

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-

DATE: March 27, 2008

TO: Office of Commission Clerk (Cole)

FROM: Office of the General Counsel (Gervasi, Jaeger)
Division of Economic Regulation (Daniel, Hewitt, Rieger, Walden)

Handwritten initials and signatures:
G, P.S., S.M.C., J.W., SDR, 192, [Signature]

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

AGENDA: 04/08/08 – Regular Agenda – Posthearing Decision – Participation is limited to Commissioners and Staff

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Carter

RULE STATUS: Adoption May Be Deferred

SPECIAL INSTRUCTIONS: None

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

RECEIVED--FPSC
08 MAR 27 AM 11:41
COMMISSION
CLERK

Case Background

By Order No. PSC-07-0469-NOR-WS, issued May 31, 2007, in this docket, the Commission issued a notice of intent to adopt new Rule 25-30.4325, Florida Administrative Code (F.A.C.), relating to water treatment plant used and useful calculations. The Notice of Rulemaking appeared in the June 8, 2007 edition of the Florida Administrative Weekly (FAW), and advised that if timely requested, a hearing would be held at a time and place to be announced in a future notice.

On June 29, 2007, the Office of Public Counsel (OPC) timely filed a Petition for Hearing on the proposed adoption of the rule pursuant to subsection 120.54(3)(c)2., Florida Statutes (F.S.). By Order No. PSC-07-0741-PCO-WS, issued September 17, 2007, the Commission

DOCUMENT NUMBER-DATE

02317 MAR 27 8

FPSC-COMMISSION CLERK

granted OPC's Petition and suspended the rulemaking proceeding pending the completion of a formal evidentiary proceeding (otherwise known as a "draw out" proceeding). The rulemaking proceeding will resume upon the conclusion of the formal evidentiary or "draw out" proceeding, pursuant to subsection 120.54(3)(c)2., F.S. Two utilities, Aqua Utilities Florida, Inc. (AUF) and Utilities, Inc. (UI), have intervened in this matter. The formal hearing was held on January 22, 2008.

On January 9, 2008, OPC filed a motion to file revised recommended Rule 25-30.4325, F.A.C. AUF filed a response in opposition to the motion on January 16, 2008. The motion was denied as a preliminary matter at the January 22, 2008, hearing. The parties timely filed post-hearing briefs on February 26, 2008, pursuant to Order No. PSC-08-0091-PCO-WS, issued February 13, 2008, granting AUF's motion for extension of time to file briefs.

This recommendation is to make certain changes to the proposed rule based on the evidence of record. The rule as recommended herein is contained on Attachment A. Attachment B is a comparison of the proposed rule to the recommended rule. Attachment C is the recommended rule in type and strike format.

The Commission has jurisdiction pursuant to sections 120.54, 350.127(2), 367.081, and 367.121(1)(f), F.S.

Approved Stipulations

At the hearing, the Commission found that the stipulations reached by the parties and supported by staff were reasonable, and accepted the stipulated matters as set forth below.

1. Rule 25-30.4325(1)(a) shall read "A water treatment system includes all facilities, such as wells and treatment facilities, excluding storage and high service pumping, necessary to pump and treat potable water." (Issue 1)
2. Rule 25-30.4325(5) shall read "The used and useful calculation of a water treatment system is made by dividing the peak demand by the firm reliable capacity of the water treatment system." (Issue 9)
3. Rule 25-30.4325(8) shall read "The used and useful calculation of storage is made by dividing the peak demand by the usable storage of the storage tank. Usable storage capacity less than or equal to the peak day demand shall be considered 100 percent used and useful. A hydropneumatic tank is not considered usable storage." (Issue 12)
4. Rule 25-30.4325(9) shall read "Usable storage determination shall be as follows:
 - (a) An elevated storage tank shall be considered 100 percent usable.
 - (b) A ground storage tank shall be considered 90 percent usable if the bottom of the tank is below the centerline of the pumping unit.
 - (c) A ground storage tank constructed with a bottom drain shall be considered 100 percent usable, unless there is a limiting factor, in which case the limiting factor will be taken into consideration." (Issue 13)

Discussion of Issues

Issue A: Which party bears the burden of proof to demonstrate that specific provisions of proposed Rule 25-30.4325 should not be accepted?

Recommendation: As the Petitioner, OPC bears the burden of proving by a preponderance of the evidence that the alternative rule proposals it has presented should be adopted by the Commission instead of the specific provisions in the proposed rule. Other parties and staff bear that same burden of proof with respect to the alternative rule proposals they have presented. (Gervasi, Jaeger)

Position of the Parties

OPC: Each party seeking a change to the proposed rule has the burden of proof to establish by a preponderance of the evidence that their recommended change is superior. Ultimately, the Commission has the same burden with regard to the final language of the adopted rule.

AUF: As the Petitioner in this proceeding, the Office of Public Counsel bears the burden of proof in its comprehensive attack on the Staff's proposed rule. AUF bears a similar burden of proof with respect to individual challenged provisions.

UI: OPC bears the burden of proof because it is the Petitioner in this proceeding. Any intervener or Staff who takes the position to change a portion of the proposed rule bears the burden of proof that the provision it seeks to change is arbitrary or capricious.

Staff Analysis:

OPC

In its post-hearing brief, OPC states that as the party asserting the affirmative case, OPC has the burden of proof to establish by a preponderance of the evidence that its recommended changes to the rule are more appropriate and superior to the language as originally proposed. OPC further states that other parties seeking changes to the proposed rule have the same burden of proof, and that the Commission has the ultimate burden of proof to establish by a preponderance of the evidence that the Commission's finally approved language is more appropriate and superior to the recommended alternatives. This burden is met if the greater weight of the competent substantial evidence in the record of this proceeding, however slight the edge may be, supports the finally approved language.¹

¹ OPC cites to the following authorities to support its position: Fitzpatrick v. City of Miami Beach, 328 So. 2d 578 (Fla. 3rd DCA 1976); HRS v. Career Service Commission, 289 So. 2d 578 (Fla. 3rd DCA 1976); and Order No. 10162, issued July 27, 1981, in Docket No. 800119-EU, In Re: Application of Florida Power Corporation for an increase in rates and charges.

AUF

AUF states that under generally accepted principles of administrative law, the burden of proof is on the party asserting the affirmative of an issue before an administrative tribunal, and that this burden applies equally as well in a “draw out” proceeding such as this.² While AUF has not found any case law in Florida which specifically states the evidentiary standard to be applied in a “draw out” proceeding, there is case law under traditional Section 120.56, F.S., rule challenge proceedings that provides that the weighing of the evidence should be based upon a preponderance of the evidence standard.³ AUF believes the Commission should similarly apply a preponderance of the evidence standard in this “draw out” proceeding.

UI

UI argues that in determining the validity of an agency’s proposed rule, the Commission’s consideration should be whether the proposed rule is arbitrary or capricious.⁴ In demonstrating that a proposed rule is arbitrary or capricious, OPC, as the challenger, has the burden to do so by the preponderance of the evidence.⁵ UI argues that the very nature of this rulemaking process, which spanned several years with input from all affected parties as well as other state agencies, belies the argument that the proposed rule is arbitrary or capricious.

Analysis and Conclusion

All parties and staff agree that the general rule is that the burden of proof is on the party asserting the affirmative of an issue before an administrative tribunal.⁶ The parties and staff also agree that as the party asserting the affirmative case, OPC has the burden of proof to establish by a preponderance of the evidence that its recommended changes to the rule are more appropriate and superior to the language as originally proposed and that other parties or staff seeking changes to the proposed rule have the same burden of proof as OPC with respect to the proposed rule changes they are seeking.⁷

Staff does not agree with OPC that the Commission has the ultimate burden of proof to establish by a preponderance of the evidence that the Commission’s finally approved language is

² As legal authority for its position, AUF cites to Balino v. HRS, 348 So. 2d 349 (Fla. 1st DCA 1977), cert. denied, 370 So. 2d 458 (Fla. 1979) (finding that the burden in a rule challenge is on the party attacking an agency’s proposed rule).

³ Department of Health v. Merritt, 919 So. 2d 561, 564 (Fla. 1st DCA 2006).

⁴ Adam Smith Enterprises, Inc. v. DER, 553 So. 2d 1260 (Fla. 1st DCA 1989).

⁵ Agrico Chemical Co. v. DER, 365 So. 2d 759, 763 (Fla. 1st DCA 1978), cert. denied, 376 So. 2d 74 (Fla. 1979) (finding that an arbitrary decision is not supported by facts or logic, or despotic, and that capricious action is one which is taken without thought or reason or irrationally).

⁶ Balino, 348 So. 2d at 350.

⁷ Career Service Commission, 289 So. 2d at 415 (finding that absent a statutory provision stating otherwise, the degree of proof by which a case must be established before an administrative tribunal is a preponderance of the evidence). See also Merritt, 919 So. 2d at 564.

more appropriate and superior to the recommended alternatives. The burden in a rule challenge is on the party attacking an agency's proposed rule.⁸ The cases relied upon by OPC in arguing that the Commission bears the ultimate burden of proof in this case are not on point. Those cases, Fitzpatrick and Career Service Commission, stand for the proposition that the burden of proving the basis for a disciplinary action rests with the appointing authority and are inapplicable here. Nor does staff agree with UI that the Commission's consideration should be whether the proposed rule is arbitrary or capricious. That is a standard used by a reviewing authority in determining the validity of an agency's proposed rule. The validity of the proposed rule is not at issue in this "draw out" proceeding. Rather, the Commission may modify the proposed rule after consideration of the record established at the hearing and the arguments of the parties and recommendation of staff.⁹

For the foregoing reasons, staff recommends that as the Petitioner, OPC bears the burden of proving by a preponderance of the evidence that the alternative rule proposals it has presented should be adopted by the Commission instead of the specific provisions in the proposed rule. Other parties and staff bear that same burden of proof with respect to the alternative rule proposals they have presented.

⁸ March 28, 1989, DOAH Recommended Order in Case Nos. 88-1067RP et al., In Re: Petitions for Draw-Out Proceedings pursuant to Section 120.54(17), F.S., concerning the Department of Community Affairs' Proposed Rules 9J-14.006 and 9J-15.006 at 33 (citing Career Service Commission, *supra*; DOT v. J.W.C. Co., 396 So. 2d 778 (Fla. 1981); and Agrico Chemical Co., *supra*).

⁹ Id.

Issue 1: Stipulation.

Issue 2: Should the definition of storage facilities as proposed in Rule 25-30.4325(1)(b) be adopted?

Recommendation: Yes, the definition of storage facilities in Proposed Rule 25-30.4325(1)(b), F.A.C., should be adopted if the Commission approves staff's recommendation in Issue 16. If the Commission denies staff's recommendation in Issue 16, the definition of storage facilities should be changed to exclude high service pumps. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. The definition of storage facilities should not include high service pumping.

AUF: No. High service pumps should be separated from storage facilities for purposes of identifying their cost and percentage used and useful. The calculation of used and useful for high service pumps should not be limited to a formula reflecting the ratio of demand to capacity.

UI: Yes. The proposed rule provides a proper definition of storage facilities.

Staff Analysis: Proposed Rule 25-30.4325(1)(b), F.A.C., defines storage facilities to include ground or elevated storage tanks and high service pumps. OPC witness Woodcock and Aqua witness Guastella believe that high service pumps should not be included in the definition for storage because they believe that used and useful for high service pumps should be calculated separately from storage. The parties arguments on that point are addressed in Issue 16. In Issue 16, staff recommends that there is insufficient evidence to support a separate used and useful evaluation for high service pumps. Therefore, if the Commission approves staff's recommendation in Issue 16, the definition of storage facilities in Proposed Rule 25-30.4325(1)(b), F.A.C., should be adopted. If the Commission denies staff's recommendation in Issue 16, then the definition of storage facilities should be changed to exclude high service pumps.

Issue 3: Should the definition of peak demand as proposed in Rule 25-30.4325(1)(c) be adopted?

Recommendation: Yes, the definition of peak demand for a water system as proposed in Rule 25-30.4325(1)(c) should be adopted. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: Proposed subparagraph (1)(c) should be modified. While proposed subparagraph (1)(c) defines peak demand for a water treatment system as either maximum hour or maximum day, it fails to clarify when maximum hour or day should be used and how they should be used for systems with and without storage.

AUF: No. The definition should not exclude excessive unaccounted for water. Also, the fire flow provision should be amended to allow recovery of an appropriate fire flow or a minimum of either the fire flow required by the local governmental authority or 2 hours at 500 gallons per minute.

UI: Yes. The proposed rule provides a proper definition of peak demand for a water system.

Staff Analysis: Proposed Rule 25-30.4325(1)(c), F.A.C., contains the definition of peak demand for a water treatment system. The proposed rule provides that the peak demand for a water treatment system includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of Rule 25-30.431, F.A.C., and where fire flow is provided, a minimum of either the fire flow required by the local governmental authority or two hours at 500 gallons per minute. Proposed Rule 25-30.4325(7), F.A.C., provides that peak demand is based on a peak hour for a water treatment system with no storage and a peak day for a water treatment system with storage capacity.

OPC

OPC agrees that the peak demand for a water treatment system, with or without storage, should include a growth allowance and an adjustment for excessive unaccounted for water. OPC also agrees that peak demand for a water treatment system with storage should include fire flow. However, OPC proposed alternative rule language that provides that peak demand for systems without storage should be based on the greater of either (1) the maximum hour demand without fire flow or (2) the maximum day demand with fire flow, where provided.

