

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

**PAWTUCKET WATER)
SUPPLY BOARD) Docket No. 4550**

**DIRECT TESTIMONY
OF
LAFAYETTE K. MORGAN, JR.**

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

June 18, 2015

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1 analyzing testimony, exhibits, and other data presented by parties before the North
2 Carolina Utilities Commission. I had the additional responsibility of performing the
3 examinations of books and records of utilities involved in rate proceedings and
4 summarizing the results into testimony and exhibits for presentation before that
5 Commission. I was also involved in numerous special projects, including
6 participating in compliance and prudence audits of a major utility and conducting
7 research on several issues affecting natural gas and electric utilities.

8 From June 1990 until July 1993, I was employed by Potomac Electric Power
9 Company (Pepco) in Washington, D.C. At Pepco, I was involved in the preparation
10 of the cost of service, rate base and ratemaking adjustments supporting the company's
11 requests for revenue increases in the State of Maryland and the District of Columbia.
12 I also conducted research on several issues affecting the electric utility industry for
13 presentation to management.

14 From July 1993 through 2010, I was employed by Exeter Associates, Inc. as a
15 Senior Regulatory Analyst. During that period I was involved in the analysis of the
16 operations of public utilities, with particular emphasis on utility rate regulation. I
17 reviewed and analyzed utility rate filings, focusing primarily on revenue requirements
18 determination. This work involved natural gas, water, electric and telephone
19 companies.

20 In 2010, I left Exeter Associates to pursue other business interests. In late
21 2014, I returned to Exeter to continue to work in a similar capacity to my work prior
22 to my hiatus.

23 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY
24 PROCEEDINGS ON UTILITY RATES?

1 A. Yes. I have previously presented testimony and affidavits on numerous occasions
2 before the North Carolina Utilities Commission, the Pennsylvania Public Utility
3 Commission, the Virginia Corporation Commission, the Louisiana Public Service
4 Commission, the Georgia Public Service Commission, the Maine Public Utilities
5 Commission, the Kentucky Public Service Commission, the Public Utilities
6 Commission of Rhode Island, the Vermont Public Service Board, the Illinois
7 Commerce Commission, the West Virginia Public Service Commission, the
8 Maryland Public Service Commission and the Federal Energy Regulatory
9 Commission (FERC).

10 Q. ON WHOSE BEHALF ARE YOU APPEARING?

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

13 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
14 PROCEEDING?

15 A. Exeter Associates has been retained by the Division to assist in the evaluation of the
16 General Rate Filing submitted by Pawtucket Water Supply Board (“PWSB” or “the
17 Board”). In this testimony, I present my findings on behalf of the Division regarding
18 the overall revenue increase to which PWSB is entitled for the rate year and step
19 increases. My associate, Mr. Jerome D. Mierzwa, will present the Division’s
20 recommendations with regarding rate design and class cost of service issues.

21 Q. IN CONNECTION WITH THIS CASE, HAVE YOU PERFORMED AN
22 EXAMINATION AND REVIEW OF THE COMPANY’S TESTIMONY
23 AND EXHIBITS?

24 A. Yes. I have reviewed PWSB’s testimony, exhibits and its rate filing, as well as its
25 responses to the Division and the Town of Cumberland’s data requests.

1 Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR
2 TESTIMONY?

3 A. Yes. I have prepared Schedules LKM-1 through LKM-12. Schedule LKM-1
4 provides a summary of revenues and expenses under present and proposed rates. My
5 adjustments to PWSB's claimed revenues and operating expenses are presented on
6 Schedules LKM-2 through LKM-12.

7

8 **Summary and Recommendations**

9 Q. PLEASE SUMMARIZE THE RATE RELIEF REQUESTED BY NBC IN
10 ITS FILING.

11 A. As discussed in the testimony of PWSB witness Christopher P. N. Woodcock,
12 PWSB's initial filing sought an increase in rate year revenues of \$2,287,845¹, which
13 represents an overall revenue increase of 13 percent. To develop its claim, PWSB
14 utilized the results for the Fiscal Year ended June 30, 2014 (FY14) as the test year.
15 PWSB then adjusted the test year cost of service to reflect changes to become
16 effective for the rate year ending June 30, 2016 (FY16). The Board's filing also
17 includes two proposed additional step increases of \$1,736,208 and \$674,498 for FY17
18 and FY18, respectively.

19 Q. DID PWSB REVISE ITS CLAIM?

20 A. Yes. In the supplemental testimony of Robert E. Benson filed on May 28, 2015,
21 PWSB revised its claim to include revised debt service costs and to include retiree
22 benefit costs that were omitted from its original filing. The effect of these changes
23 increases PWSB's rate year operating expenses by \$179,096 and its revenue

¹ The actual revenues produced by the proposed rates when applied to the rate year billing determinants are \$2,281,131, a \$286 difference.

1 deficiency by \$181,782 to \$2,470,779, including a 1.5 percent operating revenue
2 allowance.

3 Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

4 A. As shown on Schedule LKM-1, page 1, I have determined the PWSB's overall
5 revenue requirement for the rate year to be \$20,438,300. This represents an increase
6 over revenues at present rates of \$2,101,250 for the rate year. For the step increases, I
7 have determined increases of \$1,258,251 for FY17 and \$696,900 for FY18. The
8 changes in revenues that I am recommending are \$369,529 less than PWSB for the
9 rate year, \$155,013 less for FY17 (the 1st step increase), and \$199,838 lower for
10 FY18 (the 2nd step increase). In total, the increases in revenues that I am
11 recommending are \$724,380 less than the increases proposed by PWSB after
12 reflecting the updates to retiree benefits and debt service identified in Mr. Benson's
13 Supplemental Testimony. The table below summarizes the differences between the
14 Division's proposed revenue increases and those of PWSB.

	<u>Change in Revenues per Division</u>	<u>Change in Revenues per PWSB⁽¹⁾</u>	<u>Difference</u>
Rate Year Revenue Increase	\$ 2,101,250	\$ 2,470,779	\$ (369,529)
FY 2017 Step Increase	1,258,251	1,413,264	(155,013)
FY 2018 Step Increase	<u>696,900</u>	<u>896,738</u>	<u>(199,838)</u>
Totals	<u>\$ 4,056,401</u>	<u>\$ 4,780,781</u>	<u>\$ (724,380)</u>

⁽¹⁾ – Reflects updated amounts including increased retiree benefits and reduced debt service per supplemental testimony of Robert Benson.

15 Q. WHAT TIME PERIODS HAVE YOU USED IN MAKING YOUR
16 DETERMINATION OF PWSB'S REVENUE REQUIREMENTS?

1 A. Consistent with PWSB’s filing, I have used the same test year ended June 30, 2014
2 and rate year ending June 30, 2016 as the basis for determining PWSB’s rate year
3 revenue requirements and the revenue increase necessary to recover those
4 requirements.

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

6 A. The remainder of my testimony is organized into sections corresponding to the issue
7 or topic being addressed. I have also separated my discussion of the issues by rate
8 year and step increase. Specifically, under the rate year section I discuss the issues
9 that I have adjusted in determining the rate year revenue requirement. Similarly,
10 under the step increase section, I address those issues that affect the revenue increases
11 for the step increase years. These sections are set forth in the Table of Contents for
12 this testimony.

13

14

Other Operating Revenues

15 Q. WOULD YOU PLEASE EXPLAIN YOUR ADJUSTMENT TO OTHER
16 OPERATING REVENUES?

17 A. Yes. In PWSB’s filing, the revenues to which I refer as “Other Operating Revenues”
18 (i.e., Penalties Water Account, Service Installation & Service Fees and Miscellaneous
19 Revenues) were adjusted with the intent of including a normalized level of revenues
20 in the cost of service. This process involved removing a one-time event involving
21 fees received from the Department of Transportation and then calculating a four-year
22 average for the period from FY11 through FY14 in order to derive a normal ongoing
23 level revenue activities. The resulting four-year average revenues were included in
24 the cost of service as the normalized level of other operating revenues for the rate
25 year.

