

**BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND**

**PROVIDENCE WATER        )  
SUPPLY BOARD            )        DOCKET NO. 4406**

**DIRECT TESTIMONY  
OF  
THOMAS S. CATLIN**

**ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**August 23, 2013**

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**EXETER**

ASSOCIATES, INC.  
10480 Little Patuxent Parkway  
Suite 300  
Columbia, Maryland 21044

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Direct Testimony of Thomas S. Catlin

1

**Introduction**

2 Q.

WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS  
ADDRESS?

4 A.

My name is Thomas S. Catlin. I am a principal with Exeter Associates, Inc. Our offices are located at 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter is a firm of consulting economists specializing in issues pertaining to public utilities.

8 Q.

PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

9 A.

I hold a Master of Science Degree in Water Resources Engineering and Management from Arizona State University (1976). Major areas of study for this degree included pricing policy, economics, and management. I received my Bachelor of Science Degree in Physics and Math from the State University of New York at Stony Brook in 1974. I have also completed graduate courses in financial and management accounting.

15 Q.

WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL  
EXPERIENCE?

17 A.

From August 1976 until June 1977, I was employed by Arthur Beard Engineers in Phoenix, Arizona, where, among other responsibilities, I conducted economic

1 feasibility, financial and implementation analyses in conjunction with utility  
2 construction projects. I also served as project engineer for two utility valuation  
3 studies.

4 From June 1977 until September 1981, I was employed by Camp Dresser &  
5 McKee, Inc. Prior to transferring to the Management Consulting Division of CDM in  
6 April 1978, I was involved in both project administration and design. My project  
7 administration responsibilities included budget preparation and labor and cost  
8 monitoring and forecasting. As a member of CDM's Management Consulting  
9 Division, I performed cost of service, rate, and financial studies on approximately  
10 15 municipal and private water, wastewater and storm drainage utilities. These  
11 projects included: determining total costs of service; developing capital asset and  
12 depreciation bases; preparing cost allocation studies; evaluating alternative rate  
13 structures and designing rates; preparing bill analyses; developing cost and revenue  
14 projections; and preparing rate filings and expert testimony.

15 In September 1981, I accepted a position as a utility rates analyst with Exeter  
16 Associates, Inc. I became a principal and vice-president of the firm in 1984. Since  
17 joining Exeter, I have continued to be involved in the analysis of the operations of  
18 public utilities, with particular emphasis on utility rate regulation. I have been  
19 extensively involved in the review and analysis of utility rate filings, as well as other  
20 types of proceedings before state and federal regulatory authorities. My work in  
21 utility rate filings has focused on revenue requirements issues, but has also addressed  
22 service cost and rate design matters. I have also been involved in analyzing affiliate  
23 relations, alternative regulatory mechanisms, and regulatory restructuring issues.

1 This experience has involved electric, natural gas transmission and distribution, and  
2 telephone utilities, as well as water and wastewater companies.

3 Q. HAVE YOU PREVIOUSLY TESTIFIED IN OTHER REGULATORY  
4 PROCEEDINGS ON UTILITY RATES?

5 A. Yes. I have previously presented testimony on more than 250 occasions before the  
6 Federal Energy Regulatory Commission and the public utility commissions of  
7 Arizona, California, Colorado, Delaware, the District of Columbia, Florida, Idaho,  
8 Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New  
9 Jersey, Ohio, Oklahoma, Pennsylvania, Utah, Virginia, and West Virginia, as well as  
10 before this Commission. I have also filed rate case evidence by affidavit with the  
11 Connecticut Department of Public Utility Control and have appeared as a witness on  
12 behalf of the Louisiana Public Service Commission before the Nineteenth Judicial  
13 District Court.

14 Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

15 A. Yes. I am a member of the American Water Works Association (AWWA) and the  
16 Chesapeake Section of the AWWA.

17 Q. ON WHOSE BEHALF ARE YOU APPEARING?

18 A. I am presenting testimony on behalf of the Division of Public Utilities and Carriers  
19 (the Division).

20 Q. HAVE YOU PREVIOUSLY TESTIFIED ON WATER UTILITY ISSUES  
21 BEFORE THIS COMMISSION?

22 A. Yes, I have been asked by the Division to address water utility issues on numerous  
23 occasions. I testified on revenue requirement, cost of service and/or rate design  
24 issues in Newport Water Division, Docket Nos. 2029, 2985, 3457, 3578, 3675, 3818  
25 4025 and 4243; Providence Water Supply Board, Docket Nos. 2022, 2048, 2304,

1 2961, 3163, 3446, 3684, 3832 and 4061; Kent County Water Authority, Docket Nos.  
2 2098 and 3942, Woonsocket Water Department, Docket Nos. 2099 and 2904; United  
3 Water Rhode Island, Inc., (formerly Wakefield Water Company), Docket Nos. 2006  
4 2873 and 4255; and Pawtucket Water Supply Board, Docket Nos. 3193, 3378, 3497,  
5 3674 and 4171.

6 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

7 A. Exeter Associates was retained by the Division to assist in the evaluation of the  
8 General Rate Filing submitted by the Providence Water Supply Board (Providence  
9 Water or PWSB) on March 29, 2013. This testimony presents my findings and  
10 recommendations regarding the overall revenue increase to which Providence Water  
11 is entitled. My associate, Jerome D. Mierzwa, addresses cost allocation and rate  
12 design issues.

13 Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR  
14 TESTIMONY?

15 A. Yes. I have prepared Schedules TSC-1 through TSC-14. Schedule TSC-1 provides a  
16 summary of revenues and expenses under present and proposed rates. Schedules  
17 TSC-2 through TSC-14 present the adjustments that I am recommending be made to  
18 Providence Water's claimed revenues and operating expenses.

19

20 **Summary and Recommendations**

21 Q. PLEASE SUMMARIZE THE RATE RELIEF REQUESTED BY  
22 PROVIDENCE WATER IN ITS FILING.

23 A. As discussed in the testimony of Providence Water witness Harold J. Smith,  
24 Providence Water is seeking an increase in revenues of \$14,619,888, which  
25 represents an overall revenue increase of 24.3 percent. To develop its claim,

1 Providence Water utilized the results for fiscal year (FY) 2012 as the test year.  
2 Providence Water then adjusted the test year cost of service to reflect changes to  
3 become effective for a calendar year (CY) 2014 rate year.

4 Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

5 A. As shown on Schedule TSC-1, I have determined Providence Water's overall revenue  
6 requirement to be \$69,646,380. This represents an increase over revenues at present  
7 rates of \$9,558,892. The revenue increase that I have identified is \$5,060,996 less  
8 than the revenue increase of \$14,619,888 requested by Providence Water.<sup>1</sup> This  
9 difference is the result of the adjustments to PWSB's claimed revenues and operating  
10 expenses that are summarized on Schedule TSC-2.

11 Q. WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR  
12 DETERMINATION OF PROVIDENCE WATER'S REVENUE  
13 REQUIREMENTS?

14 A. Consistent with Providence Water's filing, I have utilized a test year ended  
15 June 30, 2012 and a rate year ending December 31, 2014 as the basis for determining  
16 Providence Water's revenue requirements and the revenue increase necessary to  
17 recover those requirements.

18 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

19 A. The remainder of my testimony is organized into sections corresponding to the issue  
20 or topic being addressed. These sections are set forth in the Table of Contents for  
21 this testimony.