Witness Woodcock testified that peak demand for systems without storage should be consistent with the Department of Environmental Protection's (DEP) Rule 62-555.320, F.A.C., which provides the design criteria for high service pumping stations (well pumps). Subsection (15)(a) of the DEP rule provides that high service pumping capacity should be sufficient to meet at least the water system's peak hour demand, and if fire protection is being provided, at least the maximum day demand plus fire flow should be met. Witness Woodcock testified that when fire flow is provided in smaller systems, fire flow alone can be significantly greater than the

maximum hour flow, and the maximum day plus fire flow test can give a better indication of the peak flows. He noted that for systems without storage, fire flow would have to come from well pumps, and with a fire occurring in the peak hour, typically the demand being placed on the system would tend to impact the peak hour on the system. Witness Woodcock testified that OPC's proposed language, based on the DEP rule, is consistent with sound engineering design and appropriate for used and useful calculations. Consequently, it would be inappropriate to add max hour of the max day demands with the fire flow requirement, plus a growth allowance, for treatment without storage. To do so is contrary to real world experience and unfairly overstates the demand numerator portion of the used and useful fraction which expresses the used and useful percentage for treatment. (TR 47-49, 99-101, 312-313, OPC BR 8-9)

Witness Woodcock also testified that rather than having a minimum fire flow allowance, each system should be looked at on a case by case basis. He believes that a system must have an appropriate number of fire hydrants and lines that are sized to provide the required fire flow in order to include fire flow in the used and useful calculation. (TR 49-50)

AUF

AUF witness Guastella agreed with most of the definition for peak demand; however, he does not agree that peak demand should be adjusted for excessive unaccounted for water and he believes that when fire flow is provided, an appropriate fire flow or a minimum of either the fire flow required by the local governmental authority or two hours at 500 gallons per minute should be included in peak demand.

Witness Guastella testified that it is not appropriate to make an adjustment to peak demand for unaccounted for water because eventually all systems experience increasing levels of unaccounted for water as they age. The appropriate regulatory response is to reduce variable costs for power and chemicals, but not to reduce an investment that had to be made in order to provide service to the customers. He testified that it is the utility's responsibility to control unaccounted for water and to make a cost-justified decision as to whether the cost to correct the problem is worth the benefit. He believes that a wrong message would be sent to the utility by making an adjustment to plant as an incentive to fix the problem. (TR 126, 140, 154-164, 172)

In reference to the amount of fire flow to be included in the peak demand, witness Guastella testified that the proposed rule language assumes that the local governmental authority's fire flow requirement is consistent with how the entire water system should have been designed. Local governmental authorities do not necessarily have the expertise to establish design criteria for the comprehensive water system; therefore, additional wording should be included in the proposed rule to consider the appropriate amount of fire flow. Rather than referring to the local government, witness Guastella testified that including the "appropriate fire flow" wording in the rule directs the engineer and the utility to the basis for which the utility had incurred costs to meet the fire flow requirement in that specific area.

Witness Guastella testified that the counties that have ordinances or rules on required fire flow use the National Board of Fire Protection or Insurance Service Organization (ISO) standards to develop their fire flow requirements. The ISO and its predecessor, the National

Board of Fire Underwriter (NBFU), provide formulas and publications that reflect proper engineering design of water systems to possibly meet greater fire flow demands than what is required by the local governmental authorities. He recommends that the used and useful rule would be better if it were to specifically recognize the need for water systems to be designed to meet the most appropriate fire flow requirements and for the water utility's rates to include the costs to do so. Although he was not aware of any specific provision in the DEP rules that requires a utility to follow ISO standards, he testified that if ISO standards are not met, the utility is not capable of providing the needed fire flow requirement that the utility should be designed to meet.

Witness Guastella did not know of any case in the past where the Commission had considered the additional level of fire flow that he is recommending. He testified that his concept was considered in 2004 by the St. Johns County Regulatory Authority for Intercoastal Utilities; however, the County did not agree with, or accept, his fire flow recommendation. (TR 123-124, 148-149, 153-154, 170, 329-330)

UI

UI witness Seidman testified that he supports the rule as proposed. (TR 187) UI's position in its brief is that the proposed Rule 25-30.4325(1)(c), F.A.C., provides a proper definition for peak demand for a water system. Witness Seidman did not offer any testimony to change this proposed rule.

Staff Witnesses

Staff witness Redemann disagrees with OPC's proposed definition of peak demand for systems without storage. Witness Redemann testified that OPC's proposal to base peak demand for systems without storage on the greater of either (1) the maximum hour demand without fire flow or (2) the maximum day demand with fire flow is not consistent with sound engineering design. While OPC's proposed alternative language may be based on DEP rules, those DEP rules, which are based on sound engineering principles, are designed to provide the minimum design criteria a system must have in order to be permitted. The Commission's purpose is to establish used and useful plant that is put into rate base. When asked about the likelihood of a fire occurring on the annual peak demand hour of a water system, he could not recall any instance, but indicated that it could easily happen. (TR 272-273, 288-292)

In reference to AUF's approach that it is not appropriate to make an adjustment to peak demand for excessive unaccounted for water, witness Redemann indicated that it is a long-standing practice for the Commission to consider unaccounted for water over 10% to be excessive. He believes that adjustments for unaccounted for water in excess of 10% should be made to peak demand as well as chemical and electrical expenses and purchased water, so that the ratepayers do not bear those costs. However, if a utility has performed a water audit and is in the process of reducing the amount of water loss, no adjustment to expenses is needed because the cost the company will incur to correct the problem will likely exceed the expenses that would be removed. Also, for those systems that have slightly over 10% unaccounted for water, the adjustment on such small amounts would be immaterial. (TR 274-276)

Staff witness Hoofnagle testified that the DEP sets or establishes standards of practice and care for the industry to ensure water quality. The DEP supports a utility's decision to design and construct well, treatment, and storage facilities that meet or exceed the minimum criteria required by rule. (TR 251)

OPC Rebuttal

Witness Woodcock agreed with witness Guastella's contention that local government authorities often recommend a rate of flow per hydrant and that fire flow requirements need to be met for an entire service area, taking into account the population of the community being served. Witness Woodcock testified that a water treatment system is typically designed based on the fire flow requirements of the local government and that a water distribution system must be properly designed and capable of meeting fire flow demands throughout the entire service area, including instances where there are multiple or coincidental fires. In reference to the proper engineering design to have a water distribution system capable of meeting fire service requirements throughout the service area, witness Woodcock could not commit to knowing what the specific system wide fire flow requirement may be. This is because there could be parts of a system that have no hydrants and lines not sized to provide service for fire; and other areas of the system designed to meet the fire flow requirements. Witness Woodcock agreed that depending on the occurrences and magnitudes of the fire or multiple fires, facilities including storage can be used in some cases at their full capacity. He indicated that this depends on the size of the system and the characteristics of the service area. (TR 82, 87-89)

Analysis and Conclusion

Proposed Rule 25-30.4325(1)(c), F.A.C., contains the definition of peak demand for a water treatment system. The proposed rule provides that the peak demand for a water treatment system includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of Rule 25-30.431, F.A.C., and where fire flow is provided, a minimum of either the fire flow required by the local governmental authority or two hours at 500 gallons per minute. Proposed Rule 25-30.4325(7), F.A.C., provides that peak demand is based on a peak hour for a water treatment system with no storage and a peak day for a water treatment system with storage capacity.

All parties agree that the peak demand for a water treatment system (with or without storage) should include a growth allowance as required by Section 367.081, F.S. The parties also agree that peak demand for a water treatment system with storage should be based on a peak day and should include fire flow; although OPC and AUF have concerns about the amount of fire flow that should be included.

All parties, with the exception of OPC, agree that peak demand for a water treatment systems without storage should be based on a peak hour; although, again, OPC and AUF have concerns about the amount of fire flow that should be included. The alternative rule language proposed by OPC regarding the peak demand for systems without storage reflects the minimum design criteria a system must have in order to be permitted by DEP. Staff agrees with staff witness Redemann that the minimum criteria for DEP permitting are not the same criteria used

for ratemaking. The Commission is required by Section 367.081, F.S., to consider the utility's quality of service in rate proceedings. Therefore, the criteria for determining the amount of plant that will be considered used and useful and included in rate base should allow the utility the opportunity to recover its investment in sufficient plant to not only meet DEP's minimum permitting criteria, but to also meet its obligation to provide safe, efficient, and sufficient service, pursuant to Section 367.111, F.S. Further, DEP supports a utility's decision to design facilities that meet or exceed the minimum criteria required by the DEP rules. Water systems that do not have storage facilities should be allowed to include in rate base both the peak hour demand and fire flow requirements to recognize the possibility that a fire could occur during the peak hour. This is also consistent with prior Commission practice.¹⁰

Witness Woodcock's testimony regarding the interpretation of the phrase "where provided" reflects OPC's concern that even though a utility may provide fire flow, there could be parts of a system that have limited access to that fire flow because of either a lack of fire hydrants or the size of the lines serving the area. In those instances, OPC would like to limit the amount of fire flow that is included in peak demand. However, OPC did not offer any alternative language to specifically address this concern. Commission practice has been to allow fire flow even in systems that have limitations on the amount of fire flow available. In Order No. PSC-03-1440-FOF-WS, the Commission found that it is appropriate to include fire flow in the used and useful analysis, even if that protection is only available to a limited number of customers in the service area.¹¹

Staff was not persuaded by AUF's testimony regarding the use of industry standards to determine the amount of fire flow to be included in peak demand. Because the proposed rule is designed to be used in a wide variety of cases, it should contain criteria that will be appropriate in the majority of those cases. The proposed rule language offers a reasonable option for determining the amount of fire flow to be included in the used and useful calculation in most cases. The language in subsection (3) of the proposed rule provides an opportunity for any party to offer and support a separate used and useful calculation based on a different criteria. Further, the language in the proposed rule is consistent with prior Commission orders. It should be noted that the Commission has declined to accept the ISO guidelines for determining the appropriate amount of fire flow.¹²

¹⁰ See Order No. PSC-07-0199-PAA-WS, issued March 05, 2007, in Docket No.060257-WS, In re: Application for increase in water and wastewater rates in Polk County by Cypress Lakes Utilities, Inc.; Order No.PSC-07-1009-PAA-WU, issued December 20, 2007, in Docket No.070177-WU, In re: Application for staff-assisted rate case in Pasco County by LWV Utility; and Order No.11436, issued December 22, 1982, in Docket No.810187-WS, In re: Staff assisted request of Burnt Store Utilities, Inc., for increased water and sewer rates in Lee County, Florida.

¹¹ Order No. PSC-03-1440-FOF-WS, issued December 22, 2003, in Docket No. 020071-WS, In re: Application for rate increase in Marion, Orange, Pasco, Pinellas, and Seminole Counties by Utilities, Inc. of Florida.

¹² See Order No. 22844, issued April 23, 1990, in Docket No.890360-WS, In re: Application of South Broward Utility, Inc. for a rate increase in Broward County; and Order No.20017, issued September 16, 1988, in Docket No.870980-WS, In re: Application of St. Augustine Shores Utilities, a Division of United Florida Utilities Corporation, for an increase in water and sewer rates in St. Johns County, Florida.

Staff disagrees with AUF's witness Guastella that an adjustment should not be made to rate base for excessive unaccounted for water. Staff believes that it is appropriate for the Commission to continue to make adjustments for unaccounted for water in excess of 10% to peak demand, as well as to chemical and electrical expenses and purchased water. This is necessary so that the ratepayers do not bear those costs. AUF's argument is not persuasive enough to warrant a change to long-standing Commission practice on this subject. We do agree that all systems generally experience increasing levels of unaccounted for water as they age. However, we believe that it is the responsibility of the utility, not the ratepayers, to control excessive levels of unaccounted for water. AUF has failed to prove by example that the utilities have been harmed from any adjustments made by the Commission concerning excessive unaccounted for water. In fact, we suggest that by not making an adjustment to plant, a wrong message would be sent to the utility as a disincentive to fix the problem. Commission practice has been to make plant adjustments as a result of excessive unaccounted for water; although, as discussed in Issue 14, an adjustment may not be made to expenses under certain circumstances.¹³

Given the above, staff believes that there is not a preponderance of evidence in the record to support changing the language of the proposed rule. Therefore, it is recommended that the definition of peak demand for a water system as proposed in Rule 25-30.4325(1)(c) should be adopted.

¹³ See, e.g., Order No. PSC-07-0505-SC-WS, issued June 13, 2007, in Docket No.060253-WS, In re: Application for increase in water and wastewater rates in Marion, Orange, Pasco, Pinellas, and Seminole Counties by Utilities, Inc. of Florida; and Order No. PSC-06-1027-PAA-WU, issued December 11, 2006, in Docket No. 050563-WU, In re: Application for increase in water rates in Polk County by Park Water Company.

Issue 4: Should the definition of peak demand for storage as proposed in Rule 25-30.4325(1)(d) be adopted?

Recommendation: Yes, the proposed rule language should be adopted without modification. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. The Citizens agree with the language of proposed subparagraph (1)(d), except that peak demand for storage should be based upon 25% of maximum day demand rather than maximum day demand.

AUF: No. The definition should not exclude excessive unaccounted for water. Also, the fire flow provision should be amended to allow recovery of an appropriate fire flow or a minimum of either the fire flow required by the local governmental authority or 2 hours at 500 gallons per minute.

UI: Yes. The proposed rule provides a proper definition of peak demand for storage.

Staff Analysis: Proposed Rule 25-30.4325(1)(d), F.A.C., contains the definition of peak demand for storage facilities. The proposed rule provides that the peak demand for storage facilities includes the maximum day demand, excluding excessive unaccounted for water, plus a growth allowance and fire flow.

