BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP - CHAIRMAN
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

ORIGINAL

IN THE MATTER OF THE APPLICATION OF UTILITY SOURCE, LLC, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. WS-04235A-13-0331 **NOTICE OF FILING STAFF'S DIRECT TESTIMONIES**

The Utilities Division ("Staff") of the Arizona Corporation Commission ("Commission") hereby files Direct Testimonies of John A. Cassidy, Mike Thompson and Jorn L. Keller, in the above-referenced docket.

RESPECTFULLY SUBMITTED this 4th day of September, 2014.

Wesley C. Van Cleve
Matthew Laudone
Attorneys, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Original and thirteen (13) copies of the foregoing filed this 4th day of September, 2014, with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Copy of the foregoing mailed this 4th day of September, 2014, to:

Steve Wene, Esq.
MOYES SELLERS & HENDRICKS, LTD
1850 North Central Avenue, Suite 1100
Phoenix, Arizona 85004
Attorneys for Utility Source, LLC
swene@law-msh.com

Daniel Pozefsky, Chief Counsel
RESIDENTIAL UTILITY CONSUMER OFFICE
1110 West Washington Street, Suite 220
Phoenix, Arizona 85007

Erik Nielsen
4680 North Alpine Drive
P.O. Box 16020
Bellemont, Arizona 86015

Terry Fallon
4561 Bellemont Springs Drive
Bellemont, Arizona 85015

Roseann Osorio

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF UTILITY SOURCE, LLC, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER AND WASTEWATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. WS-04235A-13-0331

DIRECT

TESTIMONY

OF

JOHN A. CASSIDY

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 4, 2014

TABLE OF CONTENTS

SCHEDULES

EXECUTIVE SUMMARY
UTILITY SOURCE, LLC
DOCKET NO. WS-04235A-13-0331

The direct testimony of Staff witness John A. Cassidy addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Utility Source, LLC ("Company") for this proceeding consisting of 0.0 percent debt and 100.0 percent equity.

Cost of Equity – Staff recommends that the Commission adopt a 9.6 percent cost of equity for the Company. Staff's estimated cost of equity for the Company is based on the 9.0 percent average of its discounted cash flow method ("DCF") cost of equity methodology estimates for the sample companies of 8.6 percent for the constant-growth DCF model and 9.3 percent for the multi-stage DCF model. Staff's recommended cost of equity includes an upward economic assessment adjustment of 60 basis points (0.6 percent).

Cost of Debt – Staff recommends that the Commission adopt a 0.0 percent cost of debt for the Company.

Overall Rate of Return – Staff recommends that the Commission adopt a 9.6 percent overall rate of return.

Mr. Bourassa's Testimony – The Commission should reject the Company's proposed 11.0 percent return on equity ("ROE") for the following reasons:

Mr. Bourassa's primary Future Growth DCF estimates rely exclusively on analysts' forecasts of earnings per share growth. Effectively, Mr. Bourassa's overall DCF estimate is weighted 75 percent by his Future Growth DCF estimates. Mr. Bourassa's capital asset pricing model ("CAPM") estimates are overstated due to the use of a forecasted risk-free rate. The current market risk premium ("MRP") in Mr. Bourassa's current MRP CAPM model is not reflective of current market conditions, and thus serves to overstate his CAPM cost of equity estimate. Mr. Bourassa's proposed cost of equity has been inflated by an implicit upward adjustment for financial risk and small company risk premium.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is John A. Cassidy. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. I am responsible for the examination of financial and statistical information included in utility rate applications and other financial matters, including studies to estimate the cost of capital component in rate filings used to determine the overall revenue requirement, and for preparing written reports, testimonies and schedules to present Staff's recommendations to the Commission on these matters.

Q. Please describe your educational background and professional experience.

A. I hold a Bachelor of Arts degree in History from Arizona State University, a Master of Library Science degree from the University of Arizona, and a Master of Business Administration degree with an emphasis in Finance from Arizona State University. While pursuing my MBA degree, I was inducted into Beta Gamma Sigma, the National Business Honor Society. I have passed the CPA exam, but opted not to pursue certification. I have worked professionally as a librarian, financial consultant and tax auditor and served as Staff's cost of capital witness in rate case evidentiary proceedings in my current as well as in a past tenure as a Commission employee.

Q. What is the scope of your testimony in this case?

A. My testimony provides Staff's recommended capital structure, cost of equity, and overall rate of return ("ROR") for establishing the revenue requirements for Utility Source, LLC ("USL" or "Company") in the Company's pending water/wastewater rate application.

Q. Please provide a brief description of USL.

A. USL is a Class "C" Limited Liability Company public service corporation engaged in providing water and wastewater utility service in portions of Coconino County, Arizona, pursuant to a certificate of convenience and necessity granted by the Arizona Corporation Commission ("Commission"). During the test year ending December 31, 2012, the Company served approximately 331 water and wastewater connections.

Summary of Testimony and Recommendations

Q. Briefly summarize how Staff's cost of capital testimony is organized.

A. Staff's cost of capital testimony is presented in ten sections. Section I is this introduction. Section II discusses the concept of weighted average cost of capital ("WACC"). Section III presents the concept of capital structure and presents Staff's recommended capital structure for USL in this proceeding. Section IV discusses the concepts of ROE and risk. Section V presents the methods employed by Staff to estimate USL's ROE. Section VI presents the findings of Staff's ROE analysis. Section VII presents Staff's final cost of equity estimates for USL. Section VIII presents Staff's ROR recommendation. Section IX presents Staff's comments on the direct testimony of the Company's witness, Mr. Thomas J. Bourassa. Finally, Section X presents Staff's conclusions.

Q. Have you prepared any exhibits to accompany your testimony?

A. Yes. I prepared nine schedules (JAC-1 to JAC-9) which support Staff's cost of capital analysis.

Q. What is Staff's recommended rate of return for USL?

A. Staff recommends a 9.6 percent overall ROR, as shown in Schedule JAC-1. Staff's ROR recommendation is based on the following: (1) a capital structure composed of 0.0 percent debt and 100.0 percent equity; (2) an estimated cost of equity of 9.0 percent, calculated as the simple average of the two cost of equity estimates for the sample companies derived from Staff's discounted cash flow ("DCF") estimation methodologies (8.6 percent from Staff's constant growth DCF model and 9.3 percent from Staff's multi-stage DCF model), plus the adoption of a 60 basis point upward economic assessment adjustment; and (3) a cost of debt of 0.0 percent.

Staff continues to develop and analyze the indicated cost of equity estimates derived from the two capital asset pricing model ("CAPM") estimation methodologies historically considered and relied upon by Staff. However, at the present time Staff is recommending that the Commission place less emphasis on CAPM results due to the continuing divergence of the CAPM-indicated cost of equity results relative to those derived by the DCF model.

Q. Mr. Cassidy, briefly explain why the cost of equity estimates derived from the CAPM have become problematic in today's economic environment.

A. In an effort to recover from the economic recession of 2008, the United States Federal Reserve ("The Fed") initiated a monetary policy intended to stimulate economic growth and reduce unemployment by keeping the federal funds rate at a level between 0 to ¼ percent.[1]

[1] The federal funds rate is the interest rate charged to banks by the Fed for overnight transfers of funds.

The federal funds rate is the central bank's key tool to spur the economy and a low rate is thought to encourage spending by making it cheaper to borrow money. In addition, in an effort to put downward pressure on longer-term interest rates, the Fed initiated a policy of quantitative easing[2] wherein the U.S. central bank would purchase U.S. Treasury mortgage-backed securities by reinvesting the principal payments from its holdings of agency debt and agency mortgage-backed securities, and of rolling over maturing Treasury securities at auction.[3] As a consequence, the low interest rate environment engineered by the Fed has compelled investors to seek out higher yields on investment wherever they may be found, resulting in the equity markets having recently achieved new all-time highs,[4] and forecasted dividend yields continuing to remain at low levels.[5] At present, these factors, in combination with one another, have led to unusually low cost of equity estimates being obtained from the CAPM model. Accordingly, in Staff's judgment the cost of equity estimates derived from the CAPM should not be given their traditional weighting for purposes of setting rates until such time that market conditions change.

[2] Quantitative easing is an unconventional monetary policy in which a central bank purchases government securities or other securities from the market in order to lower interest rates and increase the money supply. Quantitative easing increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity. Quantitative easing is considered when short-term interest rates are at or approaching zero, and does not involve the printing of new banknotes.

[3] In a Press Release issued July 30, 2014, the Fed announced that beginning in August 2014 it would add to its holdings of agency mortgage-backed securities at a pace of $10 billion per month, down from its prior level of $15 billion per month, and add to its holdings of longer-term Treasury securities at a pace of $15 billion per month, down from its prior level of $20 billion per month. (http://www.federalreserve.gov/newsevents/press/monetary/20140730a.htm)

[4] On July 16, 2014, the Dow Jones Industrial Average reached an all-time closing high of 17,138.20, and an all-time intra-day high of 17,153.80 on August 26, 2014. Similarly, the S&P 500 Index reached a new all-time closing high of 2,000.12 on August 27, 2014, and an all-time intra-day high of 2,005.04 on August 26, 2014 (Source: Yahoo! Finance).

[5] As reported in the *Value Line Investment Survey, Summary & Index*, the median estimated dividend yield (next 12 months) of all dividend paying stocks under its review is currently at 2.0 percent (*Value Line*, August 29, 2014 issue).

USL's Proposed Overall Rate of Return

Q. Briefly summarize USL's proposed capital structure, cost of debt, ROE and overall ROR for this proceeding.

A. Table 1 summarizes the Company's proposed capital structure, cost of debt, ROE and overall ROR in this proceeding:

Table 1

	Weight	Cost	Weighted Cost
Long-term Debt	0.00%	0.00%	0.00%
Common Equity	100.00%	11.00%	11.00%
Cost of Capital/ROR			**11.00%**

USL is proposing an overall rate of return of 11.00 percent.

II. THE WEIGHTED AVERAGE COST OF CAPITAL

Q. Briefly explain the cost of capital concept.

A. The cost of capital is the opportunity cost of choosing one investment over others with equivalent risk. In other words, the cost of capital is the return that stakeholders expect for investing their financial resources in a determined business venture over another business venture.

Q. What is the overall cost of capital?

A. The cost of capital to a company issuing a variety of securities (i.e., stock and indebtedness) is an average of the cost rates on all issued securities adjusted to reflect the relative amounts for each security in the company's entire capital structure. Thus, the overall cost of capital to a firm is its weighted average cost of capital ("WACC").

Q. How is the WACC calculated?

A. The WACC is calculated by adding the weighted expected returns of a firm's securities. The WACC formula is:

Equation 1.

$$WACC = \sum_{i=1}^{n} W_i * r_i$$

In this equation, W_i is the weight given to the i^{th} security (the proportion of the i^{th} security relative to the portfolio) and r_i is the expected return on the i^{th} security.

Q. Can you provide an example demonstrating application of Equation 1?

A. Yes. For this example, assume that an entity has a capital structure composed of 60 percent debt and 40 percent equity. Also, assume that the embedded cost of debt is 6.0 percent and the expected return on equity, i.e., the cost of equity, is 10.5 percent. Calculation of the WACC is as follows:

$$WACC = (60\% * 6.0\%) + (40\% * 10.5\%)$$

$$WACC = 3.60\% + 4.20\%$$

$$WACC = 7.80\%$$

The weighted average cost of capital in this example is 7.80 percent. The entity in this example would need to earn an overall rate of return of 7.80 percent to cover its cost of capital.

III. CAPITAL STRUCTURE

Background

Q. Please explain the capital structure concept.

A. The capital structure of a firm is the relative proportions of each type of security:-short-term debt, long-term debt (including capital leases), preferred stock and common stock that are used to finance the firm's assets.

Q. How is the capital structure expressed?

A. The capital structure of a company is expressed as the percentage of each component of the capital structure (capital leases, short-term debt, long-term debt, preferred stock and common stock) relative to the entire capital structure.

As an example, the capital structure for an entity that is financed by $20,000 of short-term debt, $85,000 of long-term debt (including capital leases), $15,000 of preferred stock and $80,000 of common stock is shown in Table 2.

Table 2

Component			%
Short-Term Debt	$20,000	($20,000/$200,000)	10.0%
Long-Term Debt	$85,000	($85,000/$200,000)	42.5%
Preferred Stock	$15,000	($15,000/$200,000)	7.5%
Common Stock	$80,000	($80,000/$200,000)	40.0%
Total	$200,000		100%

The capital structure in this example is composed of 10.0 percent short-term debt, 42.5 percent long-term debt, 7.5 percent preferred stock and 40.0 percent common stock.

USL's Capital Structure

Q. What capital structure does USL propose for purposes of this proceeding?

A. The Company proposes a capital structure composed of 0.0 percent debt and 100.0 percent common equity. USL's proposed capital structure reflects its actual consolidated capital structure as of the December 31, 2012 test-year end, as shown in the Company's Schedule D-1.

Q. How does USL's proposed capital structure compare to capital structures of publicly-traded water utilities?

B. Schedule JAC-4 shows the capital structures of seven publicly-traded water companies ("sample water companies" or "sample water utilities") as of December 2013. The average capital structure for the sample water utilities is comprised of approximately 47.9 percent debt and 52.1 percent equity.

Staff's Capital Structure

Q. What is Staff's recommended capital structure for USL?

A. Staff recommends a capital structure composed of 0.0 percent debt and 100.0 percent equity.

IV. RETURN ON EQUITY

Background

Q. Please define the term "cost of equity capital."

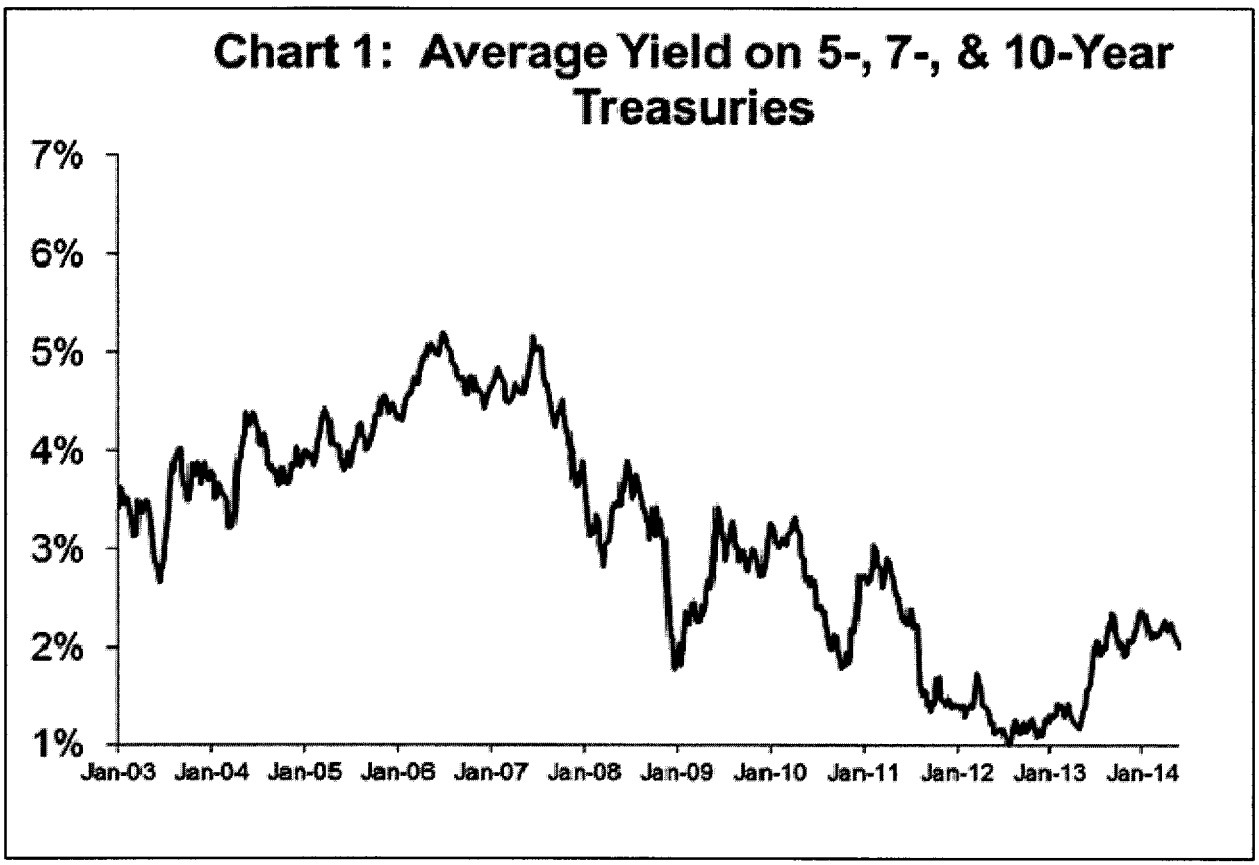
A. The cost of equity is the rate of return that investors expect to earn on their investment in a business entity given its risk. In other words, the cost of equity to the entity is the investors' expected rate of return on other investments of similar risk. As investors have a wide selection of stocks to choose from, they will choose stocks with similar risks but higher returns. Therefore, the market determines the entity's cost of equity.

Q. Is there a correlation between interest rates and the cost of equity?

A. Yes, there is a positive correlation between interest rates and the cost of equity, as the two tend to move in the same direction.

Q. What has been the general trend of interest rates in recent years?

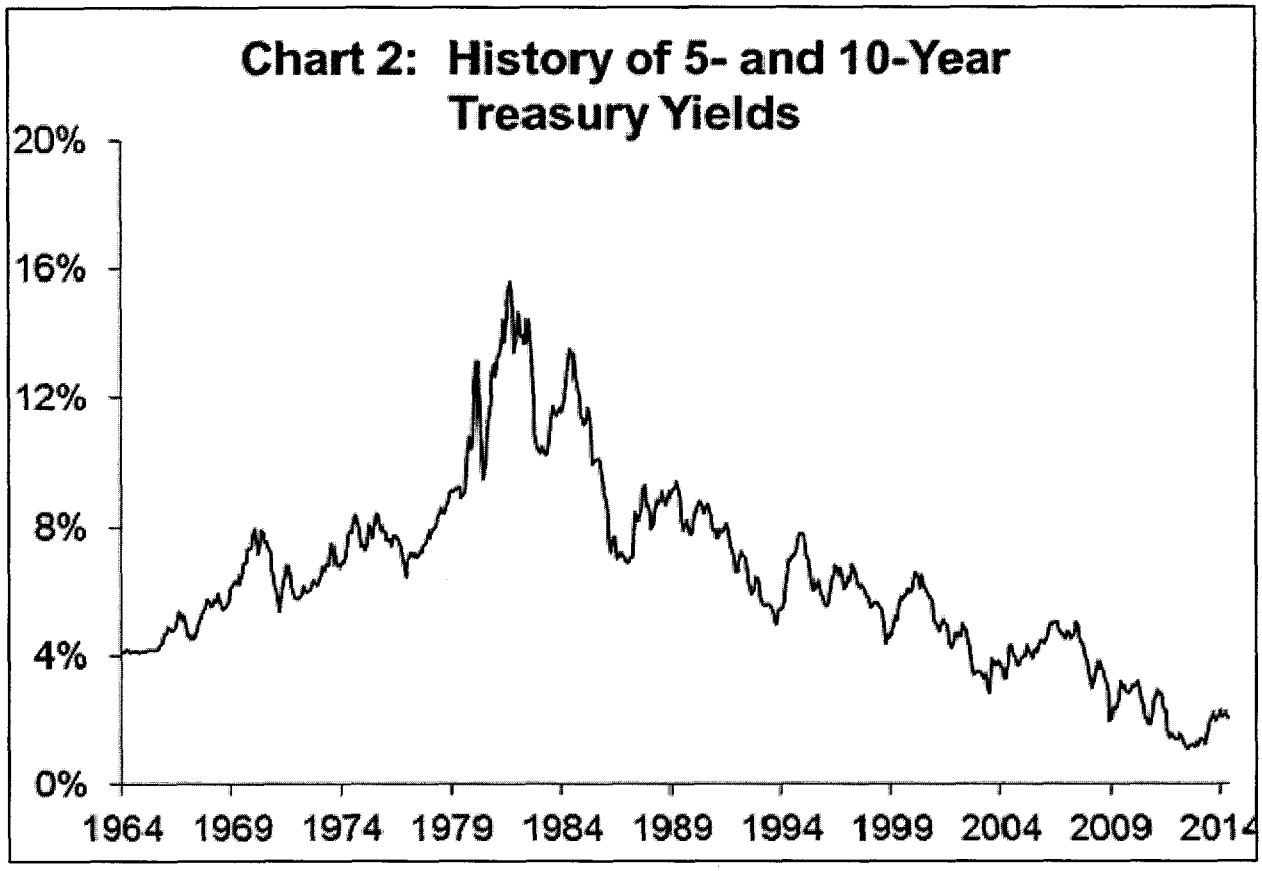
A. A chronological chart of interest rates is a good tool to show interest rate history and identify trends. Chart 1 graphs intermediate U.S. treasury rates from January 3, 2003, to May 30, 2014.



As shown in Chart 1, intermediate-term interest rates generally trended upward from 2003 to mid-2007, trended downward until late-2012, and have trended upward since that time.

Q. What has been the general trend in interest rates longer term?

A. U.S. Treasury rates from January 1964- May 2014 are shown in Chart 2. The chart shows that interest rates trended upward through the mid-1980s and have trended downward since that time.



Source: Federal Reserve

Q. Do these trends have relevance to the cost of equity?

A. Yes. As previously noted, interest rates and the cost of equity tend to move in the same direction; therefore, it can be concluded that the cost of equity has also declined over the past 30 years.

Q. Do actual returns represent the cost of equity?

A. No. The cost of equity represents investors' *expected* returns and not realized returns.

Risk

Q. Please define risk as it relates to an equity security investment.

A. Risk, as it relates to an equity security investment, is defined as the variability or uncertainty of the returns associated with that particular security. Investors are risk averse and require a greater potential return to invest in relatively greater risk opportunities, i.e., investors require compensation for taking on additional risk. Risk is generally separated into two components: market risk (systematic risk) which is non-diversifiable, and non-market risk (unsystematic risk or firm-specific risk) which is diversifiable.

Q. What is market risk?

A. Market risk, or systematic risk, is the risk associated with an investment that cannot be reduced through diversification. Market risk stems from factors that affect all securities, such as recessions, war, inflation and high interest rates. These factors affect the entire market. However, market risk does not impact each security to the same degree.

Q. What is non-market risk?

A. Non-market risk, or unsystematic risk, is risk which is unique to the firm and is capable of being diversified away. Examples of unsystematic risk include losses caused by labor problems, nationalization of assets, loss of a big client or adverse weather conditions. Investors can eliminate firm-specific risk by holding a diverse portfolio; thus, it is not of concern to diversified investors.

Q. Is the cost of equity affected by firm-specific risk?

A. No. Since firm-specific risk can be eliminated through diversification, it does not affect the cost of equity.

Q. Can investors expect additional returns for firm-specific risk?

A. No. Investors who hold diversified portfolios can effectively eliminate firm-specific risk and, consequently, do not require any additional return. Since investors who choose to be less than fully-diversified must compete in the market with fully-diversified investors, the former cannot expect to be compensated for unique risk.

Q. Is a firm subject to any other risk?

A. Yes. Firms are also subject to business risk and to financial risk.

Q. Please define business risk.

A. Business risk is the fluctuation of earnings inherent in a firm's operations and environment, such as competition and adverse economic conditions, which may impair its ability to provide returns on investment. Companies in the same or similar line of business tend to experience the same fluctuations in business cycles.

Q. Please define financial risk.

A. Financial risk is the fluctuation of earnings inherent in the use of debt financing that may impair a firm's ability to provide adequate returns; the higher the percentage of debt in a company's capital structure, the greater its exposure to financial risk.

Q. Do business risk and financial risk affect the cost of equity?

A. Yes.

Q. How does USL's financial risk exposure compare to that of Staff's sample group of water companies?

A. JAC-4 shows the capital structures of the seven sample water companies as of December 2013, and USL's capital structure as of the test year ending December 31, 2012. As shown, the sample water utilities were capitalized with approximately 47.9 percent debt and 52.1 percent equity, while USL's capital structure consists of 0.0 percent debt and 100.0 percent equity. Thus, relative to Staff's sample companies, USL has no exposure to financial risk because the Company does not utilize debt financing.

V. ESTIMATING THE COST OF EQUITY

Introduction

Q. Did Staff directly estimate the cost of equity for USL?

A. No. Since USL is not a publicly-traded company, Staff is unable to directly estimate its cost of equity due to the lack of firm-specific market data. Instead, Staff estimated the Company's cost of equity indirectly, using a representative sample group of publicly-traded water utilities as a proxy, taking the average of the sample group to reduce the sample error resulting from random fluctuations in the market at the time the information is gathered.

Q. What sample companies did Staff select as proxies for USL?

A. Staff's sample consists of the following seven publicly-traded water utilities: American States Water, California Water, Aqua America, Connecticut Water Service, Middlesex Water, SJW Corporation and York Water. Staff selected these companies because they are publicly-traded and receive the majority of their earnings from regulated operations.

Q. What models did Staff implement to estimate USL's cost of equity?

A. Staff used two variations of the DCF model, both of which are market-based, to estimate the cost of equity for USL: the constant-growth DCF model and the multi-stage DCF model.

Q. Please explain why Staff chose the DCF model.

A. Staff chose to use the DCF model because it is a widely-recognized market-based model and has been used extensively to estimate the cost of equity. For the reasons noted earlier, Staff does not incorporate estimates derived from the CAPM into its cost of equity analysis for USL. An explanation of the DCF model is provided below.

Discounted Cash Flow Model Analysis

Q. Please provide a brief summary of the theory upon which the DCF method of estimating the cost of equity is based.

A. The DCF method of stock valuation is based on the theory that the value of an investment is equal to the sum of the future cash flows generated from the aforementioned investment discounted to the present time. This method uses expected dividends, market price and dividend growth rate to calculate the cost of capital. Professor Myron Gordon pioneered the DCF method in the 1960s. The DCF method has become widely used to estimate the cost of equity for public utilities due to its theoretical merit and its simplicity. Staff used the financial information for the relevant seven sample companies in the DCF model and averaged the results to determine an estimated cost of equity for the sample companies.

Q. Does Staff use more than one version of the DCF?

A. Yes. Staff uses two versions of the DCF model: the constant-growth DCF and the multi-stage or non-constant growth DCF. The constant-growth DCF assumes that an entity's

dividends will grow indefinitely at the same rate. The multi-stage growth DCF model assumes the dividend growth rate will change at some point in the future.

The Constant-Growth DCF

Q. What is the mathematical formula used in Staff's constant-growth DCF analysis?

A. The constant-growth DCF formula used in Staff's analysis is:

Equation 2 :

$$K = \frac{D_1}{P_0} + g$$

where : K = the cost of equity
D_1 = the expected annual dividend
P_0 = the current stock price
g = the expected infinite annual growth rate of dividends

Equation 2 assumes that the entity has a constant earnings retention rate and that its earnings are expected to grow at a constant rate. According to Equation 2, a stock with a current market price of $10 per share, an expected annual dividend of $0.45 per share and an expected dividend growth rate of 3.0 percent per year has a cost of equity to the entity of 7.5 percent reflected by the sum of the dividend yield ($0.45/ $10 = 4.5 percent) and the 3.0 percent annual dividend growth rate.

Q. How did Staff calculate the expected dividend yield (D_1/P_0) component of the constant-growth DCF formula?

A. Staff calculated the expected yield component of the DCF formula by dividing the expected annual dividend (D_1) by the spot stock price (P_0) after the close of market on August 27, 2014, as reported by *MSN Money*.

Q. Why did Staff use the August 27, 2014, spot price rather than a historical average stock price to calculate the dividend yield component of the DCF formula?

A. The current, rather than historic, market price is used in order to be consistent with financial theory. In accordance with the Efficient Market Hypothesis, the current stock price is reflective of all available information on a stock, and as such reveals investors' expectations of future returns.

Q. How did Staff estimate the dividend growth (g) component of the constant-growth DCF model represented by Equation 2?

A. The dividend growth component used by Staff is determined by the average of six different estimation methods, as shown in Schedule JAC-8. Staff calculated historical and projected growth estimates on dividend-per-share ("DPS"),[6] earnings-per-share ("EPS")[7] and sustainable growth bases.

Q. Why did Staff examine EPS growth to estimate the dividend growth component of the constant-growth DCF model?

A. Historic and projected EPS growth are used because dividends are related to earnings. Dividend distributions may exceed earnings in the short run, but cannot continue indefinitely. In the long term, dividend distributions are dependent on earnings.

Q. How did Staff estimate historical DPS growth?

A. Staff estimated historical DPS growth by calculating a compound annual DPS growth rate for each of its sample companies over the 10-year period, 2003-2013. As shown in Schedule JAC-5, the average historical DPS growth rate for the sample was 3.7 percent.

[6] Derived from information provided by *Value Line.*
[7] Derived from information provided by *Value Line.*

Q. How did Staff estimate projected DPS growth?

A. Staff calculated an average of the projected DPS growth rates for the sample water utilities from *Value Line* through the period, 2017-2019. The average projected DPS growth rate is 5.9 percent, as shown in Schedule JAC-5.

Q. How did Staff estimate historical EPS growth rate?

A. Staff estimated historical EPS growth by calculating a compound annual EPS growth rate for each of its sample companies over the 10-year period, 2003-2013. As shown in Schedule JAC-5, the average historical EPS growth rate for the sample was 6.5 percent.

Q. How did Staff estimate projected EPS growth?

A. Staff calculated an average of the projected EPS growth rates for the sample water utilities from *Value Line* through the period, 2017-2019. The average projected EPS growth rate is 6.0 percent, as shown in Schedule JAC-5.

Q. How does Staff calculate its historical and projected sustainable growth rates?

A. Historical and projected sustainable growth rates are calculated by adding their respective retention growth rate terms (br) to their respective stock financing growth rate terms (vs), as shown in Schedule JAC-6.

Q. What is retention growth?

A. Retention growth is the growth in dividends due to the retention of earnings. The retention growth concept is based on the theory that dividend growth cannot be achieved unless the company retains and reinvests a portion of its earnings. The retention growth is used in Staff's calculation of sustainable growth shown in Schedule JAC-6.

Q. What is the formula for the retention growth rate?

A. The retention growth rate is the product of the retention ratio and the book/accounting return on equity. The retention growth rate formula is:

Equation 3 :

$$\text{Retention Growth Rate} = br$$

where : b = the retention ratio (1 – dividend payout ratio)
r = the accounting/book return on common equity

Q. How did Staff calculate the average historical retention growth rate (br) for the sample water utilities?

A. Staff calculated the mean of the 10-year average historical retention rate for each sample company over the period, 2003-2013. As shown in Schedule JAC-6, the historical average retention (br) growth rate for the sample is 2.8 percent.

