

State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

### -M-E-M-O-R-A-N-D-U-M-

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**DATE:** May 10, 2007

**TO:** Commission Clerk (Cole)

**FROM:** Office of the General Counsel (Harris, Cibula, Jaeger)  
Division of Economic Regulation (Rendell, Redemann, Hewitt)

**RE:** Docket No. 070183-WS - Proposed adoption of Rule 25-30.4325, F.A.C., Water Treatment Plant Used and Useful Calculations

**AGENDA:** 05/22/07 – Regular Agenda – Rule Proposal – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Carter

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\GCL\WP\070183.RCM.DOC

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### Case Background

“Used and useful” is that portion of water plant assets in service deemed necessary and prudent to serve existing customers. Prior to 2003, Commission rate cases had inconsistently calculated used and useful percentages for individual water systems. As a result, substantial amounts of staff, utility, consultant, and ratepayer advocate time have been spent litigating the correct used and useful percentage for each case. This litigation results in substantial rate case expense, which is ultimately passed on to the utility’s ratepayers. In 2003, the Commission concluded a rate proceeding which included testimony from various parties, as well as staff.<sup>1</sup> Staff filed testimony in that proceeding which summarized the Commission’s policy on used and

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<sup>1</sup> Order No. PSC-03-1440-FOF-WS, issued December 22, 2003, Docket No. 020071-WS, In re: Application for rate increase in Marion, Orange, Pasco, Pinellas and Seminole Counties by Utilities, Inc., of Florida.

useful calculations to that point. Since the 2003 decision, the Commission's policy regarding used and useful calculations has continued to coalesce to the point where staff believes a used and useful rule is ripe for promulgation.

Staff's recommended rule, attached as Attachment A, is a codification of Commission policy towards water treatment and storage used and useful calculations. This recommended rule will standardize used and useful calculations, thus simplifying the rate case process. Ultimately, staff believes that the amount of time spent by staff, utility personnel, consultants, and ratepayer advocates will be drastically reduced, eliminating a portion of rate case expense and regulatory costs.

A Notice of Rule Development was published in the Florida Administrative Weekly, Volume 32, No. 25, June 23, 2006. A staff Rule Development Workshop was held July 26, 2006. Workshop comments were received from the Office of Public Counsel ("OPC"), the Department of Environmental Protection ("DEP"), Frank A. Seidman on behalf of Utilities, Inc., and John Guastella, of Guastella and Associates. Staff circulated a revised draft rule on March 23, 2007, and scheduled a conference call with all interested persons to discuss staff's draft. At the request of OPC, the conference call was rescheduled twice, and was conducted on April 16, 2007. Additional comments were received from Frank Seidman on behalf of Utilities, Inc. on April 18, 2007. Staff has incorporated the comments received through April 30, 2007, in this Recommendation. OPC submitted additional comments on May 8, 2007; staff has attempted to address those additional comments as fully as possible. The Commission has rulemaking authority pursuant to Sections 120.54 and 367.121(1)(f), Florida Statutes.

## **Discussion of Issues**

**Issue 1:** Should the Commission propose new Rule 25-30.4325, Florida Administrative Code (“F.A.C.”), Water Treatment and Storage Used and Useful Calculations?

**Recommendation:** Yes. The Commission should propose new Rule 25-30.4325, F.A.C. (Harris, Rendell, Redemann, Hewitt)

## **Staff Analysis:**

### **Summary of Rule:**

Subsection (1) [Page 12, lines 2-18] defines terms used in the rule.

Subsection (2) [Page 12, lines 19-21] requires that each used and useful evaluation include a determination as to the prudence of investment and a consideration of economies of scale.

Subsection (3) [Page 12, lines 22-24] requires separate used and useful calculations for the water treatment system and the system’s storage facilities.

Subsection (4) [Page 13, lines 1-6] provides various criteria where a water treatment system will be considered 100 percent used and useful.

Subsections (5) through (7) [Page 13, line 7 - page 14, line 14] specify the methodology for calculating the used and useful percentage for the water treatment system.

Subsection (8) [Page 14, lines 15-18] specifies the calculation of the used and useful percentage for the water system’s storage facilities.

Subsection (9) [Page 14, line 19 – page 15, line 1] addresses the determination of usable storage.