OPC

OPC agrees with the language in the proposed rule, except OPC believes that the peak demand for storage should be based upon 25%, rather than 100%, of the maximum day demand. Witness Woodcock testified that including the maximum day demand in the used and useful calculation for storage facilities is excessive. OPC proposed alternative language to include only 25% of the utility's maximum day demand to reflect the design standards found in DEP Rule 62-555.320(19), F.A.C. (TR 50-51)

Witness Woodcock testified that storage basically comes after a major treatment process and the demands that are placed on the system start with the storage tank. Generally, storage is sized the same regardless of what the upstream treatment process might be. Witness Woodcock believes that 25% maximum day storage is for flow equalization and allows for emergencies such as pipe or equipment failures. Also, it has been his experience that storage facilities for new water systems are designed based on 25% of peak demand which reflects the current DEP rules. DEP has additional rule provisions that would allow a utility to use less than 25% of the maximum day demand provided certain demonstrations are met that include the ability of the water treatment facility to replenish storage volume and hydropneumatic volume. Witness Woodcock believes that while the DEP rules may be considered the regulatory minimums, they are established to provide safe and reliable drinking water to the general public. In fact, storage volume that does not get "turned over" in a storage tank can cause water quality problems. (TR 101-102, 313-314)

When asked about the cost-effectiveness for a utility to install a single storage facility to meet its peak demand, or to add storage periodically as needed, witness Woodcock indicated that it would be a hard determination to make in general. There may be economies of scale in getting a larger tank, and more of the site would be used up if multiple tanks were added. (TR 108)

AUF

AUF witness Guastella agreed with using 100% of a maximum day in determining the used and usefulness of storage facilities; however, as discussed in Issue 3, he does not believe that an adjustment should be made for excessive unaccounted for water and he believes that "an appropriate fire flow" should be included in the calculation. He testified that storage facilities are designed with capacity for equalization, fire demand and duration, and emergencies. The design of storage capacity will vary from system to system, as well as from consultant to consultant. He pointed out that although the cost of utility facilities is determined according to engineering design criteria to ensure safe and adequate service on a continuous basis, the engineering design standards are not established according to rate setting procedures or used and useful calculations. (TR 130-131)

UI

UI witness Seidman believes that witness Woodcock's recommendation of 25% of maximum day plus fire flow is inadequate for purposes of determining used and useful. He does not agree that the DEP design standard should be used as a maximum for purposes of a utility recovering its costs. He testified that many of OPC's proposed rule change recommendations are based on DEP minimum design demand criteria and when actual demand is substituted for design demand and then used to calculate used and useful, the result is almost always an inability of the utility to recover the full cost of the system it had designed in accordance with sound engineering practice. Witness Seidman does not believe that the disincentives that result in water systems being designed to meet only minimum standards mirror the concepts embodied in DEP design standards. (TR 201-202)

Further, witness Seidman believes that OPC ignores the necessity for emergency storage which, in addition to fire storage, protects against such events as power outages, large main breaks, and unexpected shut downs or failures of the treatment plant or the water supply. He points out that there is support in the industry literature for storage capacity to be designed to include fire flow and equalization capacity equal to the maximum day demand. Though higher than the minimum requirement, witness Seidman stated that the proposed rule recommendation of 100% of maximum day demand is not unreasonable. (TR 202-203, 205-206, 245)

Staff Witness

Staff witness Redemann testified that the proposed rule should be adopted without modification. He cited the AWWA Water Distribution Systems Handbook, which states that the principal function of storage is to provide reserve supply for operation equalization, fire suppression reserves, and emergency needs. The Department of the Army's Design of Small Water System Manual indicates that distribution storage facilities are used to meet peak demands

(including fire flows) and, depending on system size and type, distribution storage volume may vary from about one-half the average daily use to the maximum daily use to a two- or three-day supply. He further testified that natural disasters that frequently occur in Florida can cause power outages for an extended period of time or well contamination, and the only source of water would be the amount in the ground or elevated storage tanks. In addition, he testified that the Commission has included one full day of storage in prior cases. (TR 279-280)

As discussed in Issue 3, staff witness Hoofnagle testified that the DEP sets or establishes standards of practice and care for the industry to ensure water quality. The DEP supports a utility's decision to design and construct well, treatment, and storage facilities that are larger than the minimum criteria required by rule. (TR 251)

Analysis and Conclusion

Proposed Rule 25-30.4325(1)(d), F.A.C., contains the definition of peak demand for storage facilities. The proposed rule provides that the peak demand for storage facilities includes the maximum day demand, excluding excessive unaccounted for water, plus a growth allowance and fire flow. All parties agree that the peak demand for storage facilities should include a growth allowance as required by Section 367.081, F.S., and fire flow; although OPC and AUF have concerns about the amount of fire flow that should be included. OPC proposed alternative language to include only 25% of the peak day; all other parties agreed that 100% of the peak day demand should be included. AUF also took exception to making an adjustment for excessive unaccounted for water for the same reasons addressed in Issue 3.

Similar to the arguments in Issue 3 regarding the amount of demand to be included in the used and useful calculation for treatment facilities, the testimony regarding the amount of demand to be included in the used and useful calculation for storage facilities addresses DEP minimum design criteria, industry design standards, and the balance that must be weighed in a rate making proceeding. Storage facilities are constructed for a variety of reasons, including day to day system demands as well as emergencies. The testimony indicates that utilities must anticipate future customer needs while recognizing the inefficiencies that can result if storage facilities are over or undersized. The rule adopted by the Commission should allow utilities the flexibility to use reasonable design criteria. Staff is persuaded that minimum design criteria, as reflected in the DEP rules, is not the best basis for a used and useful analysis. The used and useful calculation should allow the utility to fully recover the cost of storage facilities that are sized to meet the system's peak demand, excluding excessive unaccounted for water, plus customer growth and fire flow requirement.

As discussed in Issue 3, staff is not persuaded by AUF witness Guastella's testimony regarding the use of industry standards to determine the amount of fire flow to be included or the proposal to not adjust peak demand for excessive unaccounted for water. Based on the above, staff recommends that the proposed rule language should be adopted without modification. The proposed rule language offers a reasonable mechanism for determining the used and usefulness of storage facilities and subsection (3) of the proposed rule provides an opportunity for any party to offer and support a separate used and useful calculation based on a different criteria. Finally,

Docket No. 070183-WS

Date: March 27, 2008

the proposed rule is consistent with prior Commission orders addressing the used and useful calculation for storage facilities.¹⁴

¹⁴ See, e.g., Order No.PSC-97-0847-FOF-WS, issued July 15, 1997, in Docket No. 960329-WS, In re: Application for increase in rates and service availability charges in Lee County by Gulf Utility Company.

Issue 5: Should the definition of excessive unaccounted for water as proposed in Rule 25-30.4325(1)(e) be adopted?

Recommendation: The proposed rule should be adopted with the modification shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. The Citizens agree with the language of proposed subparagraph (1)(e), as modified in Staff's revised Exhibit 8, matrix, except that a sentence needs to be added to make the proposed subparagraph consistent with Staff's testimony on this issue.

AUF: No. If the Commission determines it is appropriate to exclude excessive unaccounted for water in defining peak demands, then EUW should be defined as finished potable water produced (delivered to the system) that exceeds 10% of that production quantity.

UI: Yes. The proposed rule provides a proper definition of excessive unaccounted for water.

Staff Analysis: Proposed Rule 25-30.4325(1)(e), F.A.C., defines excessive unaccounted for water as finished potable water produced in excess of 110 percent of the accounted for usage, including water sold, other water used, such as for flushing or fire fighting, and water lost through line breaks. The parties generally agree that the definition could be worded more clearly. In addition, OPC would like to add language requiring the utility to provide documentation to justify the amount of water used in a system for flushing and fire fighting and water lost through line breaks.

OPC

OPC witness Woodcock testified that additional language should be added to require the utility to provide proper documentation of all water uses to be considered accounted for water. If complete documentation is not available, then those amounts should be considered unaccounted for water. However, witness Woodcock agreed that different people equally qualified could have different definitions of complete documentation. Also, he acknowledged that the Commission already has a rule that places the burden of proof on the utility to prove each schedule of its minimum filing requirements, including the used and useful calculation. (TR 52, 95, 103, 316-317)

AUF

AUF witness Guastella proposed revising the definition of excessive unaccounted for water to be finished potable water produced (delivered to the system) that exceeds 10% of that production quantity. Unaccounted for water is a percentage of the total amount of water delivered to the water system. If the accounted for usage is known or estimated, and assuming

an acceptable unaccounted for level of 10%, the unaccounted for quantity is properly calculated by dividing the known usage by 0.9 in order to determine the quantity delivered to the system. Then the calculated amount of water delivered to the system should be multiplied by 10% in order to determine the unaccounted for quantity. There is no need to complicate the rule with the specific arithmetic, the correct use of which should be left to the party responsible for the calculation. (TR 126)

Also, witness Guastella testified that water used for flushing and fire fighting and water lost in line breaks are not routinely measured or metered. They are determined based on estimates. The basis for a utility's estimates of such items is readily reviewed in the normal course of a rate investigation as to the reasonableness of the estimates. OPC's recommendation for unspecified documentation merely creates an excuse to eliminate reasonable estimates that are readily examined by experienced engineers or operators. The basis for a utility's estimates to account for water is readily reviewed for reasonableness in the normal course of a rate investigation. (TR 131)

UI

UI witness Seidman testified that accounted for water used for flushing, fire fighting, and line breaks are identified in the minimum filing requirements for rate filings as "other uses." OPC's proposal to require that unaccounted for water be "fully documented" is vague, in that it does not indicate the level of documentation required. He believes that the utility is already responsible for supporting any schedule submitted in a rate filing pursuant to Rule 25-30.450, F.A.C., and that there is no need for additional language in this rule. (TR 208-209)

Staff Witness

Staff witness Redemann proposed revised language to clarify the definition of excessive unaccounted for water as unaccounted for water in excess of 10 percent of the amount produced. He did not support OPC's proposal to require additional documentation for unaccounted for water. (TR 274, 283, EX 21 (RPR 8))

Analysis and Conclusion

All parties generally agreed that unaccounted for water in excess of 10 percent should be considered excess and that the definition for excessive unaccounted for water could be worded more clearly. Therefore, staff recommends that the proposed rule be adopted with the modification shown on Attachments B and C. Further, staff recommends that because Commission rules currently place the burden on the utility to justify and support its minimum filing requirements, including the used and useful calculation, no additional requirement is needed to document unaccounted for water.

Issue 6: Should the Commission's used and useful evaluation include a determination as to the prudence of the investment and consideration of economies of scale as proposed in Rule 25-30.4325(2) and be adopted?

Recommendation: The proposed rule should be adopted with the modification shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. Pursuant to Chapter 367.081 (3), F.S., the Commission has always considered the prudent costs of providing service when fixing rates. Consideration of economies of scale, to the extent its value is documented, may also be considered under the alternative calculation provision provided in paragraph (3) of the proposed rule.

AUF: Yes.

UI: Yes. The proposed rule should include a determination of prudence and consider economies of scale in making a used and useful evaluation.

Staff Analysis: Proposed Rule 25-30.4325(2), F.A.C., provides that the Commission's used and useful evaluation of a water treatment system and storage facilities shall include a determination of prudence and consider economies of scale. All parties generally agree with the provisions of this portion of the rule with the exception of OPC. OPC believes that the entire provision should be deleted and the language permitting the Commission's consideration of economies of scale should be added to the rule subsection dealing with alternative calculations.

OPC

OPC witness Woodcock testified that, pursuant to Section 367.081, F.S., the Commission has always considered the prudent cost of providing service when fixing rates and that the proposed rule language provides no additional guidance to the Commission regarding the application of prudence to used and useful. Therefore, OPC proposes to delete that portion of the proposed rule. Further, witness Woodcock testified that while economies of scale may affect used and useful, the language in the proposed rule provides no clear direction or insight on how such issues should be addressed or calculated. Economies of scale can be addressed in used and useful calculations many different ways and it is difficult to specifically codify how one would handle economies of scale. Witness Woodcock recommended revisions to subsection (3) of the proposed rule that he believes will provide the flexibility for economies of scale to be considered. Further, witness Woodcock recommended combining subsections (2) and (3) of the proposed rule and moving provisions of subsection (11) related to other relevant factors the Commission should consider, such as whether flows have decreased due to conservation or a reduction in the number of customers, into the combined subsections (2) and (3). However, in its brief, OPC argues that the Commission should not include the language concerning reduction in flows due to conservation or a reduction in the number of customers in subsection (3), although no reason was given for that position. (TR 52-53, 73, 317, 323, OPC BR 18)

AUF

AUF witness Guastella testified that the proposed language in subsection (2) of the rule is essential if the proposed rule is to have any value in providing a reasonable balance in making a used and useful adjustment for developer created utilities. Design standards require capacity that is greater than expected when actual demands are realized in order to include a factor of safety or cushion to assure adequate service. The utilities incur costs for facilities based on design capacity not actual use. The proposed rule makes no specific allowance for the portion of capacity that represents the safety factor or cushion; but at some point, prudence and economies of scale are considerations that must be recognized within the context of the rule. (TR 131)

UI

UI witness Seidman testified that subsection (2) of the rule be adopted as is. It is proper for the Commission to make its intent known in this rule concerning prudence of investment and economies of scale. He points out that subsection (2) of the proposed rule requires the consideration of prudence of investment and economies of scale, in addition to the calculations of used and useful for the various system components. Subsection (3) of the proposed rule allows alternative calculations to be made. By combining the language of these sections, Mr. Woodcock defines the consideration of prudence of investment and economies of scale as alternative used and useful calculations, thus limiting their consideration to only when alternative calculations are proposed. That is not the intent of the currently proposed language. The intent of the currently proposed language is to consider these factors regardless of the method of calculation. Further, witness Seidman noted that OPC's recommended wording concerning economies of scale gives no direction or insight about how it will be addressed. (TR 209-211)

Staff Witness

Staff witness Redemann's Exhibit RPR 8 (EXH 21) contains recommended revisions to subsection (2) of the proposed rule to add other relevant factors that the Commission should consider in the used and useful evaluation, such as whether flows have decreased due to conservation or a reduction in the number of customers. The revised language includes the provisions for the Commission to consider prudence and economies of scale. In addition, witness Redemann agreed with OPC witness Woodcock that moving the provisions of subsection (11) to subsection (2) clarifies and consolidates some of the factors the Commission considers in evaluating used and useful plant. (TR 282, EX 21 (RPR 8))

Analysis and Conclusion

Section 367.081, F.S., provides that the Commission, in fixing rates, may determine the prudent cost of providing service during the period of time the rates will be in effect. Further, the Commission routinely considers both the prudence of investment and economies of scale in rate proceedings. Therefore, staff recommends that those provisions should remain in subsection (2) of the rule. These provisions clarify and put all parties on notice that these are issues that the Commission will consider in its used and useful evaluation. In addition, staff agrees that the provisions in subsection (11) of the proposed rule regarding other relevant factors the

Docket No. 070183-WS
Date: March 27, 2008

Commission will consider should be moved to subsection (2) of the rule. Therefore, staff recommends that the proposed rule should be adopted with the modification shown on Attachments B and C.

