

Ruth Nettles

From: DAVIS.PHYLLIS [DAVIS.PHYLLIS@leg.state.fl.us]
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To: Filings@psc.state.fl.us
Cc: REILLY.STEVE; KIRBY.KIMBERLY; DAVIS.PHYLLIS; Ken Hoffman; Martin S. Freidman; Ralph Jeager; Rosanne Gervasi
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a. Person responsible for this electronic filing:

Stephen C. Reilly, Associate Public Counsel
Office of Public Counsel
c/o The Florida Legislature
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400
(850) 488-9330
Reilly.steve@leg.state.fl.us

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In re: Proposed adoption of Rule 25-30.4325, F.A.C., Water Treatment Plant Used and Useful Calculations.

c. Document being filed on behalf of Office of Public Counsel.

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e. The document attached for electronic filing is **Citizens' Post-Hearing Statement**.

Thank you for your attention and cooperation to this request.

Phyllis W. Philip-Guide
Secretary to Stephen C. Reilly, Associate Public Counsel.
Office of Public Counsel
Telephone: (850) 488-9330
Fax: (850) 488-4491

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Proposed adoption of
Rule 25-30.4325, F.A.C., Water
Treatment Plant Used and Useful
Calculations.

Docket No. 070183-WS

Filed: February 26, 2008

CITIZENS' POST-HEARING STATEMENT

J. R. Kelly
Public Counsel

Stephen C. Reilly
Associate Public Counsel

Office of Public Counsel
c/o The Florida Legislature
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400

Attorneys for the Citizens
of the State of Florida

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CITATIONS

All citations to the transcript of the formal hearing will be cited as (T. ____). All citations to Exhibits introduced at the formal hearing will be cited as (Ex. ____) or (Ex. ____, sub part). All citations to Commission Orders or Rules or other authorities, including page numbers when applicable, will be cited after the sentence or paragraph it supports as (_____, _____).

'BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Proposed adoption of Rule 25-30.4325,
F.A.C., Water Treatment Plant Used and
Useful Calculations.

DOCKET NO. 070183-WS

FILED: February 26, 2008

CITIZENS' POST-HEARING STATEMENT

The Citizens of the State of Florida, ("Citizens") by and through their attorney, the Public Counsel ("OPC"), pursuant to and consistent with Order No. PSC-08-0043-PHO-WS, hereby file this Post-Hearing Statement.

BASIC POSITION:

Calculating proper U&U percentages for water treatment systems involves separate analysis and calculation for each of the major components: 1) water treatment; 2) storage; and 3) high service pumping. The U&U percentage for each component is a fraction, with each component's capacity being the denominator and the component's demand being the numerator. The components capacity refers to the amount of water the component can reliably deliver. The component's demand represents the actual peak demand (historic or projected) being placed upon the component. It is important for the Commission to not replace these actual test year demands in the U&U fraction with theoretical "design demand." It is precisely these design capacities that the Commission's U&U fraction should test relative to the actual test year demands. To the extent the U&U analysis determines the utility constructed more plant than is necessary to serve current demands and the statutorily required growth, the utility may use the Commission's Rule 25-30.434, Application for Allowance for Funds Prudently Invested

(AFPI). This rule allows utilities to recover depreciation and other carrying costs associated with plant that is found to be non-used and useful.

THE ISSUES – FINDINGS OF FACT AND CONCLUSIONS OF LAW

LEGAL ISSUE

ISSUE A: Which party bears the burden of proof to demonstrate that specific provisions of proposed Rule 25-30.4325 should be adopted?

POSITION: 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.

DISCUSSION: As the petitioner, the Citizens are a party asserting the affirmative of an issue, namely, that the Commission's intention to adopt Rule 25-30.4325, F.A.C., as approved by the Commission on May 22, 2007, fails to properly allocate the costs of providing service between current and future customers, as specified in paragraph 5 of the petition. As the party asserting the above affirmative case, the Citizen have 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. Application of Florida Power Corporation for an increase in rate and charges, Order No. 10162, Florida Public Service Commission, July 27, 1981, 81 FPSC 188; Florida Department of HRS vs. Career Service Commission, 289 So. 2d. 412 (Fla. 4th DCA 1974); Fitzpatrick v. City of Miami Beach, 328 So. 2d 578 (Fla. 3rd DCA 1976). Likewise, other parties seeking changes to the proposed rule have the same burden of proof.

Notwithstanding the above, it is the Commission, as the ultimate party asserting the affirmative of this proceeding, namely, the adoption of its rule prescribing the proper calculations for the used and usefulness of water treatment plant, that 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. Ibid. 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. Ibid; Also see Black's Law Dictionary, Preponderance of the Evidence, Seventh Edition, 1999.

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

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

DISCUSSION: The Citizens believe that subparagraph (1)(b), definition of storage facilities, should read:

(b) Storage facilities include ground or elevated storage tanks. (T.45).

High service pumps after storage are separate and distinct components from both water treatment and storage. These pumps that deliver potable water to the transmission and distribution system and ultimately the customers, are required to meet the daily peak demands of the service area, and if provided fire flow. (T.45). Combining high service pumps with storage in used and useful calculations ignores the fundamental role that high service pumps play in a water treatment 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. (T.46).

Including high service pumps with storage means that the pumps will not be evaluated at all. They would simply be assigned the U&U percentage of the storage, the calculation of which has nothing to do with high service pumping. (T.46). There will be instances when some capacity of high service pumps will be considered U&U when in fact they are not. Conversely, there will be instances when some of the capacity of the high service pumps is considered non U&U, when in fact they are needed to provide service to the customers. Either way, evaluating high service pumps separate from storage is necessary to provide an accurate calculation of U&U. (T.46).

While Witness Guastella disagrees with Witness Woodcock's method of calculating the used and usefulness of high service pumping, he provides testimony agreeing with Citizens' recommendation to perform a separate U&U calculation for this distinct component of the water system. (T. 129). However, under cross-examination he changes his mind and states that it shouldn't be treated separately. (T.167). Witness Seidman concedes that in some cases where he has provided testimony he has recommended separate U&U calculations for high service pumping. (T.196). However, Witness Seidman recommends the separate U&U calculation for high service pumping be considered an exception under (3) rather than the rule. (T. 196-197). Witness Redemann defended the rule language, which included high service pumping with storage, and contended that the cost of high service pumps were minimal compared to the cost of storage. (T. 280). Witness Woodcock's response was that regardless of the subjective assessment of the relative cost of high service pumping to storage, high service pumps

are inherently different than storage and should be evaluated for U&U in a completely different manner. (T.312). High service pumps should not be evaluated under the alternative calculation provision because they are not a special or unique case. They are a critical component of a water system that is always present after storage (T. 312). Separately evaluating high service pumping does not over complicate the rule because the recommended method for evaluating the U&U of high service pumps mostly relies on data that is already required in Staff's proposed rule. (T. 46). The only additional data that would be required is the capacity of the high service pumps, which should be readily available. Adding this calculation to the rule is not unduly burdensome or complicated and is needed in order to produce accurate U&U percentages. (T. 47).