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<sup>1</sup> The schedules accompanying Providence Water witness Smith's testimony show a revenue deficiency of \$14,618,141. Due to rounding, the proposed rates would generate a revenue increase of \$14,619,888.

**Salaries and Wages**

1  
2 Q. PLEASE EXPLAIN HOW PROVIDENCE WATER DEVELOPED ITS  
3 CLAIMED ALLOWANCE FOR RATE YEAR SALARIES AND WAGES.

4 A. To develop its claimed rate year allowance for salaries and wages, Providence Water  
5 first calculated the annualized wages for the 234 existing full-time employees based  
6 on the payroll for the week ended November 18, 2012. To this amount, Providence  
7 Water added the annual salaries of the five employees on workers' compensation, and  
8 the annual salaries for eleven vacant positions. Next, Providence Water added the  
9 annual longevity pay and the annual amounts paid to part-time employees, rain gauge  
10 keepers and Board members, to determine total annualized payroll in FY 2013.  
11 Finally, Providence Water increased the FY 2013 total by 4.545 percent to reflect the  
12 compound effect of a 3.0 percent wage increase on July 1, 2013, and one-half of the  
13 3.0 percent increase scheduled for July 1, 2014 to determine wages for the rate year  
14 ending December 31, 2014.

15 Q. DO YOU AGREE WITH PROVIDENCE WATER'S RATE YEAR WAGE  
16 CLAIM?

17 A. No. I have identified several issues with regard to Providence Water's claim. First,  
18 by ignoring normal employee turnover and including wages for its eleven vacant  
19 positions, Providence Water has overstated rate year salaries and wages. In response  
20 to Division data request Set 4, question 1 (DIV 4-1), Providence Water indicated that  
21 seven of the eleven vacant positions as of November 2012 were filled by  
22 June 30, 2013. However, despite this, the number of full-time permanent employees  
23 actually declined from 239 as of November 2012 to 235 as of June 2013 due to other  
24 positions becoming vacant. In fact, as shown in response to DIV 4-6, the number of  
25 permanent full-time employees has been at 239 or less in every month in the last two



1 years except in August 2011 (241), September 2011 (240), October 2011 (241), and  
2 October 2012 (240).

3 Second, Providence Water has annualized the wages for existing employees  
4 by multiplying total payroll, including overtime, for the week of November 18, 2012  
5 by 52. Depending on the level of overtime during that week, annual overtime  
6 expense could be overstated or understated because overtime varies from month to  
7 month and week to week.

8 Third, inclusion of the full annual salaries of the employees receiving  
9 workers' compensation creates a potential double-count of these salaries.  
10 Historically, PWSB has had third-party insurance for workers' compensation which  
11 paid the salaries of any employee on workers' compensation leave, and those salaries  
12 were not part of Providence Water's payroll. Currently, Providence Water is self-  
13 insured for workers' compensation claims up to \$350,000 per employee. Therefore,  
14 if the salaries of these workers are included in payroll, they must be excluded from  
15 workers' compensation expense.

16 Finally, Providence Water's calculation of annualized wages appears to  
17 exclude the wages paid to temporary seasonal employees. Because these employees  
18 are only employed in the summer months, the payroll for the week of  
19 November 18, 2012 used to annualize wages would not include wages for those  
20 employees.

21 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO  
22 PROVIDENCE WATER'S CLAIM FOR RATE YEAR SALARIES AND  
23 WAGES?

24 A. I am proposing to utilize PWSB's actual wages for FY 2013 as the starting point for  
25 my determination of rate year salaries and wages. These wages reflect actual

1 employee levels, thereby accounting for the effects of employee turnover, as well  
2 including longevity pay, actual overtime, and temporary, seasonal employee wages. I  
3 have then adjusted actual FY 2013 wages to reflect three changes. First, consistent  
4 with my determination of workers' compensation expense discussed subsequently, I  
5 have adjusted FY 2013 salaries and wages to include the amounts that would have  
6 been paid if all employees were on the payroll and no employees received workers'  
7 compensation. Second, I have further increased payroll to include three additional  
8 employees. Finally, I have adjusted payroll to account for effects of the wage  
9 increase of 3 percent on July 1, 2013, and one-half the annual effect of an additional 3  
10 percent increase on July 1, 2014.

11 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO INCLUDE WAGES FOR  
12 THREE EMPLOYEES IN EXCESS OF THOSE IN FY 2013.

13 A. I have included wages for three new positions because Providence Water has  
14 indicated it is striving to reduce the number of vacant positions on its Staff. I based  
15 the increase of three employees on two factors. First, the average number of full-  
16 time, permanent employees increased from 234 in FY 2012 to 237 in FY 2013. An  
17 increase of three employees for the rate year is consistent with this increase. Second,  
18 240 is the highest number of employees that Providence Water had during FY 2013,  
19 which is three employees above the FY 2013 average.

20 Q. HAVE YOU PREPARED A SCHEDULE WHICH SHOWS THE  
21 CALCULATION OF YOUR RECOMMENDED LEVEL OF SALARIES  
22 AND WAGES FOR THE RATE YEAR?

23 A. Yes. Schedule TSC-3 presents my recommendation regarding the appropriate level  
24 of salaries and wages for the rate year based on FY 2013 salaries and wages per  
25 books, plus wages for employees on workers' compensation and three additional

1 employees. As shown there, I am recommending a rate year allowance for salaries  
2 and wages of \$14,282,574, which is \$475,150 less than Providence Water's claim.

3  
4 **Payroll Clearing**

5 Q. WHAT IS PAYROLL CLEARING?

6 A. Payroll clearing represents the capitalized labor associated with Providence Water  
7 construction projects. For investor-owned utilities that earn a return on rate base,  
8 capitalized labor becomes part of the capital investment which the utility is allowed to  
9 depreciate and earn a return. For Providence Water and other municipal utilities for  
10 which revenue requirements are determined on a cash basis, capitalized labor costs  
11 must be reimbursed from the Infrastructure Replacement (IFR) fund or another  
12 capital fund because Providence Water's cost of service does not include depreciation  
13 of, and a return on, rate base.

14 Q. HOW DID PROVIDENCE WATER DETERMINE THE AMOUNT OF  
15 PAYROLL CLEARING THAT WILL BE REIMBURSED FROM THE IFR  
16 OR OTHER CAPITAL FUND FOR THE RATE YEAR?

17 A. Providence Water included a credit or off-set to salaries and wages for payroll  
18 clearing equal to the payroll clearing in the FY 2012 test year. As shown on Schedule  
19 HJS-A1, this credit is \$798,115. However, in response to DIV 1-10, Providence  
20 Water agreed that this amount should be adjusted to reflect wage increases after FY  
21 2012

22 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO PAYROLL  
23 CLEARING?

24 A. I am proposing to adjust payroll clearing to reflect the effect of the increases in wage  
25 rates that occurred after the test year ended June 30, 2012 on July 1, 2012, July 1,

1 2013, and one-half of the increase scheduled for July 1, 2014. As shown on Schedule  
2 TSC-4, this adjustment increases payroll clearing and reduces test year expenses by  
3 \$61,306.

4

5 **Overhead Rate Applied**

6 Q. WHAT IS OVERHEAD RATE APPLIED?

7 A. Similar to payroll clearing, overhead rate applied represents capitalized overheads  
8 that are attributable to construction projects.

9 Q. HAS PROVIDENCE WATER TREATED THESE CAPITALIZED  
10 OVERHEADS IN THE SAME MANNER AS CAPITALIZED WAGES  
11 (PAYROLL CLEARING)?