Subsection (10) [Page 15, lines 2-6] addresses excessive unaccounted-for water and under what circumstances an adjustment shall be made to the used and useful calculation.

Subsection (11) [Page 15, lines 7-9] includes an adjustment for reduced water flows due to conservation or a reduction in the number of customers.

### **Used and Useful Generally**

“Used” refers to that portion of a utility’s plant that is in service (not under construction or standing idle) and “useful” refers to that portion of a utility’s plant that is actively helping the utility provide efficient service to current customers. “Used and useful” is that portion of plant assets in service deemed necessary and prudent to serve existing customers and a statutory growth allowance. In general, the used and useful percentage for water plants is calculated by

adding the customer demand, required fire flow, and statutory growth allowance together.<sup>2</sup> Excessive unaccounted-for water is then subtracted, and this numerator is then divided by total plant capacity. The result is the used and useful percentage for the plant being analyzed. Typically, this used and useful percentage is then applied to the utility's investment in the plant and depreciation to determine how much investment should be recovered in current rates.

As stated in the background, the purpose of used and useful calculations is to ensure that current customers only pay for utility plant that is of immediate use to them, including the statutory growth allowance, while taking into account the efficiencies of building a plant properly sized to serve future total expected customer load. As a general rule, it is more cost effective to build one plant which can meet all customer demand as it comes online, than to build a small plant at first and keep expanding it as customer demand increases.<sup>3</sup> However, where growth will occur over an extended period of time, it is unfair to require the first customers to pay all the costs of a plant with excess current capacity which is of no use to these first customers. Used and useful calculations are an attempt to balance these two competing interests.

Local Fire Flow Requirements. [Paragraphs (1)(c), (1)(d) and (4)(a), page 12, lines 7-15 and page 13, lines 1-3]

As a general rule, a water system must be able to provide sufficient water to meet emergency fire suppression needs. Accordingly, utilities are generally required to provide fire flow at a minimum rate of 500 gallons per minute ("GPM") for two continuous hours. However, different standards may be set by local governments or by local fire marshal specifications. Water systems must be engineered and constructed to meet these requirements, with the result that they are sometimes larger than required solely to meet customer usage demands.

In his comments, Mr. Seidman expressed concern with staff's draft language that allows a water system to be designed to meet local requirements for fire flow in determining the percentage of the system which is used and useful. Mr. Seidman believes that local requirements can be difficult to locate and apply, and may be outdated and thus inadequate to provide full protection to the community. He suggests that it may be prudent for a utility to engineer and construct its system to exceed local requirements, for example, building to the Insurance Services Organization standard of 500 GPM. In such a case, the comments suggest it would be unfair to the utility if the rule treated this higher standard as excess capacity, and reduced the used and useful percentage as a result. Mr. Guastella's comments reflected concern that local fire flow standards may be illusory in practice, since the local fire flow standard would be based on flow from one hydrant only, while in an actual emergency, demand might be placed on many hydrants simultaneously. Mr. Guastella suggests the water plant must be designed to meet this simultaneous demand from many hydrants.

Staff does not entirely agree with these suggestions. Staff believes local authorities are in the best position to determine the necessary fire flow requirements for their jurisdiction. Staff

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<sup>2</sup> Section 367.081(2)(a)(2), Florida Statutes, requires the growth allowance not exceed five percent per year. The statute is implemented through Rule 25-30.431, F.A.C.

<sup>3</sup> It also takes time to build additional plant capacity, which cannot be added instantly. Sufficient capacity to serve all customers, plus a statutory growth allowance, must be available before additional customer demand may be placed on the system.

does not believe this rule should attempt to overrule local determinations based on specific local circumstances and conditions. Staff does believe, however, that there should be some minimum amount of fire flow available for the safety of the public, and the situation could arise where there is no local requirement. Accordingly, staff has included language in paragraphs (1)(c) and (d) to require that, in systems which provide fire flow, the minimum flow rate shall be either that set by the local government authority or 500 GPM.

OPC's comments reflect the concern that fire flow standards could be manipulated by a utility to justify construction of a larger water plant than is needed to meet customer usage demand and reasonable fire flow amounts. OPC believes the calculation is complicated by the fact that water in storage can be used to meet fire flow requirements, but a system with no or undersized storage must still be able to produce sufficient quantity for fire flow purposes, which means the treatment system must be larger.

