BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

UNITED WATER OF RHODE ISLAND, INC.	**))**	**DOCKET NO. 4434**

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

FEBRUARY 3, 2014

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UNITED WATER OF RHODE ISLAND, INC.	))	DOCKET NO. 4255

Direct Testimony of Thomas S. Catlin

Introduction

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

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

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

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

Q. WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE?

A. From August 1976 until June 1977, I was employed by Arthur Beard Engineers in Phoenix, Arizona, where, among other responsibilities, I conducted economic feasibility, financial and implementation analyses in conjunction with utility construction projects. I also served as project engineer for two utility valuation studies.

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

In September 1981, I accepted a position as a utility rates analyst with Exeter Associates, Inc. I became a principal and vice-president of the firm in 1984. Since joining Exeter, I have continued to be involved in the analysis of the operations of public utilities, with particular emphasis on utility rate regulation. I have been extensively involved in the review and analysis of utility rate filings, as well as other types of proceedings before state and federal regulatory authorities. My work in utility rate filings has focused on revenue requirements issues, but has also addressed service cost and rate design matters. I have also been involved in analyzing affiliate relations, alternative regulatory mechanisms, and regulatory restructuring issues. This experience has involved electric, natural gas transmission and distribution, and telephone utilities, as well as water and wastewater companies.

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

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

Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

A. Yes. I am a member of the American Water Works Association (AWWA) and the Chesapeake Section of the AWWA. I serve on the AWWA's Rates and Charges Committee and on the AWWA Water Utility Council's Technical Advisory Group on Economics.

Q. **ON WHOSE BEHALF ARE YOU APPEARING?**

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

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

A. Yes, I have been asked by the Division to address water utility issues on numerous occasions. I testified on revenue requirement, cost of service and/or rate design issues in Newport Water Division, Docket Nos. 2029, 2985, 3457, 3578, 3675, 3818 4025 and 4243; Providence Water Supply Board, Docket Nos. 2022, 2048, 2304, 2961, 3163, 3446, 3684, 3832 and 4061; Kent County Water Authority, Docket Nos. 2098, 3942, and 4406; Woonsocket Water Department, Docket Nos. 2099 and 2904; United Water Rhode Island, Inc., (formerly Wakefield Water Company), Docket Nos. 2006 2873 and 4255; and Pawtucket Water Supply Board, Docket Nos. 3193, 3378, 3497, 3674 and 4171.

Purpose and Summary

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Exeter Associates was retained by the Division to assist it in the evaluation of the rate filing submitted by the United Water of Rhode Island, Inc. (UWRI or the Company) on August 13, 2013. This testimony presents my findings and recommendations with regard to UWRI's rate year rate base and net operating income at present rates. Based on these amounts, I have determined the overall revenue increase that would be required to generate the return on rate base recommended by Mr. Matthew I. Kahal on behalf of the Division. I also address the design of rates to recover the Division's recommended rate increase

Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR TESTIMONY?

A. Yes. I have prepared Schedules TSC-1 through TSC-19, which are attached to my testimony. These schedules present my findings regarding UWRI's rate year revenue requirements and the development of rates to recover those amounts.

Q. **WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR DETERMINATION OF UWRI'S REVENUE REQUIREMENTS?**

A. Consistent with UWRI's filing, I have accepted the 12 months ending December 31, 2012 as the test year. I have also accepted the 12 months ending December 31, 2014 as the rate year for purposes of determining the Company's revenue requirements and the revenue increase necessary to recover those requirements.

Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO THE APPROPRIATE INCREASE IN REVENUES IN THIS PROCEEDING?

A. As shown on Schedule TSC-1, it is my recommendation that UWRI receive a revenue increase of $1,006,902 in this proceeding. This amount is $556,251 less than the increase of $1,563,153 that UWRI has requested based on rate year revenues at present rates.

Q. PLEASE SUMMARIZE YOUR FINDINGS REGARDING THE COMPANY'S REVENUE REQUIREMENTS.

A. As shown on page 2 of Schedule TSC-1, I have determined the Company has a revenue deficiency of $1,006,902. This is the amount by which revenues at present rates are less than those required to generate an overall return of 7.72 percent after reflecting my adjustments to UWRI's claimed rate year rate base and operating income. The return of 7.72 percent represents Mr. Kahal's findings regarding the Company's overall cost of capital.

Schedule TSC-2 summarizes my adjustments to UWRI's proposed rate year rate base. Schedule TSC-3 provides a summary of my adjustments to rate year revenues and expenses and the resulting net income at present rates. Schedule TSC-4 presents a proof of income taxes at present and proposed rates.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. In the remainder of my testimony, I document and explain each of the adjustments to rate base and operating income which I have made to arrive at the test year revenue surplus shown on Schedule TSC-1. My discussion of these adjustments is organized into sections corresponding to the issue being addressed. These sections are set forth in the Table of Contents for this testimony.

Cash Working Capital

Q. HOW HAS UWRI CALCULATED ITS CLAIMED ALLOWANCE FOR CASH WORKING CAPITAL?

A. The Company has calculated its claimed cash working capital allowance as one-eighth (1/8th) of operating and maintenance (O&M) expense.

Q. WHAT ADJUSTMENTS ARE YOU PROPOSING TO MAKE TO UWRI'S CLAIM?

A. I am proposing to make two adjustments to UWRI's claim. First, I have eliminated tank painting amortization expense from the expense base used in the calculation of cash working capital. UWRI records the amortization of deferred painting costs as O&M expense. However, given that the balance of deferred costs is recorded as a regulatory asset and included in rate base, the amortization should be treated like all other depreciation and amortization expense and not included in the calculation of cash working capital. Second, I have adjusted the O&M base to which the one-eighth factor is applied to reflect the adjustments to O&M expense that I have made on behalf of the Division.

Q. HAVE YOU PREPARED A SCHEDULE SHOWING YOUR ADJUSTED CASH WORKING CAPITAL ALLOWANCE?

Yes, Schedule TSC-5 presents my calculation of the Division's recommended allowance for cash working capital based on the one-eighth method. As shown there, I have calculated a cash working capital allowance of $218,054, which is $16,974 less than amount included in UWRI's filing.

Deferred Rate Case Expense

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO ELIMINATE DEFERRED RATE CASE EXPENSE FROM RATE YEAR RATE BASE.

A. UWRI is proposing to amortize its projected rate case expense in this proceeding along with the remaining unamortized balance of rate case expenses from Docket No. 4255 over two years. The Company has then included the projected average balance of unamortized rate case expense, net of deferred income taxes, during the 2014 rate year in rate base. Consistent with this Commission's long-standing practice, as affirmed by the Rhode Island Supreme Court in Providence Gas Company v. Malachowski (656 A 2d. 949 at 953 (R.I. 1995)), I have eliminated the balance of deferred rate case expenses from rate base. As shown on my rate base summary schedule (TSC-2), this adjustment reduces rate base by $199,366.

Accumulated Deferred Income Taxes

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE BALANCE OF ACCUMULATED DEFERRED INCOME TAXES?

A. In developing its projection of the balance of accumulated deferred income taxes (ADIT) in the rate year, the Company did not take into account the provision for federal bonus depreciation of 50 percent in 2013. As a result, UWRI's projected rate year ADIT balance is understated. I have adjusted the projected balance of ADIT for the rate year to take federal bonus depreciation into account. As shown on Schedule TSC-6, this adjustment increases the balance of ADIT and reduces rate base by $906,105.

Rate Year Revenue

Q. PLEASE EXPLAIN HOW COMPANY WITNESS UGBOAJA DEVELOPED HIS PROJECTIONS OF RATE YEAR CUSTOMER NUMBERS AND CONSUMPTION BY CUSTOMER CLASS.

A. Mr. Ugboaja relied on the use of trend analyses for all customer classes other than public and private fire service. For both the residential and non-residential classes, the number of customers in the rate year was developed using a 5-year trend analysis. To develop consumption for the residential class, Mr. Ugboaja relied on a 7-year trend analysis. For customer classes other than residential, the Company used a 4-year average of per-customer usage which was then multiplied by the projected number of customers developed using a five year trend to obtain projected total usage.

Q. PLEASE SUMMARIZE THE APPROACH USED TO PROJECT RESIDENTIAL CONSUMPTION.

A. To develop his projections of total residential class usage, Mr. Ugboaja used a trend analysis relying on annual historical data spanning the period from 2003 through 2012. He calculated six trend lines, with each trend line relying on data ending in 2012 but beginning on successively more recent starting years. The first starting year used was 2003; the last starting year was 2008. This provided a total of six trend lines, and from those trend lines, Mr. Ugboaja selected the trend line using the 2006 through 2012 data (7 years).