12 A. No. Unlike payroll clearing or capitalized labor, Providence Water has not treated  
13 overhead rate applied as being reimbursed from the IFR fund or another capital fund.  
14 Instead, Providence Water has treated these capitalized overheads as a normal O&M  
15 expense.

16 Q. HAS PROVIDENCE WATER TREATED CAPITALIZED BENEFITS AS  
17 REIMBURSED FROM THE IFR OR OTHER CAPITAL ACCOUNT IN  
18 PRIOR RATE CASES?

19 A. Yes. In response to DIV 4-2, Providence Water indicates that overhead rate applied  
20 was not treated as reimbursed from the IFR fund in Docket No. 3832. However, in  
21 Providence Water's last rate case in Docket No. 4061, and in Docket Nos. 3446 and  
22 3684, the two cases prior to Docket No. 3832, both capitalized labor and capitalized  
23 overheads were reimbursed from the IFR or other capital fund.

24 Q. HOW ARE YOU PROPOSING TO TREAT OVERHEAD RATE APPLIED  
25 AMOUNTS?

1 A. I am proposing to treat overhead rate applied amounts as eligible for reimbursement  
2 from the IFR fund or capital funds, as applicable. This approach recognizes these  
3 amounts are capitalized costs, not O&M expenses, and is consistent with the  
4 treatment of capitalized wages and the treatment of capitalized overheads in prior  
5 cases other than Docket No. 3832.

6 Q. HOW HAVE YOU DETERMINED THE AMOUNT OF CAPITALIZED  
7 OVERHEADS TO BE REIMBURSED FROM CAPITAL FUNDS FOR THE  
8 RATE YEAR?

9 A. During the FY 2012 test year, overhead rate applied amounts totaled \$1,202,719.  
10 These amounts include both fringe benefits, which are a percentage of labor and a  
11 portion of the Administration, Finance, Support and Engineering costs of Providence  
12 Water. To estimate the rate year level of capitalized overheads, I have escalated the  
13 test year overheads applied by the same factor as payroll clearing. As discussed  
14 subsequently, this is the inflation factor from the FY 2012 test year to the CY 2014  
15 rate year that I am recommending. As shown on Schedule TSC-5, I have estimated  
16 the capitalized overheads to be reimbursed from the IFR or capital fund, and excluded  
17 from O&M expense, to be \$1,295,104.

18 Q. ARE YOU PROPOSING TO INCREASE IFR OR OTHER CAPITAL  
19 FUNDING TO ACCOUNT FOR THE ADDITIONAL AMOUNTS TO BE  
20 USED TO REIMBURSE OVERHEADS APPLIED?

21 A. No. As shown on Schedule HJS-S9C, Providence Water projects that it will have a  
22 balance of \$3.1 million in the IFR fund as of June 30, 2014, and that balance will  
23 grow to over \$7.5 million by June 30, 2015. In addition, Schedule HJS-S9A shows  
24 that Providence Water also projects a surplus of over \$4.6 million in the Capital Fund  
25 (used to pay for cash funded projects) as of June 30, 2015. Hence, there will be more

1 than sufficient monies available to reimburse overheads applied during the rate year  
2 and beyond.

3  
4 **Benefits Expense**

5 Q. WHAT ADJUSTMENTS HAVE YOU MADE TO PWSB'S PROJECTION  
6 OF RATE YEAR BENEFITS EXPENSE?

7 A. I have made five adjustments to Providence Water's projection of benefits expense  
8 for the rate year. First, I have revised the estimate of Union Combined benefits  
9 expense to eliminate the projected 4.23 percent increase included by Providence  
10 Water based on the response to DIV 1-18 that stated the increase should be zero  
11 percent. Second, I have included a 37.7 percent increase in test year Union Pension  
12 expense instead of the 41.21 percent increase included by PWSB, again as provided  
13 in response to DIV 1-18. Third, I have revised City Retirement expense to reflect the  
14 updated cost provided in response to DIV 1-20. Fourth, for those items that  
15 Providence Water escalated for inflation, I have reduced the inflation rate from  
16 6.38 percent as used by PWSB to 4.66 percent, consistent with my recommendation  
17 regarding the appropriate inflation rate, as discussed subsequently. Finally, I have  
18 revised the projected amounts for medical insurance, employee co-pays, and dental  
19 insurance to reflect actual premiums for FY 2014.

20 Q. COULD YOU PROVIDE ADDITIONAL DETAILS REGARDING HOW  
21 YOU PROJECTED MEDICAL AND DENTAL INSURANCE COSTS?

22 A. Yes. I used the response to COM 1-11 and 1-21 to identify Providence Water's  
23 medical (Blue Cross) and dental (Delta Dental) premiums for FY 2014. I adjusted the  
24 total premiums provided by Providence Water in COM 1-11 to exclude the premiums  
25 for vacant positions in excess of those needed to match my recommendation to allow

1 for 240 full-time, permanent employees. I would note that in determining medical  
2 insurance costs, I separated the cash payments made to employees who do not accept  
3 healthcare, and updated the rate year amount included by Providence Water for these  
4 payments instead of applying an inflation factor to the test year payments.

5 Q. DID YOU MAKE AN ADJUSTMENT TO MEDICAL AND DENTAL  
6 INSURANCE COSTS TO REFLECT AN INCREASE IN PREMIUMS  
7 FROM FY 2014 TO CY 2014 LEVELS BASED ON HISTORICAL  
8 TRENDS?

9 A. No. As noted by Mr. Smith in his direct testimony, the City of Providence made  
10 changes to its health insurance plans so that current premiums are not directly  
11 comparable to historical premiums. In addition, changes in the number of employees  
12 and the mix of employees taking family versus single coverage have a material effect  
13 on the increase in costs from FY 2012 to FY 2014 that further make the change over  
14 that time period unusable for estimating future increases.

15 Q. HAVE YOU PREPARED A SCHEDULE SHOWING YOUR  
16 ADJUSTMENT TO EMPLOYEE BENEFITS?

17 A. Yes. Schedule TSC-6 presents my estimate of rate year benefits expense after  
18 reflecting the adjustments above. As shown there, I have projected benefits expense  
19 to be \$8,224,746, which is an increase of \$580,214 compared to Providence Water's  
20 rate year claim.

21

22

**Inflation Adjustment**

23 Q. PLEASE SUMMARIZE THE ADJUSTMENT THAT PROVIDENCE  
24 WATER MADE FOR INFLATION.

1 A. For those expenses that were not separately adjusted from test year to rate year levels,  
2 Providence Water applied an escalation factor of 6.38 percent based on 2.5 percent  
3 per year inflation for two and one-half years.

4 Q. WHAT REVISIONS ARE YOU PROPOSING TO THIS CLAIM?

5 A. I am proposing two revisions to Providence Water's adjustment for inflation. First,  
6 the 2.5 percent per year inflation rate used by Providence Water was based on the  
7 historical increase in the Consumer Price Index (CPI) from 2010 to 2012. I am  
8 proposing to revise the escalation factor to reflect expected inflation from FY 2012 to  
9 CY 2014 of 4.695 percent. I have based this on the average projected CPI for 2014 as  
10 identified by Blue Chip Economic Indicators dated August 10, 2013 compared to the  
11 average CPI for the four quarters ended June 2012.