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

POSITION: *Proposed subparagraph (1)(c) should be modified. While proposed subparagraph (1)(c) defines peak demand for 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.*

DISCUSSION: The Citizens believe subparagraph (1)(c), definition of peak demand for treatment, should read:

(c) Peak demand for a water treatment system includes:

- 1. For utilities without storage, 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 governmental authority or 2 hours at 500 gpm.**

2. **For utilities with storage, 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 governmental authority or 2 hours at 500 gpm. Fire flow shall be considered to the extent the treatment facilities can replenish fire flow volume over a 24 hour period. (T.48,313,314).**

This wording provides for the specific cases of when maximum hour and maximum day demands should be used. The first point to consider is whether the water treatment system has storage. If it does not, the water treatment system must be sized to meet the daily peak demands of the service area, and where provided, a minimum of either the fire flow required by local government authority or 2 hours at 500 gallons per minute. (T. 48). In evaluating pumps that provide service, the demand of the service area is evaluated in two ways. The first way is to look at the maximum hour demand of the service area. The second way is used when fire flow is provided for the service area. In this situation the fire flow plus the maximum day demand of the service area provides a second calculation. (T. 48). The peak flow of the water treatment system would be the greater of the two. This is similar to the design standards for high service pumps in the FDEP rules for the design and construction of Public Water Systems. Subsection (15)(a) of FDEP Rule 62-555.320, F.A.C., states in part:

“...the total capacity of all high service pumping stations connected to a water system...shall be sufficient to; 1. Meet at least the water system’s ...peak hour water demand (and if fire protection is being provided meet at least the water system’s or the booster station service area’s, design fire flow rate plus a background water demand equivalent to the maximum-day demand other than fire flow demand);” (T. 48).

For smaller systems where fire flow is provided, the fire flow alone can be significantly greater than the maximum hour flow. So the maximum day plus fire flow test can give a better indication of the peak flows a water treatment system can experience for smaller systems where fire flow is provided. (T. 49). Storage acts as an equalization volume for the peak demands that occur over the course of a day. It also provides volume for fire flow demands if provided by the system. Therefore, these peak demands are not placed upon the treatment facilities. (T.49). In this situation the peak flow from a water treatment system would be the maximum day demand. The FDEP rule 62.555.315, F.A.C., provides that the total well capacity connected to a water system shall at least equal the system's design maximum day water demand. (T.49).

Witness Guastella disagrees with Staff's, OPC's and Utilities, Inc.'s witnesses support of the proposed rules' fire flow requirement based upon the minimum of either the fire flow required by the local government authority or 2 hours at 500 gallons per minute. Witness Guastella argues for an "appropriate" fire flow requirement that he never quantified, but argues should be based upon engineering considerations that take into account the requirements of the Insurance Service Organization (ISO) and its predecessor, the National Board of Fire Underwriters (NBFU). (T.127). According to Witness Guastella, these authorities take into account the population of the community being served, not just individual hydrants or buildings. (T.127). He proposed an unquantified fire flow requirement that must take into consideration the use of multiple hydrants and the need to meet fire flow demands at every location throughout the system, and in some cases meet coincidental fires. (T. 128). Under questioning, Witness Guastella was unable to cite any Florida cases that followed the above described

“appropriate” fire flow requirement. (T. 147-148). He also conceded that his substantially higher fire flow requirement proposed in a 2004 rate case before the St. Johns County Regulatory Authority was rejected by the Hearing Officer and ultimately by the St. Johns County Board of County Commissioners. (T. 148-149). Further, when questioned about the current applicability of his 1956 Exhibit No. 6, NBFU authority, he conceded that his Exhibit 22, which included excerpts from a 1999 AWWA Manual M5, expressly states that the older NBFU’s method of estimating required fire flow based on population had been eliminated. (T. 335-336).

With the Citizen’s adding a fire flow requirement to its recommended peak max day demand for water treatment with storage, the main point of disagreement is the question of including a fire flow requirement with max hour demand for treatment without storage. The Citizens believe it is not appropriate nor cost effective to include a fire flow requirement on top of the max hour demand of the test year for treatment. When Witness Redemann was asked about the likelihood of a fire occurring on the max hour of the 24 hours of the single max day of the year, he answered “it could very easily happen.” (T. 291). Disappointed with this answer, the Citizens asked Witness Redemann if he was aware of any instance where that has ever happened. Witness Redemann conceded he could not recall such an instance. (T. 291). Further, Witness Redemann admitted that if a fire were to occur during the max hour of the max day, that the water systems’ response to the fire would tend to depress simultaneous peak demands. (T. 292). 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.

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

POSITION: *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.*

DISCUSSION: The Citizens believe that subparagraph (1)(d), definition of peak demand for storage, should read:

(d) Peak demand for storage includes 25% of the utility's maximum day demand, excluding excessive unaccounted for water, plus an allowance for fire flow, where provided, a minimum of either the fire flow required by local governmental authority or 2 hours at 500 gallons per minute, and a growth allowance based on the requirements in Rule 25-30.431, F.A.C. (T.50).

The Citizens' recommendation changes the definition of peak demand from the 100% maximum day to 25% of the maximum day. Subsection (19) of FDEP Rule 62-555.320, F.A.C., states that the total useful finished water storage capacity (excluding any storage capacity for fire protection) connected to a water system shall at least equal 25 percent of the system's maximum day water demand, excluding any design fire flow demand. The revised paragraph above mirrors the concept embodied in the FDEP design standards by which water systems are designed and constructed. (T. 50).

Staff and Utility sponsored witnesses criticized the Citizen's recommendation of 25% of max day demand as being a minimum FDEP design standard that does not represent adequate storage. The Citizens' recommendation is not based upon a minimum FDEP standard. Subsection (19) of FDEP Rule 62-555.320, F.A.C., has additional

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. (T.314). Witness Woodcock believes this criteria to be the regulatory minimum, but is far too complicated to be included in the U&U process. Furthermore, the FDEP rules, while they may be considered regulatory minimums, are established to provide safe and reliable drinking water to the general public and are the basis of design for water systems statewide. (T. 314). It is also important to note that FDEP makes no specific allowances for growth in its storage requirements, which is a part of the Citizen's recommended U&U calculations. (T. 314).

Witness Seidman criticized Citizen's definition for peak demand for storage because it ignores the necessity for emergency storage. (T. 202). Witness Seidman concedes that determination of the amount of emergency storage is a judgment call and design resources do not offer any estimates of the range of the amount. (T. 202). However, based upon a "Recommended Standard for Water Works" reference, Witness Seidman states that one could set a minimum storage capacity, other than fire flow, at about 50% of maximum daily demand, with 25% being for equalization and 25% for emergency demand. (T. 202-203). The best endorsement Utility Witness Seidman could offer for proposed subparagraph (1)(d)'s allowance for 100% of maximum day demand, was that though it is higher than even his minimum allowance, it was not unreasonable from the utilities' standpoint. While the 100% of maximum day demand allowance is not unreasonable from the utilities' standpoint, it clearly is unreasonable from the ratepayers' standpoint.