Q. IS THE APPROACH USED TO PROJECT RESIDENTIAL CONSUMPTION REASONABLE?

A. No. There does not appear to be any reason for selecting 2006-2012 trending over the five other alternative trend lines computed by Mr. Ugboaja other than the Company's contention that "…a seven year trend of actual billed residential consumption best reflected what it anticipates will occur during the rate year." (Direct Testimony of Obioma N. Ugboaja, page 5, line 23 through page 6, line 2) This statement suggests that the quantitative methodology was selected based on the results obtained rather than on an objective assessment of the appropriateness of the approach.

Q. ABSENT THE COMPANY'S PREFERENCE FOR THE RESULTS, ARE THERE ANY CLEAR REASONS TO SELECT THE 7-YEAR TREND ANALYSIS OVER THE FIVE ALTERNATIVES?

A. No, there are not.

Q. ARE THERE ANY ISSUES ASSOCIATED WITH THE DATA RELIED UPON FOR THE COMPANY'S PROJECTION OF THE NUMBER OF RESIDENTIAL CUSTOMERS THAT RAISE CONCERNS?

A. Yes. The data series representing the annual number of residential customers is internally inconsistent. Between December 2011 and January 2012, the total number of residential customers declined by 199. The average change in the number of residential customers (December of one year compared to January of the following year) between 2003 and 2011 was approximately 16. The largest single December-to-January change other than 2011-to-2012 was 81 customers between December 2005 and January 2006. According to the response to Div. 4-1, the large change in the number of customers between December 2011 and January 2012 is attributable to the Company implementing a new customer care and billing system in October 2011 and the fact that there are differences between the old system and the new system in the way customers are counted. Consequently, the customer count data for years prior to 2012 is inconsistent with the 2012 and subsequent customer count data, and a trend analysis using these data is inappropriate.

Q. IS THE CUSTOMER TREND ANALYSIS CONDUCTED FOR THE OTHER CUSTOMER CLASSES SIMILARLY AFFECTED?

A. Yes. Commercial, industrial, and public authority customer counts also declined between December 2011 and January 2012. I note, however, while the industrial customer count number declines by ten percent between December 2011 and January 2012, that represents only one customer.

Q. IS THE CAUSE OF THE DECLINES THE SAME AS FOR THE RESIDENTIAL CLASS?

A. Yes. For this reason, the trending of the customer count data as well as the trending of the usage per customer data for these classes is unreliable for the same reason as is the case for the residential data. That is, a fundamental inconsistency exists in the data series.

Q. DO YOU BELIEVE THERE ARE ANY MEANINGFUL TRENDS IN THE CUSTOMER DATA FOR ANY OF THE MAJOR CUSTOMER CLASSES OVER THE PAST FIVE YEARS?

A. No. There does not appear to be any strong and sustained trend in the number of customers for any of the major customer classes. While trends can be arithmetically computed, as was done by Mr. Ugboaja, examination of these data does not suggest the existence of a discernible trend. Consequently, using a trending approach to project the data series forward does not provide a set of meaningful results, especially in light of the data inconsistency.

Q. IN LIGHT OF THESE FINDINGS, HOW ARE YOU PROPOSING TO PROJECT THE NUMBER OF WATER SERVICE CUSTOMERS DURING THE 2014 RATE YEAR?

A. Because there is no reliable long-term trend in the number of water service customers due in part to the change in billing systems at the end of 2011 that resulted in pre-2012 customer data being inconsistent with 2012 and subsequent data, I have utilized actual customer numbers by rate class in 2013 as my starting point. I have then adjusted these counts by the change in the number of customers from 2012 to 2013 to arrive at the number of water service customers on each rate class for the 2014 rate year.

Q. HOW DO YOUR PROJECTIONS OF RATE YEAR CUSTOMERS COMPARE TO THE COMPANY'S?

A. My estimate is that UWRI will have 8,148 total water service customers compared to the Company's estimate of 8,147 customers. My estimate includes 9 more residential customers, 10 less commercial customers and 2 more public authority customers.

Q. HOW ARE YOU PROPOSING TO ESTIMATE RESIDENTIAL WATER CONSUMPTION FOR THE RATE YEAR?

A. In lieu of the seven year trend utilized by the Company, I am proposing to base residential consumption for the rate year on the four-year average for 2010 through 2013. As shown in Table A below, residential consumption over this period has been relatively stable, with all years being within plus or minus two percent of the mean.

TABLE A
Residential Consumption
(1,000 Gallons)

2010	419,497
2011	403,689
2012	411,040
2013	409,445
Average*	410,918
***Used for 2013 Rate Year**	

Q. HOW ARE YOU PROPOSING TO DETERMINE THE PROJECTED RATE YEAR CONSUMPTION FOR THE NON-RESIDENTIAL CLASSES?

A. The Company based its projection of rate year consumption for each non-residential customer class by first determining the four year average consumption per customer for the period 2009 through 2012. It then multiplied this average for each class by the projected 2014 rate year number of customers for that class based on its trend analysis. Because of the issues with customer counts and the Company's trend analysis discussed previously, I have based the 2014 rate year consumption for each non-residential class on the average consumption for that class in the four years from 2010 through 2013. As shown in Table B, this results in projected rate year consumption totaling 615,551 thousand gallons, of which 404,341 thousand gallons is for the sales for resale customer.

Public

	Commercial	Industrial	Public Authority	Resale	Total
2010	178,475	1,952	26,361	359,934	566,722
2011	181,502	2,514	27,698	426,596	638,310
2012	182,404	2,163	28,202	419,351	632,120
2013	184,418	1,916	27,235	411,483	625,052
Average*	181,700	2,136	27,374	404,341	615,551

***Used for 2014 Rate Year**

Q. HAVE YOU MADE ANY ADJUSTMENTS TO THE UNITS FOR FIRE SERVICE?

A. Yes. The Company projected no increase in the number of private fire services and public hydrants from the test year to the rate year. I have adjusted the rate year units of service to reflect actual 2013 units of service, which include the addition of one private fire service and one public hydrant.

Q. HAVE YOU PREPARED A SCHEDULE SHOWING RATE YEAR REVENUES AT PRESENT RATES BASED ON YOUR PROJECTION OF CUSTOMERS AND WATER CONSUMPTION?

A. Yes. Schedule 7 provides a summary of the rate year billing units and provides the calculation of revenues at present rates. As shown on page 2 of that Schedule, the revisions I have made to UWRI's projection of rate year customers and consumption result in an increase in revenues at present rates of $80,673.

Wages and Benefits Capitalized

Q. HOW DID UWRI DETERMINE THE PERCENTAGE OF WAGES AND BENEFITS THAT WILL BE CHARGED TO EXPENSE IN THE RATE YEAR?

A. UWRI's wage costs consist of the wages for its own employees that are capitalized or expensed, plus wages transferred in from other United Water companies that are charged to expense. The Company based the percentage that each of these three categories of wages are expected to represent of total rate year wages on the three year averages for the years 2010, 2011, and 2012.

Q. WHAT CHANGE ARE YOU PROPOSING TO MAKE TO THE PERCENTAGE OF WAGES AND BENEFITS CHARGED TO EXPENSE IN THE RATE YEAR?

A. During 2010, the percentage of UWRI's wages charged to expense was 86.18 percent compared to 81.10 percent in 2011 and 80.86 percent in 2012. To determine whether 2010 was anomalous, Div. 4-5 asked UWRI to provide similar data for 2008, 2009, and 2013, or the most recent 12 months available. This response indicated that the percentage of UWRI wages charged to O&M was 72.00 percent in 2008, 73.84 percent in 2009 and 78.28 percent for the 12 months ended November 2013. Based on these results, I concluded that the percentage of wages charged to O&M in 2010 and prior years is not representative of ongoing operations. Therefore, I have revised the percentage of wages charged to expense for the rate year to reflect the three-year average for 2011, 2012, and 2013[1].

Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE EFFECT OF THIS CHANGE?

A. Yes. Schedule TSC-8 presents my adjustment to rate year wages and benefits to reflect the updated percentage of wages charged to expense. As shown on page 2 of that schedule, the three-year percentage of wages expensed is 80.08 percent and the percent charged to capital is 19.92 percent. After accounting for the average percentage of wages transferred in from others, the net percentage of wages charged to expense is 82.08 percent and the percent capitalized is 17.92 percent.

Page 1 of Schedule 7 shows the derivation of the adjustment to wages and benefits charged to expense in the rate year to reflect these revised percentages. As shown there, this adjustment reduces the rate year wages charged to expense by $15,931 and increases the benefits transferred out (reduces expense) by $10,157. I would note that I have based the calculation on the Company's rate year wage and benefits claims. In calculating my subsequent adjustments to wages and benefits, I have determined the change in rate year expense based upon the updated three-year average percentages for 2011 through 2013.