As a general matter, OPC believes fire flow should only be added to the treatment system if there is insufficient storage to meet fire flow demands, or if the system does not have high service pumping capacity. OPC believes that by not routinely adding fire flow to actual usage demand flows for systems with adequate storage or high service pumping, the overall demand will be smaller, which would generally translate into a smaller size required plant.

Staff agrees with OPC that storage does provide fire flow protection. Staff believes the recommendation to separate the used and useful calculations for water treatment from storage satisfies OPC's concerns in this area. Sections (1)(c) [page 12, lines 7-11] and (4)(a) [page 13, lines 1-3] implement this scheme.

Economies of Scale. [Subsection (2), page 12, lines 19-21]

The utilities' comments suggest the need for the rule to take into account the benefits of economies of scale in calculating used and useful percentages. As stated above, it is generally more cost-effective to initially construct one large plant than a smaller plant with later additions, or multiple smaller plants. Further, marginal construction costs often decrease as the size of the plant is increased. The utilities' comments further suggest that if current customers receive a benefit from the utility building "oversized" facilities at the beginning of the project due to economies of scale, then those benefits should be reflected in the current used and useful calculation. Staff agrees with this concept and has included subsection (2) in the recommended rule to take economies of scale into account when they benefit current customers.

Mr. Guastella's comments suggest a water system should be determined to be 100% used and useful if it would be no less costly to build a larger system than to build a system sized for actual customer numbers. Staff does not agree. Staff believes this should not be automatic, but rather cost should be one of the factors in the used and useful calculation. Staff has drafted the rule such that, in considering economies of scale, system build-out criteria will be considered. The recommended rule is intended to acknowledge that prudent utility planning is not necessarily the same as the best decision for early ratepayers.

OPC's comments are concerned with the possibility that individual components of the water treatment and storage systems might be oversized. OPC suggests that economies of scale

only be considered for those components of the system which are not oversized, or for oversized components if the utility can demonstrate through detailed analysis that an actual economy exists. OPC asks that, if its suggestions are not included in the rule, then subsection (2) should be deleted from the draft rule. Staff does not agree with this approach. Staff believes economies of scale are a valid component of the used and useful calculation. The “oversized” issue is analyzed further in the discussion of subsection (3), below.

Storage vs. Treatment. [Subsection (3), page 12, lines 22-24]

Comments on staff’s draft rule indicated the need for a distinction between the storage portion of a water system and the treatment portion of that system. Comments received from Mr. Seidman state that storage should never be considered part of firm reliable capacity of the water treatment system, since storage is a part of the distribution system. OPC suggests that the water treatment and storage portions of the system should be analyzed separately. Staff agrees that storage is part of the distribution system, not the water treatment system, and has revised the recommended rule to reflect this difference. In Subsection (1), Definitions, “water treatment system” specifically excludes storage, which is defined in paragraph (1)(b). Paragraphs (1)(c) and (1)(d) define peak demand for water treatment systems and storage systems separately. Subsections (5) and (6) address used and useful calculations for the water treatment portion of the system. Subsection (7) addresses calculation of peak demand for a system with no storage. Subsection (8) addresses used and useful calculations for the storage portion of the system.

Mr. Seidman’s comments also suggested a conflict in staff’s draft rule regarding a system with a restriction on the pumping capacity of a well and a provision that storage could be considered part of that pumping capacity. By establishing separate calculations for used and useful percentages of system treatment and system storage, staff’s recommended rule resolves this concern. Staff agrees with Mr. Seidman’s further comment that the rule should provide flexibility for a company to present alternative calculations of used and useful for treatment vs. storage, and has included language to this effect in the recommended rule. [Page 12, lines 23-24]

OPC objects to calculation of the used and useful percentage based on the total water treatment or storage system, as opposed to analysis of each component of the water treatment system or storage system. OPC suggests that if any one component of a system is oversized, then a detailed analysis of the entire system should be performed, and the used and useful calculations should be made in a way that accounts for the possibility that individual components, but not the entire system, might be oversized.