Q. How did Staff estimate its projected retention growth rate (br) for the sample water utilities?

A. Staff used the retention growth projections for the sample water utilities for the period, 2017-2019, from *Value Line.* As shown in Schedule JAC-6, the projected average retention growth rate for the sample companies is 4.2 percent.

Q. When can retention growth provide a reasonable estimate of future dividend growth?

A. The retention growth rate is a reasonable estimate of future dividend growth when the retention ratio is reasonably constant and the entity's market price to book value ("market-to-book ratio") is expected to be 1.0. The average retention ratio has been reasonably constant

in recent years. However, the market-to-book ratio for the sample water utilities is 2.2, notably higher than 1.0, as shown in Schedule JAC-7.

Q. Is there any financial implication of a market-to-book ratio greater than 1.0?

A. Yes. A market-to-book ratio greater than 1.0 implies that investors expect an entity to earn an accounting/book return on its equity that exceeds its cost of equity. The relationship between required returns and expected cash flows is readily observed in the fixed securities market. For example, assume an entity contemplating issuance of bonds with a face value of $10 million at either 6 percent or 8 percent and, thus, paying annual interest of $600,000 or $800,000, respectively. Regardless of investors' required return on similar bonds, investors will be willing to pay more for the bonds if issued at 8 percent than if the bonds are issued at 6 percent. For example, if the current interest rate required by investors is 6 percent, then they would bid $10 million for the 6 percent bonds and more than $10 million for the 8 percent bonds. Similarly, if equity investors require a 9 percent return and expect an entity to earn accounting/book returns of 13 percent, the market will bid up the price of the entity's stock to provide the required return of 9 percent.

Q. How has Staff generally recognized a market-to-book ratio exceeding 1.0 in its cost of equity analyses in recent years?

A. Staff has assumed that investors expect the market-to-book ratio to remain greater than 1.0. Given that assumption, Staff has added a stock financing growth rate (vs) term to the retention ratio (br) term to calculate its historical and projected sustainable growth rates.

Q. Do the historical and projected sustainable growth rates Staff uses to develop its DCF cost of equity in this case continue to include a stock financing growth rate term?

A. Yes.

Q. What is stock financing growth?

A. Stock financing growth is the increase in an entity's dividends attributable to the sale of stock by that entity. Stock financing growth is a concept derived by Myron Gordon and discussed in his book *The Cost of Capital to a Public Utility.*[8] Stock financing growth is the product of the fraction of the funds raised from the sale of stock that accrues to existing shareholders (v) and the fraction resulting from dividing the funds raised from the sale of stock by the existing common equity (s).

Q. What is the mathematical formula for the stock financing growth rate?

A. The mathematical formula for stock financing growth is:

Equation 4:

$$\text{Stock Financing Growth} = vs$$

where: v = Fraction of the funds raised from the sale of stock that accrues to existing shareholders

s = Funds raised from the sale of stock as a fraction of the existing common equity

Q. How is the variable *v* presented above calculated?

A. Variable v is calculated as follows:

Equation 5:

$$v = 1 - \left(\frac{book\ value}{market\ value} \right)$$

For example, assume that a share of stock has a $30 book value and is selling for $45. Then, to find the value of v, the formula is applied:

[8] Gordon, Myron J. *The Cost of Capital to a Public Utility.* MSU Public Utilities Studies, Michigan, 1974, pp. 31-35.

$$v = 1 - \left(\frac{30}{45}\right)$$

In this example, v is equal to 0.33.

Q. How is the variable *s* presented above calculated?

A. Variable s is calculated as follows:

Equation 6:

$$s = \frac{\text{Funds raised from the issuance of stock}}{\text{Total existing common equity before the issuance}}$$

For example, assume that an entity has $150 in existing equity, and it sells $30 of stock. Then, to find the value of s, the formula is applied:

$$s = \left(\frac{30}{150}\right)$$

In this example, s is equal to 20.0 percent.

Q. What is the *vs* term when the market-to-book ratio is equal to 1.0?

A. A market-to-book ratio of 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment equal to the cost of equity. When the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders, i.e., the term v is equal to zero (0.0). Consequently, the vs term is also equal to zero (0.0). When stock financing growth is zero, dividend growth depends solely on the br term.

Q. What is the effect of the *vs* term when the market-to-book ratio is greater than 1.0?

A. A market-to-book ratio greater than 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment greater than the cost of equity. Equation 5 shows that, when the market-to-book ratio is greater than 1.0, the *v* term is also greater than zero. The excess by which new shares are issued and sold over book value per share of outstanding stock is a contribution that accrues to existing stockholders in the form of a higher book value. The resulting higher book value leads to higher expected earnings and dividends. Continued growth from the *vs* term is dependent upon the continued issuance and sale of additional shares at a price that exceeds book value per share.

Q. What *vs* estimate did Staff calculate from its analysis of the sample water utilities?

A. Staff estimated an average stock financing growth of 2.6 percent for the sample water utilities, as shown in Schedule JAC-6.

Q. What would occur if an entity had a market-to-book ratio greater than 1.0 as a result of investors expecting earnings to exceed its cost of equity, and subsequently experienced newly-authorized rates equal only to its cost of equity?

A. Holding all other factors constant, one would expect market forces to move the company's stock price lower, closer to a market-to-book ratio of 1.0, to reflect investor expectations of reduced expected future cash flows.

Q. If the average market-to-book ratio of Staff's sample water utilities were to fall to 1.0 due to authorized ROEs equaling their cost of equity, would inclusion of the vs term be necessary to Staff's constant-growth DCF analysis?

A. No. As discussed above, when the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders

because the *v* term equals to zero and, consequently, the *vs* term also equals zero. When the market-to-book ratio equals 1.0, dividend growth depends solely on the *br* term. Staff's inclusion of the *vs* term assumes that the market-to-book ratio continues to exceed 1.0 and that the water utilities will continue to issue and sell stock at prices above book value with the effect of benefitting existing shareholders.

Q. What are Staff's historical and projected sustainable growth rates?

A. Staff's estimated historical sustainable growth rate is 5.4 percent based on an analysis of earnings retention for the sample water companies. Staff's projected sustainable growth rate is 6.8 percent based on retention growth projected by *Value Line.* Schedule JAC-6 presents Staff's estimates of the sustainable growth rate.

Q. What is Staff's expected infinite annual growth rate in dividends?

A. Staff's expected dividend growth rate (g) is 5.7 percent, which is the average of historical and projected DPS, EPS, and sustainable growth estimates. Staff's calculation of the expected infinite annual growth rate in dividends is shown in Schedule JAC-8.

Q. What is Staff's constant-growth DCF estimate for the sample utilities?

A. Staff's constant-growth DCF estimate is 8.6 percent, as shown in Schedule JAC-3.

The Multi-Stage DCF

Q. Why did Staff implement the multi-stage DCF model to estimate USL's cost of equity?

A. Staff generally uses the multi-stage DCF model to consider the assumption that dividends may not grow at a constant rate. The multi-stage DCF uses two stages of growth; the first

stage (near-term) having a duration of four years, followed by a second stage (long-term) of constant growth.

Q. What is the mathematical formula for the multi-stage DCF?

A. The multi-stage DCF formula is shown in the following equation:

Equation 7 :

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non – constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

Q. What steps did Staff take to implement its multi-stage DCF cost of equity model?

A. First, Staff projected future dividends for each of the sample water utilities using near-term and long-term growth rates. Second, Staff calculated the rate (cost of equity) which equates the present value of the forecasted dividends to the current stock price for each of the sample water utilities. Lastly, Staff calculated an overall sample average cost of equity estimate.

Q. How did Staff calculate near-term (stage-1) growth?

A. The stage-1 growth rate is based on *Value Line*'s projected dividends for the next twelve months, when available, and on the average dividend growth (g) rate of 5.7 percent, calculated in Staff's constant DCF analysis for the remainder of the stage.

Q. How did Staff estimate long-term (stage-2) growth?

A. Staff calculated the stage-2 growth rate using the arithmetic mean rate of growth in Gross Domestic Product ("GDP") from 1929 to 2013.[9] Using the GDP growth rate assumes that the water utility industry is expected to grow at the same rate as the overall economy.

Q. What is the historical GDP growth rate that Staff used to estimate stage-2 growth?

A. Staff used 6.5 percent to estimate the stage-2 growth rate.

Q. What is Staff's multi-stage DCF estimate for the sample utilities?

A. Staff's multi-stage DCF estimate is 9.3 percent, as shown in Schedule JAC-3.

Q. What is Staff's overall DCF estimate for the sample utilities?

A. Staff's overall DCF estimate is 9.0 percent. Staff calculated the overall DCF estimate by averaging the constant growth DCF (8.6%) and multi-stage DCF (9.3%) estimates, as shown in Schedule JAC-3.

VI. SUMMARY OF STAFF'S COST OF EQUITY ANALYSIS

Q. What is the result of Staff's constant-growth DCF analysis to estimate the cost of equity for the sample water utilities?

A. Schedule JAC-3 shows the result of Staff's constant-growth DCF analysis. The result of Staff's constant-growth DCF analysis is as follows:

$$k = 2.9\% + 5.7\%$$

$$k = \mathbf{8.6\%}$$

[9] www.bea.doc.gov.

Staff's constant-growth DCF estimate of the cost of equity for the sample water utilities is 8.6 percent.

Q. What is the result of Staff's multi-stage DCF analysis to estimate of the cost of equity for the sample utilities?

A. Schedule JAC-9 shows the result of Staff's multi-stage DCF analysis. The result of Staff's multi-stage DCF analysis is:

Company	**Equity Cost Estimate (k)**
American States Water	9.1%
California Water	9.1%
Aqua America	9.0%
Connecticut Water	9.5%
Middlesex Water	10.1%
SJW Corp	9.2%
York Water	9.3%
Average	**9.3%**

Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 9.3 percent.

Q. What is Staff's overall DCF estimate of the cost of equity for the sample utilities?

A. Staff's overall DCF estimate of the cost of equity for the sample utilities is 9.0 percent. Staff calculated an overall DCF cost of equity estimate by averaging Staff's constant growth DCF (8.6 percent) and Staff's multi-stage DCF (9.3 percent) estimates, as shown in Schedule JAC-3.

VII. FINAL COST OF EQUITY ESTIMATES FOR USL

Q. Please compare USL's capital structure to that of Staff's seven sample companies.

A. The average capital structure for the sample water utilities is composed of 47.9 percent debt and 52.1 percent equity, as shown in Schedule JAC-4. In contrast, USL's capital structure is composed of 0.0 percent debt and 100.0 percent equity. Since the Company's capital structure is less highly leveraged than that of the average sample water utility, USL's stockholders bear *less* financial risk than do equity shareholders of the sample utilities.

Q. Is Staff recommending a downward financial risk adjustment to the Company's cost of equity to recognize its lower financial risk?

A. No. Staff normally applies two criteria in assessing whether application of a downward financial risk adjustment is appropriate. The first consideration is whether the utility has a reasonably economical capital structure. Staff considers a capital structure composed of no more than 60 percent equity to meet this condition. If equity exceeds 60 percent, as it does for USL, Staff considers application of a downward financial risk adjustment to be appropriate if the utility meets the second criteria. The second condition is whether the utility has access to the capital markets. For non-publicly traded entities, access to the capital markets typically requires that the firm obtain an investment grade credit rating, or to be affiliated (i.e., operating subsidiary) with a parent company having such. In the instant docket, USL does not meet this condition; thus, despite USL's equity exceeding 60 percent, Staff is not recommending a downward financial risk adjustment to the Company's cost of equity. Staff's methodology for applying a downward financial risk adjustment encourages a utility with access to the capital markets to use that access to manage its capital structure with economic efficiency and encourages a utility that lacks access to the capital markets to maintain a healthy capital structure.

Q. Did Staff consider factors other than the results of its technical models in its cost of equity analysis?

A. Yes. In consideration of the relatively uncertain status of the economy and the market that currently exists, Staff is proposing an upward economic assessment adjustment to the cost of equity. In this case, Staff recommends a 60 basis point (0.6 percent) upward economic assessment adjustment, as shown in Schedule JAC-3.

Q. What is Staff's recommended cost of equity for USL?

A. Staff recommends a cost of equity of 9.6 percent for USL, based on cost of equity estimates for the sample companies of 8.6 percent for the constant-growth DCF model and 9.3 percent for the multi-stage DCF model. Staff recommends adoption of a 60 basis point upward economic assessment adjustment, resulting in a 9.6 percent Staff-recommended cost of equity, as shown in Schedule JAC-3.

VIII. RATE OF RETURN RECOMMENDATION

Q. What overall rate of return did Staff determine for USL?

A. Staff determined a 9.6 percent ROR for the Company, as shown in Schedule JAC-1 and the following table:

Table 3

	Weight	Cost	Weighted Cost
Long-term Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	9.6%	9.6%
Overall ROR			**9.6%**

IX. STAFF RESPONSE TO COMPANY'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

Q. Please summarize Mr. Bourassa's analyses and recommendations.

A. Mr. Bourassa recommends an 11.0 percent cost of equity based on estimates derived from two constant growth DCF analyses (median estimate 8.5%), two CAPM analyses (median estimate 9.9%), and two Build-up risk premium models (median estimate 11.7%) designed as a check for reasonableness to his DCF and CAPM results, using a proxy sample of six publicly-traded water companies. He proposes a capital structure consisting of 0.00 percent debt and 100.00 percent equity. Mr. Bourassa determined that the cost of equity for publicly traded water utilities lies within the range of 8.5 percent to 11.7 percent, with the mid-point of his range being 10.1 percent. Mr. Bourassa makes no explicit adjustments to his 10.1 percent mid-point cost of equity estimate; however, in arriving at his recommended 11.0 percent cost of equity figure he gives consideration to (a) prospective economic conditions, (b) financial risks associated with the Company's pro forma capital structure, (c) incremental business risks associated with USL's small size, and (d) an assessment of USL's business risk exposure relative to his sample companies.[10] His overall recommended rate of return for the Company is 11.0 percent.

For purposes of his constant growth DCF analyses, Mr. Bourassa gives a 50 percent weight to the estimates derived from his Future Growth DCF model and a 50 percent weight to the estimates derived from his Past and Future Growth DCF Model. In his primary Future Growth DCF model, Mr. Bourassa relies exclusively on analysts' forecasts of EPS growth to estimate the dividend growth (g) component (See TJB Schedule D-4.6). In his Past and Future Growth DCF model, Mr. Bourassa estimates his dividend growth (g) rate by giving 50 percent weight to historical measures of growth in annual share price, book value, EPS and

[10] *See* Bourassa Direct, pp. 3-4, lines 22:1)

DPS over a five-year period, and 50 percent weight to the dividend growth rate obtained from his primary Future Growth DCF model (See TJB Schedule D-4.4). Thus, for purposes of the overall dividend growth (g) rate used in his constant growth DCF analyses, Mr. Bourassa effectively gives a 75 percent weight to the results obtained from analysts forecasts' for EPS growth and only a 25 percent weight to the results obtained from historical measures of dividend growth (See TJB Schedule D-4.8). In each of his two constant growth DCF analyses, Mr. Bourassa uses a 60-day average stock price to calculate the current dividend yield (D_0/P_0) (See TJB Schedule D-4.7).

For purposes of his CAPM analyses, Mr. Bourassa presents estimates based upon both historical- and current market risk premia. In both, he uses a 4.40 percent forecasted risk free (R_f) rate based, in part, upon estimates from Value Line and Blue Chip Consensus Forecasts for the 30-year long-term Treasury yield covering the period, 2014-2015 (See TJB Schedule D-4.10).

Q. Does Staff have any comments on Mr. Bourassa's sole reliance on analysts' forecasts of EPS growth rates to estimate dividend growth rate (g) in his Future Growth DCF analysis?

A. Yes. Exclusive reliance on analysts' forecasts of earnings growth to forecast DPS is inappropriate because it assumes that investors do not give consideration to other relevant information such as historical dividend and earnings growth. Generally, analysts' forecasts are known to be overly optimistic. Sole use of analysts' forecasts to calculate the expected dividend growth rate, (g), serves to inflate that component of the DCF model and, consequently, the estimated cost of equity. The appropriate growth rate to use in the DCF model is the dividend growth rate expected by *investors*, not by analysts. Investors are assumed to be rational, and as such will want to take into consideration all relevant available

information prior to making an investment decision. Therefore, it is reasonable to assume that investors would consider both historical measures of past growth, as well as analysts' forecasts of future growth, similar to the balanced approach used by Staff when estimating the dividend growth (g) rate in Staff's constant-growth DCF model.[11]

Q. Does the narrative of Mr. Bourassa's direct testimony state that he relies exclusively on analysts' forecasts of EPS growth to estimate the expected dividend growth rate (g) in his Future Growth DCF model?

A. No. Mr. Bourassa states only that "I have used analyst growth forecasts, where available,"[12] and that "I use analysts' forecasts of growth as a primary estimate of growth."[13] Only when referring to TJB Schedule D-4.6 does one learn that he has relied exclusively on analysts' forecasts of EPS growth to estimate the dividend growth (g) rate in his Future Growth DCF model.

Q. Does Staff have evidence to support its assertion that exclusive reliance on analysts' forecasts of earnings growth in the DCF model would result in inflated cost of equity estimates?

A. Yes. Experts in the financial community have commented on the optimism in analysts' forecasts of future earnings.[14] A study cited by David Dreman in his book *Contrarian Investment Strategies: The Next Generation* found that *Value Line* analysts were optimistic in their forecasts by 9 percent annually, on average for the 1987 – 1989 period. Another study

---

[11] *See* Cassidy Direct, page 16, lines 10-13.
[12] *See* Bourassa Direct, page 33, lines 17-18.
[13] *See* Bourassa Direct, page 34, lines 4-5.
[14] Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. p. 100. Dreman, David. *Contrarian Investment Strategies: The Next Generation*. 1998. Simon & Schuster. New York. pp. 97-98. Malkiel, Burton G. *A Random Walk Down Wall Street*. 2003. W.W. Norton & Co. New York. p. 175.
Testimony of Professors Myron J. Gordon and Lawrence I. Gould, consultant to the Trial Staff (Common Carrier Bureau), FCC Docket 79-63, p. 95.

conducted by David Dreman found that between 1982 and 1997, analysts overestimated the growth of earnings of companies in the S&P 500 by 188 percent.

Burton Malkiel, of Princeton University, conducted a study of the 1- and 5-year earnings forecasts made by some of the most respected names in the investment business. His results showed that when compared with actual earnings growth rates, the 5-year forecasts made by professional analysts were far less accurate than estimates derived from several naïve forecasting models, such as the long-run growth rate in national income. In the following excerpt from his book, *A Random Walk Down Wall Street*, Professor Malkiel discusses the results of his study:

> When confronted with the poor record of their five-year growth estimates, *the security analysts honestly, if sheepishly, admitted that five years ahead is really too far in advance to make reliable projections.* They protested that although long-term projections are admittedly important, they really ought to be judged on their ability to project earnings changes one year ahead. Believe it or not, it turned out that their one-year forecasts were even worse than their five-year projections.
>
> The analysts fought back gamely. They complained that it was unfair to judge their performance on a wide cross section of industries, because earnings for high-tech firms and various "cyclical" companies are notoriously hard to forecast. *"Try us on utilities," one analyst confidently asserted. At the time they were considered among the most stable group of companies because of government regulation. So we tried it and they didn't like it. Even the forecasts for the stable utilities were far off the mark.*[15] (Emphasis added)

Q. Are investors aware of the overestimation problems associated with analysts' forecasts?

A. Yes. In addition to books, there are numerous published articles appearing in *The Wall Street Journal* and other financial publications that cast doubt on the accuracy of research analysts'

[15] Malkiel, Burton G. A Random Walk Down Wall Street. 2003. W.W. Norton & Co. New York. p. 175

forecasts.[16] Investors, being keenly aware of these inherent biases in forecasts, will use other methods to assess future growth.

Q. Should DPS growth be considered in a DCF analysis?

A. Yes. As previously stated in section VI of this testimony, the current market price of a stock is equal to the present value of all expected future dividends, not future earnings. Professor Jeremy Siegel from the Wharton School of Finance stated:

> Note that the price of the stock is always equal to the present value of all future *dividends* and not the present value of future earnings. Earnings not paid to investors can have value only if they are paid as dividends or other cash disbursements at a later date. Valuing stock as the present discounted value of future earnings is manifestly wrong and greatly overstates the value of the firm.[17]

For valuation purposes, therefore, earnings paid out in the form of a dividend have paramount relevancy to investors. Dividends, unlike earnings, cannot be manipulated or overstated. Thus, historical DPS growth should receive appropriate consideration when estimating the market cost of equity in the DCF model.

Q. How does Mr. Bourassa calculate the expected dividend growth (g) rate used in his Past and Future Growth DCF model?

A. As shown in TJB Schedule D-4.4, Mr. Bourassa estimates the expected dividend growth (g) rate in his Past and Future Growth DCF model[18] by providing a 50 percent weight[19] to

---

[16] Smith, Randall & Craig, Suzanne. "Big Firms Had Research Ploy: Quiet Payments Among Rivals." *The Wall Street Journal.* April 30, 2003. Brown, Ken. "Analysts: Still Coming Up Rosy." *The Wall Street Journal.* January 27, 2003. p. C1. Karmin, Craig. "Profit Forecasts Become Anybody's Guess." *The Wall Street Journal.* January 21, 2003. p. C1. Gasparino, Charles. "Merrill Lynch Investigation Widens." *The Wall Street Journal.* April 11, 2002. p. C4. Elstein, Aaron. "Earnings Estimates Are All Over the Map." *The Wall Street Journal.* August 2, 2001. p. C1. Dreman, David. "Don't Count on those Earnings Forecasts." *Forbes.* January 26, 1998. p. 110.

[17] Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. P. 93.

[18] *See* TJB Schedule D-4.4, Column 7.

[19] *See* TJB Schedule D-4.4, Column 5.

historical measures of growth in average annual share price, book value, EPS and DPS for his sample companies over a five-year period[20] and a 50 percent weight[21] to the average of analysts' forecasts for EPS growth derived from his Future Growth DCF model.

Q. For purposes of his overall DCF estimate, what percentage weight does Mr. Bourassa allocate to the dividend growth (g) component derived from analysts' forecasts of EPS growth in his Future Growth DCF model?

A. Effectively, for purposes of his overall DCF estimate Mr. Bourassa allocates a 75 percent weight to the results derived from analysts' forecasts of EPS growth in his Future Growth DCF Model. As noted above, TJB Schedule D-4.4 presents the results of Mr. Bourassa's Past and Future Growth DCF model, which provides for an equal weighting (i.e., 50 percent) between historical and projected measures of dividend growth. However, as shown in TJB Schedule D-4.8, for purposes of his overall dividend growth (g) estimate,[22] Mr. Bourassa combines the average of his Past and Future Growth DCF estimate[23] with his average Future Growth DCF estimate.[24] In so doing, Mr. Bourassa effectively gives a 75 percent weight to the dividend growth (g) estimate derived from analysts' forecasts of EPS growth in his Future Growth DCF model and only a 25 percent weight to the dividend growth estimate derived from historical measures of growth in his Past and Future Growth DCF model.

[20] In TJB Schedule D-4.5, Mr. Bourassa presents this same dividend growth information over a ten-year period, but elects not to use it for purposes of his recommended cost of equity.
[21] *See* TJB Schedule D-4.4, Column 6.
[22] *See* TJB Schedule D-4.8, Column 3.
[23] *See* TJB Schedule D-4.8, Line 8.
[24] *See* TJB Schedule D-4.8, Line 10.

Q. Does Staff have any comment on Mr. Bourassa's use of growth in average annual share price to estimate the expected dividend growth (g) component in his Past and Future Growth DCF model?

A. Yes. Staff would point out that in both his five- and ten-year historical growth DCF analyses, share price growth has exceeded that of dividend growth by a wide margin. Specifically, in his five-year historical growth analysis (See TJB Schedule D-4.4), average share price growth (5.80%) exceeds average DPS growth (3.33%) by 74.2 percent (((.0580/.0333) – 1) = 74.2%), and in his ten-year historical growth analysis (See TJB Schedule D-4.5), average share price growth (6.88%) exceeds average DPS growth (3.25%) by 111.7 percent (((.0688/.0325) – 1) = 111.7%). Thus, share price appreciation is not a determinant of dividend growth, and for this reason Staff considers its use as a growth parameter to be inappropriate.

Q. As it relates to the cost of equity, what is the significance of Mr. Bourassa's sample water companies having experienced share price growth in excess of DPS growth over both the last five- and ten-year periods?

A. Simply stated, it is an indication that the cost of equity for publicly-traded water utilities has fallen over each of the last 5- and 10-year periods. When the market price per share of common stock for a given firm rises faster than does the dividend paid on a per share basis, the dividend yield falls. As dividend yields fall, investors pay more for an equivalent unit of return on their investment, resulting in a lower cost of equity. Markets are efficient, and because prices for publicly traded stocks can rise only if investors are willing to bid up the share price, when share price growth exceeds DPS growth over a five- or ten-year period, the willingness of investors to continue to bid up share prices is reflective of investor expectations that market returns have fallen. Thus, Mr. Bourassa's use of share price growth increases his cost of equity estimate at a time when share price growth actually reflects a

decrease in cost of equity. This incongruous outcome is the result of choosing an inappropriate parameter for dividend growth in the DCF model.

Q. Turning to Mr. Bourassa's CAPM analyses, in view of the recent strength in the U.S. equity markets, does Staff consider the 8.61 percent[25] current market risk premium component in his current MRP CAPM model to be reflective of current market conditions?

A. No. As an input into his current market risk premium CAPM model, Mr. Bourassa employs *Value Line's* median 3-5 year price appreciation potential estimate to compute the market risk premium ("MRP") component.[26] As shown in TJB Schedule D-4.11, Mr. Bourassa presents historical data covering the period December 2011 - July 2013, and for purposes of his recommended 8.61 percent current MRP value, elects to use a 6-month average estimate covering the period, February 2013-July 2013.[27] Staff conducted a check of *Value Line* data and found that during the 6-month period, February 2013 – July 2013, the *Value Line* median 3-5 year price appreciation potential estimate averaged 46.42 percent. However, given the strength in the equity markets, over the most recent 6-month period (i.e., December 2013 - May 2014) *Value Line's* price appreciation potential estimate fell to an average of 33.25 percent. Thus, given the methodology employed by Mr. Bourassa to calculate the 8.61 percent market risk premium used in his current MRP CAPM model, that MRP value is not reflective of current market conditions.

---

[25] *See* TJB Schedule D-4.12, line 5.
[26] *See* TJB Schedule D-4.11, footnote 3.
[27] *See* TJB Schedule D-4.11, lines 25 and 30.

Q. Does Staff agree with Mr. Bourassa's use of a forecasted risk-free (R_F) interest rate in his CAPM analyses?

A. No. The appropriate risk-free interest rate to be used in the CAPM model is the current rate borne by investors in the market. Use of a forecasted risk-free rate serves to overstate the estimated market cost of equity.

Q. What risk-free rate does Mr. Bourassa use in his CAPM analyses?

A. In both his historical and current market risk premia CAPM analyses, Mr. Bourassa uses a forecasted risk-free rate based, in part, upon estimates from *Value Line* and Blue Chip Financial Forecasts for the 30-year long-term Treasury yield covering the period 2014-2015. The forecasted rate used by Mr. Bourassa in his CAPM analyses is 4.40 percent. At present,[28] the yield on the 30-year U.S. Treasury Bond is 3.11 percent, which suggests that Mr. Bourassa has overstated the risk-free rate in his CAPM analyses by 129 basis points.

Q. As noted on page 3 of his testimony, Mr. Bourassa arrives at his 11.0 percent cost of equity for USL by giving, in part, implicit consideration to "financial risks associated with the Company's pro forma capital structure." Is there any evidence that (a) the Company has proposed a pro forma capital structure in this docket or (b) USL has exposure to financial risk?

A. No. As noted earlier (*See* Cassidy Direct, p. 8, lines 3-6), the Company has proposed its *actual* consolidated capital structure as of the test year ending December 31, 2012, consisting of 0.0 percent debt and 100.0 percent equity. As further noted (*See* Cassidy Direct, p. 12, lines 21-23), financial risk relates to the fluctuation in earnings which takes place when a firm employs fixed cost debt to financing. As indicated, USL's actual capital structure contains no debt financing; therefore, the Company has no exposure to financial risk.

[28] As of August 27, 2014.

Q. Absent exposure to financial risk, is it appropriate for Mr. Bourassa to give consideration (explicit or implicit) to 'financial risk' as a factor when estimating USL's cost of equity?

A. No, it is not.

Q. As noted, in arriving at his recommended 11.0 percent cost of equity for USL, Mr. Bourassa makes implicit upward adjustments to his 10.1 percent midpoint cost of equity estimate for small size and increased exposure to business risk resulting from small size. How does Staff respond?

A. While Staff would agree with the general proposition that smaller companies are riskier than larger companies, empirical research has demonstrated that a small company risk premium adjustment to the cost of equity is unwarranted for regulated utilities. Annie Wong, of Western Connecticut State University, conducted a study on utility stocks to determine if the so-called size effect exists in the utility industry, and she writes as follows:

> The fact that the two samples show different, though weak, results indicates that utility and industrial stocks do not share the same characteristics. First, given firm size, utility stocks are consistently less risky than industrial stocks. Second, industrial betas tend to decrease with firm size but utility betas do not. These findings may be attributed to the fact that all public utilities operate in an environment with regional monopolistic power and regulated financial structure. As a result, the business and financial risks are very similar among the utilities regardless of their size. Therefore, utility betas would not necessarily be expected to be related to firm size.
>
> The object of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for the utility stocks. *This implies that although the size phenomenon has been strongly documented for industrials, the findings suggest that there is no need to adjust for the firm size in utility regulations.* [emphasis added].[29]

[29] Annie Wong, "Utility Stock and the Size Effect: An Empirical Analysis," *Journal of the Midwest Finance Association*, (1993), p.98.

To underscore this point, Paschall and Hawkins write as follows:

> A size premium does not automatically apply in every case. Each privately held company should be analyzed to determine if a size premium is appropriate in its particular case. There can be unusual circumstances where a small company has risk characteristics that make it far less risky than the average company, warranting the use of a very low equity risk premium. One possible example of this is a private water utility (monopoly situation, very low risk, near-guarantee of payments).[30]

Q. Has the Commission previously ruled on the issue of firm size and whether it warrants a risk premium adjustment to the cost of equity?

