

State of Florida



# 2-4 H 1.59 Hublic Service Commission -M-E-M-O-R-A-N-D-U-M-

DATE: February 4, 2003 TO:

Division of Commission Clerk and Administrative Services

- **FROM:** Tony Sargent, Professional Accountant, Division of Economic Regulation
- RE: Docket No. 021228-WS - application for staff assisted rate case in Brevard County by Service Management Systems, Inc.

The attached letter was sent to the Division of Economic Regulation. Please include it in the official docket file for Docket No. 021228-WS.

Thank you.



DOCUMENT NUMER CATE 01092 FED-48

FPSC-CL PTTTL: CLERK

SMS

January 29, 2003

Mr. Tony Sargent State of Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

RE: Docket No. 021228-WS

Dear Mr. Sargent:

I hope that the information I gave you on the local meeting facilities is helpful in your locating a venue for your customer meeting. In response to the request for information contained in your recent fax, I would like to provide the following information:

1. The legal and accounting consultants, M. Deterding and Robert Nixon, will review correspondence and Public Service Commission calculations and recommendations for this utility. I estimate a budget for this staff assisted rate case for consultants of \$10,000. This amount of course could be less or greater based on issues that would arise during the audit and engineering evaluation. In addition, Robert Nixon, CPA will review the audit and respond and M. Deterding will appear before the Commission for the final hearing.

The management of this utility has grown increasingly complex and demanding of time. 2 The management requirements of the utility are a minimum of 15 hours per week. Even using an hourly rate of \$80 per hour, which would be low for the required level of management service, equals \$1,200 a week or \$62,400 a year. The utility requires professional experienced management as the position involves evaluation of capital expenditures and improvements and interaction and correspondence with numerous agencies such as Public Service Commission, Department of Environmental Protection and St. Johns River Water Management District. This utility also provides fire protection service that requires knowledge of National Fire Protection Codes and makes diligent management a necessity. The time consumed in this staff assisted rate case alone will be up to 200 hours of management time. In addition to a manager, this utility now requires and employs a full time maintenance/operation person at an annual salary before benefits, expenses or overtime, of \$27,560 per year. There is a bookkeeper and degreed accountant, both who provide service on a part time basis to the utility, with the bookkeeper at \$9.10 per hour working 11 hours per week, \$5,205 annually and the degreed accountant being paid annually \$11,080 for her services to the utility. This utility is now required to have audited financial statements annually due to requirements of a loan and we prepare the annual report in house.

Secretarial support provided because of the large amounts of correspondence involved is approximately \$5,000 per year.

DOCUMENT NUM TO ANT

DIO92 FEB-48 235 Hammock Shore Drive • Melbourne Beach, Florida 32951 • (321) 723-2447 FPSC-011100 - CLERA In addition to a contract utility company service which provides repair and licensed sewer and water treatment operators, the utility now employs directly a licensed operator on a part time basis at a cost of \$10,250 a year. This licensed operator employed part time is also training the new maintenance /operation person, and helps in responding to emergencies both during business hours and after hours.

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3. Attached is a memorandum from our consulting engineer, PBS&J, which deals with that firms professional services in designing the new high service pumping facility and they're estimated of cost to purchase and install the required equipment. The cost is approximated to be \$130,000, which involves about \$15,000 of engineering fees and as much as \$115,000 in equipment purchases and installation cost. The variable speed controls to operate these pumps are very expensive.

4. The utility has always had free office space made available to it and only paid a share in the cost of the office such as electric, cleaning, landscape maintenance. As a customer of the utility has created a zoning issue on the operation of the utility accounting from its current location, a new office will need to be provided. As there is no office space for rent in our immediate area, and the bookkeeping and accounting work is done by part time persons with other responsibilities, a modular office building is being considered. The current utility cost and general office cost will be impacted by the loss of the convenience in sharing that exists in the current location. A modular office building will cost approximately \$350 per month plus a set up and delivery charge of approximately \$2,000. I am currently looking into other alternatives and other office sharing opportunities at different locations, but nothing has been finalized at this point.

I hope this answers your questions. Please give me a call if you have any additional requests for information.

Sincerel rèsident

/gak cc: Robert Nixon, CPA cc: M. Deterding, Esq.



November 18, 2002

James Bates Service Management Systems, Inc. 235 Hammock Shore Drive Melbourne Beach, Florida 32951

COLIDING REGULATION ည္

Dear Jim,

Attached is our technical evaluation and cost estimate for the Aquarina non-potable water pumping facilities. After evaluation of the pump options available, we have recommended the installation of two variable speed pumps, capable of meeting a wide range of flow conditions, as is required by the Aquarina project. Individually, each proposed pump will meet fire flow requirements based on ISO criteria, thus providing for operating redundancy.

