State of Florida

ORIGINAL

Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

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

DATE: April 13, 2007

TO: Ann Cole, Commission Clerk - PSC, Office of Commission Clerk

FROM: Lawrence D. Harris, Senior Attorney, Office of the General Counsel LDH

RE: Docket No. 070183-WS

Please file the attached workshop comments in the above docket file.

LDH
Attachments

7/24/06

FLORIDA PUBLIC SERVICE COMMISSION

PROPOSED RULE DEVELOPMENT: RULE DEVELOPMENT WORKSHOP, 9:30 AM, 7/26/06

RULE TITLE: Water Treatment Plant Used and Useful Calculation, Rule No. 25-30.4325

OFFICE OF PUBLIC COUNSEL COMMENTS AND SUGGESTIONS

We suggest the title of the rule be changed to "Water Plant Used and Useful Calculations", and that the rule also address the used and useful calculations for high service pumping and distribution and transmission systems.

(1) Definitions – We suggest the definitions be rewritten as follows:

(a) Water Plant: Water plant includes all facilities necessary to produce, treat, and deliver potable water to the customers. This may also include a storage component if utilized by the utility, and if applicable, facilities to deliver purchased treated water to the transmission and/or distribution system.

(b) Peak Demand: Peak demand includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus an allowance for fire flow based on local requirements, if fire flow is furnished and to the extent not furnished by storage, and a growth allowance based on the requirements in Rule 25-30.431, FAC.

(c) Excessive Unaccounted for Water (EUW): Excessive unaccounted for water (EUW) is water produced in excess of 10 percent of the accounted for usage, including water sold, water used for flushing, fire fighting or water lost through line breaks. When determining whether EUW exists in a system, the Utility shall furnish the following information for analysis:

1. Documentation of all raw water pumped during the test year
2. Documentation of all water sold
3. Documentation of all water used for flushing with appropriate logs, rates and times of flushing and total water used for flushing at each occasion

4. Documentation of any water used in the treatment plant process that does not go into the distribution system
5. Documentation of water used for fire fighting to include pumping records for the specific day of the fire
6. To be considered as accounted for water usage, water lost through a line break shall be documented with date and time of line break; size of main broken; the time repairs are completed and flow rates through the break to completion of repairs. Miscellaneous system leakage shall not be a part of accounted for water but is classified as unaccounted for water.

(2) OPC objects to the basis of the used and useful calculations being the total system since we have found that most all systems have one or more components that are very much oversized. We suggest that the individual used and useful calculations be required for each component of a water plant. At a bare minimum, the following should be added to (2).

(a) If any component in a water plant is found to be oversized in excess of its FDEP required size, then each component of the water plant will be analyzed for its individual used and usefulness. The capacity of each component in the denominator of the used and useful formula shall be the actual capacity of the component while the numerator in the formula shall be the appropriate demand flow plus required fire flow, if provided and to the extent not provided by storage, plus an allowance for 5 years growth.

(b) Required fire flow will not be added to the flow for any component if fire flow is already provided by storage and high service pumping. These components include all components ahead of the storage facilities including wells and treatment facilities. If the required fire flow is partially furnished by storage and high service pumping, then each component will have fire flow added to the appropriate flow for that component to the extent not furnished by storage and high service pumping. Water plants without storage

will have the required fire flow added to the appropriate flow for all components, if fire flow is provided.

(3) OPC suggests that the following be added to (3).

(a) Any component of a water system that has a capacity greater than the FDEP required sizing for the component shall be considered as oversized.

(b) Unless the Utility can demonstrate that any oversized component will save the rate-payers an equal or greater amount than the additional cost of the oversized component through ratepaying over a five year period, then the lowered used and useful percentage of the oversized component will be applied.

(c) Prudence or economies of scale claimed by a Utility for an oversized component must be proven by the Utility by preparing an analysis of the additional cost of the oversized component as compared to the savings that the ratepayers will enjoy through the oversized component at a future time. Due consideration shall be given in the analysis to the additional costs the ratepayers will suffer due to higher rates until the capacity of the oversized component is needed. The analysis must show that the cost to the rate-payers due to the oversized component is at least matched by the future savings after the demand meets the capacity of the oversized component and not simply that the Utility will benefit from the economy of scale.