Issue 7: Should alternative calculations for water treatment systems and storage facilities be allowed as proposed in Rule 25-30.4325(3) and be adopted?

Recommendation: The proposed rule should be adopted with the modifications shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: Not as proposed. However, the Citizens do support an alternative calculation paragraph that affords all parties the opportunity to propose an alternative U&U calculation when the facts of a specific case warrant it.

AUF: Yes.

UI: Yes. The proposed rule should allow alternative calculations for water treatment systems and storage facilities.

Staff Analysis: Proposed Rule 25-30.4325(3), F.A.C., provides that a separate calculation shall be made for the water treatment system and storage facilities. Subsection (3) of the proposed rule also contains a provision that allows the utility to provide a second, alternative used and useful calculation and supporting documentation for the water treatment system and storage facilities. This provision allows the utility to address circumstances that it believes warrant an evaluation that is different than the evaluation required by the other subsections of the rule.

OPC:

OPC believes that any party, not just the utility, should be allowed to provide a separate, alternative used and useful calculation. OPC witness Woodcock states that some level of flexibility is desirable in order to produce more accurate used and used percentages for some cases; however, the proposed wording for this rule only gives the utility the ability to propose such calculations. Witness Woodcock proposed wording to allow any party the right to provide an alternative calculation based on factors such as economies of scale, service area restrictions, treatment capacity, well draw-down limitations, flow changes due to conservation or a reduction in the number customers, and alternative peaking factors. The party proposing the alternative would have the burden of proving that the alternative calculation is more appropriate. (TR 53-58, 65-66, 72-73, 318, 323)

AUF

AUF witness Guastella testified that no change to this proposed rule is necessary because this paragraph recognizes that water utilities should have the ability to provide alternative calculations as part of its burden to justify its proposed rates, and that any party to the rate proceeding has the right to address every aspect of the utility's filing. However, in its brief, AUF takes the position that it does not object to OPC's proposal to expand the language to cover any

and all parties to a rate case proceeding. All parties to such a proceeding would be bound by all of the other provisions in the rule.

However, AUF believes the Commission should reject the remainder of OPC's proposed language, including the language which incorporates a burden of proof provision, as well as the language regarding the specific issues that would be the subject of an alternative methodology section. AUF believes that OPC's proposals are unnecessary, will increase the cost of litigation to the detriment of customers, and lack support as they were undermined by OPC's own witness. AUF relies on its cross-examination of witness Woodcock to show that the alternative methodologies should be limited to proposals and methodologies that are special or unique, and that the specific issues contained in OPC's proposed language are not special or unique. (TR 132, AUF BR 16-18)

UI

UI witness Seidman testified that it would be helpful to adopt OPC's proposed wording to include factors such as service area restrictions, treatment capacity, well draw-down limitations, and changes in flow due to conservation or a reduction in the number of customers. However, he does not believe it is necessary to modify the language to reflect that all parties may address an alternative calculation. He testified that the proposed rule addresses the responsibilities and requirements of the utility for a rate adjustment. Other parties have every right to respond to the filing of the utility at the proper time and in the proper manner provided for in the law and in rules implementing the law. (TR 210-212)

Staff Witness

Staff witness Redemann testified that he agrees with OPC's proposal to move alternative and limiting factors found in subsections (6) and (11) of the rule to subsection (3). The proposed changes to the rule provide additional clarification and consolidation of the rule language. Also, witness Redemann supports language allowing any party to a proceeding, not just the utility, to propose and justify an alternative calculation. Witness Redemann's Exhibit RPR 8 (EXH 21) contains his suggested revised language. (TR 282-283, EX 21 (RPR 8))

Analysis and Conclusion

Conflicting testimony was provided on whether subsection (3) of the proposed rule should address only the utility or all parties to a ratemaking proceeding, and on whether the examples of issues that could be addressed in an alternative calculation should be included in subsection (3). Staff agrees that any party to a rate proceeding may propose and support any position it desires under the existing provisions of Chapter 367, F.S., and Rule 25-30, F.A.C. However, revising the language to reflect that "an alternative calculation may also be provided," without referring to whether the utility believes an alternative calculation is appropriate, merely clarifies that the alternative calculation option is available to all parties. In addition, moving the various alternative considerations found in the proposed rule in subsections (6) and (11) to subsection (3) further clarifies the intent of this subsection to allow any party the opportunity to address a variety of issues that it believes it can support and justify in a separate used and useful

Docket No. 070183-WS

Date: March 27, 2008

evaluation. Therefore, staff recommends that the proposed rule be adopted with the modifications shown on Attachments B and C.

Issue 8: Should the conditions for considering a water treatment system 100% used and useful as proposed in Rule 25-30.4325(4) be adopted?

Recommendation: The proposed rule should be adopted with the modifications shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. The Citizens do not agree that the conditions prescribed in subparagraphs (4)(a) – (c) of the Commission’s proposed rule should cause a treatment system to be considered 100% used and useful.

AUF: Yes.

UI: Yes. The conditions for considering a water treatment system as 100% used and useful are proper.

Staff Analysis: Proposed Rule 25-30.4325(4), F.A.C., contains conditions for considering a water treatment system to be 100% used and useful, including treatment systems that are the minimum size necessary to adequately serve an area, service areas that are mature or built out with no potential for expansion, and systems served by a single well.

OPC

OPC believes that subsection (4) of the proposed rule should be deleted. Witness Woodcock believes that automatically considering a system 100% used and useful, while administratively expedient, must be very carefully considered. He testified that if a water treatment system has a set of special circumstances that would allow one to consider it 100% used and useful, that can be adequately addressed in the used and useful calculation or in the alternative calculation provided in subsection (3) of the proposed rule.

Witness Woodcock testified that the phrase “minimum size necessary” would result in subjective testimony because it provides for no standards or definition to that term. As for the maturity of the system, witness Woodcock believes that the age of a system has nothing to do with a system’s capacity, demands, growth rate, unaccounted for water, fire flow or any other parameters that comprise the used and useful calculation and should not be considered.

In the case where a system is built out and there is no potential for service area expansion, there may be a case for departing from the established used and useful calculations; however, this can be easily addressed in the alternative calculation provision. Witness Woodcock testified that built out systems should be treated no differently than other systems, unless it can be documented that service area restrictions prevent expansion and that the system was prudently designed. In its brief, OPC argued that this provision should not be considered unless prudence of design is also included, as testified to by staff witness Redemann.

As for considering one well 100% used and useful, witness Woodcock testified that the fact that DEP allows small systems to be constructed with only one well does not mean that it should be automatically 100% used and useful. Under the proposed rule, a single well operating within a system at 50% build out and at 50% operating capacity could inaccurately be considered 100% used and useful. A well could be grossly oversized with respect to customer demand and the application of this paragraph to the rule would completely ignore the fact and automatically have the customers bear the cost of the unused portion of the well. Since there is no redundant, standby well in the single well system, used and useful should be evaluated on the single well in service. (TR 55-56, 84-85, 319-320)

AUF

AUF witness Guastella testified that the provisions of subsection (4) of the proposed rule are essential if the rule is to have any value in providing a reasonable balance in making a used and useful adjustment for developer created utilities. In order to include a factor of safety or cushion to assure adequate service, design standards require capacity that is greater than expected when actual demands are realized. The utilities incur costs for facilities based on design capacity, not actual use. In addition, witness Guastella points out that complete or fully developed systems and single well systems must be considered 100% used and useful. Otherwise, utilities will never be able to achieve the cost of serving their existing customers. To do otherwise would simply deny an unavoidable cost that was necessary to provide adequate service. (TR 131-132)

UI

UI witness Seidman believes that subsection (4) of the proposed rule should be adopted. He testified that the circumstances identified in the proposed rule are special circumstances which the Commission has previously addressed and found to be the basis for a finding of 100% used and useful. Setting these items out separately eliminates the need to go through the used and useful calculations, saving both time and expense. He recommends that the rule should be applicable to storage as well since that would be consistent with the intent of the rule.

In response to OPC's position on this issue, UI witness Seidman pointed out that the purpose of the used and useful evaluation is to determine what costs are legitimately recoverable through rates, not to simply arrive at a used and useful percentage. It is not to give a signal to downsize a well pump in order to increase the used and useful percentage, rather than to size it in accordance with sound engineering practice.

In its brief, UI indicated that OPC apparently fails to understand that used and useful calculations are not solely based on minimum design criteria, but also include the Commission's judgment on what is reasonable for utilities to provide service to their customers. If OPC's alternative calculations provision is not adopted, then no change should be made to this provision of the proposed rule. (TR 213-215, UI BR 14-15)

Staff Witness

Staff witness Redemann testified that the used and useful formula is for systems with potential for growth in the service territory. If the utility's service territory is built out, there is no apparent potential for expansion in the surrounding area, and it appears that the system was designed prudently, the system should be considered 100% used and useful. This is consistent with prior Commission orders.

For systems with a single well, the system should be considered 100% used and useful unless it appears that the well is oversized. Commission rules and statutes require the Commission to evaluate quality of service in rate cases, including the operational condition of the utility's plant and facilities and the utility's attempt to address customer satisfaction. With one well, the reliability is poor and the result can be poor customer satisfaction. Therefore, from a quality of service standpoint, witness Redemann believes that a system with one well should be considered 100% used and useful because of reliability concerns which could affect customer satisfaction. This is consistent with prior Commission decisions. (TR 281-282, 297-298, 307-308)

Analysis and Conclusion

The Commission has consistently found that systems with one well and systems that are built out with no apparent potential for expansion are 100% used and useful unless it appears that the system was not prudently designed.¹⁵ These systems, and there are hundreds of them in Florida, are typically built by developers to serve a relatively small area. Staff believes that it is not efficient to require a sophisticated used and useful analysis to ascertain whether these types of systems are oversized for the developments they are designed to serve. Rather, a used and useful analysis should only be performed as an alternative when there is evidence indicating that the system may be oversized. However, staff is in agreement with the arguments that terms such as mature and minimum size are vague and should not be included in the rule. Therefore, staff recommends that the proposed rule be adopted with the modifications shown on Attachments B and C.

¹⁵ See, e.g., Order No.PSC-96-1320-FOF-WS, issued October 30, 1996, in Docket No.950495-WS, In re: Application for rate increase and increase in service availability charges by Southern States Utilities, Inc. for Orange-Osceola Utilities, Inc. in Osceola County, and in Bradford, Brevard, Charlotte, Citrus, Clay, Collier, Duval, Highlands, Lake, Lee, Marion, Martin, Nassau, Orange, Osceola, Pasco, Putnam, Seminole, St. Johns, St. Lucie, Volusia, and Washington Counties at 58 (finding that in systems with only one component [such as a single well], that component is considered 100 percent used and useful), rev'd on other grounds, Southern States Utils. v. PSC, 714 So. 2d 1046, (Fla. 1st DCA 1998); and Order No. PSC-03-1440-FOF-WS, issued December 22, 2003, in Docket No. 020071-WS, In Re: Application for rate increase in Marion, Orange, Pasco, Pinellas, and Seminole Counties by Utilities, Inc. of Florida at 44 (finding that it is not unreasonable or unusual for the Commission to consider distribution and collection systems that are 80% or more built out to be 100% used and useful in instances where there is virtually no growth potential and the existing lines are the minimum size needed to serve the existing customers).

Issue 9: Stipulation.

Issue 10: Should the definition of firm reliable capacity for various combinations of water treatment systems and storage facilities as proposed in Rule 25-30.4325(6) be adopted?

Recommendation: The proposed rule should be adopted with the modification that the limiting factors should be moved from subsection (6) of the rule to subsection (3), as shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. Subparagraph (6)(b), with its automatic elimination of one-half of the capacity of the remaining pumps, after removal of the largest, is the single most objectionable provision of this proposed rule to the ratepayers of Florida. The provision unjustly understates the capacity denominator and unfairly inflates the U&U for treatment.

AUF: Yes.