12 The second revision I am proposing to make to Providence Water's inflation  
13 adjustment is to exclude purchased power costs from the expense to which an  
14 escalation factor is applied. Total purchased power costs and fuel for power purchase  
15 costs have shown no upward trend over the last three years, varying from \$1,300,559  
16 in FY 2010 to \$1,474,835 in FY 2011 to \$1,361,928 in the FY 2012 test year.  
17 Moreover, Providence Water has an energy supply contract with the League of Cities  
18 and Towns that is in effect from 2011 through 2015 that will ensure the supply  
19 component of the costs will not increase. Therefore, purchased power costs should  
20 not be escalated for inflation.

21 Q. WHAT IS THE EFFECT OF THE REVISIONS YOU HAVE MADE TO  
22 PROVIDENCE WATER'S INFLATION ADJUSTMENT?

23 As shown on Schedule TSC-7, my adjustments to revise the inflation rate and exclude  
24 purchase power costs from the inflation base reduce Providence Water's adjustment  
25 by \$170,630.



1 **Bad Debt Expense**

2 Q. WHAT CONCERN DO YOU HAVE WITH REGARD TO PWSB'S  
3 CLAIMED BAD DEBT EXPENSE FOR THE RATE YEAR?

4 A. Providence Water applied an inflation factor of 6.376 percent to test year expense of  
5 \$445,333 to determine its claim for rate year bad debt expense of \$473,727. This  
6 proposal is inconsistent with Providence Waters experience which reveals that bad  
7 debt experience varies from year to year and is not a function of inflation. Over the  
8 past four years, Providence Water's bad debt expense has varied from \$720,206 in  
9 FY 2010, to \$(524,135) in FY 2011 (negative indicating the recovery or reversal of  
10 prior years' bad debt), to \$445,333 in FY 2012 and to \$(1,320,107) for FY 2013.

11 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO  
12 PROVIDENCE WATER'S CLAIMED EXPENSE?

13 A. As shown on Schedule TSC-8, the average level of bad debt expense over the period  
14 FY 2010 through FY 2013 has been negative. Accordingly, I am proposing to  
15 eliminate Providence Water's claim for bad debt expense, thereby reducing rate year  
16 expense by \$473,727. This adjustment is shown on Schedule TSC-8.

17  
18 **Insurance Expense**

19 Q. HOW DID PROVIDENCE WATER DEVELOP ITS CLAIM FOR  
20 INSURANCE EXPENSE?

21 A. Providence Water's filing includes an allowance for insurance expense that was  
22 determined by applying an escalation factor of 1.0638 to test year insurance based on  
23 its estimate of inflation of 2.5 percent per year. In his direct testimony, Providence  
24 Water witness Smith indicated that this estimate would be updated when bids for its  
25 new insurance contracts were received.

1 Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO INSURANCE EXPENSE  
2 FOR THE RATE YEAR.

3 A. I have adjusted insurance expense to reflect the updated information provided by  
4 Providence Water. I have included \$1,018,753 for property and casualty insurance to  
5 reflect the FY 2014 premiums based on the recently received bids. As can be seen  
6 from Schedule TSC-9, property and casualty premiums have not increased in recent  
7 years and I have used the FY 2014 premiums as representative of the rate year.

8 Beginning in FY 2013, Providence Water became currently self-insured for  
9 workers' compensation claims of up to \$350,000 per incident. This was necessary  
10 due to poor claims experience that PWSB has taken aggressive measures to correct.  
11 (For example, over the course of FY 2013, the number of employees on workers'  
12 compensation declined for 10 to 3.) To account for rate year workers' compensation  
13 insurance costs, I have included the FY 2014 premium of \$443,542 being paid to The  
14 Hartford for plan administration and excess coverage. I have added \$250,000 to this  
15 amount to cover costs for medical claims and other related costs. As noted  
16 previously, I have included the wages for all employees in salaries and wages and  
17 therefore have not included any amounts for salaries and wages paid as workers'  
18 compensation. I would note that to the extent that any workers' compensation is paid  
19 to employees in lieu of salary, those amounts should not be treated as workers'  
20 compensation expense unless the salary for that employee is credited to the insurance  
21 reserve.

22 As far as the remaining components of insurance expense, I have based the  
23 allowance for injuries and damages on the average claims for FY 2011, FY 2012 and

1 FY 2013.<sup>2</sup> I have based the amounts for safety supplies and program expense on the  
2 expenses incurred in the test year adjusted for inflation. As shown on Schedule TSC-  
3 9, my recommended allowance for insurance expense is \$282,043 less than  
4 Providence Water's claim. This difference is primarily due to the change in workers'  
5 compensation insurance.

6

7

**Chemicals and Sludge Handling**

8 Q. PLEASE SUMMARIZE PROVIDENCE WATER'S REQUEST FOR  
9 FUNDING ITS CHEMICALS AND SLUDGE MAINTENANCE FUND.

10 A. Providence Water is proposing to increase the annual contribution to the chemicals  
11 and sludge maintenance fund by \$3,000,000 from \$2,458,942 to \$5,458,942. This  
12 increase is designed to recover projected rate year chemical and sludge handling costs  
13 of \$4,773,881, plus provide an additional fund contribution of \$685,061 to be used to  
14 recover a projected shortfall in the fund balance. This shortfall was projected to  
15 occur in FY 2013 due to a known increase in sludge handling costs, and projected  
16 increases in chemical costs due to the increased usage discussed by Providence Water  
17 witness Paul Gadoury and further detailed in response to DIV 1-25.

18 Q. DID THE PROJECTED INCREASE IN CHEMICAL COSTS PROJECTED  
19 FOR FY 2013 OCCUR?

20 A. No. Providence Water projected that the quantities of all of the water treatment  
21 chemicals that it utilizes would increase in FY 2013 and beyond compared to FY  
22 2012. However, with the exception of chlorine use, actual chemical use was less in  
23 FY 2013 than in FY 2012.

---

<sup>2</sup> The FY 2013 amount was provided in late May and does not include a full year of experience. To the extent that additional claims were paid during FY 2013, it would be appropriate to update the average to include those additional claims paid.

1 Q. HOW ARE YOU PROPOSING TO DETERMINE CHEMICAL COSTS?

2 A. Schedule TSC-10 presents a comparison of Providence Water's projected chemical  
3 use with the actual quantities utilized in FY 2012 and FY 2013. As noted above, FY  
4 2013 chemical use was not only below PWSB's projections, it was below FY 2012  
5 usage for all chemicals other than chlorine. To be conservative, I am proposing to  
6 base the chemical costs included in determining the restricted account funding on the  
7 higher of the quantity utilized in FY 2012 or FY 2013. I have then multiplied these  
8 quantities by the unit prices for the rate year to determine annual chemical costs of  
9 \$2,499,322. Adding the costs of the new sludge maintenance costs of \$1,700,000 per  
10 year results in total chemical and sludge handling costs of \$4,199,322.

11 Q. HOW DO THE CHEMICAL COSTS YOU HAVE INCLUDED COMPARE  
12 TO THOSE THAT WOULD HAVE RESULTED IF YOU HAD BASED  
13 QUANTITIES ON A TWO-YEAR AVERAGE?

14 A. Had a two-year average for the quantities been utilized, chemical costs would have  
15 been \$2,241,843, a reduction of \$257,479 compared to my recommendation.

16 Q. ARE YOU PROPOSING TO INCLUDE ANY AMOUNT ABOVE  
17 PROJECTED CHEMICAL AND SLUDGE HANDLING COSTS TO FUND  
18 A SHORTFALL IN THE RESTRICTED ACCOUNT?