(4) OPC objects to the wording of (4) to the extent that the used and useful calculations of all of the components of water plant are to be determined by dividing the peak flow by the reliable capacity of each component. We assume that this statement does not mean the "peak flow" as engineers define peak flow, but means the maximum daily flow for systems with storage and the peak hourly flow for systems without storage, which would be the FDEP requirement for design for the wells and treatment facilities. This statement should be reworded in line with FDEP requirements for design of water plant facilities with storage and without storage. With that understanding, OPC still objects to

this proposed (4) and says that at a minimum, the following should be added:

"....., except where any individual component is determined to be oversized."

and

(a) If any component within the water plant is found to be oversized in excess of the required FDEP capacity, then the used and usefulness of each individual component of the plant will be analyzed individually by dividing the appropriate demand flow plus fire flow, if provided and to the extent not furnished by storage, plus an allowance for 5 years growth by the actual capacity of the oversized component. Appropriate demand should be defined as the demand required for design of water plant facilities by the FDEP.

(5) OPC objects to the wording of "peak day for a system with storage facilities" which would be absolutely wrong and not in accordance with FDEP requirements for design of water plant facilities with storage. We assume that what is meant by "peak day" was intended to mean maximum day flow. Only systems without storage need to be designed for peak hourly flow. This wording should be revised to comport with FDEP requirements for design. With that understanding, OPC still objects to the multiplier of 2 times the maximum daily flow to obtain the peak hourly or daily flow since maximum daily flow is already being used in the calculation which then has fire flow added, if furnished and to the extent not furnished by storage, and five years growth added to the peak flow. To obtain peak flow a multiplier of 1.5 should be more than sufficient to obtain peak flows. Most authorities suggest a multiplier of from 1.5 to 2 be used. The lowest of the recommended range of 1.5 should be used since we are also adding fire flow, if furnished and to the extent not furnished by storage, and five years growth to the peak flow. OPC offers the following comments and suggested revised language to the subsections of paragraph (5).

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

1. the single maximum day (SMD) in the test year, if there is no anomaly on that day such as a fire or line break, less excessive unaccounted for water divided by 1440 minutes in a day times one and one-half. [(SMD – EUW)/1,440 x 1.5]. An anomaly in daily flow is hereby defined as any individual day's flow that is 20% or greater than the average of the 5 highest flow days of the maximum flow month in the test year, excluding any anomaly, or
2. the average of the 5 highest days (ADF) within the highest flow month, excluding any anomaly, in the test year less excessive unaccounted for water divided by 1440 minutes in a day times one and one-half. [(AFD – EUW)/1,440 x 1.5], with any anomaly being as defined in 1 above.
3. OPC objects to 1.1 gallons per minute per equivalent residential connection in the test year, (1.1 x ERC), being used as the peak flow, if the actual maximum day flow data is not available. OPC believes that there are actual or equivalent historical records available for all water systems that could be used for mobile home parks through large single family residential developments for all areas of Florida. Flows per day vary greatly depending upon the type of residence, with mobile home parks often having a usage of 3,000 gallons or less per month (100 gallons per day) per residence. To use 1.1 gallons per minute would be absurd for these type developments since this equates to 792 gallons per day based on a 12 hour day. Furthermore, most all single family residences except the very largest high end homes have a daily water usage of much less than 396 gallons per day which would be 792 divided by 2. To arbitrarily use a flow rate of 1.1 gallons per minute per ERC would be extremely unfair to the great majority of the ratepayers.

(b) Peak day demand, expressed in gallons per day, shall include:

1. the single maximum day in the test year, if there is no anomaly on that day such as a fire or line break, less excessive unaccounted for water (SMD – EUW) with anomaly in daily flow being hereby defined as any individual day's flow that is 20% or greater than the average of the 5 highest flow days, not including anomalies, of the maximum month in the test year, or

2. the average of the 5 highest days within the maximum flow month, not including anomalies, in the test year less excessive unaccounted for water (AFD – EUW), with anomaly in daily flow being hereby defined as any individual day's flow that is 20% or greater than the average of the 5 highest flow days of the maximum month in the test year, not including anomalies.

3. OPC objects to 787.5 gallons per day per equivalent residential connection (787.5 x ERC) being used as the peak flow if the actual maximum day flow data is not available. OPC believes that there are actual or equivalent historical records available for all water systems that could be used for mobile home parks through large single family residential developments for all areas of Florida. Flows per day vary greatly depending upon the type of residence with mobile home parks often having only a usage of 3,000 gallons per month or less per residence (100 gallons per day). To use 787.5 gallons per day per residence would be absurd for these type developments. Furthermore, most all single family residences except the very largest high end homes have a daily water usage of much less than 394 gallons per day which would be 787.5 divided by 2. To arbitrarily use a flow rate of 787.5 gallons per day per ERC would be extremely unfair to the great majority of ratepayers.

