## BEFORE THE PUBLIC UTILITIES COMMISSION OF RHODE ISLAND

PROVIDENCE WATER SUPPLY BOARD ) DOCKET NO. 4994

#### DIRECT TESTIMONY ON COST OF SERVICE STUDY

OF

JEROME D. MIERZWA

ON BEHALF OF THE DIVISION OF PUBLIC UTILITIES AND CARRIERS

October 7, 2021



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1		I. <u>INTRODUCTION</u>
2	Q.	WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS
3		ADDRESS?
4	A.	My name is Jerome D. Mierzwa. I am a Vice President of and a Principle with Exeter
5		Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway,
6		Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-
7		related consulting services.
8	Q.	ARE YOU THE SAME JEROME D. MIERZWA WHO PREVIOUSLY
9		SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?
10	A.	Yes, I submitted direct testimony on behalf of the Division of Public Utilities and
11		Carriers ("Division") on May 4, 2020.
12	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
13	A.	On December 2, 2019, in Docket No. 4994, the Providence Water Supply Board
14		("Providence Water") filed an application with the Public Utilities Commission
15		("Commission") requesting a three step increase in rates over the course of three years
16		(Rate Year 1, Rate Year 2, and Rate Year 3). An Initial Settlement Agreement ("ISA")
17		was filed in Docket No. 4994 on July 3, 2020. The ISA provided for uniform wholesale
18		rates based on a cost of service study that was filed with the ISA. The Commission

Direct Testimony of Jerome D. Mierzwa

subsequently conducted evidentiary hearings on the ISA and at an open meeting on
 August 18, 2020, the Commission modified the ISA. Among other adjustments and
 modifications, the Commission rejected uniform wholesale rates and required
 implementation of graduated individual rates for each wholesale customer.

5 On August 25, 2020, Providence Water submitted an Amended Settlement Agreement ("ASA") reflecting the Commission's adjustments and modifications to the 6 7 ISA. The ASA included a cost of service study that utilized individual peaking factors 8 for each wholesale customer without any other material changes to the cost of service 9 study included in the ISA. However, the ASA did not include rates that fully reflected 10 the results of a cost of service study which utilized individual peaking factors for each wholesale customer. Instead, as directed by the Commission at its August 18, 2020 11 12 open meeting, the rates for the first step of the three step increase for Rate Year 1 13 reflected one-third of the change between the rates in the ISA and the rates developed 14 utilizing individual peaking factors for each wholesale customer. On August 27, 2020, 15 the Commission voted to accept the ASA.

16 In its Report and Order in Docket No. 4994 (Order No. 23928), issued October 17 20, 2020, the Commission required Providence Water to perform a new allocated cost 18 of service study taking into account certain directives which the Commission identified 19 in Order No. 23928. On April 1, 2021, Providence Water filed its new cost of service 20 study in compliance with Order No. 23928. Exeter Associates was retained by the 21 Division to review the cost of service study and rate design proposals presented by 22 Providence Water in its initial December 2, 2019 application in Docket No. 4994. The 23 purpose of my testimony is to evaluate and assess the new cost of service study filed by Providence Water on April 1, 2021. 24

1	Q.	WHAT COST OF SERVICE STUDY DIRECTIVES DID THE
2		COMMISSION ESTABLISH IN ORDER NO. 23928?
3	A.	In Order No. 23928, the Commission identified the following issues to be addressed in
4		Providence Water's new cost of service study:
5		1. Transmission and Distribution Labor Cost Allocation
6		2. Central Operations Facility Allocation
7		3. Non-Revenue Water Allocation
8		4. Pumping Cost Allocation
9		5. Unidirectional Flushing Cost Allocation
10	Q.	WERE THESE THE ONLY ISSUES WHICH THE COMMISSION
11		DIRECTED PROVIDENCE WATER TO ADDRESS IN THE NEW COST
12		OF SERVICE STUDY?
13	A.	No. Order No. 23928 also indicated that it was the Commission's objective to approve
14		individual wholesale rates which take "into account all relevant factors, in a manner
15		that is fair to all the affected parties," (Order, at 33).
16	Q.	WHAT REVENUE REQUIREMENT DID PROVIDENCE WATER
17		UTILIZE IN ITS NEW COST OF SERVICE STUDY?
18	А.	Providence Water utilized its Rate Year 2 revenue requirement in its new cost of service
19		study.
20	Q.	PLEASE IDENTIFY THE CUSTOMERS SERVED BY PROVIDENCE
21		WATER.
22	A.	Providence Water provides service to retail customers and serves the following seven
23		wholesale customers:
24		East Providence