UI: Yes. The proposed rule provides a proper definition of firm reliable capacity for various combinations of water treatment systems and storage facilities.

Staff Analysis: Proposed Rule 25-30.4325(6), F.A.C., contains the definition of firm reliable capacity for water treatment systems. All parties agree with the provisions of this portion of the rule, with the exception of OPC's proposal to use 24 hours instead of 12 hours of pumping to determine the firm reliable capacity of a water treatment system with storage. In addition, as addressed in Issue 6, OPC proposed moving the language related to limiting factors to subsection (3) of the proposed rule.

OPC

OPC witness Woodcock's primary concern with this rule is related to the number of hours of pumping used to determine the firm reliable capacity of a water treatment system with storage. He testified that the prudent and efficient design of a well system would seek to maximize the pumping time to the daily maximum of 24 hours. The maximum capacity a well can produce in one day is equivalent to the amount of water it can produce in 24 hours regardless of the type of treatment, presence of storage, or characteristics of the service area. Basing the reliable capacity on 12 hours of pumping after removing the largest well for service essentially doubles the used and useful of a water treatment system for no reason other than it has storage. Witness Woodcock recognizes that in Florida the production capacity of wells can change not only with geography but also over time as aquifers are stressed or salt water intrusion becomes a concern. When this is an issue, the solution is generally an amount of reduced pumping or relocation of wells. In no way is the solution as simple as reducing well pumping to 12 hours a day. Instead, witness Woodcock recommends that limitations on pumping required by the Water

Management Districts or other regulatory bodies should be addressed in the alternative calculation portion of the proposed rule.

On cross-examination, witness Woodcock acknowledged that pumps never operate 24 hours per day, seven days per week, 52 weeks per year. If the system is properly designed, it is going to be operating 24 hours per day maybe on a maximum day. He could not give a definitive answer as to the impact on the useful life of a pump running 24 hours per day versus 12 hours per day. He suggested that it would be more advantageous for a pump's useful life if it was running over a longer period of time, as opposed to shorter running cycles that cause stress on a pump.

In its brief, OPC argues that to compare maximum demands in the numerator with one-half of the total rated firm reliable capacity in the denominator produces a serious mismatch. The concept of proper matching is followed in the Commission's used and useful rule for wastewater treatment plants, Rule 25-30.432, F.A.C., which provides that the flow rate to be used in the numerator of the equation shall be the same period or basis as the period or basis stated for the permitted capacity. While acknowledging that in recent years, Commission orders have reflected the use of 12 hours of pumping, OPC argues that in the many preceding years, many of the Commission orders never mentioned or applied 12 hours of pumping. OPC suggests that the Commission has the opportunity in this proceeding to decide which policy will be prescribed by the first Commission rule on water treatment and storage used and useful calculation and respectfully requests that the Commission recognize the actual total firm reliable capacity of the pumps in the denominator of the used and useful fraction based on 24 hours of pumping unless there is a documented restriction by the Water Management District or other regulatory body in which case the restriction should apply. (TR 57-60, 105-113, 321-322, OPC BR 32-34)

AUF

AUF witness Guastella supports the provisions of the proposed rule related to firm reliable capacity, including the use of 12 hours instead of 24 hours of pumping to determine the firm reliable capacity of a water system with storage. He testified that using a 12-hour period provides a reasonable balance that recognizes typical consumption characteristics in terms of time periods and also recognizes the typical practice of resting wells to allow time for recharge. (TR 132)

UI

UI witness Seidman also supports the rule as proposed, although he agrees with OPC's proposal to move the language related to limiting factors from subsection (6) to subsection (3). Witness Seidman testified that selecting the period of time upon which the capacity of the water treatment systems is evaluated for purposes of calculating used and useful (12 versus 24 hours) is one of the most important and difficult decisions to be made in developing these rules. He points out that witness Woodcock's summation of the factors affecting this issue well illustrates their complexity. In adopting a rule for the purpose of calculating used and useful, the Commission is adopting a single default formula that best results in a determination of that portion of the cost of

the system that can be recovered through rates. The proposed rules allow for consideration of an alternative calculation regardless of which time frame is chosen. For default formula purposes, staff makes a powerful argument that the proposed rule recognizes that there are costs incurred for purposes other than delivering water and that is the cost of protecting the water supply. Witness Seidman stated that OPC makes protecting the water supply a secondary issue to be addressed with an alternate calculation. He believes that the Commission is indirectly saying that the utility must protect the environment, provide safe water, and provide adequate service in order to meet the regulatory requirements of this Commission. This is necessary even though the Commission is not the agency that is going to determine whether those criteria are met. It is his opinion that the proposed rule is the more responsible and prudent methodology for a default definition.

On cross-examination, witness Seidman testified that designing a system to have only 12 hours of operation is not prudent. However, he also testified that for the purpose of used and useful determination, the 12-hour criteria is a good one because it envelops a lot of other things besides just the requirement to meet the peak demand. (TR 216-219, 232-238)

Staff Witnesses

Staff witness Redemann testified that for systems with ground or elevated storage, the firm reliable capacity of the water system should be based on 12 hours per day. It is environmentally responsible and prudent to rest a well for 12 hours per day so that the ground water can recharge. Excessive pumping has caused wells to draw air, sand and gravel into the water system; saltwater intrusion; land subsidence; and collapsed wells. The use of 12 hours per day of pumping reflects the general usage pattern of customers. In addition, he pointed out that generally speaking, the reason systems have storage is to accommodate treatment needs because of water quality issues, although storage can also be used to address pressure demands. When a well is pumped, it concentrates the components of what is inside the well. Pumping 24 hours would just deteriorate the water quality. Witness Redemann also identified numerous rate cases in which the Commission used a 12-hour day to determine well capacity. (TR 278-279, 298-302)

Staff witness Jenkins testified that most concerns associated with ground water withdrawals in Florida are due to the cumulative withdrawals by multiple permittees, not withdrawals from a single well or well field. The benefits from operating wells for shorter periods of time instead of longer periods depend on many factors. Some impacts such as localized environmental harm, interference and up coning saline water intrusion can be caused by short periods of high volume pumping. Shorter pumping periods have to be evaluated in cases where these impacts are a concern. He testified that the bottom line is that there is typically no benefit to operating wells or a well field for a period of 12 hours versus 24 hours in Florida since localized steady state drawdown conditions are quickly reached and impacts are often caused by regional cumulative withdrawals. However, in some cases, such as where there are localized resource impacts, interference with existing legal uses, or saline water intrusion, short-duration operation of wells can be used to avoid or minimize the impacts. Although he believes that it is more important to regulate longer term withdrawals of water to prevent harm, he does agree that for the purposes of the proposed rule, it is reasonable to base firm reliable

capacity on a duration of well pumping that is less than 24 hours since the well field taken as a whole cannot operate 24 hours per day, 7 days per week. It is important that Commission-regulated utilities have the pumping ability and withdrawal capacity above what is needed to meet typical water user demands. (TR 261-264)

Analysis and Conclusion

All of the parties agree with the provision of the proposed rule that excludes the largest well, for those systems with more than one well, in determining the firm reliable capacity of a water treatment systems and the provision that firm reliable capacity is expressed in gallons per minute for systems with no storage capacity. There is also general agreement that the provisions of the proposed rule addressing limiting factors in determining firm reliable capacity can be moved from subsection (6) to subsection (3). However, the issue of whether to use 12 or 24 hours to determine the firm reliable capacity of a water treatment system with storage capacity is both controversial and complex.

OPC believes that the use of 12 hours rather than 24 hours results in the automatic elimination of one-half of the capacity of the pumps, after removal of the largest well and that this is the single most objectionable provision of this proposed rule to the ratepayers of Florida. The provision unjustly understates the capacity denominator and unfairly inflates the used and useful calculation. AUF, UI, and staff witness Redemann each believe that the use of 12 hours more closely reflects the intent of the rule to address ratemaking as opposed to system design considerations.

The purpose of the entire proposed rule, including these provisions, is to provide a basic mechanism for determining the amount of water treatment plant that should be included in rate base, thereby reducing the need for costly litigation in the majority of rate cases. Therefore, the rule must reflect a wide variety of ratemaking issues, including whether the system was prudently designed, whether the design capacity exceeds current customer demand, and whether the system provides quality water. While it is extremely difficult to identify a single formula that adequately addresses all of these concerns, staff is persuaded that the proposed rule provides a reasonable balance of each of those criteria. Therefore, staff recommends that the proposed rule be adopted with the modification that the limiting factors should be moved from subsection (6) of the proposed rule to subsection (3), as shown on Attachments B and C.

Issue 11: Should the basis for expressing peak demand as proposed in Rule 25-30.4325(7) be adopted?

Recommendation: The proposed rule should be adopted with the modifications shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: The Citizens essentially agree with the proposed language of Paragraph (7), except for subparagraphs (7)(a)2. and (7)(b)2. We propose using the 5 highest days within the “maximum month” rather than “30 day period”. The Citizens also recommend deleting subparagraphs (7)(a)3. and (7)(b)3.

AUF: No. These provisions should be amended to: (1) strike the reduction for excessive unaccounted for water; and (2) use the highest maximum day that does not reflect an unusual occurrence on such day, without the limitation that such highest maximum day have occurred in the test year.

UI: Yes. The proposed basis for expressing peaking demand is proper.

Staff Analysis: Proposed Rule 25-30.4325(7), F.A.C., contains the criteria for determining peak demand for water treatment systems with no storage capacity (peak hour) and for water treatment systems with storage capacity (peak day). The proposed rule provides that the peak day demand is the single maximum day in the test year with no unusual occurrence, such as a fire or line break. If there is an unusual occurrence on the single maximum day, then the average of the five highest days within a 30-day period in the test year with no unusual occurrence should be used. If actual flow data is not available, the rule provides a default number of gallons per equivalent residential connection (ERC) to be used. For systems without storage, the proposed rule provides that the maximum day is divided by 1440 minutes in a day and multiplied by a factor of 2 to reflect a peak hour on the maximum day.

OPC essentially agrees with the proposed rule, although OPC believes that subsections (7)(a)(2) and (7)(b)(2) should be revised to reflect that a maximum month should be used for determining a peak day instead of a 30-day period. In addition, OPC believes that subsections (7)(a)(3) and (7)(b)(3), which address systems where flow data is not available, should be deleted. AUF believes that the peak day should be the highest maximum day with no unusual occurrence a system has experienced, regardless of whether that day occurred in the test year. In addition, as addressed in Issue 3, AUF believes that there should not be an adjustment for excessive unaccounted for water. UI believes that the proposed rule is reasonable.

OPC

Concerning the use of a maximum month instead of a 30-day period for determining a peak day, OPC witness Woodcock believes that the use of a maximum month would provide an easier calculation and would be consistent with the method that has been used by the

Commission in the past. He knew of no national standard or design criteria that would support defaulting to a five-day average. He opposed the idea of revising the proposed rule to allow the use of the next highest maximum day if there is an unusual occurrence on the highest maximum day. He also opposed the use of a maximum day outside of the test year because it is important to use the same time period for all of the data in a rate case. He pointed out that the alternative calculation provision could be used to address the use of the next highest maximum day and a maximum day that is outside the test year. In reference to the use of the proposed peak day demand criteria for those systems where flow data is not available, he believes that there are multiple ways a peak demand could be generated. Therefore, he believes that provision should be eliminated as it attempts to generalize an uncommon occurrence and ignores the possibility that some system specific data may be available that could result in a more accurate used and useful percentage. (TR 61-63,80-81, 323)

AUF

AUF witness Guastella testified that choosing the maximum day should not be limited to a rate setting test year. He argued that the rate setting test year is not a consideration in engineering design criteria or those established by environmental regulators. He believes that using test year demands when previous demands were higher is simply denying a cost the utility had to incur in order to adequately provide service to existing customers.

Witness Guastella proposed eliminating the maximum five day average provision in the rule and, instead, use the next maximum day demand that had no unusual occurrence. He argued that the use of the average of the five highest days produces costs that are less than the actual cost of facilities that were needed on the days when the demand was higher than the other days included in the average. He is not aware of any engineering design criteria that would use a five-day average. He argued that in order to assure that there is ample capacity to meet unforeseen circumstances, the engineering design would assume a maximum day demand in excess of the actually expected maximum day in order to provide a factor of safety or cushion. Further, every engineering criteria and DEP indicate the use of maximum day, not averages. (TR 125-126, 164-165)

UI

UI witness Seidman testified that the highest five days in the peak month should be used, instead of a 30-day period, because it easier to identify. In addition, he argued that the use of the average of the five highest days should not be required when the peak day of the year has an unusual occurrence because there is the big leap from a single peak day to the average of the five highest days. Averaging mitigates maximum demand and takes away from the purpose of using the single maximum day which is to recognize what the system must be able to serve. He argued that it is better to choose the next highest day in which there is no unusual occurrence. He agreed with AUF witness Guastella that the use of an out-of-test-year peak day reflects the maximum customer demand that has been put on that system to date.