1 After reviewing PWSB's filing, I have accepted the adjustment to remove the
2 one-time revenues. However, I disagree with the four-year average used in deriving
3 the normalized level of revenues. Therefore, I have adjusted the level of other
4 operating revenues to reflect the 3 most recent fiscal years available to me at the time
5 of preparing this testimony.

6 Q. PLEASE EXPLAIN WHY YOU DISAGREE WITH THE FOUR-YEAR
7 AVERAGE.

8 A. There are a several reasons why I disagree with the four-year average. First, as
9 indicated in the direct testimony of PWSB's witness Bebyn, the use of the four-year
10 average was intended to better reflect a normal level of revenues. However, when the
11 revenues from the four-year period are reviewed (see Schedule DGB-6 of PWSB's
12 filing), it is apparent that revenues from FY11 are well out of the range of the
13 remaining three years when compared. Thus, the inclusion of FY11 would distort the
14 average level of revenues reflective of recent years. Given the appropriate intent of
15 reflecting a normalized level of revenues, FY11 revenues should be removed.
16 Second, the response to various Division data requests demonstrate that FY11 was an
17 abnormal year for the recorded level of Other Operating Revenues. In the response to
18 DIV. 3-3, PWSB explains that penalty revenues was incorrect during FY11 because
19 of an error in the billing software. When FY11 is compared to the subsequent years,
20 one can clearly see that FY11 is virtually half of each of the subsequent years. Also,
21 in the response to DIV. 3-5 and DIV. 3-19, PWSB explains, and the data show, that
22 there has been an increase in municipal liens certificates in recent years. Also, prior
23 to FY12, cash receipts for municipal liens were recorded in a different account. This
24 would explain the lower level FY11 miscellaneous revenues. Hence, including the
25 lower level of FY11 revenues in the average would distort the normalized level of

1 revenues. These instances further support the decision to use the most recent three
2 years. Finally, as indicated in the direct testimony of Board witness Woodcock,
3 PWSB has used the same three years I used (FY 12 through FY14) in determining
4 metered sales service revenues. As a matter of consistency, I believe it is appropriate
5 to use the same period in the determination of these other operating revenues.

6 On Schedule LKM-3, I have presented my adjustment to Other Operating
7 Revenues which results in a net increase of \$48,865.

8

9

Regulatory Commission Expense

10 Q. PLEASE EXPLAIN THE ADJUSTMENT YOU HAVE MADE TO
11 REGULATORY COMMISSION EXPENSE.

12 A. The regulatory commission expense account is used to record the annual fees paid to
13 the Rhode Island Public Utilities Commission. The level of costs recorded in
14 Regulatory Commission Expense for the test year and carried over to the rate year of
15 \$94,971 was approximately 82 percent higher than the average of the preceding three
16 years. In response to DIV. 2-9, PWSB indicated that the bill received from the
17 Commission by the Board during FY14 stated that a correction was made for a prior
18 year error which resulted in the increased expense for FY14. However, from my
19 discussion with the Division, it is my understanding that the correction that was made
20 involved a permanent change that would result in a higher level of fees on an ongoing
21 basis than that which was billed to PWSB in prior years. Hence, reflecting a level of
22 Regulatory Commission expense that was normalized to the level experienced prior
23 to the test year would under estimate Regulatory Commission expense. In order to
24 evaluate the reasonableness of the FY14 assessment used by PWSB, I obtained
25 PWSB's Commission assessment for 2015 from the Division. The 2015 assessment

1 is \$78,605, which is well below the 2014 amount. Because of the variation in the
2 2014 and 2015 amounts, I used the average of those two amounts to derive a pro
3 forma level of Regulatory Commission expense. From that amount I subtracted the
4 rate year level of Regulatory Commission expense to derive the adjustment. This
5 adjustment decreases expense by \$8,183, as presented on Schedule LKM-4.

6

7

Rate Case Expenses

8 Q.

WHAT CHANGES ARE YOU RECOMMENDING RATE CASE
9 EXPENSE?

10 A.

PWSB has estimated the cost of this proceeding to be \$200,000 and has proposed to
11 spread those costs over two years. I am recommending that rate case expenses be
12 normalized over 3 years. This approach is consistent with the multi-year step
13 increase proposal that the Board is seeking which, if authorized by the Commission,
14 would set rates that go into effect through 2018. Therefore, the 3-year period is
15 appropriate. I have presented this adjustment on Schedule LKM-5 and decreased
16 operating expenses by \$33,333.

17

18

Property Taxes

19 Q.

PLEASE EXPLAIN HOW PWSB HAS REFLECTED PROPERTY TAXES
20 IN ITS FILING.

21 A.

The property taxes paid by PWSB can be divided by property taxes subject to its
22 agreement with Cumberland and property taxes that are not subject to the
23 Cumberland agreement. For those property taxes that are covered by the Cumberland
24 agreement, PWSB, in its filing, presented its property taxes for the rate and future
25 years according to the terms of the agreement. However, for property taxes not

1 subject to the Cumberland agreement, the Board projected future tax increases based
2 upon a 3 percent tax growth rate. The combined property taxes are included in
3 determining the revenue requirements for the rate year and the step increases.

4 After reviewing the filing and related documents, I have determine that the
5 use of a 3 percent growth rate is not reasonable in light of PWSB's recent history with
6 these taxes.

7 Q. HAVE YOU MADE AN ADJUSTMENT TO THE LEVEL OF PROPERTY
8 TAXES?

9 A. Yes. In the response to DIV 2-12, I have calculated the average annual growth in
10 property taxes not covered by the Cumberland agreement over the most recent three-
11 year period to be -0.44 percent. Rather than reducing property taxes for the rate year
12 and the two subsequent step increase years to reflect the negative growth rate, I have
13 left the property taxes not covered by the Cumberland agreement unchanged from the
14 test year. In other words, I have kept the level of these taxes flat for the three-year
15 period. In the event more recent information becomes available, I will review it and
16 revise my adjustment if necessary. The calculation of my adjustment to property
17 taxes is shown on Schedule LKM-6. For the rate year, the level of property taxes is
18 reduced by \$7,318.

19

20

Rate Year Inflation Escalation

21 Q. DID PWSB MAKE AN ADJUSTMENT TO ESCALATE ITS EXPENSES
22 TO REFLECT INFLATION?

23 A. Yes. As stated earlier, PWSB's filing is based upon the test year ended June 30, 2014
24 which is adjusted to the rate year June 30, 2016 (FY16). Since there is a two-year
25 difference in time, the Board has adjusted expenses that were not specifically adjusted

1 elsewhere to the FY16 level by applying an inflation escalation factor. Board witness
2 Woodcock explained that he derived a one-year inflation rate of 3.08 percent from a
3 four-year average of third quarter GDP from 2011 to 2014. To obtain the appropriate
4 rate for the two-year period, a compounded inflation rate of 6.24 percent was
5 calculated and applied to the FY14 amounts to derive the rate year amount.

6 Q. DO YOU AGREE WITH PWSB INFLATION ESCALATION?

7 A. No. While, conceptually, I accept the use of an inflation factor to escalate FY14 costs
8 to FY16, I disagree with the use of the GDP as the basis of the inflation rate. The
9 GDP, or Gross Domestic Product, is measure of all goods and service that occur in
10 the economy as a whole. The change in GDP from quarter-to-quarter (or year-to-
11 year) measures the growth or shrinkage of the economy, not inflation. However,
12 there is also another tool, the Gross Domestic Product-Price Index (GDP-PI) that is
13 the measure of inflation. As the name implies, the GDP-PI measures the changes in
14 prices in the economy from quarter-to-quarter, etc. Hence, it is the GDP-PI that I am
15 recommending to be used to derive the FY16 expenses.