19 A. Yes. Based on the FY 2013 chemical usage data and prices provided in discovery, I  
20 have estimated that actual FY 2013 chemical costs were approximately \$2.06 million.  
21 This is approximately \$1.13 million less than Providence Water's estimate of FY  
22 2013 costs. Based on the sources and uses of funds shown on Schedule HIS-S9G,  
23 Providence Water should have ended FY 2013 with a small positive balance in the  
24 Chemical and Sludge Maintenance fund. However, if FY 2014 funding was based on  
25 including only the amount necessary to cover estimated costs, the restricted fund

1 balance would be approximately \$300,000 negative at the end of FY 2014.  
2 Therefore, I am proposing to include an additional \$250,000 in reserve funding. This  
3 will result in \$375,000 in additional funding in FY 2014 and FY 2015 so that the  
4 negative balance will be eliminated by the end of FY 2015. (Because the new  
5 funding will not begin until the second half of FY 2014, only \$125,000 will be  
6 collected in FY 2014.)

7 Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO FUNDING  
8 OF THE CHEMICAL AND SLUDGE HANDLING RESTRICTED  
9 ACCOUNT?

10 A. As shown on Schedule TSC-10, I am proposing to include a funding allowance of  
11 \$4,450,000 based on the estimate of chemical costs I have developed. This represents  
12 an increase of \$1,991,058 compared to the current funding allowance, but is  
13 \$1,008,942 less than Providence Water's requested funding allowance.

14

15 **Property Tax Expense**

16 Q. PLEASE SUMMARIZE HOW PROVIDENCE WATER DEVELOPED ITS  
17 CLAIM FOR RATE YEAR PROPERTY TAX EXPENSE.

18 A. Providence Water based its rate year property tax claim on the average of its  
19 projection of taxes for each municipality in FY 2014 and FY 2015. With the  
20 exception of Scituate and Gloucester, Providence Water projected FY 2014 and FY  
21 2015 property taxes by escalating its FY 2013 assessment from each municipality by  
22 the four percent per year statutory maximum. The FY 2014 and FY 2015 taxes for  
23 Gloucester and Scituate were based on their tax treaties with Providence Water. In  
24 the case of Gloucester, the tax treaty includes four percent per year increases over FY  
25 2013 for FY 2014 and FY 2015. For Scituate, the property tax treaty called for

1 Providence Water to pay adjusted taxes in FY 2009 through FY 2013 and return to  
2 non-adjusted tax levels in FY 2014. Providence Water assumed that FY 2014 and FY  
3 2015 taxes would include the full four percent maximum increases.

4 Q. HOW ARE YOU PROPOSING TO DETERMINE RATE YEAR  
5 PROPERTY TAX EXPENSE?

6 A. Consistent with Providence Water's approach, I am proposing to utilize the average  
7 projected property tax expense for FY 2014 and FY 2015 to estimate property tax  
8 expense for the CY 2014 rate year. However, since the time Providence Water filed  
9 its rate case, actual FY 2014 property tax bills have been received.<sup>3</sup> Therefore, I have  
10 used these amounts for FY 2014.

11 To estimate FY 2015 property taxes, I have escalated the actual taxes for FY  
12 2014 based on recent experience. For Scituate, which accounts for more than  
13 85 percent of Providence Water's total property tax expense, the response to DIV 1-  
14 11 indicates that the tax rate has increased by 2.27 percent, zero percent, and  
15 one percent over the last three years. Based on this, I have included a conservative  
16 two percent increase from FY 2014 to FY 2015. For Gloucester, I have utilized the  
17 tax treaty amount for FY 2015, which reflects a four percent increase compared to FY  
18 2014. For the remaining municipalities, I looked at the overall increase over the last  
19 several years. From FY 2011 to FY 2014, the overall increase in the combined  
20 property taxes paid to municipalities other than Scituate and Gloucester was  
21 1.10 percent. This is consistent with the increase from FY 2013 to FY 2014 of  
22 1.14 percent. However, to again be conservative, I have included an increase of two  
23 percent from FY 2014 to FY 2015.

---

<sup>3</sup> The exceptions are the Harmony and Chepachet Fire Districts. The combined property taxes for these two small fire districts totaled \$297 for FY 2013, and I have assumed these taxes would increase by four percent for purposes of projecting their FY 2014 taxes.

1 Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE EFFECT OF  
2 YOUR UPDATED ESTIMATES OF PROPERTY TAXES?

3 A. Yes. This information is presented on Schedule TSC-11. As shown there, my  
4 projection of property tax expense is \$252,919 less than Providence Water's  
5 projection.

6

7 **Unidirectional Flushing Program**

8 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE  
9 COSTS OF THE UNIDIRECTIONAL FLUSHING PROGRAM?

10 A. In response to DIV 1-30, Providence Water provided an update of the costs of its new  
11 unidirectional flushing program. According to that response, the field operations  
12 costs are now estimated to be \$290,000 instead of its original estimate of \$380,000. I  
13 have reflected this reduction in costs of \$90,000 on Schedule TSC-12.

14

15 **Regulatory and Rate Case Expense**

16 Q. HOW DID PROVIDENCE WATER DEVELOP ITS REGULATORY AND  
17 RATE CASE EXPENSE CLAIM?

18 A. Providence Water's claimed regulatory and rate case expense consists of three  
19 primary elements: the costs of the current rate case; its allocated share of PUC  
20 expenses; and the costs of various other regulatory proceedings. For the current rate  
21 case, Providence Water estimated total costs of \$233,622 and has proposed to  
22 amortize those costs over two years. The amount included for Providence Water's  
23 proportionate share of PUC expenses was based on the FY 2013 assessment. For the  
24 costs of other proceedings, Providence Water generally escalated FY 2012 costs by  
25 five percent. It also added \$6,500 for costs related to a bond filing with the Division.

1 Q. ARE YOU PROPOSING ANY ADJUSTMENTS TO PROVIDENCE  
2 WATER'S CLAIM FOR REGULATORY AND RATE CASE EXPENSE?

3 A. Yes. Providence Water's claimed costs include costs associated with two prior rate  
4 proceedings: Docket 40611-Conservation Rate Filing and the hydrant fee filing.  
5 Those costs are not ongoing and are not incremental to the cost of this proceeding.  
6 To the extent these amounts represent the amortization costs of those prior  
7 proceedings, the amortization should be complete prior to the rate year in this case.  
8 Therefore, I have eliminated these amounts which total \$17,626, as shown on  
9 Schedule TSC-13.

10

11

**Miscellaneous Expenses**

12 Q. PLEASE EXPLAIN YOUR CONCERN WITH REGARD TO  
13 MISCELLANEOUS EXPENSES.

14 A. Based on my review of the response to Comm 1-33, I have identified a number of test  
15 year expense items that may not be appropriately included in Providence Water's rate  
16 year expenses. This includes costs that are either not properly recovered from  
17 ratepayers and/or costs that are one-time expenses that will not be incurred again in  
18 the rate year.

19 Q. WOULD YOU PLEASE SUMMARIZE THE MISCELLANEOUS  
20 EXPENSES ABOUT WHICH YOU HAVE CONCERNS?

21 A. Yes. First, Water Treatment Miscellaneous Expenses (Account 67530) include an  
22 assessment of \$2,775 from the Rhode Island Department of Environmental  
23 Management for an air quality violation and \$17,937 for hazardous waste disposal  
24 and containment paid to Triumvirate Environmental. These would appear to be



1 expenses that are not properly recovered from ratepayers as well as being non-  
2 recurring expenses.

