

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

IN RE: UNITED WATER RHODE ISLAND :
 GENERAL RATE FILING : **DOCKET NO. 4255**

REPORT AND ORDER

I. Background

On June 3, 2011, United Water Rhode Island, Inc. (“United Water RI” or “Company”), a wholly-owned subsidiary of United Waterworks, Inc. (“UWW”) which in turn is a wholly owned subsidiary of United Water Resources (“UWR”), filed an application with the Rhode Island Public Utilities Commission (“Commission”) pursuant to R.I.G.L. §39-3-11 for authority to increase its rates and charges for water service rendered within its service area. The Company requested an overall increase in annual revenues of \$1,218,702, or 43 percent, to be effective July 3, 2011 for a total cost of service of \$4,077,004. On June 16, 2011, the Commission suspended the effective date of United Water RI’s requested rate increase in order to conduct a full investigation and to hold public hearings. On June 24, 2011, the Town of South Kingstown, a municipality within the Company’s service area, moved to intervene in the instant Docket.¹

This general rate case filing represents United Water RI’s first rate filing since January 1999. The following table provides a brief history:

¹ Rule 1.13 of the Commission’s Rules of Practice and Procedure provides “...any person claiming a right to intervene of an interest of such nature that intervention is necessary or appropriate may intervene in any proceeding before the Commission. Such right or interest may be...[a]n interest which may be directly affected and which is not adequately represented by existing parties and as to which movants may be bound by the Commission’s action in the proceeding...any other interest of such nature that movant’s participation may be in the public interest.”

<u>Year Filed</u>	<u>Docket Number</u>	<u>Amount Requested</u>	<u>Amount Granted</u>
1980	1547	\$ 312,934	\$ 187,458
1983	1734	\$ 359,802	\$ 149,824
1991	2006	\$ 439,608	\$ 320,626
1999	2873	\$ 492,000	\$ 420,000

United Water RI and the Division of Public Utilities and Carriers (“Division”) each submitted Pre-filed Testimony addressing all, or portions of, United Water RI’s revenue requirement for the twelve month period ending December 31, 2012 as the proposed Rate Year and using the twelve month period ending December 31, 2010 as the test year.

II. United Water Rhode Island Direct Testimony

In support of its request for increased revenues, United Water RI submitted the pre-filed direct testimonies of Stanley J. Knox, the Company’s General Manager, Obioma N. Ugboaja, a Rate Analyst with United Water Management and Services, Inc. (“UWMS”)², Pauline M. Ahern, CRRA, a Principal with AUS Consultants, Timothy J. Michaelson, Senior Director in the Regulatory Business Department of UWMS, Thomas G. Lippai, a Rate Analyst with UWMS, and Christopher P.N. Woodcock, President of Woodcock & Associates, a consulting firm specializing in water and wastewater rate and financial studies.

A. Stanley J. Knox

Stanley J. Knox provided testimony to discuss the Company’s history, its cost cutting control measures, current initiatives and improvements, affiliate relationships and why the rate increase is necessary. Mr. Knox described the history of United Water RI

² UWMS is a subsidiary of United Water Resources.

noting that it employs ten full time employees to serve the 7,338 metered residential customer, 715 commercial customers, 10 industrial customer, 97 municipal customers, three wholesale customers and 183 private fire customers and to provide private and public fire service in South Kingstown and Narragansett. He identified two well fields, the Tuckertown Well Field and Howland Well Field, as having a production capacity of 7.3 million gallons of water per day as well as two additional properties available to develop additional supply if needed.³

Mr. Knox described the Company's water treatment process noting that it is currently in compliance with all state and federal regulations. He identified a number of new regulations that have been promulgated since the Company's last rate case including the Federal Homeland Security Act that requires both an Emergency Response Plan assuring quality dependable water in the event of a crisis and a Vulnerability Assessment Plan focusing on security, the Rhode Island Department of Health Cross Connection and Backflow requirements that requires retrofits for all non-residential dwellings, and the EPA's Groundwater Rule that mandates testing of all wells within twenty-four hours when there is a positive coliform sample.⁴

The two primary reasons that United Water RI needs a rate increase were identified by Mr. Knox as: the increase in the investment in Plant In-Service and the added costs of operation and maintenance expenses, primarily, labor, power and chemicals, taxes and depreciation. Mr. Knox noted that because United Water RI is part of a large national company, it has the ability to negotiate better prices for many of its costs including chemicals and energy. He discussed how the United Water RI has

³ United Water RI Exhibit 1a, Direct Testimony of Stanley J. Knox, June 3, 2011 at 1-4.

⁴ *Id.* at 4-7.

controlled energy costs by installing high efficiency motors and through hedging. Another cost savings measure identified by Mr. Knox was the elimination of the Post-Retirement Health care plan and pension eligibility for the Company's new employees.⁵

Mr. Knox described United Water RI's wholesale customers, the Municipality of Narragansett and the Town of South Kingstown, which operates the Middlebridge System and the South Shore System. He pointed out that United Water RI has benefited from additional revenues caused by growth in both of these communities. He identified the major additions to Plant In-Service as 1) the installation of 10,000 feet of 12" DI main from United Water RI's existing system up Route 1 South, 2) the construction of the Saugatucket Road Pump Station which separated the Sherman tank and the Tower Hill tank, increased the ability to transmit Water to the Tower Hill tank, provided greater storage to the Sherman tank and increased the flow around the north end of the distribution system, 3) the design and calibration of the System Hydraulic Modeling utilized for both capital planning and operational simulations, 4) the main replacement on Boston Neck Road resulting in increased flow capacity and improved transmission, and 5) the main replacement in Wakefield on Northrup Street. Mr. Knox described the Business Technology Master Plan ("BTMP"), which includes the implementation of a new billing and customer service system and is part of the revenue requirement. He stressed the importance of the BTMP as allowing United Water RI to keep pace with technological advances thus reducing risk due to outdated support systems.⁶

At the present time, the Company plans to implement three aspects of the BTMP: a) a new Customer Information System ("CIS"), b) an Enterprise Asset Management

⁵ *Id.* at 7-9.

⁶ *Id.* at 9-13.

(“EAM”) system and c) a geographic information system (“GIS”) with all systems linked to mobile field staff. Mr. Knox noted that replacement of the existing CIS will be completed in October of 2011. He stated that implementation of the EAM will begin in 2012 and be completed in eighteen months. Following implementation of the EAM the mobile field staff will be linked to the Company’s data systems within approximately eighteen months.⁷

Regarding the CIS, Mr. Knox discussed the business and technical reasons that it was important for United Water RI to separate itself from the WINS II system which is an outsourced system. He asserted that the WINS II system does not meet United Water RI’s business needs in that it does not provide the appropriate level of integration or allow service personnel to support the needs of its customers. He noted improved business process and management reporting as resulting once the Company separates itself from the WINS II system. Mr. Knox asserted that from a technical point of view, the computer language used by the WINS II system has outlived its usefulness and is no longer readily utilized in the market. He identified a number of risks in remaining on the WINS II system including the lack of commitment on the part of the owner/operator of the system in further investment or development of the system, the migration from the system of other clients thereby reducing the client base and the limited number of staff that have detailed knowledge of that system.⁸

Mr. Knox listed the benefits of a new CIS to include billing, account management, revenue management, credit and collections, field device management and field service work management. Specifically, he discussed the ability of this system to

⁷ *Id.* at 13-14.

⁸ *Id.* at 14-16.

provide response to a customer inquiry during the customer's first contact assuming a field visit is not necessary. He noted that all of a customer's accounts would be linked allowing a customer service representative ("CSR") the ability to access all accounts from a single location. The new system would also allow for improved scheduling of customer appointments, improved handling of customer complaints, pre-emptive monitoring, customers being able to select their channel of communication with the Company, and improved billing services by allowing for payment plans and installment deposit plans to be shown on the bill.⁹

Mr. Knox discussed how the capital improvements will improve flow and pressure and provide timeliness and accuracy while ensuring that the Company is able to meet its obligation to provide high quality water and water service to its customers in a cost efficient manner. He mentioned that the Company's strategy is to complete one project per year and noted that since the last rate case, United Water RI has replaced almost 8,000 feet of varying width pipe as well as 80 percent of residential meters being replaced with radio frequency transmitting meters. He described the results obtained from research grants offered by Suez Environmental, United Water RI's parent company, through its R&I Alliance as allowing the Company to optimize operations, reduce operating costs and improve water quality. Specifically, he identified the pipe asset management and storage tank operations as two of the areas where the R&I Alliance has benefitted Rhode Island customers.¹⁰

Mr. Knox described a number of R&I projects that are planned including: a) a grant to study the use of a special membrane to remove volatile substances from drinking

⁹ *Id.* at 16-19.

¹⁰ *Id.* at 20-23.

water, b) a project to evaluate fixed metering networks which will allow customers to view real time usage and allow United Water RI to better assist customers in identifying leaks and c) continued research at the Company's research center. He also identified the numerous ways that United Water RI has proven its commitment to conservation by the distribution of low flow household water fixtures, bill stuffers with savings tips, immediate response to suspected leaks and its low level of system loss. These efforts, he asserted, have resulted in a decrease in the average residential customer usage from 217 gallons of water per day to 157 gallons of water per day since United Water RI's last rate case. In addition to these conservation efforts, Mr. Knox stated that the Company uses a number of communication methods to inform its customers and other stakeholders about the Company's activities and performance including its website, the news media, meetings with local officials and school programs.¹¹

United Water's corporate Customer Service Group has also conducted customer satisfaction surveys where United Water RI has consistently been the number one company. Mr. Knox noted that the Company receives very few complaints. He identified the individuals that will provide pre-filed testimony and described the services and functions that UWM&S provides to United Water RI noting that without these services and functions being provided on a regular basis, United Water RI would not be able to effectively meet ever changing state and federal regulations. Mr. Knox also described the Sector Agreement between United Water RI and United Water New York which provides operational, engineering and management support to United Water RI on an as needed basis. He explained how corporate United Water is divided into six sectors, each which includes a large sector utility, in this instance New York and several smaller

¹¹ *Id.* at 23-26.

companies like Rhode Island. This Sector Agreement was filed with the Commission in 1998.¹²

B. Obioma N. Ugboaja

Obioma N. Ugboaja, a rate analyst for UWMS, provided testimony to sponsor normalized operating revenues and to present the proposed tariffs for the rate year. He identified the historic test year as the calendar year ending December 31, 2010 and the rate year as the calendar year ending December 31, 2012. He presented adjusted test year revenues of \$2,885,747. After adding adjustments for customer growth and weather normalization, Mr. Ugboaja determined the rate year revenue to be \$2,858,302. He noted that with the exception of the public and private fire classes, United Water RI used a simple trend analysis to project customer growth with a five year historical period as its data sample. For the fire classes, Mr. Ugboaja used the number of hydrants in the test year as the projected number of hydrants for the rate year. Mr. Ugboaja's projections revealed a 1.6 percent growth in United Water RI's residential class and a 0.40 percent growth in its commercial class. He described how growth was projected for all classes and explained that a more detailed approach was used to project the consumption for the residential class because that class of customers accounts for approximately ninety percent of the Company's customer base. He pointed out that while growth has historically trended upwards, actual billed consumption has trended downwards opining that this downward trend may be the result of water conservation. He identified weather and the economy as possible explanations for the decrease in actual billed consumption.¹³

¹² *Id.* at 26-29.

¹³ United Water RI Exhibit 1b, Direct Testimony of Obioma N. Ugboaja, June 3, 2011 at 1-5.

Mr. Ugboaja asserted that the modest increase in customer growth is tempered by the lower consumption volumes. He described the fire protection services as 187 fire service lines and 658 public fire hydrants that bring in \$252,368 of revenue. He stated that since no new developments are planned to be constructed for the rate year, United Water RI projected the same number of hydrants and service lines as its historic test year. He identified certain adjustments made to miscellaneous revenues, turn on/off fees estimated to be approximately \$6292 during the rate year, a water quality protection charge which is a statutorily mandated surcharge estimated to be \$13,880 for the rate year, tank truck sales normalized using a five year average of \$13,032 and miscellaneous fees totaling \$3,098 for meter test charges, returned checks and fees from the Point Judith Country Club.¹⁴

Mr. Ugboaja alleged that the current tariff does not provide sufficient revenue for the Company to cover the costs of serving its customers and proposed the changes recommended by Mr. Woodcock based on his findings in the Class Cost of Service (“CCOS”) study that he prepared. He described the increases proposed to the three components of service: a) service charges which are proposed to increase between 35 percent and 108 percent depending on meter size, b) volumetric rates which include inclining block rates that will increase by approximately 29 percent for the first block and approximately 21 percent in its second block for residential customers and will increase by 69 percent for non-residential customers and wholesale rates which are proposed to increase by 26 percent to reflect the full cost of service and c) fire service which is

¹⁴ *Id.* at 6-8.

proposed to increase by 100 percent for public service and between 4.8 percent and 103 percent for private service depending on the service line.¹⁵

While the rates do not reflect the full cost of service for each customer class, Mr. Ugboaja, stated that it was United Water RI's intention to gradually phase-in rates over time to reflect the true cost of service. He offered that local economic and political concerns, competitive pressures and the need to avoid rate shock are issues to be examined when determining final rates for utilities in addition to the CCOS. He asserted that the proposed rates are fair and balance the interests of all customers served while at the same time encouraging conservation by sending appropriate price signals to consumers and allowing United Water RI to provide quality and reliable service to its customers.¹⁶

C. Pauline M. Ahern

Pauline M. Ahern, a Principal with AUS Consultants, provided testimony regarding the rate of return, the cost of equity, the cost long-term debt and the capital structure. She recommended a rate of return of 8.74 percent based on the consolidated capital structure at March 31, 2011 of UWW which consists of 47.53 percent long-term debt and 52.47 percent common equity at a long term debt cost of 6.15 percent and her recommended cost of equity of 11.10 percent. Ms. Ahern used a proxy group to arrive at her recommended cost of equity, because United Water RI is not publicly traded and thus a market-based cost of common equity could not be determined directly from the Company. Noting that no proxy group can be assembled that will have identical characteristics of United Water RI, she asserted that the proxy group results could be

¹⁵ *Id.* at 9-11.

¹⁶ *Id.* at 11-12.

adjusted to reflect unique financial and/or business risk of the Company. She arrived at an 11.10 percent cost of common equity after evaluating four market-based cost of common equity models each of which she discussed individually. Ms. Ahern noted that her recommended common equity cost was based on a proxy group of eight water companies that was adjusted downward by 21 basis points to reflect United Water RI's lower financial risk and adjusted upward by 55 basis points to account for United Water RI's small size relative to the eight companies in the proxy group.¹⁷

Prior to beginning her discussion on each of the cost methods she utilized to reach her conclusion, Ms. Ahern asserted that use of multiple models adds reliability when a cost rate is set for a particular company. She defined business risk as the riskiness of a company's common stock without considering debt and/or preferred capital and provided quality of management, regulatory environment, customer mix and concentration of customers, service territory growth, capital intensity and size as examples of business risk that would have a direct bearing on earnings. She noted that the higher the business risk, the greater the rate of return demanded by shareholders. She identified a number of business risks facing the water industry to include tightening health and safety regulations, drought, water source overuse, runoff and threatened species/habitat and environmental protection that limit supply availability. She also contrasted water utilities to other public utilities stating that they are typically vertically engaged, providing the entire service from acquiring supply to distribution.¹⁸

In addition to the risks, Ms. Ahern discussed how the water industry is much more capital intensive than that of other utilities and how it requires more investment to

¹⁷ United Water RI Exhibit 1c, Direct Testimony of Pauline M. Ahern, June 3, 2011 at 1-6.

¹⁸ *Id.* at 6-8.

produce revenue. She stated that in 2010 it took United Water RI \$5.10 in net utility plant to produce \$1.00 of operating revenue. She noted that United Water RI is projecting an approximate 82 percent increase in capital investments over the next five years. Because water utilities have lower depreciation rates, Ms. Ahern asserted that depreciation as a source of internally generated cash is less for water utilities than it is for other utilities and pointed out that United Water RI's average depreciation rate for 2010 was 2.1 percent which was lower than the 3 percent average for water utilities. While noting that water utilities are capital intensive, she offered that capital expenditures will increase significantly over the course of the next twenty years. She cited an EPA fact sheet that stated transmission and distribution mains account for most of a water utility's infrastructure. She asserted that capital expenditures will require significant financing which is typically debt, equity and cash flow, and all of which are connected to the utility's ability to earn a sufficient rate of return able to allow the utility to maintain a good credit rating and to attract new capital.¹⁹

Ms. Ahern alleged that because of the capital intensity, depreciation rates, significant capital expenditures and negative free cash flow relative to operating revenues, water utilities are a greater investment risk than electric, gas and combination electric gas utilities. She also noted the increasing proportion of total debt to earnings before interest, taxes, depreciation and amortization ("EBITDA") which indicates financial risk for water utilities increasing significantly and now being higher than that of electric, combination electric and gas and natural gas utilities as opposed to ten years ago when that risk was lower than those other utilities. Additionally the decline in funds for operations to total debt, low level interest coverage ratios and returns on equity ("ROE")

¹⁹ *Id.* at 8-14.

that are lower than those for electric, combination electric and gas and natural gas utilities for the ten year period ending in 2010 are other indicators that water utilities have an increased investment risk. Ms. Ahern asserted the water utilities generally earn far less than their authorized ROEs as opposed to electric, combination electric and gas and natural gas utilities further supporting her assertion that water utilities are riskier investments than other utilities.²⁰

In discussing her assertion that United Water RI has an additional extraordinary business risk because of its small size, Ms. Ahern alleged that smaller companies are less able to cope with significant events that affect sales, revenues and earnings such as the loss of a large customer and extreme weather conditions. She asserted that because of the risk associated with the smallness of a company, investors demand a greater return to compensate for the lack of liquidity and marketability of their investment.²¹

Ms. Ahern defined financial risk as additional risk created by the introduction of additional capital, debt and preferred stock, into the capital structure. She asserted that when there is a high amount of this type of capital in the capital structure, consideration must be given in establishing a cost of common equity that will compensate for the higher financial risk created by this capital. She discussed the S&P rating matrix pointing out that the eight water companies in her proxy group were split A+ (A), Excellent and Intermediate and that United Water RI was not rated by either Moody's or S&P. Although the business and financial risks of the companies in the proxy group may be different, Ms. Ahern stated that the fact that these companies have the same bond/credit rating indicates that the combined risks are similar. She asserted that bond

²⁰ *Id.* at 14-18.

²¹ *Id.* at 18-19.

and credit ratings are a good way to compare the investment risks of different companies, because they provide a thorough and comprehensive analysis of all diversifiable business risks.²²

Ms. Ahern described how she selected the eight companies in her proxy group with criteria that included: Water Company Group of AUS Utility Reports (April 2011); consensus five-year EPS growth rate projections; positive Value Line five-year DPS growth rate projections; Value Line adjusted betas; no cut or omission of dividends during five years ending 2010; 60 percent or greater of 2010 total operating income derived from and 60 percent or greater of 2010 total assets devoted to regulated water operations; and no public announcement of involvement in any major merger or acquisition activity. Comparing the eight companies selected for her proxy group, she found that those companies had an average 7.87 percent earnings rate on book common equity based on 50.30 percent total permanent capital excluding short term debt with the average dividend payout ratio of 66.14 percent. The range of total debt as a percentage of EBITDA for 2006-2010 averaged 6.04 times, and funds from operations relative to total debt averaged 16.81 percent.²³

Ms. Ahern described the Efficient Market Hypothesis (“EMH”) as the foundation of modern investment theory. She explained that the “semistrong” form of the EMH assumes all publicly available information and risks are taken into account by investors and thus are fully reflected in securities prices. She emphasized that no specific common equity model should be relied on exclusively and that in order to emulate investor behavior, the results of the different models should be considered. She asserted that she

²² *Id.* at 19-22.

²³ *Id.* at 22-23.

considered the Discounted Cash Flow (“DCF”) model, the Risk Premium Model (“RPM”), the Capital Asset Pricing Model (“CAPM”) and the Comparable Earnings Model (“CEM”).²⁴

In describing the DCF model, Ms. Ahern noted that when investors buy stock, they do so for an expected total return rate which is determined by the dividend yield and the expected growth rate. The sum of the dividend yield and the expected growth rate is the capitalization rate or the total common equity return rate expected by investors. She utilized the single-stage constant growth model, as it is the most commonly used model with public utilities because utilities, especially water utilities are in a mature stage of their life cycles and are not transitioning from growth stage to growth stage. She identified a number of characteristics to support her assertion that the utility industry is relatively stable and mature including the fact that returns on investment for this industry are set through a ratemaking process, as opposed to through the competitive market, and the longevity of the industry.²⁵

Ms. Ahern used unadjusted dividend yields based on the average of closing market prices for the 60 day period ending April 1, 2011. She explained that dividend yield must be adjusted, because dividends are paid quarterly and not daily. She adjusted the actual average dividend yield upward by $\frac{1}{2}$ the annual growth rate, because the various companies increase their quarterly dividend at different times during the year. She asserted that this conservative approach of a $\frac{1}{2}$ growth rate increase was reasonable. She explained how investors rely on analysts’ earnings growth expectations and how such expectations have a significant effect on market prices and the appreciation of those

²⁴ *Id.* at 23-25.

²⁵ *Id.* at 25-27.

prices and cited authorities, Myron Gordon and James Bonbright to support her assertion that analysts' forecasts are superior to financial statements and historical extrapolations and her use of EPS growth rate projections in the cost of common equity analysis. In addition to using security analysts' projected EPS growth rates, she used Value Line's projected five-year compound growth rates in EPS for each company in her proxy group. Ms. Ahern's calculations resulted in her recommendation for a cost of common equity of 9.81 percent which was the median for the companies in her proxy group.²⁶

The second model Ms. Ahern evaluated was the RPM which she defined as based on the premise that the greater the risk borne by investors, the greater the return they require. She asserted that equity capital has a greater investment risk than debt capital. Ms. Ahern noted that with the RPM theory, the cost of common equity equals the cost rate for long term debt plus a risk premium over that cost rate to compensate shareholders for the additional risk they assume by being last-in-line for any claims against the corporation's assets and earnings. She distinguished the RPM and the CAPM by noting that the RPM uses a beta approach taking into account market risk which is a very small percentage of total risk. Additionally, because the CAPM uses a risk-free rate of return, it does not reflect the company's specific risk.²⁷

Ms. Ahern set forth the steps in the RPM analysis starting with how she determined the expected bond yield. She used a consensus forecast of approximately fifty economists of the expected yield on Aaa rated corporate bonds for the six calendar quarters ending with the third calendar quarter of 2012 and made 51 basis point adjustment to that yield to be the equivalent of a Moody's A2 rated public utility bond

²⁶ *Id.* at 27-31, Schedule PMA-6.

²⁷ *Id.* at 31-33.

resulting in an expected bond yield applicable to a Moody's A rated public utility bond of 6.06 percent. She adjusted this by 16 basis points to make the prospective bond yield applicable to an A3 public utility bond because her proxy group's average Moody's bond rating is A3 resulting in the expected specific bond yield of 6.22 percent.²⁸

Ms. Ahern identified the mean equity risk premium of her proxy group as 4.39 percent. She asserted that because betas are derived from market prices of common stocks over a five year period, beta derived equity risk premiums should be given substantial weight. She explained that the total market equity risk premium utilized is 6.30 percent and is based on the average of the long-term historical market risk premium and forecasted market risk premium as well as an equity risk premium based upon a study of the holding period returns of the S&P Public Utility Index relative to A rated public utility bond yields. She used the average historical yield on Moody's Aaa and A rated corporate bonds for the period 1926-2010 and supported her use of the long holding period by noting that it is consistent with the long-term investment horizon presumed by the DCF model. She calculated the long-term historical equity risk premium on the market as a whole to be 5.80 percent by subtracting the long-term arithmetic mean yield on corporate bonds from the long-term arithmetic mean total return rates on the market as a whole. She supported her use of the arithmetic mean, as opposed to the geometric mean, by asserting that its use takes into account variance in returns and equity risk premiums allowing investors to meaningfully evaluate prospective risk. She also cited various authorities to further support her assertion.²⁹

²⁸ *Id.* at 33-34.

²⁹ *Id.* at 34-39.

Because both ratemaking and the cost of capital are prospective, Ms. Ahern asserted that a prospective market risk equity premium is essential. She explained her calculation of the 6.30 percent equity risk premium as deducting the April 1, 2011 Blue Chip Financial Forecasts consensus estimate of about 50 economists of the expected yield on Moody's Aaa rated corporate bonds for the six calendar quarters ending with the third calendar quarter of 2012 of 5.55 percent from the forecasted annual total return rate on the market as a whole of 12.34 percent resulting in a forecasted total market equity risk premium of 6.79 percent. She then added this with the historical equity risk premium of 5.80 percent and divided that sum by two since she gave equal weight to the forecasted and the historical equity risk premiums. This 6.30 percent equity risk premium was adjusted by the median beta of the proxy group, 0.73, to result in a beta driven premium of 4.60 percent which was then added to that based on the holding period returns for public utilities with A rated bonds, 4.17 percent, and then divided by two to reach the beta adjusted risk premium of 4.39 percent. Then Ms. Ahern added the beta adjusted risk premium of 4.39 percent to the adjusted prospective bond yield of 6.22 percent to arrive at her recommended RPM common equity cost rate of 10.61 percent.³⁰

The third method Ms. Ahern discussed was the CAPM which she noted defines risk as the covariability of a security's returns with the market's returns as measured by beta. A beta of less than 1.0 indicates lower variability than the market and a beta of greater than 1.0 indicates higher variability than the market. She pointed out that this method assumes that all non-market risks or unsystematic risks can be eliminated through diversification and any risk that cannot be eliminated is called market or systematic risk. She explained that investors require compensation for this market risk and described how

³⁰ *Id.* at 39-41, Schedule PMA-8.

a risk-free rate of return is added to a market risk premium which is then adjusted to reflect the systematic risk of the individual security relative to the total market as measured by beta. She applied both the traditional CAPM and the Empirical Capital Asset Pricing Model (“ECAPM”) and averaged the two to come up with her result. Ms. Ahern adopted a 4.88 percent risk free rate of return which was based up the average consensus forecast for the reporting economists in the April 1, 2011 Blue Chip Financial Forecasts of the expected yields on 30-year U.S. Treasury bonds for the six quarters ending with the third calendar quarter 2012. She explained that the prospective yield on long-term U.S. Treasury bonds was appropriate for use as the risk free rate, because it is consistent with the long-term cost of capital to public utilities measured by the yields on A rated public utility bonds, the long-term horizon presumed in the standard DCF model used in regulatory ratemaking, and the long-term life of the jurisdictional rate base to which the allowed rate of return will be applied.³¹

Ms. Ahern deducted the 4.88 percent risk free rate of return from the Value Line projected total annual market return of 12.34 percent resulting in a forecasted total market equity risk premium of 7.46 percent. Next she deducted the long-term income return on U.S. Government Securities of 5.20 percent from the SBBI-2011 historical total market return of 11.90 percent for a historical equity risk premium of 6.70 percent. The 6.70 percent historical equity risk premiums resulted in an average total market equity risk premium of 7.08 percent. She added the company specific risk premium, which was derived by multiplying the average total market equity risk premium of 7.08 percent by the Value Line adjusted beta for each company, to the 4.88 percent risk free rate to calculate the CAPM result for each of the companies in her proxy group and a median

³¹ *Id.* at 41-44.