4. In no case shall flow of a single maximum day or the average of the five highest days of the maximum flow month be used which include a day or days when there was a fire or a line break, nor shall a flow of any single maximum day or the average of the five highest days of a maximum flow month be used for any time outside the test year.

(6) OPC objects to the definition of firm reliable capacity and the manner of calculating the firm reliable capacity given in subsection (6)(a). OPC believes that a firm reliable capacity should be determined for each component from supply wells to treatment plant to high service pumps and be calculated in accordance with subsections (a), (c) and (d) as follows:

(a) OPC objects to the manner of calculating the Firm Reliable Capacity (FRC) of supply wells and specifically basing the FRC on 12 hours only of pumping. Modern pumps can operate continuously for thousands of hours. In actual usage, well pumps are shut off periodically during the day by the pumping controls when the system reached a preset adequate pressure. Therefore, even under extreme demand days, the pumps are resting for brief periods throughout the day and there is no danger of overworking or overheating the pumps. A realistic limitation on the hours of pumping in calculating the FRC should be set at 20 to 22 hours of pumping per day which would be a very safe operation for the well pumps. Only if the Water Management District for the area sets a limitation on well pumping per day to protect the aquifer should a limitation of a lower number of hours of pumping per day be adopted. To set a 12 hour limitation of pumping in calculating the FRC is an arbitrary and artificial limitation which bears no relationship to the safe operation of the pumps or the protection of the aquifer in most areas. The total well capacity with the largest well out of service for 20 to 22 hours of pumping should be calculated as the FRC of the wells.

(b) OPC agrees

(c) The firm reliable capacity of the treatment facility should be taken as the lowest limiting flow component in the treatment process, except where any major component of the treatment process is oversized, in which case all individual major components of the treatment process will have their used and usefulness calculated separately and each component should have its own FRC.

(d) The FRC for high service pumps should be calculated exactly as discussed above for water supply wells since FDEP rules for high service pumps are very similar to those for supply wells.

(7) OPC asks for clarification of paragraph (7). If it is meant that a Utility will be allowed to show the demand in the numerator of the used and useful formula as the peak flow as compared to the actual capacity in the denominator, then OPC strenuously objects. Such a rule would guarantee that all storage facilities with less capacity than peak demand would be 100 percent used and useful which would be most all storage tanks of all systems. OPC recommends that the used and useful calculation of storage facilities follow the requirements for the sizing of storage facilities as contained in the Ten States Standards and in AWWA Manual 32 for determining the demand in comparison to the actual storage capacity. The various requirements of Ten States Standards and AWWA Manual 32 and OPC's recommendation for determining the used and useful percentage for storage facilities follows:

1. Ten States Standards requires fire flow storage if fire flow is furnished.

2. AWWA Manual 32 suggests that equalization storage be provided in an amount equal to 20 to 25 percent of the Average Day Flow (ADF) with fire flow storage if fire flow is provided.

3. Ten States Standards states that minimum storage equal to ADF be provided for systems not providing fire flow with the proviso that storage capacity can be reduced

when source of supply and treatment facilities have sufficient capacity with standby power.

4. OPC recommends that one-half day ADF plus fire flow, if furnished, plus an allowance for five years growth be used in determining the demand in comparison to the actual storage capacity to calculate the used and useful percentage of the storage facilities. The one-half day ADF would be more than adequate to meet AWWA manual 32 requirements for 20 to 25 percent of ADF plus fire flow. Fire flow requirements for most systems are 500 to 750 gallons per minute for a two hour duration which equates to 60,000 to 90,000 gallons. The one day ADF mentioned in Ten States Standards should be reduced to one-half day ADF because the wells and treatment facilities are designed for maximum day flow and all facilities are required to have emergency power.

(8) OPC objects to paragraph (8) including subparagraphs (a), (b), and (c) and recommends that subparagraphs (a), (b), and (c) be deleted and paragraph (8) be rewritten as follows:

(8) Water Plant, including all of its components, wells, treatment facilities, storage facilities, high service pumping and transmission and distribution systems, shall be considered 100 percent used and useful if the service territory the system is designed to serve is built out and there is no potential for expansion of the service territory.

(9) OPC recommends that the following be added to paragraph (9).

If the reason for excessive unaccounted for water (EUW) during the test year is simple leakage of distribution piping due to failure of the utility to maintain the system properly, then the full amount of excessive unaccounted for water will be adjusted from the appropriate plant flows and operating expenses with EUW being determined per documentation provided by the Utility.

