State of Florida

ORIGINAL

Public Service Commission

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

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

DATE: April 20, 2007

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

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

RE: Docket No. 070183-WS

Please file the attached comments from Utilities, Inc., on staff's draft Rule 25-30.4325 in the docket file.

LDH
Attachments

PROPOSED RULE 25-30.4325

EXPLANATION OF MODIFICATIONS TO PSC STAFF'S PROPOSED RULE
ON BEHALF OF
UTILITIES, INC AND ITS FLORIDA SUBSIDIARIES

APRIL 19, 2007

We appreciate the opportunity provided at the April 16, 2007 conference to provide input on the proposed rule and for all parties to share their concerns. Utilities, Inc. has six recommended modifications to Staff's latest draft rule. They are shown on the attachment, Utilities, Inc. Mark Up of Staff Draft Rule – 4/19/07. What follows is an explanation and support for those modifications.

1. Lines 10 and 14 of page 1 of the mark up - the words, "or the ISO Fire Suppression Rating Schedule (ISO), whichever is greater" were added. This change addresses concerns that there may not be specific local governmental authority regarding the quantity and duration of fire flow, that such authority may not be explicit or may provide for quantity and duration less than that generally recognized as necessary for safety. This Commission has recognized the ISO (Insurance Services Office) as a standard for determining required fire flow quantity and duration for many years. It is referenced in the current MFR forms, last revised in 1993. It is referenced in the *Water Distribution Systems Handbook* and *Recommended Standards for Water Works*, both of which are engineering references incorporated into DEP Chapter 62-555, F.A.C., Permitting, Construction, Operation and Maintenance of Public Water Systems. It is also referenced in AWWA Manual M31, *Distribution System Requirements for Fire Protection*. We believe that the ISO is recognized as the

standard for minimum fire protection requirements and should be included in the rule as a default basis for determining fire flow quantity and duration. Safety is the main concern. As stated in Section 367.111, F.S., "Each utility provide to each person reasonably entitled thereto such safe, efficient, and sufficient service....

2. Line 10 of page 1 of the mark up - the words, "that exceed storage capacity" are deleted. The purpose of this change is to ensure that for safety purposes, the determination of used and useful include the ability of the water source and treatment system to meet peak demand including fire flow demand. We have often argued that this assures the ability of the system to replenish finished water storage. This modification is bolstered by the comments of DEP in this proceeding. Quoting DEP, "When calculating maximum day demand, a fire should not be considered an anomaly. Fires happen, and water systems often must be sized to provide fire protection. Even if a water system has sufficient fire storage , source and treatment facilities must be capable of replenishing the fire storage on a daily basis so that the fire storage is available on any given day. Thus, maximum day capacity must include fire-flow demand (fire flow rate times fire flow duration)." (Emphasis added). This is consistent with DEP Rules. DEP Rule 62-555.320(6), F.A.C. states, 'The total capacity of all water source and treatment facilities connected to a water system shall at least equal the water system's design maximum-day water demand (including design fire-flow demand if fire protection is being provided)." Finally, in light of changing weather patterns and the severe drought conditions currently affecting Florida, it would be remiss to not recognize fire flow demand as a necessary component in evaluating the used and usefulness of source and treatment facilities.

This is an area where the Commission can act, as it has done in the past, to protect the safety of the consumer.

3. Line 17 of page 1 of the mark-up - the words "and other" are added preceding "water used" and the words "such as" are added following "water used." The rule as proposed by Staff limits other water uses to three specific uses - flushing, fire fighting and water lost through line breaks. The change allows for the inclusion of any other water use that may be indentifiable, without having to spell out each one.

4. Line 18 of page 1 of the mark up - the sentence "Potable water produced should match the flows shown on the Monthly Operating Reports sent to DEP." is added. The reason is to ensure clarity as to the source of the potable water statistics and to maintain consistency with current MFR requirements.

5. Line 20 of page 1 of the mark up – the word "Commission's" is inserted after "The". The purpose is to clarify that the evaluation of used and usefulness referred to is the Commission's and not the utility's.