[1] Data for the 12 months ending November 2013 has been used pending the availability of data for calendar year 2013.

<u>Incentive Compensation</u>

Q. PLEASE SUMMARIZE UWRI'S CLAIM FOR INCENTIVE COMPENSATION EXPENSE.

A. As shown on Exhibit 3 (Gil), Schedule 2A, page 1 of 4, the Company's claimed rate year payroll expense includes $37,745 for incentive compensation, of which 84.33 percent is charged to O&M under UWRI's proposal and of which 82.08 percent is charged to O&M under my recommended expense allocator. This amount is based on all employees receiving their targeted bonus payments under the Company's Short Term Incentive Plan (STIP). For exempt employees, these target payments range from five percent to 15 percent of their salaries and are based on achieving a combination of financial and performance goals. However, no bonuses are paid if the 80 percent threshold for the financial goals is not achieved. For non-exempt employees, the three percent award is based on business unit financial performance, safety, and customer service goals.

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO INCENTIVE COMPENSATION EXPENSE?

A. I am proposing to adjust the incentive compensation allowed in rates related to exclude the incentive compensation amounts paid to UWRI's exempt employees that are directly associated with meeting financial performance goals. The effect of this adjustment is to exclude 50 percent of the bonuses for the Manager and Superintendent and 40 percent of the bonus for the Supervisor from the allowable expenses for ratemaking. The remaining 50 percent of the bonuses for the Manager and Superintendent and 60 percent of the bonus for the Supervisor are related to meeting non-financial goals, which I have treated as an allowable expense for ratemaking.

Q. PLEASE EXPLAIN WHY YOU ARE PROPOSING TO ELIMINATE THE PORTION OF STIP EXPENSE FOR EXEMPT EMPLOYEES DIRECTLY ATTRIBUTABLE TO MEETING FINANCIAL GOALS.

A. The portion of STIP expense that is directly attributable to meeting financial performance goals is not properly recoverable from ratepayers for several reasons. First, if the financial goals are set properly, achieving the necessary performance should be self-supporting. That is, measures that achieve additional cost savings, improve sales, or otherwise improve the financial results of the Company should provide the income necessary to fund the awards. Second, the payouts are made independent of the quality of service, efficiency or safety goals. Finally, the incentive to improve financial performance is not necessarily consistent with ratepayers' interests.

Q. WHAT IS THE EFFECT OF YOUR TWO ADJUSTMENTS TO THE INCENTIVE COMPENSATION AMOUNTS INCLUDED IN RATES FOR UWRI'S EXEMPT EMPLOYEES?

A. As shown on Schedule TSC-9, adjusting the incentive compensation expense included in rates attributable to achieving financial performance goals reduces rate year labor costs by $13,341, of which $10,951 is allocated to expense based on the capital and expense ratios that I have recommended. Accounting for the concomitant reduction in payroll taxes of $499 results in a total reduction in test expense expenses of $11,450.

Q. ARE YOU PROPOSING AN ADDITIONAL ADJUSTMENT TO THE INCENTIVE COMPENSATION EXPENSE INCLUDED IN THE BILLINGS TO UWRI FROM THE SERVICE COMPANY?

A. Yes. In addition to the amounts included in rate year expenses for UWRI employees in Rhode Island, Management and Service (M&S) fees billed to the Company by UWRI Water Management and Services (UWM&S) also include incentive compensation paid to UWM&S employees. The amounts for UWM&S employees include bonuses paid under two plans: the STIP and the Long-Term Incentive Plan (LTIP). According to the response to Div. 4-7, rate year M&S fees include $16,260 for STIP payments to UWM&S employees, of which 40 percent is attributable to meeting financial performance goals. In addition, M&S fees include $7,612 of LTIP payments, which are based 100 percent on achieving financial goals. For the same reasons that I excluded incentive compensation payments attributable to meeting financial performance goals for UWRI's Rhode Island employees, I am also proposing to eliminate those amounts paid to UWM&S employees. As shown on Schedule TSC-10, this adjustment reduces M&S billings by $15,965 when the FICA taxes associated with the incentive compensation payments are taken into account.

<u>Chemicals Expense</u>

Q. WOULD YOU BRIEFLY SUMMARIZE HOW UWRI DEVELOPED ITS ESTIMATE OF CHEMICAL COSTS FOR THE RATE YEAR?

A. Yes. UWRI uses three chemicals in the treatment of its water supply: lime, sodium hypochlorite, and Nalco C-9. To develop its projection of rate year chemical expense, UWRI first estimated the average quantity used per million gallons (MG) of water treated over the three years from 2010 through 2012. The Company then estimated the water production for the rate year based on its projection of rate year consumption adjusted to reflect the three-year average of non-revenue producing water (the difference between water produced and water sold). This estimate of rate year water production was multiplied by the average quantity of chemical used per MG of water produced to determine the rate year estimated usage of each treatment chemical. Finally, UWRI multiplied these chemical quantities by the estimated rate year unit chemical prices to obtain projected rate year chemicals expense.

Q. WHAT ADJUSTMENTS ARE YOU PROPOSING TO MAKE TO UWRI'S PROJECTION?

A. I have made several changes to UWRI's projection of chemicals expense for the rate year, primarily in the form of updates to the data utilized by the Company. First, I have updated the average quantities of chemicals used per MG of water treated to reflect the three-year average results for 2011 through 2013 instead of 2010 through 2012. Similarly, I have updated the non-revenue producing water percentage to reflect the average level for 2011 through 2013. Third, I have revised the rate year water consumption to reflect the Divisions recommendation. Finally, I have updated the calculation to reflect actual chemical prices for 2014.

Q. HAVE YOU MADE ANY CHANGES OTHER THAN THE UPDATES YOU JUST DISCUSSED?

A. Yes. The use of Nalco C-9 has been decreasing over the last several years compared to the 2010 level. According to the response to Div. 4-15, the decline from 2010 that took place in 2011 was because the dosing rate was cut by one-third in 2011. In 2013, Nalco C-9 usage further declined "considerably because UWRI is treating less frequently due to its last lead and copper test showing no lead and copper." Accordingly, I have utilized the pounds of Nalco C-9 per MG of water treated in 2013 to estimate the rate year usage of this chemical.

Q. WHAT AFFECT DO THESE CHANGES HAVE ON RATE YEAR CHEMICALS EXPENSE?

A. As shown on Schedule TSC-11, the changes I have made to the projection of rate year chemicals costs reduces rate year chemicals expense by $9,044.

Power Supply Expense

Q. HOW DID THE COMPANY PROJECT RATE YEAR POWER SUPPLY EXPENSE?

A. UWRI has two power supply related accounts. For the smaller of the two, Other Utilities Power – Account 50620, the Company utilized a three-year average of the costs incurred in 2010 through 2012, and adjusted for inflation to the rate year. For the larger of the two, Power – Account 50610, UWRI followed an approach similar to that for projecting chemical costs. That is, UWRI determined the average kWh per MG produced in 2012 and multiplied that amount by the projected rate year production based on its estimate of rate year consumption to determine rate year electricity use. This use was multiplied by projections of the National Grid delivery rates and Constellation Energy supply rates to determine projected rate year power costs.

Q. WHAT ADJUSTMENTS ARE PROPOSING TO UWRI'S ESTIMATE OF POWER COSTS IN ACCOUNT 50610 – POWER?

A. In its filing, UWRI treated all of the power for which the costs are included in Account 50610 as production related and for which the supply is provided by Constellation Energy. However, in reviewing, the information provided by UWRI in response to Div. 4-9, I determined that Account 50610 includes not only the two Large Demand (Rate G-32) accounts for the production facilities (well fields), but also a number of Small C&I (Rate C-06) accounts for other locations that are not associated with water production. Therefore, I have revised the projection of Account

50610 power costs to separately account for production and non-production related power.

To determine production related power costs for the rate year, I calculated the average kWh per MG of water produced in 2013 for the two Rate G-32 accounts. I then multiplied this average by the same projected estimate of rate year water production based on the Division's consumption projections that I used for chemicals expense to estimate power use. I then multiplied this estimate of power use by the average rate paid to National Grid for delivery service in 2013 and by the new energy supply rate that has been agreed to by UWRI and Constellation Energy for 2014 through 2016 to estimate total production related electricity costs.

To determine the total cost of power in Account 50610 for the rate year, I then added the amounts paid to National Grid for delivery and supply service in 2013 for the Small C&I (non-production related) accounts. As shown in Schedule TSC-12, I have estimated rate year power costs in Account 50610 to be $236,635, which is $18,031 greater than UWRI's projection.