(10) OPC agrees that the Commission should consider whether flows have decreased due to conservation or a reduction in the number of customers, but the Utility should be

required to furnish full proof of these factors causing flow decreases before making any adjustments to the used and useful calculations.

OPC offers the following additional comments:

OPC recommends that the only way to obtain a true picture of the used and usefulness of water plant is to calculate the used and useful percentages for each of the major components of the plant including the supply wells; the treatment facilities; the storage facilities; the high service pumps and the distribution system. Although not specifically discussed above in the proposed rule for calculating the used and useful percentages for a water system, the high service pumps used and useful calculations should follow the same procedure as discussed above for the supply wells since the Ten States Standards and FDEP rules for sizing of high service pumps are very similar to those for supply wells. The rationale for calculating the used and useful percentage for the distribution system should follow the long time Commission policy of comparing connected lots (ERCs) plus an allowance for five years growth to total available lots (ERCs) which could be served by the system. OPC recommends that all ancillary equipment that goes with a major component of the system should have the same used and useful percentage as the component itself.

OPC requests that the rule address the calculation of the appropriate gallons per day to be used in the growth component of the used and useful percentage. This calculation currently is based on non-rule policy. OPC believes that the growth gallons per day should be determined using the same basis used to determine the demand component in the numerator of the used and useful calculations.

OPC also requests that the rule address the calculation of the excess unaccounted for water using the same basis used to determine the demand component. In other words, if max day

demand is used, then max month average should be used to calculate unaccounted for water, not the annual average.

PROPOSED RULE 25-30.4325
COMMISSION WORKSHOP – JULY 2, 2006

COMMENTS OF
FRANK SEIDMAN
MANAGEMENT & REGULATORY CONSULTANTS, INC.
ON BEHALF OF
UTILITIES, INC AND ITS FLORIDA SUBSIDIARIES

This Commission has been addressing the used & useful concept for water and wastewater systems for approximately 35 years. A general approach has evolved over the years. There have even been generalized formulae developed as a guideline, but there has never been a formal policy or rule adopted by the Commission. Generally speaking, each case stands on its own. There have been two major sets of workshops conducted for the purpose of developing used & useful rules - one in the early 1980's and one consuming the better part of the 1990's. In both of those cases, the whole concept of used & useful was undertaken for all components of water and wastewater systems. They proved to be too broad in scope to result in any meeting of the minds.

The proposed rules narrow the scope considerably and greatly increase the chances of success. The staff is to be commended for its proposal. It is an excellent attempt to codify a generally accepted approach to evaluation of used & useful for water treatment systems.

On behalf of Utilities, Inc. and its Florida subsidiaries, the following comments and observations are constructively submitted.

1. There appears to be a conflict between the title of the rule and the definition in proposed

Rule 25-30.4325(1)(a). The title of the rule is Water Treatment Plant Used and Useful Calculations. Proposed rule 25-30.4325(1)(a) defines a water treatment system. System, as defined, includes production and treatment components, and possibly some storage component. I believe "system" better reflects the intent of the rule and recommend that the title of the rule be changed to Water Treatment System Used and Useful Calculations.

2. I believe it should be further noted that there is no legitimate circumstance wherein storage capacity is ever properly considered a part of the firm reliable capacity of the production and treatment system when used and usefulness is measured by peak day demand. Storage is a component of the distribution system, not the production or treatment system. This is recognized in the way the NARUC Uniform System of Accounts is set up. It is recognized that way in texts dealing with water systems. The American Water Works Association (AWWA) addresses storage in its texts on water distribution, not water treatment. Texts on water treatment plant design do not address storage. The AWWA states, "If treated water was not available from storage, the water treatment plant would have to be large enough to meet the Peak Hour Demand." The AWWA also states, "With adequate storage, water can be treated and pumped into the distribution system at a rate equaling the average demand." The "average demand" referred to is the average of the hourly demands in a day. The peak day demand is the total of the hourly demands for that day or the average hourly demand x 24. So, storage allows the treatment system to be built to serve the peak day demand rather than the peak hour demand. That is why storage capacity cannot be added to production /treatment capacity without also changing the basis for used and usefulness to peak hour demand. The Commission has evaluated used and usefulness on the basis of peak day demand

measured against firm reliable capacity, excluding storage for some 30 years. If the Commission decides to adopt a rule that includes storage capacity as a part of production treatment capacity it will be changing that long standing approach. I would like to point out, that I believe that such a shift in rate-making policy must be supported by expert testimony, documentary evidence or other evidence appropriate to the nature of the issue involved [Florida Cities Water Co. v State, Pub. Serv. Comm'n 705 So 2d 620 (Fla. 1st DCA 1998), Southern States Utilities v State, Pub. Serv. Comm'n 714 So 2d 1046 (Fla. 1st DCA 1998), and Palm Coast Utility Corporation v State, Pub. Serv. Comm'n 742 So 2d 482 (Fla. 1st DCA 1999)].

