

ORIGINAL

BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

DOCKET NO. 060368-WS
AQUA UTILITIES FLORIDA, INC.

IN RE: APPLICATION FOR INCREASE IN WATER AND
WASTEWATER RATES IN ALACHUA, BREVARD,
HIGHLANDS, LAKE, LEE, MARION, ORANGE, PALM
BEACH, PASCO, POLK, PUTNAM, SEMINOLE, SUMTER,
VOLUSIA, AND WASHINGTON COUNTIES BY AQUA
UTILITIES FLORIDA, INC.

DECEMBER 1, 2006

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DIRECT TESTIMONY OF:

JOHN F. GUASTELLA

DOCUMENT NUMBER-DATE

11041 DEC-18

FPSC-COMMISSION CLERK

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2 **AQUA UTILITIES FLORIDA, INC.**

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5 **December 1, 2006**

6
7 **Q. Please state your name and business address.**

8 A. John F. Guastella, Guastella Associates, Inc., 6 Beacon Street, Suite 410, Boston, MA
9 02108.

10
11 **Q. Please describe Guastella Associates, Inc.**

12 A. Guastella Associates, Inc. provides utility management; valuation and rate consulting
13 services to both regulated and unregulated utilities.

14
15 **Q. Please describe your educational, professional and business background and**
16 **experience.**

17 A. I graduated from Stevens Institute of Technology in June of 1962, receiving a degree in
18 Mechanical Engineering. I am a licensed professional engineer. I have completed
19 courses in utility regulation sponsored by the National Association of Regulatory Utility
20 Commissioners ("NARUC") and conducted by the University of Colorado, University of
21 South Florida, Florida Atlantic University, the University of Utah, Florida State
22 University, and the University of Florida.

23 I was employed by the New York State Public Service Commission for sixteen
24 years from 1962 to 1978. With the exception of two years in which I was involved in the

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1 regulation of electric and gas utilities, my time with the New York Commission was
2 devoted to the regulation of water utilities. After a series of promotions during the years
3 1962 to 1970, attained through competitive examinations, I was promoted to Chief of
4 Rates and Finance in the Commission's Water Division. In 1972, I was made Assistant
5 Director of the Water Division. In 1974, I was appointed by the Chairman of the
6 Commission as Director of the Water Division, a position I held until my resignation
7 from the Commission in August of 1978.

8 My duties with the Commission included the performance and supervision of
9 various engineering and economic studies concerning valuation of utility property,
10 financing, rates and service of electric, gas and water utilities. While in the Water
11 Division, I either examined or supervised the examination of the books and records of
12 literally hundreds of water utilities.

13 As Director of the Water Division, I was responsible for the regulation of more
14 than 450 water companies in New York State, heading a professional staff consisting of
15 32 engineers and three technicians. One of my primary duties was to advise the
16 Commission during its adjudication of formal proceedings, as well as other matters. In
17 the course of those deliberations, testimony, exhibits and briefs submitted in formal
18 proceedings were reviewed and analyzed. My duties and responsibilities covered such
19 subjects as the reasonableness of investments in utility plant, appropriate depreciation,
20 contributions in aid of construction, advances in aid of construction, construction work in
21 progress, working capital, amortizations, rate base, revenue level, operation and
22 maintenance expenses, taxes, cost of capital, fundable capital, financing, capital structure,
23 rate of return, rate design, rate structure, quality of service and, in general, all aspects of
24 utility valuation, rate setting and service.

1 Another major responsibility was the review of all proposed legislation affecting
2 water utilities in New York and the subsequent preparation of recommendations for use
3 by the governor or the legislature in considering such legislation. I also made legislative
4 proposals and participated directly in drafting bills that were enacted: one expanded the
5 New York Commission's jurisdiction with respect to the regulation of the service
6 provided by small water companies and another dealt specifically with rate regulation and
7 financing of developer-related water systems. During my employment with the New
8 York Commission, I handled or supervised the handling of thousands of consumer
9 complaints by individuals, corporations and municipal, governmental and political
10 officials.

11 In 1978, I formed Guastella Associates, Inc. Concurrently with my position as
12 President of Guastella Associates, Inc., I served as President of Country Knolls Water
13 Works, Inc. from 1987 to 1991, directing the management and operation of this utility
14 which served some 5,000 customers.

15 I have prepared appraisals and valuations of utility property, depreciation studies,
16 rate analyses, cost allocation and rate design studies, and management and financial
17 analyses. I have provided consulting services for municipal and investor-owned water
18 and wastewater utilities, as well as gas utilities and solid waste collection and disposal
19 companies.