Q. HOW HAVE YOU ESTIMATED OTHER UTILITIES POWER (ACCOUNT 50620) FOR THE RATE YEAR?

A. I have based my estimate of Other Utilities Power costs for the rate year on the average costs incurred over the three years from 2011 through 2013. In doing so, I have adjusted the 2011 costs downward to exclude $12,659 incurred for additional fuel and diesel for the generator due to power outages caused by the storm Irene. To include some allowance for storm costs, I have not excluded the $6,800 incurred for diesel costs due to Hurricane Sandy during 2012. As shown on Schedule TSC-12, this calculation results in a rate year allowance for Other Power Costs of $24,295, which is $7,902 less than UWRI's claim for this account. I have not included an inflation adjustment because costs have steadily declined and would be even lower in 2012 and on average had I excluded the costs associated with Hurricane Sandy.

<u>Amortization of PEBOP Transition Obligation</u>

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE AMORTIZATION OF THE TRANSITION OBLIGATION ASSOCIATED POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS (PEBOP).

A. The initial transaction obligation associated with PEBOP (retiree medical) costs was created at the time SFAS No. 106 was adopted. That obligation is being amortized over 20 years and the amortization will be complete in December 2014. Consistent with UWRI's proposal to amortize the costs of the current rate case, as well as the remaining unamortized balance of the costs of the last rate case, over an expected two year rate effective period, I am proposing to amortize the remaining PEBOP transition obligation over two years. This will prevent the over-recovery of these costs. As shown on Schedule TSC-13, this adjustment reduces rate year expense by $2,557.

<u>Transportation Expense</u>

Q. WHAT ADJUSTMENTS HAVE YOU MADE TO THE PROJECTED TRANSPORTATION EXPENSE THAT THE COMPANY INCLUDED FOR THE RATE YEAR?

A. I have made three adjustments to the Company's claimed rate year allowance for transportation expense. UWRI based its rate year claim on a three year average of historical costs adjusted for the inflation from the three year average or midpoint to 2014. As discussed subsequently in more detail, I have updated the various inflation factors used by UWRI to reflect updated 2013 results and 2014 projections. I have adjusted the determination of rate year transportation expense to reflect this update.

Second, UWRI adjusted the three year average of maintenance and repair costs for 2010 through 2012 to include the three year amortization of the cost of extraordinary backhoe repairs undertaken in 2013. I have accepted this adjustment, but have adjusted the 2012 expenses included in the three year average to eliminate $7,798 of abnormally high costs for trailer and truck repairs.

Finally, a portion of transportation costs is charged to construction based on the percentages of wages capitalized. I have adjusted transportation expense to reflect the updated percentage of wages capitalized that I explained previously.

Schedule TSC-14 presents a comparison of my calculation of rate year transportation expense with that of the Company. As can be seen from the schedule, the revisions I have described reduce rate year transportation expense by $4,858.

Outside Services Expense

Q. PLEASE EXPLAIN WHAT ADJUSTMENTS YOU HAVE MADE TO OUTSIDE SERVICES EXPENSE.

A. I have made several adjustments to UWRI's projection of rate year outside services expense. First, the Company started with test year expenses and adjusted those amounts for inflation and several other changes. I have revised the adjustment for inflation to reflect my update of the Company's inflation factors to reflect the most recent data available.

Second, UWRI adjusted temporary help expense to include $10,000 for summer help to supplement its own staff in performing hydrant painting. UWRI has based this amount on two workers each working 42 eight hour days at $15 per hour.

Because the Company has not done this previously and has no experience as to how well this program will work, I am proposing that the initial allowance in rates be set at $5,000. If this approach to hydrant painting is successful, UWRI can request expansion of the program in its next filing.

Third, UWRI adjusted actual test year expenses to include $3,325 for efficiency testing of seven wells. In response to Div. 4-17, the Company indicated that the correct amount is $1,425 for the efficiency testing of three wells. I have incorporated this correction in my estimate of rate year outside services expense.

Finally, the Company included $40,000 for well rehabilitation expense. This represents the projected cost of well rehabilitation that is considered to be an expense and is in addition to the estimated capital costs of $40,000. According to the response to Div. 4-18, the Company expects to rehabilitate an average of one well every two to three years. Therefore, I am proposing to adjust UWRI's claim to include $16,000 as the normalized level of expense. ($40,000 ÷ 2.5 years = $16,000)

Q. WHAT IS THE EFFECT OF THESE CHANGES ON OUTSIDE SERVICE COSTS FOR THE RATE EYAR?

Schedule TSC-15 shows a comparison of my recommendations with that of the Company as indicated on that schedule, the revisions I have made reduce rate year outside services expense by $31,317.

Inflation Factors

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO REFLECT UPDATED INFLATION FACTORS?

A. In its filing, UWRI used three different inflation factors to adjust costs from historical levels to projected rate year levels. These included: an inflation factor to adjust three year averages for 2010 through 2012 to the 2014 rate year; a factor to adjust 2012 test year costs to the rate year; and one to adjust 2013 budgeted costs to the rate year. In each case, UWRI relied upon the Blue Chip Economic Indicators forecast as of March 2013 as the source for the projected level of inflation in 2013 and 2014. I have revised the inflation factors utilized by the Company to reflect updated projections of inflation for 2013 and 2014 based on the January 2014 Blue Chip Economic Indicators. My updated inflation factors are developed on page 2 of Schedule TSC-16.

Q. HAVE YOU CALCULATED THE EFFECT OF USING THE UPDATED INFLATION FACTORS ON RATE YEAR EXPENSES?

A. Yes. Page 1 of Schedule TSC-16 details the calculation of my adjustment to rate year expenses to reflect the updated inflation factors calculated on page 2 of Schedule TSC-16. As shown there, this adjustment reduces projected expenses for the rate year by $2,010. This adjustment in addition to the effect which updating the Company's inflation factors had on my adjustments to transportation expense and outside service expense, as discussed previously.

Property Taxes

Q. HOW DID UWRI DEVELOP ITS PROJECTION OF RATE YEAR PROPERTY TAXES?

A. The Company projected rate year property taxes by escalating 2013 property tax expense by the average growth rate over the four years from 2009 to 2013.

Q. DO YOU AGREE WITH THIS PROPOSED METHODOLOGY?

A. No. In its filing, the Company has consistently utilized three years of data in developing its rate year cost estimates. Moreover, in its last rate case, UWRI utilized a three year average growth rate to project rate year property taxes. Based on the response to Div. 2-42, the reason that UWRI used a four year growth rate is because it produced a percentage increase that was close to the increase in 2013 over 2012. Matching a particular percentage increase is not an appropriate basis for selecting one trending or growth period over another. The reason for using a multi-year growth rates is to recognize that the increase is not known and the change or growth varies from year to year. Instead, consistency should be maintained from case to case in the methodology used to project costs.

Q. WHAT IS YOUR RECOMMENDATION?

A. I am recommending that the growth rate in property tax expense be based on the three year average annual growth rate from 2010 to 2013. This will maintain consistency with the procedure used in the last case, as well as the general practice in this case of relying on cost data from 2010 to 2013. As shown on Schedule TSC-17, this results in projected rate year property taxes of $306,832, which is $8,192 less than UWRI's claim.

<u>Rate Design</u>

Q. HOW ARE YOU PROPOSING TO DESIGN RATES TO RECOVER THE REVENUE INCREASE THAT YOU HAVE IDENTIFIED ON BEHALF OF THE DIVISION?

A. In its prior rate case in Docket No. 4255, the Company presented a comprehensive class cost of service study that was reviewed and generally found to be reasonable by the Division's witness in that proceeding. Therefore, for this proceeding, I am accepting UWRI's proposal to recover the revenue increase through uniform percentage increases in the service charges and commodity charges for all water and fire service customers.

Q. HAVE YOU PREPARED SCHEDULES SHOWING THE CALCULATION OF THE RATES THAT YOU ARE PROPOSING?

A. Yes. Schedule TSC-18 shows the derivation of the uniform percentage increase in existing rates necessary to generate the required rate increase. As shown on that schedule, the overall percentage increase in rates is 27.10 percent. Schedule TSC-19 shows the calculation of the proposed rates based on the application of the 27.10 percent increase to the current rates. Schedule TSC-19 also provides a proof of revenue at present and proposed rates.

DOES THIS COMPLETE YOUR DIRECT TESTIMONY

A. Yes it does.

BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

UNITED WATER OF	**)**	
RHODE ISLAND, INC.	**)**	**DOCKET NO. 4255**

SCHEDULES ACCOMPANYING THE

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

FEBRUARY 3, 2014

EXETER

ASSOCIATES, INC.
10480 Little Patuxent Parkway
Suite 300
Columbia, Maryland 20904

UNITED WATER RHODE ISLAND, INC.

