demand from existing customers can easily be 10% from year to year. (Composite Exh. 1 (14), pp. 10-11)

PSC-regulated water and wastewater utilities are required to provide safe, efficient and sufficient service, which must "not be less safe, less efficient, or less sufficient than is consistent with the approved engineering design of the system and the

reasonable and proper operation of the utility in the public interest." Sec. 367.111(2), Fla. Stat. To fulfill this mandate, utilities must be able to react to changes in the peak demands of their existing customers. It would be "shortsighted and irresponsible not to have capacity in reserve to meet changing peak demand." (Composite Exh. 1 (18), p. 14) Utilities "cannot wait for expressed customer demand" before they commit funds to provide service. Utilities are obligated by law to be ready to serve, and in return, the law gives them the opportunity to earn on the investment necessary to meet their obligations. (Composite Exh. 1 (18), p. 10) The appropriate vehicle to facilitate compliance with such statutory requirements is recognition of adequate margin reserve in rate base.

Myth # 7: AFPI adequately compensates utilities for reserve capacity.

PSC policy and rules provide for recovery of an Allowance for Funds Prudently Invested (AFPI). The AFPI charge purports to be a "mechanism which allows a utility to earn a fair rate of return on prudently constructed plant held for future use from the future customers to be served by that plant in the form of a charge paid by those customers." Rule 25-30.434(1), Fla. Admin. Code. The intent of the allowance is to enable utilities to recover carrying costs and expenses associated with prudent non-used and useful plant, to be paid by future customers as they connect to the system, along with service availability charges. Generally, AFPI accumulates certain fixed costs associated with non-used and useful plant and compounds for five years. By approving the charge, the

PSC has acknowledged that investment in non-used and useful plant is prudent and the utility should receive a return on that prudent investment. (Composite Exh. 1 (9) DS-2, p. 26; (10), p. 49)

The investment in margin reserve is used and useful plant, and the portion offset by imputed CIAC that is not earned on in rate base is not recoverable through the AFPI charge:

Margin Reserve is included in rate base as used and useful plant. The portion of margin reserve offset by imputed CIAC, even though no longer earned on in rate base, is still used and useful plant and not assignable to AFPI for recovery from future customers. The basis for the AFPI calculation is non-used and useful plant. See Rule 25-30.434 (3) (f), F.A.C. (Composite Exh. 1 (10) at p. 50)

Since there is by definition no opportunity to earn on investment in margin reserve against which CIAC has been imputed, from either current or future customers, the utility is never made whole. Those earnings on prudent investment are lost forever. (Composite Exh. 1 (9) DS-2; (10) at p. 50; (11) at p. 5; (15) at p. 21)

Despite these undeniable truths, an insidious myth used to rationalize traditional PSC margin reserve policy persists: that AFPI is a valid surrogate for margin reserve. Staff witness Crouch cited AFPI as a method available to a utility to recoup investment that is "legitimate and prudent even though it provided a capacity in excess of that required in the authorized margin reserve period." (Composite Exh. 1 (12), p. 10)

Mr. Crouch's summation aptly reflects the intent and theory of AFPI. He admitted, however, that he was not an expert on the AFPI recovery mechanism, and offered no data or other support to show

its real-world effectiveness. Instead, Mr. Crouch indicated that "for lack of a better solution, [AFPI] gives the utility some method of recouping some portion of their nonused and useful." (T. 280-282)

As it has done for many years, OPC maintained in the instant proceedings that investment in margin reserve is not properly considered used and useful. OPC's suggestion was to eliminate recognition of any margin reserve and replace it with AFPI, which it asserted "would alleviate the FWA's concern of lost returns on imputed CIAC and give relief to existing customers paying a return on plant not serving them." (Composite Exh. 1 (7), pp. 3-4) OPC provided no data or other support for the real-world effectiveness of AFPI as an investment recovery mechanism.

This is not a viable prescription for sound utility financing. As Mr. Seidman testified,

But regardless, a reserve that has been identified as necessary for the utility to function properly is a cost responsibility of current customers. The Commission's responsibility is not just to keep costs low, but to provide sufficient compensation to a utility to allow it to attract capital at a reasonable cost and to remain financially sound. This won't be the case under Mr. Crouch's scenario. The funds for this necessary plant must come from investors or lenders. But since there is no current source of earnings for them, the cost of the riskiness associated with recovery through AFPI will most likely result in higher debt costs. It won't be met with higher equity costs because the Commission's leverage formula doesn't address this type of risk. And without a risk premium related to speculative deferred income for used and useful plant, equity infusion is not a likely source of capital. (Composite Exh. 1 (18), pp. 8-9)