The estimated construction cost for the proposed improvements is \$114,600, which includes a 10% contingency. These costs are derived from pump suppliers, and local utility contractors familiar with this type of construction. We anticipate approximately 3-4 weeks to complete the pump installation once the equipment has been delivered to the site.

At this time, we are continuing with the final construction documents. Please contact me with any questions you may have.

Respectfully,

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Edwin R. Krug, P.E. Division Manager

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## AQUARINA PLANNED UNIT DEVELOPMENT EVALUATION OF NON-POTABLE WATER PUMPING FACILITIES

#### Background

Aquarma's water needs are divided into two categories, potable drinking water and nonpotable irrigation and fire protection water. To reduce impacts to the shallow aquifer fresh water lens utilized by others in the region, the potable water needs of Aquarina have been met by drilling deeper wells into brackish water and using reverse osmosis to produce drinking water. Non-potable demands (irrigation and fire protection) were originally to be met by reclaiming and recycling the project's generated wastewater. However, since the volume of wastewater is currently insufficient to meet the project's non-potable needs, a combination of groundwater and surface water is used. Separate distribution systems for each use have been installed throughout the project.

The original design concept for the non-potable water pumping facilities included three large (60 horsepower) pumps with a space for a fourth to meet the anticipated demand, a jockey pump and hydro-pneumatic tank for maintenance of pressure during periods of non-use, and a recirculation pump to keep the contents of the storage tank "fresh" and for rechlorination if needed.

The original facilities were designed for the ultimate build-out of the project. The actual development has been significantly reduced from the original build-out program, thus affecting the generation of wastewater and the volume of non-potable water needed for irrigation. The required fire flow remains large due to the presence of the first mid-rise multi-family building. The range between the lower irrigation flow requirement and the still bigh fire flow requirement creates a problem with pressure regulation and control of the system. This problem was addressed by converting the recirculation pump to an irrigation pump, with appropriate replumbing and control modifications. Since there have been no major fire type demands on the system, the lone irrigation/recirculation pump has been providing most all of the non-potable supply, and has failed prematurely. A second such pump was added as an appendage, and has had to be rebuilt due to excessive use. The three large fire pumps have suffered from the lack of regular use, and have deteriorated accordingly.

#### **Proposed Facilities**

The recommended system modifications will use two pumps, each being capable of meeting the required ISO fire flow of 1800 gpm at 50 psi. Each pump will be controlled

by variable frequency drives, capable of operating at slower speeds for varying irrigation flows and at a very low speed for the jockey pump function. This allows continuous operation at the lowest speed, but does not require the jockey pump, hydro-pneumatic tank, or air compressor. A timer will be used to provide pump alternation, keeping each pump regularly exercised. Variable speed drives will eliminate the potential of water hammer by virtue of a gradual buildup in speed and flow.

The existing piping and pump barrels will be reused to the maximum extent possible, with only new connecting pieces and possible new check valves. The existing irrigation pump will be left in place as a recirculation pump, since the need to direct reclaimed wastewater into the storage tank will be necessary once the plant flow reaches 100,000 gallons per day. The hydro-pneumatic tank, air compressor and jockey pump will be removed. This physical space will be used for the new variable frequency drive cabinetry. The existing control cabinet will become a junction box for connecting the power and control wires using the existing conduits. We have assumed that the existing emergency generator is operational, and simply needs to be connected into the new pump system controls.

### Estimated Construction Cost

Several pump manufacturers and models were examined. The recommended pumps have less pressure capabilities than the current pumps, but greater flow capabilities. This reflects the changes in build-out concepts since the original Aquarina development program. The recommended pumps are Layne Verti-line model 12FHL, 1770 rpm, 9.469" impeller, 60 horsepower. Each pump will include a variable frequency drive (VFD) unit in a NEMA 3R stainless steel cabinet, with a bypass contactor.

The estimate construction cost for the improvements is as follows:

Purchase price of the pumps, 2 at \$24,400 each	\$ 48,800
Purchase price of the VFD's, 2 at \$19,100 each	38,200
Contractor mobilization	600
Materials	800
Labor, including removal of the existing pumps	8,200
and tank switch box, installation of the	
new pumps with tie-ins on successive days,	
installation of new electrical chase, and cleanup.	
Electrical work, including the permits and installing	7,600
the new controls, breaker, wires and conduits.	. ,
Sub-Total	\$104,200
Contingency (10%)	<u>\$ 10,400</u>
TOTAL	\$114,600