Summary of Operating Income
Rate Year Ended December 31, 2014

	Amount per Company at Present Rates	Division Adjustments	Amount per Division at Present Rates	Revenue Increase/ (Decrease)	Amounts After Revenue Incr. / (Decr.)
Operating Revenues					
Retail Sales	$ 2,709,794	$ 72,248	$ 2,782,042	$ 754,123	$ 3,536,165
Sales for Resale	$ 447,403	7,817	455,220	123,929	579,149
Fire Protection	477,732	608	478,340	129,022	607,362
Other Operating Revenues	35,337	-	35,337	-	35,337
Total Operating Revenues	$ 3,670,266	$ 80,673	$ 3,750,939	$ 1,007,074	$ 4,758,013
Operating Expenses					
O&M Expense	$ 2,301,468	(92,407)	$ 2,209,061	3,154	$ 2,212,215
Depreciation Expense	600,370	-	600,370	-	600,370
Property Tax	315,024	(8,192)	306,832	-	306,832
Payroll Rax	59,265	(499)	58,766	-	58,766
Gross Receipts Tax	45,878	1,008	46,887	12,588	59,475
Income before Income Taxes	$ 348,261	$ 180,763	$ 529,024	$ 991,331	$ 1,520,355
Current Income Taxes	(152,784)	74,862	(77,922)	346,907	268,985
Deferred Federal Income Taxes	118,139	-	118,139		118,139
Amortization of ITCs	(4,662)	-	(4,662)	-	(4,662)
Total Operating Expenses	$ 3,282,698	$ (25,228)	$ 3,257,470	$ 362,649	$ 3,620,119
Utility Operating Income	$ 387,568	$ 105,902	$ 493,469	$ 644,424	$ 1,137,894
Rate Base	$ 15,859,819		$ 14,737,374		$ 14,737,374
Rate of Return	2.44%		3.35%		7.72%

UNITED WATER RHODE ISLAND, INC.

Determination of Revenue Increase
Rate Year Ended December 31, 2014

	Amount per Company (1)	Amount Per Division	Amount per Division Source
Proposed Rate Base	15,859,819	$ 14,737,374	Schedule TSC-2
Required Rate of Return	8.75%	7.72%	
Net Operating Income Required	$ 1,387,734	$ 1,137,725	
Net Operating Income at Present Rates	387,568	493,469	Schedule TSC-1, page 1
Net Income Surplus/(Deficiency)	$ (1,000,166)	$ (644,256)	
Revenue Multiplier (2)	1.5628923	1.5628923	
Base Rate Revenue Increase	$ 1,563,152	$ 1,006,902	

Verification

Revenue Increase/(Decrease)		$ 1,563,152	$ 1,006,902
PUC Assessment	0.31317%	$ 4,895	$ 3,153
Gross Receipts Tax	1.25%	19,539	12,586
Federal Taxable Income		$ 1,538,717	$ 991,162
Federal Income Tax	35.00%	538,551	346,907
Net Income		$ (1,000,166)	$ (644,255)

Notes:
(1) Per Exhibit 1 (Prettyman), Schedule 1.

(2) Calculation of Conversion Factor

	Tax Rates	
Revenues		1.000000
PUC Assessment	0.31317%	0.003132
Gross Receipts Tax	1.25%	0.012500
Net Federal Taxable Income		0.984368
Federal Income Tax	35.00%	0.344529
Revenue Conversion Factor		0.6398394
Revenue Multiplier		1.5628923

UNITED WATER RHODE ISLAND, INC.

Summary of Rate Base
Rate Year Ended December 31, 2014

Description	Amount per Company (1)	Division Adjustments (2)	Adjusted Per Division
Utility Plant in Service	$ 28,149,420		$ 28,149,420
Less: Accumulated Depreciation and Amortization	(7,003,970)		(7,003,970)
Net Utility Plant in Service	$ 21,145,450	$ -	$ 21,145,450
Materials and Supplies	86,062		86,062
Cash Working Capital	287,684	(16,974)	270,710
Deferred Tank Painting (net of Deferred Income Tax)	168,165		168,165
Deferred Rate Case Expense	199,366	(199,366)	-
Total Additions	$ 741,277	$ (216,340)	$ 524,937
	-	-	-
Contributions in Aid of Construction	(3,533,455)	-	(3,533,455)
Accumulated Deferred Income Taxes	(1,842,541)	(906,105)	(2,748,646)
Unamortized ITCs	(89,099)		(89,099)
Unfunded FAS 106 (net of Deferred Income Tax)	(561,813)	-	(561,813)
Total Deductions	$ (6,026,908)	$ (906,105)	$ (6,933,013)
Total Rate Base	$ 15,859,819	$ (1,122,445)	$ 14,737,374

Notes:
(1) Per Exhibit 3 (Michaelson), Schedule 1, page 4 of 4.

(2) Refer to page 2 of this Schedule.

UNITED WATER RHODE ISLAND, INC.

Summary of Adjustments to Rate Base
Rate Year Ended December 31, 2014

	Amount	Source
Rate Base per Company Filing	$ 15,859,819	Per Exhibit 3, Schedule 1, page 4
Division Adjustments		
Cash Working Capital	(16,974)	Schedule TSC-5
Deferred Rate Case	(199,366)	Refer to Testimony
Accumulated Deferred Income Taxes	(906,105)	Schedule TSC-6
Total Division Adjustments	$ (1,122,445)	
Division Adjusted Rate Base	$ 14,737,374	

UNITED WATER RHODE ISLAND, INC.

Summary of Adjustments to Net Income
Rate Year Ended December 31, 2014

	Amount	Source
Net Income per Company	$ 387,568	Exhibit 3 (Michaelson), Schedule 10
Division Adjustments		
Rate Year Revenue	51,618	Schedule TSC-7
Wages and Benefits Charged to Expense	16,957	Schedule TSC-8
Incentive Compensation-Company Employees	7,442	Schedule TSC-9
Incentive Compensation-UWM&S Fees	10,377	Schedule TSC-10
Chemicals Expense	5,879	Schedule TSC-11
Power Expense	(6,584)	Schedule TSC-12
PEPOB Transition Obligation	1,662	Schedule TSC-13
Transportation Expense	3,158	Schedule TSC-14
Outside Services Expense	20,356	Schedule TSC-15
Inflation	1,306	Schedule TSC-16
Property Taxes	5,325	Schedule TSC-17
Interest Synchronization	(11,594)	Schedule TSC-4
Total Division Adjustments	$ 105,902	
Net Income Per Division	$ 493,470	

UNITED WATER RHODE ISLAND, INC.

Summary of Adjustments to Net Income
Rate Year Ended December 31, 2014

	Revenues	O&M Expenses	Depreciation Expense	Taxes Other Than Oincome	Current Federal Income Taxes	Deferred Federal Income Taxes	ITC Amortization	Net Operating Income
Net Income per Company	$ 3,670,266	$ 2,301,468	$ 600,370	$ 420,167	$ (152,784)	$ 118,139	$ (4,662)	$ 387,568
Division Adjustments								
Rate Year Revenue	80,673	253	-	1,008	27,794	-	-	51,618
Wages and Benefits Charged to Expense		(26,088)			9,131	-	-	16,957
Incentive Compensation-Company Employees		(10,951)		(499)	4,007	-	-	7,442
Incentive Compensation-UWM&S Fees		(15,965)			5,588	-	-	10,377
Chemicals Expense		(9,044)			3,165	-	-	5,879
Power Expense		10,129			(3,545)	-	-	(6,584)
PEPOB Transition Obligation		(2,557)			895	-	-	1,662
Transportation Expense		(4,858)			1,700	-	-	3,158
Outside Services Expense		(31,317)			10,961	-	-	20,356
Inflation		(2,010)			703	-	-	1,306
Property Taxes				(8,192)	2,867	-	-	5,325
Interest Synchronization					11,594			(11,594)
Total Division Adjustments	$ 80,673	$ (92,407)	$ -	$ (7,683)	$ 74,862	$ -	$ -	$ 105,902
Division Adjusted Net Income	$ 3,750,939	$ 2,209,061	$ 600,370	$ 412,484	$ (77,922)	$ 118,139	$ (4,662)	$ 493,470

UNITED WATER RHODE ISLAND, INC.