Mr. Seidman provided substantial testimony showing "the consistent, historical support for a reserve requirement being used

and useful plant." (Composite Exh. 1 (10), pp. 7-24) According to Mr. Seidman,

To suddenly reverse that conclusion to placate OPC is uncalled for. As a matter of logic, if margin reserve were truly not used and useful (which is clearly not the case), then it should not be built. The Commission should then tell utilities outright "do not build a reserve margin - it is not used and useful. If you are unable to meet your obligations to serve because you do not have a reserve margin, you will not be penalized. It will not be considered a service deficiency." At least then, everyone will know where they stand. But I do not think anyone wants to make such a statement and be subject to the resulting consequences. The simple fact is, margin reserve is necessary and it is used and useful. (Composite Exh. 1 (18), p. 16)

Ms. Swain further disputed OPC's suggestion:

The utility should not have to recover margin reserve through such a speculative means, when, as we have demonstrated, margin reserve should be recovered from existing customers. Furthermore, while conducting our study, we found many utilities do not have an AFPI rate approved. There is little incentive to utilities to request AFPI because it is so speculative, and because it's recovery period is so narrow.

The fact is, margin reserve benefits existing customers, and as such, it should be, as it has been, recoverable from existing customers. (Composite Exh. 1 (19), p. 3)

The FWA's Study policy addresses AFPI in detail. (Composite Exh. 1 (9), DS-2) The FWA Study found that AFPI does not adequately compensate utilities for a full margin reserve.

The FWA Study found that AFPI has resulted in "an unfair shifting of costs from current customers to future customers. When cost recovery is shifted from [the] current revenue requirement to AFPI, future customers end up paying for all 'non-used and useful' plant [through higher CIAC and AFPI charges] while current

customers receive the benefits of any economies of scale associated with that plant. (Composite Exh. 1 (9), DS-2, p.26)

Furthermore, Ms. Swain agreed where "AFPI becomes so large that taking AFPI in addition to the utility's normal service availability charges, ... the utility can't compete, or ... it discourages growth in the area because the charges becomes so excessive." (T. 167)

The FWA study confirmed that AFPI is "speculative, that is to say, collection of AFPI revenue is entirely dependent upon growth." Even though the PSC recognizes the investment is prudent, the utility bears the entire risk of growth occurring as projected. (Composite Exh. 1 (9), DS-2, p. 26)

The FWA Study further established that utilities are not made whole by AFPI, even when growth occurs as projected. This is shown in the model of utility cost recovery. In fact, revenue from rates plus AFPI never provide more than 70% of the authorized rate of return. (Composite Exh. 1 (9), pp. 15-18; DS-2, pp.5, 26, Appendix A)

The FWA Study further examined the effect of computation problems related to imputation of CIAC. There being no adjustment to increase the number of future customers subject to AFPI when CIAC is imputed, substantial earnings on prudent investment are lost forever. Using the Study's utility cost recovery model, over the 25 year period, \$3.4 million in AFPI collections are lost, due to the flaw in the calculation. This problem would not occur if

CIAC is not imputed on margin reserve. (Composite Exh. 1 (9), DS-2, pp. 5, 26-27)

The inherently speculative nature of AFPI has a real world impact on utility financing. AFPI does not generate cash flow, it generates "paper earnings" which may or may not materialize. Accordingly, lenders will not loan money to utilities on the basis of AFPI. (T. 73-74) As SSU witness Guastella observed:

Facetiously, I suggest, that you go to a lending institution, a bank, and you say, our rates will only cover half of the principal and interest. Therefore, we would like you to give us some money to cover the other half. We will not return the dollars to you and we will give you no interest on the money you give to us. We just need the money because our ratepayers will not be allowed to pay rates that cover that cost.

Obviously you can't go to a lending institution and do that. You shouldn't go to the stockholders to do that. Stockholders shouldn't be asked to provide funds to pay for carrying costs for facilities for no return and no recovery of investment. (T. 199-200)

As with lenders, utility auditors are unimpressed with AFPI.

As Ms. Swain testified,

as a recognition of that risk, there is not a company that I am aware of that has ever been successful in convincing its auditors that it should be able to record revenues related to AFPI on an accrual basis. It's only recorded when the cash is actually in hand, because that risk is recognized, not just by the utility, but also in the accounting and auditing industry. (T. 92-93; 100)

AFPI also poses a substantial regulatory dilemma for utilities: they must choose between the excessively complex administration associated with a myriad of qualifying assets, or having to start the carrying cost accruals and calculation of the charge all over again. As Ms. Swain explained, each calculation of AFPI is for a five-year period, associated with a specific

qualifying asset, where the costs are accumulated, therefore increasing during that period. If during those five years other qualifying assets are added, then a new total of all qualifying assets is calculated and used as the basis for the new fee. However, the fee begins accumulating from zero once again. The only way to prevent this is to calculate a separate fee for each new qualifying asset, every time one is added. This would be nearly impossible to administer since utilities are in a continuous state of extending lines, expanding treatment plant, and adding wells. Furthermore there is no rational mechanism to apply the correct fee to each individual customer. (T. 93-95)

