



May 13, 2016

VIA E-FILING

Carlotta S. Stauffer, Commission Clerk
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399

RE: Docket No. 150269-WS; Application for limited proceeding water rate increase in Marion, Pasco, and Seminole Counties, by Utilities, Inc. of Florida.
Our File No. 30057.224

Dear Ms. Stauffer:

The following are the responses of Utilities, Inc. of Florida, (“Utility”) to the Staff’s Fourth Data Request dated May 4, 2016:

Secondary Standards		
	Allowed Level	
Contaminant	Value	Unit
Iron	0.3	mg/L
Color	15	Units

Test Values 2015				
Summertree Wells				
	#1	#2	#13-17	Max
Iron	0.038	0.076	0.38	0.38
Color	17	18	13	18

Please refer to the Tables above. Table 1 represents the allowed levels of iron and color contaminants under DEP secondary standards. Table 2 represents the 2015 test values for Iron and Color for each Summertree well.

- Both Iron and Color were found to exceed DEP secondary standards in the 2015 testing of Summertree wells. Has anything been done to bring these numbers into compliance? If not, why?

RESPONSE: It is important to clarify that even though the iron concentration at Well 13 is greater than DEP’s Maximum Contaminant Level of 0.3 mg/L, the Utility is not out of compliance with the Department’s secondary drinking water standard for iron because the sum of the iron and manganese concentrations is less than 1.0 mg/L. Also, the Utility has been adding a polyphosphate sequestrant at Wells 2 and 13, the two dominant water sources, as a component of the water treatment process since 2012. No sequestrant is added at Well 1 as the iron concentration is significantly lower at that well, and therefore, the use of a sequestrant is not warranted at Well 1. Also, Well 1’s production capacity of less than 100 gpm reflects the limited impact of Well 1 on

water quality throughout the system in general. This is because of the much larger production capacity from Wells 2 and 13, 526 gpm and 810 gpm respectively.

In an effort to reduce the color of the finished water in addition to maximizing the value of adding the polyphosphate sequestrant, the Utility executes an extensive flushing program that includes the use of multiple automatic flushing valves placed at key locations throughout the distribution network. These flushing points are also metered so that the Utility can easily confirm that the flushing valves are working as designed and to quantify the volume of water used for this purpose.

The sequestrant used to keep iron in solution is a polyphosphate compound specifically formulated for this application. When a sequestrant is not used, iron may precipitate out of solution resulting in discolored water, staining of surfaces, and a change in taste. The effectiveness of a sequestrant is dependent on a number of factors including water age, pH, ionic forms of iron present in the source water, water temperature, and the type and concentration of sequestrant used. Consequently, in order to optimize water quality at all times and at all locations throughout the distribution system, the execution of a comprehensive flushing program is critical.

Additionally, the Utility, with the help of a qualified professional engineering firm, researched various alternative treatment methods and their costs. The engineering evaluation identified multiple treatment options that would be able to reduce iron and color substantially at the point of entry of the water into the distribution system.

2. Is the connection to Pasco County expected to decrease the Iron and Color levels in the water supply? Please explain your response.

RESPONSE: Yes, it is the Utility's understanding that Pasco County Utilities is not dependent solely on groundwater for its water supply. Assuming the interconnection is constructed and placed into service, the water supplied by Pasco County to UIF at Summertree will be a blend of treated groundwater and surface water. The likelihood of Pasco's water containing elevated iron or color levels is reduced significantly due to Pasco's ability to utilize surface water to a large degree, which contain very little soluble iron and thus avoid the precipitation of iron out of solution.

Water samples were taken by the Utility in March 2014 from two locations within the Colony Lakes subdivision, which is a single family neighborhood located east of and directly adjacent to the Summertree community. These sample sites are assumed to be representative of Pasco's water quality in the vicinity of Summertree and prospectively representative of water quality provided through the proposed interconnection. These samples were analyzed for multiple parameters including iron and color. The samples contained 0.038 mg/L of iron and 12.45 Color Units. The iron concentration in these samples, if representative of water quality that Pasco County Utilities would provide to the Utility at Summertree, contains 90% less iron than the groundwater present at Wells 2 and 13. Additionally, the color of Pasco's water is marginally better than the Utility's well water at Summertree. Samples taken from various locations in the Summertree distribution system indicate that color ranges from as little as seven to as much as 18 Color Units.

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Should you or Staff have any questions regarding this filing, please do not hesitate to give me a call.

Very truly yours,

/s/ Martin Friedman

MARTIN S. FRIEDMAN
For the Firm

MSF/

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