3. Proposed Rule 25-30.4325(1)(b) includes an allowance for fire flow "based on local requirements." Often it is difficult to determine exactly what the requirement is, if any. Even when there is a local requirement it is sometimes difficult to determine a specific quantity of water requirement and time period of delivery because it is not spelled out. I recommend two things. First, I recommend that the rule continue to include the option of using the standards set by the Insurance Service Organization (ISO), as is already done in the existing MFR forms. Second, I recommend that the option that results in the greatest fire flow quantity be used. I realize that this may appear self serving being suggested by a utility. But it is really a matter of safety. The ISO requires a minimum of two hours availability, but I have seen local codes that require only one hour. A utility should not be penalized for maintaining capacity that can meet the more stringent code. And a utility should not be discouraged from doing so.

4. Proposed Rule 25-30.4325 (1)(c) needs some clarification. According to the proposed

wording, the basis for measurement of UAW is the amount of "water produced." There is no definition of water produced. In the existing MFRs, water produced is referred to as the "water pumped." However, the instructions modify this by stating that the gallons pumped should match the flows shown on monthly operating reports sent to DEP. It would be helpful if this rule clarified this matter by adding the sentence, "The water produced shall match the flows shown on monthly operating reports sent to DEP."

5. Proposed Rule 25-30.4325 (2) requires that used and useful be based on a total system analysis unless one or more components is oversized in anticipation of future growth. I assume that the intent is to make the total system approach the preferred approach and to also standardize the approach. But I believe this wording will cause just more confusion. What qualifies as a "component'? When is a component "oversized"? "Oversized" compared to what? I think the intent of the rule would be better served by language such as, "Except as provided in subsection (7), the used and usefulness of a water treatment system will be based on a total system analysis. If the utility believes an alternative method of analysis is more appropriate, such analysis may be provided, in addition to the total system approach, and must be supported in the MFR, including, where appropriate, considerations of prudence and economies of scale."

6. If the recommendation in 5 above is accepted, proposed Rule 25-30.4325(3) is not necessary and should be deleted. If it is not deleted, the rule should be rearranged because it is confusing, as written. Is a determination of prudence required in all instances and, additionally, a consideration of economies of scale when a component is oversized or are both required only when a component is oversized? Alternative language is, "If any component of a water

treatment system is oversized, the used and usefulness of that component shall include a determination of prudence and consideration of economies of scale.

7. Proposed Rule 25-30.4325(5) indicates that peak demand be based on peak hour for systems with no storage and peak demand for systems with storage. I believe storage vs. no storage is too severe a definition. As staff is aware, there are many small systems that have only hydro pneumatic storage or storage so limited as to provide virtually no ability to provide for fire flow or provide for differences between hourly flows and daily flows. I recommend that the peak hour should be the basis for systems with negligible storage as well as no storage.

8. I have several observations regarding the clarity of proposed Rules 25-30.4325(5)(a) and (b), the calculations of peak hour and peak day.

a. in each case, the base calculation is the maximum day or the average of the 5 highest days less EUW. This is expressed in equations as (SMD-EUW) or (AFD-EUW). It should be noted the SMD and AFD each are ordinarily expressed in the units of gallons per day, while EUW is ordinarily expressed in units of gallons per year. For clarity, there should be an indication that in these equations, EUW is the annual EUW divided by 365 or 366 in leap years.

b. the proposed rule provides for use of the SMD, if there is no anomaly on that day or the average of the highest days within a 30 day period. It is assumed that the intent of the rule is that, if there is an anomaly on the SMD, the next best choice is to use the average

of the 5 highest days. Actually, the next best choice is the next highest day in which there is no anomaly. If it is agreed that the basis for measuring used and usefulness is the peak day, then we ought to try to use the highest day in which there is no anomaly. Averaging several days takes you further, not closer to that base, and the more days that are averaged, the further one is taken from the base. As we have seen in many cases, the true peak typically falls in the peak month, except when there is an anomaly. It is not difficult to determine from utility records if there were anomalous factors. If the utility records are inadequate to make that determination, then the choice of 5 highest days would be appropriate. It is recommended that the language in the proposed rule indicate that peak day demand is defined as the single maximum day in the test year in which no anomaly has occurred or the average of the 5 highest days within a 30-day period if records are insufficient to determine whether anomalies occur.