1		• Warwick
2		Bristol County
3		• Greenville
4		• Lincoln
5		• Smithfield
6		• Kent County
7	Q.	DID YOUR REVIEW OF PROVIDENCE WATER'S NEW COST OF
8		SERVICE STUDY REVEAL ANY CONCERNS?
9	A.	Yes. My review of Providence Water's new cost of service study revealed a concern
10		with respect to the revised allocation of pumping costs.
11	Q.	PLEASE EXPLAIN HOW PROVIDENCE WATER ALLOCATED
12		PUMPING COSTS IN ITS NEW COST OF SERVICE STUDY?
13	A.	As explained by Providence Water witness Harold J. Smith in his compliance
14		testimony, most of Providence Water's system is fed by gravity and does not require
15		any additional pumping. All customers use the gravity portion of the system. However,
16		there are some customers who are served by the gravity system and a series of pump
17		stations. Mr. Smith refers to customers that only use the gravity portion of the system
18		as low service customers. Mr. Smith refers to customers that use the gravity system and
19		require pumping as high service customers. Bristol County, East Providence, Kent
20		County, and Warwick are low service customers and do not require additional
21		pumping. Greenville, Lincoln, and Smithfield are high service customers and are
22		served by two pump stations: the Neutaconkanut Pump Station and the Bath Street
23		Pump Station. The allocation of pumping costs in the cost of service study filed in the
24		ASA did not distinguish between high and low service customers. The new COSS

1 addresses this issue by differentiating between the low service system, which is used 2 by all customers, and the high service system, which is used by retail customers, 3 Greenville, Lincoln, and Smithfield only. More specifically, Mr. Smith added two cost 4 component categories to the new cost of service study titled "CTA – Supply, Treatment 5 and Low Service" and "High Service and Retail." CTA – Supply, Treatment and Low Service costs are those which relate to Providence Water's source of supply, treatment 6 7 plant and the Aqueduct and Neutaconkanut Reservoirs. These costs are incurred to 8 serve all customers and are allocated based on base, maximum day, and maximum hour 9 demands for each customer class. High Service and Retail Costs relate to Providence 10 Water's pump stations which are used to serve certain wholesale customers and Providence Water's retail customers. These costs are allocated based on base, 11 12 maximum day, and maximum hour demands for retail, Greenville, Lincoln, and 13 Smithfield

14

15

#### Q. WHAT IS YOUR CONCERN WITH PROVIDENCE WATER'S

#### ALLOCATION OF PUMPING COSTS?

A. Only a portion of the base, maximum day, and maximum hour demands of retail customers are served by the high service system. However, the total base, maximum day, and maximum hour demands of retail customers have been used to allocate high service system costs in the new cost of service study. The demands of retail customers served by the low service system should be excluded from the allocation of pumping costs.

## Q. HAS PROVIDENCE WATER REVISED ITS NEW COST OF SERVICE STUDY TO ADJUST THE ALLOCATION OF PUMPING COSTS TO

# EXCLUDE THE DEMANDS OF RETAIL CUSTOMERS THAT ARE SERVED BY THE LOW SERVICE SYSTEM?

A. Yes. At the Division's request, Providence Water revised its new cost of service study to adjust the allocation of pumping costs to exclude the demands of retail customers that are served by the low service system. A comparison of Providence Water's initial and revised new cost of service studies is presented in Table 1 below. Also identified in Table 1 are the percentage changes in rates which would be required under each study to adopt cost of service rates.

Cost of ervice 0,753,832 5,398,278 7,714,618 758,291 82,451 2,017,357 5,724,827	Increase 1.36% 8.86% 8.00 9.77 0.00 1.39 <b>7.12%</b>	Cost of Service \$10,753,832 35,347,901 17,686,326 757,355 82,451 2,017,357 <b>\$66,645,222</b>	Increase 1.36% 8.71% 7.82 9.64 0.00 1.39 <b>6.99%</b>	Study Difference \$0 (50,377) (28,292) (936) 0 0 ( <b>\$79,605</b> )
5,398,278 7,714,618 758,291 82,451 2,017,357 5,724,827	8.86% 8.00 9.77 0.00 1.39 <b>7.12%</b>	35,347,901 17,686,326 757,355 82,451 2,017,357	8.71% 7.82 9.64 0.00 1.39	(50,377) (28,292) (936) 0 0
5,398,278 7,714,618 758,291 82,451 2,017,357 5,724,827	8.86% 8.00 9.77 0.00 1.39 <b>7.12%</b>	35,347,901 17,686,326 757,355 82,451 2,017,357	8.71% 7.82 9.64 0.00 1.39	(50,377) (28,292) (936) 0 0
7,714,618 758,291 82,451 2,017,357 5,724,827	8.00 9.77 0.00 1.39 <b>7.12%</b>	17,686,326 757,355 82,451 2,017,357	7.82 9.64 0.00 1.39	(28,292) (936) 0 0
7,714,618 758,291 82,451 2,017,357 5,724,827	8.00 9.77 0.00 1.39 <b>7.12%</b>	17,686,326 757,355 82,451 2,017,357	7.82 9.64 0.00 1.39	(28,292) (936) 0 0
758,291 82,451 2,017,357 5,724,827	9.77 0.00 1.39 <b>7.12%</b>	757,355 82,451 2,017,357	9.64 0.00 1.39	(936) 0 0
82,451 2,017,357 5, <b>724,827</b>	0.00 1.39 <b>7.12%</b>	82,451 2,017,357	0.00 1.39	0 0
2,017,357 5, <b>724,827</b>	1.39 <b>7.12%</b>	2,017,357	1.39	0
5,724,827	7.12%			0
		\$66,645,222	6.99%	(\$79,605)
2,535,090				
2,535,090				
	3.59%	\$2,535,090	3.59%	\$0
2,935,818	-3.77	2,935,818	-3.77	0
828,554	14.40	849,803	17.33	21,249
3,202,650	-28.16	3,202,650	-28.16	0
,993,477	13.68	2,033,394	15.96	39,917
,005,225	48.73	1,022,065	51.22	16,840
5,627,917	-7.56	5,627,917	-7.56	0
8,128,731	-5.57%	\$18,206,737	-5.16%	\$78,006
1,239,860	1.16%	\$4,240,659	1.18%	\$799
2,112,073	1.29	2,112,073	1.29	0
5,351,933	1.20%	\$6,352,732	1.21%	\$799
	1,005,225 5,627,917 <b>3,128,731</b> 4,239,860 2,112,073	48.73         5,627,917       -7.56         5,128,731       -5.57%         4,239,860       1.16%         2,112,073       1.29         5,351,933       1.20%	48.73       1,022,065         5,627,917       -7.56       5,627,917 <b>3,128,731</b> -5.57%       \$18,206,737         4,239,860       1.16%       \$4,240,659         2,112,073       1.29       2,112,073         5,351,933       1.20%       \$6,352,732	1,005,225       48.73       1,022,065       51.22         5,627,917       -7.56       5,627,917       -7.56         3,128,731       -5.57%       \$18,206,737       -5.16%         4,239,860       1.16%       \$4,240,659       1.18%         2,112,073       1.29       2,112,073       1.29