20

21 **Q. Have you previously presented expert testimony in proceedings involving regulatory**
22 **agencies, municipal jurisdictions and court cases with respect to utility matters?**

23 A. Yes.

24

1 **Q. In what states were the utilities located?**

2 A. My testimony was presented on behalf of utilities or regulatory agencies in the states of
3 Alaska, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Maryland,
4 Massachusetts, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico,
5 New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, and
6 Virginia.

7
8 **Q. Briefly state your activities in connection with professional organizations and**
9 **associations.**

10 A. I served as Vice-Chairman of the Staff-Committee on Water of NARUC. While on that
11 committee, I prepared a 95-page instruction manual entitled, "Model Record-Keeping
12 Manual for Small Water Companies," which was published by the NARUC. The manual
13 describes in detail the kinds of operating and accounting records that should be kept by
14 small water utilities, with instructions on how to use those records in order to properly
15 operate a water system and properly keep account of the cost of providing service.

16 Since 1974, I have prepared the rate case study material, assisted in the
17 coordination of the program and served as an instructor at the Annual Fall Seminar on
18 Water Rate Regulation sponsored by the NARUC and conducted by the University of
19 South Florida, Florida Atlantic University, University of Utah, Florida State University,
20 the University of Florida, and currently Michigan State University. This seminar is
21 recognized as being one of the best in the country for teaching rate-setting principles and
22 methodology. It is attended by representatives of regulatory agencies, utilities, and
23 engineering, accounting, economic and law firms throughout the country. In 1980, as a

1 special consultant to NARUC, I assisted in the establishment of another similar seminar,
2 which has been held annually in the spring in the western United States.

3 I served as an instructor and panelist in a seminar on water and sewer utility
4 regulation conducted by the Independent Water and Sewer Companies of Texas. In
5 1998, I prepared and conducted a rate regulation seminar in Maine on behalf of the New
6 England Chapter of the National Association of Water Company's ("NAWC"). In 2000
7 and 2001, I prepared and conducted a seminar for developer related and small water and
8 sewer utilities in conjunction with Florida State University, and again in 2003 in
9 conjunction with the University of Florida. This seminar provided instruction as to the
10 financial structuring of utilities, rate setting, financing and valuation for market value
11 determinations in preparation for negotiated sales or condemnations. It also identified the
12 various problems faced by small utilities, the impact on their operations and potential
13 solutions. In 2005, I prepared and conducted a special seminar on rate regulation for the
14 newly formed Office of Regulatory Staff in South Carolina. In 2006, I prepared and
15 conducted a seminar on rate regulation and valuation on behalf of the New York Chapter
16 of NAWC.

17 As a member of the NAWC, I served on its Rates and Revenue Committee and
18 Small Company Committee. I am a life-time member of the American Water Works
19 Association ("AWWA") and served on its Water Rates Committee, assisting in the
20 preparation of the AWWA Rates Manual, Third Edition. I am a life-time member of the
21 New England Water Works Association. I have also served on a joint committee on rate
22 design composed of staff members of NARUC and NAWC. In connection with my
23 serving on these committees, and in connection with cost allocation and rate design
24 studies I have performed in the course of my work, I have participated in decisional

1 meetings to determine proper engineering and construction criteria in relation to costs in
2 the design of water and sewer systems.

3 I have prepared and presented papers at a number of meetings of the National
4 Association of Water Companies, the National Association of Regulatory Utility
5 Commissioners, the New England Conference of Public Utilities Commissioners, the
6 Mid-America Regulatory Conference, and at meetings of the Public Utility Law Section
7 of the New Jersey Bar Association, the Pennsylvania Environmental Council, the
8 Southeastern Association of Regulatory Utility Commissioners, the New Jersey Chapter
9 of the American Water Works Association, and the Florida, New England, New Jersey
10 and New York chapters of NAWC. I also participated in a special workshop conducted
11 by the U.S. Environmental Protection Agency, State Revolving Fund Section, with
12 respect to its Full Cost Pricing Initiative.

13
14 **Q. What is the nature of your involvement in this proceeding?**

15 A. Guastella Associates, Inc. has been retained by Aqua Utilities, Florida ("AUF" or
16 "Company") to provide consulting services with respect to the preparation of its rate
17 filing. In addition to general assistance in the preparation of the MFRs, our specific
18 assignments included the performance of used and useful analyses, and the calculation of
19 rates and single tariff pricing on a county-wide basis. We also provided assistance for the
20 Company's proposed service availability and AFPI changes.