To explain this situation further, Ms. Swain gave an example where AFPI is calculated first for one well, and subsequently for a second well. AFPI calculated for the first well must be collected from one set of customers, and the AFPI calculated for the second well would be collected from one set of customers. However, customers are not served only by one well or the other -- how could one determine which customer is charged which AFPI rate? Ms. Swain went on to describe an alternative mechanism, which would require averaging the charges:

I had a situation several years ago... with regard to distribution lines in Pine Ridge Utilities. And what we did was rather than having different customers pay different AFPI charges when we applied for that second AFPI, just specifically for new lines, is we came out with a method of averaging. And it seemed to work. And I don't know how growth has been in Pine Ridge, and if they've actually recovered their revenues, but there was a mechanism to do it.

Ms. Swain then described the absurdity of attempting to average rates where continuous plant expansions require nearly continuous AFPI rate calculations:

But where you're talking about continuous distribution line, expansions, extensions, new wells, new treatment plant, new sewer treatment plant, and it's happening constantly, and you have 15 different types of ... plant expansions, since your last rate case, it's very unlikely that the utilities are able to keep track of the ERCs and the capacities and the appropriate AFPI charge for each one of them, and then come out with some mechanism for averaging. It doesn't exist. It hasn't existed yet. So it will ... go back to zero. (T. 94-95)

Ms. Swain further explained that the unfortunate result of the convoluted calculation is the treatment received by Southern States in its recent rate order:⁹

what I understand is that they had reached a level in their AFPI charges on their five-year chart, where they were recovering nearly \$1 million in AFPI, that was their projection. They filed a rate case, and their first year's charges after that new rate case is going to be \$100,000. And yet they had still not ever recovered, never collected all those fees that were accumulating. They still had more customers to pay those. And yet it went down to zero again.

... The error is in the calculation of the new rate, not in the application of the rate. The rate is applied pursuant to the new schedule. The new schedule is incorrect. The new schedule incorrectly starts them back at zero again. And it should have somehow been averaged. (T. 97-98)

Given the risks and complexities associated with AFPI, it should come as no surprise that many utilities do not even request it. (T. 89, 101)

⁹Order No. 96-1320-FOF-WS (October 30, 1996), at pp. 200-201)

Myth # 8: Reuse facilities are not necessarily 100% used and useful and should therefore not be expressly exempted from margin reserve considerations.

The FWA rule proposal provides that "(r)eclaimed water reuse facilities constructed in accordance with Section 403.064, Florida Statutes, shall be considered 100% used and useful. Margin reserve shall therefore not be a factor."

Mr. Crouch testified that PSC Staff did not support this proposal, as "we have not even decided what is used and useful yet." According to Mr. Crouch, application of used and useful principles to reuse facilities "is not inconsistent with the FDEP rule which says that all prudent investment will be recovered through rates. There are two key words there. Prudent. What is a prudent investment? Who is going to decide prudent?" (T. 261-262)

The PSC has to date steadfastly refused to allow utilities full recovery of reuse facilities through their rates, in derogation of various statutes and state water policy. This policy has caused and continues to cause significant consternation among the State's environmental regulators with primary jurisdiction over reuse facilities.

Section 367.0817(3), Florida Statutes, requires the PSC to allow recovery of all prudent costs of a reuse project through the utility's rates. Recovery of such costs is required from the utility's water, wastewater, or reuse customers, or any combination thereof, as deemed appropriate by the PSC. Similarly, Section 403.064(10), Florida Statutes, requires the PSC to allow utilities

to recover the full prudently incurred cost of reuse feasibility studies and reuse facilities through their rate structure. This is consistent with the State objectives of encouraging and promoting reuse. Sec. 373.250 (1), Fla. Stat. Given this clear statutory directive, DEP requested that all feasible reuse facilities be considered 100% used and useful. (Composite Exh. 1 (13) p. 4)

DEP proposed specific amendments to the PSC's proposed rule that would facilitate full recovery of reuse studies and facilities through utility rates and otherwise harmonize the rules and policies of the two agencies. Included in the DEP proposal are definitions of reuse facilities that would clearly identify the types of qualifying facilities. (Composite Exh. 1 (13), pp. 4-6)

The St. Johns River Water Management District, the South Florida Water Management District, and the Southwest Florida Water Management District, the three districts with most of the investor-owned water and wastewater utilities in the State, observed that the PSC's proposed rule appears to be "incongruent" with state-wide water policies of long-term planning, conservation and alternative supply development.