A. Yes. The Commission previously ruled in Decision No. 64282[31] for Arizona Water that firm size does not warrant recognition of a risk premium stating, "We do not agree with the Company's proposal to assign a risk premium to Arizona Water based on its size relative to other publicly traded water utilities...." The Commission confirmed its previous ruling in Decision No. 64727[32] for Black Mountain Gas agreeing with Staff that "the 'firm size phenomenon' does not exist for regulated utilities, and that therefore there is no need to adjust for risk for small firm size in utility regulation." All companies have firm-specific risks; therefore, the existence of unique risks for a company does not lead to the conclusion that its total risk is greater than other entities. Moreover, as previously discussed, investors cannot expect compensation for firm-specific risk since it can be eliminated through diversification.

X. CONCLUSION

Q. Please summarize Staff's recommendations.

A. Staff recommends that the Commission adopt a 9.6 percent overall rate of return ("ROR") for the Company based on a capital structure composed of 0.0 percent debt and 100.0

---

[30] Michael A. Paschall and George B. Hawkins, "Do Smaller Companies Warrant a Higher Discount Rate for Risk?: The 'Size Effect' Debate," *CCH Business Valuation Alert*, Vol. 1, Issue No. 2, December 1999.
[31] Dated December 28, 2001.
[32] Dated April 17, 2002.

percent equity, Staff's 9.0 percent average DCF cost of equity estimate, and Staff's 60 basis point (0.60 percent) upward economic assessment adjustment.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Utility Source, LLC Cost of Capital Calculation
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Staff Recommended Structure			
Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	9.6%	9.6%
Weighted Average Cost of Capital			9.6%
Company Proposed Structure			
Debt	0.0%	0.0%	0.00%
Common Equity	100.0%	11.00%	11.00%
Weighted Average Cost of Capital			11.00%

[D] : [B] x [C]

Supporting Schedules: JAC-2, JAC-3 and JAC-4.

Intentionally left blank

Utility Source, LLC Cost of Capital Calculation
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]	[C]		[D]		[E]
DCF Method		D_1/P_0 [1]	+	g [2]	=	**k**
Constant Growth DCF Estimate		2.9%	+	5.7%	=	8.6%
Multi-Stage DCF Estimate					=	9.3%
Average DCF Estimate						**9.0%**
				Staff's Estimated Cost of Equity		**9.0%**
				Economic Assessment Adjustment		0.6%
				Sub-Total		**9.6%**
				Financial Risk Adjustment		0.0%
				Total		**9.6%**

1 MSN Money and Value Line

2 Schedule JAC-8

Utility Source, LLC Cost of Capital Calculation
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Debt	Common Equity	Total
American States Water	40.8%	59.2%	100.0%
California Water	47.2%	52.8%	100.0%
Aqua America	52.0%	48.0%	100.0%
Connecticut Water	50.8%	49.2%	100.0%
Middlesex Water	45.9%	54.1%	100.0%
SJW Corp	54.7%	45.3%	100.0%
York Water	44.2%	55.8%	100.0%
Average Sample Water Utilities	**47.9%**	**52.1%**	**100.0%**
Utility Source, LLC - Actual Capital Structure	**0.0%**	**100.0%**	**100.0%**

Source:
Sample Water Companies from Value Line

Utility Source, LLC Cost of Capital Calculation
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 2003 to 2013 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 2003 to 2013 EPS[1]	Earnings Per Share Projected EPS[1]
American States Water	5.6%	7.7%	15.2%	3.9%
California Water	1.3%	8.0%	4.9%	8.9%
Aqua America	7.6%	9.0%	9.7%	6.0%
Connecticut Water	1.7%	3.4%	3.7%	3.3%
Middlesex Water	1.5%	2.0%	5.4%	3.1%
SJW Corp	4.1%	5.2%	2.1%	8.7%
York Water	4.1%	6.0%	4.8%	8.0%
Average Sample Water Utilities	**3.7%**	**5.9%**	**6.5%**	**6.0%**

1 Value Line

Utility Source, LLC Cost of Capital Calculation
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 2003 to 2013 br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth 2003 to 2013 br + vs	Sustainable Growth Projected br + vs
American States Water	4.1%	5.6%	1.7%	5.8%	7.3%
California Water	2.6%	3.8%	3.1%	5.7%	6.9%
Aqua America	4.2%	6.0%	1.8%	5.9%	7.8%
Connecticut Water	2.1%	3.5%	3.5%	5.5%	7.0%
Middlesex Water	1.3%	2.8%	2.8%	4.1%	5.6%
SJW Corp	3.2%	3.6%	0.8%	4.1%	4.5%
York Water	2.2%	4.0%	4.5%	6.6%	8.5%
Average Sample Water Utilities	**2.8%**	**4.2%**	**2.6%**	**5.4%**	**6.8%**

[B]: Value Line
[C]: Value Line
[D]: Value Line, MSN Money, and Form 10-Ks filed with the Securities and Exchange Commission (http://www.sec.gov/)
[E]: [B]+[D]
[F]: [C]+[D]

Utility Source, LLC Cost of Capital Calculation
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 8/27/2014	Book Value	Mkt To Book	*Value Line* Beta β	Raw Beta βraw
American States Water	AWR	**32.26**	12.73	2.5	**0.70**	0.52
California Water	CWT	**24.22**	12.27	2.0	**0.70**	0.52
Aqua America	WTR	**24.73**	8.56	2.9	**0.70**	0.52
Connecticut Water	CTWS	**33.41**	16.42	2.0	**0.65**	0.45
Middlesex Water	MSEX	**20.48**	12.08	1.7	**0.70**	0.52
SJW Corp	SJW	**27.04**	15.63	1.7	**0.80**	0.67
York Water	YORW	**20.20**	8.28	2.4	**0.75**	0.60
Average				**2.2**	**0.71**	**0.54**

[C]: Msn Money

[D]: Value Line

[E]: [C] / [D]

[F]: Value Line

[G]: (-0.35 + [F]) / 0.67

Utility Source, LLC Cost of Capital Calculation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	3.7%
DPS Growth - Projected[1]	5.9%
EPS Growth - Historical[1]	6.5%
EPS Growth - Projected[1]	6.0%
Sustainable Growth - Historical[2]	5.4%
Sustainable Growth - Projected[2]	6.8%
Average	**5.7%**

1 Schedule JAC-5

2 Schedule JAC-6

Utility Source, LLC Cost of Capital Calculation
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Company	Current Mkt. Price (P_o)[1] 8/27/2014	Projected Dividends[2] (Stage 1 growth) (D_t) d_1	d_2	d_3	d_4	Stage 2 growth[3] (g_n)	Equity Cost Estimate (K)[4]
American States Water	32.3	0.86	0.91	0.96	1.01	6.5%	9.1%
California Water	24.2	0.66	0.70	0.74	0.78	6.5%	9.1%
Aqua America	24.7	0.64	0.68	0.72	0.76	6.5%	9.0%
Connecticut Water	33.4	1.05	1.11	1.17	1.24	6.5%	9.5%
Middlesex Water	20.5	0.77	0.81	0.86	0.91	6.5%	10.1%
SJW Corp	27.0	0.76	0.80	0.85	0.90	6.5%	9.2%
York Water	20.2	0.58	0.61	0.65	0.68	6.5%	9.3%
						Average	**9.3%**

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non – constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

1 [B] see Schedule JAC-7

2 Derived from Value Line Information

3 Average annual growth in GDP 1929 - 2012 in current dollars.

4 Internal Rate of Return of Projected Dividends

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF UTILITY SOURCE, LLC FOR AN INCREASE IN ITS WATER AND WASTEWATER RATES	DOCKET NO. WS-04235A-13-0331

DIRECT TESTIMONY

OF

MICHAEL THOMPSON, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 4, 2014

TABLE OF CONTENTS

EXHIBITS

INTRODUCTION

Q. Please state your name and business address.

A. My name is Michael Thompson. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a Utilities Engineer - Water/Wastewater in the Utilities Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since June 2013.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. As a Utilities Engineer, specializing in water and wastewater engineering, my responsibilities include: the inspection, investigation, and evaluation of water and wastewater systems; obtaining data, and preparing investigative reports; providing technical recommendations and suggesting corrective action for water and wastewater systems; and providing written and oral testimony in rate cases and other cases before the Commission.

Q. How many companies have you analyzed for the Utilities Division?

A. I have analyzed 12 companies covering various responsibilities for the Utilities Division Staff ("Utilities Staff" or "Staff").

Q. Have you previously testified before this Commission?

A. Yes, I have testified before this Commission.

Q. What is your educational background?

A. I graduated from the SUNY College of Environmental Science and Forestry ("ESF") at Syracuse, New York, and Syracuse University ("SU") at Syracuse, New York. I have a Bachelor of Science Degree in Pulp and Paper Engineering from ESF and Chemical Engineering from SU.

Q. Briefly describe your pertinent work experience.

A. Prior to my employment with the Commission, I was the Operations Engineer, from 2009 to 2012, for the Southwest and Central Districts of Golden State Water Company ("GSWC"), located in Gardena and Santa Fe Springs, California, respectively. As the Operations Engineer, I provided technical assistance and support to the districts' operations departments with primary focus on resolving operational problems and optimizing the efficiency of the water system operations. Prior to my employment with GSWC, I was employed with Chaparral City Water Company ("Chaparral"), from 2002 to 2009 as District Operations Engineer. While at Chaparral, I performed all capital, new business, and water quality activities within the district. I served as field engineer/construction manager for all capital and new business projects under construction. I also managed all water quality activities including monitoring, sampling, and reporting as required by 40 CFR (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

From 2000 to 2002, I was employed with the Fountain Hills Sanitary District as Engineering Assistant. I performed plan review of all commercial and residential projects in the Town of Fountain Hills, and managed the district's construction projects.

From 1996 to 2000, I was employed as an Environmental Engineering Specialist with the Arizona Department of Environmental Quality ("ADEQ"). During that time period, I

performed operations and maintenance site inspections of public water systems in Gila, LaPaz, Mohave, and Southwestern Yavapai Counties.

Q. Please state your professional membership, registrations, and licenses.

A. I am registered as a Professional Engineer (Civil) in the State of Arizona, and a Grade 2 Certified Water Treatment Plant Operator, and a Grade 3 Certified Water Distribution System Operator. I am a member of the American Water Works Association and Arizona Water Association.

PURPOSE OF TESTIMONY

Q. What was your assignment in this rate proceeding?

A. My assignment was to provide Staff's engineering evaluations for the Utility Source, LLC ("Utility Source" or "Company") rate proceedings.

Q. What is the purpose of your testimony in this proceeding?

A. To present the findings of Staff's engineering evaluation of the operations for Utility Source. I visited the Utility Source water and wastewater systems on November 7, 2013. The findings are contained in the Engineering Report that I have prepared for this proceeding. The report is included as Exhibit MT-1 to this pre-filed testimony.

ENGINEERING REPORT

Q. Please describe the attached Engineering Report, Exhibit MT-1?

A. Exhibit MT-1 presents the details and Staff's analysis and findings for Utility Source's water and wastewater systems, and is attached to the direct testimony. Exhibit MT-1 contains the following major topics: 1) Introduction and Location of the Utility Source Water and Wastewater Systems, 2) Description of the Water and Wastewater Systems, 2) Water and

Wastewater Use, 3) Growth, 4) Compliance Status with ADEQ, the Arizona Department of Water Resources, and the Commission, 5) Depreciation Rates, and 6) Other Issues.

Q. Was the Engineering Report prepared by you?

A. Yes.

CONCLUSIONS AND RECOMMENDATIONS

Q. What are Staff's conclusions and recommendations regarding the operations of Utility Source's Water and Wastewater Systems?

A. Staff's conclusions and recommendations regarding the Utility Source Water and Wastewater System operations are listed as follows:

Conclusions:

1. The Commission Utilities Staff concludes that the Utility Source water system has adequate production and storage capacity to serve the present customer base and reasonable growth.

2. Staff concludes that the Utility Source wastewater system has adequate capacity to serve the current customer base and reasonable growth.

3. Arizona Department of Environmental Quality ("ADEQ") regulates the Utility Source water system, known as Flagstaff Meadows, under ADEQ Public Water System Identification ("PWS ID") No. 03-300. According to ADEQ Drinking Water Compliance Status Report ("CSR"), dated March 25, 2014, ADEQ has determined that the Flagstaff Meadows PWS is currently delivering water that meets water quality

standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

4. According to ADEQ Wastewater Compliance Status Report ("CSR"), dated July 15, 2014, ADEQ has determined that Flagstaff Meadows WWTP is currently in compliance.

5. The Utility Source water system is not located within an ADWR Active Management Area ("AMA").

6. The Arizona Department of Water Resources ("ADWR") has reported that Utility Source is currently compliant with departmental requirements governing water providers and/or community water systems.

7. According to the Utilities Division Compliance Section database Utility Source currently has no delinquent Commission compliance items.

8. Utility Source has approved Curtailment and Backflow Tariffs on file with the Commission.

9. Staff concludes that Deep Well No. 4 is currently in operation for occasional use, but is technically not needed to serve the test year customers.

Recommendations:

1. Staff recommends an annual water testing expense of $1,470 presented in Table C be used for purposes of this application (See Section F. ADEQ Compliance).

2. Staff recommends an annual wastewater testing expense of $14,527 presented in Table D be used for purposes of this application (See Section F. ADEQ Compliance).

3. Staff recommends that Utility Source use the water and wastewater depreciation rates presented in Tables E and F, respectively. (See Section I. Depreciation Rates).

4. Staff recommends that the meter and installation charges listed under "Staff's Recommendation" in Table G be adopted (See Section J. Other Issues).

5. Staff recommends approval of the five (5) BMP Tariffs selected, attached hereto as Exhibit A. Staff further recommends that Utility Source notify its customers, in a form acceptable to Staff, of the BMP Tariffs approved by the Commission and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP Tariffs to any customer upon request. Staff will file a letter in the Docket confirming that Utility Sources' tariffs have been updated with the tariffs approved by the Commission. The tariffs shall go into effect 30 days after the date notice is sent to customers. Utility Source may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

6. Staff recommends that Utility Source, LLC file with Docket Control, as a compliance item in this docket by September 30, 2015, documentation that construction of the Deep Well No. 2 security fence has been completed and the security gate has been installed.

7. Staff recommends that Utility Source be held to the following conditions should the Commission approve the removal of the costs associated with Deep Well No. 4 from rate base: 1) Utility Source must obtain approval from the Commission prior to selling Deep

Well No. 4 and 2) Utility Source is not allowed to require a developer to pay for the construction of a new well.

8. Staff recommends that the Company file with Docket Control, as a compliance item in this docket by September 30, 2015, documentation demonstrating that the repair of the waste water treatment plant mixed media filter has been completed and has been placed in operation.

9. Staff recommends that Utility Source file with Docket Control, as a compliance item in this docket, by July 31, 2015, a copy of the approved ADEQ AZPDES permit.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

ENGINEERING REPORT FOR
Utility Source, LLC

Docket No. WS-04235A-13-0331 (Rates)

By Michael Thompson, P. E.

July 15, 2014

TABLE OF CONTENTS

A. INTRODUCTION AND LOCATION OF COMPANY

On September 27, 2013, Utility Source, LLC ("Utility Source" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") to increase its rates (Docket No. WS-04235A-13-0331). Utility Source's current rates were approved in Commission Decision No. 70140, dated January 23, 2008.

On January 9, 2014, Utility Source filed an Amended Rate Application in response to issues raised upon review of the original rate application.

On March 6, 2014, the Commission's Utilities Division Staff ("Utilities Staff" or "Staff") filed a letter of Sufficiency indicating that Utility Source's application met the sufficiency requirements and was classified as a Class C Utility.

The Staff engineering review and analysis of the pending rate application is presented in this report.

Utility Source is a Class C utility company that provides public utility water and wastewater service to approximately 331 metered connections.[1] The Utility Source water and wastewater systems serve a residential community (Flagstaff Meadows I & II, and Flagstaff Meadows Townhomes I), a Hotel, a Fire Department Station, a Trailer Park, and a Truck Stop ("Pilot Travel Center"). The water and wastewater systems are located north of Interstate 40 approximately eleven (11) miles west-northwest of Flagstaff, Arizona near the Town of Bellemont, Arizona in Coconino County. The location of Utility Source and the area covered by its Water and Wastewater Certificate of Convenience and Necessity ("CC&N") are shown in Figures 1 and 2, respectively. The original Water and Wastewater CC&N currently covering approximately 672 acres, was granted in Commission Decision No. 67446 dated January 4, 2005.

B. DESCRIPTION OF THE WATER AND WASTEWATER SYSTEMS[2]

The Utility Source water and wastewater systems, known as Flagstaff Meadows Water and Wastewater Systems, were visited on November 7, 2013, by Staff member Michael Thompson. Mr. Thompson was accompanied by Staff members Mr. Jorn Keller, Ms. Teresa Hunsaker, and Briton Baxter, and company representatives Mr. Lonnie McCleve, and Mr. Jeremy McCaleb. Mr. McCleve is the owner of the company, and Mr. McCaleb is currently the on-site manager and certified operator handling the day-to-day operations of the water and wastewater systems.[3]

---

[1] Per plant data submitted with the application.

[2] The description of the water and wastewater systems are based on one, or a combination of, the following sources: 1) Company's Application, 2) Information contained in the Company's Response to Staff Data Requests and, 3) Information collected during Staff's site visit.

[3] Mr. McCaleb is a Certified Grade 2 Water Distribution System Operator, a Grade 2 Water Treatment Plant Operator, a Grade 3 Wastewater Treatment Plant Operator, and a Grade 3 Wastewater Collection System Operator. Mr. McCaleb's ADEQ Operator Identification No. is OP022972.

Flagstaff Meadows Water System

The water system is a groundwater-based system consisting of five (5) active wells, four (4) inactive wells, two (2) storage tanks, two (2) 15 horsepower (hp) booster pumps with variable frequency drives ("VFDs"), one (1) 75 hp emergency fire booster pump, one (1) 200 gallon pressure tank, an emergency power back-up generator, a booster pump house, thirty four (34) standard fire hydrants, approximately 21,353 linear feet ("lf") of 6, 8, and 12 inch polyvinyl chloride ("PVC") water main pipe, and 331 metered connections.

The in-service plant facilities (i.e., active wells, tanks, pumps, and visible pipe) within the service area appeared to be in proper working order, properly maintained, and in good condition. Staff did not observe any leaks at the active well sites, tanks, or in the distribution system. However, construction of the Deep Well No.2 Site security fence (block wall) and gate was incomplete leaving the site vulnerable to intruders. Staff recommends that Utility Source, LLC file with Docket Control, as a compliance item in this docket by September 30, 2015, documentation that construction of the Deep Well No. 2 security fence has been completed and the security gate has been installed.

Three (3) of the five (5) active wells, Deep Wells No. 1, 2, & 3, pump water directly to the two (2) storage tanks. The three (3) deep wells are the primary sources of water for the water system. The Deep Well No. 1 Site is located east of the Pilot Truck Center, and adjacent to and north of the hotel. The Deep Well No. 2 Site is located adjacent to and west of the Pilot Truck Center at Brannigan Park Road. Two (2) storage tanks, booster pump house, and the emergency power back-up generator are located at the Deep Well No. 2 Site. The Deep Well No. 3 Site is located adjacent to and west of the Deep Well No. 2 Site. The Deep Well No. 4 Site is located northeast of the Flagstaff Meadows Townhomes and adjacent to the trailer park. Deep Well No. 4 produces water at a rate of approximately 280 gallons per minute ("gpm"), and is the largest water producer of the four active wells. The well is connected to the water distribution system and when utilized pumps water to both the distribution system and the storage tanks. The well is primarily utilized to provide additional production if and when needed. Water leaving any of the four (4) wells is not chlorinated; however, sodium hypochlorite tablets are inserted into the storage tanks to chlorinate the water prior to entering the distribution system. If necessary, water pumped from Deep Well No. 4 can be chlorinated prior to entering the distribution system. Shallow Well No. 2 pumps water directly to the storage tanks and is capable of producing approximately 10 gpm.

The water system currently has four (4) inactive wells identified as Shallow Wells No. 1, 3, 4, & 5. The four (4) inactive wells have not been operational for several years. The plumbing and electrical connections on each well have been disconnected.

Disinfected water from the storage tanks is pressurized and pumped into the distribution system via a booster pump system consisting of two (2) 15 horsepower ("hp") booster pumps with VFDs, and a 200 gallon pressure tank. The booster pumps and pressure tank are located in the booster pump house. In the event of a fire or dramatic loss of system pressure a 75 hp emergency booster pump, also located within the booster pump house, functions automatically to provide the required flow and pressure should the 15 hp booster pumps be unable to meet the flow and pressure demand.

A standby 120 kilowatt ("kW") emergency back-up generator, located in the booster pump house, is capable of providing emergency power to the booster pumps should the water system experience a power outage.

A detailed listing of the Flagstaff Meadows Water System plant facilities is included in Table A, and a schematic and overhead photo of the service area are illustrated in Figures 3 and 4, respectively.

Table A. Water System Plant Facilities Summary[4]

Well Data								
Well ID	Operating Status	ADWR Well ID No.	Pump (hp)	Pump Yield (gpm)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Year Drilled
Deep Well No. 1	Active	55-593267	10	11	1,947	8	¾	2002
Deep Well No. 2	Active	55-598834	50	23	2,100	8	1	2003
Deep Well No. 3	Active	55-203241	125	72	2,801	10	2	2004
Deep Well No. 4	Active	55-206887	210	280	2,900	10	4	2005
Shallow Well No. 1	Inactive	55-515324	1	5	105	8	¾	1987
Shallow Well No .2	Active	55-503545	1	10	215	7	¾	1982
Shallow Well No. 3	Inactive	55-559096	2	7	240	6	¾	1997
Shallow Well No. 4	Inactive	55-564258	2	12	300	7	NA	1998
Shallow Well No. 5	Inactive	55-598623	2	10	300	6	NA	2004

Water Storage, Booster Pumps, & Structures			
Structure or Equipment	Location	Quantity	Capacity / Size
Storage Tank No. 1	Deep Well No. 2 Site	1	260,000 Gallons
Storage Tank No. 2	Deep Well No. 2 Site	1	420,000 Gallons
Booster Pumps*	Deep Well No. 2 Site	2	15 Horsepower (hp)
Emergency Fire Booster Pump*	Deep Well No. 2 Site	1	75 Horsepower (hp)
Emergency Power Back-up Generator*	Deep Well No. 2 Site	1	120 kilowatts (kW)
Pressure Tank*	Deep Well No. 2 Site	1	200 Gallons
Booster Pump House	Deep Well No. 2 Site	1	Approximately 15 feet x 30 feet
Security Fence – Cinder Block Wall[1]	Deep Well No. 2 Site	1	Approximately 400 feet in Length

*Indicates equipment is housed in the Operations Building located at the Deep Well No. 2 Site. Deep Well No. 2 Site is located adjacent to and west of the Pilot Truck Center at Brannigan Park Road.
[1]At the time of the inspection of the water system construction of the security fence (block wall) and gate was incomplete.

Service Areas Distribution Mains		
Diameter (inches)	Material	Length (feet)
6	PVC – C900	900
8	PVC – C900	14,563
12	PVC – C900	5,890
	Total Length	21,353

Note: PVC is poly vinyl chloride pipe used in water distribution systems and in general construction.

[4] The information listed was based on one, or a combination of, the following sources: 1) Company's Application, 2) Commission Annual Reports, 3) Arizona Department of Water Resources Records, 4) Information contained in the Company's response to a Staff Data Requests and, 5) Information collected during Staff's site visit.

Service Areas Meters	
Size	Quantity
3/4 inch	328
2	4
Total Quantity	332

Service Area Fire Hydrants	
Size/Description	Quantity
Standard	34

Flagstaff Meadows Wastewater System

The wastewater system consists of an extended aeration wastewater treatment plant ("WWTP"), an inactive single batch extended aeration treatment plant, a facility building, an emergency back-up power generator, two (2) wastewater effluent lakes, one (1) decorative pond, two (2) lift stations, and a collection system providing service for 332 wastewater service lateral connections. The wastewater system provides service for the Pilot Truck Center, hotel, fire station, single family residences, and townhomes. The WWTP, constructed by SANTEC Corporation, is an activated sludge process with nitrification/de-nitrification capable of treating approximately 100,000 gallons of wastewater per day.[5] The in-service wastewater plant facilities (i.e., tanks, pumps, and visible pipe) within the service area appeared to be in proper working order, properly maintained, and in good condition. Staff did not observe any leaks at the WWTP, lift stations, manholes, or collection system.

Wastewater from the Pilot Truck Center and hotel flows to a 1,500 gallon lift station located at the Deep Well No. 2 Site. The wastewater is pumped from the lift station, via one (1) of two (2) 1.5 hp booster pumps, to a manhole located near the Pilot Truck Center. The wastewater then flows from the manhole, via gravity, to the collection main system combining with wastewater from the fire station, single family residences, and the townhomes, and ultimately arriving at the WWTP's 8,000 gallon lift station.

From the WWTP lift station, the wastewater ("influent") is pumped, via one (1) of two (2) 3.0 hp booster pumps, to the WWTP flow equalization tank. The flow equalization tank evens out the load on the treatment plant during periods of high and low influent flow providing comprehensive control over plant operations and resulting in consistent treatment levels. The influent flows, via gravity, from the equalization tank through the treatment plants seven (7) stage process (step feed system) which includes aeration, anoxic, denitrification, clarification, filtration, chlorination, and dechlorination. After the clarification process, the influent flows from the clarifier to a filter lift station. Normally, the influent is then pumped from the filter lift station through a mixed media filter and on to the chlorine contact tank. However, the mixed media filter is currently offline due to operational issues and is being bypassed. Consequently, influent is currently pumped directly from the filter lift station to the chlorine contact tank. From the chlorine contact tank, the influent flows through a dechlorination tablet feeder, where it is then discharged as treated wastewater ("effluent") to Effluent Lake 2. Staff recommends that the Company file with Docket

[5] The WWTP was designed by Curtis Engineering per its design report dated April 30, 2004.

Control, as a compliance item in this docket by September 30, 2015, documentation demonstrating that the repair of the waste water treatment plant mixed media filter has been completed and has been placed in operation.

Sludge generated from the WWTP process is stored in three (3) sludge holding tanks. The WWTP sludge handling system consists of two (2) sludge holding tanks with capacities of approximately 22,000 gallons and 3,500 gallons. The third sludge holding tank is the inactive single batch treatment plant which has a capacity of approximately 37,500 gallons. Together the three tanks provide a total holding capacity of approximately 63,000 gallons. Sludge removed from the holding tanks is transported to the City of Flagstaff's sludge handling facility by an independent sludge hauler contracted by Utility Source.

A standby 120 kW emergency back-up generator, located outside the facility building, is capable of providing emergency power should the wastewater treatment plant experience a power outage.

A detailed listing of the Flagstaff Meadows Wastewater System plant facilities is included in Table B, and a schematic of the WWTP and overhead photo of service area are illustrated in Figures 5 and 6, respectively.

Table B. Wastewater System Plant Facilities Summary[6]

Flagstaff Meadows Wastewater Treatment Plant Extended Aeration (100,000 gpd) Shadow Mountain Drive, Bellemont, Arizona		
Tanks	Capacity (Gallons)	Purpose
Flow Meter (Mag)	N/A	Measures hydraulic flow into the treatment plant.
Comminutor	N/A	Shredder that reduces solids in the influent to manageable sizes.
Flow Equalization	28,562	Evens out the load on the treatment plant during periods of high and low influent flow.
Anoxic	10,580	Devoid of Oxygen. Used for the removal of Nitrogen by microorganisms.
Aeration 1	39,427	Adds air for microorganisms treating the influent.
Aeration 2	39,427	Adds air for microorganisms treating the influent.
Denitrification	10,580	Aerobic process in which Ammonia and Nitrogen are changed to Nitrogen gas and then vented to the atmosphere.
Reaeration/Clarification	Combined Tank 10,511 / 17,345	Settling tank for separating heavy and light solids in the influent. Heavier solids (activated sludge) settle to the bottom of the tank, while lighter solids float to the surface for removal. Heavier solids are pumped to aeration or the sludge tanks.
Filter Lift Station	3,320	Pumps treated influent to the filter and chlorinator.
Filter – Mixed Media	N/A	Removes remaining suspended solids before disinfection.

[6] The information listed was based on one, or a combination of, the following sources: 1) Company's Application, 2) Commission Annual Reports, 3) Santec Corporation, 4) Information contained in the Company's response to a Staff Data Requests and, 5) Information collected during Staff's site visit.

(Inactive)		
Chlorinator	3,448	Used to chlorinate the influent for disinfection.
Sludge 1	21,928	Storage of heavier solids that are transported to a sludge waste facility.
Sludge 2	3,500	Storage of heavier solids that are transported to a sludge waste facility.
Single Batch Treatment Plant	37,500	Inactive Plant. Currently used for sludge storage.

