

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
PUBLIC UTILITIES COMMISSION**

**IN RE: PAWTUCKET WATER SUPPLY BOARD'S  
APPLICATION TO CHANGE RATES**

**DOCKET NO. 4550**

**REPORT AND ORDER**

**I. Introduction**

On February 4, 2015, the Pawtucket Water Supply Board (Pawtucket Water) filed an application with the Public Utilities Commission (PUC or Commission) for a multi-year, three-step rate increase pursuant to R.I. General Laws § 39-15.1-4.<sup>1</sup> The first increase, proposed for implementation on March 6, 2015, sought additional operating revenues of \$2,288,131 to satisfy a revenue requirement of \$20,577,182.<sup>2</sup> This proposal represented a 12.5% increase in total revenues. The rate impact differed by customer class. The second increase of \$1,736,208, with a proposed effective date of July 1, 2016, was an 8.4% increase in total revenues, to support a revenue requirement of \$22,313,390. The third increase, with a proposed effective date of July 1, 2017, sought additional operating revenues of \$674,498, representing a 3.0% increase in total revenues, to support a revenue requirement of \$22,987,888. The second and third increases were intended for uniform application to all customer classes.

On February 25, 2015, the PUC suspended the effective date of Pawtucket Water's application, in order to conduct a full investigation.<sup>3</sup> By virtue of the suspension, the PUC delayed

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<sup>1</sup> All filings in this docket are available at the PUC offices located at 89 Jefferson Boulevard, Warwick, R.I. or at <http://www.ripuc.org/eventsactions/docket/4550page.html>.

<sup>2</sup> The first increase was revised to \$2,467,227 to support a revised revenue requirement of \$20,756,268. This revision included healthcare costs of \$179,096 which had been inadvertently omitted from the original filing. Benson Supp. Test.at 1 (May 28, 2015); Morgan Test. at 5 (June 18, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling\\_2-4-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling_2-4-15.pdf).

<sup>3</sup> R.I. Gen. Laws § 39-3-11.

the effective date of the first step increase to November 6, 2015. Thereafter, the parties engaged in extensive discovery and negotiations over the course of seven months, resulting in a Revised Settlement Agreement (Revised Settlement) filed with the PUC on September 29, 2015.<sup>4</sup> The Revised Settlement reflected the parties' agreement to significantly reduce the rate and step increases originally proposed by Pawtucket Water. According to the Revised Settlement, Pawtucket Water's rate year increase in FY 2016 was reduced to \$1,598,016 and step increases in FY 2017 and FY 2018 were amended to \$1,352,419 and \$826,561, respectively.<sup>5</sup> On October 5, 2015, following an evidentiary hearing, the PUC approved the Revised Settlement, finding it to be just and reasonable.

## **II. Direct Testimony- Pawtucket Water Supply Board**

In support of its application, Pawtucket Water presented testimony from four witnesses: (1) David G. Bebyn, one of its consultants; (2) Christopher P.N. Woodcock, another consultant; (3) Robert E. Benson, its Chief Financial Officer; and (4) James L. DeCelles, its Chief Engineer.

### **A. David G. Bebyn**

Mr. Bebyn presented a normalized, adjusted test year of July 1, 2013 through June 30, 2014 with numerous adjustments, after a review of Pawtucket Water's actual expenses from FY 2011 through FY 2014.<sup>6</sup> He made a series of fifteen adjustments to the audited test year to present the test year on a normalized rate-making basis. Mr. Bebyn's analysis resulted in total test year adjustments of \$622,885, resulting in adjusted test year expenses of \$18,463,886.<sup>7</sup>

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<sup>4</sup> The parties initially filed a Settlement Agreement on Sept. 28, 2015 but it did not contain all required signatures. The Revised Settlement Agreement, executed by all parties, was filed Sept. 29, 2015; [http://www.ripuc.org/eventsactions/docket/4550-PWSB-Revised-SettlementAgreement\\_9-29-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-Revised-SettlementAgreement_9-29-15.pdf).

<sup>5</sup> Revised Settlement Agreement (Sept. 29, 2015).

<sup>6</sup> Bebyn Test. at 2-3, Ex. 6 (Feb. 4, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling\\_2-4-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling_2-4-15.pdf).

<sup>7</sup> Bebyn Test. at Sch. DBG-1 (Feb. 4, 2015).

## **B. Christopher P.N. Woodcock**

Mr. Woodcock's testimony presented the development of new water rates and charges as well as the step increases proposed for FY 2017 and FY 2018. His testimony included a summary of test year revenues and expenses and supporting schedules, as well as an updated cost-of-service study allocating costs to customer classes and types of service.<sup>8</sup> In conducting his analysis, Mr. Woodcock utilized the same methodology used and approved in Pawtucket Water's most recent previous rate case, in 2010, Docket No. 4171.<sup>9</sup> He projected a decline in Pawtucket Water's revenues of \$1,702,210 compared with the projected revenues approved in Docket No. 4171. Based on projected changes in FY 2017 and FY 2018 in new debt costs, property taxes, inflation on labor costs, inflation on Operation & Maintenance (O&M) expenses, and increased revenue stabilization, Mr. Woodcock proposed revenue increases of 12.5% for FY 2016, 8.4% for FY 2017, and 3.0% for FY 2018.<sup>10</sup> He also proposed new water rates and charges for Pawtucket Water based on the updated cost-of-service study, allocating the functional costs to various cost components and distributing those costs to customer classes and types of service.<sup>11</sup>

## **C. Robert E. Benson**

Mr. Benson indicated that his schedules for the rate year reflected all personnel costs including wages and salaries, health care, and retirement. He also presented schedules supporting Pawtucket Water's O&M and debt service costs. He reported outstanding debt as of June 30, 2014 of \$102,655,889, of which \$102,303,000 was Rhode Island Clean Water

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<sup>8</sup> Woodcock Test. at 3 (Feb.4, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling\\_2-4-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling_2-4-15.pdf)

<sup>9</sup> *Id.*

<sup>10</sup> Woodcock Test. at 18, Sch. CW 12 at 1-2.

<sup>11</sup> *Id.* at 3.

Finance Agency Bonds (Clean Water Finance)<sup>12</sup> and \$352,859 was General Obligation Bonds.<sup>13</sup> He stated that debt service requirements have increased or will increase since Docket 4171 as follows:

(1) In November of 2011, Pawtucket Water borrowed \$7,485,000 from Clean Water Finance to fund main replacement projects MR-5, MR-6, and MR-7.

(2) In June 2012, Pawtucket Water borrowed \$1,955,000 from Clean Water Finance to fund main replacement projects MR-6 and MR-7.

(3) In May 2013, Pawtucket Water borrowed another \$8,645,000 from Clean Water Finance to fund main replacement projects MR-8 and MR-9.

(4) In the spring 2015, Pawtucket Water planned to borrow an additional \$10,600,000 for main replacement project MR-10 and cleaning and lining project CL-6.<sup>14</sup>

On May 28, 2015, Mr. Benson filed supplemental testimony to revise the rate year revenue requirement to include retiree health care costs of \$179,096, which had been inadvertently omitted from the original filing, and to revise debt service schedules. The revised debt service schedules reduced borrowing funds in FY2015 from \$10,600,000 to \$5,907,000, with the remaining \$4,718,000 to be borrowed in FY 2016.<sup>15</sup>

#### **D. James L. DeCelles**

Mr. DeCelles testified that the primary reason for Pawtucket Water's requested rate increase was lost revenue resulting from reduced consumption.<sup>16</sup> He claimed that lost revenue

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<sup>12</sup> Rhode Island Clean Water Finance Agency is now the Rhode Island Infrastructure Bank.

<sup>13</sup> Benson Test. at 3 (Feb. 5, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling\\_2-4-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling_2-4-15.pdf), Exhibit 8.

<sup>14</sup> *Id* at 4.

<sup>15</sup> Benson Supp. Test. at 1-2; Revised Sch. RB-03 (May 28, 2015).

<sup>16</sup> DeCelles Test.2 (Feb. 5, 2015), Ex. 9; [http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling\\_2-4-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-RateFiling_2-4-15.pdf).

from reduced consumption accounted for approximately three quarters of the requested rate increase.<sup>17</sup> Noting that Pawtucket Water cannot control consumption, Mr. DeCelles reiterated that the steady decline in consumption had prevented Pawtucket Water from collecting the revenues authorized by the PUC in Docket No. 4171.<sup>18</sup> He urged the PUC to adopt the consumption levels proposed by Mr. Woodcock. He emphasized the importance of setting realistic consumption levels, arguing that unrealistic consumption levels result in artificially low rates that provide no benefit to customers and that will have to be re-adjusted in future dockets.<sup>19</sup>

Other factors contributing to the proposed rate increase for FY 2016 were: a contractual increase for the operation of treatment facilities; non-labor expenses; and labor expenses, including salary, benefits, and payroll tax increases.<sup>20</sup> Mr. DeCelles explained that the operation of Pawtucket Water's treatment plant facilities is governed by a contract with United Water. The contract contains a Consumer Price Index (CPI) escalation clause that raises the cost of the contract in the rate year.<sup>21</sup> Mr. DeCelles cited a 30% increase in power costs, as well as significant increases in police detail fees, especially for Central Falls, as additional factors contributing to the proposed rate increase.<sup>22</sup> Finally, increasing labor costs resulted of union contracts requiring pay increases of 1.75% in year one, 2.0% in year two, and 2.0% in year three.<sup>23</sup>

According to Mr. DeCelles, a significant cause of the proposed increases for FY 2017 and FY 2018 was increased debt service associated with anticipated borrowing to finance the

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<sup>17</sup> *Id.*

<sup>18</sup> *Id.* at 3.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 4.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

completion of the distribution system rehabilitation that began in 2003.<sup>24</sup> The FY 2017 and FY 2018 step increases are also intended to cover anticipated costs for labor, inflation, and the revenue stabilization account.<sup>25</sup>

### **III. Direct Testimony of the Division of Public Utilities and Carriers**

The Division of Public Utilities and Carriers (Division) presented expert witness testimony from Jerome D. Mierzwa, its rate design consultant, and Lafayette K. Morgan, Jr., its revenue requirement consultant.

#### **A. Jerome D. Mierzwa**

Mr. Mierzwa addressed the cost-of-service study and rate design proposed by Pawtucket Water. He explained that a cost-of-service study is conducted to assist a utility or public utility commission in determining the level of costs properly recoverable from each of the various classes to which the utility provides service.<sup>26</sup> Pawtucket Water used the base extra-capacity methodology adopted in prior rate proceedings. Mr. Mierzwa explained that the base extra-capacity methodology divides costs into four cost categories, two of the categories are then further subdivided.<sup>27</sup> The four cost categories in the base-extra capacity method are: base or average capacity; extra-capacity; customer; and direct fire protection.<sup>28</sup> Extra-capacity is further subdivided into maximum-day and maximum-hour costs.<sup>29</sup> Customer costs are further subdivided into meter / service-related costs, and account / bill-related costs.<sup>30</sup> Once divided

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<sup>24</sup> Pawtucket Water launched a complete source-to-tap overhaul of its water system in 2003. This overhaul required a series of loans to fund the new treatment plant construction and the distribution system rehabilitation. The new treatment plant came on-line in 2008, and two final projects have yet to be completed in the distribution system rehabilitation.

<sup>25</sup> DeCelles Test. at 3 (Feb. 5, 2015).

<sup>26</sup> Mierzwa Test. at 3 (June 18, 2015). [http://www.ripuc.org/eventsactions/docket/4550-DPU-Mierzwa\(6-18-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-DPU-Mierzwa(6-18-15).pdf).

<sup>27</sup> *Id.* at 4.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

into these categories, costs are then allocated to customer classes. Base costs are allocated according to average water use, and extra-capacity costs are allocated based on the excess of peak demands over average demands (extra-capacity factors).<sup>31</sup> Meter and service-related customer costs are allocated based on relative meter and service-investment or a proxy thereof. Account-related customer costs are allocated based on the number of customers or the number of bills.<sup>32</sup>

Mr. Mierzwa noted that many of the allocation factors used by Pawtucket Water were the same factors used in prior proceedings. Mr. Mierzwa noted, however, that even though actual usage data supported a maximum-day capacity factor for the Town of Cumberland (Cumberland) of approximately 4.5 to 4.8, instead of the 2.5 maximum-day capacity factor used by Pawtucket Water, he did not recommend using the 4.5 to 4.8 maximum day capacity. Doing so, he explained, would violate the reasonableness guidelines set forth in the American Water Works Association's (AWWA) *Principles of Water Rates, Fees and Charges* (AWWA M1 Manual).<sup>33</sup> Mr. Mierzwa warned that adjusting the demand factor of just the wholesale class, without adjusting the demand factors for the other classes, would nearly double the rate increase for the wholesale class.<sup>34</sup> He did agree that this issue should be revisited in future rate filings.<sup>35</sup>

Mr. Mierzwa recommended that the allocation factor for transmission and distribution O&M expense, also known as "Factor O," should be updated in a future proceeding. Based on a data response in which Pawtucket Water provided updated material and labor costs for the

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<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 7.

<sup>34</sup> *Id.*

<sup>35</sup> *Id.* at 5.

past two years.<sup>36</sup> Mr. Mierzwa advised not doing so in the instant proceeding because doing it would result in very little change in the total monthly customer charge for most customers.<sup>37</sup> Moreover, incorporating an updated Factor O in this proceeding would result in significant decreases in monthly service charges and a significant increase in the monthly public fire service surcharge.<sup>38</sup>

**B. Lafayette K. Morgan, Jr.**

Mr. Morgan's analysis and testimony focused on the proposed revenue increases for both the initial rate filing and the proposed step increases.<sup>39</sup> He addressed eight separate categories of the filing and proposed rate year adjustments to Pawtucket Water's revenue requirement totaling \$369,529.<sup>40</sup> Mr. Morgan also proffered reductions in Pawtucket Water's proposed step increases for FY 2017 and FY 2018 of \$155,013 and \$199,838, respectively.<sup>41</sup>

Mr. Morgan disagreed with Pawtucket Water's use of a four-year average for purposes of normalizing Other Operating Revenues, and instead proposed using the three most recent fiscal years available (FY 2012 through FY 2014). Use of the FY 2012-FY 2014 period is consistent with the time period used by Pawtucket Water for determining metered sales service revenues.<sup>42</sup> Use of this three-year average increased Pawtucket Water's Other Operating Revenues by \$48,865.<sup>43</sup>

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<sup>36</sup> Pawtucket Water Resp. to DIV 1-5.

<sup>37</sup> Mierzwa Test. at 8 (June 18, 2015).

<sup>38</sup> *Id.*

<sup>39</sup> Morgan Test. (June 18, 2015); [http://www.ripuc.org/eventsactions/docket/4550-DPU-Morgan\(6-18-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-DPU-Morgan(6-18-15).pdf).

<sup>40</sup> *Id.* at 5 & Sch. LKM-1.

<sup>41</sup> *Id.* at 5.

<sup>42</sup> *Id.* at 8.

<sup>43</sup> *Id.* at 8 & Sch. LKM-3.

Pawtucket Water had reported a Regulatory Commission Expense of \$94,971 that was 82% higher than the average of the preceding three years.<sup>44</sup> Mr. Morgan reduced the Regulatory Commission Expense by \$8,183 by averaging the 2014 and 2015 expense and then subtracting the rate year Regulatory Commission Expense level.<sup>45</sup> He recommended spreading Pawtucket Water's Rate Case Expense of \$200,000 over a period of three years, instead of two, thus reducing the Rate Case Expense by \$33,333.<sup>46</sup>

Mr. Morgan calculated an annual growth rate of -44% for property taxes not subject to the "Cumberland Agreement." This was a substantial deviation from Pawtucket Water's 3% growth rate. Instead of reducing the growth rate for the rate year and the two step years, Mr. Morgan kept the level of property taxes not covered by the Cumberland Agreement unchanged from the test year. This reduced the rate year property tax level by \$7,318.<sup>47</sup>

Mr. Morgan calculated a two-year compounded inflation rate of 2.60% using the Gross Domestic Product-Price Index (GDP-PI) as opposed to Pawtucket Water's compounded inflation rate of 6.24%, calculated by using the Gross Domestic Product (GDP). Applying the compounded inflation rate of 2.60% to FY 16 expense amounts resulted in a reduction of \$38,241.<sup>48</sup> He also adjusted the Electric Power Expense by recalculating with the 2.6% two-year inflation rate, as opposed to the 3.08% used by Pawtucket Water, resulting in a reduction of \$15,505 in the rate year.<sup>49</sup>

Mr. Morgan reduced rate year Water Treatment Plant Annual Operating Costs by \$193,142 by using a different inflation factor in the calculation of the annual service fee for the United

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<sup>44</sup> *Id.* at 8.

<sup>45</sup> *Id.* at 8-9 & Sch. LKM-4.

<sup>46</sup> *Id.* at 9 & Sch. LKM-5.

<sup>47</sup> *Id.* at 10 & Sch. LKM-6.

<sup>48</sup> *Id.* at 11 & Sch. LKM-7.

<sup>49</sup> *Id.* at 12 & Sch. LKM-8.

Water Works contract.<sup>50</sup> The inflation factor used by Mr. Morgan was based on CPI data from the May 10, 2015 *Blue Chip Economic Indicators* consensus forecast.<sup>51</sup> Mr. Morgan normalized the Maintenance of Miscellaneous Plant expense by taking the three-year average of expense for FY 2012-FY 2014, thus reducing Maintenance of Miscellaneous Plant expense by \$19,480.<sup>52</sup>

Mr. Morgan made adjustments to each component of the step increases. He calculated debt service costs for the step-one increase to be \$323,679 lower and the step-two increase to be \$212,176 higher than the costs proposed by Pawtucket Water.<sup>53</sup> He reduced Pawtucket Water's property tax expense in FY 2016, FY 2017, and FY 2018 by \$7,318, \$15,146, and \$23,209, respectively.<sup>54</sup> He applied a 2% inflation factor to both labor costs and payroll taxes compared with Pawtucket Water's 2% inflation factor on labor costs and 3.08% on payroll taxes.<sup>55</sup> He kept workers compensation costs flat through FY 2018 based on his research indicating that workers' compensation costs have been declining in recent years.<sup>56</sup> Finally, Mr. Morgan noted that his adjustments included allowances for revenue stabilization funding of 1.5% for the rate year and FY 2017, and funding of 3% in FY 2018, consistent with Pawtucket Water's application.<sup>57</sup>

#### **IV. Direct Testimony of the Town of Cumberland**

Cumberland, Pawtucket Water's sole wholesale customer, intervened in the matter and on June 17, 2015, submitted the direct testimony of its utility consultant, David F. Russell, P.E.

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<sup>50</sup> *Id.* at 13-14 & Sch. LKM-9 at 1.

<sup>51</sup> Morgan Test. at 13-14 (June 16, 2015) & Sch. LKM-9.

<sup>52</sup> Morgan Test. at 14-15 (June 16, 2015) & Sch. LKM-10.

<sup>53</sup> *Id.* at 16 & Sch. LKM 11.

<sup>54</sup> Morgan Test.at 16 (June 16, 2015) & Sch. LKM-6.

<sup>55</sup> *Id.* at 17.

<sup>56</sup> *Id.* at 17-18.

<sup>57</sup> *Id.* at 18.

On July 15, 2015, Mr. Russell submitted corrected testimony.<sup>58</sup> According to Mr. Russell, Pawtucket Water's declining trend in water sales leveled off in the past few years and its projected rate year costs of \$900,000 could be offset by an increase in non-operating revenues of \$300,000. Based on these observations, and other points discussed below, Mr. Russell proposed adjustments to Pawtucket Water's rate-design and proposed revenue requirements.

Mr. Russell agreed with Pawtucket Water that roughly 75% of its need for additional revenues arose from declining sales. He argued, however, that Pawtucket Water overestimated the impact of declining sales on the rate year revenue requirement.<sup>59</sup> Mr. Russell noted that since FY 2012, decreases had leveled off considerably. For three of the four classes, consumption levels in FY2014 actually increased over FY 2013 levels. According to Mr. Russell, the retail class was the only class that did not have increasing sales from FY 2013 to FY 2014.<sup>60</sup> He also noted positive trends in the local and national economy since 2011-2012. He testified that the Gross Domestic Product (GDP) had increased in Rhode Island since 2010, and unemployment was decreasing in Rhode Island, regionally, and nationally.<sup>61</sup> Based on these indicators, Mr. Russell argued that Pawtucket Water's projected sales were overly pessimistic and he recalculated the projected rate year consumption volume based on growth trends over the most recent three fiscal years.<sup>62</sup>

The impact of Mr. Russell's recalculation was to reduce Pawtucket Water's rate request by \$518,518.<sup>63</sup> Mr. Russell accepted a correction made by Pawtucket Water during discovery, for overstating the operations contract for the water treatment plant, which resulted in a rate

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<sup>58</sup> Corrected Russell Test. (July 15, 2015); [http://www.ripuc.org/eventsactions/docket/4550-Cumberland-Russell-Corrected\(7-15-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-Cumberland-Russell-Corrected(7-15-15).pdf).

<sup>59</sup> Russell Corrected Test. at 8 (July 15, 2015).

<sup>60</sup> *Id.* at 9.

<sup>61</sup> *Id.* at 10-11.

<sup>62</sup> *Id.* at 10-15.

<sup>63</sup> *Id.* at 17.

year expense reduction of \$159,163. Mr. Russell also proposed several other adjustments to the rate year revenue requirement resulting in an additional \$831,815 reduction to Pawtucket Water's claim.<sup>64</sup>

During discovery, Pawtucket Water acknowledged a calculation error that overstated the rate year expense for the Water Treatment Plant by \$159,163. Mr. Russell noted the revenue requirement should therefore be adjusted downward by \$159,163.<sup>65</sup> Mr. Russell proposed a reduction to infrastructure replacement funding of \$250,000 and a reduction to the Revenue Stabilization Fund of \$147,850.<sup>66</sup>

Mr. Russell noted that Pawtucket Water's infrastructure improvement program is nearing completion with main replacement projects scheduled to be completed in approximately four years. He contended that the remaining projects have become less critical than projects completed in earlier phases of the program and that the funding level for this program should be reduced by \$250,000 per year for each year of the rate plan.<sup>67</sup> As an alternative, Mr. Russell proposed reducing funding in the first two years and increasing it in the third year. The impact of this recommendation would be a \$400,000 reduction to rate year revenue requirement, a \$200,000 reduction to the FY 2017 revenue requirement, and a \$600,000 increase in the FY 2018 revenue requirement.<sup>68</sup>

Mr. Russell also recommended delaying one project into late FY 2017 or early FY 2018 on the premise that a delay of one or more less critical projects would allow staff to be more diligent in managing the remaining projects, thus insuring higher quality facilities, and easing

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<sup>64</sup> *Id.* at 35-36.