c. Proposed Rule 25-30.4325(5)(b)3 calls for the use of 787.5 gpd/ERC when computing maximum day flow when actual flow data is not available. It is assumed that amount relates to the 1.1 gpm/ERC for peak hour demand proposed in Rule 25-30.4325(5)(a)3. It would be helpful if staff explained the relationship. It is not intuitively obvious. 1.1 gpm x 60 min x 24 hours = 1584 gpd = peak hour demand = 2 x peak day demand, by rule definition. Therefore, it appears that peak day demand would be .50 x 1584 = 792 gpd/ERC.

9. Proposed Rule 25-4325(6) allows for excluding the largest well for those systems with more than one well in determining firm reliable capacity. Although this is an adequate approach

in most cases, it does not work in all cases. If this proposal were to become a rule, it would not allow for consideration of other circumstances. There are circumstances in which a utility has multiple wells, such that having more than one well out of service at a time has a high probability of occurring. In Docket No. 951056-WS, (Palm Coast Utility Corporation, Order No. PSC-96-1338-FOF-WS, 11/7/96) the Commission allowed for the two largest wells to be out of service in setting the firm reliable capacity because the system had 27 wells. The rule needs to be flexible enough to allow for this type of circumstance.

10. There is another circumstance that is not covered in proposed Rule 25-30.4325(6)(a) that I believe the language regarding limiting components in proposed Rule 25-30.4325(6) may cover, but I would like to make sure. That is the situation in which either the gpm production rate or the hours of production time are limited for reasons of regulating drawdown to prevent salt water intrusion. Systems facing this problem may have multiple wells to allow for staggered and limited operation. The rule should be flexible enough to address this circumstance.

11. Clarification is needed with regard to the interpretation of proposed Rule 25-30.4325(6) in conjunction with (6)b. In (6) it is indicated that the firm reliable capacity of the system is the pumping capacity of the wells unless the capacity is restricted by a limiting factor such as treatment capacity. However, (6)b indicates that if the aeration or disinfection facility includes a storage facility, the usable storage facility shall be included in the firm reliable capacity. These statements seem to be at odds. Even a simple aeration and chlorination plant includes storage. Usually the aerator sits atop a storage structure. This allows for contact time for adequate disinfection to occur prior to the water entering the distribution system, as per DEP design

criteria. The storage size is related to the rate of flow from the well pumps, the contact time required and the rate of flow demanded by the system. The aeration storage is an in-line component of the pumping and treatment process and not an additive to its capacity. If anything, it may be a factor that limits the rate of delivery as contemplated in the proposed language of 25-30.4325(6). It is recommended that proposed Rule 25-30.4325(6)b is conflicting, not necessary and should be removed.

12. Proposed Rule 25-30.4325(8)(c) indicates that a system served by a single well would be considered 100% used and useful. DEP Rule 62-555.315(2), F.A.C. states, "A minimum of two wells shall be connected to each community water system that is using only ground water and that is serving or is designed to serve 350 or more persons or150 or more service connections." It would seem proper for systems of that size with 2 wells to also be considered 100% used and useful.

13. Finally, I believe there should be a general statement that allows a utility to make a case, the burden being on them, for an approach or for consideration of circumstances not covered in the rule. Although one attempts to cover all circumstances in drafting a rule, it is difficult to do so. Once the rule is set it is difficult to change it. Although many water systems share similar traits, there is yet quite a variety of system designs. The rule should provide a means to address circumstances not contemplated in the rule. Otherwise, utilities will be unduly penalized for making otherwise prudent investments and would therefore be discouraged from doing so in the future.

THE UI REVISED TEXT OF THE PROPOSED RULE DEVELOPMENT IS:

25-30.4325 Water Treatment System Used and Useful Calculation

(1) Definitions.

(a) A water treatment system includes all facilities necessary to produce, treat, and deliver potable water to a transmission and distribution system. This may include a finished water storage component, excluding process or hydropneumatic storage, if utilized by the utility.

Reason: The term "system" better defines the intent of this rule. The proposed revisions regarding storage are meant to exclude process water storage or hydropneumatic storage.

(b) Peak demand includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus an allowance for fire flow, if provided, and a growth allowance based on the requirements in Rule 25-30.431, FAC. Fire flow requirements shall be based on applicable governmental or fire marshall determination or the standards set by the independent Insurance Service Organization (ISO), whichever is greater.