16 Q. PLEASE EXPLAIN THE BASIS OF YOUR GDP-PI RATE AND HOW
17 YOU HAVE APPLIED IT TO DERIVE THE FY16 EXPENSE AMOUNTS.

18 A. I have used the May 10, 2015 Blue Chip Economic Indicators consensus forecast as
19 the source of the data used to calculate my GDP-PI rate. Similar to the approach used
20 by PWSB, I have calculated a two-year compounded inflation rate of 2.60 percent as
21 compared to PWSB's compounded inflation rate of 6.24 percent. I then applied the
22 inflation rate I calculated to non-labor expenses and those expenses that were
23 specifically adjusted elsewhere. The resulting amounts were compared to the Board's
24 amounts to derive my rate year adjustment of \$38,241 as presented on Schedule
25 LKM-7.

1 **Electric Power Expense**

2 Q. HOW HAVE YOU ADJUSTED PWSB’S CLAIM FOR ELECTRIC
3 POWER EXPENSE FOR THE RATE YEAR?

4 A. There are two components for the total electric power expense – power supply and
5 power delivery. For power supply, PWSB explained that its power supply is obtained
6 through an arrangement with the League of Cities where it receives its direct share of
7 power costs. PWSB explained that under the existing contract for power, its power
8 costs increased by 39.09 percent as of January 2015. For the power delivery costs,
9 PWSB escalated its power delivery costs by applying the annual inflation rate of
10 3.08% that it calculated, as explained above.

11 I have accepted the Board’s power supply amounts, but disagree with the
12 power delivery costs because of the 3.08 percent annual inflation used to derive the
13 rate year expense. As I have explained above, the use of the 3.08 percent annual rate
14 would overstate PWSB’s costs. As a result, I have recalculated the power delivery
15 cost using the two year inflation rate of 2.60 percent that I have calculated. This
16 adjustment reduces electric power expense by \$15,505 for the rate year, and is
17 presented on Schedule LKM-8.

18
19 **Water Treatment Plant Annual Operating Costs**

20 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE
21 WATER TREATMENT PLANT ANNUAL OPERATING COSTS?

22 A. PWSB water treatment plant is operated under a contract with United Water Works.
23 The annual operating fee is subject to an annual inflation adjustment which is applied
24 on the anniversary date of the commencement of the contract. According to Section
25 3.11.5 (5), “...the Service Fee will be adjusted to reflect changes in the CPI

1 [Consumer Price Index] as outlined in Schedule 11 hereto, which adjustment shall
2 utilize the percentage change in the CPI for the prior 12 month period using all
3 monthly indices published for that 12 month period...” In calculating the annual
4 service fee for the facility, PWSB calculated the average CPI factor for the ten years
5 ended December 2013 to derive an inflation rate of 2.56 percent. PWSB then applied
6 this rate to each prior year amount to derive the annual service fee for FY15 and
7 FY16.

8 I disagree with the basis of the 2.56 percent used by PWSB. Therefore I am
9 recommending an adjustment to the annual service fees proposed by PWSB to reflect
10 the inflation rate that is calculated based on the terms of the operating contract.
11 According to the data provided, PWSB calculates the inflation factor for each
12 contract year based upon the previous calendar. For example, the inflation factor for
13 contract year 2014-15 is based upon the change in the inflation index from the end of
14 2012 to the end of 2013. In order to derive the annual service fee for the rate year
15 (FY16), the service fee for FY15 had to be calculated first. Since the annual service
16 fee for FY15 is based upon the 2014 CPI, I calculated the 2014 CPI from actual data
17 from the Bureau of Labor Service (BLS).

18 However, for the rate year annual service fee, the inflation factor is based
19 upon data from the end of 2014 and 2015. Since 2015 is the current year, it requires
20 the use of forecasted data. The BLS does not provide forecasted data, so I used CPI
21 data from the May 10, 2015 *Blue Chip Economic Indicators* consensus forecast. I
22 recognize that the forecasted data is not the specific CPI table used to calculate the
23 CPI factor under this contract. However, it is the best data available to me at the time
24 of preparing this testimony. As a result of the changes I have made to PWSB’s
25 calculation of the annual service fee, the resulting adjustment is a decrease in the

1 water treatment service fee of \$193,142 for the rate year as can be seen on Schedule
2 LKM-9, page 1.

3 Q. EARLIER YOU INDICATED THAT THE GDP-PI WAS A MEASURE OF
4 INFLATION IN THE ECONOMY, WHY HAVE YOU NOT USED THE
5 GDP-PI FOR THE WATER TREATMENT PLANT ANNUAL SERVICE
6 FEES?

7 A. My preference would normally be to use the GDP-PI. The GDP-PI is a better
8 measure of general inflation for a utility company operations because it measures
9 inflation as a whole in the economy. The CPI, in contrast, is more focused on
10 measuring inflation using the goods and services that are bought by consumers or
11 households. Clearly, these are not the types of goods and services that PWSB
12 acquires in its operations. However, the contract for the water treatment plant
13 specifically requires the use CPI. In accordance with the terms of the contract, I used
14 the CPI.

15

16 **Maintenance of Miscellaneous Plant**

17 Q. WHAT ADJUSTMENT ARE YOU RECOMMENDING FOR
18 MAINTENANCE OF MISCELLANEOUS PLANT UNDER THE SOURCE
19 OF SUPPLY?

20 A. During the review of PWSB's filing, I observed that the FY14 level (which is also the
21 test year level) of Maintenance of Miscellaneous Plant Expense under the Source of
22 Supply category was 114 percent higher than the previous three-year average. The
23 higher level of expense was explained by PWSB to be attributable to tree and brush
24 clearing cost incurred in response to a Rhode Island Department of Environmental

1 Management (RIDEM) inspection report. Further inquiry into this matter confirmed
2 that the rate year level was higher than usual.

3 Since the level of expenses for ratemaking purposes should reflect the level of
4 expenses that are representative of a normal ongoing level, I have made an adjustment
5 to normalize the expense. This adjustment is based upon averaging the FY14
6 amount and the two prior years to derive the three-year average that I have used as the
7 normalized amount. As shown on Schedule LKM-10, this adjustment reduces
8 Operating expenses by \$19,480.

9

10

Step Increases

11 Q. WOULD YOU PLEASE DISSCUSS THE STEP INCREASES PROPOSED
12 BY PWSB?

13 A. As I indicated earlier, PWSB has proposed two step increases after the rate year. As
14 revised, the first step of \$1,413,264 would become effective during FY17 (July 1,
15 2016 through June 30, 2017), and the second step of \$896,738, would become
16 effective during FY18 (July 1, 2017 through June 30, 2018). The step increases are
17 driven by the following components: Debt Service Costs; Property Taxes; Inflation
18 (labor & non-labor); and the Revenue Stabilization Fund. I will now discuss each of
19 those components and any adjustments that I have made that affects them.

20

21

Debt Service Costs

22 Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO DEBT SERVICE
23 COSTS?

24 A. In Mr. Benson's supplemental testimony, he has updated the debt service costs using
25 data prepared in connection with the Board's proposed borrowing for its capital

1 projects. I reviewed the debt service costs and have accepted them for use in this
2 proceeding. It should be noted that since PWSB has proposed to leave the debt
3 service cost unchanged from its prior case (Docket No. 4171), the change in debt
4 service cost will not be applicable to the rate year. Hence, the change in the debt
5 service costs is reflected only in the Step 1 and Step 2 increases. On Schedule LKM-
6 11, I present these costs which will result in the inclusion of \$1,174,417 in the Step 1
7 and \$257,898 in the Step 2 increase. When compared to the amounts proposed by
8 PWSB, updated debt costs for Step 1 is \$323,679 less than the amount initially
9 requested. The updated debt service costs for the Step 2 increase are \$212,176
10 greater than the amount initial requested in PWSB's initial filing.

11

12

Property Taxes for Step Increases

13 Q.

PLEASE EXPLAIN YOUR ADJUSTMENT TO PROPERTY TAXES FOR
14 THE STEP INCREASES.