Lift Stations					
Lift Station	Location	Quantity of Pumps	Pump (hp)	Pump Capacity (gpm)	Capacity
Pilot Truck Center & Hotel	Deep Well No. 2 Site	2	1.5	50	1,500 Gallons
Treatment Plant	Wastewater Treatment Plant	1	3.0	150	8,000 Gallons

Equipment & Structures			
Equipment / Structure	Location	Quantity	Capacity / Size
Emergency Power Back-up Generator	Wastewater Treatment Plant	1	120 kW
Flow Meter (Mag)	Wastewater Treatment Plant	1	N/A
Facility Building	Wastewater Treatment Plant	1	17.5 feet x 40 feet 700 square feet
Mixed Media Filter (Inactive)	Wastewater Treatment Plant	1	
Air Blowers	Wastewater Treatment Plant Facility Building	2	40 Horsepower (hp)
Security Fence – Cinder Block Wall	Wastewater Treatment Plant	1	376 feet in length 6 feet high

Force & Collection Mains			
Type	Material	Size (inch)	Length / Quantity
Force Main	SDR – 35 PVC Pipe	4	2,200 feet
Collection Main	SDR – 35 PVC Pipe	8	16,224 feet
Collection Main	SDR – 35 PVC Pipe	12	360 feet
Lateral – Service Line	SDR – 35 PVC Pipe	4	328
Lateral – Service Line	SDR – 35 PVC Pipe	6	4

SDR – Standard Dimension Ratio is a method of rating pressure piping by using the ratio of pipe diameter to wall thickness.
PVC – Polyvinyl Chloride

Manholes & Cleanouts	
Type	Quantity
Manhole - Standard	60
Cleanouts	1

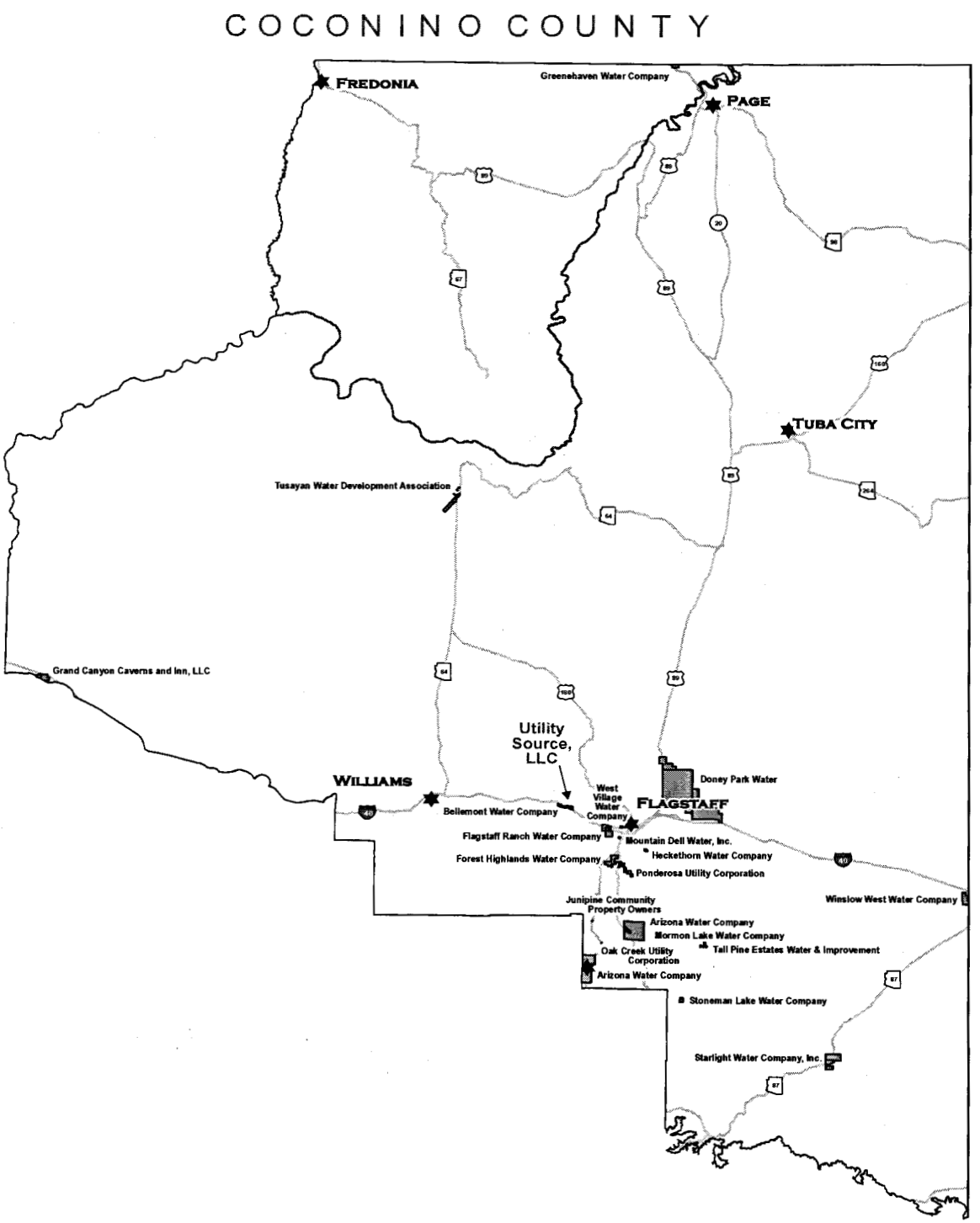


Figure 1. County Map

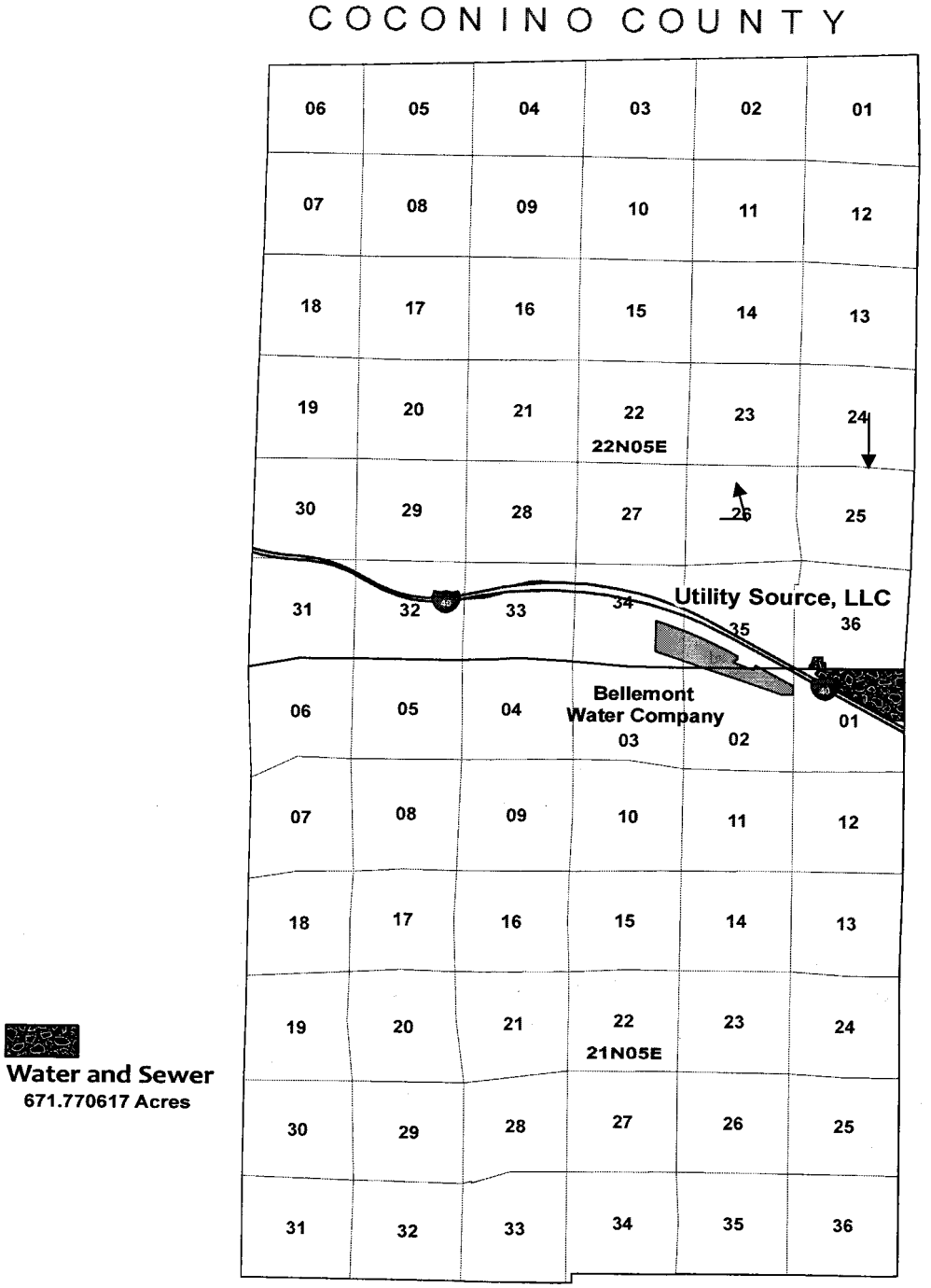


Figure 2. Certificated Area

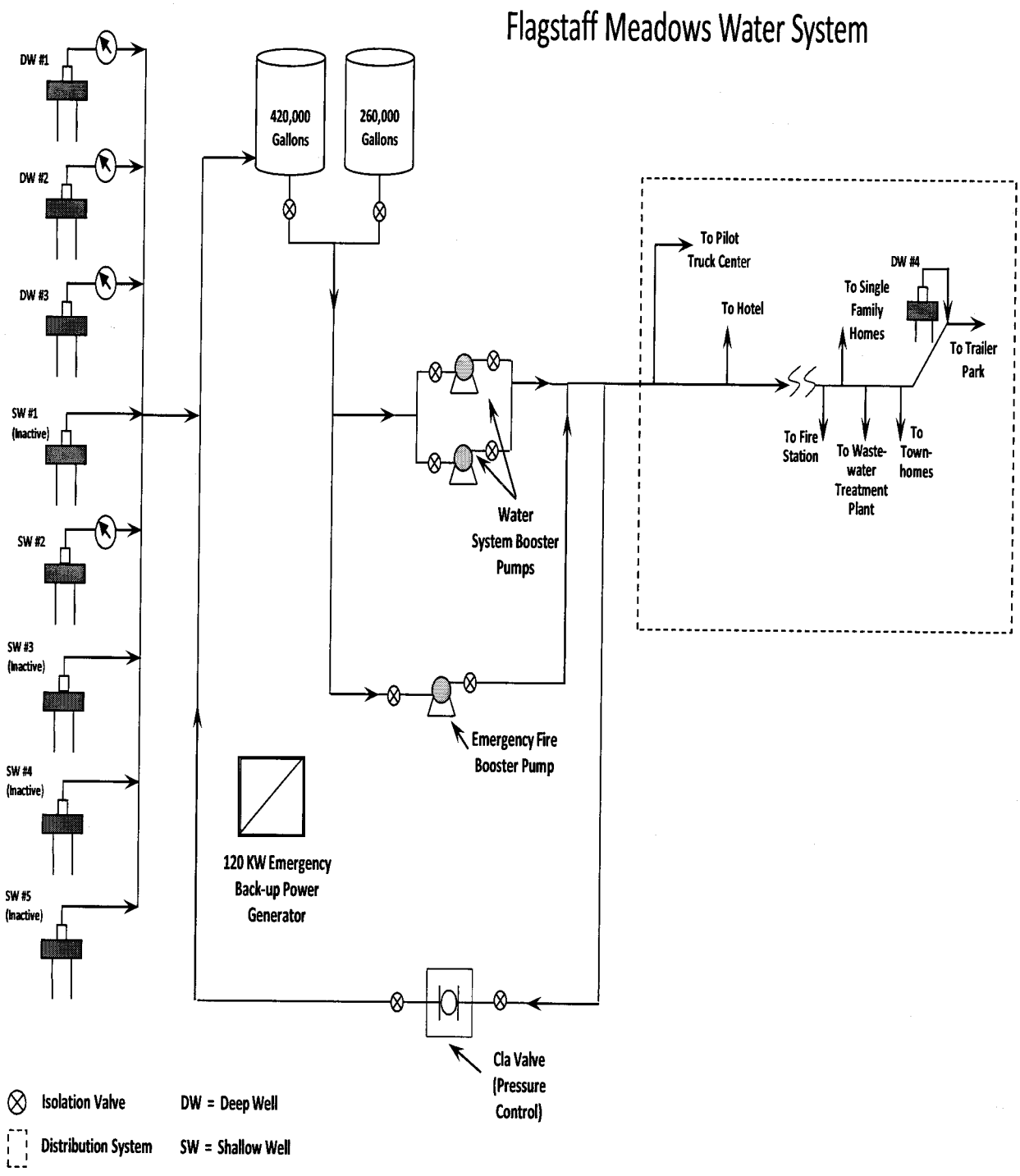


Figure 3. Flagstaff Meadows Water System Schematic

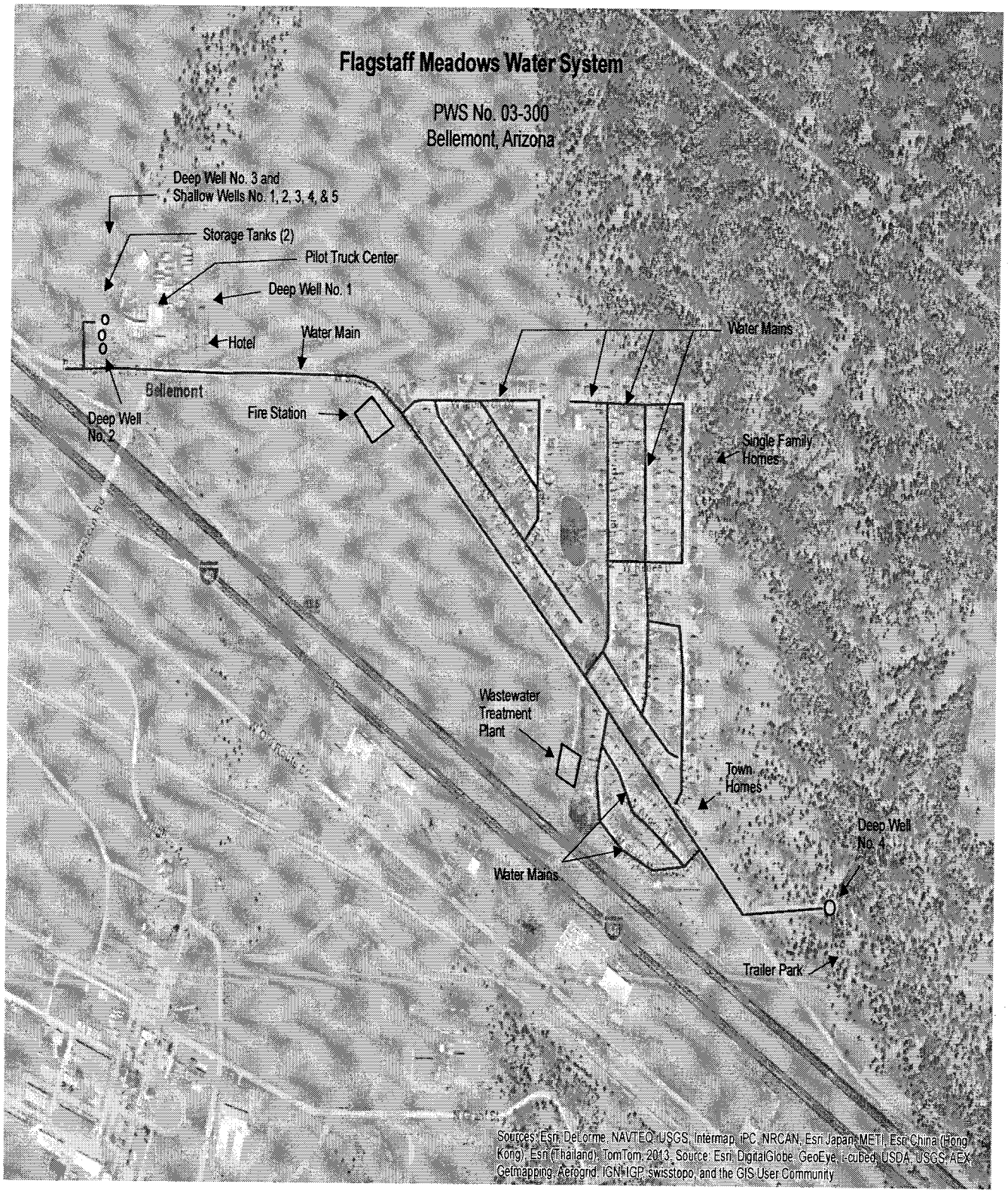


Figure 4. Flagstaff Meadows Water System – Overhead Photo

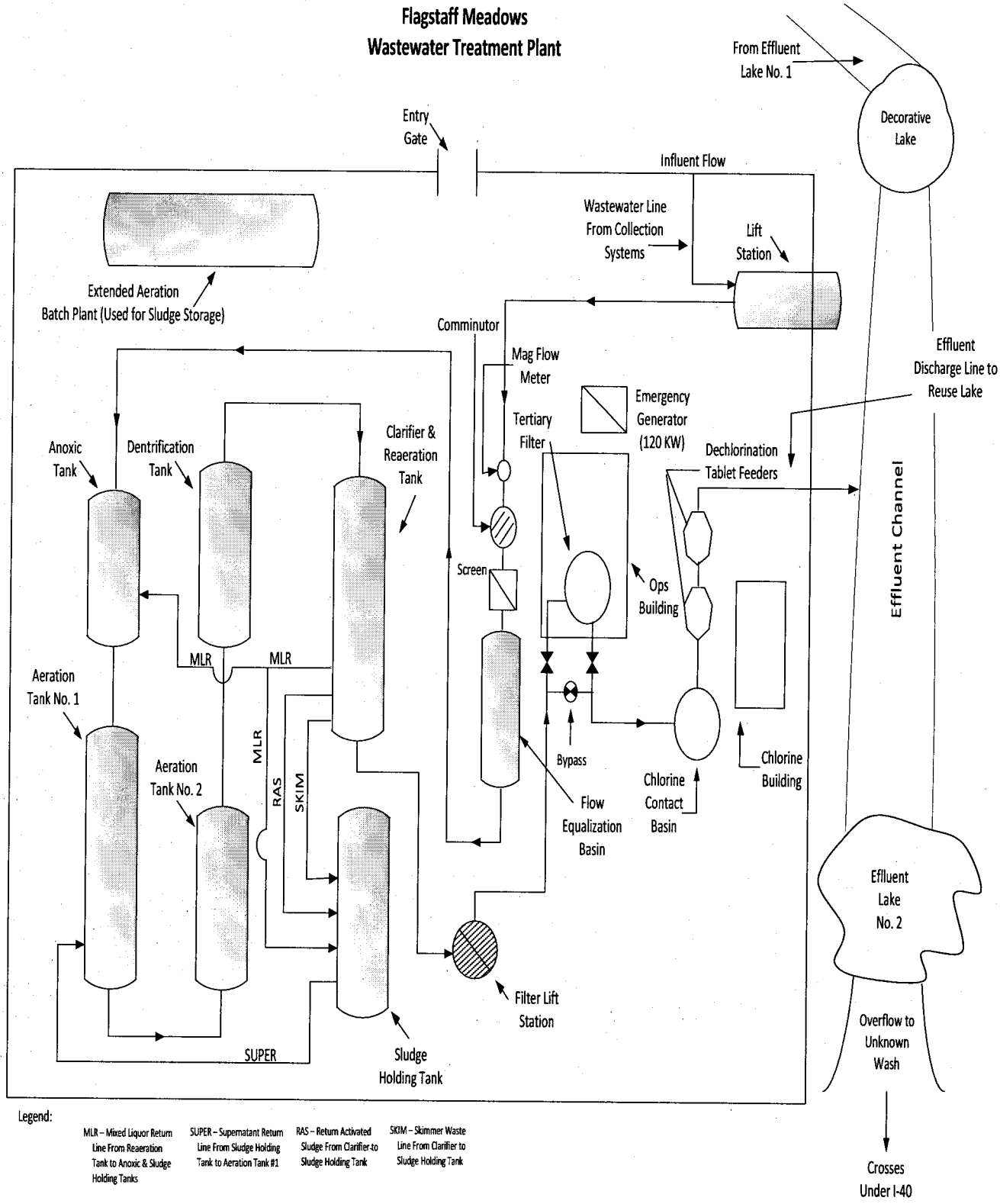


Figure 5. Flagstaff Meadows Wastewater Treatment Plant Schematic

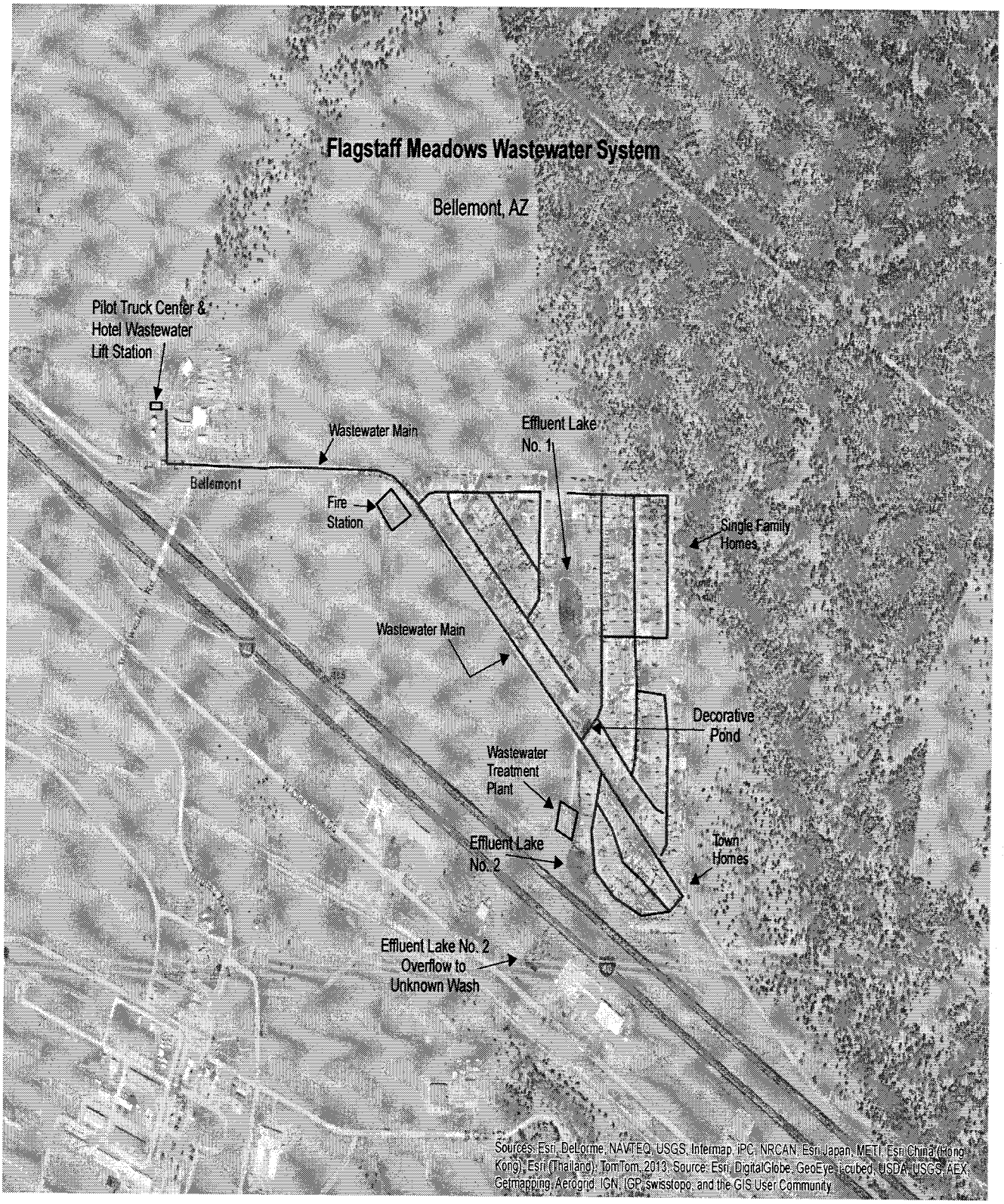


Figure 6. Flagstaff Meadows Wastewater System – Overhead Photo

C. WATER USE

Water Sold

Figure 5 represents the water consumption data for the Flagstaff Meadows water system provided by Utility Source for the test year ending December 31, 2012. Customer consumption included a high monthly water use of 306 gallons per day ("gpd") per connection (332 connections) in July, and a low water use of 127 gpd per connection (332 connections) in May. The average daily demand during the twelve-month period was approximately 167 gpd per connection. Utility Source reported 20,309,000 gallons of water sold during the test year.[7]

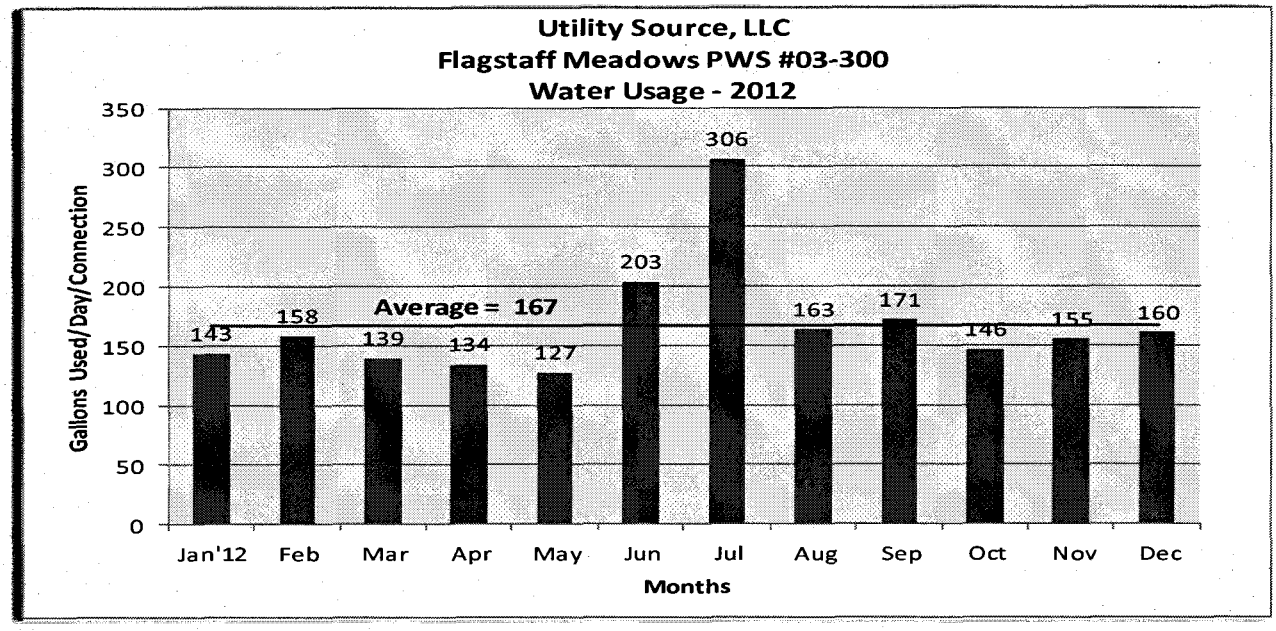


Figure 5. Water Use

Non-accounted For Water

Utility Source reported 21,368,000 gallons of water pumped and 20,309,000 gallons of water sold, during the test year ending December, 2012, resulting in a water loss of 4.95 percent, which is within acceptable limits.

System Analysis

The total well production capacity of Utility Source's four (4) active wells is approximately 386 gpm (555,840 gpd). The Flagstaff Meadows water system has a total of two (2) storage tanks providing a total storage capacity of 680,000 gallons. There are 34 fire hydrants in the distribution systems. The fire flow requirement is 1,000 gpm with a minimum duration of 2 hours.

[7] Total water sold during the test year is based on the monthly data from the meter reads as reported in the Utility Source 2012 Annual Report Water Statistics.

During the peak month, July 2012, the water system was serving 332 connections when Utility Source reported 3,151,000 gallons of water sold. Average daily demand for the month of July 2012 was determined to be 101,645 gpd. Staff concludes that the Flagstaff Meadows water system has adequate production and storage capacity to serve the current customer base and reasonable growth.

D. WASTEWATER USE

Wastewater Flows

Figure 6 represents the wastewater flow data, provided by Utility Source, for wastewater flow to the Flagstaff Meadows WWTP for the test year ending December 31, 2012. Customer wastewater flow included a high monthly flow of 207 gpd per connection (332 connections) in August, and a low flow of 144 gpd per connection (332 connections) in November. The average daily wastewater flow during the twelve-month period was approximately 172 gpd per connection. Utility Source reported 20,920,807 gallons of wastewater discharged to the treatment plant during the test year.[8]

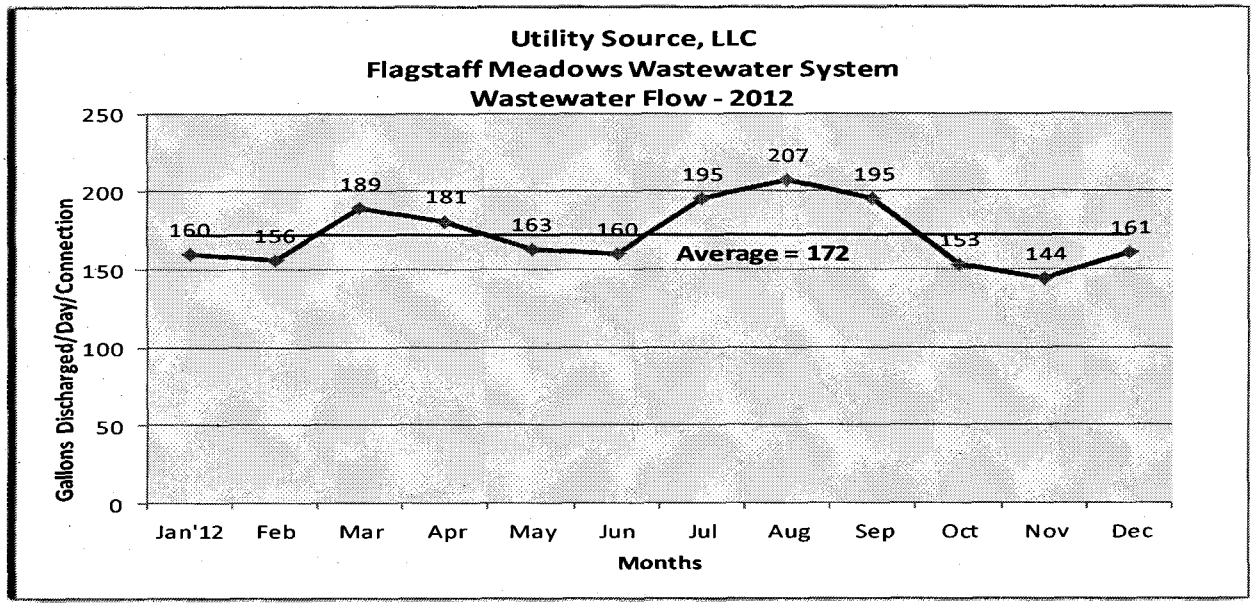


Figure 6. Wastewater Flow

System Analysis

The WWTP is an activated sludge process with nitrification/de-nitrification capable of treating approximately 100,000 gallons of wastewater per day.

[8] Total wastewater flow during the test year is based on the monthly data from the wastewater treatment plant meter reads as reported in the Utility Source 2012 Annual Report Wastewater Statistics.

During the peak month, August 2012, Utility Source reported that the WWTP received 2,131,347 gallons of wastewater, and a peak flow of 80,568 gallons. Average daily flow for the month of August 2012 was determined to be 68,753 gpd.

Staff concludes that the Flagstaff Meadows wastewater treatment plant has adequate capacity to serve the current customer base and reasonable growth.