With regard to emergency storage, FDEP has many requirements to keep water treatment facilities in service in the event of emergencies, such as auxiliary power and firm capacity requirements. It does not make provisions for emergencies in the design of storage. (T. 314). The impression of Mr. Seidman's testimony on this issue is that more volume is always better, and that is not the case. Too much storage volume that does not get "turned over" in a storage tank can cause water quality problems, including loss of disinfection residual or formation of DBPs, which are a regulated category of water contaminants. (T. 314). Therefore, the Citizens' recommendation is that 25% of maximum day flow, plus an allowance for fire flow, plus the statutory growth allowance is appropriate.

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

POSITION: *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.*

DISCUSSION: The Citizens believe subparagraph (1)(e), definition of excessive unaccounted for water should read:

(e) Excessive unaccounted for water (EUW) is unaccounted for water in excess of 10 percent of the amount produced. Any water claimed as accounted for that was used for flushing, fire fighting, and water lost through line breaks must be documented by complete records of these flow losses. (T. 317).

The additional sentence recommended by the Citizens requires the utility to provide records documenting the other water used in a system. If there are no records available describing the volume of water used for flushing, fire fighting or line breaks the

water can hardly be considered accounted for and would therefore be considered as unaccounted for. This language requires that documentation be provided to justify these other uses. (T.52).

The Citizens agree with Staff Witness Redemann's testimony that water is a limited natural resource that must be conserved to assure adequate supply. Therefore, water utilities should be taking reasonable steps to avoid excessive losses. (T. 274). It is Commission practice to allow 10% of the total water produced or purchased as acceptable unaccounted for water. Excessive unaccounted for water is removed from the peak demand in calculating used and useful. (T. 274). In addition, the chemical and electrical expenses and purchased water costs associated with unaccounted for water in excess of 10% should be adjusted so that ratepayers do not bear those costs. (T. 274). The Commission has also required utilities to take corrective action to reduce the excessive unaccounted for water, if economically feasible. (T. 274).

It has been a long standing practice of the Commission to consider unaccounted for water over 10% to be an excessive amount. (T. 274). In addition, Staff witness Redemann had reviewed several AWWA publications and WMD rules related to consumptive use permits and water conservation, which supports 10% as a reasonable amount of accounted for water. (T. 274).

Staff Witness Redemann in his testimony states that some water is used by the utility to flush its distribution system, service lines, mains, and tanks to properly maintain the system. (T. 274). He further states that water loss can also occur when lines break during construction (T. 274). Staff Witness Redemann also states:

“The utility is required to maintain records of the amount of water used to maintain the system or lost through line breaks. The fire department should measure or

estimate the amount of water used for firefighting or testing and report the usage to the utility. If water used for maintaining the system or lost through line breaks is properly documented, then it should **not be considered unaccounted for usage.**" (Emphasis supplied) (T. 274).

The Citizens concur with Staff Witness Redemann that water used to maintain the system, water lost through line breaks, or water used to fight fires should not be considered unaccounted for water, so long as these flows are adequately documented. (T. 316). It is crucial that contemporaneous records of amounts of water used for these purposes be maintained by the utility at all times. For this reason, the Citizens recommend the before described sentence be added to subparagraph (1)(e), requiring proper documentation of all water uses that are to be considered accounted for.

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

POSITION: *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.

DISCUSSION: The Citizens believe that paragraph (2) should be deleted and the language permitting the Commission's consideration of economies of scale in its used and useful calculations should be added to the alternative calculations paragraph (3). (T. 53).

Witness Seidman in his testimony states:

"...Mr. Woodcock indicates that prudence of investment is already an issue in rate cases, separate from used and useful and therefore it is not required in this rule. In my opinion, that is not correct. As I previously pointed out, the statute authorizing the regulation of water and wastewater utilities does not address prudent

investment. It does not require its consideration nor does it preclude its consideration. Therefore, I believe it is proper for the Commission to make its intent known in this rule..." (T.209-210).

The Citizens respectfully disagrees with this position. Chapter 367.081(3), F.S., provides:

"The commission, in fixing rates, may determine the **prudent** cost of providing service during the period of time the rates will be in effect following the entry of a final order relating to the rate request of the utility and may use such costs to determine the revenue requirements that will allow the utility to earn a fair rate of return on its rate base." (Emphasis Supplied).

Pursuant to Chapter 367.081(3), F.S., the Commission has always considered the prudent cost of providing service when fixing rates. Proposed paragraph (2) provides no additional guidance to the Commission regarding the application of prudence to U&U. (T. 317).

The Citizens recognize that economies of scale may be present in a facility that may affect used and useful. However, this paragraph provides no clear direction or insight on how such issues should be addressed or calculated in U&U calculations, it merely raises the point. (T. 53). Therefore, the Citizens' recommendation is that this paragraph is not necessary and can be removed. We would point out, however, that Citizens' recommended paragraph (3) to the proposed rule will provide for alternate methodologies or revisions to U&U calculations that would allow for the flexibility for economies of scale to be considered. (T. 53).

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?

POSITION: *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.*

DISCUSSION: The Citizens believe paragraph (3) alternative calculations, should read:

(3) If any party believes a used and useful calculation should be utilized in a specific case which differs from the provisions of this rule, such calculation may be provided along with supporting documentation. The party proposing the alternative calculation shall have the burden to prove that the alternative calculation is more appropriate for the specific case than application of the calculation provided by this rule. Examples of such specific cases that might warrant the use of alternative used and useful calculations include but are not limited to: economies of scale, service area restrictions, factors involving treatment capacity, well drawdown limitations, changes in flow due to conservation or a reduction in the number of customers, and alternative peaking factors. (T. 53-54,323)

Proposed paragraph (3) gives the utility the ability to provide alternative calculations, along with supporting documentation if the utility believes it is appropriate. (T. 53). The Citizens agree that there may be instances where the standard U&U calculations may not be appropriate or may not provide an accurate U&U percentage. In fact, it would be difficult to craft a rule with strict calculations that would accurately calculate used and useful for all cases. (T.53). Some level of flexibility is desirable in order to produce more accurate U&U percentages for some cases. However, with the way proposed paragraph (3) is worded only the utility has that ability to propose such calculations. (T.53). Under the Citizens' recommended paragraph (3) any party has the ability to propose alternative calculations if it is deemed necessary given the specifics of the water system in question. (T. 54).

Witness Woodcock is of the opinion that the provision for alternative calculations in proposed paragraph (3) of the rule should be expanded to allow all parties, the Utility, Staff and Intervenors, the ability to deviate from the prescribed methodology of the rule where circumstances warrant it. (T. 66). In these cases he believes each party should have the burden of proof in documenting their position. He also believes that there are many cases throughout the proposed rule that can be incorporated in this paragraph, including economies of scale, service area restrictions, limiting factors involving treatment capacity, well drawdown limitations and changes in flow due to conservation or a reduction in number of customers. (T. 66).