3 Customer Accounts related Miscellaneous Expenses (Account 67570) include  
4 separate entries for \$3,620 and \$599 for customer refunds. These refunds appear to  
5 be related to water service and, as such, are not properly included in rate year  
6 operating expenses because these amounts represent an adjustment to revenues, not  
7 expenses, and rate year revenues are based on a multi-year average of historical sales  
8 volumes.

9 Administrative and General Miscellaneous Expenses (Account 67580) include  
10 four entries which appear to be one-time, non-recurring items which may not be  
11 properly included in rate year expenses. These include \$28,000 paid to Zandar for  
12 software conversion; \$125,528 paid to Adaptive Minds for billing software/Oracle  
13 support; \$35,000 paid to Sansoucy for appraisal service; and \$69,933 paid to  
14 Partridge, Snow and Hahn for legal services/strategic plan.

15 Q. HOW ARE YOU PROPOSING TO TREAT THE MISCELLANEOUS  
16 EXPENSE ITEMS DISCUSSED ABOVE?

17 A. Because of the timing of the response to Comm 1-33, insufficient time was available  
18 prior to the filing of this testimony to conduct follow-up discovery to obtain more  
19 details. For purposes of developing my initial recommendation on behalf of the  
20 Division, I have excluded all of the costs that I have discussed above from rate year  
21 expenses. I am prepared to reevaluate this recommendation if Providence Water  
22 provides information in discovery or rebuttal testimony that demonstrates why these  
23 costs should be recovered from ratepayers.

24 Schedule TSC-14 provides the calculation of my adjustment to remove the  
25 Miscellaneous Expenses discussed previously. I would note that all Miscellaneous

1 Expenses were included in the overall pool of costs that was adjusted from test year  
2 to rate year levels by applying an inflation factor. Therefore, in developing my  
3 adjustment, I have applied the inflation factor that I recommended to the test year  
4 amounts of the eight miscellaneous expense items I am eliminating. As shown on  
5 Schedule TSC-14, this adjustment reduces rate year expense by \$296,698.

6

7

**Operating Reserve**

8 Q. HOW HAVE YOU CALCULATED THE OPERATING RESERVE  
9 ALLOWANCE INCLUDED IN THE DIVISION'S RECOMMENDED  
10 TOTAL COST OF SERVICE?

11 A. Consistent with the Commission's decision in Docket No. 3832, I am including a  
12 total operating reserve allowance of 3.0 percent of expenses less miscellaneous  
13 revenues, of which 2.0 percent is restricted and 1.0 percent is unrestricted. However,  
14 I am proposing to adjust the amount that is collected through proposed rates to  
15 account for the incremental one time revenues that will be realized by Providence  
16 Water as the result of the switch from quarterly to monthly billing for all customers  
17 not already billed monthly. According to the response to KCWA 2-12, Providence  
18 Water expects to realize a one-time increase in revenue of \$2,196,330 in revenues  
19 based on current rates as the result of the switch to monthly billing. This amount will  
20 increase based on the revenue increase granted in this case.

21 I am proposing that \$2,200,000 million of additional revenues generated by  
22 the switch to monthly billing be set aside in the restricted operating reserve account  
23 and be used to reduce the amount that must be recovered in rates by \$1,100,000 per  
24 year for two years. This will help offset the significant increase in this case being  
25 sought to meet additional IFR and other costs. I have based the use of two years for

1 the revenue requirement offset on Providence Water's stated intent (in KCWA-8) to  
2 file another rate increase in two years in order to meet increased IFR funding  
3 requirements. My calculation of the required IFR funding is shown on Schedule  
4 TSC-2.

5 Q. DOES THIS COMPLETE YOUR TESTIMONY?

6 A. Yes, it does.

**BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND**

**PROVIDENCE WATER        )  
SUPPLY BOARD            )        **DOCKET NO. 4406****

**SCHEDULES ACCOMPANYING THE  
DIRECT TESTIMONY  
OF  
THOMAS S. CATLIN**

**ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**August 23, 2013**

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**EXETER**

ASSOCIATES, INC.  
10480 Little Patuxent Parkway  
Suite 300  
Columbia, Maryland 21044

PROVIDENCE WATER SUPPLY BOARD

Summary of Revenues and Expenses at  
Present and Proposed Rates  
Rate Year Ended December 31, 2014

	Rate Year Amount Per Providence	Division Adjustments	Rate Year at Present Rates	Proposed Rate Increase	Rate Year at Proposed Rates
<b>Revenue</b>					
Service Charge	\$ 5,726,796	\$ -	\$ 5,726,796		\$ 5,726,796
Retail Sales	32,253,695	-	32,253,695		32,253,695
Wholesale Sales	16,618,799	-	16,618,799		16,618,799
Private Fire Protection	2,253,933	-	2,253,933		2,253,933
Retail FPSC	1,095,131		1,095,131		1,095,131
Public Fire Protection	959,965		959,965		959,965
Miscellaneous	1,179,169		1,179,169		1,179,169
Total Revenue	\$ 60,087,488	\$ -	\$ 60,087,488	\$ 9,558,892	\$ 69,646,380
<b>Expenses</b>					
Operation & Maintenance	30,126,993	(943,617)	29,183,376	-	29,183,376
Insurance	2,084,590	(282,043)	1,802,547	-	1,802,547
Chemicals & Sludge	5,458,942	(1,008,942)	4,450,000	-	4,450,000
City Services	839,167	-	839,167	-	839,167
Property Taxes	6,740,435	(252,919)	6,487,516	-	6,487,516
Capital Reimbursement	(798,115)	(1,356,410)	(2,154,525)	-	(2,154,525)
Net Operations	\$ 44,452,012	\$ (3,843,931)	\$ 40,608,081	\$ -	\$ 40,608,081
Capital Fund	2,450,000		2,450,000	-	2,450,000
Western Cranston	62,069		62,069		62,069
Infrastructure Replacement Fund	24,000,000		24,000,000		24,000,000
Cash Funded AMR/Meter Replacement	1,000,000		1,000,000		1,000,000
Equipment Replacement Fund	600,000		600,000		600,000
Property Tax Refund Fun	-		-		-
Revenue Reserve Fund	1,427,698	(76,879)	1,350,820	-	1,350,820
Less: Reserve Funded from Monthly Billing	-	(1,100,000)	(1,100,000)		(1,100,000)
Total Capital	\$ 29,539,767	\$ (1,176,879)	\$ 28,362,889	\$ -	\$ 28,362,889
Total Expenses	\$ 73,991,779	\$ (5,020,809)	\$ 68,970,970	\$ -	\$ 68,970,970
Operating Reserve	713,849	(38,439)	675,410	-	675,410
Total Cost of Service	\$ 74,705,628	\$ (5,059,249)	\$ 69,646,380	\$ -	\$ 69,646,380
Revenue Surplus/(Deficiency)	\$ (14,618,140)	\$ 5,059,249	(\$9,558,892)	\$ 9,558,892	\$0

PROVIDENCE WATER SUPPLY BOARD

Summary of Division Adjustments to  
Rate Year Expenses  
Rate Year Ended December 31, 2014