CAPM of 10.20 percent. To calculate the ECAPM, instead of multiplying the beta by the 7.08 percent average total market equity risk premium, she added 25 percent of the average total market equity risk premium with 75 percent of the beta times the average total market equity risk premium and then added that to the 4.88 percent risk free rate for a median ECAPM for the proxy group of 10.50 percent. Finally she averaged the CAPM and the ECAPM results to calculate her recommended cost rate of 10.26 percent.³²

Ms. Ahern evaluated the CEM which she asserted was consistent with the Hope doctrine that the return received by an equity investor should be commensurate with the return on investment of other firms with corresponding risks. She noted that the true cost of an investment is equivalent to its next best alternative use of the funds being invested. She pointed out that regulation is intended to mimic competition and to provide a fair rate of return. She explained that she used a proxy group of non-price regulated firms similar in risk to the price regulated utilities in her proxy group, because to choose a proxy group of price regulated utilities would be circular as achieved returns are a function of authorized ROEs.³³

Ms. Ahern described her proxy group as a group of eighty-five domestic no-price regulated non-utility companies that had systematic and unsystematic risks equaling that of the companies in her water company proxy group. These companies had similar unadjusted betas and standard errors of regression. She asserted that for her proxy group of eight water companies, the median of all of the five-year projected returns on book common equity, net worth or partners' capital is 15.00 percent. After exclusion of four firms that she identified as outliers because of their significantly different returns from

³² *Id.* at 44-46, Schedule PMA-10.

³³ *Id.* at 48-50.

their respective means which she determined after applying a test of significance, her conclusion of CEM cost rate is 14.50 percent.³⁴

Ms. Ahern's concluded that a cost of equity of 11.10 percent was reasonable considering the results of the four methods she employed. She supported her use of four models by noting that no one model is precise enough to support sole reliance on that one model, all of the models have application problems, all are based on EMH and finally, the use of all four is supported by financial literature and regulatory precedent. She noted that she made a downward financial risk adjustment of 00.21 percent because of United Water RI's higher ratemaking common equity ratio of 52.47 percent as opposed to the average of the proxy group which is 49.26 percent and an upward adjustment of 00.55 percent to account for the small size of the Company. After her adjustments, Ms. Ahern stated her recommended common equity cost rate is 11.10 percent for an overall rate of return of 8.74 percent.³⁵

D. Timothy J. Michaelson

Timothy J. Michaelson presented testimony to address the test year, the rate year, and depreciation expense for the rate year and to sponsor the revenue requirement. He identified the test year as the year ending December 31, 2010 and the proposed rate year as the year ending December 31, 2012. He described how he prepared the rate base for the rate year by first developing the rate base for the test year and then forecasting each element.³⁶

Mr. Michaelson first discussed Utility Plant in Service noting that the average balance of Plant in Service is \$22,270,513. He derived this figure by forecasting

³⁴ *Id.* at 50-52, Schedule PMA-11.

³⁵ *Id.* at 52-58, Schedule, PMA-1.

³⁶ United Water RI Exhibit 1d, Direct Testimony of Timothy J. Michaelson, June 3, 2011 at 2-3.

additions and retirements for each month beginning December 31, 2010 and adding or subtracting those forecasts from each month's balance. Then he added all of the balances for the months beginning December 31, 2011 and ending December 31, 2012 and averaged that total to arrive at his final figure for ratemaking purposes. He calculated the (\$6,213,068) average Accumulated Depreciation by adding the monthly balances for December 31, 2011 through December 31, 2012 and dividing that amount by thirteen months. Contributions in Aid of Construction ("CIAC") were calculated in the same manner by summing the monthly balances for the thirteen months beginning December 31, 2011 and ending December 31, 2012 and then dividing that total by thirteen to arrive at average CIAC used in the Rate Base calculation of (\$3,072,858) which was amortized. The amortized amount was used in calculating the \$510,632 annual Depreciation Expense.³⁷

Regarding Accumulated Deferred Income Taxes ("ADIT"), Mr. Michaelson provided schedules to show the differences in tax and book depreciation for projected 2011 and 2012 for existing assets and assets planned to be put into service. He calculated Unamortized Investment Tax Credit ("ITC") and Materials and Supplies the same way as he calculated Utility Plant in Service, Accumulated Depreciation and CIAC by using the thirteen month method. Cash Working Capital ("CWC") was calculated by using 1/8 of Operation Maintenance expenses for a \$235,028 allowance. Mr. Michaelson noted that United Water RI painted two tanks in 2008 and will start amortizing this expense over ten years beginning in February 2012 to coincide with the anticipated date when the new rates will take effect. He also asserted that the Boston Neck tank is scheduled to be painted in October 2012 and this expense will begin to be amortized in that same month.

³⁷ *Id.* at 3-5, Exhibit 3, Schedules 1, 2, 3, 4.

Mr. Michaelson provided a schedule calculating the deferred tax impact on the monthly unamortized balance using the thirteen month method used previously.³⁸

Mr. Michaelson asserted that the Company is proposing a three year amortization period for deferred rate case expense beginning in February 2012 which is projected to total \$320,500. He applied the 78.4 percent unfunded percentage to the expected FAS-106 expense for 2011 and 2012 and then added one twelfth of unfunded 2011 and 2012 expenses to the previous month's unfunded balance to determine the current month's balance. Once he calculated the Deferred Tax impact, a thirteen month average of the net balance was used to determine the amount to be included in Rate Base. He explained the three year amortization period for rate case expense as being appropriate, because future planned capital expenses and cost increases will require the Company to file more frequently than the twelve year period that has passed since the last filing.³⁹

Finally Mr. Michaelson described how adjusted Depreciation Expense was calculated noting that the prior month's Plant Account balance is added/subtracted from one-half of the current month's additions/retirements and then one twelfth of the annual depreciation rate for each Plant Account is applied to that calculation. He asserted that the \$510,632 figure was a total of each month's expense. He again pointed out that the amortization of CIAC is included in that calculation. Regarding the CIS system, Mr. Michaelson noted that because of its size relative to other computer software, the Company was proposing to amortize this expense separately over seven years and referenced that this expense is included in Depreciation expense. Lastly, he stated that he

³⁸ *Id.* at 5-6, Exhibit 3, Schedules 5A-D, 6, 7, 9.

³⁹ *Id.* at 6-7, Exhibit 3, Schedules 7, 8A.

prepared an exhibit showing summarized information of operating income, rate base and rate of return for the rate year at present rates and the proposed rates.⁴⁰

E. Thomas G. Lippai

Thomas G. Lippai, analyzed United Water RI's expenses and adjusted them to reflect known and measurable changes and performed normalizing calculations in order that those expenses fairly represented the Company's operations into the rate year. He normalized expenses based on known and measurable changes for expenses that could be independently analyzed and used the 3.327 percent represented by Blue Chip Financial Forecast's estimated increase to the GDP Price Index for expenses where no such information to reflect known and measurable changes was available. He sponsored twenty-three schedules supporting his adjustments.⁴¹

Mr. Lippai's (\$16,658) adjustment to wages and salaries represented 2011 pay increases, a projected salary increase of 2.7 percent to represent pay increases for the rate year, overtime pay normalized based on a three year historical average percentage and incentive compensation. He also adjusted this expense by 1.44 percent for labor transferred in and 22.53 percent for labor transferred out or capitalized labor which was based on a three year historical average percentage. He applied the net of those percentages, 21.09 percent, to normalized fringe benefits, based on the three year historical average percentage, associated with the labor transferred in or transferred out or capitalized. The normalized fringe benefits costs included payroll taxes, health and

⁴⁰ *Id.* at 7-8, Exhibit 3, Schedule 10.

⁴¹ United Water RI Exhibit 1d, Direct Testimony of Thomas G. Lippai, June 3, 2011 at 2-5.

welfare costs, worker's compensation, pension, PEBOP, 401k and other employee costs.⁴²

The average kilowatt per hour ("kWh") usage per million gallons ("mg") was calculated by Mr. Lippai using the average of the three year historical kWh and total water production which he then applied to the total rate year water produced to determine the rate year kWh water usage. He calculated the power costs by applying projected distribution and commodity unit prices per kWh to total rate year kWh usage. He then applied the inflation rate per the GDP to the current rates. He asserted that the Company has an existing contract with Constellation New Energy for the commodity portion of power costs that is effective until December 2013. He noted that the power expense for the rate year is less than the test year, and he made an adjustment to reflect the decrease of \$28,439. Mr. Lippai used a three year average to determine chemical usage per mg. He made a \$4,867 adjustment to reflect the projected increase in this cost based on the 2011 chemical unit prices adjusted by the GDP Price Index for 2012.⁴³

Mr. Lippai asserted that the Company no longer provides pension and PEBOP benefits for new hires in an effort to contain costs. He stated that the United Water RI's actuary projected a decrease of \$27,227 for pension expense and \$12,436 for PEBOP expense. In discussing other employee benefits, Mr. Lippai noted that United Water RI employees contribute approximately 20-25 percent of their health benefit costs which he projected, based on information from outside Human Resource consulting firms, will increase by ten percent in the rate year. He adjusted rate year life insurance and 401k expenses by applying the 2.53 percent base wage increase effective April 2011 and the

⁴² *Id.* at 6-7, Exhibit 4, Schedules 2, 3.

⁴³ *Id.* at 7-9, Exhibit 4, Schedules 4, 5.

2.7 percent base wage increase effective April 2012 to the test year amounts. He increased other employee benefit expenses by applying the GDP inflationary rate to the three year historical average.⁴⁴

Mr. Lippai amortized tank painting expense over a period of ten years. Two tanks were painted in 2008 and one other will be painted in the fourth quarter of 2012. The proposed amortization of this cost results in a \$38,574 adjustment. He described Transportation/Vehicle expense to include fuel costs, maintenance and repair costs and other miscellaneous costs including insurance and depreciation. He noted that because some labor was either transferred out or capitalized this expense decreased resulting in a \$12,257 reduction to the test year expense. Test year insurance expense for general corporation, property and worker's compensation was adjusted by \$256 to reflect value increases, liability and industry increases, loss rate history and increased payroll amounts.⁴⁵

Mr. Lippai computed the Customer Information/Billing expenses for the rate year by increasing the average cost per customer for billing, printing, processing and postage for the 2010 calendar year and adding to that average, an increase for customer growth resulting in a \$659 increase in the rate year. He projected Rate Case expense after full adjudication of the instant matter to be \$320,500 and proposed a three year amortization of this expense. Mr. Lippai explained rent expense for property that United Water RI leases. The property rate year lease expense was increased by 4 percent for the rate year which Mr. Lippai described as consistent with prior increases. United Water RI also leases a transmission line which was turned over to the Company and for which the

⁴⁴ *Id.* at 9-10, Exhibit 4, Schedules 6-8.

⁴⁵ *Id.* at 10-12, Exhibit 4, Schedules 9-11.

Company was making loan payments. Those loan payments will be complete in March 2012 leaving United Water RI with a \$4864 reduction in loan payments for the rate year.⁴⁶

Mr. Lippai described the components of Outside Services as including administration, accounting, tax, communications, customer service oversight, finance, human resources, information systems, legal, procurement, technical services and other general services necessary in the proper conduct of business. He noted that test year Management and Services Fees was adjusted by 2.7 percent to reflect the projected wage increase. Mr. Lippai explained that accounting and auditing, information systems and management fee components were adjusted by a 3.327 percent inflationary factor per the GDP to test year amounts. He adjusted the remaining components by applying the 3.327 percent inflationary factor to a three year historic average of those expenses. He identified the total dollar adjustment for Outside Services as \$3,140. Mr. Lippai explained that Regulatory Commission Expense was based on R.I. Gen. Laws §39-1-23 and other Operation and Maintenance expenses were adjusted by applying the 3.327 percent inflation factor to the three year historical average.⁴⁷

Regarding Property Tax, Mr. Lippai applied a three year historical average percentage change of 6.15 percent in the actual taxes paid from 2007 through 2010 to the test year which resulted in an increase of \$23,522. He used current federal and state statutory tax rates to determine payroll tax expense and made a \$380 adjustment to Gross Receipts Tax to reflect a rate of 1.25 percent being applied to rate year operating revenues. Mr. Lippai adjusted Federal Income Tax by the current statutory rate of 35

⁴⁶ *Id.* at 12-14, Exhibit 4, Schedules 12-14.

⁴⁷ *Id.* at 14-16, Exhibit 4, Schedules 15-17.

percent. He explained that the 3.327 percent Inflationary Factor was based on the Blue Chip Financial Forecast's estimate of increases to the GDP Price Index per the December 1, 2010 issue to cover the years 2011 and 2012. Finally, he calculated Interest expense by applying the weighted cost of debt to the rate year rate base amount.⁴⁸

F. Christopher P.N. Woodcock

Finally, Christopher P.N. Woodcock provided testimony updating the cost of service allocations and rates. Mr. Woodcock noted that United Water RI requested rate year revenue of \$4.077 million which amounts to an increase of \$1.218 million or 43.3 percent of current revenues. He explained that the cost of service study supports significant increases to public fire service and customers service charges. He noted that in the prior Docket, No. 2873, neither one of these charges was increased to reflect fully its cost. Recognizing that going to full cost of study based rates would result in a significant shift in revenues, Mr. Woodcock proposed phase-in rates that are less than the cost of service for retail fire service and customer service charges. He noted that United Water RI's proposed increase for metered retail rates that is greater than indicated to offset the phase in rates proposed for retail fire service and customer service charges. He asserted that the proposed rates for United Water's wholesale customers are not impacted by the proposed adjustments to the retail fire service and customer service charges.⁴⁹

Mr. Woodcock identified and described the eleven main schedules and supporting schedules that he attached to his testimony. He discussed the cost of service study he prepared for the Company in Docket No. 2873 noting that the parties agreed to phase-in some of the increases to the public fire protection charges and the service charges for

⁴⁸ *Id.* at 17-18, Exhibit 4, Schedules 18-23.

⁴⁹ United Water RI Exhibit 1e, Direct Testimony of Christopher P.N. Woodcock, June 3, 2011 at 3-4.

smaller meters that the study indicated should both be increased substantially. Mr. Woodcock asserted that the Company is not presently proposing to adopt cost based rates. He pointed out that the cost based \$245 per quarter public fire charge is consistent with the \$200 per quarter charge derived in Docket No. 2873. Mr. Woodcock recommended doubling the public fire service charges, about one half of the cost based increase which he noted would move them closer to the cost based rates, and shifting the remaining portion of this cost to the retail base costs. He also recommended increasing the 5/8 inch meter quarterly service charge by about half the amount indicated with the remaining portion being assigned to the retail base costs. In both instances, he did not recommend that the wholesale customers share in this increase as these charges are unrelated to the sales for resale. Mr. Woodcock acknowledged that his recommended phase-in adjustments will increase the bill of a typical residential customer using 2000 cubic feet per quarter by approximately \$7 per quarter. He also noted that this recommendation is not unusual citing the Commission's recent decision in Pawtucket Water's recent filing in Docket No. 4171 whereby both the public fire protection charges and the 5/8" service charges were set below the cost of service.⁵⁰

III. Division of Public Utilities and Carriers Direct Testimony

The Division presented the testimonies of Thomas S. Catlin, a principal with Exeter Associates, Inc., Jerome D. Mierzwa, a principal with Exeter Associates, Inc., and Matthew I. Kahal, an independent consultant specializing in the areas of energy, utility and telecommunications.

A. Thomas S. Catlin

⁵⁰ *Id.* at 5-15.

Thomas Catlin provided testimony on behalf of the Division to evaluate United Water RI's rate year rate base and net operating income at present rates. He recommended the overall revenue increase he believes necessary to generate the return on rate base recommended by Division witness, Matthew Kahal. Mr. Catlin accepted United Water RI's test year as the year ending December 31, 2010 and its rate year as the year ending December 31, 2012 for determining the revenue requirement. He recommended a revenue increase of \$896,196 as opposed to the \$1,218,702 requested by the Company as what he found as necessary to generate the 7.58 percent rate of return recommended by Mr. Kahal.⁵¹

Mr. Catlin made a number of adjustments to United Water RI's rate base and operating income. He adjusted Plant in Service to reflect a \$198,000 investment that United Water RI included in contributions in-aid-of construction but failed to reflect as an investment in Plant in Service. He reduced United Water RI's adjustment to Material and Supplies by \$15,575. To justify this reduction, he asserted that since this expense has declined since mid-2010, the most recent 13-month average should be used to reflect investment levels as opposed to the historical 13-month average used by United Water RI. Mr. Catlin made two adjustments to Cash Working Capital, the first to eliminate tank painting amortization expense from the expense base used in the calculation of cash working capital, asserting that it should be treated like all other depreciation and amortization expenses as it is recorded as a regulatory asset and included in rate base, and

⁵¹ Division of Public Utilities and Carriers Exhibit 1a, Direct Testimony of Thomas S. Catlin, September 31, 2011 at 3-5.

the second to adjust the O&M base to reflect the adjustments he made, which based on the 1/8 method reduces United Water RI's cash working capital allowance by \$15,419.⁵²

Even though he accepted the deferral of the tank painting costs, which was never approved by the Commission, Mr. Catlin alleged that the Company's proposed amortization schedule of the costs of painting the Sherman and Howland Aerator tanks was inappropriate and should have begun in 2008 when the painting was complete rather than in 2012 as the Company proposes. He adjusted the deferred tank painting costs included in rate base to reflect the amortization of the costs for the 45 month period, May 2008 when the tanks were put back into service, to February 2012, when the Company assumed amortization would begin resulting in a net reduction in rate base of \$57,461 after accounting for an associated reduction in accumulated deferred income taxes. He also eliminated the balance of deferred rate case expense from rate base consistent with prior Commission practice as affirmed by the Rhode Island Supreme Court in *Providence Gas Company v. Malachowski*, 656 A.2d 949 at 953 (R.I. 1995) and pointed out that if these unamortized rate case costs were to be included in rate base, they should be stated on a net of tax basis as they are deductible for income tax purposes.⁵³

Mr. Catlin proposed a \$44,972 reduction to rate base to reflect the increase in ADIT resulting from a provision for federal bonus depreciation of 100 percent for 2011 and 50 percent for 2012. Regarding Incentive Compensation, Mr. Catlin proposed two adjustments. First he reduced the full target level of incentive for the Manager and Superintendent from 15 percent and 10 percent to 12.45 percent and 7.55 percent, respectively, as these amounts were the average incentive payments that these two

⁵² *Id.* at 5-7, Schedules TSC-2, TSC-5.

⁵³ *Id.* at 8-10, Schedule TSC-7.

employees received over the last three years. He did not reduce the Supervisor full target incentive, as the individual in that position is a new hire, and Mr. Catlin had no historical data for that position. He also adjusted this expense to exclude the 40 percent of the bonus for these employees that is directly associated with meeting financial goals which he described as not appropriate to be recovered from ratepayers. Mr. Catlin also proposed an adjustment to the incentive compensation billed to United Water RI for United Water Management and Services employees reducing that expense by the \$17,000 attributable to meeting corporate financial goals.⁵⁴

Regarding Benefits Transferred Out, Mr. Catlin reduced O&M expense by \$1,078 to reflect the amount that United Water RI inadvertently omitted for the OPEB transition obligation. He also adjusted medical benefits expense in order to reflect the Company's acknowledged correction to the number of employees receiving medical coverage. He also recommended a five year amortization period for rate case expense, as opposed to the three year period recommended by United Water RI, noting that a five year period was reasonable in light of the fact that the last two rate cases were filed eight and ten years apart. Pointing out that the cost of the Consumer Confidence Reports for 2009 and 2010, which is part of the Outside Service Expense, was included in another account, Mr. Catlin reduced this expense to reflect the same. Finally, Mr. Catlin proposed a ten year amortization period for the new CIS as opposed to the seven years proposed by United Water RI. He reasoned that two other utilities with which he was involved had identified ten years as the useful life of their newly installed CIS.⁵⁵

B. Jerome B. Mierzwa

⁵⁴ *Id.* at 11-13, Schedules TSC-8, TSC-9, TSC-10.

⁵⁵ *Id.* at 14-16, Schedules TSC-11, TSC, 12, TSC-13, TSC-14, TSC-15.

Jerome Mierzwa provided testimony addressing United Water RI's cost of service study and rate design proposals. He explained that the cost of service study is conducted to determine the level of costs properly recoverable from each rate class. He identified the two most common methods in allocating costs as the base-extra capacity method and the commodity-demand method. He described the base-extra capacity method as one where costs and investment are classified into four categories and then divided between meter and service related costs and account or billing related costs before they are allocated to the various customer classes. The commodity-demand method classifies usage related costs as demand and commodity before being allocated to the various customer classes.⁵⁶

Mr. Mierzwa testified that United Water RI employed the base extra-capacity methodology and included the residential and non-residential retail classes, the sales for resale class and the public and private fire protection classes. He identified what he termed as several undesirable rate impacts of United Water RI's cost of service study. The first impact Mr. Mierzwa noted as undesirable was United Water RI's shift of \$400,000 from fire protection charges to the retail classes. He also pointed out a shift of \$350,000 from billing charges to usage charges in an effort by United Water RI to reduce the increase in monthly service charges.⁵⁷

While not proposing any changes to the allocation factors used in United Water RI's cost of service study, Mr. Mierzwa did recommend that Mr. Catlin's revenue requirement adjustments be accepted. He also proposed adjustments to both cost shifts. First, he recommended maintaining the \$130 per quarter public fire hydrant charge

⁵⁶ Division of Public Utilities and Carriers Exhibit 1b, Direct Testimony of Jerome D. Mierzwa, September 31, 2011 at 2-4.

⁵⁷ *Id.* at 5.

proposed by United Water RI which will result in reducing the \$400,000 cost shift to \$320,000. Mr. Mierzwa's second recommendation was to reduce the service charge cost from \$350,000 to \$320,000. He prepared a revised cost of service study reflecting the Division's adjustments and the change in consumption volumes identified by United Water RI in its response to a data request from the Division.⁵⁸

C. Matthew I. Kahal

Matthew Kahal presented testimony on behalf of the Division to address the Company's proposed rate of return and cost of common equity and his recommendation regarding the same. Mr. Kahal noted the United Water RI is owned by United Water Works, Inc. ("UWW") which is a wholly-owned subsidiary of Suez Environmental S.A. ("Suez") which is a foreign company that has both utility and non-utility operations. He noted Ms. Ahern's recommendation for an overall authorized rate of return of 8.74 percent and asserted that the Company provided little explanation for its capital structure of 52.47 percent common equity and 47.53 percent long-term debt. He concurred with the approach of using the proposed capital structure of UWW explaining that United Water RI is capitalized at 100 percent equity which would not be appropriate for ratemaking purposes and that UWW is the ultimate source of United Water RI's capital base. Furthermore, he noted that utilization of Suez's capital structure would not be reasonable as it only has 6.2 percent of its assets devoted toward water utility service as opposed to UWW's 96 percent devoted to water utility service.⁵⁹

Mr. Kahal recommended a rate of return of 7.58 percent which included an ROE of 9.5 percent and a capital structure of 49.9 percent total debt and 50.1 percent common

⁵⁸ *Id.* at 5-7.

⁵⁹ Division of Public Utilities and Carriers Exhibit 1c, Direct Testimony of Matthew I. Kahal, September 31, 2011 at 4-5.

equity. He used a 6.07 percent rate for cost of debt based on United Water RI's response to a data request regarding recent debt refinancing. Mr. Kahal noted Ms. Ahern's ROE recommendation and set forth his 9.5 percent ROE which he stated was developed from a proxy group of water utilities similar to Ms. Ahern's using the DCF method. He also used a gas distribution proxy group as a check which he indicated as been employed by Ms. Ahern in past water utility cases and which yielded results demonstrating that the results obtained from his water proxy group were conservative. Lastly, Mr. Kahal employed a CAPM analysis. He asserted that the results obtained from his evaluation and consideration of the instability of the financial markets support his recommendation of a 9.5 percent ROE. He also indicated that he considers United Water RI to be a low-risk utility company.⁶⁰

Noting that his review yielded ten years of declining capital cost trends and three years of close to zero short-term Treasury rates, Mr. Kahal stated that interest rates have trended down and remained low. He pointed out that while low short term rates are attributable to Federal Reserve policy decisions, low long term rates are reflective of market weakness, the inflation outlook and international events. He asserted that although there has been market volatility within the few weeks that he prepared his testimony, utility stocks were relatively stable in 2011. He relied on the most recent six month average of market data, as has been his practice, and considered the recent market turmoil in developing his recommendation for United Water RI.⁶¹

While agreeing that it is reasonable to rely on the capital structure of UWW, Mr. Kahal identified several problems with United Water RI's proposed capital structure.

⁶⁰ *Id.* at 5-7, Schedule MIK-1.

⁶¹ *Id.* at 7-11, Schedule MIK-2.

First, he noted that United Water RI omitted short-term debt from its proposal. The second problem identified by Mr. Kahal was United Water RI's omission of a negative balance sheet entry "Other Comprehensive Income" which results in the overstating of UWW's common equity balance by \$3.285 million. Mr. Kahal explained that short term debt should be included in the capital structure of a company, because it helps to finance operations and is the least expensive type of financing. He pointed out that since UWW uses short term debt for financing, it will likely continue to do so in the future. He pointed out that since United Water RI's Allowance for Funds Used during Construction ("AFUDC") does not reflect short term debt, it is important that it be included in the Company's capital structure for setting a fair rate of return. To reflect short term debt, Mr. Kahal used a 12-month average for the period ending June 2011 which averaged \$28.7 million or 4.0 percent of capitalization. He noted that the low cost rate on short-term debt of 1.1 percent is expected to continue through 2013. After reversing the overstatement to common equity noted above, Mr. Kahal identified the Company's equity balance of \$356.1 million. Based on his adjustments, he recommended a capital structure of 45.8 percent long term debt, 4.04 percent short term debt and 50.13 percent common equity. Mr. Kahal also adjusted the Company's proposed embedded cost of debt to reflect its recent interest expense savings that resulted from its redemption of a \$20 million debt issue at a cost rate of 5.3 percent to a new issue at a cost rate of 4.1 percent. His recalculation resulted in a reduction in the embedded cost rate from 6.15 percent to 6.07 percent.⁶²

Mr. Kahal discussed Ms. Ahern's evaluation of United Water RI's business risk, specifically the capital investment needed to comply with the Safe Water Drinking Act

⁶² *Id.* at 12-14, Schedule MIK-1.

and the Company's small size, noting that there has been no significant change in the Company's risk profile since its last rate case. Explaining the corporate structure of United Water RI, Mr. Kahal asserted that its ultimate parent, Suez, and the parent of its holding company UWW, infuses equity into it from time to time. He pointed out that even though United Water RI is not rated by major credit rating agencies, UWW is rated as an A- by Standard & Poors ("S&P"), which considers water utilities like electric and gas distribution utility companies, to be low risk. Based on S&P's recent summary identifying UWW's stand-alone business risk as excellent, Mr. Kahal asserted that Ms. Ahern's 0.55 percent size adjustment was not warranted.⁶³

In discussing cost of equity, Mr. Kahal defined it as that amount required by investors to acquire or to hold on to a company's common stock. He noted that two factors determine the cost of equity of a company: fundamental conditions in the market and business and financial risks of the individual company. He recognized that Ms. Ahern adhered to these principles in her DCF analysis, but asserted that her RP and CE analyses veered from those principles by using excessive historical and non-market data. He used both the DCF and CAPM models emphasizing the DCF results because most utility regulatory commissions, including Rhode Island, rely heavily on this method in developing the cost of equity and setting a fair rate of return.⁶⁴

Mr. Kahal identified the objective of the DCF model as estimating the discount rate expected by investors on the price of a particular publicly traded common stock. He then set forth the elements of the model's equation. He noted that the constant growth rate assumption is reasonable for regulated utilities particularly when applied to a group

⁶³ *Id.* at 14-16.