For different reasons Witnesses Seidman and Guastella do not believe that paragraph (3) should provide other parties with the opportunity to utilize alternative calculations. (T. 132). However, Witness Guastella appears to argue that, nonetheless, any party to a rate proceeding has the right to address every aspect of the utility's filing. (T.212, 132). When adopted, this rule will define the Commission's policy concerning the calculations of the U&U percentages for water for production, treatment, storage and high service pumping. (T. 318). The rule will equally affect all of the parties' and staff's future recommendations to the Commission regarding these subjects. When specific circumstances warrant, the Commission should be permitted to consider alternative U&U calculations, not only from the perspective of the utility, but also from the perspective of staff and intervenors. (T. 318). The alternative calculation provision should be available to all parties, including staff, who can meet the burden of proof as to the appropriateness of the alternative calculation under the specific facts of the case. (T. 318). Witness Redemann appears to agree with the Citizens' position on this issue. In his testimony on

page 283, he proposes new language to proposed paragraph (3) to allow any party to a proceeding to propose and justify an alternative calculation. However, I note in his Revised Exhibit 21, page 2 of 5, MATRIX, that his language removes the word “utility” rather than explicitly stating “any party”. Citizens believe that our recommended paragraph (3), which refers to “any party” is clearer on this issue than Witness Redemann’s proposal. (T. 318).

Under questioning, Witness Woodcock agreed that consideration of economies of scale is one of the special considerations that more properly should be included in the alternative calculation paragraph (3). (T. 73). If a utility can document the benefits received by customers from economies of scale the company can present their arguments to the Commission under this paragraph. (T. 53).

Witness Woodcock believes that service area restrictions are another special circumstance that can be adequately addressed in the alternative calculation paragraph (3). (T. 56, 66). Likewise, Witness Woodcock believes that other limiting factors such as treatment capacity or drawdown limitations could also be the basis for justifying alternative U&U calculations when any party can provide adequate justification. (T 54, 57-58, 66). According to the Witness Woodcock, decreases in flow due to conservation or reduction in the number of customers can also present special circumstances that might warrant an alternative U&U calculation under paragraph (3). (T. 54, 64, 66).

Witness Woodcock conceded that the more expressly stated and defined language and methodologies the Commission incorporates into the rule the less litigation there will be in the future over specific used and useful issues. (T. 73). However, Witness Woodcock went on to say:

“It is one thing to codify rules to make things administratively expedient, but those rules also have to be carefully considered in the fact that they’re not glossing over or causing potential inequities that could be better handled by some flexibility in those rules.” (T. 72).

Witness Seidman agrees with Witness Woodcock, that service area restrictions, factors involving treatment capacity, well drawdown limitations and changes in flow due to conservation or reduction in the number of customers, are all special circumstances that should be added to the alternative calculations paragraph (3). (T. 211, 212).

Staff Witness Redemann also agrees with Witness Woodcock, that issues of service area restrictions, treatment capacity, well drawdown limitations, and changes in flow due to conservation or reduction in the number of customers would best be handled in the alternative calculation paragraph (3). (T. 282,283) (Revised Ex. 21, Matrix). However, the Citizens argue that the Commission should not include the language concerning “reduction in flows due to conservation or a reduction in the number of customers,” in both paragraphs (2) and (3) as proposed by Staff’s Revised Exhibit 21, Matrix. The Citizens recommend this language be included once in the alternative calculations paragraph (3).

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?

POSITION: *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.*

DISCUSSION: Subparagraphs (4)(a) – (c) should be deleted from the rule. In the opinion of Witness Woodcock, if a water treatment system has a set of special circumstances that would allow one to consider it to be 100% used and useful other than

through the calculations presented in the proposed rule, it should be addressed by the alternative calculation paragraph (3). (T. 54).

Proposed subparagraph (a) states that a system should be 100% if it is the “minimum size necessary” to provide service to existing customers plus growth and fire flow. (T. 55). This subparagraph is redundant in the fact that the used and useful calculation itself would determine the extent the system provides service to the customers, and if it is the minimum size, then the calculation would show U&U of 100%. (T.55). This provision provides absolutely no standards or definition to the term “minimum size necessary” and likely would result in significant amounts of subjective opinion testimony from engineering experts as to what the term “minimum size necessary” means. (T. 55). Ultimately, this subparagraph would complicate the very U&U calculations this rule seeks to simplify. Citizens recommend this subparagraph be removed in its entirety. (T. 55).

Proposed subparagraph (b) addresses issues when the water system is built out or “mature” with no expansion to the service area. Maturity should not factor in the U&U of a water treatment system. The age of a system has nothing to do with a system’s capacity, demands, growth rate, unaccounted for water, fire flow or any of the other parameters that comprise the U&U calculation. (T. 55). New systems can buildout quickly and be 100% U&U or systems can take a while to reach 100% U&U. In either case, the U&U percentage can be accurately calculated as provided by the proposed rule, with Citizens recommended changes. (T. 55). In the case where the system is built out and there is no potential for service area expansion there may be a case for departing

from the established U&U calculations. However, this can easily be addressed in the alternative calculation paragraph (3).

Staff Witness Redemann testifies that if the utility's service territory is built out and there is no apparent potential for expansion in the surrounding area, the system should be considered 100% used and useful if it appears that the system was designed prudently. (T. 281). Witness Redemann's testimony only partially speaks to the requirements stated in paragraph (4)(b) of the proposed rule. First, his testimony does not explain or describe the necessity of including the term "mature" in the rule. (T. 319). As Witness Woodcock states in his testimony, the age of a system does not affect a U&U calculation. Secondly, Witness Redemann adds to his testimony that the system must not only be built out, with no apparent potential for expansion, **but also must be designed prudently.** (T. 319). The Citizens agree, and believe that one of the initial steps to determining if a system was prudently designed to perform a U&U calculation. At the hearing Witness Redemann was questioned about subparagraph (4)(b):

Q Right. As part of evaluating if a system is prudently designed, this prudent standard you mention in your system, would you not also look to see if it was substantially oversized for the service area which is now built out?

A Yes. (T. 297-298).

The way the proposed rule is written there is no consideration given to the prudent design of the system and a system would be considered 100% U&U with no further consideration. Built out systems should be treated no differently than other systems, unless it can be documented that the system has service area restrictions that prevent expansion and that the system was prudently designed. (T. 319). In his testimony in Revised Exhibit 21, it appears that Mr. Redemann agrees with Witness Woodcock's

recommendation to include service area restrictions as a reason for proposing alternative calculations from those otherwise applicable to the utility. (Revised Exhibit 21, page 2 of 5). The Citizens do not believe it is appropriate to include consideration of service area restrictions in both paragraph (3) and proposed paragraph (4)(b). Further paragraph (4)(b) should not be considered unless Staff Witness Redemann's testimony concerning prudence of design is also included.