21
22 **Q. What is the scope of work performed by Guastella Associates in connection with this**
23 **assignment?**

1 A. Mr. Gary C. White and I have examined the Company's financial and operating data, and
2 I directed an analysis of the maps of each system. Our work was also coordinated with
3 that of the Company's staff as well as other consultants.
4

5 **Q. Have you prepared or supervised the preparation of any schedules that comprise**
6 **the Minimum Filing Requirements?**

7 A. Yes, the following schedules of the Minimum Filing Requirements ("MFR") were
8 prepared by me or under my direction: Schedules F-5, F-6, F-7, F-8, F-9 and F-10. The
9 results of my used and useful analysis are also reflected in Schedules A-1, A-2, A-3, A-5,
10 A-6, A-7, A-9, A-10, A-12 and A-14.

11 **Q. Are schedules F-5 through F-10 all related to used and useful calculations?**

12 A. Yes.
13

14 **Q. Would you please explain what you mean by used and useful?**

15 A. The term "used and useful" is simply a regulatory rate setting term that describes the cost
16 of property that is included in a utility's rate base (net investment) upon which the utility
17 is entitled to earn a rate of return. The balance of the cost of property that is excluded
18 from rate base is referred to as "non used and useful" or "future use" plant.

19 The reason for performing this type of allocation study is to have existing
20 customers pay rates based on the cost of plant necessary to provide safe and adequate
21 service to them on a reasonably continuous basis, and therefore preclude any
22 subsidization of future customers by existing customers.
23

1 **Q. Is there a prescribed method for performing used and useful analyses?**

2 A. No. Such analyses require many allocations as to different kinds of utility property and
3 facilities. Those allocations must be based on judgment as to such factors as equipment
4 design and utilization, system demands and characteristics, and the interrelationship of
5 each kind of equipment or facility within a system. No two utility systems are alike in
6 design, utilization and system characteristics. Moreover, utility systems are constantly
7 changing with respect to plant and function as customer demand and system
8 characteristics change, as new equipment becomes available and as regulatory
9 requirements and standards change.

10

11 **Q. What general parameters must be considered in performing used and useful**
12 **analyses?**

13 A. It must be recognized that water and wastewater systems are designed to meet maximum
14 demands that are intentionally quantified at higher levels than are actually expected to be
15 realized. In other words, well-designed water and wastewater systems should always
16 have additional capacity over and above the maximum demands that would actually
17 occur when the systems are built out. It is important to understand that the engineering
18 design of a water and wastewater systems are not based on a rate setting term called used
19 and useful. Water and wastewater systems are designed to assure the provision of safe
20 and adequate service to the customers on a continuous basis. Water and wastewater
21 utilities must incur costs to meet that standard; and rate setting used and useful
22 determinations should not deny the full cost of doing so. Accordingly, if there are
23 systems in which ratios of demands to capacities are less than 100%, it cannot necessarily
24 be concluded that the used and useful percentage is also less than 100%.

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Q. Are there any other general parameters with respect to used and useful determinations?

A. Yes. Utility systems are also designed to be economically sized. For example, it is typically less costly to construct one facility to meet the longer-term demands of the customers than to construct two or more facilities. Even if the ratio of demand to capacity is less than 100%, a downward used and useful adjustment should not be made if it would be no less costly to install facilities with less capacity or to meet the lower demands of the existing customers.

Q. Have you applied those parameters with respect to your used and useful determinations in this rate filing?

A. Yes.

Q. Are you able to summarize your used and useful determinations without discussing the individual calculations for each of the 56 water systems and 24 wastewater systems?

A. Yes. These water and wastewater systems are relatively small - - some very small - - and most have characteristics that have enabled an easy determination of used and useful, as described in the respective "F" schedules. Those few systems that required more detailed calculations, involving ratios of demands and capacities, were consistently treated.

Q. Before summarizing your used and useful determinations, would you describe the source of the data you used?

1 A. The data were obtained from the Company, as reflected in the various "F" schedules
2 showing demands and capacity and, if necessary, from operating reports.
3

4 **Q. Did you use a margin of reserve in your calculations?**

5 A. Yes, but only when necessary.
6

7 **Q. Would you briefly describe margin reserve?**

8 A. Margin reserve is an allowance for growth in customers for a five-year period after the
9 test year. For interim rates, the 2005 historical test year was used and, therefore, the
10 growth was projected to 2010; for the 2007 projected test year the growth was projected
11 to 2012. A margin reserve allowance recognizes that utilities must have capacity
12 available to provide service to new customers so that both new and existing customers
13 will in the future receive adequate service. Obviously, facilities must be installed and
14 operational in order to provide service to customers in the future, and the utility must
15 incur costs for those facilities that must be recognized in setting rates.
16