⁶⁴ *Id.* at 17-19.

of companies. Because this model can only be applied to publicly traded companies, it could not be applied to United Water RI. Furthermore, because of Suez's extensive international and non-utility operations, it was not reasonable for Mr. Kahal to apply the DCF model to Suez. He selected a proxy group to eliminate any fluctuations in data that cannot be counted for in a simple DCF study and which will cancel out anomalies through the averaging process. He noted that his group was similar to Ms. Ahern's group and that she used all but one of the same companies. He also used a proxy group of natural gas distribution companies as a check on the results of his water utility proxy group noting that Ms. Ahern has done the same in the past although not in the instant matter.⁶⁵

Mr. Kahal used nine companies, four of which are small water companies and whose assets are principally devoted to regulated utility service. He noted that the one company he used that Ms. Ahern excluded did not materially affect his DCF results. He stated that because the non-utility operations of some of the companies he used in his proxy group are minimal he did not believe it was necessary to make an adjustment to his recommendation to reflect those riskier non-regulated operations. He mentioned Ms. Ahern's 0.55 percent size adjustment and her downward adjustment of 0.21 percent for United Water RI's strong capital structure noting that although he did not make an adjustment, his 9.5 percent recommendation slightly exceeds that of the proxy groups results.⁶⁶

Using the six-month time period, Mr. Kahal's dividend yield component of 3.33 percent reflected an average of the proxy group dividend yields which he described as

⁶⁵ *Id.* at 19-22

⁶⁶ *Id.* at 22-23.

stable over the six month period. He used the half-year growth rate adjustment technique to adjust this yield to 3.4 percent noting that the yield used in the model should be the value of what investors expect to receive over the course of a year. He pointed out that Ms. Ahern also used the half-year growth rate adjustment, but used a 60-day average as opposed to the six-month average he used. Because of the stability of the market data for the group, Mr. Kahal recognized that Ms. Ahern's approach did not produce a significantly different result than the result he had obtained.⁶⁷

Regarding the growth rate, Mr. Kahal asserted that it should be prospective observing that Ms. Ahern placed exclusive weight on securities analysts projections of earnings per share. He averaged five sources, YahooFinance, MSNMoney, Reuters, CNNfn and Value Line, along with other evidence to obtain his 5.5 to 6.5 percent range for long-term growth rate. In order to test the reasonableness and to corroborate the growth rate, Mr. Kahal also compiled three other measures of growth rates published by Value Line, growth rates of dividends and book value per share and long-run retained earnings growth. He pointed out that this information was only available for the five larger companies in his water proxy group and ranged between 4.25 and 4.8 percent for these three other measures. Mr. Kahal noted that the Commission has historically favored the use of earnings retention growth, here averages 4.6 percent, but suggested that sustainable growth be included as an adder which he estimated at 1.2 percent for a total growth rate range of 5.8 percent. He concluded that the 5.8 percent sustainable growth rate and the 6.15 percent analysts' earnings projections support a reasonable range of 5.5 to 6.5 percent.⁶⁸

⁶⁷ *Id.* at 23-24.

⁶⁸ *Id.* at 24-26, Schedule MIK-4.

Based on his calculation using an adjusted dividend yield of 3.4 percent and a long-term growth range of 5.5 to 6.5 percent, Mr. Kahal identified a DCF range of 8.9 to 9.9 percent, with a midpoint of 9.4 percent. When asked to compare his recommendation to Ms. Ahern's, Mr. Kahal responded that she recommended a range with a midpoint of 9.81 percent which falls within his recommended range.⁶⁹

Mr. Kahal discussed his evaluation of the gas company proxy of nine companies and identified an adjusted dividend yield of 3.8 percent for this group. He identified a growth rate range of 4.5 percent for securities analyst earnings, to 5.5 percent for sustainable growth rate. This range with the 3.8 percent adjusted dividend yield revealed a DCF return range of 8.3 to 9.3 percent with a midpoint of 8.8 percent. Mr. Kahal stated that this supported his 9.5 percent recommendation noting that the 9.3 percent upper end of his range reflects the use of the sustainable growth rate methodology.⁷⁰

Mr. Kahal identified the CAPM methodology as a form of risk premium methodology most often used in rate cases after the DCF method. He noted the cost of equity as equaling the yield on a risk-free asset added to the sum of an equity risk premium multiplied by beta, which is a firm-specific risk measure computed as movements of the firm's stock compared to movement of the market as a whole. This, he stated, measures the investment risk that cannot be reduced or eliminated through asset diversification. Since the market has a beta of 1.0, a low risk company would have a beta of less than 1.0 and a high risk company would have a beta of greater than 1.0. Of the three variables in the formula, Mr. Kahal testified that two were directly observable, the yield on the risk-free asset, e.g. a Treasury security yield, and the beta, which is published

⁶⁹ Id. at 27-28, Schedule MIK-4.

⁷⁰ Id. at 28-30, MIK-5.

by an investor service such as Value Line. The challenge, he stated, comes in measuring the expected return on the overall market. He pointed out that both he and Ms. Ahern used the Value Line published beta.⁷¹

Mr. Kahal used a beta of 0.72 percent noting that Ms. Ahern's used a beta that was slightly higher, 0.74 percent. He also used long-term Treasury yields that averaged 4.25 percent over the last six months and an equity risk premium range of 5 to 8 percent. His calculations revealed a CAPM range of 7.9 to 10.0 percent with a midpoint of 8.9 percent. He pointed out that had he used Ms. Ahern's market risk premium of 7.1 percent, his CAPM result would have been 9.36 percent. He justified his 5 to 8 percent range because of uncertainty regarding the true market return value and as supported by a finance publication that was also cited by Ms. Ahern. Additionally, he pointed out that Ms. Ahern's 7.1 percent equity risk premium falls within his range.⁷²

Finally, Mr. Kahal discussed Ms. Ahern's recommendations for the various methodologies. First he alleged that her ROE recommendation was distorted by the 14.5 percent Comparable Earnings estimate and that her size adjustment was improper. Specifically for her DCF recommendation, he asserted that his securities analyst growth rate average which was 0.5 percent lower than hers was compiled with more recent and comprehensive data and that she had failed to calculate a sustainable growth rate which the Commission has relied on previously. Regarding her CAPM analysis, Mr. Kahal asserted that there is no basis or support for her use of the ECAPM adjustment. Furthermore, he noted that her 4.88 percent risk free rate greatly overstates Treasury yields. Mr. Kahal found Ms. Ahern's expected cost of debt to be out of line with current

⁷¹ *Id.* at 30-31.

⁷² *Id.* at 31-34, MIK-3.

market conditions. Additionally, he alleged that the CE method is not useful for determining cost of equity as it has nothing to do with the cost of equity not to mention the other problems with this method. Lastly, Mr. Kahal indicated that Ms. Ahern did not present persuasive evidence in support of her size adjustment.⁷³

IV. United Water Rhode Island Rebuttal Testimony

In response to the Division's Direct Testimonies, United Water RI presented the rebuttal testimonies of Mr. Michaelson, Mr. Lippai and Ms. Ahern.

A. Timothy J. Michaelson

Mr. Michaelson identified Mr. Catlin's proposed adjustments to rate base to which United Water RI agreed. The first of those adjustments was the addition of \$198,000 in rate base to reflect the Company's inclusion of the Contribution associated with the transmission main that services the Indian Lake Shore Development that was omitted from the Plant in Service schedule. Mr. Catlin's adjustment to utilize the most recent 13 month average balance available as opposed to the 13 month period ending December 31, 2010 was accepted and lowered rate base by \$15,575. United Water RI agreed to an adjustment of Cash Working Capital of \$6,397 which reflects: the exclusion of the \$38,574 tank painting amortization expense, a reduction of \$3,526 of incentive compensation resulting in a lowering of O&M expense, a reduction of \$10,051 of Medical Benefits Expense, an increase of O&M expenses by \$1,080 to reflect an adjustment to Benefits Transferred Out, and the agreement with Mr. Catlin that the \$5,113 OPEB Transition Obligation should be part of the Benefits Transferred Out calculation and the adjustment of Benefits Transferred Out to reflect the lowering of the Medical Expense and the Payroll Taxes associated with lower Incentive Compensation,

⁷³ *Id.* at 35-42.

and the lowering of Regulatory Commission Expense to reflect the lower revenue requirement compared to the original filing. United Water RI also agreed to reduce Rate Base by \$57,461 to reflect amortization of the tank painting costs for the Howland Aerator and Sherman tanks beginning in 2008 instead of waiting until rates are set in the instant matter. The Division's recommendation to remove unamortized Rate Case Expenses of \$272,756 from Rate Base was accepted by United Water RI as was the Division's adjustment to Accumulated Deferred Income Taxes which reduced Rate Base by \$44,972.⁷⁴

Mr. Michaelson set forth Mr. Catlin's proposed adjustments that were not acceptable to United Water RI. Specifically, the Company did not agree with the proposed adjustment to the CIS amortization period, because the Company's internal experts recommended a seven year amortization period which was previously allowed in its Pennsylvania case (Docket R-2011-2232985). His updated Rate Base to \$10,874,770 after the adjustments made in the rebuttal testimony.⁷⁵

B. Thomas G. Lippai

Mr. Lippai provided rebuttal testimony to address adjustments made by Mr. Catlin to incentive compensation, rate case amortization and outside services expense and noted that United Water RI is not contesting the Division's adjustments relating to reduced incentive compensation for the Manager and Superintendent, benefits transferred out and medical benefits expense. He described the Short Term Incentive Plan ("STIP") as based on personal and financial performance of all active exempt employees not eligible for any other annual incentive program offered by the Company. He noted that

⁷⁴ United Water RI Exhibit 2a, Rebuttal Testimony of Timothy J. Michaelson, November 8, 2011 at 1-3..

⁷⁵ *Id.* at 3-4.

the Division adjusted the financial goal portion of the STIP which accounts for forty percent of the award and which is determined by averaging the STIP paid to eligible employees for achieving the financial goals using the years 2008, 2009 and 2010. He disagreed with Mr. Catlin's reason that the incentive to improve the Company's financial performance is not consistent with the ratepayers' interests alleging that it is part of an employee's total compensation package. He noted that it is a way for the Company to attract and retain qualified staff. He also pointed out that this portion of an employee's compensation is not considered base pay for benefit calculations and if United Water RI consolidated these incentives into base pay, labor costs would increase thus causing an increase in the revenue requirement. He asserted that the STIP also provides a benefit to ratepayers by reducing the revenue requirement and resulting in lower rates. Additionally, being able to retain employees provides consistency of service and increased efficiency. Based on his analysis, he recommended that only the Division's adjustment to incentive compensation as it relates to the Superintendent and Manager be accepted by the Commission and that the amount of adjustments that the Division made for the United Water RI and the UWM&S employees be added back into the revenue requirement.⁷⁶

Mr. Lippai also discussed Rate Case Amortization and the Division's proposed increase of the Company's proposal from three to five years. He noted that United Water RI does not anticipate an extended time period between rate filings like the twelve years that have passed since its last rate filing. He reiterated the major capital projects planned to go into service over the next few years that will result in the Company's having to

⁷⁶ United Water RI Exhibit 2b, Rebuttal Testimony of Thomas G. Lippai, November 8, 2011 at 1-5.

request further rate increases. He recommended that the Commission accept the Company's three year amortization schedule for rate case expense.⁷⁷

Regarding Other Outside Services, Mr. Lippai asserted that the Division's adjustment was only to 2008 CCR costs that were included in the Other Outside Services account and did not include 2009 and 2010 CCR costs that were included in the Other Operation and Maintenance Expense category. He noted that the elimination of the Company's proposed adjustment would not allow for the adjustment of other costs also included in the Other Outside Services account. Mr. Lippai identified a revised operation and maintenance expense of \$1,864,587 and federal income tax as a result of the Company's acceptance of certain of the Division's adjustments.⁷⁸

C. Pauline M. Ahern

Ms. Ahern's rebuttal testimony addressed Mr. Kahal's direct testimony and recommendations concerning capital structure and rate of return. The first thing she disputed was his inclusion of short-term debt in United Water RI's capital structure. Her reasons for objecting to the inclusion of short-term debt included the fact that short-term debt is primarily used by UWW to fund interim capital projects, gaps in working capital and has only been used intermittently in UWW's history. She noted that the monthly volatility of UWW's short-term debt balance indicates that it should not be used continuously to fund rate base. She also disputed Mr. Kahal's inclusion of other comprehensive income in his common equity ratio, specifically the negative \$3.285 million amount that she asserted was not related to the results of company operations but to the difference between pension funding and the actuarially determined pension

⁷⁷ *Id.* at 5-6.

⁷⁸ *Id.* at 6-7.

expense. She did not object to Mr. Kahal's 6.07% cost of long term debt as that is the rate of such debt at the current time.⁷⁹

Ms. Ahern also challenged Mr. Kahal's use of a proxy group of natural gas distribution companies. She asserted that this was inadequate for cost of capital purposes, because this group could not reflect specific water industry risk and that use of the publically traded water utilities for a proxy group is sufficient to derive an investor required rate of return. Based on her opinion, the analysis of the natural gas proxy group was inappropriate and not reflective of the unique risks of water utilities. She did not address Mr. Kahal's cost of common equity for his natural gas utility proxy group. She did update her recommended cost of common equity and noted that she and Mr. Kahal have an identical water proxy group.⁸⁰

Regarding Mr. Kahal's recommended 9.50% cost of common equity, Ms. Ahern asserted that it was inadequate because it was based primarily on the DCF method which has the tendency to either overstate or understate investors' true required return. Specifically, Ms. Ahern reiterated her direct testimony and her reasoning for using more than one cost of equity model to determine a fair cost of common equity rate. She alleged that Mr. Kahal's recommendation based on the DCF model will not accurately identify investors' required return rate when there is a significant difference between the market value and the book value of the common stock.⁸¹

Ms. Ahern also criticized Mr. Kahal's CAPM analysis asserting that he did not use a projected yield for his risk-free rate, that he relied upon a range of outdated risk premiums and that was not representative of the expected return range of risk premiums

⁷⁹ United Water RI Exhibit 2c, Rebuttal Testimony of Pauline M. Ahern, November 8, 2011 at 1-4.

⁸⁰ *Id.* at 5-6.

⁸¹ *Id.* at 6-13.

and that he did not use an ECAPM analysis. She alleged that his use of average yields on 30-year U.S. Treasury bonds for the March-August 2011 period ignores the fact that both cost of capital and ratemaking are prospective and asserted that the rates in this case will affect a future period of time. Her second criticism of Mr. Kahal's analysis was of his disregard of the EMH which she spent considerable time discussing in her direct testimony. She argued that forecast accuracy is only revealed after some future period of time. She stressed that projections of interest rates should be included in a cost of common equity analysis because they are available to investors and because use of the projections is consistent with the EMH. Ms. Ahern also asserted that the premium range used by Mr. Kahal was stale, not supported by empirical evidence and not representative of expected market equity risk premiums. She contended that his use of outdated information was inconsistent with the prospective nature of cost of capital, ratemaking and the CAPM theory. She stated that Mr. Kahal should have given weight to an expected market return. She reiterated her academic support for use of the ECAPM which she stressed that Mr. Kahal should have employed noting that if he had, his CAPM analysis would have yielded a properly calculated CAPM cost rate of 11.49% as opposed to, what she alleged was, his grossly understated range of 7.90% to 10.00%.⁸²

Ms. Ahern declared that had Mr. Kahal's calculations been proper, he would have calculated a range of common equity of 9.50% to 11.49% with a midpoint of 10.50% prior to making business and financial risk adjustments. Based on this, she recommended that the Commission reject his 9.5% cost of common equity recommendation. While acknowledging that a downward adjustment of 0.32% was appropriate to reflect financial risk, United Water RI's smaller size justified a size adjustment. She asserted that Mr.

⁸² *Id.* at 13.18.

Kahal's failure to make a size adjustment ignores the fact that use of funds, and not the source of those funds, that is a determining factor in what gives rise to the risk of investment and the risk-appropriate rate of return. She supported her assertion that a size adjustment was necessary by noting that United Water RI's risk of investment is independent of its parent and that the overall rate of return set in this proceeding will be applied to United Water RI's ratebase. She also pointed out that the companies in the proxy group had significantly higher market capitalization than that of United Water RI and that smaller companies tend to be riskier investments leading investors to expect a greater return on investment to compensate for this added risk.⁸³

Responding to Mr. Kahal's criticism of her direct testimony, Ms. Ahern asserted that both academic literature and jurisdictional regulatory precedent support her use of the ECAPM calculation in the cost of common equity analysis. She also declared that it is appropriate to use projected returns and risk-free rates in such analyses. Ms. Ahern maintained that Mr. Kahal was incorrect in stating that her CEM analysis is not market based noting that her methodology used the average unadjusted beta, which resulted in companies comparable in non-diversifiable market risk, and the average residual standard error of the regression, which resulted in companies that are comparable in diversifiable risk, ultimately giving rise to the water company betas. Finally, she updated her recommended rate of return on common equity to 11.75%, but indicated that because of the current economic climate and the state of the capital markets, the Company would maintain its requested 11.10% return on common equity resulting in an overall rate of return of 8.71%.⁸⁴

⁸³ *Id.* at 18-24.

⁸⁴ *Id.* at 25-28.

V. Settlement Agreement

On December 23, 2011, United Water RI and the Division filed a Settlement Agreement⁸⁵ and jointly requested that the Commission approve the same. The Settlement Agreement included Joint Settlement Exhibits that set forth the specific terms of the Agreement that allows United Water RI to collect additional operating revenue for the Rate Year of \$941,834 for a total cost of service of \$3,817,598. The additional allowed revenue amounts to a 32.8% increase in total cost of service. The Settlement Agreement specified that a typical residential customer will experience an increase of 23.8% or \$4.46 per month. The proposed increase for a non-residential customer will range from 53.0% to 53.9% while a wholesale customer will experience an 18.4% increase. Fire service will increase by 100% for municipal fire service and from 39.5% to 62.0% for private fire service customers. At the time of the filing of the United Water RI rebuttal testimony, the Company and the Division were in agreement on all issues but four: Cash Working Capital, Incentive Compensation, Rate Case Expense Amortization and CIS Amortization. After negotiation, the parties resolved those issues as follows.

Regarding Cash Working Capital, the Division's Direct Testimony recommended an amount of \$219,609, and United Water RI's Rebuttal Testimony requested \$228,631. The parties' compromise resulted in an agreed amount for Cash Working Capital of \$222,162. United Water RI's acceptance of the decrease to its original \$235,028 request filed in its Direct Testimony was the result of accepting the Division's recommendation to reduce expenses that resulted in a \$12,866 reduction in Cash Working Capital. The specific reductions in Cash Working Capital were the exclusion of \$4,822 in tank painting amortization and the decreases in Incentive Compensation – Company

⁸⁵ The Settlement Agreement is attached hereto as Appendix A.

Employees of \$1,292, Incentive Compensation – UWM&S Fees of \$2,288, Benefits Transferred Out of \$135, Rate Case Amortization of \$991 and Other Outside Services of \$3,339.⁸⁶

The parties also agreed to an amount of \$17,015 for Incentive Compensation. This amount reflected a reduction in the original request for a 10 percent incentive payment to the Superintendent of United Water to a 7.55 percent incentive payment and a reduction in the original request for a 15 percent incentive payment to the Manager to a 12.45 percent incentive payment. The reduction in the percentage decreases resulted in an \$11,024 reduction of United Water RI's original \$26,031 request for incentive compensation to \$15,007.⁸⁷

Although United Water RI originally requested a three year amortization period for Rate Case Expense and the Division recommended that the Commission allow a five year period, the parties agreed to four years within which to amortize this expense resulting in an \$80,125 annual expense.⁸⁸ Compromise was also made to the amortization period for CIS for which United Water RI had requested a 7 year period and the Division had recommended a 10 year period. Ultimately the parties agreed on an 8 year period within which to amortize this expense or \$59,042 per year. This adjustment resulted in a \$3,888 net adjustment to Rate Base after Accumulated Depreciation was reduced by \$5,982 to reflect the \$41,877 amount of Rate Year Accumulated Depreciation per Settled Amount and the \$2,094 Deferred Income Tax Effect of the Reduction in Accumulated Depreciation at 35%.⁸⁹

⁸⁶ Appendix A, Exhibit 1, Schedule 6.

⁸⁷ *Id.* at Exhibit 1, Schedule 9.

⁸⁸ *Id.* at Exhibit 1, Schedule 13.

⁸⁹ *Id.* at Exhibit 1, Schedule 15.

The compromise of United Water RI's capital structure involved the Company's acceptance of the Division's incorporation of 4.04% short-term debt at a 1.10% cost rate and the Division's acceptance of 9.85% cost of the Company's 50.13% equity. The compromise resulted in a rate of return of 7.76%.⁹⁰

VI. HEARING

After published notice, the Commission conducted a public hearing on January 10, 2012 at the Commission offices located at 89 Jefferson Boulevard, Warwick, Rhode Island. The following appearances were entered:

FOR UNITED WATER RI	:	Joseph Keough, Esq.
FOR THE DIVISION	:	Leo Wold, Esq. Special Assistant Attorney General
FOR THE COMMISSION	:	Patricia S. Lucarelli, Esq. Chief of Legal Services

Ms Ahern was the first witness to testify on behalf of the Company. When questioned about whether or not she was comfortable with the settled ROE that was lower than her recommendation, Ms. Ahern replied that she was "comfortable with the settlement in toto...." She testified that although United Water RI's percentage of equity in its capital structure is less than its parent company, a little bit above 50 percent as opposed to approximately 52 percent, she believes that this slightly lower percent is sufficient for the Company and that there is parity between United Water RI and its parent. She stated that there were two reasons supporting her assertion. The first reason is that the approximate 52 percent equity of the parent was based on the capital structure as of March 2011 and the approximate 50 percent is based on the rate year ending 2012. She also pointed out that the United Water RI proposed capital structure is comparable

⁹⁰ Id. at Exhibit 1, Schedule 16.

with the capital structures of those companies included in the proxy group and the industry average common equity ratios. She acknowledged that when establishing a capital structure, a regulated company's actual capital structure is used if it is appropriate. She noted that United Water RI is one hundred percent equity which is not cost effective from a revenue standpoint. She referred to the consolidated parent capital structure which she described as consistent noting that she made a financial risk reduction to reflect the slightly high 52 percent equity of the parent and pointed out that it was appropriate to look to the consolidated parent as opposed to using a hypothetical when the regulated subsidiary's capital structure is inappropriate.⁹¹

Mr. Michaelson described United Water RI's corporate structure identifying Suez Environment as the ultimate parent company in the United Water RI hierarchy. He testified that Suez Environment is the parent of Suez Environment North America that is the parent of United Water, Inc. He further identified United Water, Inc. as the parent of United Water Resources, the parent of United Waterworks which is the parent of United Water RI. Mr. Michaelson explained that he is employed by United Management Services which is under United Water Resources. He represented that United Water RI would likely be back before the Commission within three years seeking rate relief, because of two large capital projects, the construction of water tanks anticipated to be in service in 2013 and 2014 and the associated main work, totaling approximately \$8 million.⁹²

Mr. Michaelson represented that some of the companies in the hierarchy including United Water RI have inclining block rates which he noted could be classified as a

⁹¹ Transcript of Hearing ("T.") January 10, 2012 at 10-11, 20-21.

⁹² T. at 12-14.

conservation rate. Mr. Ugobaja interjected that the first 24 ccf per quarter constitutes a block for residential customers and the amounts exceeding 24 ccf per quarter have a second rate structure. Mr. Michaelson justified the 100 percent increase in public fire by explaining that the cost of service study revealed an actual percentage increase of more than 200 percent. He noted that the 100 percent requested increase is a gradual step toward the actual increase. In response to whether either the Town of Narragansett or the Town of South Kingstown had objected to this increase, Mr. Knox represented neither Town had publicly objected to the increase and that the Town of South Kingstown had only questioned the timing of the increase. He also identified the rate impact on a residential customer as a 23 percent increase. Finally, Mr. Catlin represented that the Division believes that the settlement is reasonable and in the best interest of the ratepayers and the Company.⁹³

DECISION

Immediately following the hearing, the Commission considered the evidence and approved the Settlement Agreement and associated revenue requirement. The Commission and the Division thoroughly reviewed, analyzed and evaluated the evidence, documentary and oral, presented by the parties and considered the public comment presented as is typical in any rate case. This process began as soon as the initial application was filed in June 2011. The Commission believes that after months of thorough and probing review, the Settlement Agreement presented by United Water RI and the Division is supported by the considerable evidence presented and is fair, reasonable and in the best interest of the utility and its ratepayers.

⁹³ *Id.* at 14-18, 21-22.

This Commission is statutorily bound to ensure that rates are just and reasonable, and that any approved rate increases are otherwise necessary for the utility to obtain reasonable compensation for services rendered to the public. R.I. Gen. Laws §§ 39-3-11 and 39-3-12. Specifically, the Settlement Agreement represents a significant reduction in the additional operating revenue originally requested by United Water RI. In its June 3, 2011 filing, the Company sought additional operating revenue in the amount of \$1,218,702 for a 43% increase in its cost of service. The Settlement Agreement reflects a 32.8% increase in the Company's cost of service requiring additional operating revenue of \$941,834 for a total cost of service of \$3,817,598.