While staff understands OPC’s concern, staff does not recommend making these types of changes to the recommended rule. Staff believes the analysis suggested by OPC is extremely burdensome and detailed, and would impose significant effort on staff, utilities, consultants, and other parties. Staff believes this extra effort would not significantly increase the accuracy of the used and useful calculation, and would frustrate the basic intent of this rule, which is to streamline and standardize used and useful calculations. Staff also believes that a water system must be designed as a complete, integrated unit to serve the development. Staff can find no simple, easily applied criteria that could be used to determine when one component of the

integrated system is oversized in relation to the system as a whole, and adjust the used and useful percentage for that component.

OPC also suggests that, in addition to separate used and useful calculations for water treatment and storage, that high service pumping also have a separate calculation. Staff does not agree. In staff's experience, separate high service pumping calculations provide such a small incremental change to the overall used and useful percentage that any benefit would be outweighed by the additional calculations such a change would require.

100% Used and Useful. [Subsection (4), page 13, lines 1-6]

Mr. Seidman's comments expressed concern with staff's position that a system with one single well be considered 100% used and useful. [Paragraph (4)(c), page 13, line 6] Mr. Seidman believes there are situations where a small system may be required by law to have 2 wells, and the rule should consider these systems 100% used and useful also. Staff does not agree, since this result should not be automatic. The rule is designed to achieve flexibility in the calculations, so systems can be evaluated consistently, but with the ability to take mitigating circumstances into account. The rule has been drafted to allow consideration of all circumstances, without inflexible application.

OPC's May 8, 2007, comments express concern with staff's recommendation that systems with single wells or that are the minimum size required to serve customers be considered 100% used and useful. While staff believes the rule should be flexible, staff believes that for these special circumstances, an automatic 100% percentage is most efficient.

Mr. Guastella's comments suggest that the rule does not take into account the fact that water treatment facilities are not designed to exactly match actual demand, but include a "safety factor." Mr. Guastella suggests that if the used and useful calculation reaches 80 percent of actual demand, the facility should be determined 100% used and useful. Staff would note that Florida does not recognize a safety factor in water system design. Instead, systems are designed to meet actual use, with a statutory growth allowance for systems which are not built-out. The rule is designed, however, to allow flexibility in considering all relevant circumstances to arrive at the used and useful percentage.

Firm Reliable Capacity. [Subsection (6), page 13, lines 9-20]

Mr. Seidman's comments expressed concern with staff's treatment of firm reliable capacity in the draft rule. Mr. Seidman is concerned that in a system with multiple wells, more than one well could be out of service at one time. Staff believes this concern is valid, and has included language in subsection (6) [Page 13, lines 13-15] which allows the utility to provide justification why alternative treatment is appropriate.

OPC objects to the language recommended in paragraph (6)(a) [Page 13, lines 17-18] and suggests that the rule should calculate firm reliable capacity for each individual component of the water treatment and storage systems. As discussed above, staff does not agree with OPC's suggestions to calculate used and useful percentages for the individual parts of the complete system.

OPC also objects to the use of 12 hours of pumping in paragraph (6)(b). [Page 13, lines 19-20] OPC believes that most systems are capable of and actually do pump between 20 and 22 hours a day. OPC believes that by using a 12-hour pumping limit, the rule allows pumps to be oversized. Staff does not agree. First, equipment requires a certain amount of down time for maximum efficiency. Second, hydraulic considerations require that wells be given time to recover. Third, customer usage patterns require a system have water available to meet the peak hourly and day demands, and a system sized to meet the peak demands through constant pumping would not be appropriate. This is discussed further in the next section.

Peak Demand. [Subsection (7), page 13, line 21 – page 14, line 14]

Subsection (7) details the calculation of water system peak demand. In his comments, Mr. Seidman expressed several concerns which staff has addressed. First, Mr. Seidman believes the use of a peak day demand for systems with storage vs. peak hour demand for systems with no storage is too severe. He believes there are a number of smaller systems which have some negligible amount of storage, and the rule should reflect this shading. Staff agrees with this comment, and this is reflected in the rule.