Defining the margin reserve period to be eighteen months and the relationship of this component to the "used and useful" rate base determination seems to dissuade utilities from implementing alternative water supply projects designed to meet utilities' anticipated and even permitted demand. Generally, the districts authorize public water supply uses on the basis of anticipated demand projected to occur over the ensuing ten years. In this manner, the districts and utilities are better able to anticipate short-falls in supply and, where appropriate, develop alternative sources. For example, the typical time period necessary to plan, construct and

begin supplying reclaimed water will far exceed the proposed 18 month margin reserve period due to the complexities associated with timing of improvements undertaken by the supplier and end-users. While some reuse projects may be for the purpose of accommodating new customers, many reuse projects are for the purpose of allowing utilities to meet existing uses with a lower quality source, thus conserving higher quality sources for the benefit of both existing and future customers. As such the "used and useful" method of accounting (with the margin reserve period), which seems to be designed to address expansion of capacity, does not appear to be adequate in considering these factors which are unique to reuse and the development of alternative supplies. If "used and useful" is continued to be applied to allow recovery of costs for reuse projects, then the margin reserve period needs to be significantly longer. Over the years, users from all use classes, including public water suppliers, have championed longer duration water use permits to obtain more secure capital financing for the facilities which they forecast will be necessary to satisfy demand during the duration of the permit. (Exh. 3)

Ultimately, the districts endorsed the proposal that reuse facilities be considered 100% used and useful. (T. 146)

FWA submits that a "legislative fix" is not needed. Rather the rules and policies of the districts, DEP and the PSC need to be harmonized. The specific rule proposals by FWA, DEP and the districts would go far towards accomplishing the objective of encouraging prudent reuse projects, by allowing full recovery of their prudent costs through rates. (T. 152-153; Composite Exh. 1 (10), pp. 40-41; (14), pp. 31-33; (16), pp. 14-18)

Myth # 9: A 20% cap is a reasonable presumptively valid limit on margin reserve.

In his prefiled comments, Staff witness Crouch stated that under traditional PSC policy "the amount of margin reserve should not exceed plant required to serve 20% of the existing customers. This cap... recognizes that there needs to be a limit to the amount

of future plant that present customers should bear."¹⁰ (Composite Exh. 1 (12), p. 7) The 20% cap is further intended by Staff to be a "default" limitation which a rate applicant could overcome by showing an "exception" is warranted.¹¹ (T. 225-226; 264) Mr. Crouch conceded that the 20% cap was somewhat of a compromise decision. (T. 280)

The 20% cap on margin reserve has been a PSC nonrule policy for many years, and has been generally observed in tandem with the traditional margin reserve periods of 18 months for plant and 12 months for lines. Although Mr. Crouch advocated a three-year margin reserve period for several elements of plant, he did not adjust the traditional cap. He did, however, testify that in the event a margin reserve period longer than three years was adopted that the cap may need adjustment. (T. 225-226; 264)

The 20% cap is arbitrary. It is based on no data or other discernible premise other than "compromise." Its application to various plant components regardless of the length of their attendant margin reserve periods is unsupported by the record, or by reason.

Without express criteria for determining the appropriate cap for any plant component, the Staff proposal if adopted would confer unbridled discretion on the PSC, even if its "default" nature is

¹⁰The PSC's proposed rule does not indicate that any cap on margin reserve would apply.

¹¹Utilities, Inc. witness Kramer explained that several of its systems experience an annual growth rate in excess of 20%. Mr. Crouch agreed that such actual growth would be used in setting margin reserve.

acknowledged. In effect, a cap may operate as a back-door attempt to subvert the fundamental purposes of a margin reserve.

FWA therefore submits that no maximum to the margin reserve should be established. The documentation of anticipated growth in each rate application should instead be evaluated on its own merits.

Myth # 10: It is proper through imputation to match future CIAC against current investment.

OPC's comments state that:

(i)f margin reserve is included in the used and useful calculations, then, to achieve a proper matching of... [CIAC] and investment, an amount of CIAC equivalent to the number of equivalent residential connections (ERCs) represented by the margin reserve should be reflected in the rate base. The CIAC that will be collected from these future customers would, at least, serve to mitigate the impact on the existing customers resulting from requiring them to pay for plant that will be used to serve future customers. (Composite Exh. 1 (7), p. 2)

The PSC has also often justified imputation of CIAC as a policy of "matching" CIAC against the investment in margin reserve for the same period. This is a myth. As the record shows, the imputation policy is an illogical mismatching of period investment with out-of-period contributions that denies a utility the ability to earn on its investment in margin reserve. Margin reserve is an investment already made in the current period, while imputed CIAC is CIAC which may be contributed by future customers 1.5 to 5 years outside of the test year, depending on the length of the margin reserve period. (Composite Exh. 1 (18), pp. 11-12) Mr. Seidman explained that if imputed CIAC was from the same period as the

investment in margin reserve, it would not be necessary to impute it.