The Rhode Island Supreme Court has stated that “the proper rate of return ‘is a matter of judgment, not an immutable number.’” *Blackstone Valley Electric Company*, Docket No. 1605, Order No. 10695 (issued May 12, 1982) *citing Providence Gas v. Burman*, 376 A.2d 687 (R.I. 1977). A public utility is not entitled to earn a return that may be earned by a highly profitable enterprise; however, the return should be sufficient to permit the utility to maintain financial integrity, attract necessary capital and fairly compensate investors for the risks they have assumed while at the same time providing appropriate protection to the relevant public interests, both existing and foreseeable. *Bristol County Water Company*, Docket No. 1502, Order No. 10355 (issued January 15, 1981)(citation omitted). The Company's original filing proposed a return on equity of 11.1%. The Division filed testimony supporting a return on equity of 9.5%. Both parties presented extensive testimony in support of their positions and challenged the positions of each other. The Commission believes that the 9.85% return on equity agreed to by the

parties in the Settlement Agreement is a fair and reasonable amount and is representative of the proxy group used by the parties.

When the Commission is faced with an inappropriate capital structure from which to set rates, it may either rely on the capital structure of the parent, in this case UWW, or a proxy group. See *The Narragansett Electric Company v. Rhode Island Public Utilities Commission*, 35 A.3d 925 (R.I. 2012); *In Re: New England Gas Company's Distribution Adjustment Clause*, Docket No. 3459, Order No. 17524 (issued August 1, 2003); *Public Service Commission of State of New York v. FERC*, 813 F.2d 448 (1987). In the past, this Commission has utilized the actual capital structure at the holding company level when the subsidiary utility's capital structure is either non-existent or otherwise deemed not reasonable for rate setting purposes.

Because United Water RI is capitalized at 100 percent equity, its capital structure would not be appropriate for ratemaking purposes. Furthermore, the capital structure of Suez Environmental is not appropriate as only a small portion of its operations are water utility operations. Both Ms. Ahern and Mr. Kahal recommended using the capital structure of the parent UWW as UWW is the ultimate source of United Water RI's capital base and has 96% of its operations as water utility operations. The Commission finds this to be an appropriate capital structure. United Water RI proposed a capital structure of 52.74% common equity with an actual cost rate of 11.1 and 47.53% long-term debt with an actual cost rate of 6.07%. The Division proposed 50.13% common equity at 9.50%, 45.83% long term debt at 6.07% and included 4.04% short term debt at a cost rate of 1.10% including short-term debt which United Water RI had argued was not appropriate. The Commission is satisfied that the parties compromise of

a capital structure of 50.13% common equity at a cost rate of 9.85%, 45.83% long term debt at a cost rate of 6.07% and 4.04% short term debt at a cost rate of 1.10% is fair and reasonable and will be sufficient to permit United Water RI to maintain financial integrity, attract necessary capital and fairly compensate investors for the risks they have assumed while at the same time providing appropriate protection to the relevant existing and foreseeable public interests.

The Commission applauds the parties for the compromises they made throughout the course of this rate case, especially with regard to United Water RI's agreement to reduce incentive compensation for its top management. This agreement is a clear indication to the Commission of United Water RI's understanding of how the increase requested will impact its customers and its efforts to minimize that impact, while still providing a well-deserved incentive to its top quality management. Additionally, United Water RI demonstrated its willingness to compromise and further minimize the effect that increase will have on its customers. Specifically, United Water RI's agreement to amortize rate case expense over the course of four years as opposed to three years and to amortize CIS over eight years as opposed to seven years will in addition to the other agreed to adjustments lessen the impact that the rate increase will have on customers. United Water RI is to be commended for its obvious concern of its ratepayers and its efforts to minimize the effect of any rate increase that will be imposed on those ratepayers.

ACCORDINGLY, it is

(20782) ORDERED:

1. United Water Rhode Island, Inc.'s request to collect an additional \$1,218,702 is denied. United Water Rhode Island, Inc. is authorized to collect an additional \$941,834 in revenues on usage on and after January 12, 2012.
2. The terms of the Settlement Agreement between United Water Rhode Island, Inc. and the Division of Public Utilities and Carriers are approved.
3. United Water Rhode Island is allowed a rate year rate base of \$10,872,191.
4. United Water Rhode Island, Inc. is allowed an overall rate of return of 7.76%.
5. United Water Rhode Island, Inc.'s proposed capital structure is denied. The capital structure approved for ratemaking purposes shall be comprised of 50.13% equity, 45.83% long term debt and 4.04% short term debt.
6. United Water Rhode Island, Inc.'s proposed cost of capital is denied. The cost of common equity shall be 9.85%, the cost of long term debt shall be 6.07% and the cost of short term debt shall be 1.10%.
7. United Water Rhode Island, Inc.'s request for a \$20,541 adjustment to incentive compensation shall be reduced to \$15,007.

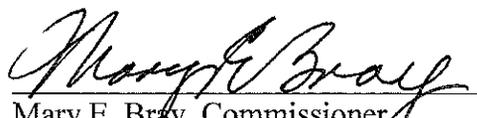
8. United Water Rhode Island, Inc.'s request for \$228,631 for cash working capital shall be adjusted to \$222,162.
9. United Water Rhode Island, Inc.'s rate case expense shall be amortized over the course of four years.
10. United Water Rhode Island, Inc.'s CIS shall be amortized over the course of eight years.
11. The Parties shall act in accordance with all other findings and instructions contained in this Order.

EFFECTIVE AT WARWICK, RHODE ISLAND ON JANUARY 12, 2012,
PURSUANT TO A BENCH DECISION ON JANUARY 12, 2012. WRITTEN ORDER
ISSUED AUGUST 1, 2012.

PUBLIC UTILITIES COMMISSION



Elia Germani, Chairman



Mary E. Bray, Commissioner



Paul J. Roberti, Commissioner



APPENDIX A

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

IN RE: UNITED WATER RHODE ISLAND, INC.

DOCKET NO.: 4255

SETTLEMENT AGREEMENT

I. INTRODUCTION

United Water Rhode Island, Inc. (hereinafter "United Water") and the Division of Public Utilities and Carriers (hereinafter "Division") (collectively, the "Parties") have reached agreement on United Water's rate application filed on June 3, 2011. Thus, the Parties jointly request that the State of Rhode Island Public Utilities Commission (hereinafter "Commission") approve this Settlement Agreement.

II. RECITALS

1. On June 3, 2011, United Water filed a rate application pursuant to R.I.G.L. § 39-3-11 and Part II of the Commission's Rules of Practice and Procedure.
2. United Water's proposed rates were designed to collect \$1,218,702 of additional operating revenue to support a total cost of service of \$4,077,004. The impact of this request would have resulted in a 43% increase in total cost of service. For a typical residential customer, the impact of this request would have resulted in an increase of \$6.54 per month or 34.9%. The proposed increase for non-residential customers ranged from 68.6% to 69.8%. For wholesale customers, the proposed increase was 25.9%. The proposed increase for municipal fire service was 100%, and

for private fire service customers, the proposed increase ranged from 39.5% to 61.0%.

3. United Water filed testimony and schedules from the following witnesses in support of its application:

- a. Timothy J. Michaelson, Senior Director, United Water Management & Services, Inc.;
- b. Thomas G. Lippai, Senior Regulatory Specialist, United Water Management & Services, Inc.;
- c. Obioma (Obie) N. Ugboaja, Rate Analyst, United Water Management & Services, Inc.;
- d. Stanley J. Knox, General Manager, United Water Rhode Island, Inc.;
- e. Pauline M. Ahearn, Principal, AUS Consultants; and,
- f. Christopher P.N. Woodcock, Woodcock & Associates, Inc.

4. The Town of South Kingstown filed a Motion to Intervene in this Docket on June 22, 2011. United Water did not object.

5. The Town of South Kingstown did not submit any pre-filed written testimony in this Docket. South Kingstown did submit public comment at the September 15, 2011 public hearing.

6. The Division investigated United Water's requested rate increase with assistance from its staff and outside expert consultants. The Division issued data requests and filed direct testimony from the following witnesses:

- a. Thomas S. Catlin, Principal, Exeter Associates, Inc.;
- b. Jerome D. Mierzwa, Principal, Exeter Associates, Inc.; and,

c. Matthew I. Kahal

7. The Parties engaged in settlement discussions after United Water submitted its rebuttal testimony.
8. The Parties gave due consideration to the testimony, exhibits, schedules, data requests, data responses, settlement discussions, and other documentation in this Docket and agreed to a comprehensive settlement that resolves all issues relating to United Water's application to increase rates.
9. The Parties agree that this Settlement Agreement is a just and reasonable resolution of the issues in this proceeding and jointly request its approval by the Commission.

III. TERMS OF SETTLEMENT

10. The Parties agree that the Joint Settlement Exhibits attached as Exhibit 1 (Schedules 1 – 16) and Exhibit 2 (Schedules 1 – 11) are accurate and reflect the Parties' agreement.
11. The agreed rates allow United Water to collect additional operating revenue in the rate year (Calendar Year 2012) in the amount of \$941,834 to support a total cost of service of \$3,817,598. This results in a 32.8% increase in total cost of service.
12. For a typical residential customer, the impact of this increase will result in an increase of \$4.46 per month or 23.8%. The proposed increase for non-residential customers will generally range from 53.0% to 53.9%. For wholesale customers the increase is 18.4%. The proposed increase for municipal fire service is 100% and for private fire service customers the proposed increase generally ranges from 39.5% to 62.0%.

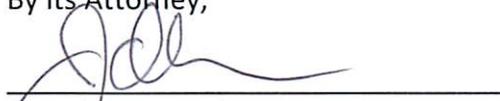
IV. EFFECT OF SETTLEMENT

13. This Settlement Agreement is the result of a negotiated agreement. The Parties conducted the discussions that produced this Settlement Agreement 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 any other proceedings.
14. The Parties' agreement to the terms of this Settlement Agreement shall not be construed as an agreement to any matter of fact or law beyond the terms hereof. 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 Settlement Agreement shall preclude any party from taking any position in any future proceeding regarding such unsettled matters.
15. This Settlement Agreement is the product of negotiation and compromise. The making of this Settlement Agreement does not establish any principle or precedent. This Settlement Agreement shall not be deemed to foreclose any party from making any contention in any future proceeding or investigation.
16. If the Commission rejects this Settlement Agreement, or modifies any provision herein, this Settlement Agreement shall be deemed withdrawn and shall be null and void in all respects.

IN WITNESS WHEREOF, the Parties agree that this Settlement Agreement is reasonable, in the public interest, in accordance with applicable law and regulatory policy, and is executed by their respective representatives, each being authorized to do so.

Dated at Pawtucket, RI this 22nd day of December, 2011.

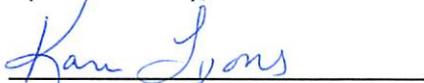
UNITED WATER
RHODE ISLAND, INC.
By its Attorney,



Joseph A. Keough, Jr. #4925
KEOUGH & SWEENEY, LTD.
100 Armistice Boulevard
Pawtucket, RI 02860
Tel: (401)-724-3600

Dated at Providence, RI this 22nd day of December, 2011.

DIVISION OF PUBLIC UTILITIES
AND CARRIERS,
By its Attorney,



Karen Lyons, #6797
Special Assistant Attorney General
150 South Main Street
Providence, RI 02903
Tel: 401-274-4400, ext. 2403

UNITED WATER RHODE ISLAND, INC.

Summary of Operating Income
 Rate Year Ended December 31, 2012

	Amount per Company at Present Rates	Division Adjustments	Amount per Division at Present Rates	Revenue Increase/ (Decrease)	Amounts After Revenue Incr. / (Decr.)
<u>Operating Revenues</u>					
Metered Sales	\$ 2,569,432	\$ 17,462	\$ 2,586,894	\$ 941,834	\$ 3,528,728
Fire Protection	252,568		252,568	-	252,568
Other Operating Revenues	36,302		36,302		36,302
Total Operating Revenues	\$ 2,858,302	\$ 17,462	\$ 2,875,764	\$ 941,834	\$ 3,817,598
<u>Operating Expenses</u>					
O&M Expense	\$ 1,877,083	(64,305)	\$ 1,812,778	2,426	\$ 1,815,204
Depreciation Expense	510,632	(8,434)	502,198	-	502,198
Property Tax	271,022		271,022	-	271,022
Payroll Rax	56,446	(692)	55,754	-	55,754
Gross Receipts Tax	35,729	218	35,947	11,773	47,720
Income before Income Taxes	\$ 107,390	\$ 90,675	\$ 198,066	\$ 927,635	\$ 1,125,701
Current Income Taxes	(159,075)	34,651	(124,423)	324,672	200,249
Deferred Federal Income Taxes	83,486	2,952	86,438		86,438
Amortization of ITCs	(4,668)	-	(4,668)	-	(4,668)
Total Operating Expenses	\$ 2,670,655	\$ (35,610)	\$ 2,635,045	\$ 338,871	\$ 2,973,916
Utility Operating Income	\$ 187,647	\$ 53,072	\$ 240,719	\$ 602,963	\$ 843,682
Rate Base	\$ 11,073,931		\$ 10,872,191		\$ 10,872,191
Rate of Return	1.69%		2.21%		7.76%

UNITED WATER RHODE ISLAND, INC.

Determination of Revenue Increase
 Rate Year Ended December 31, 2012

	<u>Amount Per Division</u>	<u>Amount per Division Source</u>
Proposed Rate Base	\$ 10,872,191	Ex. 1 (JS) Sch. 2
Required Rate of Return	<u>7.76%</u>	
Net Operating Income Required	\$ 843,682	
Net Operating Income at Present Rates	<u>240,719</u>	Ex. 1 (JS) Sch. 1 page 1
Net Income Surplus/(Deficiency)	\$ (602,963)	
Revenue Multiplier (2)	<u>1.5620102</u>	
Base Rate Revenue Increase	<u><u>\$ 941,834</u></u>	

Verification

Revenue Increase/(Decrease)		\$ 941,834
PUC Assessment	0.25759%	\$ 2,426
Gross Receipts Tax	1.25%	<u>11,773</u>
Federal Taxable Income		\$ 927,635
Federal Income Tax	35.00%	<u>324,672</u>
Net Income		<u><u>\$ (602,963)</u></u>

Notes:

(1) Per Exhibit 3 (Michaelson), Schedule 10.

(2) Calculation of Conversion Factor

Revenues	1.000000
PUC Assessment	0.002576
Gross Receipts Tax	<u>0.012500</u>
Net Federal Taxable Income	0.984924
Federal Income Tax	<u>0.344723</u>

Revenue Conversion Factor 0.6402007

Revenue Multiplier 1.56201025

UNITED WATER RHODE ISLAND, INC.

Summary of Rate Base
 Rate Year Ended December 31, 2012

<u>Description</u>	<u>Amount per Company (1)</u>	<u>Division Adjustments (2)</u>	<u>Adjusted Per Division</u>
Utility Plant in Service	\$ 22,270,513	\$ 198,000	\$ 22,468,513
Less: Accumulated Depreciation and Amortization	(6,213,068)	5,982	(6,207,086)
Net Utility Plant in Service	<u>\$ 16,057,445</u>	<u>\$ 203,982</u>	<u>\$ 16,261,427</u>
Materials and Supplies	103,664	(15,575)	88,089
Cash Working Capital	235,028	(12,866)	222,162
Deferred Tank Painting (net of Deferred Income Tax)	147,639	(57,461)	90,178
Deferred Rate Case Expense	272,756	(272,756)	-
Total Additions	<u>\$ 759,087</u>	<u>\$ (358,657)</u>	<u>\$ 400,430</u>
	-	-	-
Contributions in Aid of Construction	(3,596,531)	-	(3,596,531)
Accumulated Deferred Income Taxes	(1,534,287)	(47,066)	(1,581,353)
Unamortized ITCs	(98,414)	-	(98,414)
Unfunded FAS 106 (net of Deferred Income Tax)	(513,369)	-	(513,369)
Total Deductions	<u>\$ (5,742,601)</u>	<u>\$ (47,066)</u>	<u>\$ (5,789,667)</u>
Total Rate Base	<u><u>\$ 11,073,931</u></u>	<u><u>\$ (201,740)</u></u>	<u><u>\$ 10,872,191</u></u>

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, 2012

	<u>Amount</u>	<u>Source</u>
Rate Base per Company Filing	\$ 11,073,931	Per Exhibit 3, Schedule 1, page 4
<u>Division Adjustments</u>		
Indian River Transmission Main	198,000	Response to Div. 2-30
Materials and Supplies	(15,575)	Ex. 1 (JS) Sch. 5
Cash Working Capital	(12,866)	Ex. 1 (JS) Sch. 6
Deferred Tank Painting	(57,461)	Ex. 1 (JS) Sch. 7
Deferred Rate Case	(272,756)	Refer to Testimony
Accumulated Deferred Income Taxes	(44,972)	Ex. 1 (JS) Sch. 8
CIS Amortization Changes	3,888	Ex. 1 (JS) Sch. 15
	<u>\$ (201,740)</u>	
Total Division Adjustments		
Division Adjusted Rate Base	<u>\$ 10,872,191</u>	

UNITED WATER RHODE ISLAND, INC.

Summary of Adjustments to Net Income
 Rate Year Ended December 31, 2012

	<u>Amount</u>	<u>Source</u>
Net Income per Company	\$ 187,647	Exhibit 3 (Michaelson), Schedule 10
<u>Division Adjustments</u>		
Update to Units of Service per Div. 4-9 Supplemental	11,179	See Note (1)
Incentive Compensation-Company Employees	7,166	Ex. 1 (JS) Sch. 9
Incentive Compensation-UWM&S Fees	11,895	Ex. 1 (JS) Sch. 10
Benefits Transferred Out	701	Ex. 1 (JS) Sch. 11
Corrected Medical Benefits	5,155	Ex. 1 (JS) Sch. 12
Rate Case Amortization	17,360	Ex. 1 (JS) Sch. 13
Other Outside Services	-	Ex. 1 (JS) Sch. 14
CIS Amortization	5,482	Ex. 1 (JS) Sch. 15
Interest Synchronization	<u>(5,867)</u>	Ex. 1 (JS) Sch. 4
Total Division Adjustments to Net Income	<u>\$ 53,072</u>	
Net Income Per Division	<u><u>\$ 240,719</u></u>	

Note:

- (1) Reflects correction to billing determinants per Supplemental Response to Div. 4-9. Revenues at present rates calculated on Schedule 11 of Settlement Exhibit 2.

UNITED WATER RHODE ISLAND, INC.

Summary of Adjustments to Net Income
Rate Year Ended December 31, 2012

	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	\$ 2,858,302	\$ 1,877,083	\$ 510,632	\$ 363,197	\$ (159,075)	\$ 83,486	\$ (4,668)	\$ 187,647
<u>Division Adjustments</u>								
Update to Units of Service per Div. 4-9 Supplemental	17,462	45		218	6,020	-	-	11,179
Incentive Compensation-Company Employees		(10,332)		(692)	3,858	-	-	7,166
Incentive Compensation-UWM&S Fees		(18,301)			6,405	-	-	11,895
Benefits Transferred Out		(1,078)			377	-	-	701
Corrected Medical Benefits		(7,931)			2,776	-	-	5,155
Rate Case Amortization		(26,708)			9,348	-	-	17,360
Other Outside Services		-			-	-	-	-
CIS Amortization			(8,434)		2,952	-	-	5,482
Interest Synchronization					5,867			(5,867)
Total Division Adjustments	\$ 17,462	\$ (64,305)	\$ (8,434)	\$ (474)	\$ 37,603	\$ -	\$ -	\$ 53,072
Division Adjusted Net Income	<u>\$ 2,875,764</u>	<u>\$ 1,812,778</u>	<u>\$ 502,198</u>	<u>\$ 362,723</u>	<u>\$ (121,472)</u>	<u>\$ 83,486</u>	<u>\$ (4,668)</u>	<u>\$ 240,719</u>

UNITED WATER RHODE ISLAND, INC.

Calculation of Current Income Tax
Rate Year Ended December 31, 2012

	Amount per Company at Present Rates (A)	Division Adjustments (B)	Adjusted per Division at Present Rates (C)	Revenue Increase/ (Decrease) (D)	Amounts After Revenue Increase (E)
Operating Revenue	\$ 2,858,302	\$ 17,462	\$ 2,875,764	\$ 941,834	\$ 3,817,598
O&M Expense	1,877,083	(64,305)	1,812,778	2,426	1,815,204
Depreciation Expense	510,632	(8,434)	502,198	-	502,198
Property Tax	271,022	-	271,022		271,022
Payroll Rax	56,446	(692)	55,754		55,754
Gross Receipts Tax	35,729	218	35,947	11,773	47,720
Operating Income Before Income Taxes	\$ 107,390	\$ 90,675	\$ 198,066	\$ 927,635	\$ 1,125,701
Interest Expense	323,359	(16,763)	306,596		306,596
Excess Tax Depreciation	238,531	8,434	246,965		246,965
Current Federal Taxable Income	(454,500)	99,004	(355,496)	927,635	572,139
Federal Income Tax at 35%	\$ (159,075)	\$ 34,651	\$ (124,423)	\$ 324,672	\$ 200,249
Deferred Federal Income Tax	83,486	2,952	86,438	-	86,438
Investment Tax Credit Amortization	(4,668)	-	(4,668)	-	(4,668)
Total Federal Income Tax	\$ (80,257)	\$ 37,603	\$ (42,654)	\$ 324,672	\$ 282,019

Notes:

(1) Calculation of Interest Deduction

Rate Base	\$ 11,073,931		\$ 10,872,191	\$ 10,872,191
Weighted Cost of Debt	2.92%		2.82%	2.82%
Interest Deduction	\$ 323,359	\$ (16,763)	\$ 306,596	\$ 306,596
		-		
Federal Income Tax Effect at 35%		5,867		
Interest Synchronization Adjustment		\$ 5,867		

UNITED WATER RHODE ISLAND, INC.

Adjustment to Materials and Supplies to
Reflect Most Recent 13 Month Average Balance
Rate Year Ended December 31, 2012

	<u>Balance (1)</u>
August	\$ 101,586
September	101,027
October	108,169
November	85,305
December	86,030
January 2011	77,218
February	92,724
March	87,121
April	84,078
May	83,025
June	75,377
July	83,889
August	<u>79,871</u>
Average Balance	\$ 88,109
Balance per Company	<u>103,684</u>
Adjustment to Balance of Materials & Supplies	<u><u>\$ (15,575)</u></u>

Note:

(1) Per Exhibit 3 (Michaelson), Schedule 1 and the response to Div. 2-3.

UNITED WATER RHODE ISLAND, INC.

Cash Working Capital Analysis
Rate Year Ended December 31, 2012

	<u>Expense Amount</u>	<u>Working Capital</u>
O&M Expense per Company (1)	1,880,222	235,028
Division Adjustments (2)		
Exclude Tank Painting Amortization	(38,574)	(4,822)
Incentive Compensation-Company Employees	(10,332)	(1,292)
Incentive Compensation-UWM&S Fees	(18,301)	(2,288)
Benefits Transferred Out	(1,078)	(135)
Corrected Medical Benefits	(7,931)	(991)
Rate Case Amortization	(26,708)	(3,339)
Other Outside Services	-	-
		<u> </u>
Adjustment to Cash Working Capital		(12,866)
		<u> </u>
Cash Working Capital Per Division		<u>\$ 222,162</u>

Notes:

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

(2) Reflects exclusion of tank painting amortization and Division adjustments as summarized on Ex. 1 (Joint Settlement) Sch. 3.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Deferred Tank Painting Costs
Rate Year Ended December 31, 2012

	<u>Amount</u>
Average Balance Per Company	
Deferred Tank Painting	\$ 227,137
Accumulated Deferrred Income Taxes	79,498
Net Balance per Company	<u>\$ 147,639</u>
Adjustment to Reflect Amortization from Completion	
Monthly Amortization for Howland Aerator and Sherman Tanks	1,964
Months from May 2008 through January 31, 2012	45
Additional Amortization	<u>\$ 88,401</u>
Accumulated Deferred Income Tax Effect	30,940
Net Reduction in Balance	<u>\$ 57,461</u>
Adjusted Balance per Division	
Deferred Tank Painting	138,736
Accumulated Deferrred Income Taxes	48,558
Net Balance per Division	<u>\$ 90,178</u>

UNITED WATER RHODE ISLAND, INC.

Adjustment to Accumulated Deferred Income Taxes to
Reflect Federal Bonus Depreciation
Rate Year Ended December 31, 2012

	<u>Amount</u>
<u>Increase in ADIT Balance due to Bonus Depreciation (1)</u>	
December 2011	\$ 37,454
January 2012	45,598
February	45,598
March	45,598
April	45,598
May	45,598
June	45,598
July	45,598
August	45,598
September	45,598
October	45,598
November	45,598
December	45,598
	<hr/>
13 Month Average Increase	<u>\$ 44,972</u>

Note:

(1) Per response to Div. 6-1.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Company Incentive Compensation Expense
 Rate Year Ended December 31, 2012

	<u>2012 Base Salary (1)</u>	<u>Historal Incentive Payment % (2)</u>	<u>Non Financial Percentage (3)</u>	<u>Recoverable Incentive Compensation</u>	
Supervisor	\$ 64,277	5.00%	60.00%	\$ 1,928	3,214
Superintendent	\$ 78,632	7.55%	60.00%	3,562	7,863
Manager UWRI	\$ 99,695	12.45%	60.00%	7,447	14,954
Total				<u>\$ 12,938</u>	<u>26,031</u>
Amount per Company (1)				<u>26,031</u>	
Reduction in Total Eligible Incentive Compensation				\$ (13,093)	
Amount Charged to Capital at 21.09% (1)				<u>(2,761)</u>	
Adjustment to O&M Expense				\$ (10,332)	
Adjustment to FICA Taxes at 7.65%				<u>(692)</u>	
Total Adjustment to Rate Year Expense				<u>\$ (11,024)</u>	

Note:

(1) Amounts per Exhibit 4 (Lippai), Schedule 2A, page 1 of 4.

(2) Percentages per Exhibit 4 (Lippai), Schedule 2A, page 1 of 4, multiplied by historical ratio of actual bonus to target bonus for Superintendent and Manager.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Incentive Compensation included in UWM&S Fees
Rate Year Ended December 31, 2012

	<u>Amount</u>
UWM&S Incentive Compensation attributable to Meeting Corporate Financial Goals (1)	\$ (17,000)
FICA Taxes at 7.65%	<u>(1,301)</u>
Adjustment to Rate Year UWM&S Fees	<u><u>\$ (18,301)</u></u>

Note:

(1) Per response to Div. 8-1.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Include OPEB Transition Obligation
In Determination of Benefits Transferred Out
Rate Year Ended December 31, 2012

	<u>Amount</u>
OPEB Transition Obligation (1)	\$ 5,113
Percentage of Benefits Transferred Out (2)	<u>21.09%</u>
Adjustment to Operating Expense	<u>\$ (1,078)</u>

Notes:

(1) Amount per response to Div. 6-5.