Proposed subparagraph (c) allows for 100% U&U if a system is served by one well. While the concept of firm reliable capacity (total capacity of all units less the capacity of the largest) implies that there will always be more than one well, in fact, there are instances where water systems are designed and permitted with a single well, as provided in FDEP Rule 62-555.315, F.A.C. (T. 56). When there is only one well the U&U calculation should be based on the capacity of that single well. Under the proposed rule a single well can be operating within a system that is 50% built out and operating at 50% capacity and yet be considered, inaccurately, as 100% used and useful. (T. 56). Removing the largest well from service is an acceptable way to calculate the U&U for multiple well systems. However, for single well systems there is not a redundant, standby well that can be removed. In these cases the U&U should be evaluated on the single well in service. (T. 56).

FDEP allows small systems to be constructed with only one well and just because a system has only one well doesn't mean that it should be considered automatically 100% U&U with no further analysis. (T. 320). A well could be grossly oversized with respect to the customer demand and the application of this paragraph to the rule would

completely ignore that fact and automatically have the customers bear the cost of the unused portion of the well. (T. 320). Mr. Seidmann's discussion of instantaneous demand does not address the impact of this rule on the many single well systems that are currently in service. (T.214). For existing systems, automatically considering a well 100% U&U with no analysis is not likely to improve the service the customers receive, but will definitely affect how much the customers pay for that service. (T. 320).

Concerning subparagraph (4)(c) Witness Redemann testifies:

"For systems with only one well, the system should be considered 100% used and useful unless it appears that the well is oversized." (T. 281).

The rule as proposed does not include "...unless it appears that the well is oversized".

From how the proposed rule reads a one well system is 100% U&U, with no further analysis necessary. (T.320). It is the Citizens' position that a U&U analysis on a single well system would be necessary to determine if, in fact, the well is oversized. (T. 320)

At the hearing Witness Redemann was questioned concerning subparagraph (4)(c):

Q Okay. You state in this testimony that the single well system should be considered 100 percent used and useful unless it appears to be oversized?

A Yes, that's correct.

• • •

Q And determining whether it is oversized, would be one way is to look at the well's capacity relative to the system demands?

A Yes, that would be one way to do it. You probably would need to consider economies of scale. Well, for one well, we would consider that to be 100 percent used and useful.

Q But if there was still some question of being oversized, wouldn't you make allowances for growth, excessive unaccounted for water, and, if provided, fire flow?

A Well, that would all be looked at in the calculation, of course.

- Q To determine whether it was oversized or not?
 A Yes.
 Q And those would be other factors that you would consider?
 A Yes.
 Q Is that not the used and useful calculation?
 A That is the used and useful calculation.
 Q Okay. Thank you. ..." (T. 295-296).

One well systems should not automatically be considered 100% U&U. One well systems should only be considered 100% U&U if it can be determined that the well is not oversized, a determination that should require consideration of all of the factors that comprise the normal U&U analysis.

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.

POSITION: *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.*

DISCUSSION: The Citizens believe that subparagraphs (6)(a) and (b), regarding firm reliable capacity, should read:

(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.

(a) For systems with no storage, the firm reliable capacity shall be expressed in gallons per minute.

(b) For systems with storage, the firm reliable capacity shall be expressed as gallons per day, based upon 24 hours of pumping, unless there is documented restrictions to the hours of pumping as required by the Water Management District or other regulatory body, in which case the restriction shall apply.

All of the parties agree with the first sentence of proposed paragraph (6). (T. 57, 132, 215, 277). Witness Woodcock recommends that the provisions relating to limiting

factors such as treatment capacity or draw down limitations restricting pumping capacity should be addressed in the alternative calculation paragraph (3). (T. 57-58). Witness Woodcock also recommends the provision to permit utilities to provide justification for removing more than one well out of service, when there are multiple wells, should be addressed in the alternative calculation paragraph (3). (T. 57-58) Witness Woodcock argues that these special circumstances being addressed in the default firm reliable capacity paragraph over complicate the capacity issue. (T. 57) With respect to limiting treatment capacity there may be a case where a relatively small part of a water treatment plant unreasonable limits the entire water treatment component to a much less capacity than would otherwise be the case, which would automatically cause the U&U to be higher than if the components were all properly sized. (T. 59). Ultimately, the customers would bear the impact of U&U for water treatment capacity that is under utilized. Similarly, simply removing additional wells from the U&U calculation if the utility believe there is justification also causes the U&U percentage to be higher. (T. 59). In the event that there is a documented, valid, case for addressing a limiting capacity issue, or removing more than one well from service, it can be addressed by the Citizens' neutrally worded recommended paragraph (3). (T. 58).

So long as utilities can seek an alternative calculation under paragraph (3) for the above limiting factors, Witness Seidman did not object to Witness Woodcock's simplified version of paragraph (6), which includes only the first sentence of proposed paragraph (6). Staff Witness Redemann also agrees that with the expansion of paragraph (3) to include other factors limiting treatment capacity, that paragraph (6) could be

simplified to include the first sentence. (Revised Exhibit 21, page 2 of 5 and 3 of 5, MATRIX).

Subparagraph (6)(a) speaks to the units of expressing the firm reliable capacity of systems with no storage in terms of gpm. Citizens believe that as long as the units of the U&U calculation are consistent, gpm, gph or gpd can be used. That being said, we do not object to the wording of the subparagraph (6)(a). (T. 58). No other parties have an objection to the wording of paragraph (6) (a).

As stated in Citizens' position, 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 entire proposed rule. The way the proposed rule is written there are different firm capacity criteria depending on whether the water treatment facilities have storage or not. Subparagraph (6)(b) states that well capacity for systems with storage should only be evaluated for the wells pumping for 12 hours instead of 24 hours. (T. 59). The number of hours a well can be pumped is completely independent of the downstream components of a water treatment system, including, storage. (T. 59). The FDEP rules for public water supply wells make no specific reference to a requirement that would require that well pumps be limited to 12 hours of pumping per day if the system includes storage. In fact, prudent and efficient design of a well system would seek to maximize the pumping time to the daily maximum of 24 hours. (T. 59).

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. (T. 59)

The Citizens recognize that in Florida the production capacity of wells can change not only with geography but also can change over time as aquifers are stressed or salt water intrusion becomes a concern. (T. 59-60). When this is an issue the solution is generally an amount of reduced pumping or relocation of wells. In no way is the solution something as simple as reducing well pumping to 12 hours a day. (T. 60). In order to address these issues when they arise a more accurate U&U percentage can be derived by evaluating the specific system in detail. We also believe the Citizens' recommended language concerning consideration of limiting factors required by the Water Management Districts or other regulatory body helps address this issue. (T. 60). The Citizens' proposed wording of subparagraph (6)(b) expressly provides that any documented restrictions to the hours of pumping as required by the Water Management District or other regulatory body shall be recognized and limit the hours of pumping used to determine the capacity denominator of the fraction, which expresses the U&U percentage for treatment with storage. (T. 58-59).