When the Commission considers rate base in a rate application, it does so for a test year. The investment in margin reserve is an investment in plant already in service, for test year customers, during the test year.

Then, the Commission imputes the service availability charges for customers in the years subsequent to the test year, against test year investment.

This is clearly a mismatch that violates the concept of the test year. It is a mismatch which the Commission does not even consider for any other revenue or cost category. For example, the Commission does not impute into the test year, the revenues or expenses, not yet incurred, but associated with future customers beyond the test year. That also would be an illogical mismatch. (Composite Exh. 1 (10), pp. 43-44; see also Composite Exh. 1 (18), pp. 11-12)

The PSC should therefore lay to rest the fallacy that imputation of CIAC "matches" margin reserve investment. As Mr. Seidman put it, such imputation is not matching, "it is the antithesis of matching." (Composite Exh. 1 (18), p. 12)

If however, the PSC insists on imputing future CIAC against current investment in margin reserve,

then it is logical to also impute the investment in margin reserve that will be necessary to serve those imputed future customers, because, after all, the need for margin reserve in a growing utility is a continuing one. (Composite Exh. 1 (10), pp. 43-44)

In actuality,

(e)ach existing customer has a margin reserve requirement associated with it that protects its quality of service as other customers are added to the system and assures that the utility has sufficient capacity to meet any additional demands that it may place on the system. As each new customer joins the system, it utilizes existing margin reserve, and that margin reserve must be replaced. Therefore, the utility must maintain a continuing

investment in margin reserve in order to maintain the status quo as new customers become existing customers. (Composite Exh. 1 (10), p. 44; see also Composite Exh. 1 (11), p. 5)

Myth # 11: If the PSC discontinues its imputation policy, it should lower the returns on equity of affected utilities.

According to OPC,

(i)f the Commission does not continue to impute CIAC associated with margin reserve, it will place the risk of future customer connections on the backs of current ratepayers. The risk that future customers will not connect to a utility's system, as projected by the utility in its margin reserve calculations, is a risk that should be borne by stockholders, not customers. This is a risk that the utility is compensated for in its allowed return on equity. If the Commission changes its policy and does not impute CIAC on margin reserve, it will need to adjust its leverage graph formula to account for the lower risk of the utility inherent in requiring current customers to bear the risk that future customers will not connect to the system. (Composite Exh. 1 (7), p. 2)

Mr. Seidman refuted OPC's assertion that the risk of serving future customers should be borne by the utility, as follows:

... I have no idea where this theory comes from. Clearly, as a regulated monopoly, a utility is obligated to provide, and be ready to provide, service within its certificated area. In return for meeting this obligation, the utility is protected from the type of risk of which OPC speaks. That is one of the factors that distinguishes a regulated monopoly from a free market enterprise. A free market enterprise has the option of serving or not serving. It can act to minimize financial risk by simply waiting for demand to build up before service it. A regulated monopoly does not have that option. It must be ready to serve, and as long as it makes rational decisions based on the best information available at the time, the investment associated with those decisions is considered prudent. (Composite Exh. 1 (18), pp. 12-13)

Mr. Seidman also debunked OPC's suggestion that the PSC adjust its leverage formula if it does not impute CIAC on the margin reserve. The PSC's orders

establishing the leverage formula and level of allowable return on equity [do] not even mention margin reserve or imputed CIAC. It does not allude to any premium built in related to the risk of future customers connecting to the system. The risk premiums addressed by the order[s] are those generally related to the inability of water and wastewater utilities to access the public debt and equity markets because of their size. There is no risk premium related to future customer connections in the leverage formula for which an adjustment can be made. (Composite Exh. 1 (18), pp. 13-14; T. 138)

Staff witness Walker concurred with Mr. Seidman, testifying that:

I don't believe the notion that you would impute CIAC is considered at all in the leverage formula. I don't believe that they're making any evaluation of whether or not future CIAC has been historically counted against the Company, was a factor when they decided ... to adopt the leverage formula. (T. 286)