15 A.

As I discussed earlier, PWSB's claim for property taxes is based upon a combination
16 of costs resulting from a tax agreement with Cumberland and the recognition of
17 inflation. Earlier in this testimony, I also explain that I disagreed with the inflation
18 component of PWSB's claim for property taxes. The result of the changes I have
19 made to PWSB property taxes claim were projected through the Step Increase periods
20 as presented on Schedule LKM-5. On that schedule, I also calculated the annual level
21 of property taxes that would be appropriate for each of the step years and the change
22 in the revenue requirement to derive the level of taxes that I have determined for each
23 of the years. As shown on that schedule, the property taxes in the first step (FY17)
24 will decrease by \$50,000 and there will be no increase for property taxes in the
25 second step (FY18). The \$50,000 decrease represents an additional decrease of

1 \$7,828 from PWSB's claim. Since I am recommending no change in property taxes
2 from FY17 to FY18, the result is an \$8,063 decrease from PWSB's claim.

3
4 **Step Period Inflation Escalation**

5 Q. WHAT ADJUSTMENT HAVE YOU MADE TO RECOGNIZE
6 INFLATION DURING THE STEP PERIODS?

7 A. During the step periods the company proposed increases to recognize a 2 percent
8 increase in labor costs, and a 3.08 percent increase in non-labor costs. I have
9 accepted the labor cost escalator of 2 percent. However, I have explained earlier in
10 this testimony why I disagree with the 3.08 percent inflation rate. Consistent with my
11 recommendation for the rate year inflation adjustment, I used an inflation rate of 2.0
12 percent based on the projected increase in the GDP-PI as of the end of 2016 to
13 calculate the increase in non-labor expenses to be reflected in the calculation of the
14 step increases.

15 Q. WERE THERE ANY OTHER CHANGES MADE BY YOU IN
16 DETERMINING THE INFLATION ESCALATION FOR THE STEP
17 PERIODS?

18 A. Yes. In deriving labor inflation amount for the step periods, PWSB applied the 2
19 percent labor inflation factor only to labor costs and its general inflation rate of 3.08
20 percent to the payroll taxes. In contrast, I have applied the 2 percent inflation factor
21 to both the labor cost and the payroll taxes. With a very limited exception, all
22 individual salaries will fall below the FICA cap. Therefore, mathematically, when
23 you apply a percentage increase to salary and wages, payroll taxes will also increase
24 payroll taxes by the same percentage. The second change that I have made is to
25 exclude workers compensation from the inflation escalation. Based upon my

1 examination of workers compensation over the last years, those costs have been
2 decreasing rather than increasing. Therefore, I have elected to keep those costs flat.
3 Finally, the adjustment I have recommended to the rate year expenses were included
4 in determining the expenses before to which I applied the inflation factor. This
5 adjustment was necessary to reflect the adjustments I recommend to the future years
6 step increases.

7

8

Revenue Stabilization

9 Q. HAVE YOU MADE AN ADJUSTMENT TO THE REVENUE
10 STABILIZATION ACCOUNT?

11 A. According to PWSB's filing, it is seeking a 1.5 percent allowance for the rate year
12 and FY17, and 3 percent beginning in FY18. I included the allowances as part of my
13 recommendation in a manner consistent with PWSB's filing. In the first step
14 increase, I have included \$18,595 to recognize the 1.5 percent allowance on the
15 increased costs. For the second step, I have included \$321,457 to reflect the full 3
16 percent allowance. The revenue stabilization funding is presented on Schedule LKM-
17 1, Page 2.

18 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

19 A. Yes, it does.

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**SCHEDULES ACCOMPANYING THE
DIRECT TESTIMONY
OF
LAFAYETTE K. MORGAN, JR.**

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

JUNE 18, 2015

EXETER

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

PAWTUCKET WATER SUPPLY BOARD

Summary of Revenues and Expenses at
 Present and Proposed Rates
 Rate Year Ended June 30, 2016

	Test Year Amount Per PWSB	(1)	PWSB Rate Year Adjustments	(1)	Rate Year Amount Per PWSB	Division Adjustments	Rate Year at Present Rates	Allowable Rate Increase	Rate Year at Proposed Rates
Revenue									
Service Charges	\$ 2,994,094		\$ -		\$ 2,994,094	\$ -	\$ 2,994,094		
Metered Rates	13,293,168		-		13,293,168	-	13,293,168		
Fire Protection	1,343,028		-		1,343,028	-	1,343,028		
Miscellaneous	659,046		(1,152)		657,894	48,865	706,759		
Total Revenue	\$ 18,289,336		\$ (1,152)		\$ 18,288,184	\$ 48,865	\$ 18,337,049	\$ 2,101,250	\$ 20,438,300
Expenses									
Operating & Maintenance									
Administration	\$ 2,173,233		\$ 152,286	(2)	\$ 2,325,519	\$ (59,387)	\$ 2,266,132	\$ -	\$ 2,266,132
Customer Service	933,072		123,856		1,056,928	(7,748)	1,049,180	-	1,049,180
Supply	438,872		38,264		477,136	(26,803)	450,333	-	450,333
Purification	2,628,473		418,674		3,047,147	(205,947)	2,841,200	-	2,841,200
Transmission & Distribution	2,322,774		175,610		2,498,384	(7,999)	2,490,385	-	2,490,385
Total Operating & Maintenance	\$ 8,496,424		\$ 908,690		\$ 9,405,114	\$ (307,884)	\$ 9,097,230	\$ -	\$ 9,097,230
Capital									
Property Taxes	\$ 921,828		\$ (160,232)		\$ 761,596	\$ (7,318)	\$ 754,278	\$ -	\$ 754,278
Principal, Interest & RICWFA Fees	7,764,193		-		7,764,193	-	7,764,193	-	7,764,193
Leases	-		-		-	-	-	-	-
IFR	2,500,000		-		2,500,000	-	2,500,000	-	2,500,000
Trustee Fees	26,879		4,121		31,000	-	31,000	-	31,000
O&M Reserve Deposit	-		-		-	-	-	-	-
Total Capital	\$ 11,212,900		\$ (156,111)		\$ 11,056,789	\$ (7,318)	\$ 11,049,471	\$ -	\$ 11,049,471
Total Expenses	\$ 19,709,324		\$ 752,579		\$ 20,461,903	\$ (315,202)	\$ 20,146,701	\$ -	\$ 20,146,701
Operating Reserve Allowance	-		297,060		297,060	(5,461)	291,599	-	291,599
Total Cost of Service	\$ 19,709,324		\$ 1,049,639		\$ 20,758,963	\$ (320,663)	\$ 20,438,300	\$ -	\$ 20,438,300
Revenue Surplus/(Deficiency)	\$ (1,419,988)		\$ (1,050,791)		\$ (2,470,779)	\$ 369,529	\$ (2,101,250)	\$ 2,101,250	\$ -

Notes:

- (1) Pre-filed Testimony of Christopher Woodcock, Schedule 11.0, Page 1.
 (2) Revised to reflect the Supplemental Testimony of Robert Benson, Schedule REB Supplemental #1.

PAWTUCKET WATER SUPPLY BOARD

Summary of Revenues and Annual Step Increases
 Rate Year Ended June 30, 2016

	Rate Year Increase FY <u>2016</u>	(1)	Step 1 Increase <u>FY 2017</u>	Step 2 Increase <u>FY 2018</u>
Additional Debt Service	\$ -		\$ 1,174,417 (2)	\$ 257,898 (2)
Change in Property Taxes	-		(50,000) (3)	- (3)
Labor Inflation	-		58,067 (4)	59,228 (4)
Non- Labor Inflation	-		57,173 (4)	58,316 (4)
Revenue Stabilization	<u>-</u>		<u>18,595</u> (5)	<u>321,457</u> (6)
Revenue Increase per Year	\$ 2,101,250		\$ 1,258,251	\$ 696,900
Annual Revenues At Current Rates	\$ 18,337,049		\$ 20,438,300	\$ 21,696,551
Revenues After Proposed Rate Increase	<u>\$ 20,438,300</u>		<u>\$ 21,696,551</u>	<u>\$ 22,393,451</u>

Notes:

- (1) Schedule LKM-1, Page 2.
- (2) Schedule LKM-11.
- (3) Schedule LKM-6.
- (4) Schedule LKM-12.
- (5) Increased Costs x 1.5%
- (6) 3% of Cost of Service less Miscellaneous Revenue & Operating Revenue Allowance.