Calculation of Current Income Tax
Rate Year Ended December 31, 2014

	Amount per Company at Present Rates	Division Adjustments	Adjusted per Division at Present Rates	Revenue Increase/ (Decrease)	Amounts After Revenue Increase
	(A)	(B)	(C)	(D)	(E)
Operating Revenue	$ 3,670,266	$ 80,673	$ 3,750,939	$ 1,006,902	$ 4,757,841
O&M Expense	2,301,468	(92,407)	2,209,061	3,153	2,212,215
Depreciation Expense	600,370	-	600,370	-	600,370
Property Tax	315,024	(8,192)	306,832		306,832
Payroll Tax	59,265	(499)	58,766		58,766
Gross Receipts Tax	45,878	1,008	46,886	12,586	59,473
Operating Income Before Income Taxes	$ 348,261	$ 180,763	$ 529,024	$ 991,162	$ 1,520,186
Interest Expense	447,247	(33,127)	414,120		414,120
Exceess Tax Depreciation	337,539	-	337,539		337,539
Current Federal Taxable Income	(436,525)	213,890	(222,635)	991,162	768,527
Federal Income Tax at 35%	$ (152,784)	$ 74,862	$ (77,922)	$ 346,907	$ 268,985
Deferred Federal Income Tax	118,139	-	118,139	-	118,139
Investment Tax Credit Amortization	(4,662)	-	(4,662)	-	(4,662)
Total Federal Income Tax	$ (39,307)	$ 74,862	$ 35,554	$ 346,907	$ 382,461

Notes:

(1) Calculation of Interest Deduction

	(A)	(B)	(C)	(D)	(E)
Rate Base	$ 15,859,819		$ 14,737,374		$ 14,737,374
Weighted Cost of Debt	2.82%		2.81%		2.81%
Interest Deduction	$ 447,247	$ (33,127)	$ 414,120		$ 414,120
		-			
Federal Income Tax Effect at 35%		11,594			
Interest Synchronization Adjustment		$ 11,594			

Docket No. 4434
Schedule TSC-5

UNITED WATER RHODE ISLAND, INC.

Cash Working Capital Analysis
Rate Year Ended December 31, 2014

	Expense Amount	Working Capital
O&M Expense per Company (1)	1,880,222	235,028
Division Adjustments (2)		
Exclude Tank Painting Amortization	(43,383)	(5,423)
Adjustment to Salaries and Wages	(15,931)	(1,991)
Adjustment to Benefits Transferred	(10,157)	(1,270)
Incentive Compensation-Company Employees	(10,951)	(1,369)
Incentive Compensation-UWM&S Fees	(15,965)	(1,996)
Chemicals Expense	(9,044)	(1,131)
Power Expense	10,129	1,266
PEPOB Transition Obligation	(2,557)	(320)
Transportation Expense	(4,858)	(607)
Outside Services Expense	(31,317)	(3,915)
Inflation	(2,010)	(251)
Regulatory Commission Assessment	253	32
Adjustment to Cash Working Capital		(16,974)
Cash Working Capital Per Division		$ 218,054

Notes:

(1) Per Exhibit 3 (Michaelson), Schedule 1, page 4 of 4.

(2) Reflects exclusion of tank painting amortization and Division adjsustments as summarizd on Schedule TSC-3.

Docket No. 4434
Schedule TSC-6

UNITED WATER RHODE ISLAND, INC.

Adjustment to Accumulated Deferred Income Taxes to
Reflect Federal Bonus Deprecaiton
Rate Year Ended December 31, 2014

	Balance of ADIT Due to Tax Depreciation	
	Per Division (1)	Per Company (2)
December 2013	$ 2,590,421	$ 1,662,459
January 2014	2,596,857	1,672,538
February	2,603,288	1,682,611
March	2,609,712	1,692,678
April	2,616,123	1,702,732
May	2,622,419	1,712,671
June	2,628,491	1,722,386
July	2,634,435	1,731,972
August	2,640,360	1,741,540
September	2,646,293	1,751,115
October	2,652,187	1,760,652
November	2,658,052	1,770,160
December 14	2,664,847	1,780,598
13 Month Average (3)	$ 2,627,960	1,721,855
Adjustment to ADIT	$ 906,105	

Notes:

(1) Per response to Div. 2-49 adjusted to reflect bonus depreciation only in 2013.

(2) Per Ehibit 4 (Michaelson), Schedule 5A, page 2 of 2.

(3) Amounts do not include ADIT related to AFUDC Equity or Cost of Removal.

UNITED WATER RHODE ISLAND, INC.

Determination of Water and Fire Service Revenues at Present Rates
Based on Division Units of Service
Rate Year Ended December 31, 2014

Quarterly Fixed Meter Revenue			
Meter Size	Pro Forma Year Normalized Bills	Service Charge	Fixed Meter Revenue
5/8"	29,627	24.01	$ 711,344
3/4"	15	25.72	386
1"	1,093	37.73	41,239
1 1/2"	293	63.45	18,591
2"	588	85.75	50,421
3"	39	114.91	4,481
4"	4	171.51	686
6"	25	296.72	7,418
8"	4	514.55	2,058
Total	**31,688**		**$ 836,625**

Monthly Fixed Meter Revenue			
Meter Size	Pro Forma Year Normalized Bills	Service Charge	Fixed Meter Revenue
5/8"	42	12.57	$ 528
3/4"	-	13.14	-
1"	48	17.14	823
1 1/2"	12	25.72	309
2"	111	33.15	3,680
3"	35	42.87	1,500
4"	12	61.74	741
6"	-	103.48	-
8"	-	176.09	-
Total	**260**		**$ 7,580**

Consumption Revenue			
	Consumption (CCF)	Rate ($/CCF)	Consumption Revenue
Residential			
0-24 CCF	421,238	2.276	$ 958,738
Over 24 CCF	128,118	2.853	365,520
Commercial	242,912	2.173	527,848
Industrial	2,857	2.173	6,208
Public Auth.	36,596	2.173	79,523
Total	**831,721**		**$ 1,937,837**

UNITED WATER RHODE ISLAND, INC.

Determination of Water and Fire Service Revenues at Present Rates
Based on Division Units of Service
Rate Year Ended December 31, 2014

Resale Revenue			
Usage ('000 gallons)	Current Rate (Per '000 gallons)	Current Fixed Monthly Charge	Revenue
404,341	$ 1.124	$ 61.74	**$ 455,220**

Fire Service Revenue			
Connection Size	Pro Forma Units	Quarterly Rate	Annual Revenue
2 1/2"	6	22.00	$ 528
3"	-	32.00	-
4"	20	60.00	4,800
6"	139	162.00	90,072
8"	27	337.00	36,396
10"	-	601.00	-
12"	1	966.00	3,864
16"	-	2,050.00	-
Total Private Fire	193		$ 135,660
Fire Hydrants	Pro Forma Units	Rate	Annual Revenue
Public Hydrants-Quarterly	352	130.00	183,040
Public Hydrants-Semi-Annual	307	260.00	159,640
Total Public Fire	659		$ 342,680
Total Fire Service			**$ 478,340**

Adjustment Summary			
	Amount per Company	Amount per Division	Adjustment
Retail Sales	$ 2,709,794	$ 2,782,042	$ 72,248
Sales for Resale	447,403	455,220	7,817
Fire Protection	477,732	$ 478,340	608
Other Operating Revenues	35,337	35,337	-
Total Revenue	$ 3,670,266	$ 3,750,939	**$ 80,673**
Increase in Regulatory Commission Assessment at 0.31317%			253
Increase in Gross Receipts Tax at 1.25%			1,008
Net Adjustment to Income before Taxes			$ 79,412

UNITED WATER RHODE ISLAND, INC.

Adjustment to Salaries and Wages and Benefits Expense
to Reflect Updated Percentage Charged to Expense
Rate Year Ended December 31, 2014

Wages		
Rate Year Salaries and Wages per Company (1)	$	711,022
Net Percentage Charged to O&M per Division (2)		82.08%
Wages Charged to O&M per Division	$	583,627
Amount per Company (1)		599,558
Adjustment to Rate Year Wage Expense	$	(15,931)

Benefits Transferred		
Rate Year Benefits per Company (3)	$	453,306
Net Percentage Capitalized/Transferred Out per Division (2)		17.92%
Benefits Transferred Out per Division	$	(81,220)
Amount per Company		(71,063)
Adjustment to Rate Year Benefits Expense	$	(10,157)

Notes:
(1) Per Exhibit 3 (Gil), Schedule 2.

(2) Refer to Page 2 of this Schedule.

(3) Per Exhibit 3 (Gil), Schedule 3.

UNITED WATER RHODE ISLAND, INC.