Second, Mr. Seidman was concerned that staff's draft rule did not provide for a single maximum day ("SMD") that was non-representative of the actual SMD during the test period due to some anomaly. Staff has revised the recommended rule to take this circumstance into account by including language in sub-paragraph (7)(a)1. and (7)(a)2. [Page 13, line 24 – page 14, line 5]

Mr. Guastella expressed concern that the use of maximum demands for the test year only is incorrect, and staff should consider maximum demands for earlier years, if those years' maximum demands exceed test year maximum demand. Staff does not agree with this comment. When setting rates, staff uses only test year data, so that all variables can be taken into account when setting rates.<sup>4</sup> Taking maximum demand data from outside the test year could lead to inaccurate rates, since there would be no context for those outside-of-test year numbers, and other in-test year data may not be adjusted accordingly.

OPC expressed a number of concerns with subsection (7) and the calculation of peak demand. First, as discussed above, OPC believes fire flow amounts should come from storage, and a fire flow factor should only be added to actual use demand for systems with insufficient storage and no high service pumping. Staff has resolved this concern by recommending in paragraphs (1)(c) and (4)(a) that storage be calculated separately from treatment facilities and the general treatment of fire flow. Staff's references<sup>5</sup> also suggest that when fire flow comes from storage, the treatment plant must be able to replenish system storage so as to be able to meet the system's maximum day demand.

Second, OPC objects to the use of the total water treatment or storage system when calculating peak flow and firm reliable capacity. OPC believes that some method of adjustment

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<sup>4</sup> The purpose of the test year is to ensure that the new rates are based on the utility's most recent actual experience, with any appropriate adjustments, so that the new rates will reflect typical conditions in the immediate future.

<sup>5</sup> Mays, Larry: Water Systems Distribution Handbook; US Army Corps of Engineers Design of Small Water Systems.



for individual oversized components must be included in the rule. This leads OPC to suggest a detailed analysis be performed on the individual components of the system. As discussed above, staff believes such a detailed analysis will not significantly add to the accuracy of the used and useful calculation, and will impose much greater costs. Staff therefore does not recommend adoption of this suggestion.

Third, OPC expressed concern with the use of a 2.0 multiplier in subparagraphs (7)(a)1. and (7)(a)2. [Page 14, lines 2 and 5] OPC recommends use of 1.5 as the multiplier. According to the American Water Works Association's Manual of Water Supply Practices, the peak factor for maximum day demand is developed from a range of values between 1.3 and 2.0. Staff's use of the 2.0 multiplier is designed to allow the utility to provide the best possible service by allowing the highest multiplier consistent with accepted practice. Furthermore, the Commission has used the 2.0 multiplier in a number of past used and useful calculations.

OPC is also concerned with the use of 1.1 GPM per ERC as a proxy for peak hour flow when actual flow data is not available. [Paragraph (7)(a)3., page 14, lines 6-7] OPC believes that flow data will always be either available or easily determined, and that the 1.1 factor is too high in any event.<sup>6</sup> Staff does not agree that actual flow data will always be available or determinable,<sup>7</sup> and recommends the rule contain a default flow rate for these situations.

OPC's May 8 comments further suggest that, for storage, staff's use of peak demand is too high, and some other numerator, such as 25% of peak demand, should be used. Staff does not agree. While staff agrees that 25% is sometimes used as the minimum design criteria<sup>8</sup>, staff believes that system storage must be able to meet 100% of peak day demand.

Excessive Unaccounted - For Water. [Subsections (1)(e) and (10), page 12, lines 16-17 and 15, lines 2-6]

Unaccounted-for water is water taken from a supply source into the distribution system which is not delivered to customers or otherwise accounted for. The "source" is generally the point of entry for raw water into the water treatment portion of the system; this is usually a well or wells.

Mr. Seidman's comments suggest that in paragraph (1)(e) [page 12], the definition of excessive unaccounted-for water, the word "produced" is unclear and leads to confusion. He suggests including language to reflect that "water produced" is the amount reflected on the utility's monthly Florida DEP operating reports.<sup>9</sup> Staff believes the use of the term "produced" is clear and refers to the amount of water pumped and treated. Further, staff can conceive of situations where the utility's total water source would not be captured solely by the monthly DEP operating reports. Staff does recommend, however, using the term "finished potable water produced."

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<sup>6</sup> Staff notes that DEP allows peak demand factors as high as 2.0 GPM.

<sup>7</sup> For example, many small systems have very poor recordkeeping.

<sup>8</sup> Engineering designs range from a minimum of 25% to as much as 300% of peak day demand.