PAWTUCKET WATER SUPPLY BOARD

Summary of Division Adjustments to
Rate Year Revenues and Expenses at Present Rates
Rate Year Ended June 30, 2016

Description	Rate Year Amount
<u>Revenue Adjustments</u>	
Miscellaneous Revenues	\$ 48,865
Total Revenue Adjustments	<u>\$ 48,865</u>
<u>Expense Adjustments</u>	
Administration	
Regulatory Commission Expense	\$ (8,183)
Rate Case	(33,333)
Purchased Power	(910)
Inflation	(16,962)
Customer Service	
Inflation	(7,748)
Supply	
Purchased Power	(1,429)
Maintenance of Miscellaneous Plant	(19,480)
Inflation	(5,894)
Purification	
Purchased Power	(12,805)
Water Treatment	(193,142)
Transmission & Distribution	
Purchased Power	(362)
Inflation	(7,638)
Total Operating & Maintenance	
Capital	
Property Taxes	<u>(7,318)</u>
Total Expense Adjustments	\$ (315,202)
Total Division Adjustments to Operating Income	<u>\$ 364,068</u>

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Annualize Other Operating Revenues
 Rate Year Ended June 30, 2016

		Penalties Water	Service Installation & Service Fees	Miscellaneous Revenues	Totals
		Account			
FY 12	(1)	\$ 326,610	\$ 44,928	\$ 286,507	\$ 658,045
FY 13	(1)	319,770	87,074	207,353	614,197
FY 14	(1)	<u>326,339</u>	<u>60,512</u>	<u>233,806</u>	<u>620,657</u>
3-Year Average Revenues		\$ 324,240	\$ 64,171	\$ 242,555	\$ 630,966
Adjusted Revenues per PWSB	(1)	<u>284,343</u>	<u>78,239</u>	<u>219,519</u>	<u>582,101</u>
Adjustment to Other Operating Revenues		<u>\$ 39,897</u>	<u>\$ (14,068)</u>	<u>\$ 23,036</u>	<u>\$ 48,865</u>

Notes:

(1) Schedule DGB -6.

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Normalize Regulatory Commission Expense
Rate Year Ended June 30, 2016

		<u>Total Cost</u>
2015 General Assessment Due & Paid	(1) \$	78,606
2014 General Assessment Due & Paid	(1) \$	<u>94,971</u>
Average General Assessment Due & Paid	\$	86,789
Regulatory Commission Expense - Other per PWSB	(2) <u></u>	<u>94,971</u>
Adjustment to Regulatory Commission Expense	\$	<u><u>(8,183)</u></u>

Notes:

(1) Per DPUC Internal Accounting Document.

(2) CW Sch. 1.0, Page 1.

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Normalize Rate Case Expense
Rate Year Ended June 30, 2016

	<u>Total Cost</u>
Estimated Rate Case Expense per PWSB Normalization Period	(1) \$ 200,000 <u>3</u>
Annualized Rate Case Expense	\$ 66,667
Rate Case Expense per PWSB	(1) <u>100,000</u>
Adjustment to Rate Case Expense	<u>\$ (33,333)</u>

Notes:

(1) CW Sch. 1.1, Page 2.

PAWTUCKET WATER SUPPLY BOARD
 Adjustment to Reflect Annual Property Tax Expense Growth
 Rate Year Ended June 30, 2016

		<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>
Real Property Tax Subject to Tax Agreement with Cumberland	(1)	\$ 518,000	\$ 500,000	\$ 450,000	\$ 450,000
Property Tax Not Subject to Tax Agreement with Cumberland Before Annual Growth	(1)	\$ 254,279	\$ 254,279	\$ 254,279	\$ 254,279
Annual Growth Rate	(2)	1.0000	1.0000	1.0000	1.0000
Property Tax Not Subject to Tax Agreement with Cumberland After Annual Growth		\$ 254,279	\$ 254,279	\$ 254,279	\$ 254,279
Total Property Taxes		\$ 772,279	\$ 754,279	\$ 704,279	\$ 704,279
			<u>761,597</u>	<u>719,425</u>	<u>727,488</u>
Adjustment to Property Taxes			\$ (7,318)	\$ (15,146)	\$ (23,209)

Notes:

(1) PWSB Response to DIV. 2-12.

(2) Average Annual Growth Rate Calculated per Response to DIV. 2-12 for the last 3 years would be negative. Assumed rates will remain flat for the 3 year period.

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Reflect the GDPPI in the Rate Year Inflation Claim
Rate Year Ended June 30, 2016

	Test Year FY 2014	(1)	Inflation Adjustment to Derive FY 2016 Amount	(2)	Rate Year FY 2016	Rate Year FY 2016 per PWSB	(1)	Division Rate Year Adjustments
	(a)		(b)		(c)	(d)		(e)
ADMINISTRATION								
Materials and Supplies (Account 620)	\$ 53,171		\$ 1,384		\$ 54,555	\$ 56,491		\$ (1,937)
Contractual Services - Legal (Account 633)	188,115		4,895		193,010	199,862		(6,852)
Contractual Services - Other (Account 635)	11,188		291		11,479	11,886		(407)
Rental of Equipment (Account 642)	3,455		90		3,545	3,671		(126)
Transportation Expenses (Account 650)	7,043		183		7,226	7,483		(257)
Miscellaneous Expense (Account 675)	28,117		732		28,848	29,872		(1,024)
Credit Card Fees	22,812		594		23,406	24,237		(831)
Education Training	4,250		111		4,361	4,516		(155)
Maintenance of Misc. Plant	48,584		1,264		49,849	51,618		(1,770)
Other Utilities	98,864		2,573		101,436	105,037		(3,601)
Postage	78		2		80	83		(3)
Subtotal - Admin	\$ 465,676		\$ 12,118		\$ 477,794	\$ 494,755		\$ (16,962)
CUSTOMER ACCOUNTS								
Mats & Supp (Cust Serv)	\$ 980		\$ 25		\$ 1,005	\$ 1,041		\$ (36)
Mats & Supp (Meters)	3,360		87		3,447	3,570		(122)
Contractual Services - Other - [Cust. Svc.] (Account 635)	34,898		908		35,806	37,077		(1,271)
Rental of Equipment (Account 642)	1,931		50		1,981	2,051		(70)
Transportation Expenses - [Cust. Svc.] (Account 650)	763		20		783	810		(28)
Transportation Expenses - [Meter] (Account 650)	11,117		289		11,406	11,811		(405)
Bad Debt Expense (Account 670)	1,710		45		1,755	1,817		(62)
Miscellaneous Expense - [Cust. Svc.] (Account 675)	238		6		244	253		(9)
Miscellaneous Expense - [Meter] (Account 675)	686		18		704	729		(25)
Education Training - [Meter]	732		19		751	778		(27)
Other Utilities - [Cust. Svc.]	2,586		67		2,653	2,747		(94)
Other Utilities - [Meter]	3,028		79		3,107	3,217		(110)
Printing - [Cust. Svc.]	39,768		1,035		40,803	42,251		(1,448)
Printing - [Meter]	902		23		925	958		(33)
Postage-[Cust. Svc.]	110,011		2,863		112,873	116,880		(4,007)
Subtotal - Customer Accts	\$ 212,709		\$ 5,535		\$ 218,244	\$ 225,991		\$ (7,748)
SOURCE OF SUPPLY								
Materials and Supplies (Account 620) & Rental	\$ 1,988		\$ 52		\$ 2,040	\$ 2,112		\$ (72)
Transportation Expenses (Account 650)	3,661		95		3,756	3,890		(133)
Miscellaneous Expense (Account 675)	49		1		50	52		(2)
Security Service	74,733		1,945		76,678	79,400		(2,722)
Education Training	628		16		645	667		(23)
Maint of Misc Plant	76,766		1,998		78,764	81,560		(2,796)
Other Utilities	3,990		104		4,094	4,239		(145)
Subtotal - Supply	\$ 161,816		\$ 4,211		\$ 166,027	\$ 171,921		\$ (5,894)
TRANSMISSION & DISTRIBUTION								
Materials and Supplies - (Account 620)	\$ 55,068		\$ 1,433		\$ 56,501	\$ 58,507		\$ (2,006)
Materials and Supplies - [Engineering] (Account 620)	11,225		292		11,518	11,926		(409)
Rental of Equipment (Account 642)	11,734		305		12,040	12,467		(427)
Rental of Equipment - [Engineering] (Account 642)	2,959		77		3,036	3,144		(108)
Transportation Expenses - (Account 650)	79,571		2,071		81,641	84,539		(2,898)
Transportation Expenses - [Engineering] (Account 650)	8,826		230		9,056	9,377		(321)
Miscellaneous Expense - (Account 675)	3,377		88		3,465	3,588		(123)
Miscellaneous Expense - [Engineering] (Account 675)	495		13		508	526		(18)
Education Training	4,444		116		4,560	4,722		(162)
Education Training - [Engineering]	667		17		684	708		(24)
Repairs & Maintenance - general	1,432		37		1,470	1,522		(52)
Repairs & Maintenance - services	4,268		111		4,379	4,534		(155)
Other Utilities	22,105		575		22,680	23,486		(805)
Other Utilities - [Engineering]	3,525		92		3,617	3,745		(128)
Subtotal - T&D	\$ 209,697		\$ 5,457		\$ 215,154	\$ 222,792		\$ (7,638)
	\$ 1,049,898		\$ 27,321		\$ 1,077,219	\$ 1,115,460		\$ (38,241)