Calcuation of Normalized Percentage of Labor Costs Expensed and Capitalized
Based on 3-Year Average for 2011 through 2013

Rate Year Ended December 31, 2014

		2011 (1)	2012 (1)	2013 (2)	**3 Yr Avg**
Gross Payroll	(a)	$ 668,290	$ 692,066	$ 675,743	$ 678,700
Capitalized	(b)	(126,307)	(132,479)	(146,804)	(135,197)
Transferred to Other BU's	(c)	-	-	-	-
Net Payroll	(d)	$ 541,983	$ 559,587	$ 528,939	$ 543,503
Expense Rate	(d) / (a)	81.10%	80.86%	78.28%	80.08%
Capitalized/Transferred Out	(b)+(c)	$ (126,307)	$ (132,479)	$ (146,804)	$ (135,197)
Capitalized/Transferred Out Rate	(b)+(c)/(a)	18.90%	19.14%	21.72%	**19.92%**
Transferred in	(c)	$ 9,923	$ 11,618	$ 19,237	$ 13,593
Transferred in Rate	(c)/(a)	1.48%	1.68%	2.85%	**2.00%**

Notes:
(1) Per Exhibit 3 (Gil), Schedule 2A, page 4.

(2) Amounts per response to Div. 4-5.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Company Incentive Compensation Expense
Rate Year Ended December 31, 2014

Employee	2012 Base Salary (1)	Incentive Payment % (1)	Non Financial Percentage (2)	Recoverable Incentive Compensation
Manager Rhode Island	$ 104,653	15.00%	50.00%	$ 7,849
Superindentent	82,856	10.00%	50.00%	4,143
Supervisor Office	67,443	5.00%	60.00%	2,023
Total				$ 14,015
Amount per Company (1)				27,356
Reduction in Total Eligible Incentive Compensation				$ (13,341)
Amount Charged to Capital at 17.92% (3)				(2,390)
Adjustment to O&M Expense				$ (10,951)
Adjustment to FICA Taxes (4)				(499)
Total Adjustment to Rate Year Expense				$ (11,450)

Notes:
(1) Amounts per Exhibit 3 (Gil), Schedule 2A.

(2) Per response to Div. 2-17.

(3) Per Schedule TSC-7, page 2 of 2.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Incentive Compensation included in UWM&S Fees
Rate Year Ended December 31, 2014

		Amount
Financial Based Incentive Plan Costs in UWM&S Fees		
Short-Term Incentive Plan-Total (1)	$	16,260
Percent Attributable to Financial Goals (1)		40%
STIP Costs Attributable to Financial Goals in Test Year	$	6,504
Long-Term Incentive Plan for Test Year (1)		7,612
Total Incentive Compensation Attributable to Financial Goals	$	14,116
Increase to Rate Year at 5.06% (2)		714
Rate Year Incentive Compensation Attributable to Financial Goals	$	14,830
FICA Taxes at 7.65%		1,135
Adjustment to Rate Year UWM&S Fees	$	(15,965)

Notes:
(1) Per response to Div. 4-7.

(2) Per Exhibit 3 (Gil), Schedule 15A

UNITED WATER RHODE ISLAND, INC.

Adjustment to Chemical Expense
Rate Year Ended December 31, 2014

Chemical Usage (1)				
Chemical Name	2011	2012	2013	Average (2)
Lime (pounds)	110,650	117,600	108,250	112,167
Sodium Hypochlorite (gallons)	8,101	8,849	8,270	8,407
Nalco C-9 (pounds)	20,309	20,868	12,949	12,949

Production(MG) (Subject to Chemical Treatment) (1)				
	2011	2012	2013	Average
Production(MG) (Subject to Chemical Treatment)	1,082.74	1,144.40	1,044.90	1,090.68

Determination of Rate Year Expense				
Chemical Name	Average Usage Per MG (2)	Rate Year Production (3)	Rate Year Unit Cost (4)	Rate Year Costs
Lime (pounds)	102.84	1,065.30	$ 0.1730	$ 18,953
Sodium Hypochlorite (gallons)	7.71	1,065.30	1.6300	13,384
Nalco C-9 (pounds)	12.39	1,065.30	0.8600	11,354
Total Rate Year Chemicals Expense per Division				$ 43,691
Amount per Company (Exhibit 3 (Gil) Schedule 5A				52,735
Adjustment to Rate Year Expense				**$ (9,044)**

Notes:

(1) Per Exhibit 3 (Gil) Schedule 5A, except 2013 per response to Div. 4-13.

(2) Amounts reflect 3 year average of 2011 through 2013 except Nalco C-9, which is based on 2013 only to reflect reduced usage due to modified treatment program.

(3) Calclated based on projected rate year consumprion per Schedule TSC-7 and average level of non revenue producing water for 2011 through 2013 as shown below.

Rate Year Billed Consumption (MG) Per Schedule TSC-7	1,026.47
Non-revenue water %	3.65%
Total Production Subject to Chemical Treatment (MG)	1,065.30

Non-Revenue Water %:	
2011	3.76%
2012	6.17%
2013	1.01%
Three Year Average	3.65%

UNITED WATER RHODE ISLAND, INC.

Adjustment to Power Supply Expense
Rate Year Ended December 31, 2014

Power - Account 50610					
Rate Year 2014	**kWh Avg Usage (1)**	**Projected Water Production (MG) (2)**	**kWh**	**kWh Avg Cost (3)**	**Total Cost**
Commodity (Constellation New Energy)	1,514.21	1,065.30	1,613,092	$ 0.09245	149,130
Distribution (National Grid)	1,514.21	1,065.30	1,613,092	$ 0.04918	79,329
Total Test Year Power Cost-Production Related					$ 228,460
Non-Production Related (4)					8,175
Rate Year Power Costs per Division					$ 236,635
Amount per Company (5)					$ 210,429
Adjustment to Power Costs--Acount 50610					$ 18,031

Other Utilities-Power - Account 50620	
2011 (4)(5)	27,688
2012 (4)	24,416
2013 (6)	20,781
Rate Year (3 year average)	$ 24,295
Amount per Company (4)	$ 32,197
Adjustment to Power Costs--Acount 50620	$ (7,902)

Notes:

(1) Calculated based on 2013 kWh for production of 1,582,200 divided by 2013 production of 1,044.9 million gallons. per Div. 4-9 and and 4-13.

	(a) kWh Use	(b) MG produced	(c)=(a)/(b) kWh/MG
kWh Average Usage per MG	1,582,200	1,044.90	1,514.21

(2) Reflects projected rate year consumption grossed up for average Non-Revenue Water. Refer to Schedule TSC-11 for calculation.

(3) Based on contract price for supply with Constellation Energy including taxes and on average cost per kWh in 2013 for delivery service from National Grid per Div. 4-9 and 4-10.

(4) Per Exhibit 3 (Gil) Schedule 4A.

(5) Adjusted to exclude additiona fuel and diesel costs resulting from the storm Irene per Div. 4-11.

(6) Per response to Div. 4-11.

UNITED WATER RHODE ISLAND, INC.

Adjustment to PEBOP Transition Obligation
Rate Year Ended December 31, 2014

		Amount
Unamortized Balance of Initial Transition Obligation as of January 1, 2014 (1)	$	5,113
Division Recommended Amortization Period (Years)		2
Annual Amortiztion Expense per Division	$	2,557
Amortization Expense per Company (1)		5,113
Adjustment to Amortization Expense	$	(2,557)

Note:
(1) Per Exhibit 3 (Gil), Schedule 7 and response to Div 2-25.

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Schedule TSC-14

UNITED WATER RHODE ISLAND, INC.

Adjustment to Transportation Expense
Rate Year Ended December 31, 2014

	Company Rate Year Amount (1)	Division Rate Year Amount
Leases	$ 32,902	$ 32,902
Fuel (2)	36,104	35,794
Maintenance & Repair (2)	11,974	9,178
Insurance (2)	5,963	5,912
Depreciation	1,655	1,655
Other-Registration, plates, tolls, mileage, etc. (2)	2,580	2,558
Total Costs	$ 91,178	$ 88,000
Capitalized/Transferred Out (3)	(15,850)	(17,530)
Net Transportation Expense	$ 75,328	$ 70,471
Adjustment to Transportation expense		$ (4,858)

Notes:

(1) Per Exhibit 3 (Gil) Scheudle 10A

(2) Amounts are based upon three year average adjusted for inflation as follows:

	Company	Division
Fuel:		
3 Year Average	$ 34,150	$ 34,150
Apply inflation rate	5.722%	4.817%
Rate Year Amount	$ 36,104	$ 35,794
Maintenenace & Repair:		
2010	4,732	4,732
2011	5,414	5,414
2012 (4)	13,427	5,629
3 Year Average	7,858	$ 5,258
Apply inflation rate	5.722%	4.817%
Rate Year Amount	$ 8,307	$ 5,512
Extraordinary repairs to back-hoe--3yr. amortization	3,667	3,667
Total Maintenance and Repair	$ 11,974	$ 9,178
Insurance		
3 Year Average	5,641	$ 5,641
Apply inflation rate	5.722%	4.817%
Rate Year Amount	$ 5,963	$ 5,912
Other Misc:		
3 Year Average	2,441	$ 2,441
Apply inflation rate	5.722%	4.817%
Rate Year Amount	$ 2,580	$ 2,558

(3) Capitalized amount basedf on 17.38% per Company and 19.92% per Division.