1		As indicated in Table 1, the revised allocation of pumping costs slightly reduces the
2		indicated cost of service of retail customers and slightly increases the indicated cost of
3		service of those wholesale customers served by the high service system.
4	Q.	IS PROVIDENCE WATER PROPOSING TO ADOPT THE RATES
5		INDICATED BY ITS NEW COST OF SERVICE STUDY FOR RATE
6		YEAR 2?

1	A.	No. Providence Water has indicated that it would be appropriate for the Commission
2		to consider a more gradual phase-in of cost of service rates. Mr. Smith has suggested
3		that the Commission could employ the same approach used in the ASA. That is, moving
4		$1/3^{rd}$ of the way to cost of service rates in Rate Year 2022 and another $1/3^{rd}$ in Rate
5		Year 2023. Another approach suggested by Mr. Smith would be to establish a
6		percentage increase cap of 1.75 times the overall revenue requirement increase. Classes
7		above the cap would be limited to an increase of that amount, with the difference
8		recovered via higher increase to customers below the cap.

- 9 Q. IS IT YOUR RECOMMENDITION THAT THE RATES INDICATED BY
  10 THE REVISED NEW COST OF SERVICE STUDY FOR RATE YEAR 2
  11 BE ADOPTED?
- A. No. Like Mr. Smith, I agree that it would be appropriate for the Commission to
  consider a more gradual phase-in of cost of service rates. I recommend that a hybrid
  approach to the two alternatives proposed by Mr. Smith be adopted. That is, each
  wholesale customers should be moved 1/3<sup>rd</sup> of the way toward cost of service rates
  subject to a cap increase of 12 percent. My proposed allocation of Providence Water's
  Rate Year 2 increase is presented in Table 2.

	Table 2.		
<b>Division Propos</b>		of Revenue Increas	e
Description	Present Rates	Proposed Rates	Increase
Retail			
Monthly Service Charges	\$10,609,165	\$10,753,832	1.36%
Volumetric Charges:	* - ) )	• • • • • • • • • • •	
Residential	32,516,684	34,913,586	7.37
Commercial	16,402,983	17,485,485	6.60
Industrial	690,770	748,754	8.39
East Smithfield	82,451	82,529	0.09
Public Fire Surcharge	1,989,631	2,017,357	1.39
Total Retail:	\$62,291,684	\$66,001,543	5.96%
Wholesale			
Bristol County	\$2,447,301	2,478,899	1.29%
East Providence	3,050,760	3,015,286	-1.16
Greenville	724,285	766,846	5.88
Kent County	4,458,129	4,043,444	-9.30
Lincoln	1,753,567	1,848,584	5.42
Smithfield	675,870	756,974	12.00
Warwick	6,088,219	5,940,380	-2.43
Total Wholesale:	\$19,198,131	\$18,850,414	-1.81%
Fire Protection			
Private Fire	\$4,191,361	\$4,240,659	1.18%
Hydrants	2,085,114	2,112,073	1.29
<b>Total Fire Protection:</b>	\$6,276,475	\$6,352,732	1.21%
TOTAL RATE			
REVENUES:	\$87,766,290	\$91,204,689	3.92%

## 1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes, it does.