Notes:

(1) CW Sch. 1.0.

(2) Column (a) x Compound Inflation Rate. (3)

(3) May 10, 2015 Edition Blue Chip Economic Indicators Data

	2013-14	2015-16
Third Quarter	106.9	109.7
Fourth Quarter	107.3	110.1
First Quarter	107.7	110.7
Second Quarter	108.3	111.2
	107.6	110.4

Two-Year Compound Inflation 2.60%

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Reduce Inflation Escalation on Electric Power Delivery Expense
Rate Year Ended June 30, 2016

	Test Year FY 2014	(1)	Adjustment	Rate Year FY 2016	Rate Year FY 2016 per PWSB	(1)	Division Adjustments
	(a)		(b)	(c)	(d)		(e)
Administration							
Delivery	\$ 24,976		\$ 650 (2)	\$ 25,626	\$ 26,536		\$ (910)
Supply	15,513		6,064 (1)	21,577	21,577		-
Total	\$ 40,489		\$ 6,714	\$ 47,203	\$ 48,113		\$ (910)
Source of Supply							
Delivery	\$ 39,245		\$ 1,021 (2)	\$ 40,266	\$ 41,696		\$ (1,429)
Supply	52,761		20,625 (1)	73,386	73,386		-
Total	\$ 92,006		\$ 21,646	\$ 113,652	\$ 115,082		\$ (1,429)
Purification							
Delivery	\$ 351,556		\$ 9,148 (2)	\$ 360,704	\$ 373,509		\$ (12,805)
Supply	425,157		166,198 (1)	591,354	591,354		-
Total	\$ 776,713		\$ 175,346	\$ 952,058	\$ 964,863		\$ (12,805)
Transmission & Distribution							
Delivery	\$ 9,926		\$ 258 (2)	\$ 10,184	\$ 10,546		\$ (362)
Supply	4,818		1,883 (1)	6,701	6,701		-
Total	\$ 14,744		\$ 2,142	\$ 16,886	\$ 17,247		\$ (362)
Total Adjustment							<u>\$ (15,505)</u>

Notes:

(1) CW Sch. 1.1, page 2

(2) Column (a) x Compound Inflation Rate. (3)

(3) Compounded Inflation Rate of 2.60% as calculated for rate year .

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Reflect the Increase in the Annual Service Fee of New Treatment Facility
Rate Year Ended June 30, 2016

	<u>Amount</u>
FY 2016 Annual Service Fee per Division	\$ 1,889,142 (1)
FY 2016 Annual Service Fee per PSWB	<u>2,082,284</u> (2)
Adjustment to O&M Expenses	<u>\$ (193,142)</u>

Notes:

(1) Schedule LKM -9, page 2.

(2) CW Sch. 1.1, Page 1.

PAWTUCKET WATER SUPPLY BOARD

Calculation of Annual Service Fee for New Water Treatment Facility
 Rate Year Ended June 30, 2016

	<u>FY 2014 Monthly Invoice Amount</u>	<u>FY 2015</u>	<u>FY 2016</u>
July-13	\$ 153,958.40 (1)	\$ 155,189.35	\$ 157,335.92
August-13	153,958.40	155,189.35	157,335.92
September-13	153,958.40	155,189.35	157,335.92
October-13	153,958.40	155,189.35	157,335.92
November-13	153,958.40	155,189.35	157,335.92
December-13	153,958.40	155,189.35	157,335.92
January-14	153,958.40	155,189.35	157,335.92
February-14	153,958.40	155,189.35	157,335.92
March-14	155,189.35 (2)	157,335.92 (2)	157,613.60 (2)
April-14	155,189.35	157,335.92	157,613.60
May-14	155,189.35	157,335.92	157,613.60
June-14	155,189.35	157,335.92	157,613.60
Total Annual Amount	<u>\$ 1,852,424.60</u>	<u>\$ 1,870,858.47</u>	<u>\$ 1,889,141.73</u>

Notes:

- (1) Response to DIV. 2-15.
- (2) Schedule LKM -9, page 3.

PAWTUCKET WATER SUPPLY BOARD

Calculation of Monthly Service Fee for New Water Treatment Facility
 Rate Year Ended June 30, 2016

	<u>Contract Year March14 - Feb15</u>	<u>Contract Year March15 - Feb16</u>	<u>Contract Year March16 - Feb17</u>
Prior Year Service Fee	\$ 1,835,070.63 (1)	\$ 1,849,751.20	\$ 1,875,349.01
CPI Adjustment	0.80% (1)	1.38% (2)	0.17%
Service Fee Increase	<u>\$ 14,680.57</u>	<u>\$ 25,597.82</u>	<u>\$ 3,169.16</u>
New Annual Service Fee	\$ 1,849,751.20	\$ 1,875,349.01	\$ 1,878,518.17
Number of Months	12	12	12
New Monthly Service Fee	<u>\$ 154,145.93</u>	<u>\$ 156,279.08</u>	<u>\$ 156,543.18</u>
Pass Through Costs			
Annual Performance Bond	\$ 12,521.00 (1)	\$ 12,682.00 (3)	\$ 12,845.00 (3)
Number of Months	12	12	12
Monthly Pass through Amount	<u>\$ 1,043.42</u>	<u>\$ 1,056.83</u>	<u>\$ 1,070.42 (1)</u>
Calculated Total Monthly Service Fee	<u>\$ 155,189.35</u>	<u>\$ 157,335.92</u>	<u>\$ 157,613.60</u>

Notes:

- (1) Response to DIV. 2-15.
- (2) Schedule LKM -9, page 3.
- (3) Response to Cumb. 3-26.

PAWTUCKET WATER SUPPLY BOARD

Calculation of Annual CPI Factor for Water Treatment Plant
 Rate Year Ended June 30, 2016

Contract Year March15 - Feb16 Inflation Rate

	Calendar Year 2013	(1)	Calendar Year 2014	(2)
January	147.3		149.2	
February	148.2		149.7	
March	147.9		150.7	
April	147.9		150.5	
May	148.0		151.4	
June	147.9		151.2	
July	148.2		151.4	
August	148.8		150.6	
September	148.7		150.6	
October	148.5		150.3	
November	148.4		149.2	
December	148.4		148.2	
	1778.2		1802.8	
End of Year CPI Factor			1802.8	
Beginning of Year Factor			1778.2	
CPI Adjustment			24.6	
CPI Adjustment Percentage			1.38%	

Contract Year March16 - Feb17 Inflation Rate

	2014	(3)	2015	(3)
First Quarter	235.4	*	235.2	*
Second Quarter	236.8	*	236.4	
Third Quarter	237.5	*	237.7	
Fourth Quarter	237.0	*	239.0	
	236.7		237.1	
End of Year CPI Factor			237.1	
Beginning of Year Factor			236.7	
CPI Adjustment			0.4	
CPI Adjustment Percentage			0.17%	

* Denotes actual data.