<sup>9</sup> As part of DEP mandatory reporting requirements, Florida water utilities are required to report on the total number of gallons pumped from utility wells each month.

Referring to Subsection (7) [pages 13-14], Mr. Seidman believes that the rule should be clarified to affirmatively state that the excessive unaccounted-for water factor in the subsection (7) formulae regarding peak demand is expressed in gallons per day. Mr. Seidman believes this clarification is necessary since excessive unaccounted-for water is generally expressed in gallons per year. Staff does not agree that this distinction must be expressed in the rule, since staff believes the calculation makes this point obvious.

Mr. Guastella's comments suggest that no adjustment for unaccounted-for water should be made to the used and useful calculation, since the fixed costs of the treatment plant do not decrease or change as the amount of unaccounted for water changes. Staff does not agree. Utilities must have an incentive to minimize unaccounted for water, for both resource conservation and cost approaches. By holding utilities accountable for their excess unaccounted-for water (a situation generally well within a utility's control), utilities have an incentive to maintain the system properly, maintain proper records, etc., for benefit of the utility's customers and the State as a whole.

OPC makes a number of suggestions for adjustments based on excessive unaccounted-for water. Staff does not agree with these suggestions. Staff's recommended used and useful rule will penalize utilities for excessive unaccounted-for water, and operations and maintenance expenses are also adjusted for excessive unaccounted-for water in rate cases. The Commission has been consistent over time in its treatment of excessive unaccounted-for water, and staff believes OPC's suggestions are excessive given prior Commission practices.

#### Summary of Statement of Estimated Regulatory Costs ("SERC").

Staff has prepared a SERC for this recommended rule, which is attached to this Recommendation as Attachment B. The SERC concludes that there should be a benefit to the Commission, with no negative impact on other state and local government entities. The SERC also concludes that there should be no impact on small businesses, small cities, or small counties.

The SERC states that water utilities will benefit from a clear understanding of what portion of their plant will be considered used and useful, and from the reduction in litigation to determine the correct used and useful percentage. Customers should also benefit due to reduced rate case expense resulting from reduced litigation.

Docket No. 070183-WS

Date: May 10, 2007

**Issue 2:** Should this docket be closed?

**Recommendation:** Yes. If no requests for hearing or comments are filed, the rule as proposed should be filed for adoption with the Secretary of State and the docket should be closed. (Harris, Jaeger)

**Staff Analysis:** Unless comments or requests for hearing are filed, the rule as proposed may be filed with the Secretary of State without further Commission action. The docket may then be closed.

1 **25-30.4325 Water Treatment and Storage Used and Useful Calculations**

2 (1) Definitions.

3 (a) A water treatment system includes all facilities, such as wells and treatment  
4 facilities, excluding storage, necessary to produce, treat, and deliver potable water to a  
5 transmission and distribution system.

6 (b) Storage facilities include ground or elevated storage tanks and high service pumps.

7 (c) Peak demand for a water treatment system includes the utility's maximum hour or  
8 day demand, excluding excessive unaccounted for water, plus a growth allowance based on  
9 the requirements of Rule 25-30.431, Florida Administrative Code, and, where fire flow is  
10 provided, a minimum of either the fire flow required by the local governmental authority or 2  
11 hours at 500 gallons per minute.

12 (d) Peak demand for storage includes the utility's maximum day demand, excluding  
13 excessive unaccounted for water, plus a growth allowance based on the requirements of Rule  
14 25-30.431, Florida Administrative Code, and, where provided, a minimum of either the fire  
15 flow required by the local governmental authority or 2 hours at 500 gallons per minute.

16 (e) Excessive unaccounted for water (EUW) is finished potable water produced in  
17 excess of 110 percent of the accounted for usage, including water sold; other water used, such  
18 as for flushing or fire fighting; and water lost through line breaks.

19 (2) The Commission's used and useful evaluation of water treatment system and  
20 storage facilities shall include a determination as to the prudence of the investment and  
21 consideration of economies of scale.

22 (3) Separate used and useful calculations shall be made for the water treatment  
23 system and storage facilities. However, if the utility believes an alternative calculation is  
24 appropriate, such calculation may also be provided, along with supporting documentation.