<u>Description</u>	<u>Amount</u>	<u>Source</u>
Rate Year Salaries and Wages	\$ (475,150)	Schedule TSC-3
Payroll Clearing	(61,306)	Schedule TSC-4
Overhead Clearing	(1,295,104)	Schedule TSC-5
Benefits	580,214	Schedule TSC-6
Inflation	(170,630)	Schedule TSC-7
Bad Debt	(473,727)	Schedule TSC-8
Insurance	(282,043)	Schedule TSC-9
Chemicals	(1,008,942)	Schedule TSC-10
Property Taxes	(252,919)	Schedule TSC-11
Unidirectional Flushing	(90,000)	Schedule TSC-12
Regulatory and Rate Case Expense	(17,626)	Schedule TSC-13
Miscellaneous Expenses	(296,698)	Schedule TSC-14
Operating Reserve	(115,318)	See Note (1)
Reserve Funding from Monthly Billings	<u>(1,100,000)</u>	See Note (2)
Total Expense Adjustments	<u>\$ (5,059,249)</u>	

Notes:

- (1) Based on 3.0% of total expenses less miscellaneous revenues. Total is split with 2% going to restricted revenue reserve fund and 1% being unrestricted.
- (2) Reflects proposal to use one-time revenue increase to fund restricted revenue reserve fund and to reflect total as offset to rates over 2 years.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Salaries and Wages to  
Reflect Normal Employee Vacancies  
Rate Year Ended December 31, 2014

	<u>Salary</u>
Total FY 2013 Wages (1)	\$ 13,587,511
Less: Wages for Engineers Paid directly from IFR Fund (1)	<u>(332,464)</u>
FY 2013 Wage Expense per Books	\$ 13,255,047
Plus Wages for Employees on Workers Compensation (1)	<u>274,221</u>
Total Salaries and Wages for Existing Employees	\$ 13,529,268
Plus Wages for 3 New Employees (2)	<u>\$ 132,384</u>
Adjusted FY 2013 Salaries and Wages	\$ 13,661,652
Adjustment to Bring to Rate Year Level	<u>1,04545</u>
Rate Year Wages per Division	\$ 14,282,574
Amount per Providence Water (4)	<u>14,757,724</u>
Adjustment to Salaries and Wages	<u><u>\$ (475,150)</u></u>

Notes:

- (1) Per response to DIV 4-12.
- (2) Based on average wages for 19 vacant positions as of June 30, 2013.
- (3) Per Schedule HJS-S3. Reflects rate year effect of 3 % wage increases on July 1, 2013 and July 1, 2014.
- (4) Per Schedule HJS-S3.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Payroll Clearing Expense  
Rate Year Ended December 31, 2014

Payroll Clearing in Test Year (1)	\$ 798,115
Adjustment to Reflect Wage Increases (2)	<u>1.0768</u>
Rate Year Payroll Clearing	\$ 859,421
Test Year Payroll Clearing	<u>798,115</u>
Adjustment to Rate Year Expense	<u><u>\$ (61,306)</u></u>

Notes:

(1) Per Schedule HJS-S1.

(2) Reflects 3 percent increases on July 1, 2012, July 1, 2013 and one-half of the annual effect of a 3% increase on July 1, 2014.



PROVIDENCE WATER SUPPLY BOARD

Adjustment to Recognize Overheads Applied  
As Reimbursable from Capital Funds  
Rate Year Ended December 31, 2014

Overhead Clearing in Test Year (1)	\$ 1,202,719
Adjustment to Reflect Increase to Rate Year (2)	<u>1.0768</u>
Rate Year Payroll Clearing	\$ 1,295,104
Amount per Providence Water	<u>-</u>
Adjustment to Rate Year Expense	<u><u>\$ (1,295,104)</u></u>

Notes:

(1) Per Schedule HJS-A1.

(2) Based on increase in payroll clearing from test year to rate year per  
Schedule TSC-4.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Benefits Expense  
 Rate Year Ended December 31, 2014

FRINGE BENEFIT	Test Year FY 2012	Adjustment	Rate Year CY 2012
Union Combined Benefits (1)	\$ 586,821	\$ -	\$ 586,821
Union Pension (1)	331,312	124,905	456,217
Death Benefit Insurance (2)	1,943	91	2,034
Educational Classes/Certification (2)	2,649	124	2,773
FICA (3)	1,014,048	46,139	1,060,187
State Unemployment Compensation (3)	14,716	670	15,386
Healthcare EE Cash Payment (4)	9,500	(500)	9,000
1/2% Wage Assignment (3)	35,820.00	1,630	37,450
Blue Cross (4)	2,072,201	792,107	2,864,308
Less Employee Co-Share (4)	(355,216)	(137,709)	(492,925)
Delta Dental (4)	254,556	3,731	258,287
GASB 43/45 Reserve Required (5)	1,230,000	(750,000)	480,000
City Retirement (6)	2,315,228	629,981	2,945,209
Total	\$ 7,513,577.79	\$ 711,169	\$ 8,224,746
Amount per Providence Water (Schedule HJS-S6)			\$ 7,644,532
Adjustment			\$ 580,214

Notes:

- (1) Amounts per DIV 1-18. Union Combined Benefits are not subject to increase. Union Pension increased by 37.7%.
- (2) Adjusted by Division inflation rate per Schedule TSC-7.
- (3) Reflects compounded salary increase of 4.55% per Schedule HJS-S6.
- (4) Reflects FY 2014 rates per Comm 1-11. Amounts have been adjusted to reflect 240 full time employees instead of 254 full time employees including 19 vacancies as of June 30, 2013.
- (5) Per Schedule HJS-6.
- (6) Per response to DIV 1-20.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Inflation Related Expense Increases  
Rate Year Ended December 31, 2014

	Inflation Base (1)	Inflation per Division (2) 4.695%	Inflation per Prov. Water (3) 6.376%	Adjustment
<u>Purchased Power Costs (4)</u>				
Pumping	\$ 778,684	\$ -	\$ 49,647	\$ (49,647)
Water Treatment	457,253	-	29,153	(29,153)
Transmission and Distribution	12,019	-	766	(766)
Administrative and General	113,972	-	7,267	(7,267)
Subtotal	<u>\$ 1,361,928</u>	<u>\$ -</u>	<u>\$ 86,833</u>	<u>\$ (86,833)</u>
<u>Other Expenses</u>				
Source of Supply	638,455	29,976	40,707	(10,731)
Pumping Expenses	790,313	37,106	50,389	(13,283)
Water Treatment	523,922	24,599	33,404	(8,805)
Transmission and Distribution	865,429	40,633	55,178	(14,545)
Customer Accounts (5)	208,639	9,796	13,303	(3,507)
Administrative and General	1,959,197	91,987	124,914	(32,927)
Subtotal	<u>\$ 4,985,955</u>	<u>\$ 234,098</u>	<u>\$ 317,895</u>	<u>\$ (83,797)</u>
Total	<u>\$ 6,347,883</u>	<u>\$ 234,098</u>	<u>\$ 404,728</u>	<u><u>\$ (170,630)</u></u>

Notes:

- (1) Amounts subject to inflation adjustment per Schedule HJS-S2.
- (2) Based on increase in Average GDP-PI for fourquarters ending 2Q12 to four quarters ending 4Q14 per Blue Chip Economic Indicators dated August 10, 2013.
- (3) Per Schedule HJS-S2.
- (4) Refer to testimony for explanation regarding not inflating power supply costs.
- (5) Excludes Bad Debt which is treated separately on Schedule TSC-8.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Bad Debt Expense  
Rate Year Ended December 31, 2014

	<u>Total</u>
Bad Debt Expense (1)	
12 Months Ending 6/30/2010	\$ 720,206
12 Months Ending 6/30/2011	(524,135)
12 Months Ending 6/30/2012	445,333
6 Months Ending 12/31/2012	<u>(1,320,107)</u>
Total	\$ (678,703)
 Average Annual Expense (divide by 4)	 <u>\$ (193,915)</u>
 Amount per Providence Water Filing (2)	 <u>473,727</u>
 Adjustment to Bad Debt Expense (Eliminate Claimed Expense)	 <u>\$ (473,727)</u>

Notes:

(1) Per response to DIV 1-4 and Comm 1-28.