Notes:

(1) Response to DIV. 2-15.

(2) <http://www.bls.gov>, CPI Table 10 (Consumer Price Index for All Urban Consumers, Northeast Size B/C).

(3) May 10, 2015 Edition Blue Chip Economic Indicators Data

PAWTUCKET WATER SUPPLY BOARD

Adjustment to Normalize Maintenance of Miscellaneous Plant
Rate Year Ended June 30, 2016

		<u>Total Cost</u>
Maintenance of Miscellaneous Plant Expense (Source of Supply)		
FY 2012 Actual Expense	(1) \$	41,570
FY 2013 Actual Expense	(1)	53,522
FY 2014 Actual Expense	(1)	<u>76,766</u>
Average Maintenance of Miscellaneous Plant Expense	\$	57,286
Rate Year Maintenance of Miscellaneous Plant Expense	(2)	<u>76,766</u>
Adjustment to Maintenance of Miscellaneous Plant Expense	\$	<u><u>(19,480)</u></u>

Notes:

(1) Schedule DGB-2.

(2) CW Sch. 1.0, Page 1.

PAWTUCKET WATER SUPPLY BOARD

Calculation of the Debt Service Expenditures
 Rate Year Ended June 30, 2016

	<u>2017 Amount</u> (1)	<u>2018 Amount</u> (1)
Existing & New Debt		
Debt Service Principal Payments	\$ 5,034,000	\$ 5,371,000
Interest Payments	3,466,574	3,402,981
Existing & New Debt Servicing Amount	<u>\$ 8,500,574</u>	<u>\$ 8,773,981</u>
Existing General Obligation Bonds		
Debt Service Principal Payments	\$ 59,562	\$ 60,374
Interest Payments	8,456	6,164
Existing General Obligation Bonds Servicing Amount	<u>\$ 68,018</u>	<u>\$ 66,538</u>
Fees		
RICWFA Fees	\$ 370,018	\$ 355,989
Total 2017 Debt Servicing Expenditures	\$ 8,938,610	
Rate Year Debt Servicing Expenditures	<u>7,764,193</u> (2)	
Debt Service Increment for Step 1 Increase	<u>\$ 1,174,417</u>	
Total 2018 Debt Servicing Expenditures		\$ 9,196,508
Total 2017 Debt Servicing Expenditures		<u>8,938,610</u>
Debt Service Increment for Step 2 Increase		<u>\$ 257,898</u>

Notes:

(1) Reflect revised debt service per Supplemental Testimony of Robert Benson stated on fiscal year basis as provided in informal discovery.

(2) CW Sch. 1.1, Page 1.

PAWTUCKET WATER SUPPLY BOARD

Calculation of the Annual Inflation for Step Increases
 Rate Year Ended June 30, 2016

Expense Item	Rate Year	Division	After Division	Inflation	2017 Step	FY 2017	Inflation	2018 Step
	FY 2016	Adjustments	Adjustments	Rate (4)	Increase Inflation	Amount	Rate	Increase Inflation
ADMINISTRATION								
Salaries & Wages - (601)	\$ 665,549 (1)	\$ -	\$ 665,549	2.00%	\$ 13,311	\$ 678,860	2.00%	\$ 13,577
Salaries & Wages - Payroll Taxes	46,421 (1)	-	46,421	2.00%	928	47,349	2.00%	947
Employee Pensions & Benefits (604)	417,565 (2)	-	417,565	2.00%	8,351	425,917	2.00%	8,518
Workers Comp	30,667 (1)	-	30,667	-	-	30,667	-	-
Materials and Supplies (Account 620)	54,555 (3)	-	54,555	2.00%	1,091	55,646	2.00%	1,113
Contractual Services - Legal (Account 633)	193,010 (3)	-	193,010	2.00%	3,860	196,870	2.00%	3,937
Contractual Services - Mgt. Fees (634) City Chg	275,788 (1)	-	275,788	2.00%	5,516	281,304	2.00%	5,626
Contractual Services - Other (Account 635)	11,479 (3)	-	11,479	2.00%	230	11,709	2.00%	234
Rental of Equipment (Account 642)	3,545 (3)	-	3,545	2.00%	71	3,616	2.00%	72
Transportation Expenses (Account 650)	7,226 (3)	-	7,226	2.00%	145	7,371	2.00%	147
Insurance - General Liability (Account 657)	151,690 (1)	-	151,690	2.00%	3,034	154,723	2.00%	3,094
Insurance - Other (Account 659)	- (1)	-	-	2.00%	-	-	2.00%	-
Regulatory Com Expense - Other (667)	94,971 (1)	(8,183)	86,789	2.00%	1,736	88,524	2.00%	1,770
Reg Com Exp - Amort of Rate Case Exp (666)	100,000 (1)	-	100,000	-	-	100,000	-	-
Miscellaneous Expense (Account 675)	28,848 (3)	-	28,848	2.00%	577	29,425	2.00%	589
Credit Card Fees	23,406 (3)	-	23,406	2.00%	468	23,874	2.00%	477
Education Training	4,361 (3)	-	4,361	2.00%	87	4,448	2.00%	89
Maint of Misc Plant	49,849 (3)	-	49,849	2.00%	997	50,846	2.00%	1,017
Purchased Power	48,113 (1)	(910)	47,203	2.00%	944	48,147	2.00%	963
Other Utilities	101,436 (3)	-	101,436	2.00%	2,029	103,465	2.00%	2,069
Printing	- (1)	-	-	2.00%	-	-	2.00%	-
Postage	80 (3)	-	80	2.00%	2	82	2.00%	2
Subtotal - Admin	\$ 2,308,557	\$ (9,092)	\$ 2,299,465		\$ 43,376	\$ 2,342,841		\$ 44,243
CUSTOMER ACCOUNTS								
Salary & Wages - Cust Ser	\$ 199,008 (1)	\$ -	\$ 199,008	2.00%	\$ 3,980	\$ 202,988	2.00%	\$ 4,060
Salary & Wages - Meter	328,541 (1)	-	328,541	2.00%	6,571	335,111	2.00%	6,702
Salary & Wages Payroll Tx(CS)	14,979 (1)	-	14,979	2.00%	300	15,279	2.00%	306
Salary & Wages Payroll Tx (Meters)	24,399 (1)	-	24,399	2.00%	488	24,887	2.00%	498
Empl Pensions & Benefits (Cust Ser)	76,821 (1)	-	76,821	2.00%	1,536	78,357	2.00%	1,567
Empl Pensions & Benefits (Meters)	171,436 (1)	-	171,436	2.00%	3,429	174,864	2.00%	3,497
Mats & Supp (Cust Serv)	1,005 (3)	-	1,005	2.00%	20	1,025	2.00%	21
Mats & Supp (Meters)	3,447 (3)	-	3,447	2.00%	69	3,516	2.00%	70
Contractual Services - Other - [Cust. Svc.] (Account 635)	35,806 (3)	-	35,806	2.00%	716	36,522	2.00%	730
Rental of Equipment (Account 642)	1,981 (3)	-	1,981	2.00%	40	2,021	2.00%	40
Workers Comp - Cust Serv	2,563 (1)	-	2,563	-	-	2,563	-	-
Workers Comp - Meters	13,191 (1)	-	13,191	-	-	13,191	-	-
Transportation Expenses - [Cust svc.] (Account 650)	783 (3)	-	783	2.00%	16	798	2.00%	16
Transportation Expenses - [Meter] (Account 650)	11,406 (3)	-	11,406	2.00%	228	11,634	2.00%	233
Bad Debt Expense (Account 670)	1,755 (3)	-	1,755	2.00%	35	1,790	2.00%	36
Miscellaneous Expense - [Cust. Svc.] (Account 675)	244 (3)	-	244	2.00%	5	249	2.00%	5
Miscellaneous Expense - [Meter] (Account 675)	704 (3)	-	704	2.00%	14	718	2.00%	14
Education Training - [Cust. Svc.]	- (1)	-	-	2.00%	-	-	2.00%	-
Education Training - [Meter]	751 (3)	-	751	2.00%	15	766	2.00%	15
Repairs & Maintenance - general	- (1)	-	-	2.00%	-	-	2.00%	-
Repairs & Maintenance - meters	- (1)	-	-	2.00%	-	-	2.00%	-
Other Utilities - [Cust. Svc.]	2,653 (3)	-	2,653	2.00%	53	2,706	2.00%	54
Other Utilities - [Meter]	3,107 (3)	-	3,107	2.00%	62	3,169	2.00%	63
Printing - [Cust. Svc.]	40,803 (3)	-	40,803	2.00%	816	41,619	2.00%	832
Printing - [Meter]	925 (3)	-	925	2.00%	19	944	2.00%	19
Postage-[Cust. Svc.]	112,873 (3)	-	112,873	2.00%	2,257	115,131	2.00%	2,303
Subtotal - Customer Accts	\$ 1,049,181	\$ -	\$ 1,049,181		\$ 20,669	\$ 1,069,850		\$ 21,082
SOURCE OF SUPPLY								
Salaries & Wages - (601)	\$ 125,509 (1)	\$ -	\$ 125,509	2.00%	\$ 2,510	\$ 128,019	2.00%	\$ 2,560
Salaries & Wages - Payroll Taxes	9,418 (1)	-	9,418	2.00%	188	9,606	2.00%	192
Employee Pensions & Benefits (604)	49,910 (1)	-	49,910	2.00%	998	50,908	2.00%	1,018
Workers Comp	5,297 (1)	-	5,297	-	-	5,297	-	-
Purchased Power (Account 615)	115,082 (1)	(1,429)	23,076	2.00%	462	23,537	2.00%	471
Materials and Supplies (Account 620) & Rental	2,040 (3)	-	124	2.00%	2	127	2.00%	3
Transportation Expenses (Account 650)	3,756 (3)	-	229	2.00%	5	233	2.00%	5
Miscellaneous Expense (Account 675)	50 (3)	-	3	2.00%	0	3	2.00%	0
Security Service	76,678 (3)	-	4,667	2.00%	93	4,760	2.00%	95
Education Training	645 (3)	-	39	2.00%	1	40	2.00%	1
Maint of Misc Plant	78,764 (3)	(19,480)	4,794	2.00%	96	4,890	2.00%	98
Other Utilities	4,094 (3)	-	249	2.00%	5	254	2.00%	5
Subtotal - Supply	\$ 471,242	\$ (20,909)	\$ 223,314		\$ 4,360	\$ 227,674		\$ 4,448