Witness Seidman agreed with OPC's position that subsections (7)(a)(3) and (7)(b)(3) are not necessary because the proposed method of estimating is not valid for all sizes and

characteristics of systems. The proposed demand per equivalent residential connection is low and he is skeptical of a situation where a utility does not have maximum day flow data. Although he would not know how to advise a utility with no operating reports showing flow records, he indicated that the proposed default rule is better than nothing. However, without sufficient information to back up a filing, he indicated that staff would deny it. (TR 220-222, 239, 242, 246)

Staff Witness

Staff witness Redemann supports the use of the average of the five highest days in a 30-day period in the test year if the peak day had an unusual occurrence. He points out that a peak day during which there was a fire (or some other unusual occurrence like a line break) should not be used because the formula includes a separate element for fire flow. Although he recently used the five-day maximum average, he admitted that he had in the past opted for the second highest day if there was no unusual occurrence. He agreed that the use of either methodology would be reasonable. Witness Redemann also supported the need for provisions in subsections (7)(a)(3) and (7)(b)(3) to determine peak demand for those systems where flow data is not available. He testified that for systems that do not have adequate DEP monthly operating reports with a record of daily master metering readings, the current demand should be estimated based on peak design criteria's consistent with the assumptions of the AWWA M32 manual. He points out that in the past, the Commission has approved estimated peak demand for systems that had no record of daily flows.¹⁶ (TR 270-271, 272, 306-307)

Analysis and Conclusion

The proposed rule provides that the single maximum day in the test year should be used to reflect peak demand in the used and useful calculation, unless there is an unusual occurrence on that day. If there is an anomaly on that day, such as a fire or line break, the proposed rule provides that the average of the five highest days within a 30-day period in the test year be used. If an anomaly occurred on the single maximum day, that day is not included in the used and useful calculation because the water used for fire fighting or lost through line breaks is not metered and would have to be estimated.

Several alternatives were offered related to choosing the single maximum day on which to base the peak demand. AUF proposed using the single maximum day the system has ever experienced, regardless of whether that day occurred within the test year and UI supported this alternative. The rationale given for potentially using a maximum day outside the test year was that the higher demand reflects the cost the utility had to incur in order to adequately provide service to existing customers. However, OPC argued that it is important to use the same time period for all of the data in a rate case. AUF, UI, and staff witness Redemann each addressed using the second maximum day in the test period, in lieu of using a five-day average, as an alternative.

¹⁶ See, e.g., Order No.PSC-03-0008-PAA-WU, issued January 2, 2003, in Docket No. 020406-WU, In re: Application for staff-assisted rate case in Polk County by Pinecrest Ranches, Inc.

Staff agrees that using a maximum day outside the test year is not appropriate because all of the other data in a rate case is limited to the test year. However, the arguments given for using a single maximum day in the test year with no unusual occurrence are compelling. No specific argument was given for not choosing the next maximum day in the test year if the utility experienced an anomaly on the first maximum day in the test year. OPC testified that there is no national standard or design criteria that would support defaulting to a five-day average.

Based upon the foregoing, staff recommends that the proposed rule be modified to provide that the single maximum day in the test year with no unusual occurrence on that day be used. The provision for using the average of the five highest days within a 30-day period in the test year should be removed. If there is an unusual occurrence on the single maximum day in the test year, such as a fire or line break, then the next maximum day with no unusual occurrence should be used. The recommended wording would allow the use of the single maximum day in the test year with no unusual occurrence, regardless of whether that were the first, second, third, or fourth maximum day. There is no reason to revise the rule to allow only the first or second maximum day to be used. Further, if the rule allowed either the first or second maximum day or the five-day average, the result would be potential litigation as to which alternative has more merit. That issue should be resolved in this proceeding.

Staff does not recommend removing the provisions in subsections (7)(a)(3) and (7)(b)(3) which address systems with no actual flow data because no alternative was given to determine the peak day demand for those systems. Staff's recommended revised language is shown on Attachments B and C.

Issue 12: Stipulation.

Issue 13: Stipulation.

Issue 14: Should the method of determining adjustments to plant and operating expenses because of excessive unaccounted for water as proposed in Rule 25-30.4325(10) be adopted?

Recommendation: Yes, the method of determining adjustments to plant and operating expenses because of excessive unaccounted for water as proposed in Rule 25-30.4325(10) should be adopted. (Rieger, Daniel, Gervasi, Jaeger)

OPC: No. The Commission should be able to consider other relevant factors in determining appropriate used and useful calculations as provided by Citizens' reworded alternative calculation paragraph (3).

AUF: No. There should be no adjustment to plant (only to operating expenses) based on excessive unaccounted for water. The more appropriate response is to conduct a cost/benefit analysis to determine if the cause(s) of the excessive unaccounted for water should be repaired.

UI: Yes.

STAFF: Yes, the method of determining adjustments to plant and operating expenses as proposed in Rule 25-30.4325(10) should be adopted.

Staff Analysis: Proposed Rule 25-30.4325(10), F.A.C., contains factors the Commission will consider in determining whether adjustments to plant and operating expenses for excessive unaccounted for water should be made.

OPC

OPC witness Woodcock testified that this provision should be removed from the proposed rule because it reflects issues for the Commission to consider and does not specifically provide any guidelines or recommendations for calculation of used and useful. OPC recommends that the factors addressed in subsection (10) of the proposed rule are more appropriately located in the alternative calculation provision in subsection (3). (TR 64, OPC BR 38)

AUF

As discussed in Issues 3 and 11, AUF witness Guastella does not believe that the Commission should make an adjustment to plant for excessive unaccounted for water. The more appropriate response is to conduct a cost/benefit analysis to determine if the cause(s) of the excessive unaccounted for water should be repaired. However, witness Guastella testified that if unaccounted for water is part of the proposed default formula, then it is important that the rule

recognize other factors that address unaccounted for water issues. The rule should include the flexibility to address issues beyond those included in restrictive formulas in every used and useful analysis. Subsection (10) of the proposed rule identifies common issues that should be considered in every used and useful analysis. (TR 133, AUF BR 24)

UI

UI witness Seidman testified that the proposed rule covers valid factors considered by the Commission, and that the Commission does make used and useful adjustments to accounts other than plant. (TR 222-223)

Staff Witness

Staff witness Redemann testified that the proposed rule should include the factors the Commission will consider in determining whether adjustments to plant and operating expenses for excessive unaccounted for water should be made. The utility should investigate the source of the water loss and reduce the amount of unaccounted for water. The Florida Rural Water Association is available to work with utilities to help find the leaks and make recommendations on what needs to be done to correct the problems. If the utility has performed a water audit to identify the reason for the excessive water loss and is in the process of reducing that amount, then no adjustment to expenses is needed because the cost the company will incur to correct the problem will likely exceed the expenses that would be removed. For systems that have slightly over 10% unaccounted for water, the adjustment on such small amounts would be immaterial. For those water systems that have not taken steps to reduce the excessive water loss, a reduction in peak demand and chemical and electrical expenses and purchased water should be made. (TR 275-276, 306)

Analysis and Conclusion

Excessive unaccounted for water is both an economic and an environmental issue. Water utilities are expected to operate their systems in the most cost effective manner possible, while striving to preserve and protect Florida's water resources. However, there are circumstances in which the cost of identifying the cause of water losses and taking the steps necessary to implement a solution outweigh the benefits. This provision of the proposed rule identifies the types of mitigating circumstances the Commission will consider in determining whether adjustments to plant and operating expenses should be made for excessive unaccounted for water. This is not an alternative calculation for the utility, but rather provides flexibility to the Commission in deciding whether those adjustments should be made. Therefore, staff recommends that the method of determining adjustments to plant and operating expenses because of excessive unaccounted for water as proposed in Rule 25-30.4325(10) should be adopted.

Issue 15: Should the Commission's consideration of other relevant factors as proposed in Rule 25-30.4325(11) be adopted?

Recommendation: Yes, however the substance of the provisions of subsection (11) should be moved to subsection (3). The proposed revision is shown on Attachments B and C. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: No. The Commission should be able to consider other relevant factors in determining appropriate used and useful calculations as provided by Citizens' reworded alternative calculation paragraph (3).

AUF: Yes.

UI: Yes. The proposed other relevant factors to be considered are proper.

Staff Analysis: Proposed Rule 25-30.4325(11), F.A.C., addresses other relevant factors the Commission will consider in its used and useful evaluation, such as whether flows have decreased due to conservation or a reduction in the number of customers. All of the parties agreed that the substance of this provision of the rule is appropriate. However, OPC suggested that those provisions could be combined with subsection (3) of the proposed rule. Staff agrees. Therefore, staff recommends that the Commission's consideration of other relevant factors as proposed in Rule 25-30.4325(11) should be adopted. However, the substance of the provisions of subsection (11) should be moved to subsection (3). The proposed revision is shown on Attachments B and C.

Issue 16: Should there be a separate used and useful calculation for high service pumping?

Recommendation: No. If the Commission approves staff's recommendation on Issue 2, OPC's proposal for a separate definition for high service pumps should be denied. If the Commission denies staff's recommendation on Issue 2 and agrees with OPC's position that there should be a separate used and useful calculation for high service pumping, then the definition of storage facilities, as discussed in Issue 2, will need to be modified to exclude high service pumps and a separate definition of high service pumps will need to be approved, as discussed in Issue 17. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: Yes.

AUF: No. In most cases, there is no need to perform such a calculation. In addition, high service pumps typically comprise a very small percentage of total storage costs. Finally, it is impractical to develop a formulaic rule for used and useful for high service pumps.

UI: No. For the default rule, a separate calculation is not needed. It is included in the calculation of storage in subsection (8). If a utility wishes to make a separate calculation, it may do so under the provisions of proposed subsection (3). (NOTE: UI's position was taken from its Prehearing Statement. UI did not provide a position statement on this Issue in its Brief.)

Staff Analysis: As discussed in Issue 2, proposed Rule 25-30.4325(1)(b), F.A.C., includes high service pumps in the definition of storage facilities. OPC believes that high service pumps should not be included in this definition because there should be separate used and useful calculations for storage facilities and high service pumps.

Issues 16 through 20 address OPC's position regarding a separate calculation for high service pumps. If the Commission agrees with OPC's position, then the definition of storage facilities, as discussed in Issue 2, will need to be modified to exclude high service pumps and a separate definition of high service pumps will need to be approved, as discussed in Issue 17. Issues 18, 19, and 20 address OPC's proposed definitions of peak demand, firm reliable capacity, and the appropriate used and useful calculation for high service pumps.

OPC

OPC witness Woodcock testified that high service pumps after storage are separate and distinct components from water treatment and storage facilities and evaluating high service pumps separately is necessary to provide an accurate calculation of used and useful. He believes that combining high service pumps with storage ignores the fundamental role that high service pumps play in a water treatment system. That role is to deliver potable water after storage to the transmission and distribution system. Unlike storage, which is a fixed structure and is evaluated

in terms of volume, high service pumps are machines and should be evaluated in terms of volume per unit of time such as gallons per minute. If they are not evaluated separately, they would simply be assigned the used and useful percentage of the storage facilities. The used and useful evaluation of high service pumps relies on readily available data and would not be unduly burdensome or complicated to calculate.

On cross-examination, witness Woodcock testified that the cost of high service pumps is less than the cost of storage in almost all cases, but by no means does he think that the costs are minimal. In addition, he was not aware of high service pumps being significantly oversized in anticipation of future storage expansion. Usually there would be a blank spot put in for an extra pump in the future. (TR 45-47, 78, 107-108)

AUF

AUF witness Guastella believes that there should not be a separate used and useful calculation for high service pumps for several reasons. The high service pumps are a very small part of the total cost of the utility and many small and medium sized systems do not have high service pumps. Further, high service pumps often do not lend themselves to simple used and useful calculations. Systems with multiple high service pumps will often operate at the same time and pump against pressure, resulting in flow rates that are less than their respective rated capacities. Therefore, a formula that only provides for the ratio of demand to capacity would not be sufficient. A true and valid used and useful analysis requires judgment and analyses that are not readily convertible into a formula and are not cost-effective, particularly in light of the relatively small percentage of a utility's plant that is dedicated to high service pumps. (TR 129, 140-141, 166-167)

UI

UI witness Seidman testified that he has, in past rate cases, evaluated system components that include storage and high service pumps separately. However, he believes that separate component evaluations should be the exception rather than the rule. Witness Seidman believes that the proposed rule provides for a simple, straightforward default methodology of evaluating used and useful and allows the opportunity for alternative calculations which would include a component by component evaluation. He points out that the Commission is not designing water systems, but is making a determination of what costs are recoverable through rates. The proposed rule has to be workable for all Commission-regulated utilities, including the smaller Class C utilities for which Commission staff will be preparing the cases. (TR 196-197)

Staff Witness

Staff witness Redemann disagreed with OPC's proposal to evaluate high service pumps and storage tanks separately. He testified that the cost of high service pumps is minimal, about .3 percent, compared to the cost of storage. As a result, he does not believe that a separate used and useful calculation is needed or cost-effective. He testified that if any party believes that a separate calculation should be made for high service pumps, the alternative calculation provision in the proposed rule may be used. (TR 280, 294-295)

Analysis and Conclusion

Staff recommends that there is insufficient evidence to support a separate used and useful evaluation for high service pumps. Based on the testimony, the cost of high service pumps is relatively small in comparison to the cost of storage facilities and the used and useful evaluation would require an analysis that does not lend itself to a simple formula. Therefore, staff recommends that the definition of storage facilities, as discussed in Issue 2, should be approved and OPC's proposal for a separate definition for high service pumps should be denied. If the Commission denies staff's recommendation on Issue 2 and agrees with OPC's position that there should be a separate used and useful calculation for high service pumping, then the definition of storage facilities, as discussed in Issue 2, will need to be modified to exclude high service pumps and a separate definition of high service pumps will need to be approved, as discussed in Issue 17.

Issue 17: If there is a separate calculation for high service pumping, what is the proper definition for high service pumping?

Recommendation: If the Commission approves staff's recommendation in Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. If the Commission denies staff's recommendation on Issue 16 and approves OPC's proposal to have a separate definition for high service pumps, then OPC's proposed definition should be approved. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: High service pumps include those pumps after storage that deliver potable water to a transmission and distribution system.