Staff Witness Redemann offers two reasons for Staff's endorsement of the 12 hour pumping limitation. The first, is he believes it is environmentally responsible and prudent to rest a well for 12 hours per day so that the ground water can recharge, because excessive pumping has caused wells to draw air, sand and gravel, and caused salt water intrusion, land subsidence and collapsed wells. (T. 278). Second, the use of 12 hours per day of pumping also reflects the general usage pattern of customers. (T. 278). However, general usage patterns of customers (demand) in no way determines the actual firm reliable capacity of the wells, which are determined by their actual rated pumping capacities. This argument confuses the numerator with the denominator. Further,

regardless of usage patterns, daily change in demands in a water system do not always correlate to well pump usage times. (T. 322). In fact, for systems with storage and high service pumping daily demand patterns have no direct bearing on well field capacity. (T. 322). The Citizens respectfully argue that it is neither necessary nor environmentally responsible or prudent for the Commission to dictate by rule a 12 hour pumping limitation for all water systems throughout the entire state of Florida.

Witness Jenkins, Director of the Division of Water Use Regulation for the St. Johns River Water Management District provided extensive testimony on the role the Water Management District plays in protecting the water resources of the State, and the agency's permitting of wells in the State. In his testimony Witness Jenkins states:

“... Section 373.016 (d) provides that it is the policy of the Legislature ‘To promote the availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems.’ The basic goal of this provision is to allow for allocation of water to meet all reasonable-beneficial needs while, at the same time, **protecting and ensuring sustainability of water resources** and natural systems. The regulatory standard interwoven throughout WMD rules is the **prevention of ‘harm.’**”

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When evaluating whether a proposed use meets CUP requirements and whether the use will cause harm, the WMDs look at **individual** and **cumulative** impacts. That is, WMD's **look to see whether the proposed use of water alone will cause harm and whether all existing uses put together will cause harm.** WMD rules allow permits to be requested and issued for many different types of uses including public water supply, commercial/industrial purposes and agriculture. CUP regulates the entire “use cycle” associated with a given water use. For example, the withdrawal of water from the resource, its use by the permittee, and the ultimate discharge are all covered under the permit.

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WMDs regulate all waters in the state. This includes ground, surface, storm, and reclaimed water, as well as seawater. Water in Florida belongs to the State of Florida. The only ownership right an entity has is a ‘usuary’ right pursuant to Florida’s regulatory requirements. An entity has a right to use water only if it is doing so in accordance with Florida’s regulatory requirements. CUPs are issued with finite permit durations. These durations range from very short (less than 1 year) up to 20 years and are based on the applicant’s demonstration that the proposed use of water will meet CUP requirements. When a CUP expires, the permittee must apply for a renewal of the CUP and demonstrate that the use of water will meet all permitting requirements in existence at the time of

renewal. CUPs are issued with “limiting conditions” that govern the water use. Generally, limiting conditions either prohibit actions (e.g., using more water than allocated) or mandate actions (e.g., hydrologic monitoring). CUPs for large water users such as public water supply utilities may contain 40 or more conditions.” (Emphasis supplied) (T. 258-259).

Witness Jenkins was asked how the aquifer is affected by pumping in various circumstances. He was asked if the aquifer was affected by the amount of continuous pumping each day, i.e., 12 hours, 16 hours, or 24 hours a day. (T. 259-260). He responded:

“To fully answer those questions, I would need to discuss very technical aspects of ground and surface water hydraulics and hydrology. Instead, and for the purposes of this PSC proceeding I have attempted to provide a basic, less technical explanation below. How an aquifer is affected by pumping is primarily a function of four things. These are the:

- Hydraulic aspects of the aquifer;
- Design of the wells and wellfield;
- **Volume of water being withdrawn; and**
- **Rate of withdrawal.**

When a well is pumped in Florida, it creates a three dimensional ‘cone of drawdown’ in the aquifer. This cone of drawdown reduces the potentiometric pressure in an artesian aquifer (such as the Floridan Aquifer) and can also lower water levels in water table aquifers (such as the Surficial Aquifer). Lower aquifer pressure and water levels generally result in a change and increase in recharge into the aquifer. The change in recharge can occur from above, beside and/or below the aquifer zone being pumped. Lowering of water levels and change in recharge can cause undesirable impact or harm to water resources. However, **it does not always cause undesirable impacts or harm.** Actually, because of consumptive use regulation and permitting, withdrawals are managed such that they **rarely cause such impacts or harm.** The potential for undesirable impacts or harm due to pumping of ground water is a function of many factors. Examples of undesirable impacts or harm that can be caused by the lowering of water levels and a change in recharge due to pumping include:

- lowering of water levels in lakes and wetlands, resulting in loss of habitat;
- reduction in spring flows, resulting in loss of habitat;
- saline water intrusion, reducing the usability of the water resource;
- increased sinkhole formation, which can cause personal and economic damage; and
- interference with existing legal uses of water, impairing the ability of a water user to access the water resource.

As discussed above, when a well is pumped, a cone of drawdown is created. The cone “grows” in the aquifer, starting from when the well pump is turned on and will increase in size until the volume of water that is being withdrawn is offset by increased recharge.

When the cone stops growing, hydrologists refer to it as ‘reaching steady state conditions.’ In Florida, **localized steady state conditions are typically reached quickly**, i.e., in a matter of hours or days after a well starts pumping, although a true steady state can take years to achieve. The quickness with which localized steady state conditions can be reached in Florida is an important factor in the discussion of whether operating wells for shorter or longer periods helps avoid harm that can be caused by pumping. Another important aspect of this topic is the role of cumulative drawdowns. **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.** For example, the concerns associated with large-scale environmental impacts in central Florida are **due to cumulative withdrawals in the region.**” (T. 260-261).

Witness Jenkins was asked if there was a benefit from operating wells for shorter periods of time instead of longer periods. He responded:

“The answer to this question depends on many factors. However, because steady state conditions are reached very quickly in Florida and because impacts of concern result primarily from regional cumulative withdrawals, management of these impacts is typically a function of regulating long term withdrawals. In evaluating whether a proposed withdrawal will cause harm to lakes, wetlands and spring flows, the WMDs generally look at the volume of water that will be used in a single month, or more commonly, each year. However, since some impacts such as localized environmental harm, interference and upconing 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.

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. More importantly, shifting withdrawals from one well to another may be more beneficial in addressing such impacts since doing so moves withdrawals away from the point of concern. (Emphasis supplied) (T. 261-262).

Witness Jenkins testimony does not support Witness Redemann’s contention that all pumps statewide should be rested 12 hours per day in

order to permit the aquifer to recharge. To the contrary, such a 12 hours versus 24 hours requirement typically provides no benefit to the aquifer. (T. 262). However, to the extent there are localized resource impacts including interference with existing legal uses, or saline water intrusion, short-duration operation of wells can be used to avoid or minimize the impacts. (T. 262). In these specific localized cases the Water Management Districts have the authority and even duty to impose pumping limitations that are appropriate for the specific situation.

Witness Jenkins was asked whether water supply pumps should have “down time” each day so that the aquifer can recharge in the pumping zones. He responded:

“Yes, the general answer to this question is that pumps **may** need downtime in **specific cases** to avoid harms such as localized resource impacts, interference with existing legal uses or saline water intrusion. **However, it is more important to regulate longer term withdrawals of water, to prevent harm.**” (Emphasis supplied) (T. 262).