Reason: This recognizes that a fire flow demand is only allowed when fire flow is provided, that for safety purposes the greater flow requirement standard is recognized and reflects the options now available under MFR Schedule F-3.

(c) Excessive unaccounted for water (EUW) is finished water in excess of 10 percent of the accounted for usage, including water sold, water used for flushing or fire fighting, and water lost through line breaks. Finished water flows shall match the flows shown on the monthly operating reports required by the Florida Department of

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Environmental Protection. (FDEP) The utility will provide all calculations and support to substantiate other uses.

Reason: Codifies the intent of MFR Schedule F-1 to require gallons reported to match those on the monthly operating reports sent to FDEP. Those reports require only finished water amounts to be reported. Also codifies the requirement to support other uses as currently required in MFR Schedule F-1.

(2) Except as provided in subsection (7), the used and usefulness of a water treatment system shall be based on a total system analysis. If the utility believes an alternative method of analysis is appropriate, such analysis may be provided in addition to the total system approach. The alternative analysis must be supported in the MFR including, where appropriate, considerations of prudence and economies of scale.

Deleted: unless one or more components of the system is oversized in anticipation of future growth.

Reason: The term "oversized" is ambiguous. There is no generally acceptable base against which to determine what is oversized and what is not. The proposed language leaves open the option for alternative analysis.

Deleted: (3) The used and usefulness of a water treatment system shall include a determination as to the prudence of the investment and consideration of economies of scale if any component is oversized.

Reason: Included in proposed change to (2) above.

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

Deleted: (4)

(4) Peak demand is based on a peak hour for systems with no storage capacity and a peak day for systems with storage capacity. Storage capacity is as defined in 25-30.4325(1)(a).

Deleted: (5)

Reason: To be consistent with the proposed definition of storage for purposes of this rule.

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

1. the single maximum day (SMD) in the test year or previous four years in which there is no unusual occurrence that affects the flows on that day such as a fire or line break, less excessive unaccounted for water divided by 1440 minutes in a day times two [((SMD-EUW)/1,440) x 2] (note: EUW = annual EUW/days in the year), or

2. the average of the 5 highest days (AFD) within a 30-day period in the test year, or previous four years, less excessive unaccounted for water divided by 1440 minutes in a day times two [((AFD-EUW)/1,440) x 2] (note: EUW = annual EUW/days in the year), or

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

Reason: To replace the ambiguous term "anomaly" with the term "unusual occurrence" as defined in MFR Schedule F-3; to expand the choice of maximum day to a five year historic period to recognize that plant required for higher earlier peaks is still U&U (revenue adjustments for conservation do not capture this); and to clarify the units for EUW as used in the stated equations.

(b) Peak day demand, expressed in gallons per day, shall include:

1. the single maximum day in the test year or previous four years, in which there is no unusual occurrence that affects the flows, on that day such as a fire or line break, less excessive unaccounted for water (SMD-EUW) (note: EUW = annual EUW/days in the year), or

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2. the average of the 5 highest days within a 30-day period in the test year or previous four years, less excessive unaccounted for water (AFD-EUW) (note: EUW = annual EUW/days in the year), or

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

(5) 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. If the pumping capacity is restricted by a limiting factor such as the treatment capacity, or draw down limitations, 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, the commission will consider such circumstance. The utility must provide support for its position in the MFR.

Reason: Sentence restructuring for clarification and to add draw down limitations. Option for additional well(s) out of service provides flexibility for special circumstances.

(a) Firm reliable capacity is expressed in gallons per minute for systems with no storage capacity and in gallons per day, based on 12 hours of pumping, for systems with storage capacity.

Alternately: (b) If a water treatment system using only aeration or disinfection includes a storage facility as defined in 35-30.4325(1)(a), the usable storage capacity shall be included in the firm reliable capacity and the demand shall be determined on a peak hour basis.

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Deleted: (b) If a water treatment system using only aeration or disinfection includes a storage facility, the usable storage capacity shall be included in the firm reliable capacity.

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Reason: The inclusion of storage capacity as a component of capacity when demand is determined on a maximum day excludes the demand component for which storage is provided. This paragraph should be stricken. If the paragraph remains, the alternative language is necessary.

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(6) If a water treatment system using a treatment process other than, or in addition to, aeration or disinfection includes a storage facility as defined in 25-30.4325(1), the used and usefulness of the storage facility will be determined separately from the water treatment system. For a water treatment system using a treatment process other than aeration or disinfection, storage capacity equaling the peak demand shall be considered 100 percent used and useful. In the calculation of the used and useful percentage of the storage facility, fire flow shall be added to the peak demand.