<sup>65</sup> *Id.* at 19.

<sup>66</sup> *Id.* at 26, 35-36.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

the transition to long term operation.<sup>69</sup> The delay of the project would reduce debt service costs by \$57,367 in FY 2016, increase them by \$120,177 in FY 2017, and reduce them again by \$261,842 in FY 2018.<sup>70</sup>

Next, Mr. Russell proposed reducing funding for the revenue stabilization fund in the first two years. Specifically, instead of funding this reserve account at 1.5% of annual revenues in FY 2016 and FY 2017, as proposed by Pawtucket Water, Mr. Russell proposed funding the reserve account at .75% in both years.<sup>71</sup> Mr. Russell's proposal would reduce Pawtucket Water's net revenue requirements by \$147,847 and \$12,828 in FY 2016 and FY 2017, and it would increase the FY 2018 revenue requirement by \$166,000.<sup>72</sup>

In addition to recommending adjustments to Pawtucket Water's revenue requirement, Mr. Russell proposed a change to the allocation of unbilled water costs to retail and wholesale customers.<sup>73</sup> Mr. Russell noted that the five-year average of system production and unbilled losses upon which Pawtucket Water's allocation was based contained significant errors, due to meter inaccuracies. Mr. Russell suggested modifying the cost-of-service model to reflect the levels reported in FY 2014.<sup>74</sup> This change resulted in an increase of \$32,983 in unbilled losses allocated to the retail classes, with a corresponding reduction in the allocation to the wholesale class.<sup>75</sup> Mr. Russell noted that this change would have a significant impact on the wholesale class, but very little impact on the retail classes.<sup>76</sup>

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<sup>69</sup> *Id.* at 27-28.

<sup>70</sup> *Id.* at 28.

<sup>71</sup> *Id.* at 30.

<sup>72</sup> *Id.* at 30.

<sup>73</sup> *Id.* at 31-32.

<sup>74</sup> *Id.* at 32.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

Mr. Russell made three recommendations to rate design. First, he suggested that debt service costs of the MR-10 and CL-6 projects be added to meter and service costs in order to increase fixed charges and, thus, increase revenue stability with respect to declining sales.<sup>77</sup> Next, Mr. Russell suggested converting the uniform rate structure from class uniform rates to increasing block rates, either by class or one increasing block rate structure to all customers.<sup>78</sup> Finally, because the medium and large customer classes consist of mostly commercial and industrial customers having similar average costs that differ from the small retail class, Mr. Russell recommended combining the medium and large customer classes into one large user class, leaving the small user class as the only other retail class.<sup>79</sup>

To promote rate gradualism and mitigate rate shock, Mr. Russell made certain contingency recommendations that would only apply in special circumstances. The first recommendation was to adjust capital programs and/or funding of reserves to make each annual percentage increase fairly close or uniform.<sup>80</sup> This recommendation would apply only if there were significant differences, after all of the adjustments are made, between each annual rate increase. Mr. Russell suggested that the percentage difference between the smallest and largest increase should not exceed 2% or 3%.<sup>81</sup> Next, if the increase to any customer class were greater than 10% in any of the three years, Mr. Russell recommended phasing-in the increase to that class by allowing some temporary departure from the cost-of-service study class allocations, allowing some cross-subsidization for one or two additional years.<sup>82</sup> The goal would be to bring the class's rate to 9.9% in the year that such an adjustment became necessary.<sup>83</sup>

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<sup>77</sup> *Id.* at 33.

<sup>78</sup> *Id.*

<sup>79</sup> *Id.* at 33-34.

<sup>80</sup> *Id.* at 34.

<sup>81</sup> *Id.*

<sup>82</sup> *Id.* at 35.

<sup>83</sup> *Id.*

Finally, if the increase to the public fire protection class were greater than 50% in any of the three years, Mr. Russell similarly recommended phasing in the increase by allowing some temporary departure from the cost of service study class allocations, allowing some cross-subsidization for one or two additional years. The goal would be to bring that class's rate increase to 49.9% in the year that such an adjustment became necessary.<sup>84</sup>

## **V. Rebuttal Testimony of the Pawtucket Water Supply Board**

### **A. Christopher P.N. Woodcock**

On July 23, 2015, Mr. Woodcock filed rebuttal testimony responding to the Division's and Cumberland's recommendations.<sup>85</sup> Mr. Woodcock explained that when he reviewed Cumberland's summer peak demands, he realized that the figures he originally used were far below the actual maximum day and peak hour demand factors.<sup>86</sup> Since Pawtucket Water did not plan to submit a new cost of service study for at least three years, he argued that the analysis proposed by Mr. Mierzwa concerning Cumberland's peak water demands should be accomplished within this proceeding and not deferred until a later rate case as suggested by Mr. Mierzwa.<sup>87</sup> Additionally, Mr. Woodcock acknowledged that the allocation "Factor O" applicable to Transmission & Distribution and O&M expenses could be changed, but agreed with Mr. Mierzwa that this issue should be deferred to a future proceeding, to avoid any further increases in this docket to public fire charges outside of Pawtucket.<sup>88</sup>

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<sup>84</sup> *Id.*

<sup>85</sup> Woodcock Rebuttal Test.at 3 (July 23, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-Woodcock\(7-23-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-Woodcock(7-23-15).pdf).

<sup>86</sup> *Id.*

<sup>87</sup> Woodcock Rebuttal Test. at 3 & Woodcock Sch. 2.3.

<sup>88</sup> *Id.* at 4.

Mr. Woodcock agreed to normalize rate-case expenses over the three-year period, as proposed by both Mr. Morgan and Mr. Russell.<sup>89</sup> For inflation expenses, Mr. Woodcock maintained that his compounded inflation rate of 6.24% was reasonable, noting that water and sewage costs are two times higher than the overall economy. He suggested using a compromise inflation rate of 6%, which reflected the two-year change in the index proposed by Mr. Morgan, multiplied by a factor of two and then rounded down.<sup>90</sup> Mr. Woodcock then incorporated this modified 6% inflation rate, 3% per year, into his calculation of electric power expense and the step increases.<sup>91</sup>

Mr. Woodcock agreed to revised rate year water sales projections using actual FY 2015 usage data for the retail customers and the estimated purchases for FY 2016 proposed by Mr. Russell and the Cumberland Water Department.<sup>92</sup> He agreed with Mr. Russell's recommendation to combine the medium and large retail rate classes.<sup>93</sup> Finally, Mr. Woodcock acquiesced to Mr. Russell's suggestion to revise the methodology used to allocate unaccounted-for water. However, Mr. Woodcock only agreed to use production and sales data for the period FY 2013 through FY 2015, since the production meter was not operating from FY 2010 through FY 2012.<sup>94</sup>

Mr. Woodcock did not agree with Mr. Russell's proposal to delay a capital project. He asserted that such a delay would have no impact on rate year debt service expense because the project was scheduled for FY 2017.<sup>95</sup> Mr. Woodcock also disagreed with Mr. Russell's

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<sup>89</sup> *Id.* at 5 & Woodcock Sch. 1.1.

<sup>90</sup> *Id.* at 7.

<sup>91</sup> *Id.* at 7-8.

<sup>92</sup> *Id.* at 9, referring to Cumberland Resp. to Pawtucket Water 1-13 and 1-38.

<sup>93</sup> Woodcock Rebuttal Test. at 10 (July 23, 2015).

<sup>94</sup> *Id.* at 13.

<sup>95</sup> *Id.* at 11.

suggestion to fund the operating reserve at .75% of annual revenues.<sup>96</sup> Mr. Woodcock found it unreasonable to fund operating reserve in this amount given that Pawtucket Water is entitled to 3% funding (1.5% restricted and 1.5% unrestricted) of operating reserves and had already reduced the funding to 1.5% for the first two steps.<sup>97</sup> According to Mr. Woodcock, the further reduction proposed by Mr. Russell was particularly unreasonable in light of the fact that the rate year will be one-third of the way through before any new rates go into effect.<sup>98</sup>

Mr. Woodcock also disagreed with Mr. Russell's proposals regarding rate design and mitigation measures. He argued there was no precedent altering the step increases in the manner proposed by Mr. Russell.<sup>99</sup> Step increases are implemented as across the board percentage increases based on updated costs filed prior to the effective dates.<sup>100</sup> Mr. Russell's proposal contradicts that practice. In this context, Mr. Woodcock averred an artificial cap of 9.9% on rate increases for any customer class was neither justified nor consistent with the annual review process conducted by the PUC before each scheduled step increase.<sup>101</sup> Mr. Woodcock claimed that Mr. Russell's asserted concern for revenue stability contradicted his recommendation to reduce funding of operating reserve.<sup>102</sup> Mr. Woodcock also maintained that there was no justification for an increasing block rate structure because there was no evidence of wasteful water use.<sup>103</sup> He noted that all step increases are subject to further PUC review, and that originally proposed step increases often change.<sup>104</sup> The revised adjustments

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<sup>96</sup> *Id.* at 12.

<sup>97</sup> *Id.*

<sup>98</sup> *Id.* at 12-13.

<sup>99</sup> *Id.* at 16.

<sup>100</sup> *Id.* at 15-16.

<sup>101</sup> *Id.* at 16.

<sup>102</sup> *Id.*

<sup>103</sup> *Id.* at 13-14.

<sup>104</sup> *Id.* at 15-16.

adopted in rebuttal by Mr. Woodcock reduced Pawtucket Water's requested increases to: \$1,667,535 in the rate year;<sup>105</sup> \$1,394,200 in FY 2017;<sup>106</sup> and \$873,007 in FY 2018.<sup>107</sup>

**B. James DeCelles**

In rebuttal, Mr. DeCelles opposed Mr. Russell's adjustments to capital costs, specifically the delay of a capital project, the reduction of \$250,000 to IFR, and a suggested reduction to electric costs by 5%. Mr. DeCelles argued that delaying the capital project would lead to increased costs which would negatively impact ratepayers.<sup>108</sup> He stated that delaying capital projects, as suggested by Mr. Russell, would not improve upon the commendable work already provided by Pawtucket Water which has been recognized by the Environmental Protection Agency, the Department of Health and Clean Water Finance Agency as a model for other utilities to follow, and has been featured as a success story in an EPA publication.<sup>109</sup> Addressing the \$250,000 reduction to IFR, Mr. DeCelles noted that according to Mr. Woodcock's estimate, Mr. Russell's adjustment would result in savings of only \$0.02 per day to the average residential customer.<sup>110</sup> Finally, he claimed that Mr. Russell's suggested electric savings were simply not supported by any evidence in the record.<sup>111</sup>

He accepted Mr. Morgan's adjustment of \$19,480 to Maintenance of Miscellaneous Plant Expense ear-marked for increased tree and brush clearing on Pawtucket Water's dams in FY 2014, per requirement of the Rhode Island Department of Environmental Management.<sup>112</sup> He disagreed, however, with Mr. Morgan's adjustment to worker's compensation expense,

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<sup>105</sup> Woodcock Sch. 10.0 at 1 (July 23, 2015).

<sup>106</sup> Woodcock Sch. 12.0 at 1 (July 23, 2015).

<sup>107</sup> Woodcock Sch. 12.0 at 2 (July 23, 2015).

<sup>108</sup> DeCelles Rebuttal Test. at 3-4 (July 23, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-DeCelles\(7-23-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-DeCelles(7-23-15).pdf).

<sup>109</sup> *Id.* at 5.

<sup>110</sup> *Id.* at 4.

<sup>111</sup> *Id.* at 1.

<sup>112</sup> *Id.* at 4.

claiming this expense was expected to increase in light of the increase in injuries in the past year.<sup>113</sup>

### **C. Robert E. Benson**

Mr. Benson responded to Mr. Morgan's and Mr. Russell's testimony. He accepted Mr. Morgan's proposed adjustments relating to Other Operating Revenue, Regulatory Commission Expense, and Rate Case Expense.<sup>114</sup> He also agreed to reduce Regulatory Commission Expense by \$8,183 and to normalize Rate-Case Expenses over a three-year period.<sup>115</sup> Mr. Benson did not, however, accept Mr. Morgan's adjustments relating to property taxes not covered by the Cumberland Tax Treaty or the Water Treatment Plant Operating Contract.<sup>116</sup> Mr. Benson agreed to reduce property taxes in the rate year by \$1,979 and in FY 2017 and FY 2018, by \$8,174 and \$14,394, respectively.<sup>117</sup> Pawtucket Water agreed to update its calculation of the Water Treatment Plant Operating Contract Expense using the most recent twenty four months of available data.

## **VI. Surrebuttal Testimony of the Division of Public Utilities and Carriers**

### **A. Jerome Mierzwa**

In surrebuttal testimony filed August 27, 2015, Mr. Mierzwa reviewed his original positions vis-à-vis Pawtucket Water's and Cumberland's responses and adjustments. He rejected Mr. Woodcock's proposal to defer the allocation Factor O to a future proceeding while updating the maximum-day and maximum-hour extra-capacity factors in this proceeding. Mr. Mierzwa disagreed with this approach because it would result in an even higher increase to

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<sup>113</sup> *Id.* at 5-6.

<sup>114</sup> Benson Rebuttal Test.at 1 (July 23, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-Benson\(7-23-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-Benson(7-23-15).pdf).

<sup>115</sup> *Id.* at 2-3.

<sup>116</sup> *Id.* at 4.

<sup>117</sup> *Id.*

Cumberland. Compared with the 23.9% increase to Cumberland originally proposed by Pawtucket Water, the revised increase, based on the revised cost of service study incorporating the updated maximum-day and maximum-hour extra-capacity factors, would result in a 37.1% increase.<sup>118</sup> In order to mitigate this impact to Cumberland, Mr. Mierzwa recommended setting the maximum-day extra-capacity factor for the wholesale class at 3.5, which is the midpoint between the factor proposed by Pawtucket Water in its original application and its rebuttal testimony.<sup>119</sup> Similarly, he recommended the maximum-hour to maximum-day ratio for the wholesale class be set at 1.10 instead of the 1.35 proposed by Pawtucket Water in rebuttal.<sup>120</sup> These changes would reduce Cumberland's increase from 37.1% to 24.7%.<sup>121</sup> Mr. Mierzwa reviewed Cumberland's proposal on debt-service costs as well as Pawtucket Water's response. Mr. Mierzwa rejected Cumberland's recommendation to recover debt service costs through increased fixed service charges on the basis that it lacked sufficient detail to be implemented.<sup>122</sup>

Mr. Mierzwa reviewed Cumberland's position regarding consideration of an increasing block rate structure and indicated that he was not opposed.<sup>123</sup> Mr. Mierzwa also agreed to combine the medium and large meter classes.<sup>124</sup> Finally, although Mr. Mierzwa agreed conceptually with the policy of gradualism and the benefits to be derived therefrom, he concurred with Pawtucket Water that the recommendations in this docket were inconsistent with the PUC's current practices and may not be workable.<sup>125</sup>

## **B. Lafayette Morgan**

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<sup>118</sup> Mierzwa Surrebuttal Test. at 4-5 (Aug. 27, 2015); [http://www.ripuc.org/eventsactions/docket/4550-DPU-Mierzwa\(8-27-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-DPU-Mierzwa(8-27-15).pdf).

<sup>119</sup> *Id.* at 5.

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> *Id.* at 9.

<sup>123</sup> *Id.*

<sup>124</sup> *Id.* at 9-10.

<sup>125</sup> *Id.* at 11.

In surrebuttal testimony filed on August 27, 2015, Mr. Morgan was unpersuaded by Mr. Woodcock's rebuttal arguments supporting the GDP measure used for inflation and the compounded inflation rate of 6%. Mr. Morgan disagreed with Mr. Woodcock that the cost of water maintenance had exceeded the overall rate of inflation, stating that Mr. Woodcock was confusing the cost of producing water with water rates paid by the customer.<sup>126</sup> Mr. Morgan also criticized Mr. Woodcock for relying on the CPI to support his GDP-based inflation rate.<sup>127</sup> According to Mr. Morgan, the CPI is based on a limited number of goods and services typically used in households and is therefore inappropriate for use in a utility ratemaking proceeding.<sup>128</sup> The GDP-PI proposed by Mr. Morgan, on the other hand, considers a wider array of goods and services.<sup>129</sup> Mr. Morgan rejected Mr. Woodcock's proposed 6% inflation rate because it was based on an inappropriate inflation measure and because it was merely an arbitrarily doubling of the rate Mr. Woodcock had originally calculated, and rounded down to 6%.<sup>130</sup>

Mr. Morgan noted that Mr. Benson's supporting schedule did not accurately reflect his agreement to adopt Mr. Morgan's adjustment to Other Operating Revenues.<sup>131</sup> Mr. Morgan reviewed the updated taxes and updated his adjustment. Finally, Mr. Morgan criticized Mr. DeCelles's position on increasing workers' compensation expenses arguing that other factors, such as the severity of injury and dollar amount of the claims, should also be considered rather than just the number of injuries.<sup>132</sup>

## **VII. Surrebuttal of the Town of Cumberland**

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<sup>126</sup> Morgan Surrebuttal Test. at 5 (Aug. 27, 2015); [http://www.ripuc.org/eventsactions/docket/4550-DPU-Morgan\(8-27-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-DPU-Morgan(8-27-15).pdf).

<sup>127</sup> *Id.* at 6-7.

<sup>128</sup> *Id.* at 6.

<sup>129</sup> *Id.*

<sup>130</sup> *Id.* at 6-7.

<sup>131</sup> *Id.*

<sup>132</sup> *Id.* at 9.

In surrebuttal testimony filed on August 27, 2015, Mr. Russell updated adjustments to: rate year sales projections; WTP operating contract cost; the escalation rate applied to many expenses; electric power costs; and allocation of unaccounted-for water to Cumberland. The net impact of Mr. Russell's revised adjustments was a reduction of \$1,463,584 to Pawtucket Water's rate year increase, from \$2,288,131 to \$824,547.<sup>133</sup>

Comparing Mr. Woodcock's FY 2015 rate year sales projections to actual sales, Mr. Russell concluded that Mr. Woodcock had significantly underestimated sales to three out of four customer classes.<sup>134</sup> Mr. Russell re-estimated FY 2016 sales, based on the actual data for FY 2015. Using these new data, FY 2016 had significantly higher estimated sales and a corresponding reduction to total revenue requirements of \$699,798.<sup>135</sup> Mr. Russell accepted the Water Treatment Plant contract escalation rate of 2.24% proposed in rebuttal by Mr. Benson, finding it to be based on a method that was prescribed in the contract.<sup>136</sup> The impact of this revision was a downward adjustment to the treatment plant operating contract cost and a reduction to revenue requirements, of \$193,192.<sup>137</sup>

Mr. Russell accepted Mr. Morgan's two-year compounded rate of 2.6% applied to many expenses that had a net impact on rate year revenue requirements of \$38,241.<sup>138</sup> Finally, Mr. Russell also modified his recommendation regarding allocation of unaccounted-for water to Cumberland, using the average of unaccounted-for water for FY 2014 and FY 2015, or

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<sup>133</sup> Russell Surrebuttal Test. at 22-23 (Aug. 27, 2015); [http://www.ripuc.org/eventsactions/docket/4550-Cumberland-Russell\(8-27-15\).pdf](http://www.ripuc.org/eventsactions/docket/4550-Cumberland-Russell(8-27-15).pdf).

<sup>134</sup> *Id.* at 3.

<sup>135</sup> *Id.* at 5, 23.

<sup>136</sup> *Id.* at 7.

<sup>137</sup> *Id.* at 7, 23.

<sup>138</sup> *Id.* at 8, 23.

12%, resulting in a decrease of \$50,997 allocated to the wholesale class and a corresponding increase in the allocation to the retail classes.<sup>139</sup>

### **VIII. Settlement Agreement**

On September 28, 2015, Pawtucket Water filed a settlement Agreement which was revised on September 29, 2015. The Revised Settlement Agreement, resolving all of the issues between all of the parties, allowed for a multi-step rate plan. The first rate increase authorizes additional operating revenues of \$1,598,016 to support a total cost of service of \$20,458,598, representing an 8.5% increase in total rate revenues. The annual bill impact of the first increase on a typical residential customer consuming 800 cubic feet of water per month is \$19.80 per year, or 4%. The impact on other customers' bills will vary based upon classification and consumption level. The second rate increase authorizes additional operating revenues of \$1,352,419 to support a total cost of service of \$21,811,579, or a 6.6% increase, applied uniformly across all customer classes. The third rate increase authorizes additional operating revenues of \$826,561 to support a total cost of service of \$22,638,140, a 3.8% increase, applied uniformly across all customer classes.

In order to mitigate the impact of the step increases on Cumberland, the parties agreed to adopt the maximum-day and maximum-hour demand extra capacity factor of 3.5 proposed by the Division. This concession does not preclude the parties' rights to propose a different capacity factor in future rate proceedings or in the step-two and step-three compliance filings. The parties also reserved the right to propose updated consumption numbers in future compliance filings.

### **IX. Hearing and Decision**

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<sup>139</sup> *Id.* at 16, 23.

The PUC held a hearing in this matter on October 1, 2015. Pawtucket Water's witnesses, Christopher Woodcock and James DeCelles, both testified that the Revised Settlement was a fair and equitable resolution of the contested issues. Mr. Woodcock confirmed that the consumption level for the wholesale class agreed to by the parties was the level described in Cumberland's direct testimony.<sup>140</sup> The PUC questioned the cost of the police details for main replacement projects. Mr. DeCelles explained that, even though Pawtucket Water questions these expenses, the utility has no control over this cost because the police department's rates are set by union contract. These costs are higher on heavily travelled streets.<sup>141</sup>

Mr. Morgan and Mr. Russell both testified that they participated in ongoing settlement negotiations with Pawtucket Water over a period of approximately thirty days and that they believed that the Revised Settlement Agreement represented a fair and equitable resolution of the issues.<sup>142</sup>

For the average residential customer using 800 cubic feet of water, with a 5/8 inch meter, the increase is \$1.65 per month.<sup>143</sup> The effect on other retail customers' bills will vary, based on classification and consumption levels.<sup>144</sup> The Revised Settlement Agreement projects across-the-board increases for all customer classes of 6.6% for FY 2017 and 3.8% for FY 2018, subject to compliance filings.<sup>145</sup> Wholesale customers would receive a 21.2% increase.<sup>146</sup> All parties recognize and accept that the figures may be modified in compliance filings, prior to

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<sup>140</sup> Hr.g. Tr. at 19.