AUF: See, AUF's response to Issue 16. Because no separate rule is necessary for high service pumps, no definition is necessary.

UI: For the default rule, a separate definition is not needed. High service pumping is included as a part of storage in subsection (1)(b). If a utility wishes to make a separate determination, it may do so under the provisions of subsection (3). (NOTE: This position was taken from UI's Prehearing Statement. UI did not provide a position statement on this Issue in its Brief).

Staff Analysis: As discussed in Issues 2, proposed Rule 25-30.4325(1)(b), F.A.C., includes high service pumps in the definition of storage facilities. Issue 16 addresses whether OPC's proposal to have a separate definition for high service pumps should be approved. This issue addresses OPC's proposed definition for high service pumps in the event the Commission denies staff's recommendation on Issue 16 and approves OPC's proposal to have a separate definition for high service pumps.

OPC's proposed definition is that high service pumps include those pumps after storage that deliver potable water to a transmission and distribution system. Staff witness Redemann agreed that if there is a separate calculation for high service pumping, OPC's definition is reasonable. AUF and UI did not offer a position on OPC's definition. Staff recommends that if the Commission denies staff's recommendation on Issue 16 and approves OPC's proposal to have a separate definition for high service pumps, then OPC's proposed definition should be approved.

Issue 18: If there is a separate calculation for high service pumping, what is the proper definition for peak demand for high service pumping?

Recommendation: If the Commission approves staff's recommendation in Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. If the Commission denies staff's recommendation on Issue 16 and approves OPC's proposal to have a separate definition for high service pumps, then the appropriate definition of peak demand for high service pumps should be the single maximum day in the test year with no unusual occurrence, such as a fire or line break. If actual flow data is not available, the rule provides a default number of gallons per ERC to be used. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: The definition for peak demand for high service pumping should be exactly the same as Citizens recommended definition for peak demand for treatment without storage, except for substituting the term high service pumping.

AUF: See, AUF's response to Issue 16. Because no separate rule is necessary for high service pumps, no definition is necessary.

UI: For the default rule, a separate definition is not needed. High service pumping is included in the definition of storage in subsection (1)(b). If a utility wishes to make a separate determination, it may do so under the provisions of subsection (3). (NOTE: UI's position was taken from its Prehearing Statement. UI did not provide a position statement on this Issue in its Brief).

Staff Analysis: OPC's proposed definition for peak demand for high service pumping is exactly the same as its recommended definition for peak demand for treatment without storage, except for substituting the term high service pumping. That proposed definition, which is discussed in Issue 3, provides that peak demand is the greater of (i) the utility's maximum hour demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements in Rule 25-30.431, F.A.C., or (ii) the utility's maximum day demand, excluding excessive unaccounted for water plus a growth allowance based on the requirements in Rule 25-30.431, F.A.C., and where provided, a minimum of either the fire flow required by local government authority or two hours at 500 gpm. OPC witness Woodcock testified that OPC's proposed definition of peak demand is similar to the requirements of DEP for high service pumps as detailed in subsection (15) of DEP Rule 62-555.320, F.A.C. (TR 51-52)

AUF and UI did not offer a position on OPC's definition. Staff witness Redemann's position is that, if there is a separate calculation for high service pumping, peak demand should be determined consistent with subsection (7)(a) of the proposed rule. That proposed definition, which is addressed in Issue 11, provides that peak demand is the single maximum day in the test year with no unusual occurrence, such as a fire or line break. If there is an unusual occurrence on the single maximum day, then the average of the five highest days within a 30-day period in the test year with no unusual occurrence should be used. If actual flow data is not available, the rule provides a default number of gallons per ERC to be used.

Analysis and Conclusion

OPC's proposal for the definition of peak demand for high service pumps is supported only by witness Woodcock's testimony regarding the appropriate definition of peak demand for water treatment facilities. Those arguments are addressed in Issues 3 and 11. Because the preponderance of the evidence does not support OPC's position on this issue, staff believes that it is appropriate to use the definition of peak demand that is approved for water treatment facilities in the used and useful evaluation of high service pumps if the Commission denies staff's recommendation on Issue 16 and approves OPC's proposal to have a separate definition for high service pumps.

Staff recommends that if the Commission approves staff's recommendation in Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. However, if the Commission denies staff's recommendation on Issue 16 and approves OPC's proposal to have a separate definition for high service pumps, then the appropriate definition of peak demand for high service pumps should be the single maximum day in the test year with no unusual occurrence, such as a fire or line break. If actual flow data is not available, the rule provides a default number of gallons per ERC to be used.

Issue 19: If there is a separate calculation for high service pumping, how should the firm reliable capacity of high service pumping be determined?

Recommendation: If the Commission approves staff's recommendation on Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. If the Commission denies staff's recommendation on Issue 16 and approves the use of a separate formula for evaluating the used and usefulness of high service pumps, staff recommends that OPC's proposal, which is the only proposal that was provided to define firm reliable capacity for high service pumps, should be approved. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: The firm reliable capacity of high service pumping is equivalent to the pumping capacity of the high service pumps excluding the largest high service pump for those systems with more than one high service pump.

AUF: After first subtracting the highest capacity pump, the reliable capacity of the remaining pumps can only be determined by taking into account limiting factors attributable to the actual operation of the remaining pumps.

UI: For the default rule, a separate determination is not needed. It is included in the determination of storage in subsection (9). If a utility wishes to make a separate determination, it may do so under the provisions of subsection (3). (NOTE: UI's position was taken from its Prehearing Statement. UI did not provide a position statement on this Issue in its Brief).

Staff Analysis: This issue addresses how firm reliable capacity should be determined for high service pumps. All parties agree that if there is a separate calculation for high service pumps, the largest pump should be excluded for those systems with more than one high service pump. This is consistent with the method of determining the firm reliable capacity of the water treatment facilities; however, it appears from the testimony that the capacity of the remaining pumps may not be as easily determined as the firm reliable capacity of the water treatment facilities.

OPC witness Woodcock testified that the firm reliable capacity of high service pumps should be defined as the pumping capacity of the high service pumps, excluding the largest high service pump for those systems with more than one high service pump. On cross-examination, witness Woodcock clarified his position regarding the capacity of the remaining high service pumps after the largest pump is removed. He testified that he generally agreed that there are times when two or more pumps are operated at the same time they will have flow rates that are less than their rated capacity because of increased head conditions in the discharge piping. He indicated that the capacity/pressure relationship is a factor that is considered in the design process. The rated capacity of the pumps usually represents the mid-point and is the appropriate capacity to use for used and useful analysis. Witness Woodcock indicated that depending on the demands of the system, it is possible that the operator may alternate the use of multiple pumps and therefore not use all of the pumps at the same time. (TR 63, 77-80, 311-312)

AUF witness Guastella testified that typically, high service pumps connect to a common transmission main and when two or more pumps are operated at the same time, they pump against pressure resulting in flow rates that are less than their respective rated capacity. In most cases it can be determined that they are 100% used and useful simply by observation. In instances where used and useful may be an issue, a formula that only provides for the ratio of demands to capacity is not sufficient. The calculation would have to take into account judgments and analyses that are not readily convertible into a formula. In its brief, AUF concluded that one must take into account that the sum of the rated capacity of each pump may be more than the combined capacity of the pumps when operated at the same time, and that there may be limiting factors attributable to the actual operation of the remaining pumps. (TR 129, BR 26)

As discussed in Issues 2 and 16, staff does not believe that there should be a separate used and useful evaluation for high service pumps because the cost of the pumps is minimal in relation to the cost of the storage facilities. The testimony regarding the determination of the firm reliable capacity of high service pumps further demonstrates that a formulaic approach over-simplifies the evaluation of the used and usefulness of high service pumps. If the Commission approves staff's recommendation on Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. However, if the Commission denies staff's recommendation on Issue 16 and approves the use of a separate formula for evaluating the used and usefulness of high service pumps, staff recommends that OPC's proposal, which is the only proposal that was provided to define firm reliable capacity for high service pumps, should be approved.

Issue 20: If there is a separate calculation for high service pumping, how should the used and usefulness of high service pumping be determined?

Recommendation: If the Commission approves staff's recommendation on Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. If the Commission denies staff's recommendation on Issue 16 and approves the use of a separate formula for evaluating the used and usefulness of high service pumps, staff recommends that the used and usefulness of high service pumping should be determined by dividing the peak demand for high service pumping by the firm reliable capacity of the high service pumps. This is consistent with the method for calculating the used and usefulness of water treatment facilities which was stipulated in Issue 9. However, the language regarding the peak hour and maximum day demand for high service pumping is unnecessary because that is addressed in Issue 18. (Rieger, Daniel, Gervasi, Jaeger)

POSITIONS

OPC: The used and usefulness of high service pumping is determined by dividing the peak demand for high service pumping as defined in this rule by the firm reliable capacity of the high service pumps. Peak hour demand and maximum day demand for high service pumping shall be calculated in the same manner as water treatment without storage.

AUF: The used and useful percentage for high service pumps should be calculated by dividing the greater of the peak hour demand or maximum day demand plus fire demand, in gallons per minute, by the reliable capacity of the high service pumps. (Guastella)

UI: For the default rule, a separate determination is not needed. It is included in the determination of storage in subsection (9). If a utility wishes to make a separate determination, it may do so under the provisions of subsection (3). (NOTE: UI's position was taken from its Prehearing Statement. UI did not provide a position statement on this Issue in its Brief).

Staff Analysis: This issue addresses the formula that should be used to evaluate the used and usefulness of high service pumps. The criteria for determining the peak demand (numerator) and the firm reliable capacity (denominator) for high service pumps were addressed in Issues 18 and 19.

OPC witness Woodcock testified that the used and usefulness of high service pumping should be evaluated in the same way as the evaluation for a water treatment system without storage. In its brief, OPC clarified that the used and usefulness of high service pumping should be determined by dividing the peak demand for high service pumping as defined in this rule by the firm reliable capacity of the high service pumps. Peak hour demand and maximum day demand for high service pumping shall be calculated in the same manner as water treatment without storage. (TR 63, 114-115, OPC BR 39-40)

In its brief, AUF concluded that, if the Commission adopts a separate rule provision addressing high service pumping, then the used and useful percentage for high service pumps should be calculated by dividing the greater of the peak hour demand or maximum day demand plus fire demand, in gallons per minute by the reliable capacity of the high service pumps. AUF argued that this methodology is supported by witness Woodcock. (AUF BR 27)

Staff recommends that if the Commission approves staff's recommendation on Issue 16 to deny OPC's proposal to have a separate definition for high service pumps, then this issue need not be ruled upon. If the Commission denies staff's recommendation on Issue 16 and approves the use of a separate formula for evaluating the used and usefulness of high service pumps, staff recommends that the used and usefulness of high service pumping should be determined by dividing the peak demand for high service pumping by the firm reliable capacity of the high service pumps. This is consistent with the method for calculating the used and usefulness of water treatment facilities which was stipulated in Issue 9. However, the language regarding the peak hour and maximum day demand for high service pumping is unnecessary because that is addressed in Issue 18.

Docket No. 070183-WS

Date: March 27, 2008

Issue 21: Should the rulemaking proceeding be resumed in order for Rule 25-30.4325 to be filed for adoption with the Secretary of State as approved by the Commission and the docket be closed?

Recommendation: Yes, the rule as approved by the Commission should be filed for adoption with the Secretary of State 21 days after the publication of a Notice of Change in the FAW and the docket should then be closed. (Gervasi, Jaeger)

Staff Analysis: Since the formal evidentiary proceeding will be concluded upon the Commission's post-hearing decision, the rulemaking proceeding should be resumed pursuant to subsection 120.54(3)(c)2., F.S. If the Commission approves any changes to the proposed rule as recommended by staff in Issues 1-20 of this recommendation and as set forth on Attachments A through C, a Notice of Change including the changes to the proposed rule as set forth in Attachment C must be published in the FAW. The rule may be filed for adoption with the Secretary of State 21 days after the Notice of Change is published and 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 and high service pumping, necessary to pump and treat potable
5 water.

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 unaccounted for water in excess of 10
17 percent of the amount produced.

18 (2) The Commission's used and useful evaluation of water treatment system and
19 storage facilities will consider the prudence of the investment, economies of scale, and other
20 relevant factors including whether flows have decreased due to conservation or to a reduction
21 in the number of customers.

22 (3) Separate used and useful calculations shall be made for the water treatment system
23 and storage facilities. An alternative calculation may also be provided, along with supporting
24 documentation and justification, including service area restrictions, factors involving treatment
25 capacity, well drawdown limitations, changes in flow due to conservation or to a reduction in

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

1 the number of customers, and alternative peaking factors.

2 (4) A water treatment system is considered 100 percent used and useful if the service
3 territory the system is designed to serve is built out and there is no apparent potential for
4 expansion of the service territory or the system is served by a single well.

5 (5) The used and useful calculation of a water treatment system is made by dividing
6 the peak demand by the firm reliable capacity of the water treatment system.

7 (6) The firm reliable capacity of a water treatment system is equivalent to the pumping
8 capacity of the wells, excluding the largest well for those systems with more than one well.

9 (a) Firm reliable capacity is expressed in gallons per minute for systems with no
10 storage capacity.

11 (b) Firm reliable capacity is expressed in gallons per day, based on 12 hours of
12 pumping, for systems with storage capacity.

13 (7) Peak demand is based on a peak hour for a water treatment system with no storage
14 capacity and a peak day for a water treatment system with storage capacity.