E. GROWTH[9]

The Flagstaff Meadows community was developed in 2004. Utility Source reported approximately 231 metered connections served in December 2004. In 2005, metered connections increased to approximately 330. From 2006 to 2012, metered connections increased to and have remained at 332. Attempts have been made by developers to develop two (2) parcels of land adjacent to the Flagstaff Meadows single family residential development and the WWTP with little success. Currently, the development of one (1) parcel located adjacent to and west of the Flagstaff Meadows single family residential development is in dispute over a bond issue between the developer and Coconino County. Until that dispute is resolved, Utility Source does not anticipate a change in its customer base for the next three (3) to five (5) years.

F. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance - Water

ADEQ regulates the Flagstaff Meadows water system under ADEQ Public Water System Identification ("PWS ID") No. 03-300. ADEQ inspected the Flagstaff Meadows water system on December 28, 2011. During the inspection no major deficiencies were found in the operation, maintenance, or certified operator status of the water system.

According to ADEQ Drinking Water Compliance Status Report ("CSR"), dated March 25, 2014, ADEQ has determined that Flagstaff Meadows PWS is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

Water Testing Expenses

In addition to Total Coliform and Lead & Copper testing, the Flagstaff Meadows water system is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). Utility Source reported water testing expenses of $1,332 (including the MAP fee) during the test year. The monitoring and testing expenses that were reviewed, evaluated, and recalculated by Staff are represented in Table C. Staff recommends an annual water testing expense of $1,470 to be used for purposes of this application.

[9] Staff's historical growth figures are based on the data reported by Utility Source in their annual reports submitted to the commission.

Table C. Flagstaff Meadows Water Testing Costs

Monitoring	Cost per Test	Quantity of Tests per 3 Years	3 Year Testing Costs	Annual Costs
Total Coliform	$20	36[1]	$720	$240
Lead & Copper	$40	10[2]	$400	$134
MAP – IOCs, SOCs, VOCs, Nitrate, Nitrite, Asbestos, and Radiochemicals	MAP	MAP[3]	N/A	$1,096
Total Cost	-	-	$4,408	$1,470

[1]Assumes one (1) Total Coliform test to be conducted each month (based on point of entry). [2]Assumes Lead & Copper testing will remain at ten (10) tests triennially. [3]The ADEQ MAP invoice for Calendar Year 2012 was $1,095.53. IOCs, SOCs, and VOCs represent Inorganic Contaminants, Synthetic Organic Contaminants, and Volatile Organic Contaminants, respectively.

Compliance – Wastewater

ADEQ inspected the Flagstaff Meadows wastewater system on December 28, 2011. During the inspection no major deficiencies were found in the operation, maintenance, or certified operator status of the wastewater system.

According to ADEQ Wastewater Compliance Status Report ("CSR"), dated July 15, 2014, ADEQ has determined that Flagstaff Meadows WWTP is currently in compliance.

The Flagstaff Meadows WWTP is regulated by ADEQ under the following permits:

Aquifer Protection Permit ("APP") No. P-104083

ADEQ uses APPs to safeguard Arizona's waters that are affected by pollutants that come from an identifiable source. The intention of the permit is to prevent further degradation of an aquifer at a point of compliance by any person/company that operates categorical discharging facilities. An APP is required of facilities that discharge a pollutant either directly to an aquifer, to the land surface, or to a vadose zone (the area between an aquifer and the land surface) in such a manner that there is a reasonable probability that the pollutant will reach an aquifer. The facilities include domestic wastewater treatment plants, mining operations, industrial facilities, on-site sewage disposal systems, direct reuse of reclaimed water and stormwater discharges associated with industrial activity as well as discharges to drywells.

On March 25, 2005, ADEQ issued APP No. P-104083 authorizing Utility Source to operate the Flagstaff Meadows WWTP at a rate of 100,000 gpd. The permit is valid for the life of the facility (operational, closure, and post closure). Effluent generated from the WWTP is discharged into an unnamed wash tributary to Volunteer Wash which is a tributary to the Verde River in Coconino County, Arizona.

Arizona Pollutant Discharge Elimination System ("AZPDES") Permit No. AZ-0024708

Under the AZPDES Permit Program, all facilities that discharge pollutants from any point source into waters of the United States (navigable waters) are required to obtain or seek coverage

under an AZPDES permit. AZPDES Permit No. AZ-0024708 was issued to Utility Source by ADEQ on July 24, 2008. The permit authorizes the Flagstaff Meadows WWTP to discharge 125,000 gpd of treated domestic wastewater ("treated effluent") to the unnamed wash, tributary to Volunteer Wash. The unnamed wash, located to the east of and adjacent to the WWTP, discharges treated effluent in a downstream pond (Lake 2) located to the south and east of the WWTP. Any overflow from Lake 2 discharges to the unnamed wash, which continues southward under Interstate 40 ("I-40"). During normal operation treated effluent in Lake 2 is pumped to Lake 1, located northwest of the WWTP in the Flagstaff Meadows development. The majority of the treated effluent in Lake 1 is reused as irrigation for the soccer field and common areas in the Flagstaff Meadows development. Any excess treated effluent in Lake 1 is recirculated back to Lake 2.

AZPDES permits are issued for only five (5) years, and on July 24, 2013 Utility Sources AZPDES permit expired. As required, Utility Source submitted a renewal application. ADEQ has administratively continued the permit, allowing Utility Source to operate during the renewal application process, and to remain in compliance. ADEQ has indicated that the permit renewal process, which includes a review of the application and the issuing of a new AZPDES permit, usually takes from 1 to 2 years. Staff recommends that Utility Source file with Docket Control, as a compliance item in this docket, by July 31, 2015, a copy of the approved ADEQ AZPDES permit.

Wastewater Testing Expenses

Utility Source reported wastewater testing expenses of $14,375 during the test year. The monitoring and testing expenses that were reviewed, evaluated, and recalculated by Staff are represented in Table D. Staff recommends an annual wastewater testing expense of $14,527 to be used for purposes of this application.

Table D. Flagstaff Meadows Wastewater Testing Costs

Monitoring	Testing Cycle[1]	Cost per Test	Quantity of Tests taken during the Testing Cycle	Quantity of Tests per Year	Annual Costs
Fecal[2]	Weekly	$25	4	208	$5,200
Biological Oxygen Demand-5 (BOD-5) (Influent & Effluent)	Monthly	$55	2	24	$110
pH	Monthly	$15	1	12	$60
TSS – Total Suspended Solids (Influent & Effluent)	Monthly	$15	2	24	$360
Total Antimony	Quarterly	$20	1	4	$80
Total Arsenic	Quarterly	$20	1	4	$80
Total Barium	Quarterly	$20	1	4	$80
Total Beryllium	Quarterly/Semi-Annual	$20	1	4	$80
Total Cadmium	Quarterly/Semi-Annual	$20	1	4	$80
Total Chromium	Quarterly	$20	1	4	$40
Total Copper	Semi-Annual	$20	1	2	$80
Total Cyanide	Quarterly/Semi-Annual	$55	1	4	$780

Total Fluoride	Quarterly	$20	1	4	$80
Total Lead	Quarterly/Semi-Annual	$20	1	4	$80
Total Mercury	Quarterly/Semi-Annual	$40	1	2	$80
Total Nickel	Quarterly	$20	1	4	$80
Total Nitrogen	Monthly/Quarterly	$65	1	12	$780
Total Phosphorous	Quarterly	$40	1	4	$160
Total Selenium	Quarterly/Semi-Annual	$20	1	4	$80
Total Silver	Semi-Annual	$20	1	2	$40
Total Sulfide	Semi-Annual	25	1	2	$50
Total Thallium	Quarterly	$20	1	4	$80
Total Zinc	Semi-Annual	$20	1	2	$40
Total Hardness	Semi-Annual	$26	1	2	$52
Oil and Grease	Semi-Annual	$110	1	2	$220
Volatile Organic Contaminants (VOC)	Semi-Annual	$280	1	2	$560
TDS – Total Dissolved Solids	Annual	$20	1	1	$20
WET Testing[3]	Annual	$1,260	3	3	$3,780
WET Testing (Shipping)	Annual	$600	1	1	$600
Ammonia Nitrogen	Annual	$110	1	1	$110
Total Kjeldahl Nitrogen - TKN	Annual	$40	1	1	$40
Nitrate-Nitrite as Nitrogen	Annual	$35	1	1	$35
Total Boron	Annual	$20	1	1	$20
Dissolved Chromium VI – HEX	Annual	$50	1	1	$50
ICP – Digestion	Quarterly	$20	1	4	$80
ICP – Metals Digestion	Quarterly	$20	1	4	$80
Residual Cl_2	Monthly	$25	1	12	$300
Total Annual Wastewater Testing Costs					**$14,527**

[1]The Semi-Annual sample is also one of the Quarterly samples taken during the year. [2]Four (4) Fecal samples are taken each week of the year. Since there are fifty-two (52) weeks each year, a total of 208 Fecal samples (4 x 52) are taken each year. [3]WET ("Whole Water Toxicity") Testing includes three (3) Chronic Toxicity tests: Green Algae, Water Flea, and Fathead Minnow.

G. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The Utility Source service area is not located within an ADWR Active Management Area ("AMA"). ADWR's Water Provider Compliance Report, dated June 6, 2014, indicates that Utility Source is currently compliant with departmental requirements governing water providers and/or community water systems.

H. ACC COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Utility Source.[10]

[10] Per Compliance Section email, dated February 19, 2014.

I. DEPRECIATION RATES

Staff's typical and customary depreciation rates, which vary by National Association of Regulatory Utility Commissioners ("NARUC") plant categories for water and wastewater companies, are illustrated in Table E and F. These rates represent typical and customary values within a range of anticipated equipment life. Staff recommends that Utility Source use the depreciation rates presented in Table E and F.

Table E. Depreciation Rate Table for Water Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	---	------

Table F. Depreciation Rate Table for Wastewater Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
354	Structures & Improvements	30	3.33
355	Power Generation Equipment	20	5.00
360	Collection – Sewers	50	2.00
361	Collection – Gravity	50	2.00
362	Special Collecting Structures	50	2.00
363	Services to Customers	50	2.00
364	Flow Measuring Devices	10	10.00
365	Flow Measuring Installations	10	10.00
366	Reuse Services	50	2.00
367	Reuse Meters & Meter Installations	12	8.33
370	Receiving Wells	30	3.33
371	Pumping Equipment	8	12.50
374	Reuse Distribution Reservoir	40	2.50
375	Reuse Transmission & Distribution System	40	2.50
380	Treatment & Disposal Equipment	20	5.00
381	Plant Sewers	20	5.00
382	Outfall Sewer Lines	30	3.33
389	Other Plant & Miscellaneous Equipment	15	6.67
390	Office Furniture & Equipment	15	6.67
390.1	Computers & Software	5	20.00
391	Transportation Equipment	5	20.00
392	Stores Equipment	25	4.00
393	Tools, Shop & Garage Equipment	20	5.00
394.1	Laboratory Equipment	10	10.00
395	Power Operated Equipment	20	5.00
396	Communication Equipment	10	10.00
397	Miscellaneous Equipment	10	10.00
398	Other Tangible Plant	----	----

J. OTHER ISSUES

1. Service Line and Meter Installation Charges

Utility Source has proposed to increase their existing service line and meter installation charges.[11] The proposed charges are refundable advances, and are similar to the Staff's typical range of charges for service line and meter installations. Since Utility Source may at times install meters on existing service lines Utility Source's proposal included separate service line and meter installation charges. Staff recommends that the charges listed under "Staff's Recommendation" in Table G be adopted.

Table G. Service Line and Meter Installation Charges

		Company Proposed			Staff's Recommendation		
Meter Size	Company Current Tariff	Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	$520	$385	$135	$520	$415	$105	$520
3/4-inch	$575	$415	$205	$620	$415	$205	$620
1-inch	$660	$465	$265	$730	$465	$265	$730
1-1/2-inch	$900	$520	$475	$995	$520	$475	$995
2-inch Turbine	$1,525	$800	$995	$1,795	$800	$995	$1,795
2-inch Compound	$2,320	$800	$1,840	$2,640	$800	$1,840	$2,640
3-inch Turbine	$2,275	$1,015	$1,620	$2,635	$1,015	$1,620	$2,635
3-inch Compound	$3,110	$1,135	$2,495	$3,630	$1,135	$2,495	$3,630
4-inch Turbine	$3,360	$1,430	$2,570	$4,000	$1,430	$2,570	$4,000
4-inch compound	$4,475	$1,610	$3,545	$5,155	$1,610	$3,545	$5,155
6-inch Turbine	$6,035	$2,150	$4,925	$7,075	$2,150	$4,925	$7,075
6-inch Compound	$8,050	$2,270	$6,820	$9,090	$2,270	$6,820	$9,090

2. Curtailment Tariff

Utility Source has an approved Curtailment Tariff on file with the Commission. This tariff became effective January 4, 2005.

3. Backflow Prevention Tariff

Utility Source has an approved Backflow Prevention Tariff on file with the Commission. This tariff became effective January 4, 2005.

4. Best Management Practices ("BMP") Tariff

Based on discussion with Staff, Utility Source has selected five (5) tariffs for implementation in its service area. The five (5) proposed tariffs include the Public Education Program Tariff, BMP

[11] The Company's current charges were approved in Decision No. 70140, effective January 23, 2008.

3.6 – Customer High Water Use Inquiry Resolution Tariff, BMP 3.7 – Customer High Water Use Notification Tariff, BMP 3.8 – Water Waste Investigations and Information Tariff, and BMP 5.2 – Water System Tampering Tariff. Staff concludes that these BMP Tariffs are relevant to Utility Sources' service area. Staff recommends approval of the five (5) BMP Tariffs selected, attached hereto as Exhibit A.

Staff further recommends that Utility Source notify its customers, in a form acceptable to Staff, of the BMP Tariffs approved by the Commission and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing and shall provide copies of the BMP Tariffs to any customer upon request. Staff will file a letter in the Docket confirming that Utility Sources' tariffs have been updated with the tariffs approved by the Commission. The tariffs shall go into effect 30 days after the date notice is sent to customers. Utility Source may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

5. Deep Well No. 4 – ADWR No. 55-206887

Utility Source proposed in its rate application to remove costs associated with Deep Well No. 4 (55-206887) from plant-in-service since it believes the well represents capacity for future customers. However, during the site inspection, Deep Well No. 4 was determined to be electrically and physically connected to the water system and available for operation. Mr. McCleve and Mr. McCaleb explained that the well is used primarily as an emergency backup to supplement water demand during extreme conditions experienced through the summer months. Mr. McCaleb also mentioned that as a precaution the well is operated once a month to ensure that the well is functioning properly, no deterioration of the well has occurred, and no contamination of the water supply has occurred. Staff concludes that Deep Well No. 4 is currently in operation for occasional use, but is technically not needed to serve the test year customers.

Staff recommends that Utility Source be held to the following conditions should the Commission approve the removal of the costs associated with Deep Well No. 4 from rate base: 1) Utility Source must obtain approval from the Commission prior to selling Deep Well No. 4 and 2) Utility Source is not allowed to require a developer to pay for the construction of a new well.

EXHIBIT A

Company: Utility Source, LLC Decision No.: _____

Phone: 480-892-8756 Effective Date: _____

Public Education Program Tariff

PURPOSE

A program for the Company to provide free written information on water conservation measures to its customers and to remind them of the importance of conserving water (Required Public Education Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall provide two newsletters to each customer; one to be provided in the spring, the other in the fall. The goal of the letters is to provide timely information to customers in preparation of the hot summer months, and the cold winter months, in regards to their water uses. The Company shall remind customers of the importance of water conservation measures and inform them of the information available from the Company.
2. Information in the newsletters shall include water saving tips, home preparation recommendations for water systems/pipes, landscape maintenance issues for summer and winter, water cistern maintenance reminders and additional pertinent topics. Where practical, the Company shall make this information available in digital format which can be e-mailed to customers upon request or posted on the Company's website.
3. Communication channels shall include one or more of the following: water bill inserts, messages on water bills, Company web page, post cards, e-mails and special mailings of print pieces, whichever is the most cost-effective and appropriate for the subject at hand.
4. Free written water conservation materials shall be available in the Company's business office and the Company shall send information to customers on request.
5. The Company may distribute water conservation information at other locations such as libraries, chambers of commerce, community events, etc., as well.
6. The Company shall keep a record of the following information and make it available to the Commission upon request.
    a. A description of each communication channel (i.e., the way messages will be provided) and the number of times it has been used.
    b. The number of customers reached (or an estimate).

A description of the written water conservation material provided free to customers.

Company: Utility Source, LLC Decision No.: _____

Phone: 480-892-8756 Effective Date: _____

Customer High Water Use Inquiry Resolution Tariff – BMP 3.6

PURPOSE

A program for the Company to assist its customers with their high water-use inquiries and complaints (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.6: Customer High Water Use Inquiry Resolution).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle high water use inquiries as calls are received.

2. Calls shall be taken by a customer service representative who has been trained on typical causes of high water consumption as well as leak detection procedures that customers can perform themselves.

3. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to the customer's residence to conduct a leak detection inspection and provide the customer with water conservation measures. The leak detection inspection may consist of a meter read check for flow verification. If the on-site inspection is requested by the customer, the Commission approved meter re-read tariff fee shall apply.

The Company shall follow up in some way on every customer inquiry or complaint and keep a record of inquiries and follow-up activities.

Company: Utility Source, LLC Decision No.: _____

Phone: 480-892-8756 Effective Date: _____

Customer High Water Use Notification Tariff – BMP 3.7

PURPOSE

A program for the Company to monitor and notify customers when water use seems to be abnormally high and provide information that could benefit those customers and promote water conservation (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services Program 3.7: Customer High Water Use Notification).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall track water usage for each customer and notify the customer if water use seems excessive for that particular billing for that time of the year.
2. The Company shall identify customers with high consumption and investigate each instance to determine the possible cause.
3. The Company shall contact the high water use customers via telephone, email, by mail or in person. The Company shall contact the customer as soon as practical in order to minimize the possible loss of water. The customer will not be required to do anything to receive this notification.
4. In the notification the Company shall explain some of the most common water usage problems and common solutions and points of contact for dealing with the issues.
5. In the notification, the customer will be reminded of at least the following water-saving precautions:
   a. Check for leaks, running toilets, or valves or flappers that need to be replaced.
   b. Check landscape watering system valves periodically for leaks and keep sprinkler heads in good shape.
   c. Adjust sprinklers so only the vegetation is watered and not the house, sidewalk, or street, etc.
   d. Continue water conservation efforts with any pools such as installing covers on pools and spas and checking for leaks around pumps.
6. In the notification, the customer will also be reminded of at least the following ordinary life events that can cause a spike in water usage:
   a. More people in the home than usual taking baths and showers.
   b. Doing more loads of laundry than usual.
   c. Doing a landscape project or starting a new lawn.
   d. Washing vehicles more often than usual.
7. The Company shall provide water conservation information that could benefit the customer, such as, but not limited to, audit programs, publications, and rebate programs.

8. The Company shall assist the customer in a self-water audit and assist the customer in determining what might be causing the high water usage as well as supply customer with information regarding water conservation and landscape watering guidelines. As part of the water audit the Company shall confirm the accuracy of the customer meter if requested to do so by the customer (applicable meter testing fees shall apply).
9. The type of notification, the timing of the notification (i.e., how long after high water use was discovered by the Company), and the criteria used for determining which customers are notified shall be recorded and made available to the Commission upon request.

Company: Utility Source, LLC Decision No.: _____

Phone: 480-892-8756 Effective Date: _____

Water Waste Investigations and Information Tariff – BMP 3.8

PURPOSE

A program for the Company to assist customers with water waste complaints and provide customers with information designed to improve water use efficiency (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.8: Water Waste Investigations and Information).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission specifically R14-2-403 and R14-2-410 and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle water waste complaints as calls are received.
2. Calls shall be taken by a customer service representative who has been trained to determine the type of water waste and to determine if it may be attributed to a leak or broken water line.
3. The Company shall follow up on every water waste complaint.
4. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to investigate further and notify the responsible party of the waste and offer assistance and information to prevent waste in the future.
5. A letter of enforcement will be issued to customers with water running beyond the curb and/or off the customers property due to such things as, but not limited to, backwashing of pools, broken sprinkler heads, and over watering of lawns beyond the saturation point.
6. The same procedures outlined above in item #4 will be followed in the event of a second violation. Termination of service may result in the event of the third violation within a 12 month period. In the event of a third violation the customer's service may be terminated per Arizona Administrative Code R14-2-410C, R14-2-410D and R14-2-410E (applicable service reconnection fees shall apply).
7. The Company shall record each account and each instance noted for water waste, the action taken and any follow-up activities.
8. Subject to the provisions of this tariff, compliance with the water waste restriction will be a condition of service.
9. The Company shall provide to its customers a complete copy of this tariff and all attachments upon request and to each new customer. The customer shall abide by the water waste restriction.
10. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Company: Utility Source, LLC Decision No.: _____

Phone: 480-892-8756 Effective Date: _____

WATER SYSTEM TAMPERING TARIFF – BMP 5.2

PURPOSE

The purpose of this tariff is to promote the conservation of groundwater by enabling the Company to bring an action for damages or to enjoin any activity against a person who tampers with the water system.

REQUIREMENTS:

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically Arizona Administrative Code ("AAC") R14-2-410 and the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. In support of the Company's water conservation goals, the Company may bring an action for damages or to enjoin any activity against a person who: (1) makes a connection or reconnection with property owned or used by the Company to provide utility service without the Company's authorization or consent; (2) prevents a Company meter or other device used to determine the charge for utility services from accurately performing its measuring function; (3) tampers with property owned or used by the Company; or (4) uses or receives the Company's services without the authorization or consent of the Company and knows or has reason to know of the unlawful diversion, tampering or connection. If the Company's action is successful, the Company may recover as damages three times the amount of actual damages.

2. Compliance with the provisions of this tariff will be a condition of service.

3. The Company shall provide to all its customers, upon request, a complete copy of this tariff and AAC R14-2-410. The customers shall follow and abide by this tariff.

4. If a customer is connected to the Company water system and the Company discovers that the customer has taken any of the actions listed in No. 1 above, the Company may terminate service per AAC R14-2-410.

5. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF UTILITY SOURCE, LLC, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER AND WASTEWATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO. WS-04235A-13-0331

DIRECT

TESTIMONY

OF

JORN L. KELLER

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 4, 2014

TABLE OF CONTENTS

SCHEDULES

UTILITY SOURCE, INC. – WATER DIVISION

UTILITY SOURCE, LLC. – *WASTEWATER DIVISION*

EXECUTIVE SUMMARY

UTILITY SOURCE, LLC.
DOCKET NO. WS-04235A-13-0331

Utility Source, LLC. ("USL" or "Company") is a for-profit, Class C public service corporation serving potable water to approximately 327 customers and wastewater service to approximately 325 customers in and near the community of Bellemont, Arizona, in Coconino County, Arizona.

On September 27, 2013, the Company filed a rate application with a test year ending December 31, 2012. On January 9, 2014, the Company filed an amendment to the application. On March 16, 2014, Staff issued a Letter of Sufficiency. Current rates became effective on January 23, 2008, pursuant to Decision No. 70140.

RATE APPLICATION:

Water Division

The Company-proposed rates, as filed, produce total operating revenue of $436,451, an increase of $228,439 (109.82 percent), over the test year revenue of $208,004, to provide a $172,320 operating income and a 11.00 percent rate of return on a proposed $1,566,543 fair value rate base ("FVRB") which is also the proposed original cost rate base ("OCRB").

The Utilities Division ("Staff") recommends total operating revenue of $406,372, an increase of $200,188 (97.09 percent) over the Staff-adjusted test year revenue of $206,184, to provide a $158,637 operating income and a 9.60 percent return on the $1,594,960 Staff-adjusted FVRB and OCRB.

Wastewater Division

The Company-proposed rates, as filed, produce total operating revenue of $318,037, an increase of $196,753 (162.23 percent) over the test year revenue of $121,284 to provide a $91,404 operating income and a 11.00 percent rate of return on a proposed $830,945 FVRB which is its OCRB.

Staff recommends total operating revenue of $315,314, an increase of $195,850 (163.94 percent) over the Staff-adjusted test year revenue of $119,464 to provide a $79,284 operating income and a 9.60 percent return on the $825,880 Staff-adjusted FVRB and OCRB.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Jorn L. Keller. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. In my capacity as a Public Utilities Analyst, I analyze and examine accounting, financial, statistical and other information and prepare reports based on my analyses that present Staff's recommendations to the Commission on utility revenue requirements, rate design and other issues.

Q. Please describe your educational background and professional experience.

A. I have a Bachelor of Science degree in Political Science from Kansas State University and a Master's degree in Business Administration. I have attended the National Association of Regulatory Utility Commissioners' ("NARUC") Utility Rate School. I joined the Commission as a Public Utilities Analyst in November, 2013. Prior to employment with the Commission, I worked for the Residential Utility Commission Office ("RUCO") as a Public Utilities Analyst.

Q. What is the scope of your testimony in this case?

A. I am presenting Staff's analysis and recommendations regarding Utility Source ("USL" or "Company") Water and Wastewater Division applications for a permanent rate increase. I am presenting testimony and schedules addressing rate base, operating revenues and expenses, revenue requirement and rate design (to be filed separately). Mr. John Cassidy is

presenting the Staff's analysis and recommendations for the Cost of Capital analysis. Mr. Michael Thompson is presenting Staff's engineering analysis and related recommendations.

Q. What is the basis of your testimony in this case?

A. I performed a regulatory audit of the Company's application and records. The regulatory audit consisted of examining and testing financial information, accounting records, and other supporting documentation and verifying that the accounting principles applied were in accordance with the Commission-adopted NARUC Uniform System of Accounts ("USOA").

Q. How is your testimony organized?

A. My testimony is presented in nine sections. Section I is this Introduction. Section II provides a background of the Company. Section III is a summary of Consumer Service Issues. Section IV presents Compliance Status. Section V is a summary of the Company's Filing and Staff's Revenue Requirement. Section VI summarizes Staff's Rate Base and Operating Income Adjustments. Section VII presents Staff's Rate Base Recommendations. Section VIII presents Staff's Operating Income Recommendations. Section IX discusses the circumstances of the Company's planned water standpipe.

II. BACKGROUND

Q. Please review the background of this application.

A. USL is an Arizona limited liability company. The Company is located in Coconino County, north of highway I40 in the unincorporated community of Bellemont. Approximately 327 customers were served in the test year ended December 31, 2012. The Company's current rates were approved by the Commission in Decision No. 70140, dated January 23, 2008. USL filed the current application on September 27, 2013, requesting a determination of the current fair value of its utility property and a permanent rate increase for its water and wastewater

divisions. Staff deemed the application sufficient on October 24, 2013. A Procedural Conference was held November 12, 2013, to discuss discrepancies within the application that made it impossible to provide accurate notice of the impacts of proposed rates and charges for some customers. USL filed an amended application on January 9, 2014. On March 6, 2014, Staff filed a Letter of Sufficiency indicating that USL's application met sufficiency requirements.

III. CONSUMER SERVICES

Q. Please provide a brief history of customer complaints received by the Commission regarding the Company. Additionally, please discuss customer responses to the Company's proposed rate increase.

A. A review of the Commission's Consumer Services database for the Company from January 1, 2011, to June 27, 2014, revealed the following:

2014 – Zero complaints

330 Opinions – All opposed to the proposed rate increase, including one petition containing 273 signatures

2013 – One Complaint -- Billing

2012 – Two Complaints -- Billing

2011 – No Complaints

All complaints have been resolved and closed.

IV. COMPLIANCE

Q. Please provide a summary of the compliance status of the Company.

A. A review of the Commission's Compliance database indicates that there are currently no delinquencies for the Company.

V. SUMMARY OF COMPANY FILING AND STAFF REVENUE RECOMMENDATIONS

Q. What test year did the Company use in this filing?

A. The Company's rate filing is based on the twelve months ending December 31, 2012 ("test year").

Q. Please summarize the Company's proposals for the Water Division ("Water") and Wastewater Division ("Wastewater") in this filing.

A. The Company proposes the following for each of its divisions.

Water

The Company-proposed rates, as filed, produce total operating revenue of $436,451, an increase of $228,439, or 109.82 percent, over test year revenue of $208,004 to provide a $172,320 operating income and an 11.00 percent rate of return on its proposed $1,566,543 fair value rate base ("FVRB") which is its original cost rate base ("OCRB").

Wastewater

The Company-proposed rates, as filed, produce total operating revenue of $318,037, an increase of $196,753, or 162.23 percent, over test year revenue of $121,284 to provide a $91,404 operating income and an 11.00 percent rate of return on its proposed $830,945 fair value rate base FVRB which is its OCRB.

Q. Please summarize Staff's recommendations.

A. Staff recommends the following for each of the Company's divisions.

Water

Staff recommends total operating revenue of $406,372, an increase of $200,188 (97.09 percent) over the Staff-adjusted test year revenue of $206,184, to provide a $158,637 operating income and a 9.60 percent return on the $1,594,960 Staff-adjusted FVRB and OCRB.

Wastewater

Staff recommends total operating revenue of $315,314, an increase of $195,850 (163.94 percent) over the Staff-adjusted test year revenue of $119,464 to provide a $79,284 operating income and a 9.60 percent return on the $825,880 Staff-adjusted FVRB and OCRB.

VI. SUMMARY OF STAFF'S RATE BASE AND OPERATING INCOME ADJUSTMENTS

Q. Please summarize the rate base adjustments addressed in your testimony.

A. My testimony addresses the following issues for the water and wastewater divisions:

Water

Accumulated Depreciation - This adjustment decreases accumulated depreciation by $49,356 by removing accumulated depreciation on retired plant.

Accumulated Amortization of CIAC – This adjustment removes $20,937 from the accumulated amortization of CIAC due to Staff's adjustment of the amortization rate used.

Wastewater

Security Deposits – This adjustment adds $5,065 in security deposits as a deduction to rate base.

Q. Please summarize the operating revenue and expense adjustments addressed in your testimony.

A. My testimony addresses the following issues:

Water

Operating Revenue - This adjustment decreases other water revenue by $1,820 to reflect the removal of security deposits from this account.

Depreciation Expense – This adjustment decreases depreciation expense by $1,097 to reflect application of Staff's recommended depreciation rates to Staff's depreciable plant balances.

Water Testing Expense – This adjustment decreases water testing expense by $6,637 to reflect the findings of Staff's Engineering Report.

Automobile Expense – This adjustment decreases miscellaneous expense by $1,750 to reflect adjustments to Company automobile expense.

Telephone Expense – This adjustment decreases miscellaneous expense by $2,366 to reflect adjustments to officer and contractor telephone expense.

Rate Case Expense – This adjustment increases rate case expense by $6,667 to reflect a three-year normalization of rate case expense.

Property Tax Expense – This adjustment decreases property tax expense by $66 to reflect Staff's adjustments to test year revenue.