<sup>141</sup> *Id.* at 29, 33.

<sup>142</sup> *Id.* at 38, 41, 45.

<sup>143</sup> *Id.* at 20.

<sup>144</sup> Rev. Settlement Agreement at 8 (Sept. 29, 2015); [http://www.ripuc.org/eventsactions/docket/4550-PWSB-Revised-SettlementAgreement\\_9-29-15.pdf](http://www.ripuc.org/eventsactions/docket/4550-PWSB-Revised-SettlementAgreement_9-29-15.pdf).

<sup>145</sup> Hr'g. Tr. at 25-26. See also Rev. Settlement Agreement at 8 (Sept. 29, 2015).

<sup>146</sup> *Id.* at 25.

the rates becoming effective for FY 2017 and FY 2018.<sup>147</sup> Rate Case Expense was estimated at \$230,000 for FY 2016 and \$20,000 each for FY 2017 and FY 2018.<sup>148</sup>

Prior to taking its vote, the PUC commended the parties for their efforts in reaching a settlement.<sup>149</sup> The PUC found the Revised Settlement Agreement to be just, fair, and reasonable and in the public interest, in accordance with Section 1.24 of the PUC Rules of Practice and Procedure.<sup>150</sup> The PUC further found the rates provided in the agreement to be adequate, equitable, and otherwise consistent with R.I. Gen. Laws Sections 39-15.1-3 and 39-15.1-4. Based on these findings, the PUC voted to approve the Revised Settlement Agreement executed on September 29, 2015.<sup>151</sup>

Accordingly, it is hereby

(22951) ORDERED:

1. The Revised Settlement Agreement executed by the parties on September 29, 2015 is hereby approved, incorporated by reference as Appendix A, and made a part of this Order.
2. The Revised Tariffs filed by the Pawtucket Water Supply Board on October 5, 2015 are hereby approved, incorporated by reference as Appendix B, and made a part of this Order.
3. Unless otherwise modified by subsequent order of the PUC, any and all future tariffs filed by the Pawtucket Water Supply Board shall be consistent with this Order and the attached Appendices, approved and incorporated herein.

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<sup>147</sup> *Id.* at 21.

<sup>148</sup> *Id.* at 21-23.

<sup>149</sup> *Id.* at 47.

<sup>150</sup> *Id.* at 49.

<sup>151</sup> Commissioner Roberti was absent from the proceeding.

EFFECTIVE AT WARWICK, RHODE ISLAND ON OCTOBER 1, 2015 PURSUANT  
TO A BENCH DECISION. WRITTEN ORDER ISSUED NOVEMBER 10, 2017.

PUBLIC UTILITIES COMMISSION



Margaret E. Curran, Chairperson

\*Herbert F. DeSimone, Jr., Commissioner

\*Commissioner DeSimone concurs with the decision but is unavailable for signature.

**NOTICE OF RIGHT OF APPEAL:** Pursuant to R.I. Gen. Laws § 39-5-1, any person aggrieved by a decision or order of the PUC may, within seven days from the date of the order, petition the Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or order.

# APPENDIX A

## STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

IN RE:            PAWTUCKET WATER SUPPLY BOARD    )  
                      APPLICATION TO CHANGE RATE        )    DOCKET NO. 4550  
                      SCHEDULES    )

### REVISED SETTLEMENT AGREEMENT

#### I. INTRODUCTION

The Pawtucket Water Supply Board (“PWSB”), the Division of Public Utilities and Carriers (“Division”) and the Town of Cumberland (“Cumberland”) have reached an agreement regarding the PWSB’s February 4, 2015 Application To Change Rate Schedules. As such, the PWSB, the Division and Cumberland (collectively the “Parties”) jointly request approval of this Settlement Agreement by the State of Rhode Island Public Utilities Commission (hereinafter “Commission”).<sup>1</sup>

#### II. RECITALS

1. On February 4, 2015, the PWSB filed an Application To Change Rate Schedules (hereinafter “Application”) pursuant to R.I.G.L § 39-3-11 and Part II of the Commission’s Rules of Practice and Procedure.

<sup>1</sup> This Revised Settlement Agreement replaces the original Settlement Agreement entered into between the PWSB and Division, and filed with the Commission on September 28, 2015. This Revised Settlement Agreement does not materially alter the terms of the original Settlement Agreement or Settlement Schedules submitted therewith. Rather, the terms of this Revised Settlement Agreement merely reflect Cumberland’s agreement with the settlement reached in this Docket.

2. In its Application, the PWSB sought to implement a multi-year rate plan through a three step increase.
3. In the first step of the increase, the PWSB sought to collect additional operating revenue in the amount of \$2,288,131 to support total operating revenues of \$20,577,182.
4. The impact of this request would have resulted in a 12.5% increase in total revenues, and the impact on customers would vary by customer class.
5. In the second step of the requested rate increase, which the PWSB proposed to become effective on July 1, 2016, the PWSB sought to collect additional operating revenue in the amount of \$1,736,208, for a total revenue requirement of \$22,313,390.
6. The impact of this second step increase would have resulted in an 8.4% increase in total revenues, and the increase would have applied uniformly to each customer class as an “across the board” increase.
7. In the third step of the requested rate increase, which the PWSB proposed to become effective on July 1, 2017, the PWSB sought to collect additional operating revenue in the amount of \$674,498, for a total revenue requirement of \$22,987,888.
8. The impact of this third step increase would have resulted in a 3.0% increase in total revenues, and the increase would have applied uniformly to each customer class as an “across the board” increase.

9. The Application also contained a Cost of Service Study and Rate Design to determine the level of costs properly recoverable from each of the various classes of the PWSB's customers.
10. In support of its Application, the PWSB filed the direct testimony and schedules of David Bebyn, C.P.A. of B& E Consulting, LLC; Christopher P.N. Woodcock of Woodcock & Associates, Inc.; Robert E. Benson, Chief Financial Officer of the Pawtucket Water Supply Board; and, James L. DeCelles, P.E., Chief Engineer of the Pawtucket Water Supply Board.
11. The PWSB also submitted supplemental direct testimony from Robert E. Benson that included a request for an additional \$179,096 for retiree costs that were inadvertently omitted in the PWSB's original filing. Thus, the PWSB's revised request sought to collect additional operating revenue in the first step of the increase in the amount of \$2,467,227 to support total operating revenues of \$20,756,278.
12. On March 4, 2015, the Town of Cumberland filed a Motion to Intervene as a party in this Docket, which the Commission granted after receiving no objections.
13. Cumberland subsequently conducted an investigation and review of the Application, and issued data requests to assist in its investigation and review.
14. In response to the PWSB's filing, the Division conducted an investigation and review of the Application with the assistance of its staff and two outside expert consultants. The Division also issued data requests to assist in its investigation and review.
15. On June 18, 2015, the Division submitted direct testimony from its consultants Lafayette K. Morgan, Jr. and Jerome D. Mierzwa of Exeter Associates, Inc.

16. The Division, through Mr. Morgan's testimony, sought to reduce the PWSB's revenue increase in the first step to \$2,101,250 (a difference of \$369,529 from the PWSB's position), for an overall revenue requirement of \$20,438,300.
17. In the second step, Mr. Morgan suggested an increase of \$1,258,251 (a difference of \$155,103 from the PWSB's position).
18. In the third step, Mr. Morgan suggested an increase of \$696,900 (a difference of \$199,838 from the PWSB's position).
19. Mr. Morgan reduced the PWSB's original rate request in the following categories:
  - a) Other Operating Revenues
  - b) Regulatory Commission Expense
  - c) Rate Case Expenses
  - d) Property Taxes
  - e) Rate Year Inflation Escalation
  - f) Electric Power Expense
  - g) Water Treatment Plant Annual Operating Costs
  - h) Maintenance of Miscellaneous Plant
  - i) Step Increases
  - j) Debt Service Costs
  - k) Property Taxes for Step Increases
  - l) Step Period Inflation Escalation
  - m) Revenue Stabilization
20. Mr. Mierzwa made suggestions regarding the PWSB's cost allocation study, specifically updating maximum-day and maximum-hour demand extra capacity factors and the factor used to allocate transmission and distribution operations and maintenance expenses. Mr. Mierzwa suggested the PWSB make these changes in its next full rate filing.
21. On June 18, 2015, the Town of Cumberland submitted direct testimony from David F. Russell of Russell Consulting, LLC.

22. Mr. Russell also suggested reductions to the PWSB's revenues. Many of the categories of Mr. Russell's recommendations mirrored the Division's as set forth in paragraph 18 above. In addition, Mr. Russell suggested changes in the PWSB's anticipated consumption, power costs, capital funding and reserves funding. Mr. Russell also suggested changes to the PWSB's cost allocation and rate design.
23. On July 23, 2015, the PWSB filed rebuttal testimony and schedules from its witnesses, Christopher P.N. Woodcock, Robert E. Benson and James L. DeCelles.
24. In its rebuttal testimony and schedules the PWSB amended its original revenue request. The revised request sought to collect additional operating revenues in each of the three steps as follows:

| <u>Step</u> | <u>Revised Increase</u> | <u>Revised Total Revenues</u> | <u>Percentage</u> |
|-------------|-------------------------|-------------------------------|-------------------|
| Step 1      | \$1,667,535             | \$20,500,744                  | 8.9%              |
| Step 2      | \$1,394,200             | \$21,894,943                  | 6.8%              |
| Step 3      | \$873,007               | \$22,767,950                  | 4.0%              |

25. In revising its revenue request, the PWSB accepted many of the revisions suggested by the Division, but still disagreed on the following topics:

- a) Rate Case Expense;
- b) Inflation Adjustments;
- c) Step Adjustments for Inflation and Worker's Compensation Expense; and,
- d) Property Taxes.

26. The PWSB also continued to disagree with Cumberland on issues related to consumption, inflation, power costs, capital funding, cost allocation and rate design.
27. The PWSB also sought to immediately implement Mr. Mierzwa's suggested revisions to the customer demand factors in this Docket since it already had the monthly

billing data Mr. Mierzwa referenced in his testimony, rather than waiting for its next full rate filing, which may be three years away in light of the multi-year rate increase requested in this Docket.

28. In particular, Mr. Woodcock suggested an update to Cumberland's maximum-day and maximum-hour demand extra capacity factors.

29. On August 28, 2015, the Division submitted surrebuttal testimony from Mr. Morgan and Mr. Mierzwa.

30. The Division revised its position as follows:

- a) Step 1 – Revenue increase of \$1,561,228 (\$106,307 less than the PWSB's Rebuttal Position).
- b) Step 2 – Revenue Increase of \$1,327,887 (\$66,313 less than the PWSB's Rebuttal Position).
- c) Step 3 – Revenue Increase of \$770,164 (\$102,843 less than the PWSB's Rebuttal Position).

31. The differences between the Division and the PWSB remained in the following categories:

- a) Rate Case Expense
- b) Inflation Adjustments
- c) Water Treatment Plant Contract
- d) Step Adjustments for Inflation and Worker's Compensation Expense
- e) Property Taxes

32. Mr. Mierzwa agreed that Cumberland's maximum-day and maximum-hour demand extra capacity factor should be increased, but reduced the 4.8 maximum day factor proposed in the PWSB's rebuttal to 3.5 to mitigate Cumberland's increase. Mr. Mierzwa also proposed a reduction to the maximum hour factor for Cumberland to mitigate the increase to Cumberland.

33. On August 27, 2015, Cumberland also submitted surrebuttal testimony, and Mr. Russell suggested changes to the PWSB's rebuttal position in the areas of consumption, inflation, power costs, capital funding, cost allocation and rate design.
34. Following the surrebuttal testimony filings by the Division and Cumberland, the Parties engaged in extensive settlement discussions and negotiations.
35. During these discussions and negotiations, the Parties narrowed their areas of disagreement on the PWSB's revenue request to four specific expense items:
- a) Rate Case Expense – The Parties agreed to a three-year normalization of \$230,000 for rate case expense as a placeholder for an actual amount to be reflected in the initial rate increase. The Parties have agreed to update this expense to reflect actual expenses as near as possible. For the step increases, the Parties have agreed to a placeholder amount of \$20,000, which would be subject to adjustment during the step increase compliance filings.
  - b) Inflation Adjustments – the Parties agreed to the Division's revised inflation calculation, which resulted in a compounded 3% inflation rate.
  - c) Step Adjustments for Inflation and Worker's Compensation Expense – the agreed upon rate of inflation will apply to the step adjustments and worker's compensation expense.
  - d) Property Taxes – the Parties agreed to use the PWSB's property tax adjustment as set forth in the PWSB's rebuttal testimony.
36. As a result of these settlement discussions and after due consideration of the testimony, exhibits, schedules, data requests, data responses, and other documentation included in the filings of the Parties in this Docket, the Parties have agreed to a settlement which resolves all issues relating to the PWSB's Application to Change Rate Schedules.

37. The Parties, by and through their respective representatives, believe that this settlement, as a whole, constitutes a just and reasonable resolution of the issues in this proceeding, and jointly request its approval by the Commission.

### **III. TERMS OF SETTLEMENT**

38. Incorporated herein and attached hereto as Exhibit 1 are Joint Settlement Schedules 1.0 through 12.0, which memorialize the settlement, and the Parties agree with these schedules as presented.

39. As set forth in these schedules, in the first step of the increase, the PWSB's rates are designed to allow for the collection of additional operating revenue in the amount of \$1,598,016 to support total cost of service of \$20,458,598. The impact of this request will result in an 8.5% increase in total rate revenues. For a typical residential customer who uses 800 CU FT of water per month, the impact of this request will result in an increase of \$19.80 per year, from \$494.40 per year to \$514.20 per year, or 4%. The impact on other retail customers' bills will vary based on classification and consumption level.

40. As set forth in these schedules, in the second step of the increase, the PWSB's rates are designed to allow for the collection of additional operating revenue in the amount of \$1,352,419 to support total cost of service of \$21,811,579. The impact of this request will result in a 6.6% increase in total revenues. The increase will apply uniformly to each customer class as an "across the board" increase.

41. As set forth in these schedules, in the third step of the increase, the PWSB's rates are designed to allow for the collection of additional operating revenue in the

amount of \$826,561 to support total cost of service of \$22,638,140. The impact of this request will result in a 3.8% increase in total revenues. The increase will apply uniformly to each customer class as an “across the board” increase.

42. The PWSB agrees to use the maximum-day and maximum-hour demand extra capacity factor of 3.5 suggested by Mr. Mierzwa to mitigate the increase to Cumberland. However, and as set forth in paragraphs 44-47 infra, the Parties reserve the right to advocate for a different capacity factor in future rate filings and in the compliance filings for Steps 2 and 3 of the proposed rate filing.
43. The Parties also reserve the right to advocate for different consumption numbers based on updated consumption numbers provided by the PWSB in its compliance filings for Steps 2 and 3 of the proposed rate filing.

#### **IV. EFFECT OF SETTLEMENT**

44. This Settlement Agreement is the result of a negotiated settlement. The discussions which have produced this Settlement Agreement have been conducted with the explicit understanding that all offers of settlement and discussion relating thereto are and shall be privileged, shall be without prejudice to the position of any party or participant presenting such offer or participating in any such discussion, and are not to be used in any manner in connection with these or other proceedings.
45. This settlement agreement is the product of negotiation and compromise. The making of this agreement establishes no principle or precedent. This agreement shall not be deemed to foreclose any party from making any contention in any future proceeding or investigation.

46. The agreement by any party to the terms of this Settlement Agreement shall not be construed as an agreement as to any matter of fact or law beyond the terms thereof. By entering into this Settlement Agreement, matters or issues other than those explicitly identified in this agreement have not been settled upon or conceded by any party to this Settlement Agreement, and nothing in this agreement shall preclude any party from taking any position in any future proceeding regarding such unsettled matters.

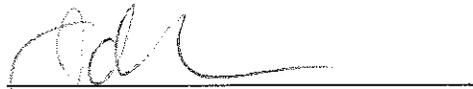
47. In the event that the Commission rejects this Settlement Agreement, or modifies this agreement or any provision therein, then this agreement shall be deemed withdrawn and shall be null and void in all respects.

IN WITNESS WHEREOF, the Pawtucket Water Supply Board, the Rhode Island Division of Public Utilities And Carriers and the Town of Cumberland agree that this Settlement Agreement is reasonable, in the public interest and in accordance with law and regulatory policy, and have caused this agreement to be executed by their respective representatives, each being authorized to do so.

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Dated this 29<sup>th</sup> day of September, 2015.

PAWTUCKET WATER  
SUPPLY BOARD  
By its Attorney,



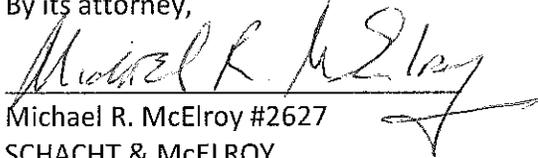
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By its attorney,



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**TEST YEAR & RATE YEAR EXPENSES**

| Expense Item   | Test Year<br>FY 2014 | Summary of<br>Adjustments | Rate Year *<br>FY 2016 | <----- Adjustments Detail -----> |                      |                             |
|--|----------------------|---------------------------|------------------------|----------------------------------|----------------------|-----------------------------|
|  |                      |                           |                        | Labor &<br>Related Items         | Other<br>Adjustments | Supporting<br>Schedule      |
| <b>ADMINISTRATION</b>                                    |                      |                           |                        |                                  |                      |                             |
| Salaries & Wages - (601)                                 | \$656,397            | \$9,152                   | \$665,549              | \$9,152                          | \$0                  | R. Benson                   |
| Salaries & Wages - Payroll Taxes                         | \$46,352             | \$69                      | \$46,421               | \$69                             | \$0                  | R. Benson                   |
| Employee Pensions & Benefits (604)                       | \$428,079            | -\$10,513                 | \$417,566              | -\$189,609                       | \$179,096            | Joint Settlement Sch. 1.1 ( |
| Workers Comp   | \$13,792             | \$16,875                  | \$30,667               | \$0                              | \$16,875             | LKM-12S                     |
| Materials and Supplies (Account 620)                     | \$53,171             | \$1,595                   | \$54,766               | \$0                              | \$1,595              | Joint Settlement Sch. 1.1 ( |
| Contractual Services - Legal (Account 633)               | \$188,115            | \$5,643                   | \$193,758              | \$0                              | \$5,643              | Joint Settlement Sch. 1.1 ( |
| Contractual Services - Mgt. Fees (634) City Chg          | \$275,788            | \$0                       | \$275,788              | \$0                              | \$0                  |                             |
| Contractual Services - Other (Account 635)               | \$11,188             | \$336                     | \$11,523               | \$0                              | \$336                | Joint Settlement Sch. 1.1 ( |
| Rental of Equipment (Account 642)                        | \$3,455              | \$104                     | \$3,559                | \$0                              | \$104                | Joint Settlement Sch. 1.1 ( |
| Transportation Expenses (Account 650)                    | \$7,043              | \$211                     | \$7,254                | \$0                              | \$211                | Joint Settlement Sch. 1.1 ( |
| Insurance - General Liability (Account 657)              | \$151,690            | \$0                       | \$151,690              | \$0                              | \$0                  |                             |
| Insurance - Other (Account 659)                          | \$0                  | \$0                       | \$0                    | \$0                              | \$0                  |                             |
| Regulatory Com Expense - Other (667)                     | \$94,971             | -\$8,182                  | \$86,789               | \$0                              | -\$8,182             | LKM-4                       |
| Reg Com Exp - Amort of Rate Case Exp (666)               | \$0                  | \$76,667                  | \$76,667               | \$0                              | \$76,667             | Joint Settlement Sch. 1.1   |
| Miscellaneous Expense (Account 675)                      | \$28,117             | \$843                     | \$28,960               | \$0                              | \$843                | Joint Settlement Sch. 1.1 ( |
| Credit Card Fees   | \$22,812             | \$684                     | \$23,496               | \$0                              | \$684                | Joint Settlement Sch. 1.1 ( |
| Education Training                                       | \$4,250              | \$128                     | \$4,378                | \$0                              | \$128                | Joint Settlement Sch. 1.1 ( |
| Maint of Misc Plant                                      | \$48,584             | \$1,458                   | \$50,042               | \$0                              | \$1,458              | Joint Settlement Sch. 1.1 ( |
| Purchased Power  | \$40,489             | \$6,813                   | \$47,302               | \$0                              | \$6,813              | Joint Settlement Sch. 1.1   |
| Other Utilities  | \$98,864             | \$2,966                   | \$101,829              | \$0                              | \$2,966              | Joint Settlement Sch. 1.1 ( |
| Printing   | \$0                  | \$0                       | \$0                    | \$0                              | \$0                  | Joint Settlement Sch. 1.1 ( |
| Postage  | \$78                 | \$2                       | \$80                   | \$0                              | \$2                  | Joint Settlement Sch. 1.1 ( |
| Subtotal - Admin   | \$2,173,233          | \$104,852                 | \$2,278,085            | -\$180,389                       | \$285,240            |                             |
| <b>CUSTOMER ACCOUNTS</b>                                 |                      |                           |                        |                                  |                      |                             |
| Salary & Wages - Cust Ser                                | \$192,753            | \$6,255                   | \$199,008              | \$6,255                          | \$0                  | R. Benson                   |
| Salary & Wages - Meter                                   | \$252,127            | \$76,413                  | \$328,541              | \$76,413                         | \$0                  | R. Benson                   |
| Salary & Wages Payroll Tx (CS)                           | \$14,856             | \$123                     | \$14,979               | \$123                            | \$0                  | R. Benson                   |
| Salary & Wages Payroll Tx (Meters)                       | \$23,110             | \$1,289                   | \$24,399               | \$1,289                          | \$0                  | R. Benson                   |
| Empl Pensions & Benefits (Cust Ser)                      | \$68,892             | \$7,929                   | \$76,821               | \$7,929                          | \$0                  | R. Benson                   |
| Empl Pensions & Benefits (Meters)                        | \$156,109            | \$15,327                  | \$171,436              | \$15,327                         | \$0                  | R. Benson                   |
| Matls & Supp (Cust Serv)                                 | \$980                | \$29                      | \$1,009                | \$0                              | \$29                 | Joint Settlement Sch. 1.1 ( |
| Matls & Supp (Meters)                                    | \$3,360              | \$101                     | \$3,461                | \$0                              | \$101                | Joint Settlement Sch. 1.1 ( |
| Contractual Services - Other - [Cust. Svc.] (Account 63) | \$34,898             | \$1,047                   | \$35,945               | \$0                              | \$1,047              | Joint Settlement Sch. 1.1 ( |
| Rental of Equipment (Account 642)                        | \$1,931              | \$58                      | \$1,989                | \$0                              | \$58                 | Joint Settlement Sch. 1.1 ( |
| Workers Comp - Cust Serv                                 | \$12,517             | -\$9,954                  | \$2,563                | \$0                              | -\$9,954             | LKM-12S                     |
| Workers Comp - Meters                                    | \$0                  | \$13,191                  | \$13,191               | \$0                              | \$13,191             | LKM-12S                     |
| Transportation Expenses - [Cust svc.] (Account 650)      | \$763                | \$23                      | \$786                  | \$0                              | \$23                 | Joint Settlement Sch. 1.1 ( |
| Transportation Expenses - [Meter] (Account 650)          | \$11,117             | \$334                     | \$11,451               | \$0                              | \$334                | Joint Settlement Sch. 1.1 ( |
| Bad Debt Expense (Account 670)                           | \$1,710              | \$51                      | \$1,762                | \$0                              | \$51                 | Joint Settlement Sch. 1.1 ( |
| Miscellaneous Expense - [Cust. Svc.] (Account 675)       | \$238                | \$7                       | \$245                  | \$0                              | \$7                  | Joint Settlement Sch. 1.1 ( |
| Miscellaneous Expense - [Meter] (Account 675)            | \$686                | \$21                      | \$707                  | \$0                              | \$21                 | Joint Settlement Sch. 1.1 ( |
| Education Training - [Cust. Svc.]                        | \$0                  | \$0                       | \$0                    | \$0                              | \$0                  | Joint Settlement Sch. 1.1 ( |
| Education Training - [Meter]                             | \$732                | \$22                      | \$754                  | \$0                              | \$22                 | Joint Settlement Sch. 1.1 ( |
| Repairs & Maintenance - general                          | \$0                  | \$0                       | \$0                    | \$0                              | \$0                  | Joint Settlement Sch. 1.1 ( |
| Repairs & Maintenance - meters                           | \$0                  | \$0                       | \$0                    | \$0                              | \$0                  | Joint Settlement Sch. 1.1 ( |
| Other Utilities - [Cust. Svc.]                           | \$2,586              | \$78                      | \$2,664                | \$0                              | \$78                 | Joint Settlement Sch. 1.1 ( |
| Other Utilities - [Meter]                                | \$3,028              | \$91                      | \$3,119                | \$0                              | \$91                 | Joint Settlement Sch. 1.1 ( |
| Printing - [Cust. Svc.]                                  | \$39,768             | \$1,193                   | \$40,961               | \$0                              | \$1,193              | Joint Settlement Sch. 1.1 ( |
| Printing - [Meter]                                       | \$902                | \$27                      | \$929                  | \$0                              | \$27                 | Joint Settlement Sch. 1.1 ( |
| Postage--[Cust. Svc.]                                    | \$110,011            | \$3,300                   | \$113,311              | \$0                              | \$3,300              | Joint Settlement Sch. 1.1 ( |
| Subtotal - Customer Accts                                | \$933,072            | \$116,955                 | \$1,050,027            | \$107,336                        | \$9,619              |                             |