The mythological nature of OPC's assertion was effectively explored by Mr. Kramer in a colloquy he had with Mr. McLean, OPC's sole representative in these proceedings. Mr. McLean stated that he had no idea whether the imputation policy is recognized by the leverage graph, and whether it's expressly identified as one of the risk factors meant "nothing" to him. Instead, Mr. McLean held forth that the imputation policy was "implicitly" one of the risk factors taken into consideration in determining returns on equity. He therefore would not agree that the risks associated with continuation of the imputation policy should result in higher returns on equity. (T. 286-288)

OPC's fanciful theory should not be accepted by the PSC. A careful reading of the 1995 leverage graph order, which provides an unusually detailed analysis of its underlying premises, shows no

consideration of the risks related to the imputation policy. Order No. PSC-95-0982-FOF-WS (August 10, 1995)¹²

FWA concurs with SSU witness Gower, that eliminating the imputation of CIAC would reduce the risk to utility investors. (T.217) However, that risk is not a factor in the PSC leverage graph formula. (T. 289)

Myth # 12: If the PSC does not impute CIAC, utilities will have an opportunity to overearn.

OPC asserted that discontinuance of the imputation policy will create opportunities to overearn, because "the utility will collect this CIAC (assuming its projections are correct) yet the associated CIAC will not be included as an offset to the rate base." (Composite Exh. 1 (7), p. 2)

This unsubstantiated concern is, as Ms. Swain noted, nonsensical:

The utility should be able to earn a fair return on margin reserve if it is a used and useful cost. In order to preserve the margin reserve, enabling the utility to earn a fair return on it, you cannot impute CIAC. As a matter of fact, if CIAC is imputed, the utility will underearn. OPC has completely failed to recognize that as new customers connect, not only does the utility collect CIAC, but it must make expenditures to provide for the then future customers. As I show on Table 5-1 in [the FWA study], in an eleven year study of 174 utilities, plant expenditures outpaced CIAC collected three to one. (Composite Exh. 1 (19), p. 2; (9) DS-2, p. 25)

As Mr. Gower testified:

The fact that overearnings may occur in the future is not sufficient reason to short change investors today, any

¹²The 1996 leverage order ratified the range in ROE established by its immediate predecessor. Order No. PSC-96-0729-FOF-WS (May 31, 1996)

more than the prospect, which is much more likely, that underearnings are likely to occur in the future is a sufficient reason to overcharge customers today. (T. 208; see also 116-119)

Myth # 13: If CIAC is not imputed, utilities would be encouraged to overproject anticipated growth.

OPC asserted that "failure to impute CIAC on margin reserve would create a significant incentive for the utility to overproject customer growth for margin reserve purposes. Imputation of CIAC on margin reserve provides the utility with an incentive to properly project future connections...." (Composite Exh. 1 (7), p. 2)

SSU counsel Armstrong disputed this notion, pointing out that a utility has no incentive to exaggerate projected growth "so that they can spend more money to build a larger plant." (T. 82; see also 224) Mr. McLean responded that "we accept that utilities don't have a tremendous incentive, or perhaps any incentive, to go out and make imprudent investments and to overstate growth." Instead, he redirected his focus to the concern whether a utility would be "held harmless" from an inaccurate growth prediction. (T. 84)

OPC's concern is not pertinent. As Ms. Swain testified:

The utility's projection of customer growth must be adequately justified in its rate application, and can easily be challenged and/or validated upon review. Obviously, the utility must be able to prove the basis for its projections. Such justification may include any combination of historical growth statistics, developer agreements, comprehensive master plans, construction plans, etc. To suggest that margin reserve should be eliminated by imputing CIAC as a way to keep the utility honest is absurd. (Composite Exh. 1 (19), pp. 2-3)

Myth # 14: The issue of imputation of CIAC against margin reserve has been resolved with finality by the Florida courts.

OPC counsel McLean stated that in the Rolling Oaks case, the First District Court of Appeal held that imputation of CIAC is "an excellent way" to allocate cost of service and the benefits of economies of scale between existing and future customers. (T. 49-50) He also asserted that the instant issues have been "litigated dozens of times before you.... You've heard it all before and it's all before you." (T. 53)

In Rolling Oaks Utilities, Inc. v. Florida Public Service Commission, the First District Court of Appeal did in fact sustain the PSC's imputation of CIAC against an allowed margin reserve. 533 So. 2d 770 (1st DCA 1988), at 773-775. The Court found that margin reserve "in a sense, rewards, the utility for its investment in plant capacity which the utility has readily available, but not currently in use." According to the Court, the PSC thereby "permits the utility to charge its existing customers a portion of the cost necessary to have service available for future customers." (at 773) According to the Court, through imputation of CIAC to the margin reserve, the PSC requires "the utility and future users of the utility's services to bear a part of the cost of making future services readily available. Absent this policy, existing customers would bear all of the cost of making services available to future customers." (at 774) The Court noted with apparent approval that the CIAC imputation was limited so as not to exceed a rate base reduction "further than if no margin reserve had been allowed." (at 774) The Court ultimately upheld the PSC's "incipient

policies" on margin reserve and imputation of CIAC as within the PSC's discretion.

