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	JUN 2 9 Hitter Service Commission EPSOPTAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD EXECUTIVE DIRECTOR TALLAHASSEE, FLORIDA 32399-0850 -M-E-M-O-R-A-N-D-U-M-
<b>DATE:</b> June 29, 2	

то:	Mary Andrews Bane, Executive Director
FROM:	Timothy J. Devlin, Director, Division of Economic Regulation $i$
RE:	Change to Staff Recommendation (Issue 4) in Docket No. 010503-WU regarding Item No. 5 on the June 29, 2004 Agenda Conference

Staff is requesting approval to make changes to the above mentioned recommendation. These changes are substantial in nature and therefore, a written type and strike modification will be presented. Although these changes are substantial, we do not recommend deferral because timing, resolution of the black water issue, is critical. Aloha plans to purchase water from the Tampa Bay Water Authority (TBW) in January of 2005 and this water will include the use of chloramines. Unless measures are taken, the blending of TBW water will exasperate the black water problem. It is very important that the process to remove hydrogen sulfide be coincident with this change to chloramines.

On June 16, 2004, OPC filed a letter written by Dr. Kurien dated June 13, 2004, outlining three modifications to the rate case order. This was in response to Aloha's June 9, 2004, petition to modify the rate case order. In response to this filing by OPC on the day before the recommendation was due, certain staff revised the draft to recommend, among other things, testing for hydrogen sulfide at point of delivery as opposed to the well site. This change to the draft was not brought to the attention of Division of Economic Regulation management and differed from the agreed upon position that was reflected in the June 14, 2004, draft that was circulated for review. The June 14, 2004, draft recommended that the hydrogen sulfide standard should be consistent with the TBW standard which involves testing at the well site.

CMP While some testing at the point of delivery may have merit, we do not have information COM \_at this time on whether testing for hydrogen sulfide at that point is feasible or what associated costs may be incurred. This revision includes a recommendation that Aloha be required to file CTR comments within 60 days from the date of the Commission's vote on this item regarding the ECR \_\_\_\_\_feasibility of collecting and testing monthly samples at domestic meters.

- GCL \_ OPC \_\_\_\_\_ C: Charles Hill, Deputy Executive Director OPC \_\_\_\_\_ Rick Melson, General Counsel
- MMS \_\_\_\_\_
- RCA
- SCR
- SEC 1
- OTH

Approvek

FPSC-COMMISSION CLERK

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**ISSUE 4**: Should the Commission grant Aloha's motion to modify the rate case order, to change the 98% standard for removal of hydrogen sulfide contained therein to agree with the Tampa Bay Water Standard of 0.1 mg/L?

**RECOMMENDATION:** Yes, Aloha's motion to modify the rate case order should be granted in part and denied in part. The fourth ordering paragraph of the rate case order should be modified to read that "Aloha shall make improvements to its wells 8 and 9 and then to all of its wells as needed to meet a goal of 0.1 mg/L of sulfides in its finished water at the point of delivery with the customer's piping. Compliance with such requirement shall be determined based upon samples taken monthly at a minimum of two sites at domestic meters most distant from the multiple treatment facilities. Such sites shall be rotated to provide the greatest likelihood of detecting any departure from the maximum levels permitted. as that water leaves the treatment facilities of the utility. Compliance with such requirement shall be determined based upon samples taken at least annually from a point of connection just after all treatment systems and before entry of such water into the transmission and distribution system of the utility. Aloha shall implement this standard no later than February 12, 2005." The Commission should direct Aloha to use the treatment process that Aloha concludes will achieve this level of treatment in the most cost-effective manner. Additionally, Aloha should be required to file comments within 60 days from the date of the Commission's vote on this item regarding the feasibility of collecting and testing monthly samples at domestic meters as proposed by Dr. Kurien. Finally, the Commission should require monthly progress reports, as set forth in the staff analysis. (Walden, Daniel, Gervasi)

## STAFF ANALYSIS:

#### Modification of Rate Case Order

In the fourth ordering paragraph of Order No. PSC-02-0593-FOF-WU (the rate case order), the Commission ordered Aloha to, by no later than December 31, 2003, "make improvements to wells 8 and 9, and then to all of its wells, to implement a treatment process designed to remove at least 98% of the hydrogen sulfide in the finished water." In the fifth ordering paragraph of the order, the Commission required Aloha to submit a plan within 90 days showing how it intends to comply with that requirement.