(2) Per Exhibit 4 (Lippai), Schedule 3A, page 1 of 1.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Medical Benefits Expense
Rate Year Ended December 31, 2012

	<u>Amount Per Filing (1)</u>	<u>Corrected Amount (2)</u>	<u>Adjustment</u>
Medical Waiver Payments	\$ 2,000	\$ 3,000	\$ 1,000
Health, Dental and Vision Insurance	<u>118,851</u>	<u>107,800</u>	<u>(11,051)</u>
Adjustment to Operating Expense	\$ 120,851	\$ 110,800	\$ (10,051)
Amount Charged to Capital at 21.09% (3)			<u>(2,120)</u>
Adjustment to O&M Expense			<u><u>\$ (7,931)</u></u>

Notes:

(1) Per Exhibit 4 (Lippai), Schedule 8 and 8A, page 1 of 1.

(2) Per response to Div. 2-23.

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

UNITED WATER RHODE ISLAND, INC.

Adjustment to Rate Case Expense
Rate Year Ended December 31, 2012

	<u>Amount</u>
Projected Rate Case Expense (1)	\$ 320,500
Settled Amortization Period -Years	<u>4</u>
Annual Amortization Expense	\$ 80,125
Amortization per Company (1)	<u>106,833</u>
Adjustment to Amortization Expense	<u><u>\$ (26,708)</u></u>

Note:

(1) Per Exhibit 4 (Lippai), Schedule 13.

UNITED WATER RHODE ISLAND, INC.

Adjustment to Outside Services Expense
Rate Year Ended December 31, 2012

	<u>Amount</u>
Increase in Other Outside Services per Company (1)	\$ 4,403
Amount Per Division (2)	<u>4,403</u>
Adjustment to Outside Services Expense	<u><u>\$ -</u></u>

Notes:

(1) Per Exhibit 4 (Lippai), Schedule 15A.

(2) Refer to testimony.

UNITED WATER RHODE ISLAND, INC.

Adjustment to CIS Amortization Expense
Rate Year Ended December 31, 2012

	<u>Amount</u>
CIS Investment (1)	\$ 472,333
Settled Amortization Period - Years	<u>8</u>
Annual Amortization Expense per Division	\$ 59,042
Amortization Expense per Company (1)	<u>67,476</u>
Adjustment to Amortization Expense	<u><u>\$ (8,434)</u></u>
Rate Year Accumulated Depreciation per Settled Amount (2)	\$ 41,877
Rate Year Accumulated Depreciation per Company (1)	<u>\$ 47,859</u>
Adjustment to Accumulated Depreciation	\$ (5,982)
Deferred Income Tax Effect of Reduction in Accumulated Depr. at 35%	<u>\$ 2,094</u>
Net Adjustment to Rate Base	<u><u>\$ 3,888</u></u>

Notes:

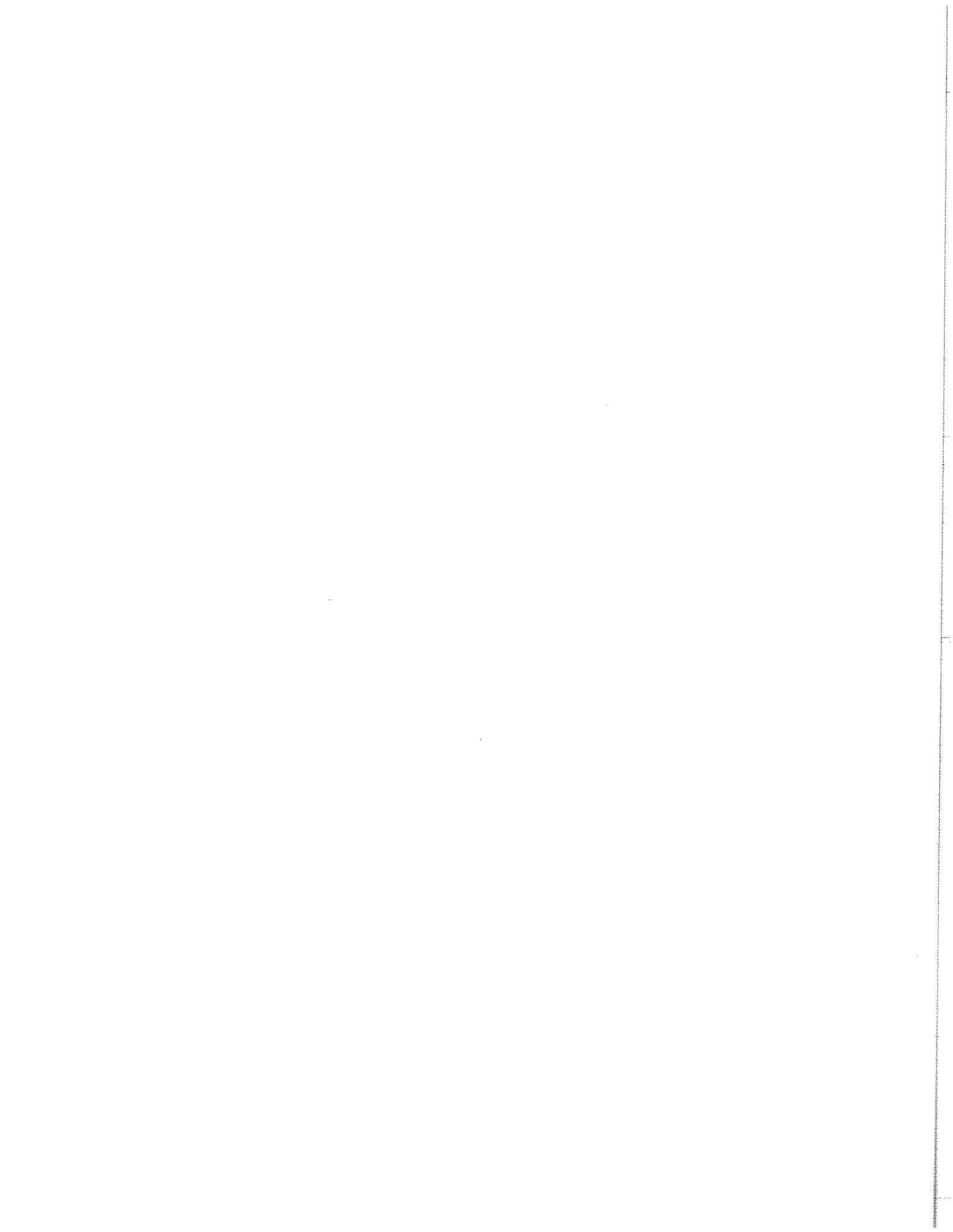
(1) Per Exhibit 3 (Michaelson), Schedule 3, page 13.

(2) Calculated using Excel version of Exhibit 3, Schedule 3 with 8 year life.

UNITED WATER RHODE ISLAND, INC.

Capital Structure and Rate of Return
Rate Year Ended December 31, 2012

<u>Capital Source</u>	<u>Capitalization Ratio</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Common Equity	50.13%	9.85%	4.94%
Short Term Debt	4.04%	1.10%	0.04%
Long-Term Debt	45.83%	6.07%	2.78%
Total	<u>100.00%</u>		<u>7.76%</u>



SUMMARY RATE YEAR EXPENSES

Operation & Maintenance	\$	1,815,204
Depreciation	\$	502,198
Taxes other than Income	\$	<u>374,495</u>
	Total Operating	\$ 2,691,896
Federal Income Tax	\$	282,019
Return on Rate Base	\$	<u>843,682</u>
	Total Revenue Required	\$ 3,817,597
Less:		
Misc. Income/Turn on-off	\$	20,172
Other Water Revenues	\$	<u>16,130</u>
	Required From Rates	\$ 3,781,296

SUMMARY OF RATE BASE

Average Utility Plant on Service	\$ 22,468,513
Less:	
Accumulated Amortization	\$ (6,213,068)
Contributions	\$ (3,596,531)
Deferred Income Tax	\$ (1,575,371)
Unamortized ITC	\$ (98,414)
1/13th Unfunded FAS 106	\$ (513,369)
Plus:	
Customer Advances	\$ -
Materials & Supplies	\$ 88,089
Working Capital	\$ 222,162
Deferred Tank Painting	\$ 90,178
Deferred Rate Case	\$ 0
Deferred Operations	\$ -
Deferred Acquisitions	\$ -
Total Rate Base	\$ 10,872,189

RATE YEAR OPERATION & MAINTENANCE EXPENSES

<u>Expense Item</u>	<u>Rate Year</u>
<u>Source of Supply Expenses</u>	
<u>Operation</u>	
Operation Supervision and Engineering	\$ 2,990
Operation Labor and Expenses	\$ 3,759
Purchased Water	\$ -
Miscellaneous Expenses	\$ -
Rents	\$ -
Total Operation	\$ 6,749
<u>Maintenance</u>	
Maintenance of Wells and Springs	\$ -
Maintenance of Supply Mains	\$ -
Maintenance of Miscellaneous Water Source Plant	\$ -
Total Maintenance	\$ -
Total Source of Supply Expenses	\$ 6,749
<u>Pumping Expenses</u>	
<u>Operation</u>	
Operation Supervision and Engineering	\$ -
Fuel for Power Production	\$ 747
Fuel or Power Purchased for Production	\$ 185,457
Pumping Labor and Expenses	\$ 72,889
Miscellaneous Expenses	\$ 4,660
Rents	\$ -
Total Operation	\$ 263,753
<u>Maintenance</u>	
Maintenance Supervision and Engineering	\$ -
Maintenance of Structures and Improvements	\$ 43
Maintenance of Power Production Equipment	\$ 1,231
Maintenance of Pumping Equipment	\$ 18,121
Total Maintenance	\$ 19,395
Total Pumping Expenses	\$ 283,147
<u>Water Treatment Expenses</u>	
<u>Operation</u>	
Operation Supervision and Engineering	\$ -
Chemicals	\$ 65,577
Operation Labor and Expenses	\$ 65,634
Miscellaneous Expenses	\$ 30,171
Total Operation	\$ 161,382
<u>Maintenance</u>	
Maintenance of Water Treatment Equipment	\$ 4,521
Total Maintenance	\$ 4,521
Total Water Treatment Expenses	\$ 165,903

Transmission and Distribution Expenses

<u>Operation</u>	
Operation Supervision and Engineering	\$ 98,196
Transmission and Distribution Lines Expenses	\$ 58,964
Meter Expenses	\$ 38,414
Miscellaneous Expenses	\$ 83,036
Rents	\$ -
Total Operation	\$ 278,610

<u>Maintenance</u>	
Maintenance Supervision and Engineering	\$ 2,448
Maintenance of Structures and Improvements	\$ 13,164
Maintenance of Dist. Reservoirs & Standpipes	\$ 38,574
Maintenance of Trans. & Distribution Mains	\$ 31,947
Maintenance of Fire Mains	\$ -
Maintenance of Services	\$ 10,790
Maintenance of Meters	\$ -
Maintenance of Hydrants	\$ 4,401
Maintenance of Miscellaneous Plant	\$ 805
Total Maintenance	\$ 102,128
Total Transmission & Distribution Expenses	\$ 380,738

Customer Accounts Expenses

<u>Operation</u>	
Supervision	\$ -
Meter Reading Salaries	\$ 109,157
Customer Records & Coll. Expenses-Labor	\$ 191,448
Uncollectible Accounts	\$ -
Miscellaneous Customer Account Expense	\$ 13,884
Total Customer Accounts Expenses	\$ 314,489

Administrative and General Expenses

<u>Operation</u>	
Administrative and General Salaries	\$ 157,509
Office Supplies and Other Expenses	\$ 30,214
Administrative Expenses Transferred	\$ (292,910)
Outside Services Employed	\$ 240,048
Property Insurance	\$ 44,300
Injuries and Damages	\$ 13,901
Employee Pension and Benefits	\$ 283,463
Regulatory Commission Expenses	\$ 89,904
Miscellaneous General Expenses	\$ 71,810
Rents	\$ 16,636
Total Operation	\$ 654,876

<u>Maintenance</u>	
Maintenance of General Plant	\$ 9,302
Total Administrative and General Expenses	\$ 664,178

Total Operation and Maintenance Expenses	\$ 1,815,204
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TEST YEAR LABOR COSTS

<u>Expense Item</u>	<u>Test Year</u>
<u>Source of Supply Expenses</u>	
<u>Operation</u>	
Operation Supervision and Engineering	\$ 3,135
Operation Labor and Expenses	\$ 2,133
Purchased Water	\$ -
Miscellaneous Expenses	\$ -
Rents	\$ -
Total Operation	\$ 5,268
<u>Maintenance</u>	
Maintenance of Wells and Springs	\$ -
Maintenance of Supply Mains	\$ -
Maintenance of Miscellaneous Water Source Plant	\$ -
Total Maintenance	\$ -
Total Source of Supply Expenses	\$ 5,268
<u>Pumping Expenses</u>	
<u>Operation</u>	
Operation Supervision and Engineering	\$ -
Fuel for Power Production	\$ -
Fuel or Power Purchased for Production	\$ -
Pumping Labor and Expenses	\$ 32,452
Miscellaneous Expenses	\$ -
Rents	\$ -
Total Operation	\$ 32,452
<u>Maintenance</u>	
Maintenance Supervision and Engineering	\$ -
Maintenance of Structures and Improvements	\$ -
Maintenance of Power Production Equipment	\$ -
Maintenance of Pumping Equipment	\$ 6,595
Total Maintenance	\$ 6,595
Total Pumping Expenses	\$ 39,047
<u>Water Treatment Expenses</u>	
<u>Operation</u>	
Operation Supervision and Engineering	\$ -
Chemicals	\$ -
Operation Labor and Expenses	\$ 27,472
Miscellaneous Expenses	\$ -
Total Operation	\$ 27,472
<u>Maintenance</u>	
Maintenance of Water Treatment Equipment	\$ -
Total Maintenance	\$ -
Total Water Treatment Expenses	\$ 27,472

Transmission and Distribution Expenses

<u>Operation</u>	
Operation Supervision and Engineering	\$ 58,901
Transmission and Distribution Lines Expenses	\$ 28,309
Meter Expenses	\$ 23,557
Miscellaneous Expenses	\$ 38,194
Rents	\$ -
Total Operation	\$ 148,961

<u>Maintenance</u>	
Maintenance Supervision and Engineering	\$ 1,496
Maintenance of Structures and Improvements	\$ 6,027
Maintenance of Dist. Reservoirs & Standpipes	\$ -
Maintenance of Trans. & Distribution Mains	\$ 17,321
Maintenance of Fire Mains	\$ -
Maintenance of Services	\$ -
Maintenance of Meters	\$ -
Maintenance of Hydrants	\$ 2,021
Maintenance of Miscellaneous Plant	\$ -
Total Maintenance	\$ 26,865
Total Transmission & Distribution Expenses	175,826

Customer Accounts Expenses

<u>Operation</u>	
Supervision	\$ -
Meter Reading Salaries	\$ 61,265
Customer Records & Coll. Expenses-Labor	\$ 55,699
Uncollectible Accounts	\$ -
Miscellaneous Customer Account Expense	\$ 4,013
Total Customer Accounts Expenses	\$ 120,977

Administrative and General Expenses

<u>Operation</u>	
Administrative and General Salaries	\$ 169,219
Office Supplies and Other Expenses	\$ -
Administrative Expenses Transferred	\$ -
Outside Services Employed	\$ -
Property Insurance	\$ -
Injuries and Damages	\$ -
Employee Pension and Benefits	\$ -
Regulatory Commission Expenses	\$ -
Miscellaneous General Expenses	\$ -
Rents	\$ -
Total Operation	\$ 169,219

<u>Maintenance</u>	
Maintenance of General Plant	\$ 4,420
Total Administrative and General Expenses	\$ 4,420

Total Labor Expenses \$ 542,229

PLANT IN SERVICE - AVG RATE YEAR

Plant Held for Future Use	\$	-
INTANGIBLE PLANT		
Organization	\$	51,107
Misc. Intangibles	\$	231,444
Subtotal	\$	282,551
SOURCE OF SUPPLY		
Land & Land Rights	\$	27,717
Wells & Springs	\$	442,871
Supply Mains	\$	47,627
Struct & Other Source of Supply	\$	106,861
Subtotal	\$	625,076
PUMPING PLANT		
Land & Land Rights	\$	5,601
Structures & Improvements	\$	679,313
Electric Pump Equip	\$	1,511,686
Diesel Pump Equip	\$	-
Other Pump Equip	\$	113,127
Subtotal	\$	2,309,727
WATER TREATMENT PLANT		
Structures & improvements	\$	18,475
Water Treatment Plant	\$	436,922
Subtotal	\$	455,396
TRANSMISSION & DISTRIBUTION PLANT		
Land & Land Rights	\$	1,862
Structures & Improvements	\$	25,772
Distrib Reservoirs & Standpipes	\$	968,016
Trans. & Dist. Mains	\$	9,688,212
Services	\$	2,963,555
Meters	\$	2,683,106
Hydrants	\$	850,459
Subtotal	\$	17,180,982
GENERAL PLANT		
Structures & Improvements	\$	205,826
Computer Hardware	\$	590,698
391A-CIS	\$	472,333
Stores Equipment	\$	-
Tools, Shop & Garage Equip.	\$	65,178
Laboratory Equipment	\$	-
Power Operated Equipment	\$	15,685
Communication Equipment	\$	185,385
Miscellaneous Equipment	\$	79,677
Subtotal	\$	1,614,782
TOTAL PLANT IN SERVICE	\$	22,468,513

RATE YEAR DEPRECIATION EXPENSE

Plant Held for Future Use	\$	-
INTANGIBLE PLANT		
Organization	\$	-
Misc. Intangibles	\$	-
Subtotal	\$	-
SOURCE OF SUPPLY		
Land & Land Rights	\$	-
Wells & Springs	\$	8,857
Supply Mains	\$	595
Struct & Other Source of Supply	\$	2,105
Subtotal	\$	11,558
PUMPING PLANT		
Land & Land Rights	\$	-
Structures & Improvements	\$	13,586
Electric Pump Equip	\$	60,456
Diesel Pump Equip	\$	-
Other Pump Equip	\$	4,525
Subtotal	\$	78,568
WATER TREATMENT PLANT		
Structures & improvements	\$	369
Water Treatment Plant	\$	21,844
Subtotal	\$	22,214
TRANSMISSION & DISTRIBUTION PLANT		
Land & Land Rights	\$	-
Structures & Improvements	\$	773
Distrib Reservoirs & Standpipes	\$	12,875
Trans. & Dist. Mains	\$	118,492
Services	\$	59,242
Meters	\$	80,422
Hydrants	\$	17,006
Subtotal	\$	288,809
GENERAL PLANT		
Structures & Improvements	\$	10,285
Computer Hardware	\$	58,805
391A-CIS	\$	59,042
Stores Equipment	\$	-
Tools, Shop & Garage Equip.	\$	6,506
Laboratory Equipment	\$	-
Power Operated Equipment	\$	1,569
Communication Equipment	\$	9,266
Miscellaneous Equipment	\$	1,594
Subtotal	\$	147,067
TOTAL	\$	548,216
Less: Contributions	\$	(46,019)
TOTAL DEPRECIATION	\$	502,198

UNITS OF SERVICE

Metered Water Sales

<u>Residential</u>	<u>100 cu ft</u>
1st Block	425,654
2nd Block	141,141
Total	566,795

Non-Residential

Commercial	251,691
Industrial	2,610
Public	35,505
Total	289,805

Sales for resale

Total	533,480
Grand Total	1,390,080

Meters By Size

<u>Quarterly</u>	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public</u>	<u>Subtotal</u>	<u>Resale</u>	<u>Total</u>
5/8	7,065	360	1	26	7,452		7,452
3/4	5	0	0	0	5		5
1	141	113	2	12	268		268
1 1/2	11	56	0	10	77		77
2	4	115	1	34	154		154
3	0	5	0	5	10		10
4	0	0	0	1	1		1
6	0	4	0	1	5		5
8 & up	0	1	0	0	1		1
Subtotal	7,227	653	4	88	7,972	0	7,972
<u>Monthly</u>							
5/8	0	2	1	0	3		3
3/4	0	0	0	0	0		0
1	0	3	1	0	4		4
1 1/2	0	0	0	1	1		1
2	0	7	2	0	9		9
3	0	3	0	0	3		3
4	0	0	1	0	1		1
6	0	0	0	0	0		0
8 & up	0	0	0	0	0	1	1
Subtotal	0	15	5	1	21	1	22
Grandtotal	7,227	668	9	89	7,993	1	7,994

Public Fire Service

Fire Hydrants	658
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Private Fire Service

<u>Size (in)</u>	<u>Total</u>
2.5	5
3	0
4	19
6	135
8	27
10	0
12	1
16	0
	187

UNITS OF SERVICE - CLASS DEMANDS

CUSTOMER CLASS	AVERAGE DEMANDS		FACTOR [1]	MAX DAY EXTRA CAPACITY		% ALL	% RETAIL
	(GALS/DAY)	PERCENT		TOTAL GAL/DAY	XTRA GAL/DAY		
Residential	1,161,542	40.6%	2.25	2,613,469	1,451,927	32.6%	44.7%
Non-Residential	593,902	20.7%	1.90	1,128,414	534,512	12.0%	16.5%
Fire Protection		0.5%	[2]	1,260,000	1,260,000	28.3%	38.8%
Sales for Resale	<u>1,093,268</u>	<u>38.2%</u>	2.10	<u>2,295,862</u>	<u>1,202,595</u>	<u>27.0%</u>	
Total	2,848,712	100.0%		7,297,745	4,449,034	100.0%	100.0%

CUSTOMER CLASS	AVERAGE DEMANDS		FACTOR [1]	PEAK HOUR EXTRA CAPACITY		% ALL	% RETAIL
	(GALS/DAY)	PERCENT		TOTAL GAL/DAY	XTRA GAL/DAY		
Residential	1,161,542	40.6%	3.25	3,775,011	1,161,542	21.8%	21.8%
Non-Residential	593,902	20.7%	2.55	1,514,450	386,036	7.2%	7.2%
Fire Protection		0.5%	[2]	5,040,000	3,780,000	71.0%	71.0%
Sales for Resale	<u>1,093,268</u>	<u>38.2%</u>	2.10	<u>2,295,862</u>	<u>0</u>	<u>0.0%</u>	
Total	2,848,712	100.0%		12,625,323	5,327,578	100.0%	100.0%

[1] based on prior COS analysis (1991 study), rounded.

[2] max day based on 3500 gpm for 6 hours, peak hr at rate of 3500 gpm

Ex. 2 (Joint Settlement) Sch. 2B

Length of Mains

	<u>Size</u>	<u>Feet</u>	<u>Inch-Miles</u>		
Service Pipes		319,714.7			
	2	12,812.5	4.9		
	3	804.0	0.5		
	4	31,950.0	24.2		
	6	212,720.5	241.7		
	8	185,044.0	280.4		
	10	6,842.0	13.0	84.0%	62.0%
	12	130,003.0	295.5		
	16	16,446.0	49.8	16.0%	38.0%
Totals		916,336.7	909.9		

Unbilled Water (thousand gallons/yr)

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>4 Yr Avg</u> <u>1000 gal/yr</u>	<u>ccf/yr</u>
Unbilled Water	42,511	37,987	66,812	72,402	54,928	73,428

SUMMARY RATE YEAR EXPENSE ALLOCATIONS

	RATE YR EXPENSE	ALLOC. SYMBOL	GENERAL WATER		FIRE SERVICE		CUST. SERVICE	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
Operation & Maintenance	\$ 1,815,204	M	64.6%	\$ 1,173,437	0.7%	\$ 12,810	34.6%	\$ 628,958
Depreciation	\$ 502,198	D	61.1%	\$ 306,902	4.6%	\$ 23,086	34.3%	\$ 172,210
Taxes other than Income	\$ 374,495	T	66.2%	\$ 248,034	3.5%	\$ 12,979	30.3%	\$ 113,481
Total Operating	\$ 2,691,896			\$ 1,728,373		\$ 48,875		\$ 914,648
Federal Income Tax	\$ 282,019	R	66.0%	\$ 186,202	5.0%	\$ 14,061	29.0%	\$ 81,756
Return on Rate Base	\$ 843,682	R	66.0%	\$ 557,036	5.0%	\$ 42,066	29.0%	\$ 244,580
Total Revenue Required	\$ 3,817,597			\$ 2,471,611		\$ 105,002		\$ 1,240,984
Less:								
Misc. Income/Turn on-off	\$ 20,172	X	90.0%	\$ 18,155	0.0%	\$ -	10.0%	\$ 2,017
Other Water Revenues	\$ 16,130	X	90.0%	\$ 14,517	0.0%	\$ -	10.0%	\$ 1,613
Required From Rates	\$ 3,781,296	F	64.5%	\$ 2,438,940	2.8%	\$ 105,002	32.7%	\$ 1,237,354

ALLOCATION OF RATE BASE

	RATE YR EXPENSE	ALLOC. SYMBOL	GENERAL WATER % AMOUNT	FIRE SERVICE % AMOUNT	CUST. SERVICE % AMOUNT
Average Utility Plant on Service	\$ 22,468,513	P	68.4% \$ 15,372,147	4.1% \$ 928,899	27.4% \$ 6,167,467
Less:					
Accumulated Amortization	\$ (6,213,068)	R	66.0% \$ (4,102,145)	5.0% \$ (309,782)	29.0% \$ (1,801,142)
Contributions	\$ (3,596,531)	B	83.0% \$ (2,985,121)	0.0% \$ -	17.0% \$ (611,410)
Deferred Income Tax	\$ (1,575,371)	R	66.0% \$ (1,040,130)	5.0% \$ (78,548)	29.0% \$ (456,693)
Unamortized ITC	\$ (98,414)	R	66.0% \$ (64,977)	5.0% \$ (4,907)	29.0% \$ (28,530)
1/13th Unfunded FAS 106	\$ (513,369)	L	57.1% \$ (293,103)	0.8% \$ (4,140)	42.1% \$ (216,125)
Plus:					
Customer Advances	\$ -	R	66.0% \$ -	5.0% \$ -	29.0% \$ -
Materials & Supplies	\$ 88,089	R	66.0% \$ 58,160	5.0% \$ 4,392	29.0% \$ 25,536
Working Capital	\$ 222,162	F	64.5% \$ 143,295	2.8% \$ 6,169	32.7% \$ 72,698
Deferred Tank Painting	\$ 90,178	S	100.0% \$ 90,178	0.0% \$ -	0.0% \$ -
Deferred Rate Case	\$ 0	F	64.5% \$ 0	2.8% \$ 0	32.7% \$ 0
Deferred Operations	\$ -	M	64.6% \$ -	0.7% \$ -	34.6% \$ -
Deferred Acquisitions	\$ -	P	68.4% \$ -	4.1% \$ -	27.4% \$ -
Total Rate Base	\$ 10,872,189	R	66.0% \$ 7,178,304	5.0% \$ 542,084	29.0% \$ 3,151,801