Witness Jenkins was asked if it was reasonable to base firm reliable capacity on a duration of well pumping less than 24 hours. He responded:

“Yes, it is reasonable. It is important that a water supply utility have the ability under PSC rules to install additional pumps and wells so that they have withdrawal capacity above what is needed to meet **typical water user demands**. Although it is very specific to the particular utility, utilities will typically have an installed withdrawal capacity of at least 120% of their peak day water demand. In some cases, the amount of “redundant” installed withdrawal capacity needed can be much higher. The reason for the additional installed capacity is that wells often do need to be taken off-line for short, and sometimes, long periods of time. When a well is off-line, water demand will need to be met via withdrawals from other wells. Examples of why wells go, or are taken, off-line include:

1. Standard maintenance and replacement of pump hardware;
2. Unanticipated pump and/or well failure;
3. Distribution system problems that isolate a well or wellfield;
4. Water quality/contamination in a well or wellfield;
5. Shifting withdrawals to avoid unacceptable water resource impacts (ex. To avoid saline water upconing); and
6. Shifting withdrawals to avoid interference with other existing legal uses of water. Well operation of a multiple-wellfield water supply utility can be complex. A typical system will have wells that are operated almost continuously to provide a base flow (this is acceptable in areas where continuous withdrawal does not cause resource harm), wells that are operated intermittently to augment the base flow it meet peak demands, wells that allow for shifting of withdrawals if such are needed to address well-specific impact concerns and back-up wells that may only be occasionally operated when other wells are not available or during emergencies. While it may appear unwarranted to the layperson, having all this additional installed capacity is necessary in order to provide reliable service. **The bottom line is that, it is reasonable to base firm reliable capacity on something less than an assumption that all wells will be pumped 24 hours a day, 7 days a week since the wellfield taken as a whole cannot operate this way.**” (T. 263-264). (Emphasis supplied)

The Citizens agree that firm reliable capacity is not based upon the assumption that all wells will be pumping 24 hours a day, 7 days a week. To the contrary, all of the parties agree that the largest well is removed from the formula and that the remaining wells on a system with storage are sized to meet single max day demand. For all of the other times of the year the well field will be pumping at varying durations, frequently substantially less to meet what Witness Jenkins refers to as the pumping duration to meet “typical water user demands” which is substantially less than what is needed to serve the single max day of the test year.

The important thing for the Commission to do is to compare “apples to apples”. In determining the used and useful percentage of water treatment with storage, the Commission should compare the single maximum day of the test year, excluding excessive unaccounted for water, plus a growth allowance based on the requirements of

Rule 25-30.431, F.A.C., and, where provided, a minimum of either the fire flow required by local governmental authority or 2 hours at 500 gpm, representing the **maximum** flow demand in the numerator, with the **maximum** total rated firm reliable capacity of the pumps. The only way to have a proper and fair match in the U & & fraction is to compare maximum demands in the numerator with total rated firm reliable capacity in the denominator. To compare maximum demands in the numerator with one-half of the total rated firm reliable capacity in the denominator produces a serious mismatch, which is extremely unfair to the ratepayers of the State of Florida, whose rates have paid for a total firm reliable capacity that Staff of the Utilities propose this Commission to discount by one-half.

This concept of proper matching is followed in the Commission's used and useful rule for wastewater treatment plant, Commission Rule 25-30.432, F.A.C. This rule provides that the flow data to be used in the numerator of the equation for calculating the used and useful percentage of a wastewater treatment plant shall be the same period or basis (such as annual average daily flow, three-month average daily flow, maximum month average daily flow) as the period or basis stated for the permitted capacity on the most recent operating permit issued by the Florida Department of Environmental Protection (DEP). The Commission's Rule for wastewater treatment insists that there be a proper matching of numerator demand with denominator capacity. The wastewater flow data in the numerator must be expressed on the same basis, average daily flow, three month average daily flow, or maximum month average daily flow, as the denominator capacity of the wastewater treatment plant.

Commissioner Skop grappled with this issue when he engaged in a series of questions posed to Witness Woodcock. (T. 108-111). During this questioning Commissioner Skop appeared to be attempting to define “theoretical maximum” or rated firm reliable capacity versus “actual or expected utilization” or “expected flow” or “expected normal” flow. In response to his questions Witness Woodcock attempted to answer by saying that the actual total rated firm reliable capacity of the remaining wells (properly matched denominator) will not operate 24/7 365 days a year. (T. 110). Witness Woodcock stated that the remaining wells would operate 24 hours a day on the single max day, and for systems with more than one well, that would still be true even with the largest well taken out of service. (T. 110). But that fact in no way should cause the Commission to cut in half the actual rated total firm reliable capacity of the wells. It is this total rated capacity that should be compared to the maximum day flow to produce a properly matched used and useful percentage.

Staff and Utility witnesses have argued that one of the purposes of proposed rule 25-30.4325, F.A.C., is to codify past Commission policies and decisions in order to settle issues and reduce rate case expense. It is also true that in recent years Staff has recommended and past Commissions have accepted and issued orders applying the 12 hours pumping limitation. (T. 278-279). However, in the many preceding years many recommendations were filed and orders issued that never mentioned or applied a 12 hours pumping limitation. It is after this evidentiary hearing that this Commission has the opportunity to decide which policy will be prescribed by the first Commission rule on water treatment and storage used and useful calculations. The Citizens respectfully request that the Commission recognize the actual total firm reliable capacity of the pumps

in the denominator of the used and useful fraction, based upon 24 hours of pumping, unless there is documented restriction to the hours of pumping as required by the Water Management District or other regulatory body in which case the restriction should apply.

This rule hearing provides this Commission with an important opportunity to adopt a policy that will be fair to the consumers of the State of Florida, by recognizing the actual rated firm reliable capacity of treatment with storage, a capacity paid for by the ratepayers, when determining its used and useful percentage.

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

POSITION: *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.*

DISCUSSION: Witness Woodcock in his prefiled direct testimony recommended providing a range of 1.5 to 2 in the peaking factor to be used to determine peak hour demand of a water system. He also provided a guideline for the use of the higher or lower peaking factor. (T. 60-61). However, in his rebuttal testimony he agreed to use 2 as his recommended default peaking factor while adding peaking factor to the list of special circumstances that might justify an alternative calculation under paragraph (3). (T. 323).

Witness Woodcock recommends changing the wording (7)(a)2. and (7)(b)2. concerning the average of the 5 highest days within a “30 day period” in the test year to “within the maximum month” of the test year. (T. 61). This recommendation provides for a somewhat easier calculation, in that water utility flow data is provided on a calendar month basis. (T. 61). It is also consistent with the method that has been used by the

Commission in the past. (T. 61). Witness Seidman testifies that he prefers the use of average of the 5 highest days of the “maximum month” of the test year as recommended by Witness Woodcock, rather than in a “30 day period” as proposed in subparagraphs (7)(a)2. and (7)(b)2. This preference would apply only if the Commission continues its policy of using the average of 5 days, if there is an anomaly in the maximum day. (T. 220).