**TEST YEAR & RATE YEAR EXPENSES**

| <b><u>Expense Item</u></b>                    | <b><u>Test Year<br/>FY 2014</u></b> | <b><u>Summary of<br/>Adjustments</u></b> | <b><u>Rate Year<br/>FY 2016</u></b> | <b>&lt;----- Adjustments Detail -----&gt;</b> |                                     |                                       |
|---|-------------------------------------|--|-------------------------------------|---|-------------------------------------|---------------------------------------|
|   |                                     |  |                                     | <b><u>Labor Increase</u></b>                  | <b><u>Other<br/>Adjustments</u></b> | <b><u>Supporting<br/>Schedule</u></b> |
| <b><u>SOURCE OF SUPPLY</u></b>                |                                     |  |                                     |   |                                     |                                       |
| Salaries & Wages - (601)                      | \$126,626                           | -\$1,117                                 | \$125,509                           | -\$1,117                                      | \$0                                 | R. Benson                             |
| Salaries & Wages - Payroll Taxes              | \$9,327                             | \$91                                     | \$9,418                             | \$91  | \$0                                 | R. Benson                             |
| Employee Pensions & Benefits (604)            | \$45,138                            | \$4,772                                  | \$49,910                            | \$4,772                                       | \$0                                 | R. Benson                             |
| Workers Comp                                  | \$3,959                             | \$1,338                                  | \$5,297                             | \$0   | \$1,338                             | LKM-12S                               |
| Purchased Power (Account 615)                 | \$92,006                            | \$21,802                                 | \$113,809                           | \$0   | \$21,802                            | Joint Settlement Sch. 1.1             |
| Materials and Supplies (Account 620) & Rental | \$1,988                             | \$60                                     | \$2,048                             | \$0   | \$60                                | Joint Settlement Sch. 1.1 (           |
| Transportation Expenses (Account 650)         | \$3,661                             | \$110                                    | \$3,771                             | \$0   | \$110                               | Joint Settlement Sch. 1.1 (           |
| Miscellaneous Expense (Account 675)           | \$49                                | \$1                                      | \$50                                | \$0   | \$1                                 | Joint Settlement Sch. 1.1 (           |
| Security Service                              | \$74,733                            | \$2,242                                  | \$76,975                            | \$0   | \$2,242                             | Joint Settlement Sch. 1.1 (           |
| Education Training                            | \$628                               | \$19                                     | \$647                               | \$0   | \$19                                | Joint Settlement Sch. 1.1 (           |
| Maint of Misc Plant                           | \$76,766                            | -\$17,761                                | \$59,005                            | \$0   | -\$17,761                           | LKM-7S                                |
| Other Utilities                               | <u>\$3,990</u>                      | <u>\$120</u>                             | <u>\$4,110</u>                      | <u>\$0</u>                                    | <u>\$120</u>                        | Joint Settlement Sch. 1.1 (           |
| Subtotal - Supply                             | \$438,872                           | \$11,677                                 | \$450,549                           | \$3,746                                       | \$7,931                             |                                       |
| <b><u>PURIFICATION</u></b>                    |                                     |  |                                     |   |                                     |                                       |
| DBO O&M Contract                              | \$1,851,761                         | \$37,331                                 | \$1,889,092                         | \$0   | \$37,331                            | Joint Settlement Sch. 1.1             |
| Purchased Power (Account 615)                 | \$776,713                           | \$176,744                                | \$953,457                           | \$0   | \$176,744                           | Joint Settlement Sch. 1.1             |
| Other Utilities                               | <u>\$0</u>                          | <u>\$0</u>                               | <u>\$0</u>                          | <u>\$0</u>                                    | <u>\$0</u>                          |                                       |
| Subtotal - Purification                       | \$2,628,473                         | \$214,075                                | \$2,842,548                         | \$0   | \$214,075                           |                                       |

**TEST YEAR & RATE YEAR EXPENSES**

| <u>Expense Item</u>                                  | <u>Test Year<br/>FY 2014</u> | <u>Summary of<br/>Adjustments</u> | <u>Rate Year<br/>FY 2016</u> | <u>&lt;----- Adjustments Detail -----&gt;</u> |                              |                                |
|--|------------------------------|-----------------------------------|------------------------------|---|------------------------------|--------------------------------|
|  |                              |                                   |                              | <u>Labor Increase</u>                         | <u>Other<br/>Adjustments</u> | <u>Supporting<br/>Schedule</u> |
| <b><u>TRANSMISSION &amp; DISTRIBUTION</u></b>        |                              |                                   |                              |   |                              |                                |
| Salaries & Wages - (601)                             | \$927,786                    | \$80,121                          | \$1,007,907                  | \$80,121                                      | \$0                          | R. Benson                      |
| Salaries & Wages -[Engineering] (601)                | \$373,160                    | \$4,937                           | \$378,097                    | \$4,937                                       | \$0                          | R. Benson                      |
| Salaries & Wages - Payroll Taxes -                   | \$71,111                     | \$4,035                           | \$75,146                     | \$4,035                                       | \$0                          | R. Benson                      |
| Salaries & Wages - Payroll Taxes - [Engineering]     | \$27,444                     | \$929                             | \$28,374                     | \$929   | \$0                          | R. Benson                      |
| Salaries & Wages - Police Details                    | \$86,272                     | \$0                               | \$86,272                     | \$0   | \$0                          |                                |
| Employee Pensions & Benefits - (604)                 | \$399,728                    | \$70,721                          | \$470,449                    | \$70,721                                      | \$0                          | R. Benson                      |
| Employee Pensions & Benefits - [Engineering] (604)   | \$122,039                    | \$27,683                          | \$149,723                    | \$27,683                                      | \$0                          | R. Benson                      |
| Materials and Supplies - (Account 620)               | \$55,068                     | \$1,652                           | \$56,720                     | \$0   | \$1,652                      | Joint Settlement Sch. 1.1 (    |
| Materials and Supplies - [Engineering] (Account 620) | \$11,225                     | \$337                             | \$11,562                     | \$0   | \$337                        | Joint Settlement Sch. 1.1 (    |
| Rental of Equipment (Account 642)                    | \$11,734                     | \$352                             | \$12,086                     | \$0   | \$352                        | Joint Settlement Sch. 1.1 (    |
| Rental of Equipment - [Engineering] (Account 642)    | \$2,959                      | \$89                              | \$3,048                      | \$0   | \$89                         | Joint Settlement Sch. 1.1 (    |
| Transportation Expenses - (Account 650)              | \$79,571                     | \$2,387                           | \$81,958                     | \$0   | \$2,387                      | Joint Settlement Sch. 1.1 (    |
| Transportation Expenses - [Engineering](Account 650) | \$8,826                      | \$265                             | \$9,091                      | \$0   | \$265                        | Joint Settlement Sch. 1.1 (    |
| Workers Comp T&D                                     | \$74,692                     | -\$29,928                         | \$44,764                     | \$0   | -\$29,928                    | LKM-12S                        |
| Workers Comp - Engineering                           | \$16,100                     | \$1,513                           | \$17,613                     | \$0   | \$1,513                      | LKM-12S                        |
| Miscellaneous Expense - (Account 675)                | \$3,377                      | \$101                             | \$3,479                      | \$0   | \$101                        | Joint Settlement Sch. 1.1 (    |
| Miscellaneous Expense - [Engineering] (Account 675)  | \$495                        | \$15                              | \$510                        | \$0   | \$15                         | Joint Settlement Sch. 1.1 (    |
| Education Training                                   | \$4,444                      | \$133                             | \$4,577                      | \$0   | \$133                        | Joint Settlement Sch. 1.1 (    |
| Education Training - [Engineering]                   | \$667                        | \$20                              | \$687                        | \$0   | \$20                         | Joint Settlement Sch. 1.1 (    |
| Repairs & Maintenance - general                      | \$1,432                      | \$43                              | \$1,475                      | \$0   | \$43                         | Joint Settlement Sch. 1.1 (    |
| Repairs & Maintenance - T&D                          | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Repairs & Maintenance - fire services                | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Repairs & Maintenance - services                     | \$4,268                      | \$128                             | \$4,396                      | \$0   | \$128                        | Joint Settlement Sch. 1.1 (    |
| Repairs & Maintenance - Hydrants                     | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Road surface restoration                             | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Repairs & Maintenance - general                      | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Purchased Power                                      | \$14,744                     | \$2,181                           | \$16,925                     | \$0   | \$2,181                      | Joint Settlement Sch. 1.1      |
| Other Utilities                                      | \$22,105                     | \$663                             | \$22,768                     | \$0   | \$663                        | Joint Settlement Sch. 1.1 (    |
| Other Utilities - [Engineering]                      | \$3,525                      | \$106                             | \$3,631                      | \$0   | \$106                        | Joint Settlement Sch. 1.1 (    |
| Printing   | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Postage--[Engineering]                               | \$0                          | \$0                               | \$0                          | \$0   | \$0                          | Joint Settlement Sch. 1.1 (    |
| Subtotal - T&D                                       | \$2,322,774                  | \$168,484                         | \$2,491,258                  | \$188,427                                     | -\$19,943                    |                                |

**TEST YEAR & RATE YEAR EXPENSES**

| <b><u>Expense Item</u></b>                         | Test Year<br><b><u>FY 2014</u></b> | Summary of<br><b><u>Adjustments</u></b> | Rate Year<br><b><u>FY 2016</u></b> | <----- Adjustments Detail -----> |                                     |                                       |
|--|------------------------------------|---|------------------------------------|----------------------------------|-------------------------------------|---------------------------------------|
|  |                                    |   |                                    | <b><u>Labor Increase</u></b>     | <b><u>Other<br/>Adjustments</u></b> | <b><u>Supporting<br/>Schedule</u></b> |
| <b><u>CAPITAL EXPENSE</u></b>                      |                                    |   |                                    |                                  |                                     |                                       |
| Property Taxes                                     |                                    |   |                                    |                                  |                                     |                                       |
| Source of Supply                                   | \$750,533                          | -\$133,300                              | \$617,233                          | \$0                              | -\$133,300                          | Joint Settlement Sch. 1.1             |
| Treatment-Pumping                                  | \$0                                | \$0                                     | \$0                                | \$0                              | \$0                                 | Joint Settlement Sch. 1.1             |
| Treatment-Purification                             | \$0                                | \$0                                     | \$0                                | \$0                              | \$0                                 | Joint Settlement Sch. 1.1             |
| Trans & Distrib                                    | \$162,078                          | -\$28,977                               | \$133,101                          | \$0                              | -\$28,977                           | Joint Settlement Sch. 1.1             |
| Rental Property                                    | \$9,217                            | \$68                                    | \$9,285                            | \$0                              | \$67.57                             | Joint Settlement Sch. 1.1             |
| Restrict. Bond Principal, Interest & RICWFA Fees * | \$7,764,193                        | \$0                                     | \$7,764,193                        | \$0                              | \$0                                 | Joint Settlement Sch. 1.1             |
| Leases   | \$0                                | \$0                                     | \$0                                | \$0                              | \$0                                 |                                       |
| IFR  | \$2,500,000                        | \$0                                     | \$2,500,000                        | \$0                              | \$0                                 | Joint Settlement Sch. 1.1             |
| Trustee Fees                                       | \$26,879                           | \$4,121                                 | \$31,000                           | \$0                              | \$4,121                             | Joint Settlement Sch. 1.1             |
| O&M Reserve Deposit                                | \$0                                | \$0                                     | \$0                                | \$0                              | \$0                                 | Joint Settlement Sch. 1.1             |
| Subtotal - Capital                                 | <b><u>\$11,212,900</u></b>         | <b><u>-\$158,089</u></b>                | <b><u>\$11,054,811</u></b>         | <b><u>\$0</u></b>                | <b><u>-\$158,089</u></b>            |                                       |
| <b>TOTAL EXPENSES</b>                              | <b>\$19,709,324</b>                | <b>\$457,954</b>                        | <b>\$20,167,278</b>                | <b>\$119,120</b>                 | <b>\$338,834</b>                    |                                       |
| PLUS: Rev. Stabiliz./Oper. Rev. Allowance          | \$0                                | \$291,882                               | \$291,882                          |                                  |                                     | Joint Settlement Sch. 1.1             |
| LESS: Service Instal Revenue                       | -\$78,239                          | \$14,068                                | -\$64,171                          |                                  | \$14,068                            | LKM-3                                 |
| LESS: State Surcharge Revenue                      | -\$48,282                          | -\$539                                  | -\$48,821                          |                                  | -\$539                              | Joint Settlement Sch. 1.1             |
| LESS: Penalties                                    | -\$284,343                         | -\$39,897                               | -\$324,240                         |                                  | -\$39,897                           | LKM-3                                 |
| LESS: Non-Operating Rental                         | -\$27,850                          | \$0                                     | -\$27,850                          |                                  |                                     | see DGB-1                             |
| LESS: Interest Income                              | -\$813                             | \$0                                     | -\$813                             |                                  |                                     | see DGB-1                             |
| LESS: Misc Non-Operating                           | <b><u>-\$219,519</u></b>           | <b><u>-\$23,036</u></b>                 | <b><u>-\$242,555</u></b>           |                                  | <b><u>-\$23,036</u></b>             | LKM-3                                 |
| <b>REQUIRED FROM RATES</b>                         | <b>\$19,050,279</b>                | <b>\$700,432</b>                        | <b>\$19,750,710</b>                | <b>\$119,120</b>                 | <b>\$289,429</b>                    |                                       |

\* TY Debt & RICWFA Fees = Restricted amount from Docket #4171 less Trustee Fees Below

**DETAILS OF ADJUSTMENTS TO TEST YEAR EXPENSES**

**Capital Requirements**

**Property Taxes**

Property taxes for future years based on following projections:

|                  | <u>2015</u>    | <u>2016</u>    | <u>2017</u>    | <u>2018</u>    |
|------------------|----------------|----------------|----------------|----------------|
| Source of Supply | \$627,484      | \$617,233      | \$569,464      | \$571,807      |
| Trans & Distrib  | \$135,573      | \$133,101      | \$132,487      | \$131,972      |
| Rental Property  | <u>\$9,222</u> | <u>\$9,285</u> | <u>\$9,299</u> | <u>\$9,315</u> |
| Totals           | \$772,279      | \$759,618      | \$711,251      | \$713,094      |

After FY 2015, non-Cumberland amounts increased 1.3%/year based on updated response to Div. 1-12

**Debt Service**

Projected Debt is as follows:

|  | <u>FY 2014</u>     | <u>FY 2015</u>     | <u>FY 2016</u>     | <u>FY 2017</u>     | <u>FY 2018</u>     |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| <i>Existing Revenue Bonds</i>                    |                    |                    |                    |                    |                    |
| Principal (& sinking fund)                       | \$4,067,074        | \$4,182,000        | \$4,650,000        | \$4,782,000        | \$4,924,000        |
| Interest   | <u>\$3,397,676</u> | <u>\$3,452,974</u> | <u>\$3,386,756</u> | <u>\$3,275,044</u> | <u>\$3,154,900</u> |
| Total  | \$7,464,750        | \$7,634,974        | \$8,036,756        | \$8,057,044        | \$8,078,900        |
| <i>Projected Revenue Bonds (2015 &amp; 2016)</i> |                    |                    |                    |                    |                    |
| Principal  | \$0                | \$0                | \$1,000            | \$252,000          | \$447,000          |
| Interest   | \$0                | \$0                | \$49,549           | \$191,530          | \$248,081          |
| Total  | \$0                | \$0                | \$50,549           | \$443,530          | \$695,081          |
| <i>Existing General Obligation Bonds</i>         |                    |                    |                    |                    |                    |
| Principal  | \$84,527           | \$59,600           | \$58,266           | \$59,562           | \$60,374           |
| Interest   | <u>\$16,212</u>    | <u>\$18,850</u>    | <u>\$10,708</u>    | <u>\$8,456</u>     | <u>\$6,164</u>     |
| Total  | \$100,739          | \$78,449           | \$68,974           | \$68,018           | \$66,538           |
| <i>Total All Bonds</i>                           | \$7,565,489        | \$7,713,423        | \$8,156,278        | \$8,568,592        | \$8,840,519        |
| <i>RICWFA Fees</i>                               | <u>\$352,914</u>   | <u>\$366,140</u>   | <u>\$363,683</u>   | <u>\$370,018</u>   | <u>\$355,989</u>   |
| Total RICWFA                                     | \$7,918,403        | \$8,079,564        | \$8,519,961        | \$8,938,610        | \$9,196,508        |

\* Although costs are shown to increase, no change over the restricted amounts from Docket 4171 is requested for the rate year. Full recovery in a second step increase is requested for FY 2017 amounts.