We do not have the evidence of record in the Rolling Oaks case at hand. What we do have in the instant proceedings is overwhelming record support for recognition that margin reserve should be considered currently in use and which therefore should be given full weight in rate-making, without imputation of CIAC. As explained in great detail earlier in this submittal,

Margin reserve is plant capacity that is not only available, but is currently in use to protect the service quality of existing customers and to provide capacity to meet the changing demands of existing customers as they improve their life styles and add or upgrade water consuming devices. (Composite Exh. 1 (10), p. 45)

FWA believes that the Rolling Oaks case was incorrectly decided by the court. In any event, circumstances have substantially changed over the decade following the PSC's decision in that rate case. The premise for the Court's decision was that margin reserve was "not currently in use." It is clear from the record in the instant proceeding, that this premise is not valid and, therefore, the Court's conclusion is no longer valid. Florida has adopted a new state water policy, and a far more complicated environmental permitting process. The record shows that these developments have had a tremendous impact on the economics of water and wastewater utility decision-making for reserve capacity. It would therefore be irresponsible to adhere to discredited policies on the basis of an outdated judicial precedent.

Myth # 15: Imputation of 50% of the amount of CIAC attributed to the margin reserve is an appropriate alternative to traditional non-rule policy.

The PSC has recently decided to impute only 50% of the amount of CIAC as an offset to margin reserve, finding that "the total amount imputed would not be collected at the beginning of the margin reserve period, rather that it would be averaged over the life of the period." Order No. PSC-96-1388-FOF-WS (November 7, 1996), at p. 20; see also Order No. PSC-96-1320-FOF-WS (October 30, 1996, at p. 76)

Staff witness Walker testified that this recent PSC practice of limiting the imputation of CIAC to 50 percent of the anticipated contributions is "only a compromise consideration, a half-step measure that overlooks the presumptively valid co-argument that margin reserve is likewise being update on [a] collateral basis." Mr. Walker noted that while in most cases, an attempt is made to present the test year as a representative period, using the 50 percent or "averaging" proposition, the CIAC imputation component is "typically the single factor that presumably grows beyond the test year." Also, using different imputation terms under different averaging propositions, for lines for treatment plant, and for water and wastewater projects, is "hard to rationalize." Composite Exh. 1 (11), p. 5; T. 259)

Under the PSC's "averaging" of the imputation of CIAC, the margin reserve periods net of the imputation are halved. Thus, using the PSC's traditional margin reserve periods, the resulting reserves net of the imputation are all of nine months for source of

supply, water and wastewater treatment plant and wastewater disposal, and six months for lines.

The FWA's submits that the "averaging proposition" is arbitrary and falls far short of providing any meaningful incentive to properly size utility facilities. As Mr. Gower observed, the averaging approach "merely reduces the degree of improper capital deprivation...." (Composite Exh. 1 (15), p. 22) As such, it should be rejected in the instant proceedings.

Myth #16: There is such a thing as a free lunch.

The PSC has long resisted meaningful reform of its policies on reserve capacity. It has done so out of concern over the impact that change could have on existing customers' water and sewer rates. The irony of this policy is that it has in fact resulted in higher rates, to both existing and future customers. Utilities have reacted to traditional policy by reducing their exposure to nonrecovery of investment, through smaller and more frequent increments of plant expansion, resulting in substantially higher unit costs.

Rates-driven resistance to reform threatens to adversely affect public health and environmental protection. With utilities operating as close to maximum capacity as possible, the risk of wastewater plant overflows, insufficiently treated water and similar hazardous conditions will inevitably increase.

As the FWA Study observes,

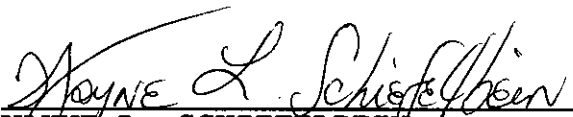
If utilities are not allowed to earn a fair return on investment and maintain financial stability, it is likely they will be seeking ways to cut costs and defer improvements to their systems. This could result in

higher rates to current and future customers and would also pose risks to health and safety. The cost of improving systems and bringing them into compliance with environmental regulation is usually greater than the cost of maintaining compliance. Associated rate increases would be more drastic. (Composite Exh. 1 (9), DS-2, p. 14)¹³

Approval of the FWA's proposed rule will result in higher rates over the short-term. However, the average increase in combined water and wastewater rates over a five-year period after implementation of such rule change, assuming a change in construction schedules from 30 to 60 month increments, is zero. (Exh. 4; see also the workpapers submitted by Ms. Swain as a late-filed exhibit on December 17, 1996.)