(2) Per Schedule HJS-S2. Includes inflation adjustment to actual test year expense.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Insurance Expense  
 Rate Year Ended December 31, 2014

	<u>FY 2011 (1)</u>	<u>FY 2012 (2)</u>	<u>FY 2013 (3)</u>	<u>FY 2014/ CY 2014 (4)</u>
Worker's Compensation	\$ 837,689	\$ 874,015	\$ 848,550	\$ 693,532
Injuries and Damages	28,851	54,528	109,666	64,348
Property and Casualty	1,011,910	1,006,353	1,062,090	1,018,753
Program Expense	1,800	7,150	N/A	7,486
Safety Supplies & Other	<u>36,627</u>	<u>17,602</u>	<u>N/A</u>	<u>18,428</u>
Total Expenses (5)	\$ 1,916,877	\$ 1,959,648	\$ 2,020,306	\$ 1,802,547
Amount per Providence Water (2)				<u>2,084,590</u>
Adjustment to Insurance Expense				<u><u>\$ (282,043)</u></u>

Notes:

- (1) Per response to DIV 1-13.
- (2) Per Schedule HJS-S5.
- (3) Per response to DIV 1-14.
- (4) Refer to testimony for explanation of development of costs.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Chemicals Expense  
 Rate Year Ended December 31, 2014

	Estimated Quantity (1)	Actual Usage		Greater of FY 2012 or FY 2013	Rate Year Unit Price (4)	Annual Cost
		FY 2012 Usage (2)	FY 2013 Usage (3)			
Ferric Sulfate (Gallons)	1,460,000	1,136,679	870,563	1,136,679	\$ 1.4000	\$ 1,591,351
Quicklime (Tons)	3,139	2,834	2,322	2,834	214.1600	606,929
Chlorine (Tons)	200	173	194	194	800.0000	155,200
Flouide (Gallons)	70,000	56,903	50,681	56,903	2.5630	145,842
Carbon Dioxide (Tons)	1,000	506	353	See Note (5)	-	-
Total Treatment Chemical Costs						<u>\$ 2,499,322</u>
Sludge Maintenance Costs						<u>1,700,000</u>
Total Chemical Costs and Sludge Handling Costs						<u>\$ 4,199,322</u>
Incremental Restricted Fund Contribution to Eliminate Shortfall (5)						<u>250,000</u>
Division Recommended Funding of Chemical and Sludge Maintenance Restricted Account (Rounded)						<u>\$ 4,450,000</u>
Proposed Funding Contribution per Providence Water (Schedule HJS-S-8.)						<u>\$ 5,458,942</u>
Adjustment to Chemical and Sludge Maintenance Funding						<u><u>\$ (1,008,942)</u></u>

Notes:

- (1) Per response DIV 1-27.
- (2) Per response to DIV 1-26.
- (3) Per response to DIV 4-10.
- (4) Per response to DIV 4-1.
- (5) Refer to testimony.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Reflect Updated Property Tax Expense  
Rate Year Ended December 31, 2014

<u>Municipality</u>	<u>Actual FY 2011 (1)</u>	<u>Actual FY 2012 (1)</u>	<u>Actual FY 2013 (1)</u>	<u>Actual FY 2014 (2)</u>	<u>Estimated FY 2015 (3)</u>	<u>CY 2014 Average</u>
Scituate	4,974,437	5,087,357	5,087,357	5,566,124	5,677,446	5,621,785
Glocester	49,380	51,478	53,537	55,679	57,906	56,793
All Other						
North Providence	\$ 239,090	\$ 266,581	\$ 266,581	\$ 268,137	\$ 273,500	\$ 270,818
West Glocester Fire	3,932	3,708	3,708	3,708	3,782	3,745
Harmony Fire District	155	164	164	171	177	174
Chepachet Fire District	120	131	133	138	144	141
Johnston	86,695	90,117	90,117	94,907	98,703	96,805
Foster	331,673	331,673	306,694	307,901	314,059	310,980
Cranston	107,568	110,523	118,597	120,152	124,958	122,555
West Warwick	3,761	3,761	3,761	3,682	3,756	3,719
Subtotal-All Other	\$ 772,994	\$ 806,658	\$ 789,755	\$ 798,796	\$ 819,079	\$ 808,938
Total Property Taxes	\$ 5,796,811	\$ 5,945,492	\$ 5,930,648	\$ 6,420,599	\$ 6,554,432	\$ 6,487,515
Amount per Providence Water (1)				6,608,270	6,872,599	<u>6,740,435</u>
Adjustment to Property Tax Expense						<u>\$ (252,919)</u>

Notes:

(1) Per Schedule HJS-S4A.

(2) Per response to DIV 4-7 except Harmony and Chepachet Fire Districts which are increased by 4 percent over FY 2013.

(3) Refer to testimony for derivation of FY 2015 amounts. Scituate is based on recent increases in the property tax rate. Glocester reflects the taxes due pursuant to the tax treaty with Providence Water. All other amounts escalated by 2% based on the overall average increase in taxes other than Scituate and Gloster in recent years. Refer to testimony.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Unidirectional Flushing Expense  
Rate Year Ended December 31, 2014

	<u>Total</u>
Field Operations-Original Estimate (1)	\$ 380,000
Field Operations-Revised Estimate (1)	<u>290,000</u>
Adjustment to Unidirectional Flushing Costs	<u><u>\$ (90,000)</u></u>

Note:

(1) Per response to DIV 1-30.



PROVIDENCE WATER SUPPLY BOARD

Adjustment to Rate Case and Regulatory Expense  
Rate Year Ended December 31, 2014

	<u>Total</u>
Docket 4062/Conservation Rate Filing (1)	\$ 8,593
Field Operations-Revised Estimate (1)	<u>9,033</u>
Adjustment to Remove Costs of Prior Proceedings	<u>\$ (17,626)</u>

Note:

(1) Per response to DIV 1-24.

PROVIDENCE WATER SUPPLY BOARD

Adjustment to Miscellaneous Expense  
Rate Year Ended December 31, 2014

	<u>Total (1)</u>
Hazardous Waste Disposal and Containment-Triumvirate Environmental	\$ 17,937
Air Quality Violation-R.I. Department of Environmental Management	2,775
Customer Refund 1	3,620
Customer Refund 2	599
Software Conversion-Zandar	28,000
Billing Software/Oracle Support-Adaptive Minds	125,528
Appraisal Service-Sansoucy	35,000
Legal Services/Strategic Plan-Partridge, Snow & Hahn	69,933
Total	<u>\$ 283,392</u>
Escalation Factor for Inflation (2)	<u>1.04695</u>
Adjustment to Miscellaneous Expenses	<u>\$ (296,698)</u>

Notes:

(1) Per response to Comm 1-33.

(2) Per Schedule TSC-7. Amount in Providence Water reflected inflation factor of 6.376% which was adjusted to reflect Division inflation factor or 4.695% on Schedule TSC-7.