In its motion to modify the rate case order, Aloha states that it submitted the requisite report on October 18, 2002, and noted therein that achieving the 98% removal standard was at best very expensive, and at worst, impossible. Attached to the motion as Exhibit A is a letter dated July 23, 2003, from OPC to the Commission, stating that the Citizens agree that the 98% removal standard should be replaced with other standards. The letter notes that the Tampa Bay Water Authority (TBW) uses a maximum total level of 0.1 mg/L standard, and that additional standards may also be appropriate, depending on the final audit report findings.

Aloha states that it continues to work with Dr. Levine, who was originally hired by the Citizens to review possible additional treatment alternatives, and intends to move forward with the recommendation of Dr. Levine to implement one of the appropriate treatment options. The Dockets Nos. 020896-WS and 010503-WU June 17, 2004

utility believes that the Commission should modify the rate case order to eliminate the 98% removal requirement as unreasonable and/or inappropriate, and that the standard provided by TBW should be adopted in its place, including the testing requirements to maintain such compliance. Finally, Aloha states that all such modified requirements should be effective by the revised deadline imposed by Order No. PSC-03-1157-PCO-WU, such that the language of the fourth ordering paragraph of the rate case order be revised to read as follows:

Ordered that Aloha Utilities, Inc. shall make improvements to its wells 8 and 9 and then to all of its wells as needed to meet a goal of 0.1 mg/L of sulfides in its finished water as that water leaves the treatment facilities of the utility. Compliance with such requirement shall be determined based upon samples taken at least annually from a point of connection just after all treatment systems and before entry of such water into the transmission and distribution system of the utility. Aloha should implement this standard no later than February 12, 2005.

On June 16, 2004, OPC filed a letter written by Dr. Kurien dated June 13, 2004 on behalf of the CAC, which OPC adopts by reference as its response to Aloha's motion. The letter states that any modification to the rate case order should be qualified to include the following language:

- 1. The reference to sulfide in "finished water" should be stated as a maximum contaminant level for total sulfides of 0.1 mg per liter of delivered water at the point of its entry into the domestic system at the domestic meter;
- 2. The improvements should be such that sulfide present in raw water or generated during treatment and transmission will be removed, not converted, to a level not to exceed 0.1 mg/L in finished water delivered at the point of entry into the domestic system; and
- 3. Compliance with such requirements shall be determined based upon samples taken at least once a month at a minimum of two sites at domestic meters most distant from each of the multiple treatment facilities. Such sites shall be rotated to provide the greatest likelihood of detecting any departure from the maximum levels permitted.

It appears to staff that the 98% removal standard required by the rate case order is not attainable for all of Aloha's wells, due to low concentration of hydrogen sulfide in some of the wells. For example, concentrations ranged between 0.61 mg/L to 2.43 mg/L in November, 2003. Removing 98% of 0.61 mg/L (.5978 mg/L) is thus not feasible. TBW is a wholesale water supplier in the area and has voluntarily imposed a standard for hydrogen sulfide not to exceed 0.1 mg/L for its finished water. Staff recommends that this standard be applied by Aloha because it appears to be reasonable and attainable, and will diminish the occurrences of black water.

Staff notes that TBW has already begun using this standard, and Aloha will be blending its water with TBW water when water is purchased through Pasco County. Regarding water

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blending, it is significant to note that beginning in January, 2005, TBW will be using chloramines for disinfection. Pasco County will also convert to the use of chloramines at that same time. In order for Aloha's water to be compatible then with purchased water, Aloha will have to convert from chlorination to the use of chloramines. Staff has been informed by both the utility's engineering consultant and Dr. Levine that treatment for hydrogen sulfide is necessary in conjunction with converting to chloramines so that the black water problem is not exacerbated. This modification will have the added benefit of allowing Aloha to produce water that is compatible with purchased water, which will further enhance the water quality provided to Aloha's customers.

It appears to staff that qualifiers nos. 1 and 32, as outlined by Dr. Kurien in response to Aloha's motion to modify the rate case order, are reasonable and should not be included in the modification. While staff understands the concerns raised by Dr. Kurien in qualifier no. 1 regarding maintaining the 0.1 mg/L goal throughout the distribution system, this does not match the standard set by TBW, which involves compliance testing at the point of connection with its bulk customers. In addition, staff has concerns regarding Aloha's purchase of water from Pasco County's treatment plants which is blended with the water provided by TBW, and the resulting impact on sulfide of those two waters being introduced into Aloha's system. Pasco County has not agreed to the same compliance standard. Therefore, water from TBW, when blended, may adversely impact Aloha's water at the point of delivery. However, **q** Qualifier no. 2, the requirement that the improvements must result in removal, as opposed to conversion, of sulfides not to exceed the 0.1 mg/L standard, would have the effect of eliminating any treatment process which oxidizes, rather than removes, hydrogen sulfide.