25 CODING: Words underlined are additions; words in ~~struck through~~ type are deletions from existing law.

- 1           (4) A water treatment system is considered 100 percent used and useful if:  
2           (a) The system is the minimum size necessary to adequately serve existing customers  
3 plus an allowance for growth and fire flow; or  
4           (b) The service territory the system is designed to serve is mature or built out and  
5 there is no potential for expansion of the service territory; or  
6           (c) The system is served by a single well.  
7           (5) The used and useful calculation of a water treatment system is made by dividing  
8 the peak demand by the firm reliable capacity of the water treatment system.  
9           (6) The firm reliable capacity of a water treatment system is equivalent to the pumping  
10 capacity of the wells, excluding the largest well for those systems with more than one well.  
11 However, if the pumping capacity is restricted by a limiting factor such as the treatment  
12 capacity or draw down limitations, then the firm reliable capacity is the capacity of the  
13 limiting component or restriction of the water treatment system. In a system with multiple  
14 wells, if a utility believes there is justification to consider more than one well out of service in  
15 determining firm reliable capacity, such circumstance will be considered. The utility must  
16 provide support for its position, in addition to the analysis excluding only the largest well.  
17           (a) Firm reliable capacity is expressed in gallons per minute for systems with no  
18 storage capacity.  
19           (b) Firm reliable capacity is expressed in gallons per day, based on 12 hours of  
20 pumping, for systems with storage capacity.  
21           (7) Peak demand is based on a peak hour for a water treatment system with no storage  
22 capacity and a peak day for a water treatment system with storage capacity.  
23           (a) Peak hour demand, expressed in gallons per minute, shall be calculated as follows:  
24           1. The single maximum day (SMD) in the test year unless there is an unusual  
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1 occurrence on that day, such as a fire or line break, less excessive unaccounted for water,  
2 divided by 1440 minutes in a day, times 2  $[(SMD-EUW)/1,440] \times 2$ , or

3 2. The average of the 5 highest days (AFD) within a 30-day period in the test year,  
4 excluding any day with an unusual occurrence, less excessive unaccounted for water, divided  
5 by 1440 minutes in a day, times 2  $[(AFD-EUW)/1,440] \times 2$ , or

6 3. If the actual maximum day flow data is not available, 1.1 gallons per minute per  
7 equivalent residential connection (1.1 x ERC).

8 (b) Peak day demand, expressed in gallons per day, shall be calculated as follows:

9 1. The single maximum day in the test year, if there is no unusual occurrence on that  
10 day, such as a fire or line break, less excessive unaccounted for water (SMD-EUW), or

11 2. The average of the 5 highest days within a 30-day period in the test year, excluding  
12 any day with an unusual occurrence, less excessive unaccounted for water (AFD-EUW), or

13 3. If the actual maximum day flow data is not available, 787.5 gallons per day per  
14 equivalent residential connection (787.5 x ERC).

15 (8) The used and useful calculation of storage is made by dividing the peak demand  
16 by the usable storage of the storage tank. Usable storage capacity less than or equal to the  
17 peak day demand shall be considered 100 percent used and useful. A hydropneumatic tank is  
18 not considered usable storage.

19 (9) Usable storage determination shall be as follows:

20 (a) An elevated storage tank shall be considered 100 percent usable.

21 (b) A ground storage tank shall be considered 90 percent usable if the bottom of the  
22 tank is below the centerline of the pumping unit.

23 (c) A ground storage tank constructed with a bottom drain shall be considered 100  
24 percent usable, unless there is a limiting factor, in which case the limiting factor will be taken

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1 into consideration.

2 (10) To determine whether an adjustment to plant and operating expenses for  
3 excessive unaccounted for water will be included in the used and useful calculation, the  
4 Commission will consider all relevant factors, including whether the reason for excessive  
5 unaccounted for water during the test period has been identified, whether a solution to correct  
6 the problem has been implemented, or whether a proposed solution is economically feasible.

7 (11) In its used and useful evaluation, the Commission will consider other relevant  
8 factors, such as whether flows have decreased due to conservation or a reduction in the  
9 number of customers.

10 Specific Authority: 350.127(2), 367.121(1)(f) FS.

11 Law Implemented: 367.081(2), (3) FS.

12 History: New \_\_\_\_\_.

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CODING: Words underlined are additions; words in ~~struck through~~ type are deletions from existing law.