PAWTUCKET WATER SUPPLY BOARD

Calculation of the Annual Inflation for Step Increases
 Rate Year Ended June 30, 2016

Expense Item	Rate Year	Division	After Division	Inflation	2017 Step	FY 2017	Inflation	2018 Step
	FY 2016	Adjustments	Adjustments	Rate (4)	Increase Inflation	Amount	Rate	Increase Inflation
PURIFICATION								
DBO O&M Contract	\$ 2,082,284 (1)	\$ -	\$ 230,523		\$ -	\$ 230,523		\$ -
Purchased Power (Account 615)	964,863 (1)	(12,805)	188,151		-	188,151		-
Other Utilities	- (1)	-	-		-	-		-
Subtotal - Purification	3,047,147	(12,805)	418,674		-	418,674		-
TRANSMISSION & DISTRIBUTION								
Salaries & Wages - (601)	\$ 1,007,907 (1)	\$ -	\$ 1,007,907	2.00%	\$ 20,158	\$ 1,028,065	2.00%	\$ 20,561
Salaries & Wages -[Engineering] (601)	378,097 (1)	-	378,097	2.00%	7,562	385,659	2.00%	7,713
Salaries & Wages - Payroll Taxes -	75,146 (1)	-	75,146	2.00%	1,503	76,649	2.00%	1,533
Salaries & Wages - Payroll Taxes - [Engineering]	28,374 (1)	-	28,374	2.00%	567	28,941	2.00%	579
Salaries & Wages - Police Details	86,272 (1)	-	86,272		-	86,272		-
Employee Pensions & Benefits - (604)	470,449 (1)	-	470,449	2.00%	9,409	479,858	2.00%	9,597
Employee Pensions & Benefits - [Engineering] (604)	149,723 (1)	-	149,723	2.00%	2,994	152,717	2.00%	3,054
Materials and Supplies - (Account 620)	56,501 (3)	-	56,501	2.00%	1,130	57,631	2.00%	1,153
Materials and Supplies - [Engineering] (Account 620)	11,518 (3)	-	11,518	2.00%	230	11,748	2.00%	235
Rental of Equipment (Account 642)	12,040 (3)	-	12,040	2.00%	241	12,280	2.00%	246
Rental of Equipment - [Engineering] (Account 642)	3,036 (3)	-	3,036	2.00%	61	3,097	2.00%	62
Transportation Expenses - (Account 650)	81,641 (3)	-	81,641	2.00%	1,633	83,274	2.00%	1,665
Transportation Expenses - [Engineering](Account 650)	9,056 (3)	-	9,056	2.00%	181	9,237	2.00%	185
Workers Comp T&D	44,764 (1)	-	44,764		-	44,764		-
Workers Comp - Engineering	17,613 (1)	-	17,613		-	17,613		-
Miscellaneous Expense - (Account 675)	3,465 (3)	-	3,465	2.00%	69	3,535	2.00%	71
Miscellaneous Expense - [Engineering] (Account 675)	508 (3)	-	508	2.00%	10	518	2.00%	10
Education Training	4,560 (3)	-	4,560	2.00%	91	4,651	2.00%	93
Education Training - [Engineering]	684 (3)	-	684	2.00%	14	698	2.00%	14
Repairs & Maintenance - general	1,470 (3)	-	1,470	2.00%	29	1,499	2.00%	30
Repairs & Maintenance - T&D	- (1)	-	-	2.00%	-	-	2.00%	-
Repairs & Maintenance - fire services	- (1)	-	-	2.00%	-	-	2.00%	-
Repairs & Maintenance - services	4,379 (3)	-	4,379	2.00%	88	4,467	2.00%	89
Repairs & Maintenance - Hydrants	- (1)	-	-	2.00%	-	-	2.00%	-
Road surface restoration	- (1)	-	-	2.00%	-	-	2.00%	-
Repairs & Maintenance - general	- (1)	-	-	2.00%	-	-	2.00%	-
Purchased Power	17,247 (1)	(362)	16,886	2.00%	338	17,223	2.00%	344
Other Utilities	22,680 (3)	-	22,680	2.00%	454	23,134	2.00%	463
Other Utilities - [Engineering]	3,617 (3)	-	3,617	2.00%	72	3,689	2.00%	74
Printing	- (1)	-	-	2.00%	-	-	2.00%	-
Postage--[Engineering]	- (1)	-	-	2.00%	-	-	2.00%	-
Subtotal - T&D	2,490,746	(362)	2,490,384		46,835	2,537,219		47,771
Total Labor					\$ 58,067			\$ 59,228
Total Non-Labor Inflation					\$ 57,173			\$ 58,316

Note

- (1) CW Schedule 1
- (1) Schedule LKM-7
- (3) Amount from CW Schedule 1 revised to reflect REB Supplemental #1.
- (4) May 10, 2015 Edition Blue Chip Economic Indicators Data