<u>Staff recommends that qualifier no. 3 regarding monthly samples taken at domestic</u> meters merits further review. Therefore, Aloha should be required to file comments within 60 days from the date of the Commission's vote on this item regarding the feasibility of collecting and testing monthly samples at domestic meters as proposed by Dr. Kurien. As discussed further below, staff does not recommend that the Commission prescribe the treatment methodology that Aloha should use in order to comply with the requisite treatment standard. This is a business decision that should be made by Aloha's engineering experts. Therefore, staff does not recommend the inclusion of that qualifiers in modifying the rate case order.

For the foregoing reasons, staff recommends that Aloha's motion to modify the rate case order be granted in part and denied in part. The fourth ordering paragraph of the rate case order should be modified to read that:

Aloha shall make improvements to its wells 8 and 9 and then to all of its wells as needed to meet a goal of 0.1 mg/L of sulfides in its finished water at the point of delivery with the customers' piping. Compliance with such requirement shall be determined based upon samples taken monthly at a minimum of two sites at domestic meters most distant from the multiple treatment facilities. Such sites shall be rotated to provide the greatest likelihood of detecting any departure from the maximum levels permitted. as that water leaves the treatment facilities of the utility. Compliance with such requirement shall be determined based upon samples taken at least annually from a point of connection just after all treatment

systems and before entry of such water into the transmission and distribution system of the utility. Aloha shall implement this standard no later than February 12, 2005.

In so recommending, staff recognizes that the Florida Supreme Court has found that:

orders of administrative agencies must eventually pass out of the agency's control and become final and no longer subject to modification. This rule assures that there will be a terminal point in every proceeding at which the parties and the public may rely on a decision of such an agency as being final and dispositive of the rights and issues involved therein. This is, of course, the same rule that governs the finality of decisions of courts. It is as essential with respect to orders of administrative bodies as with those of courts.<sup>1</sup>

Nevertheless, the Court continued by stating that:

We understand well the differences between the functions and orders of courts and those of administrative agencies, particularly those regulatory agencies which exercise a continuing supervisory jurisdiction over the persons and activities regulated. For one thing, although courts seldom, if ever, initiate proceedings on their own motion, regulatory agencies such as the commission often do so. Further, whereas courts usually decide cases on relatively fixed principles of law for the principal purpose of settling the rights of the parties litigant, the actions of administrative agencies are usually concerned with deciding issues according to a public interest that often changes with shifting circumstances and passage of time. Such considerations should warn us against a too doctrinaire analogy between courts and administrative agencies and also against inadvertently precluding agency-initiated action concerning the subject matter dealt with in an earlier order.<sup>2</sup>

With the passage of time, the parties and staff have come to realize that the 98% standard is unattainable on a system-wide basis. Therefore, staff believes that the public interest warrants modification of the standard to a more realistic standard which has been adopted by TBW, and that this action fits squarely within the reasoning of the <u>Peoples Gas</u> Court.

# Other Options

1. <u>Direct Aloha to implement a specific treatment</u>. Rather than specifying a standard for the amount of hydrogen sulfide allowed in the finished water, the Commission could order the utility to implement a new, specific treatment process to reduce the hydrogen sulfide concentrations in the finished water. This could be any one of the treatment methods included in Dr. Levine's report, including aeration, oxidants, and membrane technology. According to Aloha, H2O2 oxidation is the least cost alternative recommended by Dr. Levine in her study.

<sup>&</sup>lt;sup>1</sup> Peoples Gas System, Inc. v. Mason, 187 So. 2d 335, 339 (Fla. 1966).

Aeration, which is the method used by Pasco County coupled with storage, is not a feasible alternative for Aloha due to the compact size of the well sites.

Aloha's consultant has stated that H2O2 could be implemented simultaneously with the chloramine process by January, 2005. However, representatives of the CAC have expressed reservations over using H2O2 due to the lack of statistical performance data for hydrogen sulfide removal in drinking water. While H2O2 has been used for the treatment of drinking water, it has not been used for the purpose of reducing hydrogen sulfides in drinking water. Scientific review suggests that it will be effective for that purpose, but results have not been proven in a full scale utility application. As discussed in the Case Background, Attachment B is the response by Aloha to staff's data request concerning the costs for implementation of treatment options contained in Dr. Levine's report.