6. Lines 2-4 of page 3 of the mark up – the entire subsection 25-30.4325(7)2. is deleted. The is the subsection that defaults to using an average of the 5 highest days in a 30 day period for peak demand when there is an anomaly on the single maximum day. After much thought, we have concluded that this option serves no purpose. The basis for design of supply, treatment and storage facilities is the peak demand, the maximum day demand; i.e., the single maximum day demand. All used and useful

evaluation by this Commission has centered on the maximum day demand. The DEP rules for design center on the maximum day demand. The historic purpose of the Commission using the 5 day average concept has always been to avoid using a maximum day with an anomaly. But the proposed rule language in 25-30.4325(7)1. cures that problem because it defines the peak hour demand as "the single maximum day (SMD) in the test year where there is no unusual occurrence on that day ...." (Emphasis added). Thus anomalies are eliminated. If the single maximum day includes an unusual occurrence, it is eliminated from consideration and the next highest maximum day is examined to assure there is no unusual occurrence, etc. This proposed modification will save considerable time and expense for the utility and PSC staff.

We also changed 1.1 gallons per minute at Line 5 of page three to 2.0 gallons per minute to reflect the change announced by Staff at the April 16 conference.

25-30.4325 Water Treatment and Storage Used and Useful Calculations

(1) Definitions.

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

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

(c) Peak demand for a water treatment system includes the utility's maximum hour or day demand, excluding excessive unaccounted for water, plus a growth allowance based on the requirements in Rule 25-30.431, FAC, and any fire flow required by local governmental authority or the ISO Fire Suppression Rate Schedule, whichever is greater. ~~that exceeds the storage capacity.~~

(d) Peak demand for storage includes the utility's maximum day demand, excluding excessive unaccounted for water, plus an allowance for fire flow based on the local governmental authority requirement or ISO standards, whichever is greater, and a growth allowance based on the requirements in Rule 25-30.431, FAC.

(e) Excessive unaccounted for water (EUW) is potable water produced in excess of 110 percent of the accounted for usage, including water sold, and other water used, such as for flushing or fire fighting, and water lost through line breaks. Potable water produced should match the flows shown on the Monthly Operating Report sent to DEP.

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

(3) The used and usefulness of a water treatment system shall be calculated separately from the storage facilities. If the utility believes an alternative calculation is appropriate, such calculation may also be provided, along with supporting documentation.

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

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

(a) The system is the minimum size necessary to adequately serve existing customers plus an allowance for growth, and fire flow if no storage; or

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

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

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

(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, unless the pumping capacity is restricted by a limiting factor such as the treatment capacity, or draw down limitations, in which case, the firm reliable capacity is the capacity of the limiting component or restriction of the water treatment system. In a system with multiple wells, if a utility believes there is justification to consider more than one well out of service in determining firm reliable capacity, such circumstance will be considered. The utility must provide support for its position, in addition to the analysis excluding only the largest well.

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

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

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

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

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

divided by 1440 minutes in a day times two [((SMD-EUW)/1,440) x 2] , or

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

~~3~~ 2. If the actual maximum day flow data is not available, 2.0 ~~1.1~~ gallons per minute per equivalent residential connection (2.0 ~~1.1~~ x ERC).

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

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

2. The average of the 5 highest days within a 30-day period in the test year less excessive unaccounted for water (AFD-EUW), 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).

(8) The used and usefulness of storage is determined by dividing the peak demand plus required fire flow by the usable storage of the storage tank. Usable storage capacity less than or equal to the peak day demand shall be considered 100 percent used and useful. A hydropneumatic tank is not considered usable storage.

(9) Usable storage determination shall be as follows:

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

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

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

(10) To determine whether an adjustment to plant and operating expenses for

excessive unaccounted for water will be included in the used and useful calculation, the Commission will consider all relevant factors, including whether the reason for excessive unaccounted for water during the test period has been identified, whether a solution to correct the problem has been implemented, or whether a proposed solution is economically feasible.

(11) To determine the used and usefulness of water treatment systems and storage facilities, the Commission will consider other relevant factors, such as whether flows have decreased due to conservation or a reduction in the number of customers.

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

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

History: New

Rule 25-30-4325.ldh.doc

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