ALLOCATION OF RATE YEAR O&M EXPENSES TO
GENERAL WATER, FIRE, AND CUSTOMER SERVICE

EXPENSE ITEM	RATE YR EXPENSE	ALLOC. SYMBOL	GENERAL WATER % AMOUNT	FIRE SERVICE % AMOUNT	CUST. SERVICE % AMOUNT
Source of Supply Expenses					
<i>Operation</i>					
Operation Supervision and Engineering	\$ 2,990	A	100.0% \$ 2,990	0.0% \$ -	0.0% \$ -
Operation Labor and Expenses	\$ 3,759	A	100.0% \$ 3,759	0.0% \$ -	0.0% \$ -
Purchased Water	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Miscellaneous Expenses	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Rents	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Total Operation	\$ 6,749		\$ 6,749	\$ -	\$ -
<i>Maintenance</i>					
Maintenance of Wells and Springs	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Maintenance of Supply Mains	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Maintenance of Miscellaneous Water Source Plar	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Total Maintenance	\$ -		\$ -	\$ -	\$ -
Total Source of Supply Expenses	\$ 6,749		\$ 6,749	\$ -	\$ -
Pumping Expenses					
<i>Operation</i>					
Operation Supervision and Engineering	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Fuel for Power Production	\$ 747	A	100.0% \$ 747	0.0% \$ -	0.0% \$ -
Fuel or Power Purchased for Production	\$ 185,457	A	100.0% \$ 185,457	0.0% \$ -	0.0% \$ -
Pumping Labor and Expenses	\$ 72,889	A	100.0% \$ 72,889	0.0% \$ -	0.0% \$ -
Miscellaneous Expenses	\$ 4,660	A	100.0% \$ 4,660	0.0% \$ -	0.0% \$ -
Rents	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Total Operation	\$ 263,753		\$ 263,753	\$ -	\$ -
<i>Maintenance</i>					
Maintenance Supervision and Engineering	\$ -	A	100.0% \$ -	0.0% \$ -	0.0% \$ -
Maintenance of Structures and Improvements	\$ 43	A	100.0% \$ 43	0.0% \$ -	0.0% \$ -
Maintenance of Power Production Equipment	\$ 1,231	A	100.0% \$ 1,231	0.0% \$ -	0.0% \$ -
Maintenance of Pumping Equipment	\$ 18,121	A	100.0% \$ 18,121	0.0% \$ -	0.0% \$ -
Total Maintenance	\$ 19,395		\$ 19,395	\$ -	\$ -
Total Pumping Expenses	\$ 283,147		\$ 283,147	\$ -	\$ -

Water Treatment Expenses

<i>Operation</i>										
Operation Supervision and Engineering	-	A	100.0%	\$	-	0.0%	\$	-	0.0%	\$
Chemicals	65,577	A	100.0%	\$	65,577	0.0%	\$	-	0.0%	\$
Operation Labor and Expenses	65,634	A	100.0%	\$	65,634	0.0%	\$	-	0.0%	\$
Miscellaneous Expenses	30,171	A	100.0%	\$	30,171	0.0%	\$	-	0.0%	\$
Total Operation	161,382			\$	\$			\$		\$

Maintenance

Maintenance of Water Treatment Equipment	4,521	A	100.0%	\$	4,521	0.0%	\$	-	0.0%	\$
Total Maintenance	4,521			\$	\$			\$		\$
Total Water Treatment Expenses	165,903			\$	\$			\$		\$

Transmission and Distribution Expenses

<i>Operation</i>										
Operation Supervision and Engineering	98,196	G	80.8%	\$	79,349	1.6%	\$	1,547	17.6%	\$
Transmission and Distribution Lines Expenses	58,964	A	100.0%	\$	58,964	0.0%	\$	-	0.0%	\$
Meter Expenses	38,414	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Miscellaneous Expenses	83,036	A	100.0%	\$	83,036	0.0%	\$	-	0.0%	\$
Rents	-	A	100.0%	\$	-	0.0%	\$	-	0.0%	\$
Total Operation	278,610			\$	\$			\$		\$

Maintenance

Maintenance Supervision and Engineering	2,448	G	80.8%	\$	1,978	1.6%	\$	39	17.6%	\$
Maintenance of Structures and Improvements	13,164	A	100.0%	\$	13,164	0.0%	\$	-	0.0%	\$
Maintenance of Dist. Reservoirs & Standpipes	38,574	S	100.0%	\$	38,574	0.0%	\$	-	0.0%	\$
Maintenance of Trans. & Distribution Mains	31,947	A	100.0%	\$	31,947	0.0%	\$	-	0.0%	\$
Maintenance of Fire Mains	-	E	0.0%	\$	-	100.0%	\$	-	0.0%	\$
Maintenance of Services	10,790	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Maintenance of Meters	-	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Maintenance of Hydrants	4,401	E	0.0%	\$	4,401	100.0%	\$	-	0.0%	\$
Maintenance of Miscellaneous Plant	805	G	80.8%	\$	651	1.6%	\$	13	17.6%	\$
Total Maintenance	102,128			\$	\$			\$		\$
Total Transmission & Distribution Expenses	380,738			\$	\$			\$		\$

Customer Accounts Expenses

<i>Operation</i>										
Supervision	-	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Meter Reading Salaries	109,157	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Customer Records & Coll. Expenses-Labor	191,448	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Uncollectible Accounts	-	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Miscellaneous Customer Account Expense	13,884	C	0.0%	\$	-	0.0%	\$	-	100.0%	\$
Total Customer Accounts Expenses	314,489			\$	\$			\$		\$

Administrative and General Expenses

Operation

Administrative and General Salaries	M	\$ 157,509	64.6%	\$ 101,821.53	0.7%	\$ 1,111.51	34.6%	\$ 54,575.95
Office Supplies and Other Expenses	M	\$ 30,214	64.6%	\$ 19,531.68	0.7%	\$ 213.21	34.6%	\$ 10,468.91
Administrative Expenses Transferred	M	\$ (292,910)	64.6%	\$ (189,351.37)	0.7%	\$ (2,067.01)	34.6%	\$ (101,491.60)
Outside Services Employed	M	\$ 240,048	64.6%	\$ 155,179.08	0.7%	\$ 1,693.97	34.6%	\$ 83,175.39
Property Insurance	P	\$ 44,300	68.4%	\$ 30,308	4.1%	\$ 1,831	27.4%	\$ 12,160
Injuries and Damages	M	\$ 13,901	64.6%	\$ 8,986.29	0.7%	\$ 98.10	34.6%	\$ 4,816.62
Employee Pension and Benefits	L	\$ 283,463	57.1%	\$ 161,841	0.8%	\$ 2,286	42.1%	\$ 119,336
Regulatory Commission Expenses	M	\$ 89,904	64.6%	\$ 58,118.44	0.7%	\$ 634.44	34.6%	\$ 31,151.26
Miscellaneous General Expenses	M	\$ 71,810	64.6%	\$ 46,421.76	0.7%	\$ 506.75	34.6%	\$ 24,881.88
Rents	M	\$ 16,636	64.6%	\$ 10,754.38	0.7%	\$ 117.40	34.6%	\$ 5,764.30
Total Operation		\$ 654,876		\$ 403,611		\$ 6,426		\$ 244,839

Maintenance

Maintenance of General Plant	P	\$ 9,302	68.4%	\$ 6,364	4.1%	\$ 385	27.4%	\$ 2,553
Total Administrative and General Expenses		\$ 664,178		\$ 409,975		\$ 6,810		\$ 247,393

Total Operation and Maintenance Expenses

	M	\$ 1,815,204	64.6%	\$ 1,173,437	0.7%	\$ 12,810	34.6%	\$ 628,958
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ALLOCATION OF TEST YEAR LABOR EXPENSE TO
GENERAL WATER, FIRE & CUST. SERVICE

EXPENSE ITEM	RATE YR EXPENSE	ALLOC. SYMBOL	GENERAL WATER % AMOUNT	FIRE SERVICE % AMOUNT	CUST. SERVICE % AMOUNT
Source of Supply Expenses					
<i>Operation</i>					
Operation Supervision and Engineering	\$ 3,135	A	100.0%	0.0%	0.0%
Operation Labor and Expenses	\$ 2,133	A	100.0%	0.0%	0.0%
Purchased Water	\$ -	A	100.0%	0.0%	0.0%
Miscellaneous Expenses	\$ -	A	100.0%	0.0%	0.0%
Rents	\$ -	A	100.0%	0.0%	0.0%
Total Operation	\$ 5,268		\$ 5,268	\$ -	\$ -
<i>Maintenance</i>					
Maintenance of Wells and Springs	\$ -	A	100.0%	0.0%	0.0%
Maintenance of Supply Mains	\$ -	A	100.0%	0.0%	0.0%
Maintenance of Miscellaneous Water Source Plat	\$ -	A	100.0%	0.0%	0.0%
Total Maintenance	\$ -		\$ -	\$ -	\$ -
Total Source of Supply Expenses	\$ 5,268		\$ 5,268	\$ -	\$ -
Pumping Expenses					
<i>Operation</i>					
Operation Supervision and Engineering	\$ -	A	100.0%	0.0%	0.0%
Fuel for Power Production	\$ -	A	100.0%	0.0%	0.0%
Fuel or Power Purchased for Production	\$ -	A	100.0%	0.0%	0.0%
Pumping Labor and Expenses	\$ 32,452	A	100.0%	0.0%	0.0%
Miscellaneous Expenses	\$ -	A	100.0%	0.0%	0.0%
Rents	\$ -	A	100.0%	0.0%	0.0%
Total Operation	\$ 32,452		\$ 32,452	\$ -	\$ -
<i>Maintenance</i>					
Maintenance Supervision and Engineering	\$ -	A	100.0%	0.0%	0.0%
Maintenance of Structures and Improvements	\$ -	A	100.0%	0.0%	0.0%
Maintenance of Power Production Equipment	\$ -	A	100.0%	0.0%	0.0%
Maintenance of Pumping Equipment	\$ 6,595	A	100.0%	0.0%	0.0%
Total Maintenance	\$ 6,595		\$ 6,595	\$ -	\$ -
Total Pumping Expenses	\$ 39,047		\$ 39,047	\$ -	\$ -

Administrative and General Expenses

Operation

Administrative and General Salaries	L	169,219	\$	57.1%	\$	96,614	0.8%	\$	1,365	42.1%	\$	71,240
Office Supplies and Other Expenses	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Administrative Expenses Transferred	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Outside Services Employed	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Property Insurance	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Injuries and Damages	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Employee Pension and Benefits	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Regulatory Commission Expenses	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Miscellaneous General Expenses	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Rents	L	-	\$	57.1%	\$	-	0.8%	\$	-	42.1%	\$	-
Total Operation		169,219	\$		\$	96,614		\$	1,365		\$	71,240

Maintenance

Maintenance of General Plant	L	4,420	\$	57.1%	\$	2,524	0.8%	\$	36	42.1%	\$	1,861
Total Administrative and General Expenses		173,639	\$		\$	99,138		\$	1,400		\$	73,101

Total Labor Expenses

	L	542,229	\$	57.1%	\$	309,580	0.8%	\$	4,373	42.1%	\$	228,276
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ALLOCATION OF PLANT IN SERVICE TO
GENERAL WATER, FIRE & CUST. SERVICE

EXPENSE ITEM	RATE YR PLANT	ALLOC. SYMBOL	GENERAL WATER % AMOUNT	FIRE SERVICE % AMOUNT	CUST. SERVICE % AMOUNT
Plant Held for Future Use	\$ -	P	68.4%	4.1%	27.4%
INTANGIBLE PLANT					
Organization	\$ 51,107	P	68.4%	4.1%	27.4%
Misc. Intangibles	\$ 231,444	P	68.4%	4.1%	27.4%
Subtotal	\$ 282,551		\$ 193,311	\$ 11,681	\$ 77,558
SOURCE OF SUPPLY					
Land & Land Rights	\$ 27,717	A	100.0%	0.0%	0.0%
Wells & Springs	\$ 442,871	A	100.0%	0.0%	0.0%
Supply Mains	\$ 47,627	A	100.0%	0.0%	0.0%
Struct & Other Source of Supply	\$ 106,861	A	100.0%	0.0%	0.0%
Subtotal	\$ 625,076		\$ 625,076	\$ -	\$ -
PUMPING PLANT					
Land & Land Rights	\$ 5,601	A	100.0%	0.0%	0.0%
Structures & Improvements	\$ 679,313	A	100.0%	0.0%	0.0%
Electric Pump Equip	\$ 1,511,686	A	100.0%	0.0%	0.0%
Diesel Pump Equip	\$ -	A	100.0%	0.0%	0.0%
Other Pump Equip	\$ 113,127	A	100.0%	0.0%	0.0%
Subtotal	\$ 2,309,727		\$ 2,309,727	\$ -	\$ -
WATER TREATMENT PLANT					
Structures & Improvements	\$ 18,475	A	100.0%	0.0%	0.0%
Water Treatment Plant	\$ 436,922	A	100.0%	0.0%	0.0%
Subtotal	\$ 455,396		\$ 455,396	\$ -	\$ -
TRANSMISSION & DISTRIBUTION PLANT					
Land & Land Rights	\$ 1,862	A	100.0%	0.0%	0.0%
Structures & Improvements	\$ 25,772	A	100.0%	0.0%	0.0%
Distrib Reservoirs & Standpipes	\$ 968,016	S	100.0%	0.0%	0.0%
Trans. & Dist. Mains	\$ 9,688,212	A	100.0%	0.0%	0.0%
Services	\$ 2,963,555	C	0.0%	0.0%	100.0%
Meters	\$ 2,683,106	C	0.0%	0.0%	100.0%
Hydrants	\$ 850,459	E	0.0%	100.0%	0.0%
Subtotal	\$ 17,180,982		\$ 10,683,862	\$ 850,459	\$ 5,646,661
GENERAL PLANT					
Structures & Improvements	\$ 205,826	P	68.4%	4.1%	27.4%
Computer Hardware	\$ 590,698	P	68.4%	4.1%	27.4%
391A-CIS	\$ 472,333	P	68.4%	4.1%	27.4%
Stores Equipment	\$ -	P	68.4%	4.1%	27.4%
Tools, Shop & Garage Equip.	\$ 65,178	P	68.4%	4.1%	27.4%
Laboratory Equipment	\$ -	P	68.4%	4.1%	27.4%
Power Operated Equipment	\$ 15,685	P	68.4%	4.1%	27.4%
Communication Equipment	\$ 185,385	P	68.4%	4.1%	27.4%
Miscellaneous Equipment	\$ 79,677	P	68.4%	4.1%	27.4%
Subtotal	\$ 1,614,782		\$ 1,104,776	\$ 66,759	\$ 443,248
TOTAL PLANT IN SERVICE	\$ 22,468,513	P	68.4%	4.1%	27.4%
			\$ 15,372,147	\$ 928,899	\$ 6,167,467

ALLOCATION SYMBOLS

ALLOCATION SYMBOL	GEN'L WATER	FIRE SERVICE	CUST SERVICE
A	100.00%	0.00%	0.00%
B	83.00%	0.00%	17.00%
C	0.00%	0.00%	100.00%
D	61.11%	4.60%	34.29%
E	0.00%	100.00%	0.00%
F	64.50%	2.78%	32.72%
G	80.81%	1.58%	17.62%
L	57.09%	0.81%	42.10%
M	64.64%	0.71%	34.65%
P	68.42%	4.13%	27.45%
R	66.02%	4.99%	28.99%
S	100.00%	0.00%	0.00%
T	66.23%	3.47%	30.30%
X	90.00%	0.00%	10.00%

Supply, Production, Treatment, Pumping
 Contributed Capital (approx based on contributions)
 Meters, Services, Customer Accts
 Depreciation
 Hydrants
 Total Costs/Revenue Required
 T&D Supervision
 Labor
 Total O&M
 Plant Investment
 Rate Base
 Storage
 Taxes other than Income
 Misc Revenues - some to cust for turn on-off

Symbol T - Taxes other than income

Property	Amount**	Symbol	Gen Water	Fire	Customer
Property	\$ 271,022	P	\$ 185,423	\$ 11,205	\$ 74,394
Payroll	\$ 55,753	L	\$ 31,832	\$ 450	\$ 23,472
Gross Receipt	\$ 47,720	F	\$ 30,779	\$ 1,325	\$ 15,615
Total	\$ 374,495	T	\$ 248,034	\$ 12,979	#####
Percent			66.2%	3.5%	30.3%

FIRE SERVICE CHARGES

<u>PUBLIC FIRE SERVICE</u>	<u>QUARTERLY</u>	<u>MONTHLY</u>
Charge/Hydrant =	\$ 131.92	\$ 43.97

PRIVATE FIRE SERVICE

<u>SERVICE SIZE</u>			
<u>(inches)</u>			
2.5	\$	22.35	\$ 12.02
3	\$	31.88	\$ 15.19
4	\$	60.18	\$ 24.63
6	\$	161.77	\$ 58.49
8	\$	336.99	\$ 116.90
10	\$	600.55	\$ 204.75
12	\$	965.83	\$ 326.51
16	\$	2,050.46	\$ 688.06

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

	<u>NUMBER</u>	<u>DEMAND FACTOR (1)</u>	<u>NO. OF EQUIVS.</u>	<u>PERCENT OF DEMAND</u>	<u>REVENUE REQUIRED</u>
PUBLIC FIRE SERVICE					
Hydrants	658	111.3	73,243	76.2%	\$ 242,224 (3)
			Plus Hydrant Costs (2):		\$ 105,002
			Total		\$ 347,226
			Adjustment		\$ -
PRIVATE FIRE SERVICE					
			Total Private Fire		\$ 347,226
SIZE (IN)					
2.5	5	11.1	56		
3	0	18.0	0		
4	19	38.3	728		
6	135	111.3	15,027		
8	27	237.2	6,405		
10	0	426.6	0		
12	1	689.0	689		
16	0	1,468.4	0		
TOTAL-PRIV.	187		22,904	23.8%	\$ 75,748
=====			=====	=====	=====
GRAND TOTALS	845		96,147	100.0%	\$ 422,975

(1) Based on size to the 2.63 power.

(2) Direct hydrant fire allocations from Ex. 5 (Joint Settlement) Sch 3

(3) Fire costs adjusted and reallocated to retail base use by \$325,000

DETERMINATION OF FIRE SERVICE CHARGES

<u>PUBLIC FIRE PROTECTION</u>				<u>CALCULATED</u>	
				<u>CHARGE</u>	
PUBLIC FIRE ALLOCATION		\$ 347,226			
-----	=	-----	=	\$ 527.70 / year	
NUMBER OF PUBLIC HYDRANTS		658			
	TOTAL QUARTERLY	\$	131.92 / quarter		
	TOTAL MONTHLY	\$	263.85 / 6 months		
 <u>PRIVATE FIRE PROTECTION</u>					
PRIVATE FIRE ALLOCATION (1)		\$ 127,509			
-----	=	-----	=	\$ 5.5670 /EQUIV.	
NO. OF EQUIV. UNITS		22,904			

SIZE (IN)	DEMAND FACTOR	DEMAND COST			BILLING CHARGE	TOTAL CHARGES	
		ANNUAL	QUARTERLY	MONTHLY		QUARTERLY	MONTHLY
2.5	11.1	\$ 61.97	\$ 15.49	\$ 5.16	\$ 6.85	\$ 22.35	\$ 12.02
3	18.0	\$ 100.10	\$ 25.03	\$ 8.34	\$ 6.85	\$ 31.88	\$ 15.19
4	38.3	\$ 213.32	\$ 53.33	\$ 17.78	\$ 6.85	\$ 60.18	\$ 24.63
6	111.3	\$ 619.67	\$ 154.92	\$ 51.64	\$ 6.85	\$ 161.77	\$ 58.49
8	237.2	\$ 1,320.53	\$ 330.13	\$ 110.04	\$ 6.85	\$ 336.99	\$ 116.90
10	426.6	\$ 2,374.77	\$ 593.69	\$ 197.90	\$ 6.85	\$ 600.55	\$ 204.75
12	689.0	\$ 3,835.91	\$ 958.98	\$ 319.66	\$ 6.85	\$ 965.83	\$ 326.51
16	1,468.4	\$ 8,174.44	\$ 2,043.61	\$ 681.20	\$ 6.85	\$ 2,050.46	\$ 688.06

(1) Private Fire includes costs assigned in Sch 4A as well as allocated service maintenance costs as detailed below:

Service Line Maintenance Cost =	\$ 10,790
Service Line Depreciation Cost =	\$ 59,242
Service Line ROI Cost =	\$ 229,972
Subtotal Service Line Costs =	\$ 300,003
Addnl Allocation to Fire Service =	\$ 51,761 (17.3%)

Service Line Equivalents

Meter Size (in)	Serv. Size (in)	Equivalents	<u>Metered Water Service</u>		<u>Private Fire Service</u>	
			Number	Equivalents	Number	Equivalents
5/8	1	1.0	7,455	7,455		
3/4	1	1.1	5	6		
1	1.5	1.8	272	489		
1 1/2	2.5	3.3	78	257	5	17
2	3	4.6	163	748	0	0
3	4	6.3	13	82	19	120
4	6	9.6	2	19	135	1,296
6	8	16.9	5	85	27	456
>=8	>=10	29.6	2	59	1	30
Total				9,199		1,918
				82.7%		17.3%

COST BASED SERVICE CHARGES

METER SIZE (inches)	QUARTERLY ACCOUNTS	MONTHLY ACCOUNTS
5/8	\$ 24.01	\$ 12.57
3/4	\$ 25.72	\$ 13.14
1	\$ 37.73	\$ 17.14
1 1/2	\$ 63.45	\$ 25.72
2	\$ 85.75	\$ 33.15
3	\$ 114.91	\$ 42.87
4	\$ 171.51	\$ 61.74
6	\$ 296.72	\$ 103.48
>8	\$ 514.55	\$ 176.09

SUMMARY RATE YEAR CUSTOMER SERVICE EXPENSE ALLOCATIONS

	TOTAL	ALLOC.	<-CUST. METER->		<-CUST. BILL->	
	CUST. SERV.	SYMBOL	%	AMOUNT	%	AMOUNT
Operation & Maintenance	\$ 628,958	OO	18.6%	\$ 117,247	81.4%	\$ 511,710
Depreciation	\$ 172,210	DD	90.2%	\$ 155,392	9.8%	\$ 16,818
Taxes other than Income	\$ 113,481	TT	75.9%	\$ 86,108	24.1%	\$ 27,373
Total Operating	\$ 914,648			\$ 358,747		\$ 555,901
Federal Income Tax	\$ 81,756	RR	99.3%	\$ 81,209	0.7%	\$ 547
Return on Rate Base	\$ 244,580	RR	99.3%	\$ 242,942	0.7%	\$ 1,637
Total Revenue Required	\$ 1,240,984			\$ 682,898		\$ 558,086
Less:						
Misc. Income/Turn on-off	\$ 2,017	XX	0.0%	\$ -	100.0%	\$ 2,017
Other Water Revenues	\$ 1,613	XX	0.0%	\$ -	100.0%	\$ 1,613
Required From Rates	\$ 1,237,354	FF	55.2%	\$ 682,898	44.8%	\$ 554,456

ALLOCATION OF CUSTOMER SERVICE RATE BASE

	TOTAL	ALLOC. SYMBOL	<-CUST. METER->		<-CUST. BILL->	
	<u>CUST. SERV.</u>		%	<u>AMOUNT</u>	%	<u>AMOUNT</u>
Average Utility Plant on Service	\$ 6,167,467	II	97.2%	\$ 5,995,312	2.8%	\$ 172,154
Less:						
Accumulated Amortization	\$ (1,801,142)	RR	99.3%	\$ (1,789,084)	0.7%	\$ (12,058)
Contributions	\$ (611,410)	AA	100.0%	\$ (611,410)	0.0%	\$ -
Deferred Income Tax	\$ (456,693)	RR	99.3%	\$ (453,636)	0.7%	\$ (3,057)
Unamortized ITC	\$ (28,530)	RR	99.3%	\$ (28,339)	0.7%	\$ (191)
1/13th Unfunded FAS 106	\$ (216,125)	LL	22.0%	\$ (47,630)	78.0%	\$ (168,496)
Plus:						
Customer Advances	\$ -	RR	99.3%	\$ -	0.7%	\$ -
Materials & Supplies	\$ 25,536	RR	99.3%	\$ 25,366	0.7%	\$ 171
Working Capital	\$ 72,698	FF	55.2%	\$ 40,122	44.8%	\$ 32,576
Deferred Tank Painting	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Deferred Rate Case	\$ 0	FF	55.2%	\$ 0	44.8%	\$ 0
Deferred Operations	\$ -	OO	18.6%	\$ -	81.4%	\$ -
Deferred Acquisitions	\$ -	II	97.2%	\$ -	2.8%	\$ -
Total Rate Base	\$ 3,151,801	RR	99.3%	\$ 3,130,701	0.7%	\$ 21,100

ALLOCATION OF CUSTOMER SERVICE O&M EXPENSES

EXPENSE ITEM	TOTAL	ALLOC.	<-CUST. METER->		<-CUST. BILL->	
	CUST. SERV.		SYMBOL	%	AMOUNT	%
Transmission and Distribution Expenses						
Operation						
Operation Supervision and Engineering	\$ 17,300	AA	100.0%	\$ 17,300	0.0%	\$ -
Transmission and Distribution Lines Expenses	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Meter Expenses	\$ 38,414	AA	100.0%	\$ 38,414	0.0%	\$ -
Miscellaneous Expenses	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Rents	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Total Operation	\$ 55,714			\$ 55,714		\$ -
Maintenance						
Maintenance Supervision and Engineering	\$ 431	AA	100.0%	\$ 431	0.0%	\$ -
Maintenance of Structures and Improvements	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Dist. Reservoirs & Standpipes	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Trans. & Distribution Mains	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Fire Mains	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Services	\$ 10,790	AA	100.0%	\$ 10,790	0.0%	\$ -
Maintenance of Meters	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Hydrants	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Miscellaneous Plant	\$ 142	AA	100.0%	\$ 142	0.0%	\$ -
Total Maintenance	\$ 11,363			\$ 11,363		\$ -
Total Transmission & Distribution Expenses	\$ 67,076			\$ 67,076		\$ -
Customer Accounts Expenses						
Operation						
Supervision	\$ -	BB	0.0%	\$ -	100.0%	\$ -
Meter Reading Salaries	\$ 109,157	BB	0.0%	\$ -	100.0%	\$ 109,157
Customer Records & Coll. Expenses-Labor	\$ 191,448	BB	0.0%	\$ -	100.0%	\$ 191,448
Uncollectible Accounts	\$ -	BB	0.0%	\$ -	100.0%	\$ -
Miscellaneous Customer Account Expense	\$ 13,884	BB	0.0%	\$ -	100.0%	\$ 13,884
Total Customer Accounts Expenses	\$ 314,489			\$ -		\$ 314,489
Administrative and General Expenses						
Operation						
Administrative and General Salaries	\$ 54,576	CC	18.6%	\$ 10,174	81.4%	\$ 44,402
Office Supplies and Other Expenses	\$ 10,469	CC	18.6%	\$ 1,952	81.4%	\$ 8,517
Administrative Expenses Transferred	\$ (101,492)	CC	18.6%	\$ (18,920)	81.4%	\$ (82,572)
Outside Services Employed	\$ 83,175	CC	18.6%	\$ 15,505	81.4%	\$ 67,670
Property Insurance	\$ 12,160	CC	18.6%	\$ 2,267	81.4%	\$ 9,893
Injuries and Damages	\$ 4,817	CC	18.6%	\$ 898	81.4%	\$ 3,919
Employee Pension and Benefits	\$ 119,336	LL	22.0%	\$ 26,299	78.0%	\$ 93,037
Regulatory Commission Expenses	\$ 31,151	CC	18.6%	\$ 5,807	81.4%	\$ 25,344
Miscellaneous General Expenses	\$ 24,882	CC	18.6%	\$ 4,638	81.4%	\$ 20,244
Rents	\$ 5,764	CC	18.6%	\$ 1,075	81.4%	\$ 4,690
Total Operation	\$ 244,839			\$ 49,695		\$ 195,144
Maintenance						
Maintenance of General Plant	\$ 2,553	CC	18.6%	\$ 476	81.4%	\$ 2,077
Total Administrative and General Expenses	\$ 247,393			\$ 50,171		\$ 197,221
Total Operation and Maintenance Expenses	\$ 628,958	OO	18.6%	\$ 117,247	81.4%	\$ 511,710