There is after all, no such thing as a free lunch. If utilities are to be expected to provide safe, efficient and sufficient service, consistent with environmental regulatory requirements and at the lowest long-run cost to the public, the PSC must provide an opportunity for a return on investment needed to fulfill those mandates.

Respectfully submitted,


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¹³For sobering examples of the maxim "pay now or pay later" see Composite Exh. 1 (9), DS-2, p. 14; (16) pp. 19-21; RMH-6; T. 70.

**Florida Waterworks Association
Proposed Rule**

25-30.431 Margin Reserve

(1) "Margin reserve" is defined as the amount of plant capacity needed to preserve and protect the ability of utility facilities to provide service to existing and future customers in an economically feasible manner that will preclude a deterioration in quality of service and prevent adverse environmental and health effects.

(2) "Margin reserve period" is defined as the period during which current capacity is required to be available until the next economic capacity addition can be placed in service without causing a deterioration of the quality of service.

(3) Margin reserve is an acknowledged component of the used and useful rate base determination. An allowance for margin reserve shall be included in rate base when requested in rate cases filed pursuant to section 367.081, Florida Statutes.

(4) (a) Unless otherwise justified, the margin reserve period for water source and treatment facilities and wastewater treatment and effluent disposal facilities, other than reuse facilities subject to (6) below, will be 60 months.

(b) Unless otherwise justified, the margin reserve period for on-site water distribution lines and services and on-site wastewater collection lines and laterals will be 24 months. Prudently constructed water transmission and off-site wastewater

force and gravity collectors and pump stations are considered 100% used and useful; margin reserve shall therefore not be a factor.

(c) In determining whether another margin reserve period is justified, the Commission shall consider the rate of growth in the number of equivalent residential connections (ERCs); the time needed to meet the guidelines of the Department of Environmental Protection (DEP) for planning, designing, and construction of plant expansion; and the technical and economic options available for sizing increments of plant expansion.

(5) (a) Margin reserve for water source and treatment facilities and wastewater treatment and effluent disposal facilities shall be calculated as follows:

$$EG \times MP \times D = MR$$

where:

EG = Equivalent Annual Growth in ERCs determined pursuant to (c) or (d) below
MP = Margin Reserve Period determined pursuant to subsection (4)
D = Demand per ERC (customer demand applied in the used and useful calculations for water and wastewater facilities)
MR = Margin reserve expressed in gallons per day (GPD)

(b) Margin reserve for on-site water distribution lines and services and on-site wastewater collection lines and laterals shall be calculated as follows:

$$EG \times MP = MR$$

where:

EG = Equivalent Annual Growth in ERCs determined pursuant to (c)

or (d) below
MP = Margin Reserve Period determined
pursuant to subsection (4)
MR = Margin reserve expressed in ERCs

(c) The equivalent annual growth in ERCs (EG) is measured in terms of the projected annual growth and shall be calculated in Schedules F-9 and F-10 of Form PSC/WAW 19 for Class A utilities and Form PSC/WAW 20 for Class B utilities, incorporated by reference in Rule 25-30.437.

(d) The utility shall also submit a linear regression analysis using average ERCs for the last five years. The utility may submit other information that will affect growth in ERCs.

(6) In determining rates for water and wastewater utilities under Commission jurisdiction, the prudently incurred cost of studies and facilities for the purpose of reusing reclaimed water, that meet the requirements of section 403.064, Florida Statutes, shall be considered 100% used and useful. Margin reserve shall therefore not be a factor.

(7) As part of its application filed pursuant to Rule 25-30.437, the utility shall submit its most recent wastewater capacity analysis report, if any, filed with DEP.

(8) Contributions-in-aid-of-construction (CIAC) shall not be imputed when a margin reserve is authorized.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Petition of the Florida) Docket No. 960258-WS
Waterworks Association to Adopt Rules) Filed: January 16, 1997
on Margin Reserve and Imputation of)
Contributions-in-aid-of-Construction)
on the Margin Reserve Calculation)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that true and correct copies of the Florida Waterworks Association's Response to Exhibit 7 and Post-Hearing Comments have been furnished by hand-delivery to CHRISTIANA T. MOORE, ESQ., Office of General Counsel, Florida Public Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, and by regular U.S. Mail to the following:

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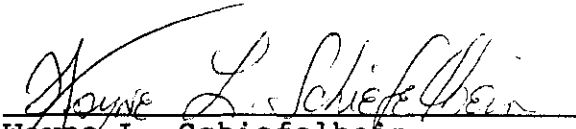
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