Income Tax Expense – This adjustment increases test year income tax expense by $685 to reflect application of statutory state and federal income tax rates to Staff-adjusted taxable income.

Wastewater

Operating Revenue - This adjustment decreases other water revenue by $1,820 to reflect the removal of security deposits from the account.

Water Testing Expense – This adjustment increases water testing expense by $8,858 to reflect the findings of Staff's Engineering Report.

Automobile Expense – This adjustment decreases miscellaneous expense by $1,750 to reflect adjustments to Company automobile expense.

Telephone Expense – This adjustment decreases miscellaneous expense by $2,366 to reflect adjustments to telephone expense.

Depreciation Expense – This adjustment increases depreciation expense by $670 to reflect application of Staff's recommended depreciation rates to Staff's depreciable plant balances.

Rate Case Expense – This adjustment increases rate case expense by $6,667 to reflect a three-year normalization of rate case expense.

Property Tax Expense – This adjustment decreases property tax expense by $67 to reflect Staff's adjustments to test year revenue.

Income Tax Expense – This adjustment decreases test year income tax expense by $1,733 to reflect application of statutory state and federal income tax rates to Staff-adjusted taxable income and to reflect Staff's adjustments to test year income.

VII. RATE BASE ADJUSTMENTS

Fair Value Rate Base

Q. Did the Company prepare a schedule showing the elements of Reconstruction Cost New Rate Base?

A. No, the Company did not. The Company's filing treats the OCRB the same as the FVRB for both the Water and Wastewater divisions.

Rate Base Summary – Water Division

Q. Please summarize Staff's adjustments to the Company's rate base shown in Schedules JLK-W3 and JLK-W4.

A. Staff's adjustments to the Company's rate base resulted in a net increase of $28,419 from $1,566,542 to $1,594,960. Staff's recommendations result from the rate base adjustments described below.

Rate Base Adjustment No. 1 – Accumulated Depreciation

Q. Do Staff and the Company's test year accumulated depreciation balances agree?

A. No. USL proposes accumulated depreciation of $726,406 while Staff's balance of $677,050 is $49,356 less.

Q. What is the basis for Staff's adjustment?

A. Staff reclassified computer equipment from the office furniture and fixtures account to computer and software. Otherwise, the variance appears to be based on the calculation of accumulated depreciation from USL's Well No. 4 that was removed from rate base in 2012.

Q. Did the Company explain the basis for the cost of Well No. 4 or their method for calculating accumulated depreciation?

A. No. The Company's responses to Data Requests number 401 and 4.2 do not explain the costs of Well No. 4 or the Company's method of calculating depreciation.

Rate Base Adjustment No. 2 – Accumulated Amortization of CIAC

Q. Please explain Staff's adjustment to the accumulated amortization of CIAC.

A. Staff observed that the Company's Schedule B-2, P.5.1 contained different CIAC amortization rates from 2006 through the test year, 2012 varying from 3.27 percent to 5.93 percent. However, the single amortization rate of 2.898 percent was used on Schedule C-2, P.2.

Q. Did the Company acknowledge that its CIAC amortization schedule contained errors?

A. Yes. The Company acknowledged the errors.

Q. What is Staff's recommendation?

A. Staff calculated accumulated amortization of CIAC using the rate of 2.898 percent. This adjustment decreases accumulated amortization by $20,937 and decreases rate base by the same amount.

Rate Base Summary – Wastewater Division

Q. Please summarize Staff's adjustments to the Company's rate base shown in Schedules JLK-WW3 and JLK-WW4.

A. Staff's adjustments to the Company's rate base resulted in a net decrease of $5,065 from $830,945 to $825,880.

Rate Base Adjustment No. 1 – Security Deposits

Q. Did the Company list Security Deposits in its calculation of rate base?

A. No. Security deposits are listed as a deduction from rate base in the Water Division, but not in Wastewater Division.

Q. What amount of Security Deposits does the Company have on deposit?

A. In its reply to Staff Data Request Number JLK 3, the Company stated that the end of test year security deposit balance was $10,950.

Q. How Does USL allocate Security Deposits between Water and Wastewater systems?

A. In Schedule B-2, P.1, the Company makes a pro forma adjustment to add $5,885 in security deposits to the Water Division. No corresponding adjustment is made for the Wastewater Division.

Q. How did Staff adjust Security Deposits?

A. Staff recommends accepting the amount of security deposits allocated to the Water Division, but also recommends that security deposits in the amount $5,065 be recognized as a Wastewater Division rate base reduction.

VIII. OPERATING INCOME ADJUSTMENTS

Operating Income Summary – Water Division

Q. What are the results of Staff's analysis of test year revenues, expenses, and operating income?

A. As shown in Schedules JLK-W7 and JLK-W8, Staff's analysis resulted in test year revenues of $206,184, expenses of $177,522 and operating income of $28,662.

Operating Income Adjustment No. 1 – Other Operating Revenue

Q. How did USL calculate Other Operating Revenue?

A. Per the Company's responses to Data Requests No. 2.9 and 3.4, all Other Water Revenue is recorded in account number 474. The account balance consists of NSF fees, security deposits, late fees and start up fees, with a test year ending balance of $12,315. As shown on the Company's Adjustment Number 7, Exhibit C-2, P. 8, security deposits in the amount of $1,612 were removed, and the balance of $10,522 was divided equally between the systems and entered as Other Water Revenue.

Q. Does Staff agree with the Company's calculation of Other Operating Revenue?

A. No. A review of account number 474 shows that test year security deposits in the amount of $5,252 were deposited to the account, leaving a balance of $6,888 or $3,441 per system as Other Water Revenue.

Q. What is Staff's recommendation?

A. Staff recommends adjustments reducing Other Water Revenue from $5.261 to $3,441 for an adjustment of $1,820.

Operating Income Adjustment No. 2 – Depreciation Expense

Q. What amount does USL propose for depreciation expense for the Water Division?

A. The Company proposes $57,728 as shown in Schedule C-1, P. 2.

Q. What amount does Staff recommend for depreciation expense?

A. Staff recommends $56,631, a decrease of $1,097, as stated in Schedule JLK-W7, Column E.

Q. Why does the depreciation expense of Staff and the Company differ?

A. The difference lies in the calculation of the composite rate for the amortization of Contributions In Aid of Construction ("CIAC"), which is deducted from depreciation expense.

Operating Income Adjustment No. 3 – Water Testing Expense

Q. What amount does USL propose for water testing expense for the Water Division?

A. The Company proposes $8,107 as shown in Schedule C-1, P. 2.

Q. What is Staff's recommendation?

A. Staff recommends $1,470 in water testing expense as stated on pages 16 and 17 of the Engineering Report. This decreases water testing expense by $6,637 to $1,470 as shown on

Schedule JLK-11. Staff found that a number of wastewater tests had been attributed to the water system.

Operating Income Adjustment No. 4 – Automobile Expense

Q. Where can USL's expense for automobile usage be found?

A. Test year automobile usage expense for the Wastewater Division was found in Miscellaneous Expense, Account 775.

Q. How much is the Company's Automobile Expense and what does it consist of?

A. In reply to Data Request No. 3, USL stated that an employee was reimbursed $500 per month for using her personal automobile for errands, to attend meetings in Bellemont and to make deliveries for the Company.

Q. Was the reply to the Data Request accurate?

A. Staff examined the Company's test year general ledger and found that reimbursement for auto expense in the amount of $6,500 or $3,250 per system was paid to this employee. This is $542 per month.

Q. Does Staff believe the amount recovered was reasonable?

A. No. The Internal Revenue Service's approved rate for business automobile expense for 2012 was $.555[1] per mile. At this rate, approximately 11,700 miles would have been driven. This number of miles appears to be excessive since this equates to almost 50 miles driven per business day.

[1] http://www.irs.gov/uac/IRS-Announces-2012-Standard-Mileage-Rates,-Most-Rates-Are-the-Same-as-in-July

Q. What does Staff recommend?

A. In the response to Data Request No. 3.3, USL's replied that the employee used a personal car from offices in Queen Creek to the systems in Bellemont. Staff recommends annual automobile reimbursement of $3,000 or $1,500 per system. This amount will provide mileage reimbursement for six annual round trips, one round trip every other month, to Bellemont, plus 3,600 additional business miles. The adjustment is a decrease in miscellaneous expense in the amount of $1,750.

Operating Income Adjustment No. 5 – Telephone Expense

Q. What telephone expense does USL propose?

A. The Company's telephone expense is included in Miscellaneous Expense. Per the response to Data Request 3, four telecommunications providers are used, with Verizon and AT&T contracted for cellular phone service.

Q. What amounts are paid for cell phone service?

A. According the Company's general ledger, test year payments to Verizon and AT&T totaled $4,732 per system for a total of $9,464.

Q. What is Staff's recommendation?

A. Staff believes that the cell phone charges are excessive. As stated in Data Request No. 3, USL has two managing members and two full time contract employees. This equates to over $2,000 per managing member and full-time contractor per year. Even considering part time employees, the monthly bill is over $1,500 per person per year. One half of the proposed amounts or $2,366 per system appears more appropriate.

Operating Income Adjustment No. 6 – Rate Case Expense

Q. What amount does the Company propose for rate case expense?

A. The Company proposes $50,000 for rate case expense to be amortized over five years. Test year expense is $10,000.

Q. Does Staff feel the proposed amount and amortization period are appropriate?

A. Staff believes that $50,000 for each system is an appropriate amount for the Company's rate case expense. However, Staff believes that the rate case amount should be normalized rather than amortized over three years rather than five, with test year expense of $16,667.

Q. Why does Staff believe that rate case expense should be normalized over three years rather than five?

A. Staff believes that the Company should apply for new rates in three years rather than five in order to report activity of the proposed standpipe. Staff will make the appropriate recommendation.

Operating Income Adjustment No. 7 – Income Tax Expense

Q. What amount does Staff recommend for income tax expense?

A. As shown on schedules JLK-W7, JLK-W8 and JLK-W13, staff recommends $ negative $1,379 as adjusted test year income tax expense, based upon Staff's adjustments to the Company's income.

Q. How did Staff calculate income tax expense for the Company?

A. Staff applied the statutory state and federal income tax rates to Staff's taxable income. Income tax expenses for the test year and recommended revenues are shown in Schedule JLK-W2. Staff's test year income tax expense is different from the Company's due to differences in taxable income resulting from differences in operating expenses.

Q. What adjustment does Staff recommend for test year income tax expense for the Company?

A. Staff recommends increasing test year income tax expense by $685, as shown in Schedule JLK-W15.

Operating Income Summary – Wastewater Division

Q. What are the results of Staff's analysis of test year revenues, expenses, and operating income?

A. As shown in Schedules JLK-WW6 and JLK-WW7, Staff's analysis resulted in test year revenues of $119,464, expenses of $203,370 and operating income of negative $83,906.

Operating Income Adjustment No. 1 – Other Operating Revenue

Q. How did USL calculate Other Operating Revenue?

A. Per the Company's responses to Data Requests No. 2.9 and 3.4, all other water revenue is recorded in account number 474. The account balance consists of NSF fees, security deposits, late fees and start up fees, with a test year ending balance of $12,315. As shown on the Company's Adjustment Number 7, Exhibit C-2, P. 8, security deposits in the amount of $1,612 were removed, and the balance of $10,522 was divided equally between the systems and entered as Other Water Revenue.

Q. Does Staff agree with the Company's calculation of Other Operating Revenue?

A. No. A review of account number 474 shows that test year security deposits in the amount of $5,252 were deposited to the account, leaving a balance of $6,888 or $3,442 per system as Other Water Revenue.

Q. What is Staff's recommendation?

A. Staff recommends adjustments reducing Other Water Revenue from $5.261 to $3,441 for an adjustment of $1,820.

Operating Income Adjustment No. 2 – Water Testing Expense

Q. What amount does USL propose for water testing expense for the Wastewater Division?

A. The Company proposes $5,669 as shown in Schedule C-1, P. 2.

Q. What is Staff's recommendation?

A. Staff recommends $14,527 in water testing expense as stated on pages 18 and 19 of the Engineering Report. This increases water testing expense by $8,858 to $14,527 as shown on Schedule JLK-9. Staff found that a number of wastewater tests had been attributed to the water system.

Operating Income Adjustment No. 3 – Automobile Expense

Q. Where can USL's expense for automobile usage be found?

A. Test year automobile usage expense for the Wastewater Division was found in Miscellaneous Expense, Account 775.

Q. How much is the Company's Automobile Expense and what does it consist of?

A. In reply to Data Request No. 3, USL stated that an employee was reimbursed $500 per month for using her personal automobile for errands, to attend meetings in Bellemont and to make deliveries for the Company.

Q. Was the response to the Data Request accurate?

A. Staff examined the Company's test year general ledger and found that reimbursement for auto expense in the amount of $6,500 or $3,250 per system was paid to this employee. This is $542 per month.

Q. Does Staff believe the amount recovered was reasonable?

A. No. The Internal Revenue Service's approved rate for business automobile expense for 2012 was $.555[2] per mile. At this rate, approximately 11,700 miles would have been driven. This number of miles appears to be excessive since this equates to almost 50 miles driven per business day.

Q. What is Staff's recommendation?

A. In the response to Data Request No. 3.3, USL replied that the employee used a personal car from offices in Queen Creek to the systems in Bellemont. Staff recommends annual automobile reimbursement of $3,000 or $1,500 per system. This amount will provide mileage reimbursement for six annual round trips, one round trip every other month, to Bellemont, plus 3,600 additional business miles. The adjustment is a decrease in miscellaneous expense in the amount of $1,750.

Operating Income Adjustment No. 4 – Telephone Expense

Q. What telephone expense does USL propose?

A. The Company's telephone expense is included in Miscellaneous Expense. This expense is reflected in general ledger accounts 675.2 and 775.2. Per the response to Data Request 3,

[2] http://www.irs.gov/uac/IRS-Announces-2012-Standard-Mileage-Rates,-Most-Rates-Are-the-Same-as-in-July

four telecommunications providers are used, with Verizon and AT&T contracted for cellular phone service.

Q. What amounts are paid for cell phone service?

A. According the Company's general ledger, test year payments to Verizon and AT&T totaled $4,732 per system for a total of $9,464.

Q. What is Staff's recommendation?

A. Staff believes that the cell phone charges are excessive. As stated in Data Request No. 3, USL has two managing members and two full time contract employees. This equates to over $2,000 per managing member and full-time contractor per year. Even considering part time employees, the bill is over $1,500 per person per year. One half of the proposed amounts or $2,366 per system appears appropriate.

Operating Income Adjustment No. 5 – Depreciation Expense

Q. What amount does USL propose for depreciation expense for the Wastewater Division?

A. The Company proposes $45,744 as shown in Schedule C-1, P. 2.

Q. What amount does Staff recommend for depreciation expense?

A. Staff recommends $46,414, an increase of $670, as stated in Schedule JLK-WW12.

Q. Why does the depreciation expense of Staff and the Company differ?

A. The difference lies in the calculation of the composite rate for the amortization of Contributions In Aid of Construction ("CIAC"), which is deducted from depreciation expense.

Operating Income Adjustment No. 6 – Rate Case Expense

Q. What amount does the Company propose for rate case expense?

A. The Company proposes $50,000 for rate case expense to be amortized over five years. Test year expense is $10,000.

Q. Does Staff feel the proposed amount and amortization period are appropriate?

A. Staff believes that $50,000 for each system is an appropriate amount for the Company's rate case expense. However, Staff believes that the rate case amount should be normalized over three years rather than amortized over five, with test year expense of $16,667.

Q. Why does Staff feel that rate case expense should be normalized over three years rather than five?

A. Staff believes that the Company should apply for new rates in three years rather than five in order to report activity of the proposed standpipe. Staff will make the appropriate recommendation.

Operating Income Adjustment No. 7 – Income Tax Expense

Q. What amount does Staff recommend for income tax expense?

A. As shown on schedules JLK-WW6, JLK-WW7 and JLK-WW13, staff recommends negative $15,728 as adjusted test year income tax expense, based upon Staff's adjustments to the Company's income.

IX. WATER STANDPIPE

Q. Does USL plan to open a standpipe operation for bulk water sales?

A. Yes. The Company stated in its response to Staff Data Request No. JLK 6.6 that it plans to open a standpipe bulk water delivery station on September 1, 2014.

A copy of Staff Data Request No. JLK-6 along with the Company's response to each question is attached as Attachment No. 1 for reference purposes.

Q. What is USL's proposed standpipe tariff rate?

A. USL is requesting approval of a standpipe tariff of $21.75 per 1,000 gallons of water delivered. This proposed rate is up from $10.35 per 1,000 gallons currently authorized by the Commission for "bulk" water sales.

Q. In Staff's opinion, has the Company provided adequate and acceptable support for the reasonableness of its proposed $21.75 per 1,000 gallon rate?

A. No. The Company has provided virtually no support for a change to the existing rate for standpipe sales. However, Staff is willing to continue recommending approval of the previously approved rate for such services since this rate was approved in a prior Commission Decision.

Q. What is the basis for Staff's recommendation?

A. The many open and unanswered questions related to the Company's proposed standpipe rate increase are concerning to Staff, and Staff believes that the standpipe facility could be a significant source of additional revenues to the Company. None of the financial ramifications associated with offering this new service are addressed in the Company's pending rate application.

Q. Mr. Keller, did the Company discuss its plans to start offering this new standpipe service in its pending rate application?

A. No. The plans to start offering this new service and certain elements of information related to the Company's investment in its standpipe facilities surfaced as a result of Staff's discovery efforts in this case. For the most part, the Company's initial application acknowledges the existence of this planned service only by including the word "standpipe" in its list of present and proposed rates.

Q. Did the Company include any anticipated revenues from this standpipe service in its proposed rate increase proof of revenues?

A. No. The only water sales volumes and related revenues included in the Company's application for bulk sales relate to the annualization of a small level of construction activity-related test year sales.

Q. Specifically where can this be seen in the Company's application?

A. On line 6, page 1 of the Water Division Schedule H-2 supported by Mr. Bourassa, the Company shows $290.19 in actual test year construction activity-related sales and $612.02 in annualized pro forma revenues using the Company's requested rate increase.

Q. Did Staff inquire as to the level of expected sales volumes associated with this new standpipe facility?

A. Yes. Staff asked for expected sales volumes in Staff Data Request No. 6 which again is attached to my direct testimony. The Company's response was that they have no such projections or the ability to make them accurately.

Q. Does Staff believe the standpipe facility has the potential to generate significant revenue for the Company?

A. Yes, according to the Certificate of Approval issued by the Arizona Department of Environmental Quality, the maximum estimated water demand for the standpipe is 200,000 gallons per month. At the proposed standpipe rate of $21.75 per 1,000 gallons, the facility could generate $52,200 per year, which is equivalent to 14 percent of the Company's proposed annual revenue.

Obviously the actual level of revenues will depend upon the rate approved for such bulk deliveries and upon demand for such bulk water. While it is true that the new standpipe facility and standpipe service evolved after the end of the Company's chosen test year, the eminent initiation of the offering of this service to the public cannot, and should not, simply be ignored because this is a post-test year operational change.

Q. Within its filed rate application, did the Company identify the investment it has in its standpipe facility?

A. No. Staff did ask for investment information in Data Request No. JLK 6.10 and the Company's response provides some support for a portion of the Company's investment but the total ultimate cost has not been revealed or been established by the Company.

Q. **Did the Company provide operating costs related to this facility?**

A. No. Though again, in response to Staff Data Request No. JLK 6.18, the Company did indicate that it would require a "vast amount of power to lift water to the standpipe."

Q. **Has Staff been provided with any details regarding the engineering and operational features associated with this facility?**

A. Yes. In addition to the facility description contained in the Company's response to Data Request No. JLK 6, Staff has also been provided with a picture of this facility, which shows a two lane facility apparently capable of delivering water simultaneously through both a four inch pipe and through a six inch pipe. A copy of that photograph is attached as Attachment 2.

Q. **Did the Company provide any economic study support related to the need for this service, or provide the results of any business plan supporting the economic viability of making an investment in such a facility?**

A. No. In Staff Data Request No. JLK6.8, USL was asked to provide a copy of the Company's business plan related to this business venture. The Company's simple response was that "the Company has no such plan drafted." This statement by the Company defies good business logic.

Q. **Did the Company identify the source of water to be delivered through this standpipe facility?**

A. In response to Staff Data Request No. 6, the Company indicates that the standpipe facility is connected to its main distribution system and that all wells will effectively be used to support water deliveries through the new bulk delivery facility. That would include well # 4, which was previously included in the Company's rate base but is now viewed by USL as representing capacity for future customers.

Q. **Would USL be harmed financially by a Commission Decision to keep the currently approved bulk sales/standpipe rate in place?**

A. No. The Company's proof of revenues related to the level of annual revenues requested and Staff's proof of revenues relates to its recommended annual revenue both accommodate full

recovery of the Company's annual revenue requirement, based upon billing determinants that do not include sales volumes from this standpipe facility.

Q. **Since it is unclear how much revenue might be generated from water sales through the standpipe facility, and the record in this docket does not contain support for the ultimate level of investment in this facility, the operating costs associated with this facility, or the impact this facility might have on the availability of water for other customers, are there other recommendations Staff is making with regards to the existence of this new facility?**

A. Yes. Staff recommends that the USL be ordered to file a new rate case by June 1, 2016, based upon a 2015 test year so that the reasonableness of the ACC-approved rate for standpipe sales can be fully supported by the Company, and so that the rates charged to other customers can be re-evaluated in light of the economic considerations resulting from the Company's decision to build this facility and to offer this new service.

X. RATE DESIGN

Rate Design – Water

Q. Has Staff prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?

A. Yes. Schedule JLK W-17 provides a summary of the Company's present, Company's proposed, and Staff's recommended rates.

Q. Please summarize the present rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size. The commodity rates are based on an inverted three-tiered rate design.

Q. Please summarize the Company's proposed rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size.. The commodity rates are based on an inverted three -tier rate design. The Company's proposed rates would increase the typical residential 3/4-inch meter bill with a median usage of 3,500 gallons from $35.30 to $69.95, for an increase of $34.65 or 98.14 percent as shown on Schedule JLK W-18.

Q. Please summarize Staff's recommended rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size. The commodity rates are based on an inverted three- tier rate design. Staff's recommended rates would increase the typical residential 3/4-inch meter bill with a median usage of 3,500 gallons from $35.30 to $61.00 for an increase of $25.70 or 72.80 percent, as shown on Schedule JLK W-18.

Q. Did the Company propose any changes to its Meter and Service Line Charges?

A. Yes. The Company has removed its Establishment and Reconnection after hours fees. Staff recommends approval of these changes. It recommended service charges that are the same as the Company's. Both the Company-proposed and the Staff-recommended changes are shown on Schedule JLK W-17 and are discussed in the testimony of Staff witness, Michael Thompson.

Rate Design – Wastewater

Q. Has Staff prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?

A. Yes. Schedule JLK WW-16 provides a summary of the Company's present, Company's proposed, and Staff's recommended rates.

Q. Please summarize the present rate design.

A. Customer class is distinguished by meter size. There are no monthly minimum charges. The commodity rates are based on usage per thousand gallons.

Q. Please summarize the Company's proposed rate design.

A. Customer class is distinguished by meter size. Monthly minimum charges are added, and they vary by meter size. The commodity rates are based on a single-tier rate design. The Company's proposed rates would increase the typical residential 3/4-inch meter bill with a median usage of 3,500 gallons from $20.44 to $71.59 for an increase of $51.15 or 250.22 percent as shown on Schedule JLK WW-17.

Q. Please summarize Staff's recommended rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size. Residential users are charged a monthly minimum of $65 per month and no usage charge. All other users are charged a monthly minimum and a single commodity rate of $11.28 per 1,000 gallons. Staff's recommended rates would increase the typical residential 3/4-inch meter bill with a median usage of 3,500 gallons from $20.44 to $65.00 for an increase of $44.56 or 218 percent, as shown on Schedule JLK WW-17.

Q. Did the Company propose any changes to its Meter and Service Line Charges?

A. Yes. The Company has removed its Establishment and Reconnection after hours fees. Staff recommends approval of these changes. It recommended service line charges that are the same as the Company's. Both the Company-proposed and the Staff-recommended charges are shown on Schedule JLK WW-17, and they are discussed in the testimony of Staff witness, Michael Thompson.

XI. SERVICE CHARGES

Q. Did the Company propose any changes to the service charges for the Water and Wastewater systems?

A. Yes. The Company proposes to discontinue the Re-establishment (After Hours) charge and the Reconnection (Delinquent – After Hours) and to add an After Hours Charge of $35.

Q. Does Staff agree with the Company's proposal to discontinue the $50.00 Re-establishment (After Hours) Charge and the $55 Reconnection (Delinquent – After Hours) and to add a $35 After Hours Charge?

A. Yes.

Q What other Service Charge changes does Staff recommend?

A. Staff recommends that the present Establishment Charge be increased from $20.00 to $30.00 and that the present Reconnection (Delinquent) Charge be reduced from $50.00 to $25.00.

Q. **Does this conclude your direct testimony?**

A. Yes, it does.

ATTACHMENT 1

ARIZONA CORPORATION COMMISSION

July 14, 2014

Steve Wene, Esq.
MOYES SELLERS & HENDRICKS, LTD.
1850 North Central Avenue, Suite 1100
Phoenix, Arizona 85004

Via E-mail and United States Mail to:
swene@law-msh.com

Re: Staff's **Sixth** Set of Data Requests to Utility Source, LLC
Docket No. WS-04235A-13-0331

Dear Mr. Wene:

Please treat this as Staff's **Sixth** Set of Data Requests to Utility Source, LLC in the above matter.

For purposes of this data request set, the words "Utility Source," "Company," "you," and "your" refer to Utility Source, LLC and any representative, including every person and/or entity acting with, under the control of, or on behalf of Utility Source, LLC. For each answer, please identify by name, title, and address each person providing information that forms the basis for the response provided.

These data requests are continuing, and your answers or any documents supplied in response to these data requests should be supplemented with any additional information or documents that come to your attention after you have provided your initial responses. Please respond within **ten** calendar days of your receipt of the copy of this letter. However, if you require additional time, please let us know.

Please provide one hard copy as well as searchable PDF, DOC or EXCEL files (via email or electronic media) of the requested data directly to each of the following addressees via overnight delivery services to:

(1) Jorn L. Keller, Utilities Division, Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona 85007. jkeller@azcc.gov

(2) Wesley C. Van Cleve, Legal Division, Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona 85007. wvancleve@azcc.gov

Sincerely,

for Wesley C. Van Cleve
Matthew Laudone
Attorneys, Legal Division
(602) 542-3402

WCVC:rbo
Enc.
cc: Jorn Keller

ARIZONA CORPORATION COMMISSION
STAFF'S SIXTH SET OF DATA REQUESTS TO
UTILITY SOURCE, LLC
DOCKET NO. WS-04235A-13-0331
JULY 7, 2014

Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

JLK 6-1 Five Year Revenue and Expense Projections - In regard to the newly-constructed standpipe, please provide a five-year projection of anticipated revenues and expenses (i.e., for each year beginning in 2014 and going through the end of 2019). As part of your response, please provide the following:

a. Revenues – For each year of the projection, please provide a calculation showing how the future revenues were determined. The calculation should include the total number of gallons sold (in thousands) and the price at which the gallons are sold. Also, please explain all assumptions used in the development of these revenue forecasts (e.g., increases in gallons sold from year over year), and please provide all supporting documentation.

b. Expenses – For each year of the projection, please provide a calculation showing how the expenses were calculated. Please identify each expense separately and provide a calculation showing how the expense was derived. Also, please explain all assumptions used in making these expense projections, and please provide supporting documentation for each expense.

i. For depreciation expense, please identify all plant (i.e. standpipe and any other plant or facility needed to adequately operate the standpipe by NARUC plant account number, gross cost of plant, accumulated depreciation on each item of plant, and depreciation rate used.

JLK 6-2 Sources of Water for Standpipe - Identify the source, or sources of water to be used in conjunction with this standpipe/water distribution center. If more than one well will be used, please provide an estimate of the annual water volumes coming from each well.

JLK 6-3 Wells Hooked Up To Standpipe - Identify all wells currently hooked up to this standpipe/water distribution center, or expected to be hooked up when the facility becomes operational.

JLK 6-4 Map of Standpipe Location - Provide a map showing where in the Company's CCN this new standpipe facility is located, where all Company water wells are located, and clearly note all water lines that will be used to supply water deliveries from this water distribution center.

ARIZONA CORPORATION COMMISSION
STAFF'S SIXTH SET OF DATA REQUESTS TO
UTILITY SOURCE, LLC
DOCKET NO. WS-04235A-13-0331
JULY 7, 2014

Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

JLK 6-5 Mains and Service Lines for Standpipe - Using the map provided in response to Staff Data Request JLK 6-4, please identify all mains and/or service lines that were added in order to provide water to this water distribution center. Identify and fully document all costs/investments associated with these main and/or service line additions.

JLK 6-6 Opening Date of Standpipe – Please provide the date that the Company believes, or plans, to have this standpipe available to serve the public?

JLK 6-7 Monthly Standpipe Sales Activity – Please provide the stand pipe sales activity to Staff via email for each month from the month the standpipe is open to the public until the date of the open meeting related to the Commission's approval of the Company's request in Docket No. 13-0331.

JLK 6-8 Business Plan – Please provide a full and complete copy of the Company's business plan regarding the newly constructed standpipe. This Business Plan should include a list of all operational and financial assumptions made in the development of this Business Plan. Also, please provide sensitivity analyses related to possible variances in the assumptions driving anticipated Business Plan results. These assumptions would be expected to include sales volumes estimates, operating cost estimates, billing rate assumptions. Provide a copy of all supporting schedules in Excel format with fully- functional formulas.

JLK 6-9 Engineering Description of Standpipe - Provide a full engineering description of, and facility design plan for, the standpipe/water distribution center's operational configurations.

JLK 6-10 Cost of the Standpipe/Water Distribution Center, Remainder of Invoices – In reference to Company's answer to Data Request JLK 4.6, is the standpipe the only plant classified as Construction Work in Progress (CWIP totals $74,120.55)? Company receipts provided in answer to Data Request JLK 2.2, include the following receipts that appear to be associated with construction of the standpipe.

Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

2/4/2010	Water Products.Net	Standpipe	$ 10,000
3/18/2010	Water Products.Net	Enclosure	3,341
4/16/2010	Pam Synod	Landscape Design	425
?/2010	Water Products.Net	Standpipe	36,684
6/24/2010	Ninyo Moore	Standpipe Svc.	2,500
4/21/2010	Shephard Wesnitzer	Standpipe plans	1,748
5/21/2010	Shephard Wesnitzer	Standpipe Svc.	753
4/29/2009	Spectrum Grp	lift station	358
			$ 55,809

a. Please explain the difference in the total of the receipts and the total cost included in CWIP and provide copies of any additional invoices supporting the total cost claimed by the Company.

b. Receipts submitted by the Company indicate that distribution mains were replaced in 2011 at a cost of $14,432. Where were these mains installed? Were they associated with construction of the standpipe?

