STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

IN RE: PROVIDENCE WATER SUPPLY BOARD - DOCKET NO. 4994

Surrebuttal TESTIMONY of JOHN F. GUASTELLA

On behalf of the

SMITHFIELD WATER SUPPLY BOARD

January 14, 2022

Please state your name and business address. 1 Q. John F. Guastella, Guastella Associates, LLC, 725 N. Highway A1A, Suite B103, Jupiter, 2 A. 3 Florida 33477. Did you provide direct testimony in this proceeding on behalf of the Smithfield 4 Q. 5 Water Supply board ("SWSB")? 6 A. Yes. Did your direct testimony include your qualifications and experience? 7 Q. 8 Yes. A. What was the focus of your direct testimony? 9 Q. I examined the wholesale rate proposed by the Providence Water Supply Board 10 A. ("PWSB") to be charged to the SWSB, and the cost allocation and rate design or cost of 11 service studies ("COSS") submitted by Harold J. Smith of Raftelis Financial Consulting 12 PA on behalf of the PWSB in support of its proposed rates. 13 Have you reviewed the rebuttal and supplemental rebuttal testimonies of Mr. 14 Q. 15 Smith? 16 A. Yes. Do you have any general comments with respect to Mr. Smith's testimonies? 17 Q. Yes. Mr. Smith's did not address my direct testimony that the separate inch-mile analysis 18 A. he used in the COSS failed to allocate any mains to fire service demands, thereby 19

increasing the cost of mains allocated to other classes of customer, and that although a

small portion of inch-miles of mains was allocated to fire service in other sections of his

COSS, it was based on a portion of the inch-miles previously allocated to retail service,

resulting in an insufficient allocation of mains. Mr. Smith also did not address my

opinion that the fire demand of 6,000 gallons per minute (gpm) for a duration of 6 hours

which he used in his COSS is not adequate for a system the size of PWSB's.

7 Q. Why are these issues so important?

- A. The failure to allocate sufficient costs to providing fire service shifts those costs to the other classes of customer, thereby overstating the rates and revenues that the COSS reflects for those customers.
- 11 Q. By letter dated January 11, 2022, the PWS responded to the fourteenth (14th) set of 12 requests from the Bristol County Water Authority. Did you review those requests 13 and responses?
- 14 A. Yes.
- 15 Q. The PWS's response to BCWA 14-1a refers to the Pare hydraulic modeling stating
 16 in part that the AWWA M1 rate manual identifies hydraulic modeling as a valid
 17 approach to distinguish transmission and distribution costs. Is that approach the
 18 same as Pare's inch-foot analysis of the allocation all mains to customer classes?
 19 A. No. The reference to hydraulic studies in the AWWA M1 manual would be a method,
- No. The reference to hydraulic studies in the AWWA M1 manual would be a method, rarely used, to separately identify the costs of transmission mains and distribution mains, which is significantly different from the Pare hydraulic study to determine the allocation

1		of all mains to each all classes of customer. I have never seen the Pare type study used	
2		for such cost allocations, and because it did not include	an allocation of mains for
3		meeting potential fire demands, it did not adequate serve	e that purpose.
4	Q.	Have you performed cost of service studies using the general methodology as	
5		reflected in the various editions of the AWWA M1 water rate manual, "Principles of	
6		Water Rates, Fees, and Charges"?	
7	A.	Yes.	
8	Q.	Would you give examples of the percentages of transmission and distribution mains	
9		allocated to providing fire demands from some of the COSS you have performed	
10		and compare them to the percentage of transmission and distribution mains that	
11		Mr. Smith's COSS reflects?	
12	A.	Yes. The following lists some of the COSS I performed, and the percentage of	
13		transmission and distribution mains allocated to fire service:	
14		Aquarion Water Company of New Hampshire	32.7%
15		Middlesex Water Company	11.0%
16		Milford Water Company	36.2%
17		Gordon's Corner Water Company	17.3%
18		Aquarion Water Company of Massachusetts	27.2%
19		Artesian Water Company	13.8%
20		Mr. Smith's COSS allocates under 4% of total transmission and distribution mains to fire	
21		service. I note that each water utility is different as to many factors and I am not	
22		suggesting that the results for other utilities be used instead of an analysis of the utility	

- being studied. This comparison, however, does indicate that the inch-foot analysis and
 the allocation to fire service of only residential mains as used in Mr. Smith's study is
 flawed.
- Q. How would the cost allocation to the SWSB be impacted by correction of the allocation of transmission and distribution mains inch-feet in the hydraulic study to include an allocation to fire service and the use of higher fire flows?
- 7 A. The COSS would reflect a lower cost allocation to the SWSB.
- 9 Have you reviewed the "gradualism" proposed by Mr. Jerome D. Mierzwa on behalf of the Division that was adopted by Mr. Smith, and if so, can you opine on the concept?
- 11 A. Yes. I agree that gradualism should be considered to mitigate disproportionate rate

 12 increases. The currently proposed gradualism or phase-in involves adjusting wholesale

 13 volume rates by one-third of the amount suggested by the COSS, but limiting the increase

 14 to any one customer's rate to 12%. Mr. Smith shows the resulting comparison of rates

 15 and revenues in his supplemental rebuttal "Schedule HJS-22a: Proposed Rates 1/3

 16 Phase-in, 12% Cap" and "Schedule HJS-23: Comparison of Revenues by Class".

17 Q. Do you agree with the 12% limit?

18 A. No. In reviewing Mr. Mierzwa's testimony, his proposed 12% limit appears to be based
19 on his judgement, not a specific analysis. Since Mr. Mierzwa's direct testimony was filed
20 at or about the same time as mine, his judgement was made without being aware of my
21 criticisms regarding the hydraulic study of inch-feet that did not include any allocation of

transmission and distribution mains to accommodate potential fire demands and the use
of inadequate fire demands. Mr. Mierzwa was also unaware of the steps the SWSB is
taking to develop its own less costly sources of water.

4 Q. What do you recommend with respect to the rates for the SWSB?

I believe it is good regulatory rate setting policy to consider the benefit of providing 5 A. incentive rates for large water consuming customers, such as the SWSB, that provide 6 7 revenue to offset rates for other classes of customer as opposed to risking all the revenues from SWSB. Mr. Smith's supplemental rebuttal Schedule HJS-23: Comparison of 8 Revenues by Customer Class shows that under his COSS, the existing revenues from the 9 SWSB for FY 2022 are \$668,091, which reflects an increase over the PWS's pre-filing 10 rates charged to the SWSB that produced \$528,996, an increase of over 26%. I 11 recommend that the rate of \$2,280.82 per million gallons that produces \$668,091, 12 reflecting an unadjusted COSS, be applicable to the SWSB without any further increase. 13

14 Q. Does that conclude your testimony at this time?

15 A. Yes.