**Trustee Fees**

|                        |                                       | <u>Test Yr</u> | <u>Estim RY</u> |
|------------------------|---------------------------------------|----------------|-----------------|
| Bank of New York       | Trustees Fees                         | \$18,500       | \$22,250        |
| US Bank                | Admin Fess                            | \$3,250        | \$3,250         |
| Partridge, Hahn & Snow | Legal Fees - Annual Disclosure filing | \$2,729        | \$3,100         |
| Amtec                  | Annual Arbitrage Services             | \$2,400        | \$2,400         |
| Total Fees             |                                       | \$26,879       | \$31,000        |

**IFR - PAYGO**

Rate Year  
\$2,500,000

**O&M Reserve Requirement**

|                           |   |           |
|---------------------------|---|-----------|
| Rate Year O&M =           | \$9,872,085 (Operating Costs plus Property Taxes) |           |
| Required Level (25%)      | \$2,468,021                                       |           |
| Balance 6/30/14           | \$2,708,181                                       | \$240,160 |
| Estimated Additions       | \$0   |           |
| Estimated Balance 6/30/15 | \$2,708,181                                       |           |
| Rate Year Addition =      | \$0   |           |

**Operating Costs**

**DBO Contract**

|                           | <u>New WTP</u> |
|---------------------------|----------------|
| Annual Contract Test Year | \$1,851,761    |
| Rate Year Estimate        | \$1,889,092    |
| Increase over Test Year   | \$37,331       |

**DETAILS OF ADJUSTMENTS TO TEST YEAR EXPENSES**

**Inflation Adjustments**

Based on the rebuttal testimony, we use a two year, compounded rate of inflation of 3.0% (annual rate of) 1.50%

**Power Costs**

|                         |    | <u>Test Year</u> | <u>Adjustment *</u> | <u>Rate Year</u> |
|-------------------------|----|------------------|---------------------|------------------|
| <u>Administration</u>   |    |                  |                     |                  |
| Delivery                | \$ | 24,976           | \$ 749              | \$ 25,725        |
| Supply                  | \$ | 15,513           | \$ 6,064            | \$ 21,577        |
| Total                   | \$ | 40,489           | \$ 6,813            | \$ 47,302        |
| <u>Source of Supply</u> |    |                  |                     |                  |
| Delivery                | \$ | 39,245           | \$ 1,177            | \$ 40,422        |
| Supply                  | \$ | 52,761           | \$ 20,625           | \$ 73,386        |
| Total                   | \$ | 92,006           | \$ 21,802           | \$ 113,809       |
| <u>Purification</u>     |    |                  |                     |                  |
| Delivery                | \$ | 351,556          | \$ 10,547           | \$ 362,103       |
| Supply                  | \$ | 425,157          | \$ 166,198          | \$ 591,354       |
| Total                   | \$ | 776,713          | \$ 176,744          | \$ 953,457       |
| <u>T&amp;D</u>          |    |                  |                     |                  |
| Delivery                | \$ | 9,926            | \$ 298              | \$ 10,224        |
| Supply                  | \$ | 4,818            | \$ 1,883            | \$ 6,701         |
| Total                   | \$ | 14,744           | \$ 2,181            | \$ 16,925        |

\* Delivery costs increased annually (2 yrs) by 1.50% per year for two years. Supply costs were increased based on an increase in the contract effective January 1, 2015 from 6.49 cents to 9.027 cents or 39.09%

**Regulatory Expenses**

*1. Rate Case Estimated Rate Year*

|                         |           |
|-------------------------|-----------|
| Rate Case Costs (estim) | \$230,000 |
| Step Increases (estim)  | \$0       |
| Total                   | \$230,000 |
| Spread over 3 yrs       | \$76,667  |
| Test Year               | \$0       |
| Adjustment              | \$76,667  |

*2. PUC Fee - Admin*

|                           |          |
|---------------------------|----------|
| FY 2014 Fee               | \$94,971 |
| Increase (2 yr inflation) | \$0      |
| Total Rate Year           | \$94,971 |
| Test Year                 | \$94,971 |
| Adjustment                | \$0      |

**State Surcharge Revenues**

|                      | <u>Hcf/yr</u> | <u>Rate/hcf</u> | <u>Revenue</u> |
|----------------------|---------------|-----------------|----------------|
| Resid. Sales (92.7%) | 2,432,801     | \$0.015         | \$36,492       |
| Non-Resid. Sales     | 821,930       | \$0.015         | \$12,329       |
| Totals               |               |                 | \$48,821       |

**Revenue Stabilization / Operating Revenue Allowance**

See testimony of C. Woodcock. An operating reserve allowance of 1.5% on total revenues is requested in this case.

**Retiree Health Care.**

This item includes the cost of the health care plans for retirees. See Rebuttal Testimony of R. Benson

**UNITS OF SERVICE**

**METERS**

| <u>Meter Size</u> | <u>Test Year</u><br><u>Monthly</u> | <u>Avg. Annual</u><br><u>Chng 2009-14</u> | <u>Rate Year</u><br><u>Monthly</u> | <u>Equiv Factor</u> | <u># of Equivs</u> |
|-------------------|------------------------------------|---|------------------------------------|---------------------|--------------------|
| 5/8               | 21,551                             | 100.02%                                   | 21,561                             | 1.00                | 21,561             |
| 3/4               | 266                                | 100.53%                                   | 269                                | 1.39                | 373                |
| 1                 | 510                                | 100.48%                                   | 515                                | 2.00                | 1,030              |
| 1 1/2             | 219                                | 99.29%                                    | 216                                | 4.07                | 879                |
| 2                 | 310                                | 95.08%                                    | 280                                | 5.29                | 1,481              |
| 3                 | 18                                 | 94.41%                                    | 16                                 | 6.00                | 96                 |
| 4                 | 9                                  | 94.41%                                    | 8                                  | 14.00               | 112                |
| 6                 | 3                                  | 87.06%                                    | 2                                  | 21.00               | 48                 |
| 8                 | 0                                  |   | 0                                  | 30.00               | 0                  |
|                   | =====                              |   | =====                              |                     | =====              |
| Totals            | 22,886                             |   | 22,867                             |                     | 25,579             |

**PUBLIC FIRE HYDRANTS**

|               | <u>Test Year</u> | <u>Adjustments</u> | <u>Rate Year</u> |
|---------------|------------------|--------------------|------------------|
| Pawtucket     | 1,515            | 0                  | 1,515            |
| Central Falls | 202              | 0                  | 202              |
| Cumberland    | 198              | 0                  | 198              |
| Attleborough  | <u>2</u>         | <u>0</u>           | <u>2</u>         |
| Totals        | 1,917            | 0                  | 1,917            |

**PRIVATE FIRE SERVICE**

| <u>Size</u> | <u>Test Year</u> | <u>Adjustments</u> | <u>Rate Year</u> | <u>Equiv Factor **</u> | <u># of Equivs</u> |
|-------------|------------------|--------------------|------------------|------------------------|--------------------|
| 2           | 33               | 5                  | 38               | 4.07                   | 155                |
| 4           | 67               | 11                 | 78               | 6.00                   | 468                |
| 6           | 405              | 0                  | 405              | 14.00                  | 5,670              |
| 8           | 91               | 2                  | 93               | 21.00                  | 1,953              |
| 10          | 3                | 0                  | 3                | 21.00                  | 63                 |
| 12          | <u>0</u>         | <u>0</u>           | <u>0</u>         | 21.00                  | <u>0</u>           |
| Total       | 599              | 18                 | 617              |                        | 8,309              |

\* Adjusted based on annual average change from 2009-2014

\* one size down to equate to meter equivalent

**UNITS OF SERVICE**

**METERED WATER USE (ccf/year)**

| <u>Class</u>     | <u>FY 2014</u> | <u>Adjustments</u> | <u>Rate Year *</u> |
|------------------|----------------|--------------------|--------------------|
| Small (5/8 - 1") | 2,565,972      | 58,409             | 2,624,381          |
| Large (>1")      | <u>816,657</u> | <u>5,273</u>       | <u>821,930</u>     |
| Total            | 3,382,629      | 63,682             | 3,446,311          |
| Wholesale        |                |                    |                    |
| Cumberland       | 235,483        | 38,581             | 274,064            |
| Seekonk          | <u>0</u>       | <u>0</u>           | <u>0</u>           |
| Total            | 235,483        | 38,581             | 274,064            |

\* See Page 2

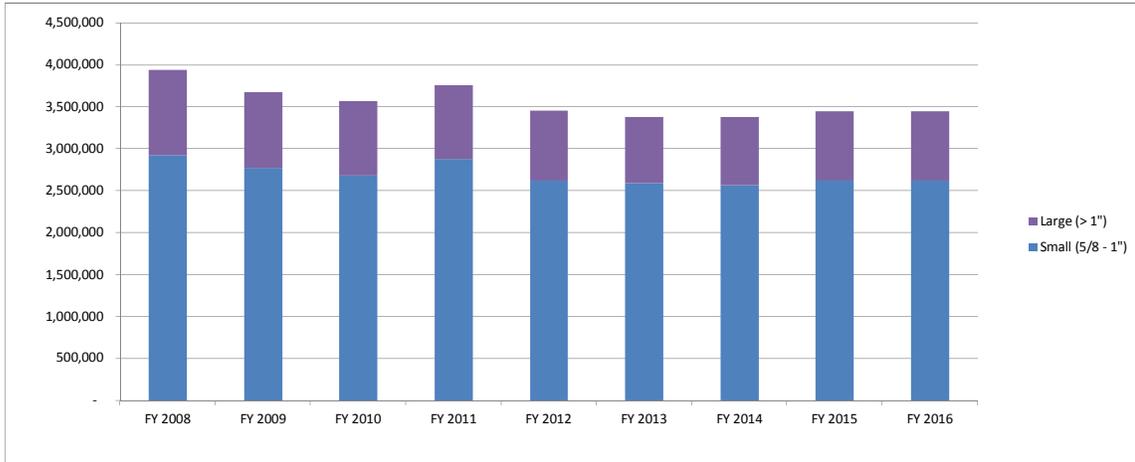
**Miles of Mains**

| <u>Size</u>   | <u>Miles</u> | <u>Inch-Miles</u> |       |
|---------------|--------------|-------------------|-------|
| Service Pipes | 203.549      |                   |       |
| 1             | 0.040        | 0.0               |       |
| 2             | 0.672        | 1.3               |       |
| 4             | 1.120        | 4.5               |       |
| 6             | 92.335       | 554.0             |       |
| 8             | 112.146      | 897.2             |       |
| 10            | 1.638        | 16.4              |       |
| 12            | 49.531       | 594.4             | 82.3% |
| 14            | 0.008        | 0.1               |       |
| 16            | 4.316        | 69.0              |       |
| 20            | 8.576        | 171.5             |       |
| 24            | 7.446        | 178.7             |       |
| 30            | 0.009        | 0.3               |       |
| 36            | 0.654        | 23.5              |       |
| 48            | <u>0.015</u> | <u>0.7</u>        | 17.7% |
| Totals        | 482.05       | 2,512             |       |

**Historic and Projected Water Sales (hcf/year)**

|                  | <u>Actual</u>  |                |                |                |                |                |                |                | <u>Projected*</u> | <u>Avg Change</u> |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------------------|
|                  | <u>FY 2008</u> | <u>FY 2009</u> | <u>FY 2010</u> | <u>FY 2011</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>FY 2014</u> | <u>FY 2015</u> | <u>FY 2016</u>    | <u>12-15</u>      |
| <b>RETAIL</b>    |                |                |                |                |                |                |                |                |                   |                   |
| Small (5/8 - 1") | 2,927,770      | 2,773,813      | 2,681,579      | 2,883,337      | 2,622,322      | 2,589,759      | 2,565,972      | 2,624,381      | 2,624,381         | 100.0%            |
| Large (> 1")     | 1,018,442      | 906,763        | 887,657        | 880,645        | 833,152        | 791,480        | 816,657        | 821,930        | 821,930           | 99.5%             |
| Subtotal Retail  | 3,946,212      | 3,680,576      | 3,569,236      | 3,763,982      | 3,455,474      | 3,381,239      | 3,382,629      | 3,446,311      | 3,446,311         |                   |
| <b>RESALE</b>    |                |                |                |                |                |                |                |                |                   | <u>12-15</u>      |
| Cumberland       | 822,591        | 578,899        | 547,806        | 445,099        | 218,558        | 204,308        | 235,483        | 302,739        | 274,064           | 111.5%            |

\* Note: Projections for FY 2016 based on FY 2015 actuals for retail customrs and value for Cumberland based on Cumberland testimony and data responses



**UNITS OF SERVICE - DEMAND FACTORS**

|                        | BASE                                 |                        | MAXIMUM DAY      |                        |                           | PEAK HOUR        |                         |                           | Equivalent Meters & Services | Bills   |
|------------------------|--------------------------------------|------------------------|------------------|------------------------|---------------------------|------------------|-------------------------|---------------------------|------------------------------|---------|
|                        | Annual Use<br>ccf/year               | Average Day<br>ccf/day | Demand<br>Factor | Maximum Day<br>ccf/day | Extra Capacity<br>ccf/day | Demand<br>Factor | Maximum Hour<br>ccf/day | Extra Capacity<br>ccf/day |                              |         |
| <u>Inside - Retail</u> |                                      |                        |                  |                        |                           |                  |                         |                           |                              |         |
| Small (5/8 - 1")       | 2,624,381                            | 7,190                  | 2.62             | 18,859                 | 11,669                    | 3.53             | 25,409                  | 6,550                     | 22,963                       | 268,132 |
| Large (>1")            | 821,930                              | 2,252                  | 2.28             | 5,144                  | 2,892                     | 3.08             | 6,931                   | 1,787                     | 2,616                        | 6,269   |
| Fire Protection        | 6,000 gal/min for 6 hours per Docket |                        | 3193             | 2,888                  | 2,888                     |                  | 11,551                  | 8,663                     |                              | 7,404   |
| <u>Wholesale</u>       |                                      |                        |                  |                        |                           |                  |                         |                           |                              |         |
| Cumberland             | 274,064                              | 751                    | 3.50             | 2,628                  | 1,877                     | 3.85             | 2,891                   | 263                       |                              |         |
| Seekonk                | 0                                    | 0                      | 3.50             | 0                      | 0                         | 3.85             | 0                       | 0                         |                              |         |
| Totals                 | 3,720,375                            | 10,193                 |                  | 29,519                 | 19,327                    |                  | 46,782                  | 17,262                    | 25,579                       | 281,805 |

**Unbilled Water (ccf/yr)**

|                    | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | <u>FY 2010</u> | <u>FY 2011</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>FY 2014</u> | <u>FY 2015</u> | <u>3 Yr Avg<br/>2013-15</u> |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------------|
| Plant Production   | 5,296,280      | 5,213,904      | 4,726,665      | 4,413,094      | 4,497,146      | 3,860,951      | 3,989,537      | 4,136,470      | 4,438,485      | 4,287,478                   |
| Less: Retail Sales | 3,884,773      | 3,949,963      | 3,611,646      | 3,593,567      | 3,779,526      | 3,426,499      | 3,373,788      | 3,410,888      | 3,455,075      | 3,432,982                   |
| Wholesale Sales    | 729,063        | 612,607        | 535,345        | 559,455        | 429,555        | 196,038        | 196,479        | 264,579        | 295,333        | 279,956                     |
| Semi-Annual Flush  | 70,194         | 113,493        | 100,936        | 123,462        | 78,587         | 109,780        | 91,937         | 40,080         | 49,728         | 44,904                      |
| Estimated Fire     | <u>26,481</u>  | <u>26,070</u>  | <u>23,633</u>  | <u>22,065</u>  | <u>19,056</u>  | <u>20,210</u>  | <u>19,050</u>  | <u>18,100</u>  | <u>5,500</u>   | 11,800                      |
| Unbilled Water     | 585,769        | 511,771        | 455,105        | 114,545        | 190,422        | 108,424        | 308,283        | 402,823        | 632,849        | 517,836                     |
| % Unaccounted      | 11.1%          | 9.8%           | 9.6%           | 2.6%           | 4.2%           | 2.8%           | 7.7%           | 9.7%           | 14.3%          | 12.1%                       |

Note: These differ from the values in Joint Settlement Sch. 2.1 as these are sales in the fiscal year, where Joint Settlement Sch. 2.1 is billings in 8.48 9.10

**DERIVATION OF CLASS PEAKING FACTORS**

Average Day Use in Maximum Month to Average Day Annual Use Ratio (Based on Data from July 2012 - June 2015)

|                              | <u>Avg Day in<br/>Max Month</u> | <u>Average Day<br/>Annual</u> | <u>System Max Day<br/>Ratio - Avg in Max Mo *</u> | <u>Adj. Factor **</u> | <u>Calc. Max<br/>Day Ratio ***</u> | <u>Max Hr:Day<br/>Ratio ****</u> | <u>Calc. Max<br/>Hour Ratio</u> |
|------------------------------|---------------------------------|-------------------------------|---|-----------------------|------------------------------------|----------------------------------|---------------------------------|
| Small (5/8 - 1")             | 9,367                           | 7,108                         | 1.32  | 1.49                  | 1.34                               | 1.35                             | 3.53                            |
| Combined Large/Medium (> 1") | 2,936                           | 2,233                         | 1.31  | 1.49                  | 1.17                               | 1.35                             | 3.08                            |
| Wholesale                    |                                 |                               | 2.76  | 1.49                  | 1.17                               | 1.10                             | 3.85                            |

\* System Max Day = 19,679 System Avg Day in Max Mo = 13,249 Ratio = 1.49

\*\* Based on example in AWWA Manual.

\*\*\* Wholesale from Div 1-6 = 4.9 in FY12, 4.8 in FY13, and 4.5 in FY14.

\*\*\*\* See Sch 3.4

| Gallons/Day | <u>Avg day</u> | <u>Max Day</u> | <u>Max Hour</u> |
|-------------|----------------|----------------|-----------------|
| Calculated  | 10,019         | 26,119         | 34,602          |
| System      | 10,019         | 19,679         | 24,947          |
| Factor      |                | 1.33           | 1.39            |

**ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS**

| <u>EXPENSE ITEM</u>                         | <u>PRO FORMA</u><br><u>EXPENSE</u> | <u>ALLOC.</u><br><u>SYMBOL (1)</u> | <u>BASE</u> | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|---|------------------------------------|------------------------------------|-------------|-----------------|------------------|-----------------|----------------|--------------------|
| <b>ADMINISTRATION</b>                       |                                    |                                    |             |                 |                  |                 |                |                    |
| Salaries & Wages - (601)                    | \$665,549                          | L-M                                | \$600,156   | \$21,245        | \$12,481         | \$0             | \$0            | \$31,667           |
| Salaries & Wages - Payroll Taxes            | \$46,421                           | L-M                                | \$41,860    | \$1,482         | \$870            | \$0             | \$0            | \$2,209            |
| Employee Pensions & Benefits (604)          | \$417,566                          | L-M                                | \$376,538   | \$13,329        | \$7,830          | \$0             | \$0            | \$19,868           |
| Workers Comp                                | \$30,667                           | L-M                                | \$27,654    | \$979           | \$575            | \$0             | \$0            | \$1,459            |
| Materials and Supplies (Account 620)        | \$54,766                           | E-M                                | \$44,944    | \$7,877         | \$550            | \$0             | \$0            | \$1,395            |
| Contractual Services - Legal (Account 630)  | \$193,758                          | E-M                                | \$159,009   | \$27,869        | \$1,945          | \$0             | \$0            | \$4,935            |
| Contractual Services - Mgt. Fees (634)      | \$275,788                          | E-M                                | \$226,327   | \$39,668        | \$2,769          | \$0             | \$0            | \$7,025            |
| Contractual Services - Other (Account 635)  | \$11,523                           | E-M                                | \$9,457     | \$1,657         | \$116            | \$0             | \$0            | \$294              |
| Rental of Equipment (Account 642)           | \$3,559                            | E-M                                | \$2,920     | \$512           | \$36             | \$0             | \$0            | \$91               |
| Transportation Expenses (Account 650)       | \$7,254                            | E-M                                | \$5,953     | \$1,043         | \$73             | \$0             | \$0            | \$185              |
| Insurance - General Liability (Account 650) | \$151,690                          | E-M                                | \$124,485   | \$21,818        | \$1,523          | \$0             | \$0            | \$3,864            |
| Insurance - Other (Account 659)             | \$0                                | E-M                                | \$0         | \$0             | \$0              | \$0             | \$0            | \$0                |
| Regulatory Com Expense - Other (667)        | \$86,789                           | E-M                                | \$71,224    | \$12,483        | \$871            | \$0             | \$0            | \$2,211            |
| Reg Com Exp - Amort of Rate Case Exp        | \$76,667                           | E-M                                | \$62,917    | \$11,027        | \$770            | \$0             | \$0            | \$1,953            |
| Miscellaneous Expense (Account 675)         | \$28,960                           | E-M                                | \$23,766    | \$4,165         | \$291            | \$0             | \$0            | \$738              |
| Credit Card Fees                            | \$23,496                           | B                                  | \$0         | \$0             | \$0              | \$0             | \$23,496       | \$0                |
| Education Training                          | \$4,378                            | E-M                                | \$3,593     | \$630           | \$44             | \$0             | \$0            | \$112              |
| Maint of Misc Plant                         | \$50,042                           | E-M                                | \$41,067    | \$7,198         | \$502            | \$0             | \$0            | \$1,275            |
| Purchased Power                             | \$47,302                           | E-M                                | \$38,819    | \$6,804         | \$475            | \$0             | \$0            | \$1,205            |
| Other Utilities                             | \$101,829                          | E-M                                | \$83,567    | \$14,647        | \$1,022          | \$0             | \$0            | \$2,594            |
| Printing                                    | \$0                                | E-M                                | \$0         | \$0             | \$0              | \$0             | \$0            | \$0                |
| Postage                                     | \$80                               | E-M                                | \$66        | \$12            | \$1              | \$0             | \$0            | \$2                |
| Subtotal - Admin                            | \$2,278,085                        |                                    | \$1,944,322 | \$194,445       | \$32,742         | \$0             | \$23,496       | \$83,079           |
| <b>CUSTOMER ACCOUNTS</b>                    |                                    |                                    |             |                 |                  |                 |                |                    |
| Salary & Wages - Cust Ser                   | \$199,008                          | B                                  | \$0         | \$0             | \$0              | \$0             | \$199,008      | \$0                |
| Salary & Wages - Meter                      | \$328,541                          | M                                  | \$0         | \$0             | \$0              | \$262,832       | \$65,708       | \$0                |
| Salary & Wages Payroll Tx(CS)               | \$14,979                           | B                                  | \$0         | \$0             | \$0              | \$0             | \$14,979       | \$0                |
| Salary & Wages Payroll Tx (Meters)          | \$24,399                           | M                                  | \$0         | \$0             | \$0              | \$19,519        | \$4,880        | \$0                |
| Empl Pensions & Benefits (Cust Ser)         | \$76,821                           | B                                  | \$0         | \$0             | \$0              | \$0             | \$76,821       | \$0                |
| Empl Pensions & Benefits (Meters)           | \$171,436                          | M                                  | \$0         | \$0             | \$0              | \$137,149       | \$34,287       | \$0                |
| Matls & Supp (Cust Serv)                    | \$1,009                            | B                                  | \$0         | \$0             | \$0              | \$0             | \$1,009        | \$0                |
| Matls & Supp (Meters)                       | \$3,461                            | M                                  | \$0         | \$0             | \$0              | \$2,768         | \$692          | \$0                |
| Contractual Services - Other - [Cust. Sr]   | \$35,945                           | B                                  | \$0         | \$0             | \$0              | \$0             | \$35,945       | \$0                |
| Rental of Equipment (Account 642)           | \$1,989                            | B                                  | \$0         | \$0             | \$0              | \$0             | \$1,989        | \$0                |
| Workers Comp - Cust Serv                    | \$2,563                            | B                                  | \$0         | \$0             | \$0              | \$0             | \$2,563        | \$0                |
| Workers Comp - Meters                       | \$13,191                           | B                                  | \$0         | \$0             | \$0              | \$0             | \$13,191       | \$0                |
| Transportation Expenses - [Cust srvc.]      | \$786                              | B                                  | \$0         | \$0             | \$0              | \$0             | \$786          | \$0                |
| Transportation Expenses - [Meter] (Acc      | \$11,451                           | M                                  | \$0         | \$0             | \$0              | \$9,160         | \$2,290        | \$0                |
| Bad Debt Expense (Account 670)              | \$1,762                            | B                                  | \$0         | \$0             | \$0              | \$0             | \$1,762        | \$0                |
| Miscellaneous Expense - [Cust. Srvc.]       | \$245                              | B                                  | \$0         | \$0             | \$0              | \$0             | \$245          | \$0                |
| Miscellaneous Expense - [Meter] (Acc        | \$707                              | M                                  | \$0         | \$0             | \$0              | \$565           | \$141          | \$0                |
| Education Training - [Cust. Srvc.]          | \$0                                | B                                  | \$0         | \$0             | \$0              | \$0             | \$0            | \$0                |
| Education Training - [Meter]                | \$754                              | M                                  | \$0         | \$0             | \$0              | \$603           | \$151          | \$0                |
| Repairs & Maintenance - general             | \$0                                | B                                  | \$0         | \$0             | \$0              | \$0             | \$0            | \$0                |
| Repairs & Maintenance - meters              | \$0                                | M                                  | \$0         | \$0             | \$0              | \$0             | \$0            | \$0                |
| Other Utilities - [Cust. Srvc.]             | \$2,664                            | B                                  | \$0         | \$0             | \$0              | \$0             | \$2,664        | \$0                |
| Other Utilities - [Meter]                   | \$3,119                            | M                                  | \$0         | \$0             | \$0              | \$2,495         | \$624          | \$0                |
| Printing - [Cust. Srvc.]                    | \$40,961                           | B                                  | \$0         | \$0             | \$0              | \$0             | \$40,961       | \$0                |
| Printing - [Meter]                          | \$929                              | M                                  | \$0         | \$0             | \$0              | \$743           | \$186          | \$0                |
| Postage--[Cust. Srvc.]                      | \$113,311                          | B                                  | \$0         | \$0             | \$0              | \$0             | \$113,311      | \$0                |
| Subtotal - Customer Accts                   | \$1,050,027                        |                                    | \$0         | \$0             | \$0              | \$435,836       | \$614,191      | \$0                |

**ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS**

| <u>EXPENSE ITEM</u>                    | <u>PRO FORMA</u><br><u>EXPENSE</u> | <u>ALLOC.</u><br><u>SYMBOL (1)</u> | <u>BASE</u>    | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|--|------------------------------------|------------------------------------|----------------|-----------------|------------------|-----------------|----------------|--------------------|
| <b><u>SOURCE OF SUPPLY</u></b>         |                                    |                                    |                |                 |                  |                 |                |                    |
| Salaries & Wages - (601)               | \$125,509                          | A                                  | \$125,509      | \$0             | \$0              | \$0             | \$0            | \$0                |
| Salaries & Wages - Payroll Taxes       | \$9,418                            | A                                  | \$9,418        | \$0             | \$0              | \$0             | \$0            | \$0                |
| Employee Pensions & Benefits (604)     | \$49,910                           | A                                  | \$49,910       | \$0             | \$0              | \$0             | \$0            | \$0                |
| Workers Comp                           | \$5,297                            | A                                  | \$5,297        | \$0             | \$0              | \$0             | \$0            | \$0                |
| Purchased Power (Account 615)          | \$113,809                          | A                                  | \$113,809      | \$0             | \$0              | \$0             | \$0            | \$0                |
| Materials and Supplies (Account 620) † | \$2,048                            | A                                  | \$2,048        | \$0             | \$0              | \$0             | \$0            | \$0                |
| Transportation Expenses (Account 650   | \$3,771                            | A                                  | \$3,771        | \$0             | \$0              | \$0             | \$0            | \$0                |
| Miscellaneous Expense (Account 675)    | \$50                               | A                                  | \$50           | \$0             | \$0              | \$0             | \$0            | \$0                |
| Security Service                       | \$76,975                           | A                                  | \$76,975       | \$0             | \$0              | \$0             | \$0            | \$0                |
| Education Training                     | \$647                              | A                                  | \$647          | \$0             | \$0              | \$0             | \$0            | \$0                |
| Maint of Misc Plant                    | \$59,005                           | A                                  | \$59,005       | \$0             | \$0              | \$0             | \$0            | \$0                |
| Other Utilities                        | <u>\$4,110</u>                     | A                                  | <u>\$4,110</u> | <u>\$0</u>      | <u>\$0</u>       | <u>\$0</u>      | <u>\$0</u>     | <u>\$0</u>         |
| Subtotal - Supply                      | \$450,549                          |                                    | \$450,549      | \$0             | \$0              | \$0             | \$0            | \$0                |
| <b><u>PURIFICATION</u></b>             |                                    |                                    |                |                 |                  |                 |                |                    |
| DBO O&M Contract                       | \$1,889,092                        | D                                  | \$1,022,852    | \$866,239       | \$0              | \$0             | \$0            | \$0                |
| Purchased Power (Account 615)          | \$953,457                          | A                                  | \$953,457      | \$0             | \$0              | \$0             | \$0            | \$0                |
| Other Utilities                        | <u>\$0</u>                         | A                                  | <u>\$0</u>     | <u>\$0</u>      | <u>\$0</u>       | <u>\$0</u>      | <u>\$0</u>     | <u>\$0</u>         |
| Subtotal - Purification                | \$2,842,548                        |                                    | \$1,976,309    | \$866,239       | \$0              | \$0             | \$0            | \$0                |

**ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS**

| <b>EXPENSE ITEM</b>                     | <b>PRO FORMA<br/>EXPENSE</b> | <b>ALLOC.<br/>SYMBOL (1)</b> | <b>BASE</b>        | <b>MAX. DAY</b>    | <b>PEAK HOUR</b> | <b>METERING</b>    | <b>BILLING</b>   | <b>DIRECT FIRE</b> |
|---|------------------------------|------------------------------|--------------------|--------------------|------------------|--------------------|------------------|--------------------|
| <b>TRANSMISSION &amp; DISTRIBUTION</b>  |                              |                              |                    |                    |                  |                    |                  |                    |
| Salaries & Wages - (601)                | \$1,007,907                  | O                            | \$55,890           | \$47,332           | \$27,806         | \$806,326          | \$0              | \$70,553           |
| Salaries & Wages -[Engineering] (601)   | \$378,097                    | O                            | \$20,966           | \$17,756           | \$10,431         | \$302,477          | \$0              | \$26,467           |
| Salaries & Wages - Payroll Taxes -      | \$75,146                     | O                            | \$4,167            | \$3,529            | \$2,073          | \$60,117           | \$0              | \$5,260            |
| Salaries & Wages - Payroll Taxes - [En  | \$28,374                     | O                            | \$1,573            | \$1,332            | \$783            | \$22,699           | \$0              | \$1,986            |
| Salaries & Wages - Police Details       | \$86,272                     | O-A                          | \$73,801           | \$4,051            | \$2,380          | \$0                | \$0              | \$6,039            |
| Employee Pensions & Benefits - (604)    | \$470,449                    | O                            | \$26,087           | \$22,093           | \$12,979         | \$376,359          | \$0              | \$32,931           |
| Employee Pensions & Benefits - [Engir   | \$149,723                    | O                            | \$8,302            | \$7,031            | \$4,131          | \$119,778          | \$0              | \$10,481           |
| Materials and Supplies - (Account 620)  | \$56,720                     | O                            | \$3,145            | \$2,664            | \$1,565          | \$45,376           | \$0              | \$3,970            |
| Materials and Supplies - [Engineering]  | \$11,562                     | O                            | \$641              | \$543              | \$319            | \$9,250            | \$0              | \$809              |
| Rental of Equipment (Account 642)       | \$12,086                     | O                            | \$670              | \$568              | \$333            | \$9,669            | \$0              | \$846              |
| Rental of Equipment - [Engineering] (A  | \$3,048                      | O                            | \$169              | \$143              | \$84             | \$2,439            | \$0              | \$213              |
| Transportation Expenses - (Account 65   | \$81,958                     | O                            | \$4,545            | \$3,849            | \$2,261          | \$65,566           | \$0              | \$5,737            |
| Transportation Expenses - [Engineering] | \$9,091                      | O                            | \$504              | \$427              | \$251            | \$7,273            | \$0              | \$636              |
| Workers Comp T&D                        | \$44,764                     | O                            | \$2,482            | \$2,102            | \$1,235          | \$35,811           | \$0              | \$3,133            |
| Workers Comp - Engineering              | \$17,613                     | O                            | \$977              | \$827              | \$486            | \$14,090           | \$0              | \$1,233            |
| Miscellaneous Expense - (Account 675    | \$3,479                      | O                            | \$193              | \$163              | \$96             | \$2,783            | \$0              | \$244              |
| Miscellaneous Expense - [Engineering]   | \$510                        | O                            | \$28               | \$24               | \$14             | \$408              | \$0              | \$36               |
| Education Training                      | \$4,577                      | O                            | \$254              | \$215              | \$126            | \$3,662            | \$0              | \$320              |
| Education Training - [Engineering]      | \$687                        | O                            | \$38               | \$32               | \$19             | \$549              | \$0              | \$48               |
| Repairs & Maintenance - general         | \$1,475                      | O                            | \$82               | \$69               | \$41             | \$1,180            | \$0              | \$103              |
| Repairs & Maintenance - T&D             | \$0                          | T                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Repairs & Maintenance - fire services   | \$0                          | F                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Repairs & Maintenance - services        | \$4,396                      | S                            | \$0                | \$0                | \$0              | \$4,396            | \$0              | \$0                |
| Repairs & Maintenance - Hydrants        | \$0                          | F                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Road surface restoration                | \$0                          | O                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Repairs & Maintenance - general         | \$0                          | O                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Purchased Power                         | \$16,925                     | O                            | \$939              | \$795              | \$467            | \$13,540           | \$0              | \$1,185            |
| Other Utilities                         | \$22,768                     | O                            | \$1,263            | \$1,069            | \$628            | \$18,215           | \$0              | \$1,594            |
| Other Utilities - [Engineering]         | \$3,631                      | O                            | \$201              | \$170              | \$100            | \$2,905            | \$0              | \$254              |
| Printing                                | \$0                          | O                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Postage--[Engineering]                  | \$0                          | O                            | \$0                | \$0                | \$0              | \$0                | \$0              | \$0                |
| Subtotal - T&D                          | <u>\$2,491,258</u>           |                              | <u>\$206,917</u>   | <u>\$116,785</u>   | <u>\$68,607</u>  | <u>\$1,924,868</u> | <u>\$0</u>       | <u>\$174,080</u>   |
| <b>TOTAL O&amp;M</b>                    | <b>\$9,112,467</b>           | <b>I</b>                     | <b>\$4,578,096</b> | <b>\$1,177,470</b> | <b>\$101,350</b> | <b>\$2,360,704</b> | <b>\$637,687</b> | <b>\$257,159</b>   |

**ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS**

| <u>EXPENSE ITEM</u>                      | <u>PRO FORMA</u><br><u>EXPENSE</u> | <u>ALLOC.</u><br><u>SYMBOL (1)</u> | <u>BASE</u>        | <u>MAX. DAY</u>    | <u>PEAK HOUR</u> | <u>METERING</u>  | <u>BILLING</u>  | <u>DIRECT FIRE</u> |
|--|------------------------------------|------------------------------------|--------------------|--------------------|------------------|------------------|-----------------|--------------------|
| <u>CAPITAL EXPENSE</u>                   |                                    |                                    |                    |                    |                  |                  |                 |                    |
| Property Taxes                           |                                    |                                    |                    |                    |                  |                  |                 |                    |
| Source of Supply                         | \$617,233                          | A                                  | \$617,233          | \$0                | \$0              | \$0              | \$0             | \$0                |
| Treatment-Pumping                        | \$0                                | D                                  | \$0                | \$0                | \$0              | \$0              | \$0             | \$0                |
| Treatment-Purification                   | \$0                                | D                                  | \$0                | \$0                | \$0              | \$0              | \$0             | \$0                |
| Trans & Distrib                          | \$133,101                          | T-C                                | \$46,588           | \$39,455           | \$23,233         | \$20,147         | \$0             | \$3,678            |
| Rental Property                          | \$9,285                            | A                                  | \$9,285            | \$0                | \$0              | \$0              | \$0             | \$0                |
| Restrict. Bond Principal, Interest & RIC | \$7,764,193                        | P-M                                | \$4,146,115        | \$2,391,524        | \$736,174        | \$357,966        | \$10,481        | \$121,933          |
| Leases                                   | \$0                                | P-M                                | \$0                | \$0                | \$0              | \$0              | \$0             | \$0                |
| IFR                                      | \$2,500,000                        | P                                  | \$1,216,375        | \$770,049          | \$237,041        | \$230,524        | \$6,750         | \$39,261           |
| Trustee Fees                             | \$31,000                           | P-M                                | \$16,554           | \$9,549            | \$2,939          | \$1,429          | \$42            | \$487              |
| O&M Reserve Deposit                      | \$0                                | E                                  | \$0                | \$0                | \$0              | \$0              | \$0             | \$0                |
| Subtotal - Capital                       | <u>\$11,054,811</u>                |                                    | <u>\$6,052,148</u> | <u>\$3,210,576</u> | <u>\$999,388</u> | <u>\$610,067</u> | <u>\$17,273</u> | <u>\$165,359</u>   |
| TOTAL EXPENSES                           | \$20,167,278                       |                                    | \$10,630,245       | \$4,388,046        | \$1,100,738      | \$2,970,771      | \$654,960       | \$422,518          |
| PLUS: Rev. Stabiliz./Oper. Rev. Allowa   | \$291,882                          | I                                  | \$146,641          | \$37,716           | \$3,246          | \$75,616         | \$20,426        | \$8,237            |
| LESS: Service Instal Revenue             | -\$64,171                          | S                                  | \$0                | \$0                | \$0              | -\$64,171        | \$0             | \$0                |
| LESS: State Surcharge Revenue            | -\$48,821                          | I                                  | -\$24,528          | -\$6,308           | -\$543           | -\$12,648        | -\$3,416        | -\$1,378           |
| LESS: Penalties                          | -\$324,240                         | I                                  | -\$162,898         | -\$41,897          | -\$3,606         | -\$83,999        | -\$22,690       | -\$9,150           |
| LESS: Non-Operating Rental               | -\$27,850                          | A                                  | -\$27,850          | \$0                | \$0              | \$0              | \$0             | \$0                |
| LESS: Interest Income                    | -\$813                             | I                                  | -\$409             | -\$105             | -\$9             | -\$211           | -\$57           | -\$23              |
| LESS: Misc Non-Operating                 | -\$242,555                         | I                                  | -\$121,859         | -\$31,342          | -\$2,698         | -\$62,837        | -\$16,974       | -\$6,845           |
| REQUIRED FROM RATES                      | \$19,750,710                       |                                    | \$10,439,342       | \$4,346,110        | \$1,097,128      | \$2,822,522      | \$632,249       | \$413,360          |

**ALLOCATION OF PLANT IN SERVICE TO COST COMPONENTS**

| <u>EXPENSE ITEM</u>              | <u>PLANT VALUE</u> | <u>ALLOC.</u><br><u>SYMBOL (1)</u> | <u>BASE</u>  | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|----------------------------------|--------------------|------------------------------------|--------------|-----------------|------------------|-----------------|----------------|--------------------|
| <u>SOURCE OF SUPPLY</u>          |                    |                                    |              |                 |                  |                 |                |                    |
| Land & Land Rights               | \$5,738,631        | A                                  | \$5,738,631  | \$0             | \$0              | \$0             | \$0            | \$0                |
| Structures & Improvements        | \$14,532,046       | A                                  | \$14,532,046 | \$0             | \$0              | \$0             | \$0            | \$0                |
| Wells & Springs                  | \$449,365          | A                                  | \$449,365    | \$0             | \$0              | \$0             | \$0            | \$0                |
| <u>PUMPING</u>                   |                    |                                    |              |                 |                  |                 |                |                    |
| Land & Land Rights               | \$30,133           | D                                  | \$16,315     | \$13,817        | \$0              | \$0             | \$0            | \$0                |
| Structures & Improvements        | \$937,301          | D                                  | \$507,504    | \$429,798       | \$0              | \$0             | \$0            | \$0                |
| Pumping Equipment                | \$1,566,482        | D                                  | \$848,174    | \$718,307       | \$0              | \$0             | \$0            | \$0                |
| <u>PURIFICATION</u>              |                    |                                    |              |                 |                  |                 |                |                    |
| Land & Land Rights               | \$26,046           | D                                  | \$14,103     | \$11,943        | \$0              | \$0             | \$0            | \$0                |
| Structures & Improvements        | \$52,659,920       | D                                  | \$28,512,813 | \$24,147,107    | \$0              | \$0             | \$0            | \$0                |
| Water Treatment Equipment        | \$635,768          | D                                  | \$344,238    | \$291,530       | \$0              | \$0             | \$0            | \$0                |
| <u>TRANSM &amp; DISTRIBUTION</u> |                    |                                    |              |                 |                  |                 |                |                    |
| Land & Land Rights               | \$1,590            | H                                  | \$639        | \$541           | \$410            | \$0             | \$0            | \$0                |
| Distribution Reservoirs          | \$693,080          | H                                  | \$278,536    | \$235,888       | \$178,656        | \$0             | \$0            | \$0                |
| Transmission Mains               | \$13,902,718       | D                                  | \$7,527,653  | \$6,375,065     | \$0              | \$0             | \$0            | \$0                |
| Distribution mains               | \$64,762,267       | H                                  | \$26,026,730 | \$22,041,677    | \$16,693,860     | \$0             | \$0            | \$0                |
| Services                         | \$9,654,037        | S                                  | \$0          | \$0             | \$0              | \$9,654,037     | \$0            | \$0                |
| Meters                           | \$4,977,190        | S                                  | \$0          | \$0             | \$0              | \$4,977,190     | \$0            | \$0                |
| Hydrants                         | \$2,671,081        | F                                  | \$0          | \$0             | \$0              | \$0             | \$0            | \$2,671,081        |
| Other Misc Equip                 | \$100,595          | H                                  | \$40,427     | \$34,237        | \$25,930         | \$0             | \$0            | \$0                |
| <u>GENERAL</u>                   |                    |                                    |              |                 |                  |                 |                |                    |
| Structures & Improvements        | \$2,337,900        | E                                  | \$900,959    | \$336,272       | \$23,469         | \$807,548       | \$210,102      | \$59,549           |
| Office furniture & equipment     | \$846,750          | E                                  | \$326,313    | \$121,792       | \$8,500          | \$292,481       | \$76,096       | \$21,568           |
| Transportation equipment         | \$1,778,868        | E                                  | \$685,525    | \$255,864       | \$17,857         | \$614,449       | \$159,863      | \$45,310           |
| Stores equipment                 | \$7,525            | E                                  | \$2,900      | \$1,082         | \$76             | \$2,599         | \$676          | \$192              |
| Tools, shop & garage equipment   | \$41,651           | E                                  | \$16,051     | \$5,991         | \$418            | \$14,387        | \$3,743        | \$1,061            |
| Laboratory equipment             | \$85,723           | A                                  | \$85,723     | \$0             | \$0              | \$0             | \$0            | \$0                |
| Power equipment                  | \$55,968           | E                                  | \$21,568     | \$8,050         | \$562            | \$19,332        | \$5,030        | \$1,426            |
| Communication equipment          | \$103,470          | E                                  | \$39,874     | \$14,883        | \$1,039          | \$35,740        | \$9,299        | \$2,636            |
| Miscellaneous equipment          | \$199,453          | E                                  | \$76,863     | \$28,688        | \$2,002          | \$68,894        | \$17,924       | \$5,080            |
| TOTAL PLANT                      | \$178,795,557      |                                    | \$86,992,951 | \$55,072,534    | \$16,952,780     | \$16,486,657    | \$482,733      | \$2,807,902        |
| PERCENT                          |                    | P                                  | 48.65%       | 30.80%          | 9.48%            | 9.22%           | 0.27%          | 1.57%              |

**ALLOCATION OF NON-ADMINISTRATIVE LABOR COSTS TO COST COMPONENTS**

| <u>EXPENSE ITEM</u>                    | <u>PRO FORMA</u><br><u>AMOUNT</u> | <u>ALLOC.</u><br><u>SYMBOL (1)</u> | <u>BASE</u>     | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u>  | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|--|-----------------------------------|------------------------------------|-----------------|-----------------|------------------|------------------|----------------|--------------------|
| <u>CUSTOMER ACCOUNTS</u>               |                                   |                                    |                 |                 |                  |                  |                |                    |
| Salary & Wages - Cust Ser              | \$199,008                         | B                                  | \$0             | \$0             | \$0              | \$0              | \$199,008      | \$0                |
| Salary & Wages - Meter                 | \$328,541                         | M                                  | \$0             | \$0             | \$0              | \$262,832        | \$65,708       | \$0                |
| <u>SOURCE OF SUPPLY</u>                |                                   |                                    |                 |                 |                  |                  |                |                    |
| Salaries & Wages - (601)               | \$125,509                         | A                                  | \$125,509       | \$0             | \$0              | \$0              | \$0            | \$0                |
| <u>TRANSMISSION &amp; DISTRIBUTION</u> |                                   |                                    |                 |                 |                  |                  |                |                    |
| Salaries & Wages - (601)               | \$1,007,907                       | O                                  | \$55,890        | \$47,332        | \$27,806         | \$806,326        | \$0            | \$70,553           |
| Salaries & Wages -[Engineering] (601)  | <u>\$378,097</u>                  | O                                  | <u>\$20,966</u> | <u>\$17,756</u> | <u>\$10,431</u>  | <u>\$302,477</u> | <u>\$0</u>     | <u>\$26,467</u>    |
| TOTALS                                 | \$2,039,061                       |                                    | \$202,365       | \$65,088        | \$38,237         | \$1,371,635      | \$264,716      | \$97,020           |
| PERCENT                                |                                   | L                                  | 9.9%            | 3.2%            | 1.9%             | 67.3%            | 13.0%          | 4.8%               |