JLK 6-11 Customers and/or Potential Customers – Please identify all customers or potential customers for the standpipe and the anticipated monthly AND annual sales from each customer. Please provide copies of any contracts, credit applications, or facility use card applications. Please provide copies of correspondence written to or received from the actual and/or potential customer.

JLK 6-12 Security Deposits for Standpipe - Explain how, or if, the Company is going to require security deposits from potential customers. Provide a copy of all security deposit forms to be used by the Company. Have such forms or tariffs been submitted to the ACC for review and approval? Please explain.

JLK 6-13 Standpipe Payment Cards and Water Delivery Billing Questions - Please answer or provide the following:

a. Please provide all documentation concerning the Company's standpipe payment or pre-payment delivery tracking and billing cards.

b. Please state whether the cost to customers will be based on actual gallons sold (e.g. customer pumps 1,025 gallons and pays for 1,025 gallons) or rounded up/down gallons (e.g. customer pumps 1,025 gallons but pays for 2,000 gallons)

Subject: All information responses should ONLY be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

c. Please state what means of payment will be accepted (e.g. Credit card, Pre-paid card, Monthly billing).

JLK 6-14 Financing for Standpipe – Please state how the standpipe facility was financed and the terms of the financing. Please provide all supporting documentation. If main extensions or other services lines were installed to directly or indirectly serve this distribution center, please explain how the investments in these lines were financed?

JLK 6-15 ADEQ - Requirements - What are the ADEQ requirements for the standpipe? Have these requirements been met? Provide a copy of both the ADEQ Approval to Construct this facility and a copy of the ADEQ Approval of Construction related to this facility.

JLK 6-16 Standpipe and CC&N – If not clearly addressed or explained in the Business Plan submitted in response to Staff Data Request JLK 6-8, please provide data in support of the need for a standpipe in the community or communities to be served by this facility. Was it requested by existing ratepayers? If so, please explain.

JLK 6-17 Correspondence Regarding Standpipe Service Availability- Provide a copy of all letters or other correspondence generated by the Company to announce or market the availability of this new facility? Identify the costs incurred in developing or sending out these announcements and identify how, and when, these costs were recorded on the Company books and records?

JLK 6-18 Reasonableness of Proposed Standpipe Rate - Please provide full support for the reasonableness of the Company's request for a tariffed billing rate of $21.75 per 1,000 gallons for the deliveries through this new water distribution center.

JLK 6-19 Revenue for Standpipe - Explain where in the Company's pending rate application and proof of revenues, the additional revenues from this water distribution center have been quantified and identified.

JLK 6-20 Portion of Well No. 4 Related to Standpipe - Staff notes that the Company's investment in well # 4 was approximately $730,000 at the time of the last rate case and this investment level has now grown to almost $1,500,000. Identify and fully explain and discuss the portion of this incremental investment made in whole, or in part, to support water deliveries through this new distribution center?

Steve Wene, No. 019630
MOYES SELLERS & HENDRICKS LTD.
1850 N. Central Avenue, Suite 1100
Phoenix, Arizona 85004
(602)-604-2189
swene@law-msh.com
Attorneys for Utility Source, L.L.C.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
BOB STUMP, CHAIRMAN
GARY PIERCE
BOB BURNS
SUSAN BITTER SMITH
BRENDA BURNS

IN THE MATTER OF THE APPLICATION OF UTILITY SOURCE, LLC, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANTS AND PROPERTY AND FOR INCREASES IN ITS WATER AND WASTEWATER RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	DOCKET NO: WS-04235A-13-0331 **RESPONSE TO STAFF'S SIXTH SET OF DATA REQUESTS**

Utility Source, L.L.C. ("Company"), hereby responds to Staff's sixth set of data requests as follows:

JLK 6.1 Five Year Revenue and Expense Projections – In regard to the newly-constructed standpipe, please provide a five-year projection of anticipated revenues and expenses (i.e., for each year beginning in 2014 and going through the end of 2019). As part of your response, please provide the following:

a. Revenues – For each year of the projection, please provide a calculation showing how the future revenues were determined. The calculation should include the total number of gallons sold (in thousands) and the price at which the gallons are sold. Also, please explain all assumptions used in the development of these revenue forecasts (e.g., increases in gallons sold from year over year), and please provide all supporting documentation.

b. Expenses – For each year of the projection, please provide a calculation showing how the expenses were calculated. Please identify each expense separately and provide a calculation showing how the expense was derived. Also, please explain all assumptions used in making these expense projections, and please provide supporting documentation for each expense.

i. For depreciation expense, please identify all plant (i.e., standpipe and any other plant or facility needed to adequately operate the standpipe by NARUC plant account number, gross cost of plant, accumulated depreciation on each item of plant, and depreciation rate used.

Response: The Company does not have such projections. The Company has no ability to answer these questions accurately at this time and any such answers would be speculative.

JLK 6.2 Sources of Water for Standpipe – Identify the source, or sources of water to be used in conjunction with this standpipe/water distribution center. If more than one well will be used, please provide an estimate of the annual water volumes coming from each well.

Response: Groundwater. The standpipe is connected to main system. All wells deliver water to the system, including the standpipe. The Company's well use will be consistent with previous practices.

JLK 6.3 Wells Hooked Up To Standpipe – Identify all wells currently hooked up to this standpipe/water distribution center, or expected to be hooked up when the facility becomes operation.

Response: All wells are connected to the system and the standpipe water is supplied through the system.

JLK 6.4 Map of Standpipe Location – Provide a map showing where in the Company's CCN this new standpipe facility is located, where all Company water wells are located, and clearly note all water lines that will be used to supply water deliveries from this water distribution center.

Response: No such map exists. A plan showing the location of the standpipe location is set forth in Attachment 6.4.

JLK 6.5 Mains and Service Lines for Standpipe – Using the map provided in

response to Staff Data Request JLK 6.4, please identify all mains and/or service lines that were added in order to provide water to this water distribution center. Identify and fully document all costs/investments associated with these main and/or service line additions.

Response: ***See*** **Attachment 6.4 No transmission lines were necessary because the standpipe is adjacent to the storage tank and booster station.**

JLK 6.6 Opening Date of Standpipe – Please provide the date that the Company believes, or plans, to have this standpipe available to serve the public?

Response: September 1, 2014.

JLK 6.7 Monthly Standpipe Sales Activity – Please provide the standpipe sales activity to Staff via email for each month from the month the standpipe is open to the public until the date of the open meeting related to the Commission's approval of the Company's request in Docket No. 13-0331.

Response: No response required at this time.

JLK 6.8 Business Plan – Please provide a full and complete copy of the company's business plan regarding the newly constructed standpipe. The Business Plan should include a list of all operational and financial assumptions made in the development of this Business Plan. Also, please provide sensitivity analyses related to possible variances in the assumptions driving anticipated Business Plan results. These assumptions would be expected to include sales volumes estimates, operating cost estimates, billing rate assumptions. Provide a copy of all supporting schedules in Excel format with fully-functional formulas.

Response: The Company has no such plan drafted.

JLK 6.9 Engineering Description of Standpipe – Provide a full engineering description of, and facility design plan for, the standpipe/water distribution center's operational configurations.

Response: ***See*** **Attachment 6.4.**

JLK 6.10 Cost of the Standpipe/Water Distribution Center, Remainder of Invoices – In reference to Company's answer to Data Request JLK 4.6, is the standpipe the only

plant classified as Construction Work in Progress (CWIP totals $74,120.55)? Company receipts provided in answer to Data Request JLK 2.2, include the following receipts that appear to be associated with construction of the standpipe.

2/4/2010	Water Products.Net	Standpipe	$10,000
3/18/2010	Water Products.Net	Enclosure	3,341
4/16/2010	Pam Synod	Landscape Design	425
?/2010	Water Products.Net	Standpipe	36,684
6/24/2010	Ninyo Moore	Standpipe Svc.	2,500
4/21/2010	Shephard Wesnitzer	Standpipe plans	1,748
5/21/2010	Shephard Wesnitzer	Standpipe Svc.	753
4/29/2009	Spectrum Grp	Lift Station	358
			$55,809

a. Please explain the difference in the total of the receipts and the total cost included in CWIP and provide copies of any additional invoices supporting the total cost claimed by the Company.

b. Receipts submitted by the Company indicate that distribution mains were replaced in 2011 at a cost of $14,432. Where were these mains installed? Were they associated with construction of the standpipe?

Response: The Company is not seeking CWIP in rate base. There is no post-test year plant requested in rate base. Receipts are set forth in Attachment 6.10. Note the invoice paid to Shepard Westnitzer for $1,404.00 was delivered and paid after December 31, 2009 when Well 4 was put into service. This invoice was erroneously placed in CWIP for the standpipe. The mains replaced in 2011 were required for Well 4, not the standpipe.

JLK 6.11 Customer and/or Potential Customers – Please identify all customers or potential customers for the standpipe and the anticipated monthly AND annual sales from each customer. Please provide copies of any contracts, credit applications, or facility use card applications. Please provide copies of correspondence written to or received from the actual and/or potential customer.

Response: The Company anticipates that it will supply bulk water to a local rancher and a local KOA summer campground. There are no written contracts.

JLK 6.12 Security Deposits for Standpipe – Explain how, or if, the Company is going to require security deposits from potential customers. Provide a copy of all security deposit forms to be used by the Company. Have such forms or tariffs been submitted to

the ACC for review and approval? Please explain.

Response: Technology now allows prepayment and credit card transactions. The customer will have to make payment and then take water. If the customer overpays for the transaction, that amount will be credited to the customer's next purchase. There are no security deposits per se.

JLK 6.13 Standpipe Payment Cards and Water Delivery Billing Questions – Please answer or provide the following:

a. Please provide all documentation concerning the Company's standpipe payment or pre-payment delivery tracking and billing cards.

b. Please state whether the cost to customers will be based on actual gallons sold (e.g. customer pumps 1,025 gallons and pays for 1,025 gallons) or rounded up/down gallons (e.g. customer pumps 1,025 gallons but pays for 2,000 gallons).

c. Please state what means of payment will be accepted (e.g. Credit card, Pre-paid card, Monthly billing).

Response: The tracking and billing will be electronic. Unless special circumstances warrant, the Company will take credit and debit cards for payment. The system will measure actual gallons.

JLK 6.14 Financing for Standpipe – Please state how the standpipe facility was financed and the terms of the financing. Please provide all supporting documentation. If main extensions or other services lines were installed to directly or indirectly serve this distribution center, please explain how the investments in these lines were financed?

Response: The standpipe was constructed using Company investment and a line of credit from the owner. As previously explained, the Company was unable to pay the owner within a year due to the lack of sufficient funding. No main extensions were needed to connect the standpipe to the existing system.

JLK 6.15 ADEQ – Requirements – What are the ADEQ requirements for the standpipe? Have these requirements been met? Provide a copy of both the ADEQ Approval to Construct this facility and a copy of the ADEQ Approval of Construction related to this facility.

Response: ADEQ requires an Approval to Construct and Approval of Construction. The Company has not received the Approval of Construction. ***See***

Attachment 6.4.

JLK 6.16 Standpipe and CC&N – If not clearly addressed or explained in the Business Plan submitted in response to Staff Data Request JLK 6-8, please provide data in support of the need for a standpipe in the community or communities to be served by this facility. Was it requested by existing ratepayers? If so, please explain.

Response: Existing ratepayers receive water through the distribution lines, so there is no need for them to haul water. Therefore, they did not request the water hauling standpipe. Water haulers and contractors have made the request for the service.

JLK 6.17 Correspondence Regarding Standpipe Service Availability – Provide a copy of all letters or other correspondence generated by the Company to announce or market the availability of this new facility? Identify the costs incurred in developing or sending out these announcements and identify how, and when, these costs were recorded on the Company books and records?

Response: The Company has not marketed the standpipe operation.

JLK 6.18 Reasonableness of Proposed Standpipe Rate – Please provide full support for the reasonableness of the Company's request for a tariffed billing rate of $21.75 per 1,000 gallons for the deliveries through this new water distribution center.

Response: The Company will need to recoup its investment. Further, the supply wells are deep and require a vast amount of power to lift water to the standpipe. Consistent with common practices adopted by this Commission, the standpipe rate is the highest commodity rate.

JLK 6.19 Revenue for Standpipe – Explain where in the Company's pending rate application and proof of revenues, the additional revenues from this water distribution center have been quantified and identified.

Response: The Company's bill count includes approximately $3,500 in bulk water sales. The Company has made no pro forma adjustments for bulk water sales because it is not known and measurable.

JLK 6.20 Portion of Well No. 4 Related to Standpipe – Staff notes that the Company's investment in well #4 was approximately $730,000 at the time of the last rate case and this investment level has now grown to almost $1,500.000. Identify and fully

explain and discuss the portion of this incremental investment made in whole, or in part, to support water deliveries through this new distribution center?

Response: Well No. 4 was in no way developed for standpipe operations.

RESPECTFULLY SUBMITTED this 7th day of August, 2014.

MOYES SELLERS & HENDRICKS LTD.

Steve Wene

Copies of the foregoing electronically sent this 7th day of August, 2014 to:

Jorn L. Keller, Utilities Division
jkeller@azcc.gov

Wesley C. Van Cleve, Legal Division
wvancleve@azcc.gov

Donnelly Hurbert

ATTACHMENT 2


OPENING SOON

UTILITY SOURCE, LLC

SCHEDULES
WATER

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

DIRECT TESTIMONY OFJORN L. KELLER

TABLE OF CONTENTS TO SCHEDULES JLK

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] COMPANY FAIR VALUE	[C] STAFF ORIGINAL COST	[D] STAFF FAIR VALUE
1	Adjusted Rate Base	$ 1,566,542	$ 1,566,542	$ 1,594,960	$ 1,594,960
2	Adjusted Operating Income (Loss)	$ (8,264)	$ (8,264)	$ (5,520)	$ (5,520)
3	Current Rate of Return (L2 / L1)	-0.53%	-0.53%	-0.35%	-0.35%
4	Required Rate of Return	11.00%	11.00%	9.60%	9.60%
5	Required Operating Income (L4 * L1)	$ 172,320	$ 172,320	$ 153,116	$ 153,116
6	Operating Income Deficiency (L5 - L2)	$ 180,584	$ 180,584	$ 158,637	$ 158,637
7	Gross Revenue Conversion Factor	1.2650	1.2650	1.2619	1.2619
8	Required Revenue Increase (L7 * L6)	$ 228,439	$ 228,439	$ 200,188	$ 200,188
9	Adjusted Test Year Revenue	$ 208,004	$ 208,004	$ 206,184	$ 206,184
10	Proposed Annual Revenue (L8 + L9)	$ 436,443	$ 436,443	$ 406,372	$ 406,372
11	Required Increase in Revenue (%)	109.82%	109.82%	97.09%	97.09%

References:
Column (A): Company Schedule B-1
Column (B): Company Schedule B-1
Column (C): Staff Schedules OCRB, GRCF, TYOI & COC
Column (D): Staff Schedules OCRB, GRCF, TYOI & COC

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	[A]	[B]	[C]	[D]
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Tax Rate (Line 17) + Property Tax Factor (Line 22)	20.7560%			
5	Subtotal (L3 - L4)	79.2440%			
6	**Revenue Conversion Factor (L1 / L5)**	1.261926			
	Calculation of Uncollectible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	19.9880%			
9	One Minus Combined Income Tax Rate (L7 - L8)	80.0120%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	3.1486%			
14	Federal Taxable Income (L12 - L13)	96.8514%			
15	Applicable Federal Income Tax Rate (Line 44)	17.3868%			
16	Effective Federal Income Tax Rate (L14 x L15)	16.8394%			
17	Combined Federal and State Income Tax Rate (L13 +L16)	19.9880%			
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Tax Rate (Line 17)	19.9880%			
20	One Minus Combined Income Tax Rate (L18 - L19)	80.0120%			
21	Property Tax Factor (XXX-18, L24)	0.9599%			
22	Effective Property Tax Factor (L 21 * L 22)	0.007680703			
23	Combined Federal and State Tax and Property Tax Rate (L17+L22)		20.7560%		
24	Required Operating Income (Schedule JLK-1, Line 5)	$ 153,116			
25	Adjusted Test Year Operating Income (Loss) (Schedule JLK-1, Line 14)	$ (5,520)			
26	Required Increase in Operating Income (L24 - L25)		$ 158,637		
27	Income Taxes on Recommended Revenue (Col. (D), L52)	$ 38,250			
28	Income Taxes on Test Year Revenue (Col. (B), L52)	$ (1,379)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 39,629		
30	Recommended Revenue Requirement (Schedule JLK-1, Line 10)	$ 406,372			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32 - L33)		$ -		
35	Property Tax with Recommended Revenue (JLK-18, L19)	$ 9,386			
36	Property Tax on Test Year Revenue (JLK-18, L 16)	$ 7,464			
37	Increase in Property Tax Due to Increase in Revenue (XXX-18, L22)		$ 1,922		
38	Total Required Increase in Revenue (L26 + L30 + L34+L37)		$ 200,187		
	Calculation of Income Tax:	Test Year		STAFF Recommended	
39	Revenue (Schedule JLK-15, Col.[C], Line 5 & Sch. JLK-1, Col. [C], Line 10)	$ 206,184	$ 200,188	$ 406,372	
40	Operating Expenses Excluding Income Taxes	213,083	1,922	215,005	
41	Synchronized Interest (L47)	-		-	
42	Arizona Taxable Income (L36 - L37- L38)	$ (6,899)		$ 191,367	
43	Arizona State Income Tax Rate	3.1460%		3.1486%	
44	Arizona Income Tax (L39 x L40)		$ (217)		$ 6,025
45	Federal Taxable Income (L33 - L35)	$ (6,682)		$ 185,341	
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (1,162)		$ 32,225	
47	Federal Tax on Second Income Bracket N/A	$ -			
48	Federal Tax on Third Income Bracket N/A	$ -			
49	Federal Tax on Fourth Income Bracket N/A	$ -			
50	Federal Tax on Fifth Income Bracket N/A	$ -		$ -	
51	Total Federal Income Tax		$ (1,162)		$ 32,225
52	Combined Federal and State Income Tax (L35 + L42)		$ (1,379)		$ 38,250
53	Applicable Federal Income Tax Rate [Col. (D), L42 - Col. (B), L42] / [Col. (C), L36 - Col. (A), L36]				17.38680%
	Calculation of Interest Synchronization:				
54	Rate Base (ScheduleJLK-3, Col. [C], Line (17))	$ 1,594,961			
55	Weighted Average Cost of Debt	0.00%			
56	Synchronized Interest (L45 X L46)	$ -			

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W3

RATE BASE - ORIGINAL COST/FAIR VALUE

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Plant in Service	$ 2,496,640	$ -	$ 2,496,640
2	Less: Accumulated Depreciation	726,406	(49,356)	677,050
3	Net Plant in Service	$ 1,770,235	$ 49,356	$ 1,819,590
	LESS:			
4	Net Contribution in Aid-of Construction (CIAC)	$ 197,807	20,937	$ 218,744
5	Advances in Aid of Construction (AIAC)	-	-	-
8	Customer Deposits	5,885	-	5,885
9	Deferred Income Tax Credits	-	-	-
	Total Deductions	$ 203,692	$ 20,937	$ 224,629
	ADD:			
10	Unamortized Finance Charges	$ -	$ -	$ -
11	Deferred Tax Assets	-	-	-
12	Allowance for Working Capital	-	-	-
13	Intentional Left Blank	-	-	-
	Total Additions	$ -	$ -	$ -
14	**Original Cost Rate Base**	**$ 1,566,543**	**$ 28,419**	**$ 1,594,961**

References:
Column (A), Company Schedule B-1
Column (B): Schedule JLK-4
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Water Division Schedule JLK-W4
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Accum. Depec. ADJ #1	[C] Accum. Amort. ADJ #2	[D] STAFF ADJUSTED
		PLANT IN SERVICE:				
1	301	Organization Costs	$ -	$ -	$ -	$ -
2	302	Franchise Costs	-	-	-	-
3	303	Land & Land Rights	210,000	-	-	210,000
4	304	Structures & Improvements	72,997	-	-	72,997
5	307	Wells & Springs	1,353,539	-	-	1,353,539
	310	Power Generation Equipment	89,125	-	-	89,125
6	311	Electric Pumping Equipment	158,711	-	-	158,711
7	320	Water Treatment Equipment	5,487	-	-	5,487
8	320.1	Water Treatment Plants	-	-	-	-
9	320.2	Solutions & Feeders	-	-	-	-
10	330	Distribution Reservoirs & Standpipes	321,452	-	-	321,452
11	330.1	Storage Tank	-	-	-	-
12	330.2	Pressure Tanks	-	-	-	-
13	331	Transmission & Distribution Mains	161,632	-	-	161,632
14	333	Services	86,250	-	-	86,250
15	334	Meters & Meter Installations	-	-	-	-
16	335	Hydrants	34,500	-	-	34,500
17	336	Backflow Prevention Devices	-	-	-	-
18	339	Other Plant & Misc. Equip.	-	-	-	-
19	340	Office Furniture & Fixtures	2,947	-	-	2,947
20	340.1	Computer & Software	-	-	-	-
21	341	Transportation Equipment	-	-	-	-
22	342	Store Equipment	-	-	-	-
23	343	Tools & Work Equipment	-	-	-	-
24	344	Laboratory Equipment	-	-	-	-
25	345	Power Operated Equipment	-	-	-	-
26	349	Communications Equipment	-	-	-	-
27	347	Miscellaneous Equipment	-	-	-	-
28	348	Other Intangibles	-	-	-	-
			-			
29		Gross Utility Plant in Service	$ 2,496,640	$ -	$ -	$ 2,496,640
30		Less: Accumulated Depreciation	726,406	(49,356)	-	677,050
31		Net Utility Plant in Service (L29 - L30)	$ 1,770,234	$ 49,356	$ -	$ 1,819,589
		DEDUCTIONS				
32		Contributions in Aid of Construction (CIAC)	$ 294,745	$ -	$ -	$ 294,745
33		Less: Accumulated Amortization	96,938	-	(20,937)	76,001
34		Net CIAC (L32 - L33)	$ 197,807	$ -	$ 20,937	$ 218,744
35		Advances in Aid of Construction (AIAC)	-	-	-	-
36		Customer Meter Deposits	5,885	-	-	5,885
37		Deferred Income Tax Credits	-	-	-	-
38		Total Deductions	$ 203,692	$ -	$ 20,937	$ 224,629
		ADDITIONS:				
39		Unamortized Finance Charges	$ -	$ -	$ -	$ -
40		Deferred Tax Assets	-	-	-	-
41		Allowance for Working Capital	-	-	-	-
42		Intentional Left Blank	-	-	-	-
43		Total Additions	$ -	$ -	$ -	$ -
44		**ORIGINAL COST RATE BASE**	$ 1,566,542	$ 49,356	$ (20,937)	$ 1,594,960

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W5

RATE BASE ADJUSTMENT NO. 1 - ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Accumulated Depreciation	$ 726,406	$ (49,356)	$ 677,050

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony, P. 13
Column [C]: Column [A] + Column [B]

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W6

RATE BASE ADJUSTMENT NO. 2 - Accumulative Amortization of CIAC

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Accumulated Amortization of CIAC	$ 96,938	$ (20,937)	$ 76,001

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony, P. 9
Column [C]: Column [A] + Column [B]

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W7

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY ADJUSTED TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
1	*REVENUES:*						
2	Metered Water Sales	$ 202,743	$ -		$ 202,743	$ 200,188	$ 402,931
3	Water Sales - Unmetered	-	-		-	-	-
4	Other Operating Revenue	5,261	(1,820)	1	3,441	-	3,441
5	**Total Operating Revenues**	$ 208,004	$ (1,820)		$ 206,184	$ 200,188	$ 406,372
6	*OPERATING EXPENSES:*						
7	Salaries & Wages	$ -	$ -		$ -	$ -	$ -
8	Purchased Water	-	-		-	-	-
9	Purchased Power	66,787	-		66,787	-	66,787
10	Chemicals	1,460	-		1,460	-	1,460
11	Materials & Supplies	12,257	-		12,257		12,257
12	Office Supplies & Expense	2,399	-		2,399	-	2,399
13	Contractual Services - Accounting	20,253	(0)		20,253		20,253
14	Contractual Services - Professional	9,651	-		9,651		9,651
15	Outside services	-	-		-	-	-
16	Water Testing	8,107	(6,637)	3	1,470	-	1,470
17	Rents	-	-		-	-	-
18	Transportation Expense	-	-		-	-	-
19	Insurance - General Liability	2,186	-		2,186	-	2,186
20	Insurance - Health & Life	-	-		-	-	-
21	Regulatory Commission Expense	10,000	6,667	6	16,667	-	16,667
22	Miscellaneous Expense	19,976	(4,116)	4,5	15,860	-	15,860
23	Depreciation Expense	57,728	(1,097)	2	56,631		56,631
24	Taxes Other than Income	-	-		-	-	-
25	Property Taxes	7,530	(66)	7	7,464	1,922	9,386
26	Income Tax	(2,064)	685	8	(1,379)	39,629	38,250
27	**Total Operating Expenses**	$ 216,269	$ (4,564)		$ 211,705	$ 41,551	$ 253,255
28	**Operating Income (Loss)**	$ (8,265)	$ 2,744		$ (5,520)	$ 158,637	$ 153,117

References:
Column (A): Company Schedule C-1 (TAB IS~ADJ)
Column (B): Schedule JLK-8
Column (C): Column (A) + Column (B)
Column (D): Schedules JLK 8
Column (E): Column (C) + Column (D)

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W8

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Water Revenue ADJ #1	[C] Depr. Expense ADJ #2	[D] Water Testing ADJ #3	[E] Auto Expense ADJ #4	[F] Telephone Exp. ADJ #5	[G] Rate Case Exp. ADJ #6	[H] Prop. Tax ADJ #7	[I] Income Tax ADJ #8	[J] STAFF ADJUSTED
1	*REVENUES:*										
2	461 Metered Water Sales	$ 202,743		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 202,743
3	460 Water Sales - Unmetered	-		-	-	-	-	-	-	-	-
4	474 Other Operating Revenue	5,261	(1,820)	-	-	-	-	-	-	-	3,441
5	**Total Operating Revenues**	$ 208,004	$ (1,820)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 206,184
6	*OPERATING EXPENSES:*										
7	601 Salaries & Wages	$ -		$ -	$ -	$ -	$ -		$ -	$ -	$ -
8	610 Purchased Water	-		-	-	-	-		-	-	-
9	615 Purchased Power	66,787		-	-	-	-		-	-	66,787
10	618 Chemicals	1,460		-	-	-	-		-	-	1,460
11	620 Materials & Supplies	12,257									12,257
12	621 Office Supplies & Expense	2,399		-	-	-	-		-	-	2,399
13	632 Contractual Services - Accounting	20,253									20,253
14	633 Contractual Services - Professional	9,651									9,651
15	630 Outside services	-		-	-	-	-		-	-	-
16	635 Water Testing	8,107		-	(6,637)	-	-		-	-	1,470
17	641 Rents	-		-	-	-	-		-	-	-
18	650 Transportation Expense	-		-	-	-	-		-	-	-
19	657 Insurance - General Liability	2,186		-	-	-	-		-	-	2,186
20	659 Insurance - Health & Life	-		-	-	-	-		-	-	-
21	666 Regulatory Commission Expense	10,000		-	-	-	-	6,667	-	-	16,667
22	675 Miscellaneous Expense	19,976		-	-	(1,750)	(2,366)		-	-	15,860
23	403 Depreciation Expense	57,728		(1,097)	-	-	-		-	-	56,631
24	408 Taxes Other than Income	-		-	-	-	-		-	-	-
25	408.11 Property Taxes	7,530		-	-	-	-		(66)	-	7,464
26	409 Income Tax	(2,064)		-	-	-	-		-	685	(1,379)
26	**Total Operating Expenses**	$ 216,269	$ -	$ (1,097)	$ (6,637)	$ (1,750)	$ (2,366)	$ 6,667	$ (66)	$ 685	$ 211,705
27	**Operating Income (Loss)**	$ (8,264)	$ (1,820)	$ 1,097	$ 6,637	$ 1,750	$ 2,366	$ (6,667)	$ 66	$ (685)	$ (5,520)

ADJ #		References:
1	Other Revenue	JLK-W9
2	Depreciation Exp.	JLK-W10
3	*Water Test*	JLK-W11
4	Auto Expense	JLK-W12
5	Telephone Exp.	JLK-W13
6	Rate Case Exp.	JLK-W14
7	Property Tax Exp.	JLK-W15
8	Income Tax Exp.	JLK-W16

UTILITY SOURCE, LLC, Water Division Schedule JLK-W9
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 1 - TEST YEAR REVENUES

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Other Operating Revenue	$ 5,261	$ (1,820)	$ 3,441

References:
Column (A), Company Schedule C-2 & Workpapers
Column (B): Testimony JLK-8
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Water Division Schedule JLK-W10
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT No. 2 - DEPRECIATION EXPENSE

Line No.	ACCT NO.	DESCRIPTION	AMOUNT	DEPREC. RATE	EXPENSE
	Plant In Service				
1	301	Organization Costs	$ -	0.00%	$ -
2	302	Franchise Costs	-	0.00%	-
3	303	Land & Land Rights	210,000	0.00%	-
4	304	Structures & Improvements	72,997	3.33%	2,431
5	307	Wells & Springs	1,353,539	3.33%	45,073
6	310	Power Generation Equipment	89,125	5.00%	4,456
7	311	Electric Pumping Equipment	158,711	12.50%	-
8	320	Water Treatment Equipment	5,487	3.33%	183
9	320.1	Water Treatment Plants	-	3.33%	-
10	320.2	Solutions & Feeders	-	20.00%	-
11	330	Distribution Reservoirs & Standpipes	321,452	2.22%	7,136
12	330.1	Storage Tank	-	2.22%	-
13	330.2	Pressure Tanks	-	5.00%	-
14	331	Transmission & Distribution Mains	161,632	2.00%	3,233
15	333	Services	86,250	3.33%	2,872
16	334	Meters & Meter Installations	-	8.33%	-
17	335	Hydrants	34,500	2.00%	690
18	336	Backflow Prevention Devices	-	6.67%	-
19	339	Other Plant & Misc. Equip.	-	6.67%	-
20	340	Office Furniture & Fixtures	2,947	6.67%	197
21	340.1	Computer & Software	-	20.00%	-
22	341	Transportation Equipment	-	20.00%	-
23	342	Store Equipment	-	4.00%	-
24	343	Tools & Work Equipment	-	5.00%	-
25	344	Laboratory Equipment	-	10.00%	-
26	345	Power Operated Equipment	-	5.00%	-
27	349	Communications Equipment	-	10.00%	-
28	347	Miscellaneous Equipment	-	10.00%	-
29	348	Other Intangibles	-	0.00%	-
30		Subtotal General	$ 2,496,640		$ 66,270
31		Less: Amortization of Contributions	$ 294,745	3.27%	$ 9,640
32		Staff Recommended Depreciation Expense			$ 56,631
33		Company Proposed Depreciation Expense			57,728
34		Increase/(Decrease) to Depreciation Expense			$ (1,097)