(4) 2012 expense adjusted to exclude abnormal costs of $7,798 oer response to Div. 2-28.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Outside Services Expense
Rate Year Ended December 31, 2014

	Company Rate Year Amount (1)	Division Rate Year Amount
Accounting & Auditing (2)	4,220	$ 4,184
Legal (2)	2,088	2,070
Information Systems (2)	14,558	14,433
Temporary Help (3)	10,000	5,000
Other (2)	11,945	11,843
Management Fee (R&I Alliance) (2)	15,801	15,666
Efficeincy Well Testing (4)	3,325	1,425
Well Rehabilitation (5)	40,000	16,000
Total	$ 101,937	$ 70,620
Adjustment to Outside Services Expense		$ (31,317)

Notes:

(1) Company amounts per Exhibit 3 (Gil) Schedule 15A.

(2) Division amounts based on updated inflation rate of 2.997% as follows:

	Test Year	Rate Year
Accounting & Auditing	4,062	4,184
Legal	2,010	2,070
Information Systems	14,013	14,433
Other	11,498	11,843
Management Fee (R&I Alliance)	15,210	15,666

(3) Reflects inclusion of 50% of proposed allowance for summer help for hydrant painting.

(4) Division amount reflects corrected amount per response to Div. 4-17.

(5) Reflects normalization of costs based on frequency of every 2 to 3 years per response to Div. 4-18.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Reflect Updated Inflation Factors
Rate Year Ended December 31, 2014

	Company Rate Year Amount (1)	Division Rate Year Amount (2)
Other Benefits Expense	$ 7,024	$ 6,965
Insurance	51,714	51,511
Customer Information/Billing	58,556	58,065
Other O&M	227,343	226,076
	$ 344,637	$ 342,617
Adjustment to Rate Year Expense		$ (2,020)
Less: Other Benefits reducttion Allocated to Capital		(11)
Net Reduction in Rate Year Expense (4)		$ (2,010)

Notes:

(1) Company amounts per Exhibit 3 (Gil) Schedule 15A.

(2) Division amounts reflect updated inflation rates as follows:

	Inflation Base	Inflation Amount (3)	Division Expense
Other Benefits Expense	$ 6,762	2.997%	$ 6,965
Insurance	50,700	1.600%	51,511
Customer Information/Billing	56,375	2.997%	58,065
Other O&M	219,498	2.997%	226,076

(3) Refer to page 2 of this schedule.

(4) The adjustment to Benefits Charged Out on Schedule TSC-7 was calculated based on \
UNWI's claimed benefits. This adjustment recognized that any reduction in benefits costs must be split between expense and capital.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Reflect Updated Inflation Factors
Rate Year Ended December 31, 2014

Description	Inflation Factor
Inflation Rate for 2012 to 2014	2.997%
Inflation rate for 2013 to 2014	1.600%
Inflation rate for 3-yr average to 2014	4.817%

	Increase in GDP Price Index (1)	Compound Rate from 2012 to 2014
2013	1.375%	1.375%
2014	1.600%	1.622%
		2.997%

	Increase in GDP Price Index (1)	Compound Rate from 3 yr. avg to 2014
2010	1.575%	
2011	2.000%	
2012 (2)	1.725%	1.767%
2013 (3)	1.375%	3.166%
2014 (4)	**1.600%**	**4.817%**

Notes:
(1) Amounts per Blue Chip Financial Forecasts December 1, 2011 (Volume 30, No. 12) and Blue Chip Financial Forecasts January 10, 2013 (Volume 33, No. 1) 2010-2013 amounts are an average of the 4 quarters and 2014 is consensus forecast.
(2) Amount in compound rate column is average GDP price index for 2010, 2011, 2012.
(3) Compound rate from 3 year average GDP to 2013.
(4) Compound rate from 3 year average GDP to 2014.

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Schedule TSC-17

UNITED WATER RHODE ISLAND, INC.

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

		Amount
Rate Year Property Taxes per Division (1)	$	306,832
Rate Year Property Taxes per Company (2)		315,024
Adjustement to Rate Year Property Tax Expense	$	(8,192)

Notes:
(1) Calculated based on 3-year historical average increase applied to 2013 property tax expense as follows:

Property Taxes		Amount	% Change
2010		257,385	
2011		263,652	2.43%
2012		270,476	2.59%
2013		293,644	8.57%
Average Annual Increase			4.49%
2014 Projected	$	306,832	

Docket No. 4434
Schedule TSC-18

UNITED WATER RHODE ISLAND, INC.

Determination of Overall Percentage Increase
Rate Year Ended December 31, 2014

Current Service Revenues per Division (1)	Amount
Retail Sales	$ 2,782,042
Sales for Resale	455,220
Fire Protection	478,340
Revenue at Present Rates	$ 3,715,602
Revenue Deficiency (2)	1,006,902
Revenues at Proposed Rates	4,722,504
Overall Percentage Increase	27.10%

Notes:
(1) Per Schedule TSC-1.

(2) Per Schedule TSC-2.

UNITED WATER RHODE ISLAND, INC.

Determination of Water and Fire Service Revenues at Present Rates
Based on Division Units of Service
Rate Year Ended December 31, 2014

Quarterly Fixed Meter Revenue				
Meter Size	Current Rate	Proposed Rate	Pro Forma Year Normalized Bills	Fixed Meter Revenue
5/8"	$ 24.01	$ 30.52	29,627	$ 904,216
3/4"	25.72	32.69	15	490
1"	37.73	47.95	1,093	52,409
1 1/2"	63.45	80.64	293	23,628
2"	85.75	108.99	588	64,086
3"	114.91	146.05	39	5,696
4"	171.51	217.99	4	872
6"	296.72	377.13	25	9,428
8"	514.55	653.99	4	2,616
Total			**31,688**	**$ 1,063,442**

Monthly Fixed Meter Revenue				
Meter Size	Current Rate	Proposed Rate	Pro Forma Year Normalized Bills	Fixed Meter Revenue
5/8"	12.57	$ 15.98	42	$ 671
3/4"	13.14	16.70	-	-
1"	17.14	21.78	48	1,045
1 1/2"	25.72	32.69	12	392
2"	33.15	42.13	111	4,676
3"	42.87	54.49	35	1,907
4"	61.74	78.47	12	942
6"	103.48	131.52	-	-
8"	176.09	223.81	-	-
Total			**260**	**$ 9,634**

Retail Consumption Revenue				
	Current Rate ($/CCF)	Proposed Rate ($/CCF)	Consumption (CCF)	Consumption Revenue
Residential				
0-24 CCF	2.276	$ 2.893	421,238	$ 1,218,642
Over 24 CCF	2.853	3.626	128,118	464,555
				-
Commercial	2.173	2.762	242,912	670,923
Industrial	2.173	2.762	2,857	7,891
Public Auth.	2.173	2.762	36,596	101,078
Total			**831,721**	**$ 2,463,089**

Total Retail Sales Revenue **$ 3,536,165**

UNITED WATER RHODE ISLAND, INC.

Determination of Water and Fire Service Revenues at Present Rates
Based on Division Units of Service
Rate Year Ended December 31, 2014

Resale Revenue

	Current Rate	Proposed Rate	Thousand Gallons/ 4" Services	Annual Revenue
Consumption--1,000 Gallons	$ 1.124	$ 1.430	404,341	$ 578,208
Service Charge	61.74	78.47	1	942
Total Resale				**$ 579,149**

Private Fire Service Revenue

Connection Size	Current Rate (Quarterly)	Proposed Rate (Quarterly)	Pro Forma Units	Annual Revenue
2 1/2"	22.00	27.96	6	$ 671
3"	32.00	40.67	-	-
4"	60.00	76.26	20	6,101
6"	162.00	205.90	139	114,480
8"	337.00	428.32	27	46,259
10"	601.00	763.87	-	-
12"	966.00	1,227.78	1	4,911
16"	2,050.00	2,605.54	-	-
Total Private Fire			**193**	**$ 172,422**

Public Fire Service Revenue

Fire Hydrants	Current Rate	Proposed Rate	Pro Forma Units	Annual Revenue
Quarterly	130.00	165.00	352	$ 232,320
Semi-Annual	260.00	330.00	307	202,620
Total Public Fire			**659**	**$ 434,940**
Total Fire Service				**$ 607,362**

Total Service Revenues	**$ 4,722,676**
Target Revenue	4,722,504
Variance	$ 172