**ALLOCATION TO FIRE, WHOLESALE & RETAIL SERVICE**

| <u>UNITS OF SERVICE</u>       | <u>TOTAL</u> | <u>BASE</u>         | <u>MAX. DAY</u>     | <u>PEAK HOUR</u>  | <u>METERING</u>         | <u>BILLING DIRECT FIRE</u> |                   |
|-------------------------------|--------------|---------------------|---------------------|-------------------|-------------------------|----------------------------|-------------------|
| Number<br>Units               |              | 3,720,375<br>ccf/yr | 19,327<br>ccf/day   | 17,262<br>ccf/day | 25,579<br>equiv meters  | 281,805<br>bills           | 1,917<br>hydrants |
| Revenue Requirements          | \$19,750,710 | \$10,439,342        | \$4,346,110         | \$1,097,128       | \$2,822,522             | \$632,249                  | \$413,360         |
| Allocation to Fire Protection | \$1,644,650  | \$31,318            | \$649,376           | \$550,596         | included in calculation |                            | \$413,360         |
| Allocation to Wholesale *     | \$906,215    | \$677,272           | \$228,592           | \$350             |                         |                            |                   |
| Net To Retail Metered Rates   | \$17,199,846 | \$9,730,752<br>6.5% | \$3,468,142<br>5.3% | \$546,182<br>0.0% | \$2,822,522             | \$632,249                  | \$0               |

\* Allocation to wholesale based on:

BASE

|                                  |                  |   |
|----------------------------------|------------------|---|
| Metered Sales (ccf/yr)           | 3,720,375        |   |
| Retail Sales (ccf/yr)            | 3,446,311        |   |
| Retail Unacctd For (ccf/yr)      | <u>527,972</u>   | Based on miles of pipe: 100% of distribution/service costs plus 92.6% of transmission plus estim fire |
| Total Retail (ccf/yr)            | 3,974,283        |   |
| Wholesale Sales (ccf/yr)         | 274,064          |   |
| Wholesale Unacctd For (ccf/yr)   | <u>1,664</u>     |   |
| Total Wholesale (ccf/yr)         | <u>275,728</u>   |   |
| Grand Total (ccf/yr)             | 4,250,011        |   |
| Wholesale Percent of Grand Total | 6.5%             |   |
| Total Base Allocation            | \$10,439,342     |   |
| Wholesale Allocation             | <b>\$677,272</b> |   |

MAX DAY

|                            |                     |   |
|----------------------------|---------------------|---|
| Total Max Day Allocation   | \$4,346,110         |   |
| Less: Distribution Costs   |                     |   |
| 82.3% of T&D O&M           | -\$96,145           |   |
| Admin O&M Share            | -\$15,877           | 16.5%   |
| Distribution Capital Items | <u>-\$1,880,565</u> | 58.57% (Less Distribution Mains & Gen'l Items allocated to Max Day) |
| Total Net of Distribution  | \$2,353,521         |   |
| Wholesale Max Day %        | 9.71%               | Joint Settlement Sch. 2.2   |
| Wholesale Allocation       | <b>\$228,592</b>    |   |

PEAK HOUR

|                            |                   |  |
|----------------------------|-------------------|--|
| Total Peak Hour Allocation | \$1,097,128       |  |
| Less: Distribution Costs   |                   |  |
| 82.3% of T&D O&M           | -\$56,482         |  |
| Admin O&M Share            | -\$18,247         | 32.3%  |
| Capital Items              | <u>-\$999,388</u> | 100.00% (All Capital Peak Hour costs = distribution) |
| Total Net of Distribution  | \$23,011          |  |
| Wholesale Peak Hr %        | 1.52%             | Joint Settlement Sch. 2.2                            |
| Wholesale Allocation       | <b>\$350</b>      |  |

**ALLOCATION SYMBOLS**

| ALLOCATION |     | <u>SYMBOL</u> | <u>BASE</u> | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |                               |
|------------|-----|---------------|-------------|-----------------|------------------|-----------------|----------------|--------------------|-------------------------------|
| 100.00%    | A   | 100.00%       | 0.00%       | 0.00%           | 0.00%            | 0.00%           | 0.00%          | 0.00%              | Supply, IFR, Power & Chemical |
| 100.00%    | B   | 0.00%         | 0.00%       | 0.00%           | 0.00%            | 0.00%           | 100.00%        | 0.00%              | Billing                       |
| 100.00%    | D   | 54.15%        | 45.85%      | 0.00%           | 0.00%            | 0.00%           | 0.00%          | 0.00%              | Max Day Demand                |
| 100.00%    | E   | 38.54%        | 14.38%      | 1.00%           | 34.54%           | 8.99%           | 2.55%          | 0.00%              | O&M less A&G                  |
| 100.00%    | E-M | 82.07%        | 14.38%      | 1.00%           | 0.00%            | 0.00%           | 2.55%          | 0.00%              | O&M less A&G - No Meter Alloc |
| 100.00%    | F   | 0.00%         | 0.00%       | 0.00%           | 0.00%            | 0.00%           | 100.00%        | 0.00%              | Fire Service                  |
| 100.00%    | H   | 40.19%        | 34.03%      | 25.78%          | 0.00%            | 0.00%           | 0.00%          | 0.00%              | Max Hour Demand               |
| 100.00%    | I   | 50.24%        | 12.92%      | 1.11%           | 25.91%           | 7.00%           | 2.82%          | 0.00%              | Total O&M                     |
| 100.00%    | L   | 9.92%         | 3.19%       | 1.88%           | 67.27%           | 12.98%          | 4.76%          | 0.00%              | Labor                         |
| 100.00%    | L-M | 90.17%        | 3.19%       | 1.88%           | 0.00%            | 0.00%           | 4.76%          | 0.00%              | Labor-No Meter Allocation     |
| 100.00%    | M   | 0.00%         | 0.00%       | 0.00%           | 80.0%            | 20.0%           | 0.00%          | 0.00%              | Cust Serv - "Meter"           |
| 100.00%    | O   | 5.55%         | 4.70%       | 2.76%           | 80.00%           | 0.00%           | 7.00%          | 0.00%              | O&M Mains, Hydrants & Service |
| 100.00%    | O-A | 85.55%        | 4.70%       | 2.76%           | 0.00%            | 0.00%           | 7.00%          | 0.00%              | T&D Police Details            |
| 100.00%    | P   | 48.65%        | 30.80%      | 9.48%           | 9.22%            | 0.27%           | 1.57%          | 0.00%              | Plant                         |
| 100.00%    | P-M | 53.40%        | 30.80%      | 9.48%           | 4.61%            | 0.13%           | 1.57%          | 0.00%              | Meter & Service Capital       |
| 100.00%    | S   | 0.00%         | 0.00%       | 0.00%           | 100.00%          | 0.00%           | 0.00%          | 0.00%              | Services and Meters           |
| 100.00%    | T   | 42.65%        | 36.12%      | 21.22%          | 0.00%            | 0.00%           | 0.00%          | 0.00%              | T&D Mains                     |
| 100.00%    | T-C | 35.00%        | 29.64%      | 17.46%          | 15.14%           | 0.00%           | 2.76%          | 0.00%              | T&D Capital                   |

*Symbol D*

|               | <u>MGD</u>   | <u>%</u>      |
|---------------|--------------|---------------|
| Avg Day       | 8.403        | 54.15%        |
| Max Day Inc   | <u>7.117</u> | <u>45.85%</u> |
| Total Max Day | 15.520       | 100.00%       |

*Symbol E*

|         | <u>TOTAL</u> | <u>BASE</u> | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|---------|--------------|-------------|-----------------|------------------|-----------------|----------------|--------------------|
| Amount  | \$6,834,382  | \$2,633,775 | \$983,025       | \$68,607         | \$2,360,704     | \$614,191      | \$174,080          |
| Percent | E            | 38.5%       | 14.4%           | 1.0%             | 34.5%           | 9.0%           | 2.5%               |

*Symbol H*

|                 | <u>MGD</u>   | <u>%</u>      |
|-----------------|--------------|---------------|
| Avg Day         | 8.403        | 40.19%        |
| Max Day Inc     | 7.117        | 34.03%        |
| Peak Hour Inc   | <u>5.390</u> | <u>25.78%</u> |
| Total Peak Hour | 20.910       | 100.00%       |

|                | <u>FY 10</u> | <u>FY 11</u> | <u>FY 12</u> | <u>FY 13</u> | <u>FY 14</u> | <u>FY 15</u> | <u>Avg or Max *</u> |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------------|
| Avg Day mgd)   | 8.53         | 8.38         | 7.11         | 7.56         | 8.55         | 9.10         | 8.40                |
| Max Day (mgd)  | 13.72        | 14.90        | 13.48        | 12.34        | 14.72        | 15.52        | 15.52               |
| Max Hour (mgd) | 19.95        | 19.84        | 18.64        | 18.66        | 18.55        | 20.91        | 20.91               |

\* FY 13 - 15

*Symbol M* These accounts include activities associated with meter reading, meter testing, backflow testing, etc. Costs have been split based on the following personnel associated with these activities:

|              | <u># Employees</u> | <u>Meter Read</u> | <u>Meters</u> |
|--------------|--------------------|-------------------|---------------|
| Meter Reader | 1.0                | 1.0               |               |
| Technician   | 3.0                |                   | 3.0           |
| Backflow     | <u>1.0</u>         |                   | <u>1.0</u>    |
| Subtotal     | 5.0                | 1.0               | 4.0           |
| Percent      |                    | 20%               | 80%           |
| Agent        | 1.0                | 0.20              | 0.80          |
| Supervisor   | <u>1.0</u>         | <u>0.20</u>       | <u>0.80</u>   |
| Total        | 7.0                | 1.4               | 5.6           |
| Percent      |                    | 20%               | 80%           |

**ALLOCATION SYMBOLS**

*Symbol O*

|          | <u>% of Time</u> | <u>BASE</u>  | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|----------|------------------|--------------|-----------------|------------------|-----------------|----------------|--------------------|
| Mains    | 13.00%           | 5.55%        | 4.70%           | 2.76%            | 0.00%           | 0.00%          | 0.00%              |
| Hydrants | 7.00%            | 0.00%        | 0.00%           | 0.00%            | 0.00%           | 0.00%          | 7.00%              |
| Services | <u>80.00%</u>    | <u>0.00%</u> | <u>0.00%</u>    | <u>0.00%</u>     | <u>80.00%</u>   | <u>0.00%</u>   | <u>0.00%</u>       |
| Total    | 100.0%           | 5.5%         | 4.7%            | 2.8%             | 80.0%           | 0.0%           | 7.0%               |

Note: Based on prior docket analysis of time

*Symbol T*

|              | <u>Plant Amt.</u>   | <u>BASE</u>         | <u>MAX. DAY</u>     | <u>PEAK HOUR</u>    | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|--------------|---------------------|---------------------|---------------------|---------------------|-----------------|----------------|--------------------|
| Transmission | \$13,902,718        | \$7,527,653         | \$6,375,065         | \$0                 | \$0             | \$0            | \$0                |
| Distribution | <u>\$64,762,267</u> | <u>\$26,026,730</u> | <u>\$22,041,677</u> | <u>\$16,693,860</u> | <u>\$0</u>      | <u>\$0</u>     | <u>\$0</u>         |
| Total        | \$78,664,985        | \$33,554,383        | \$28,416,742        | \$16,693,860        | \$0             | \$0            | \$0                |
|              |                     | 42.65%              | 36.12%              | 21.22%              | 0.00%           | 0.00%          | 0.00%              |

*Symbol T-C*

|                         | <u>Plant Amt.</u>  | <u>BASE</u>  | <u>MAX. DAY</u> | <u>PEAK HOUR</u> | <u>METERING</u> | <u>BILLING</u> | <u>DIRECT FIRE</u> |
|-------------------------|--------------------|--------------|-----------------|------------------|-----------------|----------------|--------------------|
| Distribution Reservoirs | \$693,080          | \$278,536    | \$235,888       | \$178,656        | \$0             | \$0            | \$0                |
| Transmission Mains      | \$13,902,718       | \$7,527,653  | \$6,375,065     | \$0              | \$0             | \$0            | \$0                |
| Distribution mains      | \$64,762,267       | \$26,026,730 | \$22,041,677    | \$16,693,860     | \$0             | \$0            | \$0                |
| Services                | \$9,654,037        | \$0          | \$0             | \$0              | \$9,654,037     | \$0            | \$0                |
| Meters                  | \$4,977,190        | \$0          | \$0             | \$0              | \$4,977,190     | \$0            | \$0                |
| Hydrants                | <u>\$2,671,081</u> | <u>\$0</u>   | <u>\$0</u>      | <u>\$0</u>       | <u>\$0</u>      | <u>\$0</u>     | <u>\$2,671,081</u> |
| Total                   | \$96,660,373       | \$33,832,919 | \$28,652,630    | \$16,872,517     | #####           | \$0            | \$2,671,081        |
|                         |                    | 35.00%       | 29.64%          | 17.46%           | 15.14%          | 0.00%          | 2.76%              |

**FIRE SERVICE CHARGES**

**PUBLIC FIRE SERVICE**

Annual Charge/Hydrant = \$663.43  
Charge per meter/month (Pawtucket) = \$4.81

**PRIVATE FIRE SERVICE**

| <u>SERVICE SIZE</u><br><u>(inches)</u> | <u>ANNUAL</u><br><u>CHARGE</u> |
|--|--------------------------------|
| 2                                      | \$16.93                        |
| 4                                      | \$36.55                        |
| 6                                      | \$91.78                        |
| 8                                      | \$167.02                       |
| 10                                     | \$249.15                       |
| 12                                     | \$362.98                       |

**ALLOCATION OF FIRE SERVICE EXPENSES  
TO PUBLIC AND PRIVATE FIRE SERVICE**

|                       | <u>NUMBER</u> | <u>DEMAND<br/>FACTOR (1)</u> | <u>NO. OF<br/>EQUIVS.</u> | <u>PERCENT<br/>OF DEMAND</u> | <u>NON-HYDR.<br/>REQUIRED</u> | <u>DIRECT<br/>HYDRANT</u> | <u>TOTAL</u> |
|-----------------------|---------------|------------------------------|---------------------------|------------------------------|-------------------------------|---------------------------|--------------|
| PUBLIC FIRE SERVICE   |               |                              |                           |                              |                               |                           |              |
| Hydrants              | 1,917         | 111.31                       | 213,383.0                 | 74.86%                       | \$1,110,514                   | \$161,272                 | \$1,271,786  |
| PRIVATE FIRE SERVICE  |               |                              |                           |                              |                               |                           |              |
| SIZE (IN)             |               |                              |                           |                              |                               |                           |              |
| 2                     | 38            | 6.19                         | 235.2                     |                              |                               |                           |              |
| 4                     | 78            | 38.32                        | 2,988.9                   |                              |                               |                           |              |
| 6                     | 405           | 111.31                       | 45,080.9                  |                              |                               |                           |              |
| 8                     | 93            | 237.21                       | 22,060.2                  |                              |                               |                           |              |
| 10                    | 3             | 426.58                       | 1,279.7                   |                              |                               |                           |              |
| 12                    | <u>0</u>      | <u>689.04</u>                | <u>0.0</u>                |                              |                               |                           |              |
| TOTAL-PRIV.           | 617           |                              | 71,645.0                  | 25.14%                       | \$372,864                     | \$0                       | \$372,864    |
|                       | =====         |                              | =====                     | =====                        | =====                         | =====                     | =====        |
| GRAND TOTALS          | 2,534         |                              | 285,028.0                 | 100.00%                      | \$1,483,378                   | \$161,272                 | \$1,644,650  |
| Total Fire Allocation |               |                              |                           |                              |                               |                           | \$1,644,650  |
| Less O&M for T&D Fire |               |                              |                           |                              |                               |                           | \$3,970      |
| Hydrant Capital       |               |                              |                           |                              |                               |                           | \$157,302    |
| Net Non-Hydrant       |               |                              |                           |                              |                               |                           | \$1,483,378  |

(1) Based on size to the 2.63 power.

**DETERMINATION OF FIRE SERVICE CHARGES**

|                               |             |                          |                   |
|-------------------------------|-------------|--------------------------|-------------------|
| <u>PUBLIC FIRE PROTECTION</u> |             | <u>CALCULATED CHARGE</u> |                   |
| PUBLIC FIRE ALLOCATION        | \$1,271,786 |                          |                   |
| ----- =                       | ----- =     | \$663.43 per year =      | \$55.29 per month |
| NUMBER OF PUBLIC HYDRANTS     | 1,917       |                          |                   |

PRIVATE FIRE PROTECTION

|                             |           |                |
|-----------------------------|-----------|----------------|
| PRIVATE FIRE ALLOCATION (1) | \$372,864 |                |
| ----- =                     | ----- =   | \$5.20 /EQUIV. |
| NO. OF EQUIV. UNITS         | 71,645.01 |                |

| <u>SIZE (IN)</u> | <u>DEMAND FACTOR</u> | <u>ANNUAL AMOUNTS</u> |                           |                          | <u>MONTHLY TOTAL</u> | <u>+ BILLING CALCULATED</u> |                  |
|------------------|----------------------|-----------------------|---------------------------|--------------------------|----------------------|-----------------------------|------------------|
|                  |                      | <u>DEMAND CHARGE</u>  | <u>SERVICE EQUIVS (2)</u> | <u>SERVICE LINE CHRG</u> |                      | <u>CHARGE</u>               | <u>MON. CHRG</u> |
| 2                | 6.19                 | \$32.22               | 4.07                      | \$144.01                 | \$14.69              | \$2.24                      | \$16.93          |
| 4                | 38.32                | \$199.43              | 6.00                      | \$212.22                 | \$34.30              | \$2.24                      | \$36.55          |
| 6                | 111.31               | \$579.30              | 14.00                     | \$495.18                 | \$89.54              | \$2.24                      | \$91.78          |
| 8                | 237.21               | \$1,234.50            | 21.00                     | \$742.77                 | \$164.77             | \$2.24                      | \$167.02         |
| 10               | 426.58               | \$2,220.06            | 21.00                     | \$742.77                 | \$246.90             | \$2.24                      | \$249.15         |
| 12               | 689.04               | \$3,586.00            | 21.00                     | \$742.77                 | \$360.73             | \$2.24                      | \$362.98         |

(1) Private Fire includes allocated service maintenance costs as detailed below:

(2) See Schedule 2.0

|                                    |           |                                 |
|------------------------------------|-----------|---------------------------------|
| Service Line Maintenance Cost =    | \$962,434 | (Half of total "Metering" O&M ) |
| Service Line Debt Costs =          | \$236,195 |                                 |
| Addnl Allocation to Fire Service = | \$293,881 | (24.52%)                        |
| Cost per Equiv/year =              | \$ 35.37  |                                 |

**CITY OF PAWTUCKET FIRE CHARGES**

Because the City of Pawtucket has passed an Ordinance to stop paying hydrant rental fees under R.I.G.L. § 45-39-4 it is necessary to reallocate the allocated costs directly to the customers in Pawtucket. This was approved by the RI PUC in Docket 4300.

|                                      |             |
|--------------------------------------|-------------|
| Fire Hydrants in Pawtucket =         | 1,515       |
| Proposed Hydrant Charge (per month)  | \$55.29     |
| Annual Hydrant Charge to Pawtucket : | \$1,005,172 |
| Number of Meters *                   | 208,932     |
| Fire Charge per meter =              | \$4.81      |

\* Pawtucket Water Proposed to recover these costs through an additional charge per meter in Docket 4300.  
This was approved by the RI PUC.