15 (a) Peak hour demand, expressed in gallons per minute, shall be calculated as follows:

16 1. The single maximum day (SMD) in the test year where there is no unusual
17 occurrence on that day, such as a fire or line break, less excessive unaccounted for water,
18 divided by 1440 minutes in a day, times 2 $(((SMD-EUW)/1,440) \times 2)$, or

19 2. If the actual maximum day flow data is not available, 1.1 gallons per minute per
20 equivalent residential connection (1.1 x ERC).

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

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

24 2. If the actual maximum day flow data is not available, 787.5 gallons per day per
25 equivalent residential connection (787.5 x ERC).

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

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

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

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

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

9 (c) A ground storage tank constructed with a bottom drain shall be considered 100
10 percent usable, unless there is a limiting factor, in which case the limiting factor will be taken
11 into consideration.

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

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

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

19 History: New _____.
20
21
22
23
24
25

25-30.4325 Water Treatment and Storage Used and Useful Calculations -- Comparison of Proposed Rule to Recommended Rule

<u>Proposed Rule</u>	<u>Recommended Rule</u>
(1) Definitions. (a) <u>A water treatment system includes all facilities, such as wells and treatment facilities, excluding storage, necessary to produce, treat, and deliver potable water to a transmission and distribution system.</u>	(1) Definitions. (a) <u>A water treatment system includes all facilities, such as wells and treatment facilities, excluding storage and high service pumping, necessary to pump and treat potable water.</u>
(b) <u>Storage facilities include ground or elevated storage tanks and high service pumps.</u>	(b) <u>Storage facilities include ground or elevated storage tanks and high service pumps.</u>
(c) <u>Peak demand for a water treatment system includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of Rule 25-30.431, Florida Administrative Code, and, where fire flow is provided, a minimum of either the fire flow required by the local governmental authority or 2 hours at 500 gallons per minute.</u>	(c) <u>Peak demand for a water treatment system includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of Rule 25-30.431, Florida Administrative Code, and, where fire flow is provided, a minimum of either the fire flow required by the local governmental authority or 2 hours at 500 gallons per minute.</u>
(d) <u>Peak demand for storage includes the utility's maximum day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of Rule 25-30.431, Florida Administrative Code, and, where provided, a minimum of either the fire flow required by the local governmental authority or 2 hours at 500 gallons per minute.</u>	(d) <u>Peak demand for storage includes the utility's maximum day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of Rule 25-30.431, Florida Administrative Code, and, where provided, a minimum of either the fire flow required by the local governmental authority or 2 hours at 500 gallons per minute.</u>
(e) <u>Excessive unaccounted for water (EUW) is finished potable water produced in excess of 110 percent of the accounted for usage, including water sold; other water used, such as for flushing or fire fighting; and water lost through line breaks.</u>	(e) <u>Excessive unaccounted for water (EUW) is unaccounted for water in excess of 10 percent of the amount produced.</u>
(2) <u>The Commission's used and useful evaluation of water treatment system and storage facilities shall include a determination as to the prudence of the investment and consideration of economies of scale.</u>	(2) <u>The Commission's used and useful evaluation of water treatment system and storage facilities will consider the prudence of the investment, economies of scale, and other relevant factors including whether flows have decreased due to conservation or to a reduction in the number of customers.</u>
(3) <u>Separate used and useful calculations shall be made for the water treatment system and storage facilities. However, if the utility believes an alternative calculation is appropriate, such calculation may also be provided, along with supporting documentation.</u>	(3) <u>Separate used and useful calculations shall be made for the water treatment system and storage facilities. An alternative calculation may also be provided, along with supporting documentation and justification, including service area restrictions, factors involving treatment capacity, well drawdown limitations,</u>

	<p><u>changes in flow due to conservation or to a reduction in the number of customers, and alternative peaking factors.</u></p>
<p>(4) A water treatment system is considered 100 percent used and useful if: (a) The system is the minimum size necessary to adequately serve existing customers plus an allowance for growth and fire flow; or (b) The service territory the system is designed to serve is mature or built out and there is no potential for expansion of the service territory; or (c) The system is served by a single well.</p>	<p>(4) A water treatment system is considered 100 percent used and useful if the service territory the system is designed to serve is built out and there is no apparent potential for expansion of the service territory or the system is served by a single well.</p>
<p>(5) The used and useful calculation of a water treatment system is made by dividing the peak demand by the firm reliable capacity of the water treatment system.</p>	<p>(5) The used and useful calculation of a water treatment system is made by dividing the peak demand by the firm reliable capacity of the water treatment system.</p>
<p>(6) The firm reliable capacity of a water treatment system is equivalent to the pumping capacity of the wells, excluding the largest well for those systems with more than one well. However, if the pumping capacity is restricted by a limiting factor such as the treatment capacity or draw down limitations, then the firm reliable capacity is the capacity of the limiting component or restriction of the water treatment system. In a system with multiple wells, if a utility believes there is justification to consider more than one well out of service in determining firm reliable capacity, such circumstance will be considered. The utility must provide support for its position, in addition to the analysis excluding only the largest well.</p>	<p>(6) The firm reliable capacity of a water treatment system is equivalent to the pumping capacity of the wells, excluding the largest well for those systems with more than one well.</p>
<p>(a) Firm reliable capacity is expressed in gallons per minute for systems with no storage capacity. (b) Firm reliable capacity is expressed in gallons per day, based on 12 hours of pumping, for systems with storage capacity.</p>	<p>(a) Firm reliable capacity is expressed in gallons per minute for systems with no storage capacity. (b) Firm reliable capacity is expressed in gallons per day, based on 12 hours of pumping, for systems with storage capacity.</p>
<p>Issue 11 -- (7) Peak demand is based on a peak hour for a water treatment system with no storage capacity and a peak day for a water treatment system with storage capacity.</p>	<p>(7) Peak demand is based on a peak hour for a water treatment system with no storage capacity and a peak day for a water treatment system with storage capacity.</p>
<p>(a) Peak hour demand, expressed in gallons per minute, shall be calculated as follows: 1. The single maximum day (SMD) in the test year unless there is an unusual occurrence on that day, such as a fire or line break, less excessive unaccounted for water.</p>	<p>(a) Peak hour demand, expressed in gallons per minute, shall be calculated as follows: 1. The single maximum day (SMD) in the test year where there is no unusual occurrence on that day, such as a fire or line break, less excessive unaccounted for water.</p>

<p>divided by 1440 minutes in a day, times 2 $[(SMD-EUW)/1,440] \times 2$, or</p> <p>2. The average of the 5 highest days (AFD) within a 30-day period in the test year, excluding any day with an unusual occurrence, less excessive unaccounted for water, divided by 1440 minutes in a day, times 2 $[(AFD-EUW)/1,440] \times 2$, or</p> <p>3. If the actual maximum day flow data is not available, 1.1 gallons per minute per equivalent residential connection (1.1 x ERC).</p>	<p>divided by 1440 minutes in a day, times 2 $[(SMD-EUW)/1,440] \times 2$, or</p> <p>2. If the actual maximum day flow data is not available, 1.1 gallons per minute per equivalent residential connection (1.1 x ERC).</p>
<p>(b) Peak day demand, expressed in gallons per day, shall be calculated as follows:</p> <p>1. The single maximum day in the test year, if there is no unusual occurrence on that day, such as a fire or line break, less excessive unaccounted for water (SMD-EUW), or</p> <p>2. The average of the 5 highest days within a 30-day period in the test year, excluding any day with an unusual occurrence, less excessive unaccounted for water (AFD-EUW), or</p> <p>3. If the actual maximum day flow data is not available, 787.5 gallons per day per equivalent residential connection (787.5 x ERC).</p>	<p>(b) Peak day demand, expressed in gallons per day, shall be calculated as follows:</p> <p>1. The single maximum day in the test year where there is no unusual occurrence on that day, such as a fire or line break, less excessive unaccounted for water (SMD-EUW), or</p> <p>2. If the actual maximum day flow data is not available, 787.5 gallons per day per equivalent residential connection (787.5 x ERC).</p>
<p>(8) The used and useful calculation of storage is made by dividing the peak demand by the usable storage of the storage tank. Usable storage capacity less than or equal to the peak day demand shall be considered 100 percent used and useful. A hydropneumatic tank is not considered usable storage.</p>	<p>(8) The used and useful calculation of storage is made by dividing the peak demand by the usable storage of the storage tank. Usable storage capacity less than or equal to the peak day demand shall be considered 100 percent used and useful. A hydropneumatic tank is not considered usable storage.</p>
<p>(9) Usable storage determination shall be as follows:</p> <p>(a) An elevated storage tank shall be considered 100 percent usable.</p> <p>(b) A ground storage tank shall be considered 90 percent usable if the bottom of the tank is below the centerline of the pumping unit.</p> <p>(c) A ground storage tank constructed with a bottom drain shall be considered 100 percent usable, unless there is a limiting factor, in which case the limiting factor will be taken into consideration.</p>	<p>(9) Usable storage determination shall be as follows:</p> <p>(a) An elevated storage tank shall be considered 100 percent usable.</p> <p>(b) A ground storage tank shall be considered 90 percent usable if the bottom of the tank is below the centerline of the pumping unit.</p> <p>(c) A ground storage tank constructed with a bottom drain shall be considered 100 percent usable, unless there is a limiting factor, in which case the limiting factor will be taken into consideration.</p>
<p>(10) To determine whether an adjustment to plant and operating expenses for excessive unaccounted for water will be included in the used and useful calculation, the Commission will consider all relevant factors, including</p>	<p>(10) To determine whether an adjustment to plant and operating expenses for excessive unaccounted for water will be included in the used and useful calculation, the Commission will consider all relevant factors, including</p>

<u>whether the reason for excessive unaccounted for water during the test period has been identified, whether a solution to correct the problem has been implemented, or whether a proposed solution is economically feasible.</u>	<u>whether the reason for excessive unaccounted for water during the test period has been identified, whether a solution to correct the problem has been implemented, or whether a proposed solution is economically feasible.</u>
<u>(11) In its used and useful evaluation, the Commission will consider other relevant factors, such as whether flows have decreased due to conservation or a reduction in the number of customers.</u>	

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, and high service pumping, necessary to ~~produce, pump and treat,~~
5 ~~and deliver~~ potable water to a 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~~ unaccounted for water
17 ~~produced~~ in excess of ~~140~~ 10 percent of the accounted for usage, ~~including water sold; other~~
18 ~~water used, such as for flushing or fire fighting; and water lost through line breaks~~ amount
19 produced.

20 (2) The Commission's used and useful evaluation of water treatment system and
21 storage facilities ~~shall include a determination as to~~ will consider the prudence of the
22 investment, ~~and consideration of~~ economies of scale, and other relevant factors including
23 whether flows have decreased due to conservation or to a reduction in the number of
24 customers.

25 (3) Separate used and useful calculations shall be made for the water treatment

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

1 system and storage facilities. ~~However, if the utility believes an An alternative calculation is~~
2 ~~appropriate, such calculation~~ may also be provided, along with supporting documentation: and
3 justification, including service area restrictions, factors involving treatment capacity, well
4 drawdown limitations, changes in flow due to conservation or to a reduction in the number of
5 customers, and alternative peaking factors.

6 (4) A water treatment system is considered 100 percent used and useful if:

7 ~~(a) The system is the minimum size necessary to adequately serve existing customers~~
8 ~~plus an allowance for growth and fire flow; or~~

9 ~~(b) The the service territory the system is designed to serve is ~~mature or~~ built out and~~
10 there is no apparent potential for expansion of the service territory; or

11 ~~(c) The the system is served by a single well.~~

12 (5) The used and useful calculation of a water treatment system is made by dividing
13 the peak demand by the firm reliable capacity of the water treatment system.

14 (6) The firm reliable capacity of a water treatment system is equivalent to the pumping
15 capacity of the wells, excluding the largest well for those systems with more than one well.
16 ~~However, if the pumping capacity is restricted by a limiting factor such as the treatment~~
17 ~~capacity or draw down limitations, then the firm reliable capacity is the capacity of the~~
18 ~~limiting component or restriction of the water treatment system. In a system with multiple~~
19 ~~wells, if a utility believes there is justification to consider more than one well out of service in~~
20 ~~determining firm reliable capacity, such circumstance will be considered. The utility must~~
21 ~~provide support for its position, in addition to the analysis excluding only the largest well.~~

22 (a) Firm reliable capacity is expressed in gallons per minute for systems with no
23 storage capacity.

24 (b) Firm reliable capacity is expressed in gallons per day, based on 12 hours of
25 pumping, for systems with storage capacity.

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

1 (7) Peak demand is based on a peak hour for a water treatment system with no storage
2 capacity and a peak day for a water treatment system with storage capacity.

3 (a) Peak hour demand, expressed in gallons per minute, shall be calculated as follows:

4 1. The single maximum day (SMD) in the test year ~~unless there is an~~ where there is no
5 unusual occurrence on that day, such as a fire or line break, less excessive unaccounted for
6 water, divided by 1440 minutes in a day, times 2 $(((SMD-EUW)/1,440) \times 2]$, or

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

10 32. If the actual maximum day flow data is not available, 1.1 gallons per minute per
11 equivalent residential connection (1.1 x ERC).

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

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

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

17 32. If the actual maximum day flow data is not available, 787.5 gallons per day per
18 equivalent residential connection (787.5 x ERC).

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

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

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

25 (b) A ground storage tank shall be considered 90 percent usable if the bottom of the

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

1 tank is below the centerline of the pumping unit.

2 (c) A ground storage tank constructed with a bottom drain shall be considered 100
3 percent usable, unless there is a limiting factor, in which case the limiting factor will be taken
4 into consideration.

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

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

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

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

15 History: New

16

17

18

19

20

21

22

23

24

25

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