ALLOCATION OF CUSTOMER SERVICE LABOR

EXPENSE ITEM	TOTAL	ALLOC. SYMBOL	<-CUST. METER->		<-CUST. BILL->	
	CUST. SERV.		%	AMOUNT	%	AMOUNT
Transmission and Distribution Expenses						
<i>Operation</i>						
Operation Supervision and Engineering	\$ 10,377	AA	100.0%	\$ 10,377	0.0%	\$ -
Transmission and Distribution Lines Expenses	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Meter Expenses	\$ 23,557	AA	100.0%	\$ 23,557	0.0%	\$ -
Miscellaneous Expenses	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Rents	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Total Operation	\$ 33,934			\$ 33,934		\$ -
<i>Maintenance</i>						
Maintenance Supervision and Engineering	\$ 264	AA	100.0%	\$ 264	0.0%	\$ -
	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Dist. Reservoirs & Standpipes	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Trans. & Distribution Mains	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Fire Mains	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Services	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Meters	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Hydrants	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Maintenance of Miscellaneous Plant	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Total Maintenance	\$ 264			\$ 264		\$ -
Total Transmission & Distribution Expenses	\$ 34,197			\$ 34,197		\$ -
Customer Accounts Expenses						
<i>Operation</i>						
Supervision	\$ -	BB	0.0%	\$ -	100.0%	\$ -
Meter Reading Salaries	\$ 61,265	BB	0.0%	\$ -	100.0%	\$ 61,265
Customer Records & Coll. Expenses-Labor	\$ 55,699	BB	0.0%	\$ -	100.0%	\$ 55,699
Uncollectible Accounts	\$ -	BB	0.0%	\$ -	100.0%	\$ -
Miscellaneous Customer Account Expense	\$ 4,013	BB	0.0%	\$ -	100.0%	\$ 4,013
Total Customer Accounts Expenses	\$ 120,977			\$ -		\$ 120,977
Administrative and General Expenses						
<i>Operation</i>						
Administrative and General Salaries	\$ 71,240	LL	22.0%	\$ 15,700	78.0%	\$ 55,540
Office Supplies and Other Expenses	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Administrative Expenses Transferred	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Outside Services Employed	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Property Insurance	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Injuries and Damages	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Employee Pension and Benefits	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Regulatory Commission Expenses	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Miscellaneous General Expenses	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Rents	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Total Operation	\$ -			\$ 15,700		\$ 55,540
<i>Maintenance</i>						
Maintenance of General Plant	\$ -	LL	22.0%	\$ -	78.0%	\$ -
Total Administrative and General Expenses	\$ 71,240			\$ 15,700		\$ 55,540
Total Labor Expenses	\$ 226,415	LL	22.0%	\$ 49,897	78.0%	\$ 176,517

**ALLOCATION OF CUSTOMER SERVICE PLANT TO
CUSTOMER METERS AND BILLING**

EXPENSE ITEM	TOTAL	ALLOC. SYMBOL	<-CUST. METER->		<-CUST. BILL->	
	CUST. SERV.		%	AMOUNT	%	AMOUNT
Plant Held for Future Use	\$ -	II	97.2%	\$ -	2.8%	\$ -
INTANGIBLE PLANT						
Organization	\$ 14,029	II	97.2%	\$ 13,637	2.8%	\$ 392
Misc. Intangibles	\$ 63,530	II	97.2%	\$ 61,757	2.8%	\$ 1,773
Subtotal	\$ 77,558			\$ 75,394		\$ 2,165
TRANSMISSION & DISTRIBUTION PLANT						
Land & Land Rights	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Structures & Improvements	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Distrib Reservoirs & Standpipes	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Trans. & Dist. Mains	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Services	\$ 2,963,555	AA	100.0%	\$ 2,963,555	0.0%	\$ -
Meters	\$ 2,683,106	AA	100.0%	\$ 2,683,106	0.0%	\$ -
Hydrants	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Subtotal	\$ 5,646,661			\$ 5,646,661		\$ -
GENERAL PLANT						
Structures & Improvements	\$ 56,498	II	97.2%	\$ 54,921	2.8%	\$ 1,577
Computer Hardware	\$ 162,143	BB	0.0%	\$ -	100.0%	\$ 162,143
391A-CIS	\$ 129,652	II	97.2%	\$ 126,033	2.8%	\$ 3,619
Stores Equipment	\$ -	II	97.2%	\$ -	2.8%	\$ -
Tools, Shop & Garage Equip.	\$ 17,891	II	97.2%	\$ 17,391	2.8%	\$ 499
Laboratory Equipment	\$ -	II	97.2%	\$ -	2.8%	\$ -
Power Operated Equipment	\$ 4,306	II	97.2%	\$ 4,185	2.8%	\$ 120
Communication Equipment	\$ 50,887	II	97.2%	\$ 49,466	2.8%	\$ 1,420
Miscellaneous Equipment	\$ 21,871	II	97.2%	\$ 21,260	2.8%	\$ 610
Subtotal	\$ 443,248			\$ 273,258		\$ 169,989
	=====			=====		=====
TOTAL PLANT IN SERVICE	\$ 6,167,467	II	97.2%	\$ 5,995,312	2.8%	\$ 172,154

**ALLOCATION OF CUSTOMER SERVICE DEPRECIATION TO
CUSTOMER METERS AND BILLING**

	TOTAL		<-CUST. METER->		<-CUST. BILL->	
	CUST. SERV.	ALLOC. SYMBOL	%	AMOUNT	%	AMOUNT
Plant Held for Future Use	\$ -	II	97.2%	\$ -	2.8%	\$ -
TRANSMISSION & DISTRIBUTION PLANT						
Land & Land Rights	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Structures & Improvements	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Distrib Reservoirs & Standpipes	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Trans. & Dist. Mains	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Services	\$ 59,242	AA	100.0%	\$ 59,242	0.0%	\$ -
Meters	\$ 80,422	AA	100.0%	\$ 80,422	0.0%	\$ -
Hydrants	\$ -	AA	100.0%	\$ -	0.0%	\$ -
Subtotal	\$ 139,664			\$ 139,664		\$ -
GENERAL PLANT						
Structures & Improvements	\$ 2,823	II	97.2%	\$ 2,744	2.8%	\$ 79
Computer Hardware	\$ 16,142	BB	0.0%	\$ -	100.0%	\$ 16,142
391A-CIS	\$ 16,207	II	97.2%	\$ 15,754	2.8%	\$ 452
Stores Equipment	\$ -	II	97.2%	\$ -	2.8%	\$ -
Tools, Shop & Garage Equip.	\$ 1,786	II	97.2%	\$ 1,736	2.8%	\$ 50
Laboratory Equipment	\$ -	II	97.2%	\$ -	2.8%	\$ -
Power Operated Equipment	\$ 431	II	97.2%	\$ 419	2.8%	\$ 12
Communication Equipment	\$ 2,544	II	97.2%	\$ 2,473	2.8%	\$ 71
Miscellaneous Equipment	\$ 437	II	97.2%	\$ 425	2.8%	\$ 12
Subtotal	\$ 40,369			\$ 23,551		\$ 16,818
	=====			=====		=====
TOTAL	\$ 180,033			\$ 163,215		\$ 16,818
Less: Contributions	\$ (7,823)	AA	100.0%	\$ (7,823)	0.0%	\$ -
	=====			=====		=====
TOTAL DEPRECIATION	\$ 172,210	DD	90.2%	\$ 155,392	9.8%	\$ 16,818

ALLOCATION SYMBOLS - CUSTOMER SERVICE

<u>ALLOCATION SYMBOL</u>	<u>CUSTOM METER</u>	<u>CUSTOM BILL</u>	<u>TOTAL</u>
AA	100.0%	0.0%	100.0% Meters
BB	0.0%	100.0%	100.0% Billing
CC	18.6%	81.4%	100.0% O&M G&A
DD	90.2%	9.8%	100.0% Depreciation
FF	55.2%	44.8%	100.0% Total Costs
II	97.2%	2.8%	100.0% Plant Investment
JJ	100.0%	0.0%	100.0% Capital/Debt
LL	22.0%	78.0%	100.0% Labor
OO	18.6%	81.4%	100.0% Total O&M
RR	99.3%	0.7%	100.0% Rate Base
TT	75.9%	24.1%	100.0% Nonincome Tax
XX	0.0%	100.0%	100.0% Misc Revs - Turn on-off part

Symbol TT - Taxes other than income

	<u>Amount</u>	<u>Symbol</u>	<u>Meter</u>	<u>Billing</u>
Property	\$ 74,394	II	\$ 72,317	\$ 2,077
Payroll	\$ 23,472	LL	\$ 5,173	\$ 18,299
Gross Receipt	\$ 15,615	FF	\$ 8,618	\$ 6,997
Total	\$ 113,481		\$ 86,108	\$ 27,373
Percent		TT	75.9%	24.1%

DETERMINATION OF EQUIVALENT METERS

<u>METER SIZE (IN)</u>	<u>NUMBER</u>	<u>EQUIVALENCY FACTOR (1)</u>	<u>EQUIV. 5/8 IN. METERS</u>
5/8	7,455	1	7,455
3/4	5	1.1	6
1	272	1.8	489
1 1/2	78	3.3	257
2	163	4.6	748
3	13	6.3	82
4	2	9.6	19
6	5	16.9	85
>=8	<u>2</u>	29.6	<u>59</u>
TOTALS	7,994		9,199

(1) Based on prior dockets including Docket Nos. 2098 and 2555.

DETERMINATION OF SERVICE CHARGESBILLING CHARGE

CUST. BILLING ALLOC. (2)		\$225,456		
-----	=	-----	= \$	6.85 PER BILLING
NUMBER OF BILLINGS (1)		32,899		

METER CHARGE

CUST. METER ALLOC. (3)		\$631,138		
-----	=	-----	= \$	68.61 / EQ. METER/YR
NO. EQUIV. METERS (1)		9,199		

(1) See Ex. 5 (Joint Settlement) Sch. 2

(2) Allocation to Billing was reduced and reallocated to base retail rates by \$329,000

(3) Includes total customer Metering allocation from Schedule 5A less amount assigned to private fire in Sch 4B

TOTAL SERVICE CHARGES

METER SIZE (IN)	<u>QUARTERLY ACCOUNTS</u>			<u>MONTHLY ACCOUNTS</u>		
	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>
5/8	\$ 17.15	\$ 6.85	\$ 24.01	\$ 5.72	\$ 6.85	\$ 12.57
3/4	\$ 18.87	\$ 6.85	\$ 25.72	\$ 6.29	\$ 6.85	\$ 13.14
1	\$ 30.87	\$ 6.85	\$ 37.73	\$ 10.29	\$ 6.85	\$ 17.14
1 1/2	\$ 56.60	\$ 6.85	\$ 63.45	\$ 18.87	\$ 6.85	\$ 25.72
2	\$ 78.90	\$ 6.85	\$ 85.75	\$ 26.30	\$ 6.85	\$ 33.15
3	\$ 108.06	\$ 6.85	\$ 114.91	\$ 36.02	\$ 6.85	\$ 42.87
4	\$ 164.66	\$ 6.85	\$ 171.51	\$ 54.89	\$ 6.85	\$ 61.74
6	\$ 289.87	\$ 6.85	\$ 296.72	\$ 96.62	\$ 6.85	\$ 103.48
>8	\$ 507.70	\$ 6.85	\$ 514.55	\$ 169.23	\$ 6.85	\$ 176.09

SUMMARY GENERAL WATER EXPENSE ALLOCATIONS

	TOTAL GEN'L WATER	ALLOC. SYMBOL (1)	BASE		EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
Operation & Maintenance	\$ 1,173,437	mm	55.5%	\$ 651,286	33.4%	\$ 391,586	11.1%	\$ 130,565
Depreciation	\$ 306,902	dd	39.2%	\$ 120,283	45.4%	\$ 139,314	15.4%	\$ 47,305
Taxes other than Income	\$ 248,034	tt	37.8%	\$ 93,683	42.8%	\$ 106,242	19.4%	\$ 48,110
Total Operating	\$ 1,728,373			\$ 865,252		\$ 637,142		\$ 225,980
Federal Income Tax	\$ 186,202	ff	36.7%	\$ 68,410	43.4%	\$ 80,891	19.8%	\$ 36,901
Return on Rate Base	\$ 557,036	rr	36.7%	\$ 204,654	43.4%	\$ 241,990	19.8%	\$ 110,392
Total Revenue Required	\$ 2,471,611			\$ 1,138,316		\$ 960,023		\$ 373,272
Less:								
Misc. Income/Turn on-off	\$ 18,155	xx	100.0%	\$ 18,155	0.0%	\$ -	0.0%	\$ -
Other Water Revenues	\$ 14,517	xx	100.0%	\$ 14,517	0.0%	\$ -	0.0%	\$ -
Subtotal	\$ 2,438,940	ff	45.3%	\$ 1,105,644	39.4%	\$ 960,023	15.3%	\$ 373,272
Plus:								
Public Fire Service Adjustment	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Required From Rates	\$ 2,438,940			\$ 1,105,644		\$ 960,023		\$ 373,272

**ALLOCATION OF GENERAL WATER RATE BASE TO
BASE AND EXTRA CAPACITY**

	TOTAL GENL WATER	ALLOC. SYMBOL (1)	BASE %	AMOUNT	EXTRA CAP.--MAX DAY %	AMOUNT	EXTRA CAP.--PEAK HR %	AMOUNT
Average Utility Plant on Service	\$ 15,372,147	pp	36.3%	\$ 5,583,882	43.1%	\$ 6,622,461	20.6%	\$ 3,165,805
Less:								
Accumulated Amortization	\$ (4,102,145)	rr	36.7%	\$ (1,507,119)	43.4%	\$ (1,782,075)	19.8%	\$ (812,951)
Contributions	\$ (2,985,121)	bb	33.7%	\$ (1,005,834)	41.5%	\$ (1,237,461)	24.9%	\$ (741,826)
Deferred Income Tax	\$ (1,040,130)	rr	36.7%	\$ (382,142)	43.4%	\$ (451,859)	19.8%	\$ (206,130)
Unamortized ITC	\$ (64,977)	rr	36.7%	\$ (23,873)	43.4%	\$ (28,228)	19.8%	\$ (12,877)
1/13th Unfunded FAS 106	\$ (293,103)	ll	38.9%	\$ (113,949)	44.7%	\$ (131,163)	16.4%	\$ (47,991)
Plus:								
Customer Advances	\$ -	rr	36.7%	\$ -	43.4%	\$ -	19.8%	\$ -
Materials & Supplies	\$ 58,160	rr	36.7%	\$ 21,368	43.4%	\$ 25,266	19.8%	\$ 11,526
Working Capital	\$ 143,295	ff	45.3%	\$ 64,960	39.4%	\$ 56,404	15.3%	\$ 21,931
Deferred Tank Painting	\$ 90,178	ss	0.0%	\$ -	50.0%	\$ 45,089	50.0%	\$ 45,089
Deferred Rate Case	\$ 0	ff	45.3%	\$ 0	39.4%	\$ 0	15.3%	\$ 0
Deferred Operations	\$ -	mm	55.5%	\$ -	33.4%	\$ -	11.1%	\$ -
Deferred Acquisitions	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Total Rate Base	\$ 7,178,304	rr	36.7%	\$ 2,637,293	43.4%	\$ 3,118,435	19.8%	\$ 1,422,575

ALLOCATION OF GENERAL WATER O&M EXPENSES TO
BASE AND EXTRA CAPACITY

EXPENSE ITEM	TOTAL GEN'L WATER	ALLOC. SYMBOL (1)	BASE		EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
Source of Supply Expenses								
<i>Operation</i>								
Operation Supervision and Engineering	\$ 2,990	cc	100.0%	\$ 2,990	0.0%	\$ -	0.0%	\$ -
Operation Labor and Expenses	\$ 3,759	cc	100.0%	\$ 3,759	0.0%	\$ -	0.0%	\$ -
Purchased Water	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Miscellaneous Expenses	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Rents	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Total Operation	\$ 6,749			\$ 6,749				\$ -
<i>Maintenance</i>								
Maintenance of Wells and Springs	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Maintenance of Supply Mains	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Maintenance of Miscellaneous Water Source Pl	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Total Maintenance	\$ -			\$ -				\$ -
Total Source of Supply Expenses	\$ 6,749			\$ 6,749				\$ -
Pumping Expenses								
<i>Operation</i>								
Operation Supervision and Engineering	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Fuel for Power Production	\$ 747	cc	100.0%	\$ 747	0.0%	\$ -	0.0%	\$ -
Fuel or Power Purchased for Production	\$ 185,457	cc	100.0%	\$ 185,457	0.0%	\$ -	0.0%	\$ -
Pumping Labor and Expenses	\$ 72,889	aa	44.8%	\$ 32,681	55.2%	\$ 40,207	0.0%	\$ -
Miscellaneous Expenses	\$ 4,660	aa	44.8%	\$ 2,089	55.2%	\$ 2,570	0.0%	\$ -
Rents	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Total Operation	\$ 263,753			\$ 220,975		\$ 42,778		\$ -
<i>Maintenance</i>								
Maintenance Supervision and Engineering	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Maintenance of Structures and Improvements	\$ 43	aa	44.8%	\$ 19	55.2%	\$ 24	0.0%	\$ -
Maintenance of Power Production Equipment	\$ 1,231	aa	44.8%	\$ 552	55.2%	\$ 679	0.0%	\$ -
Maintenance of Pumping Equipment	\$ 18,121	aa	44.8%	\$ 8,125	55.2%	\$ 9,996	0.0%	\$ -
Total Maintenance	\$ 19,395			\$ 8,696		\$ 10,699		\$ -
Total Pumping Expenses	\$ 283,147			\$ 229,671		\$ 53,476		\$ -
Water Treatment Expenses								
<i>Operation</i>								
Operation Supervision and Engineering	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Chemicals	\$ 65,577	cc	100.0%	\$ 65,577	0.0%	\$ -	0.0%	\$ -
Operation Labor and Expenses	\$ 65,634	aa	44.8%	\$ 29,429	55.2%	\$ 36,206	0.0%	\$ -
Miscellaneous Expenses	\$ 30,171	aa	44.8%	\$ 13,528	55.2%	\$ 16,643	0.0%	\$ -
Total Operation	\$ 161,382			\$ 108,533		\$ 52,849		\$ -
<i>Maintenance</i>								
Maintenance of Water Treatment Equipment	\$ 4,521	aa	44.8%	\$ 2,027	55.2%	\$ 2,494	0.0%	\$ -
Total Maintenance	\$ 4,521			\$ 2,027		\$ 2,494		\$ -
Total Water Treatment Expenses	\$ 165,903			\$ 110,560		\$ 55,343		\$ -

Transmission and Distribution Expenses

Operation									
Operation Supervision and Engineering	\$ 79,349	33.7%	\$ 26,737	41.5%	\$ 32,894	24.9%	\$ 19,719	24.9%	\$ 19,719
Transmission and Distribution Lines Expenses	\$ 58,964	33.7%	\$ 19,868	41.5%	\$ 24,443	24.9%	\$ 14,653	24.9%	\$ 14,653
Meter Expenses	-	33.7%	-	41.5%	-	24.9%	-	24.9%	-
Miscellaneous Expenses	\$ 83,036	33.7%	\$ 27,979	41.5%	\$ 34,422	24.9%	\$ 20,635	24.9%	\$ 20,635
Rents	-	33.7%	-	41.5%	-	24.9%	-	24.9%	-
Total Operation	\$ 221,350		\$ 74,584		\$ 91,759		\$ 55,007		\$ 55,007
Maintenance									
Maintenance Supervision and Engineering	\$ 1,978	33.7%	\$ 667	41.5%	\$ 820	24.9%	\$ 492	24.9%	\$ 492
Maintenance of Structures and Improvements	\$ 13,164	33.7%	\$ 4,435	41.5%	\$ 5,457	24.9%	\$ 3,271	24.9%	\$ 3,271
Maintenance of Dist. Reservoirs & Standpipes	\$ 38,574	33.7%	\$ 12,997	41.5%	\$ 15,990	24.9%	\$ 9,586	24.9%	\$ 9,586
Maintenance of Trans. & Distribution Mains	\$ 31,947	33.7%	\$ 10,764	41.5%	\$ 13,243	24.9%	\$ 7,939	24.9%	\$ 7,939
Maintenance of Fire Mains	-	33.7%	-	41.5%	-	24.9%	-	24.9%	-
Maintenance of Services	-	33.7%	-	41.5%	-	24.9%	-	24.9%	-
Maintenance of Meters	-	33.7%	-	41.5%	-	24.9%	-	24.9%	-
Maintenance of Hydrants	-	33.7%	-	41.5%	-	24.9%	-	24.9%	-
Maintenance of Miscellaneous Plant	\$ 651	33.7%	\$ 219	41.5%	\$ 270	24.9%	\$ 162	24.9%	\$ 162
Total Maintenance	\$ 86,313		\$ 29,083		\$ 35,780		\$ 21,449		\$ 21,449
Total Transmission & Distribution Expenses	\$ 307,663		\$ 103,667		\$ 127,539		\$ 76,457		\$ 76,457

Customer Accounts Expenses

Operation									
Supervision	\$ -	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Meter Reading Salaries	\$ -	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Customer Records & Coll. Expenses-Labor	\$ -	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Uncollectible Accounts	\$ -	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Miscellaneous Customer Account Expense	\$ -	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Total Customer Accounts Expenses	\$ -		\$ -		\$ -		\$ -		\$ -

Administrative and General Expenses

Operation									
Administrative and General Salaries	\$ 101,822	55.5%	\$ 56,513	33.4%	\$ 33,979	11.1%	\$ 11,329	11.1%	\$ 11,329
Office Supplies and Other Expenses	\$ 19,532	55.5%	\$ 10,841	33.4%	\$ 6,518	11.1%	\$ 2,173	11.1%	\$ 2,173
Administrative Expenses Transferred	\$ (189,351)	55.5%	\$ (105,095)	33.4%	\$ (63,188)	11.1%	\$ (21,069)	11.1%	\$ (21,069)
Outside Services Employed	\$ 155,179	55.5%	\$ 86,128	33.4%	\$ 51,785	11.1%	\$ 17,266	11.1%	\$ 17,266
Property Insurance	\$ 30,308	55.5%	\$ 16,822	33.4%	\$ 10,114	11.1%	\$ 3,372	11.1%	\$ 3,372
Injuries and Damages	\$ 8,986	55.5%	\$ 4,988	33.4%	\$ 2,999	11.1%	\$ 1,000	11.1%	\$ 1,000
Employee Pension and Benefits	\$ 161,841	38.9%	\$ 62,918	44.7%	\$ 72,423	16.4%	\$ 26,499	16.4%	\$ 26,499
Regulatory Commission Expenses	\$ 58,118	55.5%	\$ 32,257	33.4%	\$ 19,395	11.1%	\$ 6,467	11.1%	\$ 6,467
Miscellaneous General Expenses	\$ 46,422	55.5%	\$ 25,765	33.4%	\$ 15,491	11.1%	\$ 5,165	11.1%	\$ 5,165
Rents	\$ 10,754	55.5%	\$ 5,969	33.4%	\$ 3,589	11.1%	\$ 1,197	11.1%	\$ 1,197
Total Operation	\$ 403,611		\$ 197,107		\$ 153,104		\$ 53,400		\$ 53,400
Maintenance									
Maintenance of General Plant	\$ 6,364	55.5%	\$ 3,532	33.4%	\$ 2,124	11.1%	\$ 708	11.1%	\$ 708
Total Administrative and General Expenses	\$ 409,975		\$ 200,639		\$ 155,228		\$ 54,108		\$ 54,108
Total Operation and Maintenance Expenses	\$ 1,173,437		\$ 651,286		\$ 391,586		\$ 130,565		\$ 130,565

**ALLOCATION OF GENERAL WATER LABOR EXPENSE TO
BASE AND EXTRA CAPACITY**

EXPENSE ITEM	TOTAL GEN'L WATER	ALLOC. SYMBOL (1)	BASE		EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
Source of Supply Expenses								
<i>Operation</i>								
Operation Supervision and Engineering	\$ 3,135	cc	100.0%	\$ 3,135	0.0%	\$ -	0.0%	\$ -
Operation Labor and Expenses	\$ 2,133	cc	100.0%	\$ 2,133	0.0%	\$ -	0.0%	\$ -
Purchased Water	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Miscellaneous Expenses	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Rents	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Total Operation	\$ 5,268			\$ 5,268				\$ -
<i>Maintenance</i>								
Maintenance of Wells and Springs	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Maintenance of Supply Mains	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Maintenance of Miscellaneous Water Source Pt	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Total Maintenance	\$ -			\$ -				\$ -
Total Source of Supply Expenses	\$ 5,268			\$ 5,268				\$ -
Pumping Expenses								
<i>Operation</i>								
Operation Supervision and Engineering	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Fuel for Power Production	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Fuel or Power Purchased for Production	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Pumping Labor and Expenses	\$ 32,452	aa	44.8%	\$ 14,551	55.2%	\$ 17,901	0.0%	\$ -
Miscellaneous Expenses	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Rents	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Total Operation	\$ 32,452			\$ 14,551		\$ 17,901		\$ -
<i>Maintenance</i>								
Maintenance Supervision and Engineering	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Maintenance of Structures and Improvements	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Maintenance of Power Production Equipment	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Maintenance of Pumping Equipment	\$ 6,595	aa	44.8%	\$ 2,957	55.2%	\$ 3,638	0.0%	\$ -
Total Maintenance	\$ 6,595			\$ 2,957		\$ 3,638		\$ -
Total Pumping Expenses	\$ 39,047			\$ 17,508		\$ 21,539		\$ -
Water Treatment Expenses								
<i>Operation</i>								
Operation Supervision and Engineering	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Chemicals	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Operation Labor and Expenses	\$ 27,472	aa	44.8%	\$ 12,318	55.2%	\$ 15,154	0.0%	\$ -
Miscellaneous Expenses	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Total Operation	\$ 27,472			\$ 12,318		\$ 15,154		\$ -
<i>Maintenance</i>								
Maintenance of Water Treatment Equipment	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Total Maintenance	\$ -			\$ -		\$ -		\$ -
Total Water Treatment Expenses	\$ 27,472			\$ 12,318		\$ 15,154		\$ -