17 **Q. Would you please describe your determination of the used and useful percentages of
18 the water transmission and distributions systems and the wastewater collection
19 systems?**

20 A. There are 56 water systems and 24 wastewater systems. On the basis of our take-offs of
21 the individual systems' maps, and review of the number of connected customers and
22 related ERCs, I found that 40 water systems are built out and, therefore, 100% used and
23 useful. Another water system was considered 100% used and useful with respect to
24 permanent rates when the ratio of ERCs to total lots (lots with mains fronting the

1 property) was found to be over 80%, after an allowance for margin reserve. The
2 remaining 15 water systems had various used and useful percentages, calculated on the
3 basis of the ratio of ERCs to total lots, after an allowance for margin reserve.

4 With respect to the wastewater systems, 21 were built out and, therefore, 100%
5 used and useful. The used and useful percentages for the remaining 3 systems were
6 calculated on the basis of the ratio of ERCs to total lots.

7
8 **Q. Why do you use ERCs as the numerator?**

9 A. Mains are not designed only to cover distance, but also to meet varying demands. Ratios
10 of connected lots to total lots only consider distance; ratios of ERCs to total lots take into
11 account both distance and demands, because ERCs reflect the higher demands of
12 customers with larger meters.

13
14 **Q. How did you determine the used and useful percentages for water plants?**

15 A. For these small systems, the water plants essentially consist of wells. The wells of the
16 water systems that are built out are considered 100% used and useful. Some systems do
17 not have their own sources of water supply, accordingly related assets are of course 100%
18 used and useful. Systems with only two wells must also be considered used and useful
19 because two wells are necessary for reliability so that demands could be met with the
20 largest well out of service, and the cost of the remaining well would be no less costly if
21 designed only to meet the demands of existing customers. All of the water well systems
22 fall into one or more of the above categories and all are 100% used and useful.

23 The wastewater treatment plants for systems that are built out are considered
24 100% used and useful. Some systems do not have their own treatment plants and of

1 course any related assets are 100% used and useful. There are four wastewater treatment
2 plants (Chuluota, Leisure Lakes, Sunny Hills and Village Water) that are not in those
3 categories, and for which the used and useful percentages are based on the ratio of the
4 maximum month demands, projected for margin reserve growth, to the capacity of the
5 plants.

6
7 **Q. Have brief discussions or, where appropriate calculations, been included in the**
8 **respective F schedules related to used and useful?**

9 A. Yes.

10
11 **Q. Do you support the Company's proposal to establish single tariff pricing, or**
12 **uniform rate structures, by county?**

13 A. Yes.

14
15 **Q. Would you briefly outline the benefits of single tariff pricing?**

16 A. Yes. The first benefit is that all customers pay the same rates for the same service, a
17 benefit that was recognized in the early days of setting rural electric and telephone rates.
18 Because single tariff rates spread the cost of plant additions and replacements over a
19 wider customer base, no one system will be faced with very high rate increases, which
20 sooner or later would otherwise be faced by every individual system. Single tariff pricing
21 recognizes the economies of scale that would otherwise not be available if the individual
22 systems were not part of one company. Single tariff rates recognizes that if truly stand-
23 alone, individual systems would find it difficult if not impossible to obtain capital when
24 needed, or if they can it would be at a higher cost than when part of a large company.

1 Once single tariff pricing is established, the cost of rate case expenses will be less in
2 terms of preparing rate filings and MFRs as well as adjudicating issues. Single tariff
3 pricing recognizes that a greater level of experienced administrative, accounting,
4 engineering, legal and other staffing resources are available to all individual systems,
5 which would likely not be the case if they were truly stand-alone systems.
6

7 **Q. Has single tariff pricing been accepted by regulatory agencies around the country?**

8 A. Yes. On the basis of my involvement in other states with respect to this issue, I have
9 found that most states that regulate companies with multiple water and/or wastewater
10 systems have accepted single tariff pricing. The Department of Public Utility Control in
11 Connecticut has required its regulated water utilities to movement toward single tariff
12 pricing. NARUC and individual states have also recognized single tariff pricing as an
13 incentive to encourage larger water utilities to acquire smaller systems.
14

15 **Q. Does Mr. White cover the specific determination of single tariff pricing, by county?**

16 A. Yes. I would note that Mr. White also addresses the Company's proposals for uniform
17 Service Availability charges, and AFPI charges.
18

19 **Q. Does that conclude your testimony at this time?**

20 A. Yes.
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24