Witness Woodcock also recommends removal of subparagraphs 7(a)3. and 7(b)3. from the proposed rule. Subparagraph (7)(a)3. requires the use of 1.1 gpm/ERC in the event that actual maximum flow data is not available. The Citizens’ believe this should be eliminated as it attempts to generalize an uncommon occurrence that could be addressed under the Citizens’ recommended alternative methodology paragraph (3). (T. 62). Although it may occasionally occur that a utility may not have the data that is typically required for a water system to be in compliance with industry standard practice and regulatory requirements, there are a myriad of ways a peak demand could be generated. (T. 62). Arbitrarily applying a demand factor ignores the fact that some data may be available that could be utilized to produce a reasonable demand number and that number may be higher or lower than the proposed 1.1 gmp/ERC, particularly in service areas where there is not wide spread irrigation or a low ratio of persons to ERC. (T. 62). It is impossible to specifically pin down how maximum day demands may be determined from a utility that does not have good records, but the records that are available or other data could be used on a system specific basis that would be more accurate than 1.1 gpm/ERC. (T. 62). Furthermore, this subparagraph would seem to reward utilities for

not keeping good flow records for rate proceedings, if their actual flows are less than 1.1 gpm/ERC. (T. 62).

The Citizens' recommendation concerning subparagraph (7)(b)3. is similar to our recommendation concerning (7)(a)3. Subparagraph (7)(b)3. should also be removed because the subparagraph attempts to assign a blanket value of 787.5 gpd per ERC as the maximum day demand to be used for systems that do not have actual maximum flow data. (T. 63). The Citizens believe that such a generalized factor ignores the possibility that some specific data may be available that could result in a more accurate U&U percentage. (T. 63). Witness Seidman agrees with Witness Woodcock that subparagraphs (7)(a)3. and (7)(b)3. should be deleted from the rule. (T. 222). Witness Seidman does not believe the proposed method of estimating is valid for all size and character of systems. (T. 222).

Witness Guastella did not feel it was appropriate to make U&U adjustments to plant in service based upon excessive unaccounted for water. (T. 126). However, Commissioner McMurrian asked Witness Guastella if he didn't see the proposed rule as more of a stick incentive for the utility to take the right approach to excessive unaccounted for water. (T. 159). Also Commissioner Skop questioned Witness Guastella whether he thought that the proposed rule's limitation for unaccounted for water didn't serve somewhat as a deterrent function to the extent that it would preclude complacency in not fixing small problems before they grow into bigger ones. (T. 161). Further, Staff questioned Witness Guastella that a utility experiencing a large unaccounted for water problem could result in the utility having to build more plants sooner than it would otherwise have to in order to serve growth. (T. 163). Which is one

of the justifications to make adjustments to peak demand based upon excessive unaccounted for water. Witness Guastella avoided providing a responsive answer to Staff by merely saying that Staff's hypothetical wouldn't happen because if the Company "...reached 75% of their capacity DEP is going to tell them to start reporting so that you start expanding the capacity. And then as your demands start to exceed the 75 percent, you're already planning for the expansion of the system and DEP requires you to do that." (T. 163). This answer does not address the fact that very high unaccounted for water can cause water plants to be so poorly utilized that customers have to bear the cost of premature construction of additional plant in order to serve growth. Thus, there is a connection between adjustments to used and useful plant and excessive unaccounted for water, and it is appropriate for the Commission to codify its long standing practice of making adjustments to the used and useful calculation because of excessive unaccounted for water.

In conclusion, the Commission should adopt paragraph (7) as proposed, except it should substitute the average of the 5 highest days within the "maximum month" in the test year rather than within a 30-day period in the test year. Also, the Commission should delete subparagraphs (7)(a)3. and (7)(b)3.

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?

POSITION: *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).*

DISCUSSION: Paragraph (10) provides for the Commission to consider other relevant factors when determining whether an adjustment to plant and operating expenses

would be appropriate because of excessive unaccounted for water. Witness Woodcock recommends that the other relevant factors are more appropriately located in alternative calculation paragraph (3). (T. 64).

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

POSITION: *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).*

DISCUSSION: Proposed paragraph (11) provides that the Commission will consider other relevant factors, such as whether flows have decreased due to conservation or reduction in the number of customers when making its used and useful calculations. Witness Woodcock recommends that when these circumstances arise it should be addressed in the alternative calculations paragraph (3). (T. 64). The Citizens have expressly added changes in flows due to conservation or a reduction in the number of customers as a basis for making an alternative calculation under paragraph (3). (T. 54). Staff Witness Redemann recommends moving (11) to paragraph (2). (T. 282). The Citizens believe it would be more appropriate to locate it in paragraph (3). (T. 64).

ISSUE16: Should there be a separate used and useful calculation for high service pumping?

POSITION: *Yes.*

ISSUE17: If there is a separate calculation for high service pumping, what is the proper definition for high service pumping?

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

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

POSITION: *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.*

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

POSITION: *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.*

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

POSITION: *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.*

**DISCUSSION
FOR ISSUES 16
THROUGH 20:**

The discussion after Issue 3 presents the Citizens' arguments for providing a separate used and useful calculation for high service pumping. The proper definition for high service pumping is provided above and is supported by testimony from Witness Woodcock. (T. 45). The proper definition for peak demand for high service pumping is also provided above and is supported by testimony from Witness Woodcock. (T. 51-52). The language for peak demand for high service pumping recommended by the Citizens is similar to the requirements of FDEP for high service pumps as detailed in subsection (15) of FDEP Rule Chapter 62-555.320, F.A.C. (T. 52). The firm reliable capacity of high service pumps are determined as provided above and is

supported by testimony from Witness Woodcock. (T. 63). The calculation for the used and usefulness of high service pumping is performed as provided above and is supported by testimony from Witness Woodcock. (T. 63, 114-115).

Respectfully submitted,

s/Stephen C. Reilly
Stephen C. Reilly
Associate Public Counsel
Office of Public Counsel
c/o The Florida Legislature
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400
(850) 488-9330

CERTIFICATE OF SERVICE
DOCKET NO. 070183-WS

I HEREBY CERTIFY that a true and correct copy of the foregoing Citizens' Post-Hearing Brief has been furnished by electronic mail and U.S. Mail to the following parties on this 26th day of February, 2008, to the following:

Ralph Jaeger, Esquire
Rosanne Gervasi, Esquire
Florida Public Service Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Martin S. Friedman, Esquire
Rose Sunstrom & Bentley, LLP
2180 W. State Road 434, Suite 2118
Longwood, FL 32779

Kenneth A. Hoffman, Esquire
Marsha E. Rule, Esquire
Rutledge, Ecenia, Purnell
& Hoffman, P.A.
P.O. Box 551
Tallahassee, FL 32302

s/Stephen C. Reilly
Stephen C. Reilly
Associate Public Counsel