Commission practice has been not to micro-manage the business decisions of regulated companies, but to instead focus on the end-product goal. In keeping with this established practice, staff does not recommend that the Commission prescribe the specific treatment process to be used in this case. Prudency reviews in general rate cases provide more than ample protections for the public interest. The Commission's involvement in the determination of which treatment alternative that Aloha implements should take the form of a prudency review during the rate proceeding wherein Aloha requests, and carries the burden to prove, that the costs of the treatment process should be included in rates. This is the tool the Commission now uses to protect the public interest while avoiding the direct management by the Commission of utility operations.<sup>3</sup>

2. Purchase all water from Pasco County for Seven Springs. Staff considered an alternative that would involve the purchase of all of Aloha's water from Pasco County. Aloha is currently in negotiations with the County for a new bulk water agreement, which will potentially result in the utility coming into compliance with its WUP. However, in conversations with staff, County officials have indicated that the County cannot provide sufficient bulk water supply to the entire Seven Springs area on a going-forward basis without investing in substantial infrastructure to assure that its supply is not compromised for its own customers. The County has offered to provide up to 45,000,000 gallons per month (1.5 MGD), but Aloha's 2003 annual report shows 103,016,000 gallons was provided to the Seven Springs customers in June, 2003. Thus, the demand exceeds the supply. For this reason, purchasing all of its water from the County does not appear to be a viable alternative.

## Monthly Reports to Staff

Aloha is now in the process of planning its strategy for the installation of treatment equipment to include design, permit application to the DEP, pilot testing of the process, and installation of the equipment at each of the treatment plant sites, such that the treatment process will be operational by no later than January, 2005. Timelines have not yet been established for any of the steps. In light of this, staff recommends that Aloha provide the staff with monthly

<sup>&</sup>lt;sup>3</sup> See, e.g., Order No. PSC-94-0296-PHO-EI, issued March 15, 1994, in Docket No. 930676-EI, <u>In Re: Petition of</u> Florida Power Corporation to open investigation into Tampa Electric Company's proposed construction of 69 kV transmission line to serve the Cities of Wauchula and Fort Meade.

updates of the progress made each month and the events planned for each upcoming month. If tests were conducted during the past month, Aloha should provide a summary of the test results. Updates should be provided to staff by the tenth of each month beginning July 10, 2004 through August, 2005.

# <u>Summary</u>

Considering the alternatives and approaches noted above, staff believes that the utility and its consultants should decide the treatment method to be chosen to attain the goal of hydrogen sulfide reduction to 0.1 mg/L. Aloha is already meeting standards set forth by the DEP, and has achieved a reduced level of monitoring for lead and copper due to past compliance with the lead and copper rule. Additionally, Commission practice is not to specify a method of treatment for a regulated utility, but rather to set a goal or standard to be reached. Staff notes that any change requested in the water treatment process must be approved by the DEP, so Aloha will rely upon the expertise of that agency's district office in Tampa in addition to the opinion of its consulting engineer. Moreover, staff believes that two of the three qualifiers suggested by Dr. Kurien are reasonable and should be included in the modification of the rate case order.

Based upon the foregoing, staff recommends that the Commission grant in part and deny in part Aloha's motion to modify the rate case order. The fourth ordering paragraph of the rate case order should be modified to read that "Aloha shall make improvements to its wells 8 and 9 and then to all of its wells as needed to meet a goal of 0.1 mg/L of sulfides in its finished water at the point of delivery with the customers' piping. Compliance with such requirement shall be determined based upon samples taken monthly at a minimum of two sites at domestic meters most distant from the multiple treatment facilities. Such sites shall be rotated to provide the greatest likelihood of detecting any departure from the maximum levels permitted, as that water leaves the treatment facilities of the utility. Compliance with such requirement shall be determined based upon samples taken at least annually from a point of connection just after all treatment systems and before entry of such water into the transmission and distribution system of the utility. Aloha shall implement this standard no later than February 12, 2005." The Commission should direct Aloha to use the treatment process that Aloha concludes will achieve this level of treatment in the most cost-effective manner. Additionally, Aloha should be required to file comments within 60 days from the date of the Commission's vote on this item regarding the feasibility of collecting and testing monthly samples at domestic meters as proposed by Dr. Kurien, Finally, the Commission should require monthly progress reports, as set forth above.