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(7) 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

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(b) the service territory the system is designed to serve is mature or substantially built out or there is no potential for expansion of the service territory; or

Reason: To recognize that every lot in a service area need not be built upon for it to be considered built out and 100% used and useful. Also to recognize that the "service territory" and the "service territory the system is designed to serve" are not necessarily synonymous.

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(c) a system designed for less than 350 persons or 150 connections is served by a single well or a system designed for 350 or more persons or 150 or more connections is served by a two wells.

Reason: FDEP Rule 62-555.315(2) requires a minimum of two wells for systems designed to serve 350 or more persons or 150 or more service connections.

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(8) In determining 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 whether the reason for excessive unaccounted for water during the test period has been identified and whether a solution to correct the problem has been implemented, or whether the solution is not economically feasible.

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(9) In determining the used and useful amount, the Commission will also consider whether flows have decreased due to conservation or a reduction in the number of customers.

Specific Authority: 350.127(2), 367.121, FS.

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

History: New _____.

GUASTELLA ASSOCIATES, INC.

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July 19, 2006

Mr. Marshall Willis
Bureau Chief of Rate Filings
Florida Public Service Commission
2540 Shumard Oak Boulevard, Gerald Gunter Building
Tallahassee, Florida 32399-0850

Dear Marshall:

I very much appreciate the opportunity to submit issues for consideration at the workshop on used and useful (U&U) on July 26, 2006. I will list the issues in an outline format that includes a brief discussion of each.

Before doing so, I suggest that an overall guideline be established at the outset of the workshop so that U&U considerations produce a methodology that is consistent with the basic legal guidepost for utility rate setting. Specifically, courts have held that utilities must be given enough revenues to cover operating expenses as well as capital costs. In other words, rates must be established on the basis of the cost of providing service. The construction cost of water and wastewater utility plant is a function of sound engineering design and regulatory standards. When engineers design a new water or wastewater system, or when environmental regulators establish design standards, they do not establish capacity on the basis of the maximum demands that the customers will actually impose. Instead, they use the maximum potential capacity, with a built-in safety factor, that will never be reached, in order to assure that the water and wastewater systems will always be reliable, and provide safe and adequate service even if actual demands may increase beyond expectations. It should go without saying that a water or wastewater system is never designed on the basis of "U&U" calculations, and never with respect to a rate setting "test year".

When a properly designed water or wastewater system is constructed, it is the design cost that must be allowed for rate setting under the well-established legal guidepost, because that is the basis for the cost that utilities actually incur. Otherwise, the utility would not be given enough revenue to cover the cost of providing safe and adequate service. I suggest that the single most important principle that should guide the discussion of U&U methodology is that the cost of providing service is based on design criteria, not only actual historical demands. It is a real concern that a particular U&U methodology will become an FPSC rule that would violate the legal guidepost for rate setting.

The following is and outline of issues for discussion:

1. Using maximum demands for only the test year, as proposed, is incorrect, systems are not designed for a rate setting test year but, instead, for the maximum demand whenever it might occur. Thus, maximum demands for earlier years than the test year should be also considered if they exceed the test year maximum demands.

2. The maximum demands should not be adjusted for "excessive lost and unaccounted for water" because the cost of treatment facilities does not diminish if the system's lost and unaccounted for water becomes excessive over time (which the FPSC considers anything over 10%) . The penalty for excessive unaccounted for water should be limited to power, chemicals and purchased water, if the cost to remedy unaccounted for water is not greater than the impact on the incremental costs.

3. The proposed rule does not mention that treatment facilities are not designed to exactly match actual demands but, instead always include a factor of safety. Thus, a treatment plant should be considered 100% used and useful if the arithmetic based on actual demands produces an 80% U&U percentage.

4. The proposed rule does not mention that a system should be considered 100% U&U if it would not be any less costly to serve only existing customers, which is a better way to consider economies of scale.

5. The use of "local fire demands" may lack reality in terms of the cost of providing fire protection service. The local fire demands are typically measured in terms of flow through a single hydrant, but the treatment plant must be designed to meet fire demands that use multiple hydrants and in certain cases (larger systems) coincidental fires.

Marshall, may I take the liberty of asking you to distribute this letter to other participants, or if you send a list to me I will do so. Thank you. I look forward to working with you and the other workshop participants.

Sincerely,
GUASTELLA ASSOCIATES INC.

John F. Guastella
President