**DETERMINATION OF SERVICE CHARGES**

**BILLING CHARGE**

|                                      |   |           |                      |
|--------------------------------------|---|-----------|----------------------|
| CUST. BILLING ALLOC.                 |   | \$632,249 |                      |
| -----                                | = | -----     | = \$2.24 PER BILLING |
| NUMBER OF BILLINGS (Include Priv Fir |   | 281,805   |                      |

**METER CHARGE**

|                        |   |             |                          |
|------------------------|---|-------------|--------------------------|
| CUST. METER ALLOC. (1) |   | \$2,528,641 |                          |
| -----                  | = | -----       | = \$98.85 / EQ. METER/YR |
| NO. EQUIV. METERS      |   | 25,579      |                          |

**TOTAL SERVICE CHARGES**

| <u>METER<br/>SIZE (IN)</u> | <u>MONTHLY ACCOUNTS</u> |                           |                         |
|----------------------------|-------------------------|---------------------------|-------------------------|
|                            | <u>METER<br/>CHARGE</u> | <u>BILLING<br/>CHARGE</u> | <u>TOTAL<br/>CHARGE</u> |
| 5/8                        | \$8.24                  | \$2.24                    | \$10.48                 |
| 3/4                        | \$11.42                 | \$2.24                    | \$13.66                 |
| 1                          | \$16.48                 | \$2.24                    | \$18.72                 |
| 1 1/2                      | \$33.54                 | \$2.24                    | \$35.78                 |
| 2                          | \$43.54                 | \$2.24                    | \$45.79                 |
| 3                          | \$49.43                 | \$2.24                    | \$51.67                 |
| 4                          | \$115.33                | \$2.24                    | \$117.57                |
| 6                          | \$173.00                | \$2.24                    | \$175.24                |
| 8                          | \$247.14                | \$2.24                    | \$249.38                |

(1) Less allocation of Service Maintenance Costs to Private Fire Service - see Joint Settlement Sch. 4

**ALLOCATION OF GENERAL WATER EXPENSES  
TO CUSTOMER CLASSES**

**Class Demands**

| CUSTOMER CLASS   | AVERAGE DEMANDS |              | FACTOR | MAX DAY EXTRA CAPACITY |              |              |
|------------------|-----------------|--------------|--------|------------------------|--------------|--------------|
|                  | (CCF/DAY)       | PERCENT      |        | (CCF/DAY)              | XTRA CCF/DAY | PERCENT      |
| <i>Retail</i>    |                 |              |        |                        |              |              |
| Small (5/8 - 1") | 7,190           | 70.54%       | 2.62   | 18,859                 | 11,669       | 70.99%       |
| Large (>1")      | 2,252           | 22.09%       | 2.28   | 5,144                  | 2,892        | 17.60%       |
| <i>Wholesale</i> |                 |              |        |                        |              |              |
| Cumberland       | 751             | 7.37%        | 3.50   | 2,628                  | 1,877        | 11.42%       |
| Seekonk          | <u>0</u>        | <u>0.00%</u> | 3.50   | <u>0</u>               | <u>0</u>     | <u>0.00%</u> |
| Total            | 10,193          | 100.00%      |        | 26,632                 | 16,439       | 100.00%      |

| CUSTOMER CLASS   | AVERAGE DEMANDS |              | FACTOR | PEAK HOUR EXTRA CAPACITY |              |              |
|------------------|-----------------|--------------|--------|--------------------------|--------------|--------------|
|                  | (CCF/DAY)       | PERCENT      |        | (CCF/DAY)                | XTRA CCF/DAY | PERCENT      |
| <i>Retail</i>    |                 |              |        |                          |              |              |
| Small (5/8 - 1") | 7,190           | 70.54%       | 3.53   | 25,409                   | 6,550        | 76.17%       |
| Large (>1")      | 2,252           | 22.09%       | 3.08   | 6,931                    | 1,787        | 20.78%       |
| <i>Wholesale</i> |                 |              |        |                          |              |              |
| Cumberland       | 751             | 7.37%        | 3.85   | 2,891                    | 263          | 3.06%        |
| Seekonk          | <u>0</u>        | <u>0.00%</u> | 3.85   | <u>0</u>                 | <u>0</u>     | <u>0.00%</u> |
| Total            | 10,193          | 100.00%      |        | 35,231                   | 8,599        | 100.00%      |

**Allocation of Retail Metered Sales Costs to Classes (see Joint Settlement Sch. 3.3)**

| CUSTOMER CLASS   | BASE COSTS    |                    | MAX. DAY XTRA CAPACITY |                  | PEAK HR. XTRA CAPACITY |                  | TOTAL AMOUNT       |
|------------------|---------------|--------------------|------------------------|------------------|------------------------|------------------|--------------------|
|                  | PERCENT       | AMOUNT             | PERCENT                | AMOUNT           | PERCENT                | AMOUNT           |                    |
| <i>Retail</i>    |               |                    |                        |                  |                        |                  |                    |
| Small (5/8 - 1") | 76.15%        | \$7,410,010        | 80.14%                 | \$2,779,247      | 78.57%                 | \$429,127        | \$10,618,384       |
| Large (>1")      | <u>23.85%</u> | <u>\$2,320,741</u> | <u>19.86%</u>          | <u>\$688,895</u> | <u>21.43%</u>          | <u>\$117,055</u> | <u>\$3,126,691</u> |
| Total            | 100.00%       | \$9,730,752        | 100.00%                | \$3,468,142      | 100.00%                | \$546,182        | \$13,745,075       |
|                  |               | 70.8%              |                        | 25.2%            |                        | 4.0%             |                    |

**METERED WATER RATES**

Small (5/8 - 1")

|                         |              |   |                  |
|-------------------------|--------------|---|------------------|
| Total Expense (2)       | \$10,618,384 | = | \$ 4.046 per ccf |
| <hr/>                   |              |   |                  |
| Metered Sales (HCF) (1) | 2,624,381    |   |                  |

Large (>1")

|                         |             |   |                  |
|-------------------------|-------------|---|------------------|
| Total Expense (2)       | \$3,126,691 | = | \$ 3.804 per ccf |
| <hr/>                   |             |   |                  |
| Metered Sales (HCF) (1) | 821,930     |   |                  |

Wholesale

|                         |           |   |                 |
|-------------------------|-----------|---|-----------------|
| Total Expense (3)       | \$906,215 | = | \$3.307 per ccf |
| <hr/>                   |           |   |                 |
| Metered Sales (HCF) (1) | 274,064   |   |                 |

- (1) See Joint Settlement Sch. 2.0
- (2) See Joint Settlement Sch. 6.0
- (3) See Joint Settlement Sch. 3.3

**COMPARISON OF CURRENT & PROPOSED RATES**

|                                  |                | <u>Current</u> | <u>Proposed</u> | <u>% Change</u> |          |
|----------------------------------|----------------|----------------|-----------------|-----------------|----------|
| <u>Metered Rates (\$/ccf)</u>    |                |                |                 |                 |          |
| Small (5/8 - 1")                 |                | \$3.900        | \$4.046         | 3.7%            | \$4.048  |
| Medium (1.5 - 2" & By pass)      |                | \$3.489        | \$3.804         | 9.0%            | \$3.806  |
| Large (3" and up)                |                | \$3.286        | \$3.804         | 15.8%           | \$3.806  |
| Large (>1")                      |                |                | \$3.804         |                 | \$3.806  |
| Wholesale                        |                | \$2.726        | \$3.307         | 21.3%           | \$3.308  |
| <u>Service Charges (Monthly)</u> |                |                |                 |                 |          |
|                                  | 5/8            | \$10.00        | \$10.48         | 4.8%            | \$10.50  |
|                                  | 3/4            | \$12.96        | \$13.66         | 5.4%            | \$13.68  |
|                                  | 1              | \$17.68        | \$18.72         | 5.9%            | \$18.74  |
|                                  | 1 1/2          | \$33.60        | \$35.78         | 6.5%            | \$35.82  |
|                                  | 2              | \$42.93        | \$45.79         | 6.7%            | \$45.84  |
|                                  | 3              | \$48.42        | \$51.67         | 6.7%            | \$51.73  |
|                                  | 4              | \$109.89       | \$117.57        | 7.0%            | \$117.69 |
|                                  | 6              | \$163.68       | \$175.24        | 7.1%            | \$175.40 |
|                                  | 8              | \$232.83       | \$249.38        | 7.1%            | \$249.61 |
| <u>Fire Service (Monthly)</u>    |                |                |                 |                 |          |
| Public                           | /hydrant/month | \$29.51        | \$55.29         | 87.4%           | \$55.30  |
| Pawtucket                        | \$/billing     | \$2.57         | \$4.81          | 87.2%           | \$4.81   |
| Private                          |                |                |                 |                 |          |
|                                  | 2              | \$16.76        | \$16.93         | 1.0%            | \$16.95  |
|                                  | 4              | \$35.67        | \$36.55         | 2.4%            | \$36.58  |
|                                  | 6              | \$89.21        | \$91.78         | 2.9%            | \$91.84  |
|                                  | 8              | \$161.72       | \$167.02        | 3.3%            | \$167.10 |
|                                  | 10             | \$240.07       | \$249.15        | 3.8%            | \$249.24 |
|                                  | 12             | \$348.65       | \$362.98        | 4.1%            | \$363.09 |

**IMPACT OF PROPOSED RATES**

| METER<br>SIZE  | MONTHLY<br>USE - CU FT | CURRENT<br>RATES | <----- PROPOSED -----> |               |             |
|--|------------------------|------------------|------------------------|---------------|-------------|
|  |                        |                  | NEW BILL               | \$ INCREASE   | % INCREASE  |
| <u>Metered Service (Monthly Bills/Includes Pawtucket Fire)</u> |                        |                  |                        |               |             |
| Small  |                        |                  |                        |               |             |
| 5/8  | 600                    | \$33.40          | \$34.76                | \$1.36        | 4.1%        |
| <b>5/8</b>   | <b>800</b>             | <b>\$41.20</b>   | <b>\$42.85</b>         | <b>\$1.65</b> | <b>4.0%</b> |
| 5/8  | 1,200                  | \$56.80          | \$59.03                | \$2.23        | 3.9%        |
| 5/8  | 1,700                  | \$76.30          | \$79.26                | \$2.96        | 3.9%        |
| 5/8  | 2,500                  | \$107.50         | \$111.63               | \$4.13        | 3.8%        |
| 5/8  | 3,000                  | \$127.00         | \$131.86               | \$4.86        | 3.8%        |
| 5/8  | 5,000                  | \$205.00         | \$212.78               | \$7.78        | 3.8%        |
| 5/8  | 7,500                  | \$302.50         | \$313.93               | \$11.43       | 3.8%        |
| 5/8  | 9,000                  | \$361.00         | \$374.62               | \$13.62       | 3.8%        |
| 1  | 1,000                  | \$56.68          | \$59.18                | \$2.50        | 4.4%        |
| 1  | 12,000                 | \$485.68         | \$504.24               | \$18.56       | 3.8%        |
| 1  | 25,000                 | \$992.68         | \$1,030.22             | \$37.54       | 3.8%        |
| Large  |                        |                  |                        |               |             |
| 1 1/2  | 25,000                 | \$905.85         | \$986.78               | \$80.93       | 8.9%        |
| 1 1/2  | 50,000                 | \$1,778.10       | \$1,937.78             | \$159.68      | 9.0%        |
| 2  | 75,000                 | \$2,659.68       | \$2,898.79             | \$239.11      | 9.0%        |
| 2  | 100,000                | \$3,531.93       | \$3,849.79             | \$317.86      | 9.0%        |
| 3  | 75,000                 | \$2,512.92       | \$2,904.67             | \$391.75      | 15.6%       |
| 3  | 100,000                | \$3,334.42       | \$3,855.67             | \$521.25      | 15.6%       |
| 4  | 250,000                | \$8,324.89       | \$9,627.57             | \$1,302.68    | 15.6%       |
| 6  | 300,000                | \$10,021.68      | \$11,587.24            | \$1,565.56    | 15.6%       |
| Wholesale  |                        |                  |                        |               |             |
| 6  | 1,000,000              | \$27,423.68      | \$33,245.24            | \$5,821.56    | 21.2%       |
| <u>Fire Service (Monthly Bill)</u>                             |                        |                  |                        |               |             |
| Municipal Fire Service   | 200 hydrants           | \$491.82         | \$921.50               | \$429.68      | 87.4%       |
| Pawtucket Public Fire Protection                               | per bill               | \$2.57           | \$4.81                 | \$2.24        | 87.2%       |
| Private Fire Service   | 4 Inch Service         | \$2.97           | \$3.05                 | \$0.07        | 2.4%        |
|  | 6 Inch Service         | \$7.43           | \$7.65                 | \$0.21        | 2.9%        |
|  | 8 Inch Service         | \$13.48          | \$13.92                | \$0.44        | 3.3%        |

**REVENUE RECONCILIATION**

| <b>Service Charge: (Monthly)</b>             |           | <----- Current -----> |                  | <----- Proposed -----> |                  |
|--|-----------|-----------------------|------------------|------------------------|------------------|
| 5/8  | 21,561    | \$10.00               | \$2,587,273      | \$10.48                | \$2,711,462      |
| 3/4  | 269       | \$12.96               | \$41,812         | \$13.66                | \$44,070         |
| 1  | 515       | \$17.68               | \$109,237        | \$18.72                | \$115,663        |
| 1 1/2  | 216       | \$33.60               | \$87,043         | \$35.78                | \$92,690         |
| 2  | 280       | \$42.93               | \$144,364        | \$45.79                | \$153,982        |
| 3  | 16        | \$48.42               | \$9,322          | \$51.67                | \$9,948          |
| 4  | 8         | \$109.89              | \$10,578         | \$117.57               | \$11,317         |
| 6  | 2         | \$163.68              | \$4,466          | \$175.24               | \$4,781          |
| 8  | 0         | \$232.83              | \$0              | \$249.38               | \$0              |
| <b>Consumption Charge:</b>                   |           |                       |                  |                        |                  |
| Small (5/8 - 1")                             | 2,624,381 | \$3.900               | \$10,235,086     | \$4.046                | \$10,618,246     |
| Medium (1.5 - 2" & By pass)                  | 650,060   | \$3.489               | \$2,268,059      |                        |                  |
| Large (3" and up)                            | 171,870   | \$3.286               | \$564,765        |                        |                  |
| Large (>1")                                  | 821,930   |                       |                  | \$3.804                | \$3,126,622      |
| <u>Wholesale</u>                             | 274,064   | \$2.726               | \$747,098        | \$3.307                | \$906,330        |
| <u>Fire Protection:</u>                      |           |                       |                  |                        |                  |
| Public Hydrants (non Pawtucket)              | 402       | \$29.51               | \$142,352        | \$55.29                | \$266,719        |
| Pawtucket Billings                           | 208,932   | \$2.57                | \$536,955        | \$4.81                 | \$1,004,963      |
| Private Fire Protection                      |           |                       |                  |                        |                  |
| 2  | 38        | \$16.76               | \$7,640          | \$16.93                | \$7,720          |
| 4  | 78        | \$35.67               | \$33,391         | \$36.55                | \$34,208         |
| 6  | 405       | \$89.21               | \$433,569        | \$91.78                | \$446,068        |
| 8  | 93        | \$161.72              | \$180,479        | \$167.02               | \$186,390        |
| 10   | 3         | \$240.07              | \$8,642          | \$249.15               | \$8,969          |
| 12   | 0         | \$348.65              | <u>\$0</u>       | \$362.98               | <u>\$0</u>       |
| Total  |           |                       | \$18,152,131     |                        | \$19,750,147     |
| Plus: Misc Revenues                          |           |                       | <u>\$708,450</u> |                        | <u>\$708,450</u> |
| Pro Forma Revenue                            |           |                       | \$18,860,582     |                        | \$20,458,598     |
| Required Revenue                             |           |                       | \$20,459,161     |                        | \$20,459,161     |
| Difference                                   |           |                       | -\$1,598,579     |                        | (\$563)          |
| Increase in Revenues                         |           |                       |                  |                        | \$1,598,016      |
| Percent Increase in Total Revenues           |           |                       |                  |                        | 8.5%             |
| Percent Increase in Rate Revenues (non-misc) |           |                       |                  |                        | 8.8%             |

**SUMMARY OF COST OF SERVICE**

|                                     | <u>Test Year</u>   | <u>Adjustments</u> | <u>Rate Year</u>   |
|-------------------------------------|--------------------|--------------------|--------------------|
| <b>Revenues</b>                     |                    |                    |                    |
| Service Charges                     | \$2,994,094        | \$149,818          | \$3,143,913        |
| Metered Rates                       | \$13,815,009       | \$836,188          | \$14,651,197       |
| Fire Protection                     | \$1,343,028        | \$612,009          | \$1,955,038        |
| Miscellaneous                       | <u>\$659,046</u>   | <u>\$49,405</u>    | <u>\$708,450</u>   |
| <i>Total Revenue</i>                | \$18,811,177       | \$1,647,421        | \$20,458,598       |
| <b>Expenses</b>                     |                    |                    |                    |
| <u>O&amp;M</u>                      |                    |                    |                    |
| Admin                               | \$2,173,233        | \$104,852          | \$2,278,085        |
| Customer Serv                       | \$933,072          | \$116,955          | \$1,050,027        |
| Supply                              | \$438,872          | \$11,677           | \$450,549          |
| Purification                        | \$2,628,473        | \$214,075          | \$2,842,548        |
| Trans & Distrib                     | <u>\$2,322,774</u> | <u>\$168,484</u>   | <u>\$2,491,258</u> |
| Total O&M                           | \$8,496,424        | \$616,043          | \$9,112,467        |
| <u>Capital</u>                      |                    |                    |                    |
| Property Taxes                      | \$921,828          | -\$162,210         | \$759,618          |
| Principal, Interest & RICWFA Fees * | \$7,764,193        | \$0                | \$7,764,193        |
| Leases                              | \$0                | \$0                | \$0                |
| IFR                                 | \$2,500,000        | \$0                | \$2,500,000        |
| Trustee Fees                        | \$26,879           | \$4,121            | \$31,000           |
| O&M Reserve Deposit                 | <u>\$0</u>         | <u>\$0</u>         | <u>\$0</u>         |
| Total Capital                       | \$11,212,900       | -\$158,089         | \$11,054,811       |
| <u>Operating Revenue Allowance</u>  | <u>\$0</u>         | <u>\$291,882</u>   | <u>\$291,882</u>   |
| <i>Total Expenses</i>               | \$19,709,324       | \$749,836          | \$20,459,161       |
|                                     | \$19,709,324       |                    | \$20,459,161       |

**PROPOSED STEP INCREASES**

**YEAR 2 - FY 2017**

Rate Year (FY 2016) Revenue Requirements = \$20,459,161  
 Step Increases for 2017

|                              |    |           |
|------------------------------|----|-----------|
| New Debt                     | \$ | 1,174,417 |
| Property Tax Reduct.         | \$ | (48,368)  |
| Inflation: Labor @2%         | \$ | 54,092    |
| Inflation: Non-labor @ 2.00% | \$ | 88,842    |
| DBO O&M Contract @2.3%       | \$ | 43,449    |
| Rate Case Expense            | \$ | 20,000    |
| Rev. Stabiliz @ 1.5%         | \$ | 19,986    |
|                              | \$ | 1,352,419 |

FY 2017 Revenue Requirements = \$ 21,811,579  
 Proposed Step Increase for FY 2017 6.6%

| <u>Metered Rates</u>        | <u>Current</u> | <u>Proposed (FY2016)</u> | <u>Step Increase (FY 2017)</u> |
|-----------------------------|----------------|--------------------------|--------------------------------|
| Small (5/8 - 1")            | \$3.900        | \$4.046                  | \$4.313                        |
| Medium (1.5 - 2" & By pass) | \$3.489        | \$3.804                  | \$4.055                        |
| Large (3" and up)           | \$3.286        | \$3.804                  | \$4.055                        |
| Wholesale                   | \$2.726        | \$3.307                  | \$3.526                        |
| <u>Service Charges</u>      |                |                          |                                |
| Monthly                     |                |                          |                                |
|                             | 5/8            | \$10.00                  | \$10.48                        |
|                             | 3/4            | \$12.96                  | \$13.66                        |
|                             | 1              | \$17.68                  | \$18.72                        |
|                             | 1 1/2          | \$33.60                  | \$35.78                        |
|                             | 2              | \$42.93                  | \$45.79                        |
|                             | 3              | \$48.42                  | \$51.67                        |
|                             | 4              | \$109.89                 | \$117.57                       |
|                             | 6              | \$163.68                 | \$175.24                       |
|                             | 8              | \$232.83                 | \$249.38                       |
| <u>Fire Service</u>         |                |                          |                                |
| Public                      | /hydrant/qurt  | \$29.51                  | \$55.29                        |
| Pawtucket                   | \$/bill        | \$2.57                   | \$4.81                         |
| Private                     |                |                          |                                |
|                             | 2              | \$16.76                  | \$16.93                        |
|                             | 4              | \$35.67                  | \$36.55                        |
|                             | 6              | \$89.21                  | \$91.78                        |
|                             | 8              | \$161.72                 | \$167.02                       |
|                             | 10             | \$240.07                 | \$249.15                       |
|                             | 12             | \$348.65                 | \$362.98                       |

**PROPOSED STEP INCREASES**

**YEAR 3 - FY 2018**

Rate Year (FY 2017) Revenue Requirements = \$21,811,579  
 Step Increases for 2018

|                              |    |                |
|------------------------------|----|----------------|
| New Debt                     | \$ | 257,898        |
| Property Tax Increase        | \$ | 1,843          |
| Inflation: Labor @2%         | \$ | 55,174         |
| Inflation: Non-labor @ 2.00% | \$ | 90,619         |
| DBO O&M Contract @2.3%       | \$ | 44,448         |
| Rate Case Expense            | \$ | 20,000         |
| Rev. Stabiliz @ 3%           | \$ | <u>356,578</u> |
|                              | \$ | 826,561        |

FY 2018 Revenue Requirements = \$ 22,638,140  
 Proposed Step Increase for FY 2018 3.8%

|                             |               | <u>Current</u> | <u>Proposed (FY2016)</u> | <u>Step Increase (FY2017)</u> | <u>Step Increase (FY 2018)</u> |
|-----------------------------|---------------|----------------|--------------------------|-------------------------------|--------------------------------|
| <u>Metered Rates</u>        |               |                |                          |                               |                                |
| Small (5/8 - 1")            |               | \$3.900        | \$4.046                  | \$4.313                       | \$4.477                        |
| Medium (1.5 - 2" & By pass) |               | \$3.489        | \$3.804                  | \$4.055                       | \$4.209                        |
| Large (3" and up)           |               | \$3.286        | \$3.804                  | \$4.055                       | \$4.209                        |
| Wholesale                   |               | \$2.726        | \$3.307                  | \$3.526                       | \$3.659                        |
| <u>Service Charges</u>      |               |                |                          |                               |                                |
| Monthly                     | 5/8           | \$10.000       | \$10.48                  | \$11.17                       | \$11.60                        |
|                             | 3/4           | \$12.960       | \$13.66                  | \$14.56                       | \$15.11                        |
|                             | 1             | \$17.680       | \$18.72                  | \$19.96                       | \$20.71                        |
|                             | 1 1/2         | \$33.600       | \$35.78                  | \$38.15                       | \$39.59                        |
|                             | 2             | \$42.930       | \$45.79                  | \$48.82                       | \$50.67                        |
|                             | 3             | \$48.420       | \$51.67                  | \$55.09                       | \$57.17                        |
|                             | 4             | \$109.890      | \$117.57                 | \$125.34                      | \$130.09                       |
|                             | 6             | \$163.680      | \$175.24                 | \$186.82                      | \$193.90                       |
|                             | 8             | \$232.830      | \$249.38                 | \$265.86                      | \$275.94                       |
| <u>Fire Service</u>         |               |                |                          |                               |                                |
| Public                      | /hydrant/qurt | \$29.509       | \$55.29                  | \$58.94                       | \$61.18                        |
| Fire Service (Monthly Bill) | \$/bill       | \$2.570        | \$4.81                   | \$5.13                        | \$5.32                         |
| Private                     |               |                |                          |                               |                                |
|                             | 2             | \$16.755       | \$16.93                  | \$18.05                       | \$18.73                        |
|                             | 4             | \$35.674       | \$36.55                  | \$38.96                       | \$40.44                        |
|                             | 6             | \$89.212       | \$91.78                  | \$97.85                       | \$101.56                       |
|                             | 8             | \$161.719      | \$167.02                 | \$178.06                      | \$184.80                       |
|                             | 10            | \$240.067      | \$249.15                 | \$265.62                      | \$275.68                       |
|                             | 12            | \$348.654      | \$362.98                 | \$386.97                      | \$401.63                       |