Transmission and Distribution Expenses

<i>Operation</i>									
Operation Supervision and Engineering	\$ 47,596	bb	33.7%	\$ 16,037	41.5%	\$ 19,731	24.9%	\$ 11,828	
Transmission and Distribution Lines Expenses	\$ 28,309	bb	33.7%	\$ 9,539	41.5%	\$ 11,735	24.9%	\$ 7,035	
Meter Expenses	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Miscellaneous Expenses	\$ 38,194	bb	33.7%	\$ 12,869	41.5%	\$ 15,833	24.9%	\$ 9,492	
Rents	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Total Operation	\$ 114,099			\$ 38,446		\$ 47,299		\$ 28,355	
<i>Maintenance</i>									
Maintenance Supervision and Engineering	\$ -	bb	33.7%	\$ 407	41.5%	\$ 501	24.9%	\$ 300	
Maintenance of Structures and Improvements	\$ 1,209	bb	33.7%	\$ 2,031	41.5%	\$ 2,498	24.9%	\$ 1,498	
Maintenance of Dist. Reservoirs & Standpipes	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Maintenance of Trans. & Distribution Mains	\$ 17,321	bb	33.7%	\$ 5,836	41.5%	\$ 7,180	24.9%	\$ 4,304	
Maintenance of Fire Mains	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Maintenance of Services	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Maintenance of Meters	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Maintenance of Hydrants	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Maintenance of Miscellaneous Plant	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -	
Total Maintenance	\$ 24,557			\$ 8,274		\$ 10,180		\$ 6,103	
Total Transmission & Distribution Expenses	\$ 138,656			\$ 46,720		\$ 57,479		\$ 34,457	

Customer Accounts Expenses

<i>Operation</i>									
Supervision	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	
Meter Reading Salaries	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	
Customer Records & Coll. Expenses-Labor	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	
Uncollectible Accounts	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	
Miscellaneous Customer Account Expense	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -	
Total Customer Accounts Expenses	\$ -			\$ -		\$ -		\$ -	

Administrative and General Expenses

<i>Operation</i>									
Administrative and General Salaries	\$ 96,614	II	38.9%	\$ 37,560	44.7%	\$ 43,234	16.4%	\$ 15,819	
Office Supplies and Other Expenses	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Administrative Expenses Transferred	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Outside Services Employed	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Property Insurance	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Injuries and Damages	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Employee Pension and Benefits	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Regulatory Commission Expenses	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Miscellaneous General Expenses	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Rents	\$ -	II	38.9%	\$ -	44.7%	\$ -	16.4%	\$ -	
Total Operation	\$ 96,614			\$ 37,560		\$ 43,234		\$ 15,819	
<i>Maintenance</i>									
Maintenance of General Plant	\$ 2,524	II	38.9%	\$ 981	44.7%	\$ 1,129	16.4%	\$ 413	
Total Administrative and General Expenses	\$ 2,524			\$ 981		\$ 1,129		\$ 413	
Total Labor Expenses	\$ 309,580	II	38.9%	\$ 120,355	44.7%	\$ 138,536	16.4%	\$ 50,689	

ALLOCATION OF GEN'L WATER PLANT IN SERVICE TO
BASE AND EXTRA CAPACITY

EXPENSE ITEM	TOTAL GEN'L WATER	ALLOC. SYMBOL (1)	BASE %	AMOUNT	EXTRA CAP.-MAX DAY %	AMOUNT	EXTRA CAP.-PEAK HR %	AMOUNT
Plant Held for Future Use	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
INTANGIBLE PLANT								
Organization	\$ 34,966	pp	36.3%	\$ 12,701	43.1%	\$ 15,063	20.6%	\$ 7,201
Misc. Intangibles	\$ 158,345	pp	36.3%	\$ 57,518	43.1%	\$ 68,217	20.6%	\$ 32,610
Subtotal	\$ 193,311			\$ 70,220		\$ 83,280		\$ 39,811
SOURCE OF SUPPLY								
Land & Land Rights	\$ 27,717	cc	100.0%	\$ 27,717	0.0%	\$ -	0.0%	\$ -
Wells & Springs	\$ 442,871	cc	100.0%	\$ 442,871	0.0%	\$ -	0.0%	\$ -
Supply Mains	\$ 47,627	aa	44.8%	\$ 21,355	55.2%	\$ 26,272	0.0%	\$ -
Struct & Other Source of Supply	\$ 106,861	cc	100.0%	\$ 106,861	0.0%	\$ -	0.0%	\$ -
Subtotal	\$ 625,076			\$ 598,804		\$ 26,272		\$ -
PUMPING PLANT								
Land & Land Rights	\$ 5,601	aa	44.8%	\$ 2,512	55.2%	\$ 3,090	0.0%	\$ -
Structures & Improvements	\$ 679,313	aa	44.8%	\$ 304,586	55.2%	\$ 374,727	0.0%	\$ -
Electric Pump Equip	\$ 1,511,686	aa	44.8%	\$ 677,800	55.2%	\$ 833,887	0.0%	\$ -
Diesel Pump Equip	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Other Pump Equip	\$ 113,127	aa	44.8%	\$ 50,723	55.2%	\$ 62,404	0.0%	\$ -
Subtotal	\$ 2,309,727			\$ 1,035,620		\$ 1,274,107		\$ -
WATER TREATMENT PLANT								
Structures & Improvements	\$ 18,475	aa	44.8%	\$ 8,284	55.2%	\$ 10,191	0.0%	\$ -
Water Treatment Plant	\$ 436,922	aa	44.8%	\$ 195,904	55.2%	\$ 241,018	0.0%	\$ -
Subtotal	\$ 455,396			\$ 204,187		\$ 251,209		\$ -
TRANSMISSION & DISTRIBUTION PLANT								
Land & Land Rights	\$ 1,862	bb	33.7%	\$ 627	41.5%	\$ 772	24.9%	\$ 463
Structures & Improvements	\$ 25,772	bb	33.7%	\$ 8,684	41.5%	\$ 10,684	24.9%	\$ 6,405
Distrib Reservoirs & Standpipes	\$ 968,016	ss	0.0%	\$ -	50.0%	\$ 484,008	50.0%	\$ 484,008
Trans. & Dist. Mains	\$ 9,688,212	bb	33.7%	\$ 3,264,434	41.5%	\$ 4,016,182	24.9%	\$ 2,407,596
Services	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Meters	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Hydrants	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Subtotal	\$ 10,683,862			\$ 3,273,745		\$ 4,511,645		\$ 2,898,471
GENERAL PLANT								
Structures & Improvements	\$ 140,819	pp	36.3%	\$ 51,152	43.1%	\$ 60,666	20.6%	\$ 29,001
Computer Hardware	\$ 404,134	pp	36.3%	\$ 146,800	43.1%	\$ 174,105	20.6%	\$ 83,229
381A-CIS	\$ 323,153	pp	36.3%	\$ 117,384	43.1%	\$ 139,217	20.6%	\$ 66,551
Stores Equipment	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Tools, Shop & Garage Equip.	\$ 44,592	pp	36.3%	\$ 16,198	43.1%	\$ 19,211	20.6%	\$ 9,184
Laboratory Equipment	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Power Operated Equipment	\$ 10,731	pp	36.3%	\$ 3,898	43.1%	\$ 4,623	20.6%	\$ 2,210
Communication Equipment	\$ 126,833	pp	36.3%	\$ 46,072	43.1%	\$ 54,641	20.6%	\$ 26,121
Miscellaneous Equipment	\$ 54,512	pp	36.3%	\$ 19,801	43.1%	\$ 23,484	20.6%	\$ 11,227
Subtotal	\$ 1,104,776			\$ 401,306		\$ 475,947		\$ 227,522
TOTAL PLANT IN SERVICE	\$ 15,372,147	pp	36.3%	\$ 5,583,882	43.1%	\$ 6,622,461	20.6%	\$ 3,165,805

ALLOCATION OF GEN'L WATER DEPRECIATION TO
BASE AND EXTRA CAPACITY

	TOTAL GEN'L WATER	ALLOC. SYMBOL(1)	BASE %	AMOUNT	EXTRA CAP.-MAX DAY %	AMOUNT	EXTRA CAP.-PEAK HR %	AMOUNT
Plant Held for Future Use	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
INTANGIBLE PLANT								
Organization	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Misc. Intangibles	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Subtotal	\$ -			\$ -		\$ -		\$ -
SOURCE OF SUPPLY								
Land & Land Rights	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Wells & Springs	\$ 8,857	cc	100.0%	\$ 8,857	0.0%	\$ -	0.0%	\$ -
Supply Mains	\$ 595	aa	44.8%	\$ 267	55.2%	\$ 328	0.0%	\$ -
Struct & Other Source of Supply	\$ 2,105	cc	100.0%	\$ 2,105	0.0%	\$ -	0.0%	\$ -
Subtotal	\$ 11,558			\$ 11,230		\$ 328		\$ -
PUMPING PLANT								
Land & Land Rights	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Structures & Improvements	\$ 13,586	aa	44.8%	\$ 6,092	55.2%	\$ 7,495	0.0%	\$ -
Electric Pump Equip	\$ 60,456	aa	44.8%	\$ 27,107	55.2%	\$ 33,349	0.0%	\$ -
Diesel Pump Equip	\$ -	aa	44.8%	\$ -	55.2%	\$ -	0.0%	\$ -
Other Pump Equip	\$ 4,525	aa	44.8%	\$ 2,029	55.2%	\$ 2,496	0.0%	\$ -
Subtotal	\$ 78,568			\$ 35,228		\$ 43,340		\$ -
WATER TREATMENT PLANT								
Structures & Improvements	\$ 369	aa	44.8%	\$ 166	55.2%	\$ 204	0.0%	\$ -
Water Treatment Plant	\$ 21,844	aa	44.8%	\$ 9,794	55.2%	\$ 12,050	0.0%	\$ -
Subtotal	\$ 22,214			\$ 9,960		\$ 12,254		\$ -
TRANSMISSION & DISTRIBUTION PLANT								
Land & Land Rights	\$ -	bb	33.7%	\$ -	41.5%	\$ -	24.9%	\$ -
Structures & Improvements	\$ 773	bb	33.7%	\$ 261	41.5%	\$ 321	24.9%	\$ 192
Distrib Reservoirs & Standpipes	\$ 12,875	ss	0.0%	\$ -	50.0%	\$ 6,437	50.0%	\$ 6,437
Trans. & Dist. Mains	\$ 118,492	bb	33.7%	\$ 39,926	41.5%	\$ 49,120	24.9%	\$ 29,446
Services	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Meters	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Hydrants	\$ -	cc	100.0%	\$ -	0.0%	\$ -	0.0%	\$ -
Subtotal	\$ 132,139			\$ 40,186		\$ 55,878		\$ 36,076
GENERAL PLANT								
Structures & Improvements	\$ 7,037	pp	36.3%	\$ 2,556	43.1%	\$ 3,032	20.6%	\$ 1,449
Computer Hardware	\$ 40,233	pp	36.3%	\$ 14,614	43.1%	\$ 17,333	20.6%	\$ 8,286
381A-CIS	\$ 40,394	pp	36.3%	\$ 14,673	43.1%	\$ 17,402	20.6%	\$ 8,319
Stores Equipment	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Tools, Shop & Garage Equip.	\$ 4,451	pp	36.3%	\$ 1,617	43.1%	\$ 1,918	20.6%	\$ 917
Laboratory Equipment	\$ -	pp	36.3%	\$ -	43.1%	\$ -	20.6%	\$ -
Power Operated Equipment	\$ 1,073	pp	36.3%	\$ 390	43.1%	\$ 462	20.6%	\$ 221
Communication Equipment	\$ 6,340	pp	36.3%	\$ 2,303	43.1%	\$ 2,731	20.6%	\$ 1,306
Miscellaneous Equipment	\$ 1,090	pp	36.3%	\$ 396	43.1%	\$ 470	20.6%	\$ 225
Subtotal	\$ 100,618			\$ 36,549		\$ 43,347		\$ 20,722
TOTAL	\$ 345,097			\$ 133,153		\$ 155,147		\$ 56,797
Less: Contributions	\$ (38,195)	bb	33.7%	\$ (12,870)	41.5%	\$ (15,834)	24.9%	\$ (9,492)
TOTAL DEPRECIATION	\$ 306,902	dd	39.2%	\$ 120,283	45.4%	\$ 139,314	15.4%	\$ 47,305

ALLOCATION SYMBOLS - GENERAL WATER

ALLOCATION SYMBOL	BASE		EXTRACAPACITY		TOTAL
	%	%	MAX DAY	PEAK HOUR	
aa	44.8%	55.2%	0.0%	0.0%	100.0% Production & pumping costs
bb	33.7%	41.5%	24.9%	0.0%	100.0% T&D Mains
cc	100.0%	0.0%	0.0%	0.0%	100.0% Supply, chemicals, power & water
dd	39.2%	45.4%	15.4%	0.0%	100.0% Depreciation
ff	45.3%	39.4%	15.3%	0.0%	100.0% Total Costs/Revenue Required
ll	38.9%	44.7%	16.4%	0.0%	100.0% Labor
mm	55.5%	33.4%	11.1%	0.0%	100.0% Total O&M
pp	36.3%	43.1%	20.6%	0.0%	100.0% Plant Investment
rr	36.7%	43.4%	19.8%	0.0%	100.0% Rate Base
ss	0.0%	50.0%	50.0%	0.0%	100.0% Storage
tt	37.8%	42.8%	19.4%	0.0%	100.0% Taxes other than income
xx	100.0%	0.0%	0.0%	0.0%	100.0% Misc revenues

Gal/Min
 Max Hour Demand 4,547
 Peak Hour Demand 6,050

Symbol aa

Avg Day Increment 2,039 44.8%
 Max Day Increment 2,508 55.2%

Symbol bb

Average Day 2,039 %
 Max Day Increment 2,508 33.7%
 Peak Hour Increment 1,503 41.5%
 Total Peak Hour 6,050 24.9%
 100.0%

Symbol ff - Taxes other than income

	Gen'l Water	Symbol	Base	Max Day	Peak Hr
Property	\$ 185,423	pp	\$ 67,354	\$ 79,882	\$ 38,187
Payroll	\$ 31,832	ll	\$ 12,375	\$ 14,245	\$ 5,212
Gross Receipt	\$ 30,779	ff	\$ 13,953	\$ 12,116	\$ 4,711
Total	\$ 248,034	ft	\$ 93,683	\$ 106,242	\$ 48,110
Percent			37.8%	42.8%	19.4%

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

	<u>Total</u>	<u>Base</u>	<u>Max Day</u>	<u>Peak Hour</u>
Revenue Requirements	\$2,438,940	\$1,105,644	\$960,023	\$373,272 see Ex. 5 (Joint Settlement) Sch. 6
Allocation to Fire Service	<u>\$642,973</u>	<u>\$5,528</u>	<u>\$372,602</u>	<u>\$264,843</u> see Ex. 5 (Joint Settlement) Sch. 2A
Net to Wholesale/Retail	\$1,795,967	\$1,100,116	\$587,421	\$108,430
Allocation to Wholesale *	<u>\$448,523</u>	<u>\$404,401</u>	<u>\$44,122</u>	<u>\$0</u>
Subtotal	\$1,347,444	\$695,715	\$543,299	\$108,430
+ Fire Adjustment (Sch 4A)	<u>\$325,000</u>	<u>\$325,000</u>		
+ Cust Adjustment (Sch 5A)	<u>\$329,000</u>	<u>\$329,000</u>		
Net to Retail Metered Rates	\$2,001,444	\$1,349,715	\$543,299	\$108,430
<u>Residential</u>				
Percent		66.2%	73.1%	75.1% see Ex. 5 (Joint Settlement) Sch. 2A
Amount	\$1,371,570	\$893,079.23	\$397,107.92	\$81,382.50
<u>Non-Residential</u>				
Percent		33.8%	26.9%	24.9% see Ex. 5 (Joint Settlement) Sch. 2A
Amount	\$629,874	\$456,635.83	\$146,191.13	\$27,047.33

* Allocation to fire protection:

Base: 0.05% assigned to fire to reflect minimal use on fires

Max Day & Peak Hour -- see Ex. 5 (Joint Settlement) Sch. 2A

** Allocation to wholesale based on:

BASE

Metered Sales (ccf/yr)	1,390,080	
Retail Sales (ccf/yr)	856,600	61.6%
Retail Unacctd For (ccf/yr)	<u>68,924</u>	Based on miles of pipe: 100% of distribution/service plus 61.6% of transmission
Total Retail (ccf/yr)	925,525	
Wholesale Sales (ccf/yr)	533,480	38.4%
Wholesale Unacctd For (ccf/yr)	<u>4,504</u>	
Total Wholesale (ccf/yr)	<u>537,983</u>	
Grand Total (ccf/yr)	1,463,508	
Wholesale % of Grand Total	36.8%	
Net Base Allocation	\$1,100,116	
Wholesale Allocation	\$404,401	

MAX DAY

Net Max Day Allocation	\$587,421
Less: Distribution Costs share of T&D O&M	-\$79,138 Based on inch-miles of distrib. pipe
Admin O&M Share	-\$31,371 39.6%
Distribution Capital Items	<u>-\$313,682</u> 55.2% (Less Distribution Mains & Gen'l Items allocated to Max Day)
Total Net of Distribution	\$163,231
Wholesale Max Day %	27.03% See Ex. 5 (Joint Settlement) Sch. 2A
Wholesale Allocation	\$44,122

PEAK HOUR

Total Peak Hour Allocation	\$373,272
Wholesale Peak Hr %	0.00% See Ex. 5 (Joint Settlement) Sch. 2A
Wholesale Allocation	\$0

METERED WATER RATES

Residential

Two Block Rate

1 st Block:

Base Expense	\$893,079.23		
Max Day Expense	\$397,107.92		
Peak Hr Expense	\$ -	0.0%	
Total	\$ 1,290,187	=	\$2.276
Metered Sales (HCF) (1)	566,795	=	

2nd Block

Peak Hour Expense	\$81,382.50	=	\$0.577
2nd Block Sales (1)	141,141	=	
	Plus First Block		\$2.276
	2nd Block Rate		\$2.853

Non- Residential

Uniform Rate

Total Allocation (2)	\$629,874	=	\$2.173
Metered Sales (HCF) (1)	289,805	=	

Wholesale (Sales for Resale) Rates

Total Allocation (2)	\$448,523	=	\$0.841
Metered Sales (HCF) (1)	533,480	=	

\$1.124 per 1000 gal

Notes: (1) refer to Ex. 5 (Joint Settlement) Sch. 2.
 (2) refer to Ex. 5 (Joint Settlement) Sch. 7

COMPARISON OF CURRENT AND COST BASED RATES

		<u>Current</u>	<u>Cost of Service Based Rates</u>	<u>% Change From Current</u>	<u>Proposed Rates</u>	<u>% Change From Current</u>
<u>Metered Rates (\$/hundred cubic feet)</u>						
<i>Residential</i>						
	1st 24 ccf/qrt	\$1.945	\$1.513	-22.2%	\$2.276	17.0%
	Over 24 ccf/qrt	\$2.592	\$2.090	-19.4%	\$2.853	10.1%
<i>Non-Residential</i>						
	all use	\$1.415	\$1.410	-0.4%	\$2.173	53.6%
<i>Sales for Resale</i>						
	per 100 cu ft	\$0.711	\$0.841	18.4%	\$0.841	18.4%
	per 1000 gal	\$0.950	\$1.124	18.3%	\$1.124	18.3%
<u>Service Charges</u>						
<i>Quarterly</i>						
	5/8	\$17.26	\$ 34.01	97.0%	\$ 24.01	39.1%
	3/4	\$20.36	\$ 35.72	75.4%	\$ 25.72	26.3%
	1	\$26.63	\$ 47.73	79.2%	\$ 37.73	41.7%
	1 1/2	\$40.34	\$ 73.46	82.1%	\$ 63.45	57.3%
	2	\$53.58	\$ 95.75	78.7%	\$ 85.75	60.0%
	3	\$75.62	\$124.91	65.2%	\$114.91	52.0%
	4	\$112.53	\$181.51	61.3%	\$171.51	52.4%
	6	\$198.16	\$306.72	54.8%	\$296.72	49.7%
	8 & up	\$269.73	\$524.55	94.5%	\$514.55	90.8%
<i>Monthly</i>						
	5/8	\$12.58	\$ 22.57	79.4%	\$ 12.57	-0.1%
	3/4	\$13.08	\$ 23.14	76.9%	\$ 13.14	0.5%
	1	\$15.17	\$ 27.14	78.9%	\$ 17.14	13.0%
	1 1/2	\$19.74	\$ 35.72	81.0%	\$ 25.72	30.3%
	2	\$24.15	\$ 43.15	78.7%	\$ 33.15	37.3%
	3	\$31.50	\$ 52.87	67.8%	\$ 42.87	36.1%
	4	\$43.80	\$ 71.74	63.8%	\$ 61.74	41.0%
	6	\$72.35	\$113.48	56.8%	\$103.48	43.0%
	8 & up	\$89.91	\$186.09	107.0%	\$176.09	95.9%
<u>Fire Service</u>						
<i>Public</i>						
	/hydrant/qrt	\$65.00	\$ 225.00	246.2%	\$ 130.00	100.0%
	/hydrant/semi-ann.	\$130.00	\$ 450.00	246.2%	\$ 260.00	100.0%
<i>Private (per quarter)</i>						
	2.5	\$21.00	\$ 42.00	100.0%	\$ 22.00	4.8%
	3	\$27.00	\$ 57.00	111.1%	\$ 32.00	18.5%
	4	\$43.00	\$103.00	139.5%	\$ 60.00	39.5%
	6	\$100.00	\$266.00	166.0%	\$162.00	62.0%
	8	\$200.00	\$547.00	173.5%	\$337.00	68.5%
	10	\$350.00	\$971.00	177.4%	\$601.00	71.7%
	12	\$550.00	\$1,558.00	183.3%	\$966.00	75.6%
	16	\$1,005.00	\$3,301.00	228.5%	\$2,050.00	104.0%

**IMPACT OF COST BASED RATES
(QUARTERLY BILLINGS)**

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	COST BASED RATES			PROPOSED RATES		
			BILL	% INCREASE	\$ INCREASE	BILL	% INCREASE	\$ INCREASE
Residential								
5/8	1,000	\$36.71	\$49.14	33.9%	\$12.43	\$46.77	27.4%	\$10.06
5/8	2,000	\$56.16	\$64.27	14.4%	\$8.11	\$69.53	23.8%	\$13.37
5/8	2,500	\$66.53	\$72.41	8.8%	\$5.88	\$81.49	22.5%	\$14.96
5/8	4,000	\$105.41	\$103.76	-1.6%	-\$1.65	\$124.28	17.9%	\$18.87
5/8	5,000	\$131.33	\$124.66	-5.1%	-\$6.67	\$152.81	16.4%	\$21.48
5/8	8,000	\$209.09	\$187.36	-10.4%	-\$21.73	\$238.40	14.0%	\$29.31
5/8	10,000	\$260.93	\$229.16	-12.2%	-\$31.77	\$295.46	13.2%	\$34.53
5/8	15,000	\$390.53	\$333.66	-14.6%	-\$56.87	\$438.11	12.2%	\$47.58
5/8	20,000	\$520.13	\$438.16	-15.8%	-\$81.97	\$580.76	11.7%	\$60.63
1	30,000	\$788.70	\$660.88	-16.2%	-\$127.82	\$879.78	11.5%	\$91.08
1	40,000	\$1,047.90	\$869.88	-17.0%	-\$178.02	\$1,165.08	11.2%	\$117.18
1	75,000	\$1,955.10	\$1,601.38	-18.1%	-\$353.72	\$2,163.63	10.7%	\$208.53
2	100,000	\$2,630.05	\$2,171.90	-17.4%	-\$458.15	\$2,924.90	11.2%	\$294.85
2	200,000	\$5,222.05	\$4,261.90	-18.4%	-\$960.15	\$5,777.90	10.6%	\$555.85
2	300,000	\$7,814.05	\$6,351.90	-18.7%	-\$1,462.15	\$8,630.90	10.5%	\$816.85
2	400,000	\$10,406.05	\$8,441.90	-18.9%	-\$1,964.15	\$11,483.90	10.4%	\$1,077.85
2	600,000	\$15,590.05	\$12,621.90	-19.0%	-\$2,968.15	\$17,189.90	10.3%	\$1,599.85
Nonresidential								
1	40,000	\$592.63	\$611.73	3.2%	\$19.10	\$906.93	53.0%	\$314.30
1	75,000	\$1,087.88	\$1,105.23	1.6%	\$17.35	\$1,667.48	53.3%	\$579.60
2	100,000	\$1,468.58	\$1,505.75	2.5%	\$37.17	\$2,258.75	53.8%	\$790.17
3	200,000	\$2,905.62	\$2,944.91	1.4%	\$39.29	\$4,460.91	53.5%	\$1,555.29
3	400,000	\$5,735.62	\$5,764.91	0.5%	\$29.29	\$8,806.91	53.5%	\$3,071.29
3	600,000	\$8,565.62	\$8,584.91	0.2%	\$19.29	\$13,152.91	53.6%	\$4,587.29
4	800,000	\$11,432.53	\$11,461.51	0.3%	\$28.98	\$17,555.51	53.6%	\$6,122.98
4	1,000,000	\$14,262.53	\$14,281.51	0.1%	\$18.98	\$21,901.51	53.6%	\$7,638.98
6	1,200,000	\$17,178.16	\$17,226.72	0.3%	\$48.56	\$26,372.72	53.5%	\$9,194.56
6	1,333,333	\$19,064.82	\$19,106.72	0.2%	\$41.89	\$29,270.05	53.5%	\$10,205.22
8	2,000,000	\$28,569.73	\$28,724.55	0.5%	\$154.82	\$43,974.55	53.9%	\$15,404.82
Sales for Resale	13,000,000	\$92,378.00	\$109,330.00	18.4%	\$16,952.00	\$109,330.00	18.4%	\$16,952.00
Municipal Fire Service	300 hydrants	\$19,500.00	\$67,500.00	246.2%	\$48,000.00	\$39,000.00	100.0%	\$19,500.00
Private Fire Service	4 " Service	\$43.00	\$103.00	139.5%	\$60.00	\$60.00	39.5%	\$17.00
	6 " Service	\$100.00	\$266.00	166.0%	\$166.00	\$162.00	62.0%	\$62.00