UTILITY SOURCE, LLC, Water Division Schedule JLK-W11
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 3 -Water Testing

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Water Testing	$ 8,107	$ (6,637)	$ 1,470

References:
Column (A), Company Schedule C-2 & Workpapers
Column (B): Testimony Engineering Report, P. 16)
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Water Division Schedule JLK-W12
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 4 - Auto Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Auto Expense	$ 3,250	$ (1,750)	$ 1,500

References:
Column (A), Company Schedule C-2 & Data Request #3
Column (B): Testimony P. 14
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Water Division Schedule JLK-W13
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 5 -Telephone Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Telephone Expense	$ 4,732	$ (2,366)	$ 2,366

References:
Column (A), Company Schedule C-2 & Data Request #3.
Column (B): Testimony P. 14
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W14

OPERATING INCOME ADJUSTMENT NO. 6 -Rate Case Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Rate Case Expense	$ 10,000	$ 6,667	$ 16,667

References:
Column (A), Company Schedule C-2
Column (B): Testimony P. 15
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W15

OPERATING INCOME ADJUSTMENT No. 7 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$ 206,184	$ 206,184
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	412,368	$ 412,368
4	Staff Recommended Revenue, Per Schedule CSB-1	206,184	$ 406,372
5	Subtotal (Line 4 + Line 5)	618,552	818,740
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	206,184	$ 272,913
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	412,368	$ 545,827
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	412,368	$ 545,827
13	Assessment Ratio	20.0%	19.0%
14	Assessment Value (Line 12 * Line 13)	82,474	$ 103,707
15	Composite Property Tax Rate	9.0503%	9.0503%
			$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	$ 7,464	
17	Company Proposed Property Tax	7,530	
18	Staff Test Year Adjustment (Line 16-Line 17)	$ (66)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 9,386
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 7,464
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		$ 1,922
22	Increase to Property Tax Expense		$ 1,922
23	Increase in Revenue Requirement		200,188
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		0.959943%

UTILITY SOURCE, LLC, Water Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W16

OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Income Tax Expense	$ (2,064)	$ 685	$ (1,379)

References:
Column (A), Company Schedule C-2
Column (B): Testimony JLK-8
Column (C): Column (A) + Column (B)

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
Meter Size (All Classes):			
5/8 x 3/4 Inch	$ 13.18	$ 14.70	$ 20.00
3/4 Inch	21.00	23.42	30.00
1 Inch	40.50	45.16	75.00
1 1/2 Inch	89.20	99.46	150.00
2 Inch	147.70	164.69	240.00
3 Inch	284.20	316.88	480.00
4 Inch	479.20	534.31	750.00
6 Inch	966.92	1,078.12	1,500.00
			-
			-
			-
Commodity Charge - Per 1,000 Gallons			
5/8" x 3/4" Meter (Residential)			
First 4,000 gallons	$ 4.80	$ 8.25	N/A
4,001 to 9,000 gallons	7.16	15.75	N/A
Over 9,000 gallons	8.60	21.75	N/A
First 3,000 gallons	N/A	N/A	$ 8.00
3,001 to 10,000 gallons	N/A	N/A	14.00
Over 10,000 gallons	N/A	N/A	24.52
5/8" x 3/4" Meter (Commercial, Industrial, Irrigation)			
First 4,000 gallons	$ 4.80	$ 8.25	N/A
4,001 to 9,000 gallons	7.16	15.75	N/A
Over 9,000 gallons	8.60	21.75	N/A
First 10,000 gallons	N/A	N/A	$ 14.00
Over 10,000 gallons	N/A	N/A	24.52
3/4" Meter (Residential)			
First 4,000 gallons	$ 4.80	$ 8.25	N/A
4,001 to 9,000 gallons	7.16	15.75	N/A
Over 9,000 gallons	8.60	21.75	N/A
First 3,000 gallons	N/A	N/A	$ 8.00
3,001 to 10,000 gallons	N/A	N/A	14.00
Over 10,000 gallons	N/A	N/A	24.52
3/4" Meter (Commercial, Industrial, Irrigation)			
First 4,000 gallons	$ 4.80	$ 8.25	
4,001 to 9,000 gallons	7.16	15.75	N/A
Over 9,000 gallons	8.60	21.75	N/A
First 10,000 gallons	N/A	N/A	$ 14.00
Over 10,000 gallons	N/A	N/A	24.52
1" Meter (All Classes Including Standpipe and Construction)			
First 27,000 gallons	$ 4.80	$ 15.75	N/A
Over 27,000 gallons	7.16	21.75	N/A
First 22,000 gallons	N/A	N/A	$ 14.00
Over 22,000 gallons	N/A	N/A	24.52

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
1 1/2" Meter (All Classes Including Standpipe and Construction)			
First 57,000 gallons	$ 4.80	$ 15.75	N/A
Over 57,000 gallons	7.16	21.75	N/A
First 50,000 gallons	N/A	N/A	$ 14.00
Over 50,000 gallons	N/A	N/A	24.52
2" Meter (All Classes Including Standpipe and Construction)			
First 94,000 gallons	$ 4.80	$ 15.75	N/A
Over 94,000 gallons	7.16	21.75	N/A
First 80,000 gallons	N/A	N/A	$ 14.00
Over 80,000 gallons	N/A	N/A	24.52
3" Meter (All Classes Including Standpipe and Construction)			
First 195,000 gallons	$ 4.80	$ 15.75	N/A
Over 195,000 gallons	7.16	21.75	N/A
First 160,000 gallons	N/A	N/A	$ 14.00
Over 160,000 gallons	N/A	N/A	24.52
4" Meter (All Classes Including Standpipe and Construction)			
First 309,000 gallons	$ 4.80	$ 15.75	N/A
Over 309,000 gallons	7.16	21.75	N/A
First 250,000 gallons	N/A	N/A	$ 14.00
Over 250,000 gallons	N/A	N/A	24.52
6" Meter (All Classes Except Standpipe and Construction)			
First 615,000 gallons	$ 4.80	$ 15.75	N/A
Over 615,000 gallons	7.16	21.75	N/A
First 500,000 gallons	N/A	N/A	$ 14.00
Over 500,000 gallons	N/A	N/A	24.52
Irrigation Meters			
All Gallons	$ 9.26	$ 15.75	$ 24.52
Standpipe or Bulk			
All Gallons	$ 10.35	$ 21.75	$ 10.35
Construction			
All Gallons	$ 10.35	$ 21.75	$ 10.35

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
Other Service Charges			
Establishment	$ 20.00	$ 20.00	$ 30.00
Establishment (After Hours)	$ 40.00	Removed	N/T
Reconnection (Delinquent)	$ 50.00	$ 50.00	$ 25.00
Reconnection (Delinquent) - After Hours	$ 40.00	Removed	N/T
Deposit	*	*	*
Deposit Interest	**	**	**
Reestablishment (within 12 months)	***	***	***
NSF Check	$ 20.00	$ 20.00	$ 20.00
Late Payment Penalty (Per Month)	1.50%	1.50%	1.50%
Deferred Payment (Per Month)	1.50%	1.50%	1.50%
After Hours Service Calls - Per Hour	$ 40.00	$ 40.00	N/T
After Hours Service Charge	$ 40.00	$ 40.00	$ 40.00
Moving Customer Meter (at customer request)	Cost	Cost	Cost

* Per Commission Rule A.A.C. R-14-2-603(B)
** Per Commission Rule A.A.C. R-14-2-603(B)
*** Per Commission Rule A.A.C. R-14-2-603(D) - Months off the system times the monthly minimum.

Service and Meter Installation Charges

Service Size	Total Present Charge	Proposed Service Line	Proposed Meter	Total Proposed Charge	Recommended Service Line	Recommended Meter Insallation	Total Recommended Charge
5/8 x 3/4 Inch	$ 520	$ 385	$ 135	$ 520	$ 415	$ 105	$ 520
3/4 Inch	575	415	205	620	415	205	620
1 Inch	660	465	265	730	465	265	730
1 1/2 Inch	900	520	475	995	520	475	995
2 Inch Turbo	1,525	800	995	1,795	800	995	1,795
2 Inch Compound	2,320	800	1,840	2,640	800	1,840	2,640
3 Inch Turbo	2,275	1,015	1,620	2,635	1,015	1,620	2,635
3 Inch Compound	3,110	1,135	2,495	3,630	1,135	2,495	3,630
4 Inch Turbo	3,360	1,430	2,570	4,000	1,430	2,570	4,000
4 Inch Compound	4,475	1,610	3,545	5,155	1,610	3,545	5,155
6 Inch Turbo	6,035	2,150	4,925	7,075	2,150	4,925	7,075
6 Inch Compound	8,050	2,270	6,820	9,090	2,270	6,820	9,090
1 1/2 Inch	$ 675.00	$ 550.00	$ 675.00	$ 1,225.00	$ 550.00	$ 675.00	$ 1,225.00
2 Inch Turbo	N/A	$ 830.00	$ 1,195.00	$ 2,025.00	$ 830.00	$ 1,195.00	$ 2,025.00
2 Inch Compound	$ 1,660.00	$ 830.00	$ 2,040.00	$ 2,870.00	$ 830.00	$ 2,040.00	$ 2,870.00
3 Inch Turbo	N/A	$ 1,045.00	$ 1,820.00	$ 2,865.00	$ 1,045.00	$ 1,820.00	$ 2,865.00
3 Inch Compound	$ 2,150.00	$ 1,165.00	$ 2,604.00	$ 3,769.00	$ 1,165.00	$ 2,604.00	$ 3,769.00
4 Inch Turbo	N/A	$ 1,490.00	$ 2,820.00	$ 4,310.00	$ 1,490.00	$ 2,820.00	$ 4,310.00
4 Inch Compound	$ 3,135.00	$ 1,670.00	$ 3,795.00	$ 5,465.00	$ 1,670.00	$ 3,795.00	$ 5,465.00
6 Inch Turbo	N/A	$ 2,210.00	$ 5,175.00	$ 7,385.00	$ 2,210.00	$ 5,175.00	$ 7,385.00
6 Inch Compound	$ 6,190.00	$ 2,330.00	$ 7,070.00	$ 9,400.00	$ 2,330.00	$ 7,070.00	$ 9,400.00

Utility Source, LLC
Docket No. WS-04235A-13-0331
Test Year Ended: December 31, 2011

Schedule JLK W-18

Typical Bill Analysis
General Service 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	4,123	$ 38.58	$ 76.01	$ 37.43	97.01%
Median Usage	3,500	35.30	69.95	$ 34.65	98.14%
Staff Recommended					
Average Usage	4,123	$ 38.58	$ 69.72	$ 31.14	80.72%
Median Usage	3,500	35.30	61.00	$ 25.70	72.80%

Present & Proposed Rates (Without Taxes)
General Service 3/4-Inch Meter

	Present Rates		Company Proposed Rates		% Increase	Staff Recommended Rates		% Increase
	3/4"		3/4"			3/4"		
	Minimum Charge	$ 18.50	Minimum Charge	$ 41.07		Minimum Charge	$ 30.00	
	1st Tier Rate	$ 4.80	1st Tier Rate	$ 8.25		1st Tier Rate	$ 8.00	
	1st Tier Breakover	4,000	1st Tier Breakover	4,000		1st Tier Breakover	3,000	
	2nd Tier Rate	$ 7.16	2nd Tier Rate	$ 15.75		2nd Tier Rate	$ 14.00	
Gallons	2nd Tier Breakover	9,000	2nd Tier Breakover	9,000		2nd Tier Breakover	10,000	
Consumption	3rd Tier Rate	$ 8.60	3rd Tier Rate	$ 21.75		3rd Tier Rate	$ 24.52	
-	$ 18.50		$ 41.07		122.00%	$ 30.00		62.16%
1,000	23.30		49.32		111.67%	38.00		63.09%
2,000	28.10		57.57		104.88%	46.00		63.70%
3,000	32.90		65.82		100.06%	54.00		64.13%
4,000	37.70		74.07		96.47%	68.00		80.37%
5,000	44.86		89.82		100.22%	82.00		82.79%
6,000	52.02		105.57		102.94%	96.00		84.54%
7,000	59.18		121.32		105.00%	110.00		85.87%
8,000	66.34		137.07		106.62%	124.00		86.92%
4,123	38.58		76.01		97.01%	69.72		80.72%
9,000	73.50		152.82		107.92%	138.00		87.76%
10,000	82.10		174.57		112.63%	152.00		85.14%
11,000	90.70		196.32		116.45%	176.52		94.62%
12,000	99.30		218.07		119.61%	201.04		102.46%
13,000	107.90		239.82		122.26%	225.56		109.05%
14,000	116.50		261.57		124.52%	250.08		114.66%
15,000	125.10		283.32		126.47%	274.60		119.50%
16,000	133.70		305.07		128.18%	299.12		123.72%
17,000	142.30		326.82		129.67%	323.64		127.43%
18,000	150.90		348.57		130.99%	348.16		130.72%
19,000	159.50		370.32		132.18%	372.68		133.66%
20,000	168.10		392.07		133.24%	397.20		136.29%
25,000	211.10		500.82		137.24%	519.80		146.23%
30,000	254.10		609.57		139.89%	642.40		152.81%
35,000	297.10		718.32		141.78%	765.00		157.49%
40,000	340.10		827.07		143.18%	887.60		160.98%
45,000	383.10		935.82		144.28%	1,010.20		163.69%
50,000	426.10		1,044.57		145.15%	1,132.80		165.85%
75,000	641.10		1,588.32		147.75%	1,745.80		172.31%
100,000	856.10		2,132.07		149.04%	2,358.80		175.53%

UTILITY SOURCE, LLC

SCHEDULES
WASTEWATER

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

DIRECT TESTIMONY OFJORN L. KELLER

TABLE OF CONTENTS TO SCHEDULES JLK

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-WW1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] COMPANY FAIR VALUE	[C] STAFF ORIGINAL COST	[D] STAFF FAIR VALUE
1	Adjusted Rate Base	$ 830,945	$ 830,945	$ 825,880	$ 825,880
2	Adjusted Operating Income (Loss)	$ (72,257)	$ (72,257)	$ (83,906)	$ (83,906)
3	Current Rate of Return (L2 / L1)	-8.70%	-8.70%	-10.16%	-10.16%
4	Required Rate of Return	11.00%	11.00%	9.60%	9.60%
5	Required Operating Income (L4 * L1)	$ 91,404	$ 91,404	$ 79,284	$ 79,284
6	Operating Income Deficiency (L5 - L2)	$ 163,661	$ 163,661	$ 163,191	$ 163,191
7	Gross Revenue Conversion Factor	1.2022	1.2022	1.2001	1.2001
8	Required Revenue Increase (L7 * L6)	$ 196,753	$ 196,753	$ 195,850	$ 195,850
9	Adjusted Test Year Revenue	$ 121,284	$ 121,284	$ 119,464	$ 119,464
10	Proposed Annual Revenue (L8 + L9)	$ 318,037	$ 318,037	$ 315,314	$ 315,314
11	Required Increase in Revenue (%)	162.23%	162.23%	163.94%	163.94%

References:
Column (A): Company Schedule B-1
Column (B): Company Schedule B-1
Column (C): Staff Schedules OCRB, GRCF, TYOI & COC
Column (D): Staff Schedules OCRB, GRCF, TYOI & COC

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-WW2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	[A]	[B]	[C]	[D]
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Tax Rate (Line 17) + Property Tax Factor (Line 22)	16.6755%			
5	Subtotal (L3 - L4)	83.3245%			
6	**Revenue Conversion Factor (L1 / L5)**	1.2001			
	Calculation of Uncollectible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	15.7861%			
9	One Minus Combined Income Tax Rate (L7 - L8)	84.2139%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	2.8109%			
14	Federal Taxable Income (L12 - L13)	97.1891%			
15	Applicable Federal Income Tax Rate (Line 44)	13.3505%			
16	Effective Federal Income Tax Rate (L14 x L15)	12.9752%			
17	Combined Federal and State Income Tax Rate (L13 +L16)	15.7861%			
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Tax Rate (Line 17)	15.7861%			
20	One Minus Combined Income Tax Rate (L18 - L19)	84.2139%			
21	Property Tax Factor (XXX-18, L24)	1.0561%			
22	Effective Property Tax Factor (L 21 * L 22)	0.008893796			
23	Combined Federal and State Tax and Property Tax Rate (L17+L22)		16.6755%		
24	Required Operating Income (Schedule XXX-1, Line 5)	$ 79,284			
25	Adjusted Test Year Operating Income (Loss) (Schedule XXX-10, Line 40)	$ (83,906)			
26	Required Increase in Operating Income (L24 - L25)		$ 163,191		
27	Income Taxes on Recommended Revenue (Col. (D), L52)	$ 14,862			
28	Income Taxes on Test Year Revenue (Col. (B), L52)	$ (15,728)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 30,591		
30	Recommended Revenue Requirement (Schedule JLK-1, Line 10)	$ 315,314			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32 - L33)		$ -		
35	Property Tax with Recommended Revenue (JLK-18, L19)	$ 6,477			
36	Property Tax on Test Year Revenue (JLK-18, L 16)	$ 4,409			
37	Increase in Property Tax Due to Increase in Revenue (XXX-18, L22)		$ 2,068		
38	Total Required Increase in Revenue (L26 + L30 + L34+L37)		$ 195,850		
	Calculation of Income Tax:	Test Year		STAFF Recommended	
39	Revenue (Schedule JLK-10, Col.[C], Line 5 & Sch. JLK-1, Col. [B], Line 10)	$ 119,464	$ 195,850	$ 315,314	
40	Operating Expenses Excluding Income Taxes	219,099	2,068	221,167	221,167
41	Synchronized Interest (L47)	-		-	
42	Arizona Taxable Income (L36 - L37- L38)	$ (99,635)		$ 94,147	
43	Arizona State Income Tax Rate	2.8109%		2.8109%	
44	Arizona Income Tax (L39 x L40)		$ (2,801)		$ 2,646
45	Federal Taxable Income (L33 - L35)	$ (96,834)		$ 91,500	
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (12,928)		$ 12,216	
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -			
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -			
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -		$ -	
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -		$ -	
51	Total Federal Income Tax		$ (12,928)		$ 12,216
52	Combined Federal and State Income Tax (L35 + L42)		$ (15,728)		$ 14,862
53	Applicable Federal Income Tax Rate [Col. (D), L42 - Col. (B), L42] / [Col. (C), L36 - Col. (A), L36]				13.35%
	Calculation of Interest Synchronization:				
54	Rate Base (Schedule XXX-3, Col. [C], Line (17))	$ 825,880			
55	Weighted Average Cost of Debt (Schedule XXX-1)	0.00%			
56	Synchronized Interest (L45 X L46)	$ -			

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW 3
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

RATE BASE - ORIGINAL COST/FAIR VALUE

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Plant in Service	$ 1,397,271	$ -	$ 1,397,271
2	Less: Accumulated Depreciation	455,064	-	455,064
3	Net Plant in Service	$ 942,207	$ -	$ 942,207
	LESS:			
4	Net Contribution in Aid-of Construction (CIAC)	$ 111,262	$ -	$ 111,262
5	Advances in Aid of Construction (AIAC)	-	-	-
8	Customer Security Deposits	-	5,065	5,065
9	Deferred Income Tax Credits	-	-	-
	Total Deductions	$ 111,262	$ 5,065	$ 116,327
	ADD:			
10	Unamortized Finance Charges	$ -	$ -	$ -
11	Deferred Tax Assets	-	-	-
12	Allowance for Working Capital	-	-	-
	Total Additions	$ -	$ -	$ -
14	**Original Cost Rate Base**	**$ 830,945**	**$ (5,065)**	**$ 825,880**

References:
Column (A), Company Schedule B-1
Column (B): Schedule XXX
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW4
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Security Deposits ADJ #1	[C] STAFF ADJUSTED
		PLANT IN SERVICE:			
1	351	Organization Cost	$ -	$ -	$ -
2	352	Franchise Cost	-	-	-
3	353	Land and Land Rights	105,000	-	105,000
4	354	Structures & Improvements	56,350	-	56,350
5	355	Power Generation Equipment	2,879	-	2,879
6	360	Collection Sewers - Force	-	-	-
7	361	Collection Sewers - Gravity	260,553	-	260,553
8	362	Special Collecting Structures	-	-	-
9	363	Servcies to Customers	60,375	-	60,375
10	364	Flow Measuring Devices	-	-	-
11	365	Flow Measuring Installations	-	-	-
12	366	Reuse Services	3,450	-	3,450
13	367	Reuse Meters and Meter Installations	-	-	-
14	370	Receiving Wells	-	-	-
15	371	Pumping Equipment	-	-	-
16	374	Reuse Distribution Reserviors	-	-	-
17	375	Reuse Transmission and Distribution	-	-	-
18	380	Treatment & Disposal Equipment	903,992	-	903,992
19	381	Plant Sewers	-	-	-
20	382	Outfall Sewer Lines	-	-	-
21	389	Other Plant & Misc Equipment	-	-	-
22	390	Office Furniture & Equipment	4,672	-	4,251
23	390.1	Computers & Software	-	-	421
24	391	Transportation Equipment	-	-	-
25	392	Stores Equipment	-	-	-
26	393	Tools, Shop & Garage Equipment	-	-	-
27	394	Laboratory Equipment	-	-	-
28	395	Power Operated Equipment	-	-	-
29	396	Communication Equipment			
32		Gross Utility Plant in Service	$ 1,397,271	$ -	$ 1,397,271
33		Less: Accumulated Depreciation	455,064	-	455,064
34		Net Utility Plant in Service (L29 - L30)	$ 942,207	$ -	$ 942,207
		DEDUCTIONS			
32		Contributions in Aid of Construction (CIAC)	$ 197,973	$ -	$ 197,973
33		Less: Accumulated Amortization	86,711	-	86,711
34		Net CIAC (L32 - L33)	$ 111,262	$ -	$ 111,262
35		Advances in Aid of Construction (AIAC)	-	-	-
36		Customer Meter Deposits		5,065	5,065
37		Deferred Income Tax Credits	-	-	-
38		Total Deductions	$ 111,262	$ 5,065	$ 116,327
		ADDITIONS:			
39		Unamortized Finance Charges	$ -	$ -	$ -
40		Deferred Tax Assets	-	-	-
41		Allowance for Working Capital		-	-
42		Intentional Left Blank	-	-	-
43		Total Additions	$ -	$ -	$ -
44		**ORIGINAL COST RATE BASE**	$ 830,945	$ (5,065)	$ 825,880

ADJ #	Description
1	Customer Security Deposits

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-WW5

RATE BASE ADJUSTMENT NO. 1 - "Customer Security Deposits"

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJUSTMENT	[C] STAFF ADJUSTED
1	Customer Security Deposits	$ -	$ 5,065	$ 5,065

REFERENCES:
Column [A]: Company Schedule B-2
Column [B]: Testimony P. 10
Column [C]: Column [A] + Column [B]

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-WW6

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY ADJUSTED TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
1	*REVENUES:*					
2	Metered Water Sales	$ -	$ -	$ -		
3	Water Sales - Unmetered	116,023	-	116,023	$ 195,850	311,873
4	Other Operating Revenue	5,261	(1,820)	3,441	-	3,441
5	**Total Operating Revenues**	$ 121,284	$ (1,820)	$ 119,464	$ 195,850	$ 315,314
6	*OPERATING EXPENSES:*					
7	Salaries & Wages	$ -	$ -	$ -	$ -	$ -
8	Sludge Removal	12,659		$ 12,659		12,659
9	Purchased Power	26,213	-	$ 26,213	-	26,213
10	Chemicals	5,400	-	$ 5,400	-	5,400
11	Repairs & Maintenance	7,187	-	$ 7,187	-	7,187
14	Office Supplies & Expense	2,446	-	$ 2,446	-	2,446
12	Contractual Services - Other	46,650	-	$ 46,650	-	46,650
13	Contractual Services - Accounting	20,135		$ 20,135		20,135
15	Contractual Services - Professional	1,920		$ 1,920		1,920
16	Water Testing	5,669	8,858	$ 14,527	-	14,527
17	Rents	-	-	$ -	-	-
18	Transportation Expense	3,250	-	$ 3,250	-	3,250
19	Insurance - General Liability	2,186	-	$ 2,186	-	2,186
20	Insurance - Health & Life	-	-	$ -	-	-
21	Regulatory Commission Expense	10,000	6,667	$ 16,667	-	16,667
22	Miscellaneous Expense	13,152	(4,116)	$ 9,036	-	9,036
23	Depreciation Expense	45,744	670	$ 46,414	-	46,414
24	Taxes Other than Income	-	-	$ -	-	-
27	Property Taxes	4,476	(67)	$ 4,409	2,068	6,477
28	Income Tax	(13,545)	(1,733)	$ (15,278)	30,140	14,862
29	**Total Operating Expenses**	$ 193,541	$ 10,279	$ 203,821	$ 32,208	$ 236,029
30	**Operating Income (Loss)**	$ (72,257)	$ (12,099)	$ (84,357)	$ 163,641	$ 79,284

References:
Column (A): Company Schedule C-1
Column (B): Schedule JLKWW-7
Column (C): Column (A) + Column (B)
Column (D): Schedules JLKWW-1 and JLKWW-2
Column (E): Column (C) + Column (D)

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-WW7

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Operating Revenue ADJ #1	[C] Water Testing ADJ #2	[D] Auto Expense ADJ #3	[E] Telephone Exp. ADJ #4	[F] Depr. Exp. ADJ #5	[G] Rate Case Exp. ADJ #6	[G] Prop. Tax ADJ #7	[H] Income Tax ADJ #7	[I] STAFF ADJUSTED
1	*REVENUES:*										
2	521 Flat Rate Revenues	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	522 Measured Revenues	116,023	-	-	-	-	-	-	-	-	116,023
4	536 Other Operating Revenue	5,261	(1,820)	-	-	-	-	-	-	-	3,441
5	**Total Operating Revenues**	$ 121,284	$ (1,820)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 119,464
6	*OPERATING EXPENSES:*										
7	701 Salaries & Wages	$ -		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	711 Sludge Removal Expense	12,659		-	-	-	-	-	-	-	12,659
9	715 Purchased Power	26,213		-	-	-	-	-	-	-	26,213
10	718 Chemicals	5,400		-	-	-	-	-	-	-	5,400
11	720 Repairs & Maintenance	7,187		-	-	-	-	-	-	-	7,187
12	721 Office Supplies & Expense	2,446		-	-	-	-	-	-	-	2,446
13	730 Contractual Services - Acconting	46,650		-	-	-	-	-	-	-	46,650
14	732 Contractual Services - Other	20,135									20,135
15	733 Contractual Services -Professional	1,920									1,920
16	735 Water Testing	5,669		8,858	-	-	-	-	-	-	14,527
17	641 Rents	-		-	-	-	-	-	-	-	-
18	750 Transportation Expense	3,250		-	-	-	-	-	-	-	3,250
19	757 Insurance - General Liability	2,186		-	-	-	-	-	-	-	2,186
20	759 Insurance - Health & Life	-		-	-	-	-	-	-	-	-
21	766 Regulatory Commission Expense	10,000		-	-	-	-	6,667	-	-	16,667
22	775 Miscellaneous Expense	13,152		-	(1,750)	(2,366)	-	-	-	-	9,036
23	703 Depreciation Expense	45,744		-	-	-	670	-	-	-	46,414
24	708 Taxes Other than Income	-		-	-	-	-	-	-	-	-
25	708.11 Property Taxes	4,476		-	-	-	-	-	(67)	-	4,409
26	709 Income Tax	(13,545)	x	-	-	-	-	-	-	(1,733)	(15,728)
	Total Operating Expenses	$ 193,541	$	$ 8,858	$ (1,750)	$ (2,366)	$ 670	$ 6,667	$ (67)	$ (1,733)	$ 203,370
27	**Operating Income (Loss)**	$ (72,257)	$	$ (8,858)	$ 1,750	$ 2,366	$ (670)	$ (6,667)	$ 67	$ 1,733	$ (83,906)

ADJ #		References:
1	To remove security deposits from revenue	General Ledger, C2, P. 4
2	To increase water testing per Engineering Report	Eng. Report, P. 18, 19
3	To remove unnecessary auto expense.	JLK-WW10
4	To remove unnecessary telephone expense.	JLK-WW11
5	Depreciation Expense	JLK-WW12
6	Rate Case Expense	JLK-WW13
7	Property tax expense	JLK-WW14
8	Income tax expense	JLK-WW15

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW8
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 1 - OPERATING REVENUE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Operating Revenue	$ 5,261	$ (1,820)	$ 3,441

References:
Column (A), Company Schedule C-2 & Workpapers
Column (B): Testimony P. 16
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW9
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 2 - WATER TESTING

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Water Testing	$ 5,669	$ 8,858	$ 14,527

References:
Column (A), Company Schedule C-2 & Workpapers
Column (B): Testimony P. 16
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW10
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 3 - Automobile Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Automobile Expense	$ 3,250	$ (1,750)	$ 1,500

References:
Column (A), Company Schedule C-2 & Workpapers
Column (B): Testimony P. 16
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW11
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT NO. 4 - Officer and Contractor Telephone Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Telephone Expense	$ 4,732	$ (2,366)	$ 2,366

References:
Column (A), Company Schedule C-2 & Workpapers
Column (B): Testimony 18
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Wastewater Division Schedule JLK-WW12
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

OPERATING INCOME ADJUSTMENT No. 5 - DEPRECIATION EXPENSE

Line No.	ACCT NO.	DESCRIPTION	AMOUNT	DEPREC. RATE	EXPENSE
	Plant In Service				
1	351	Organization Cost	$ -	0.00%	$ -
2	352	Franchise Cost	-	0.00%	-
3	353	Land and Land Rights	105,000	0.00%	-
4	354	Structures & Improvements	56,350	3.33%	1,876
5	355	Power Generation Equipment	2,879	5.00%	144
6	360	Collection Sewers - Force	-	2.00%	-
7	361	Collection Sewers - Gravity	260,553	2.00%	5,211
8	362	Special Collecting Structures	-	2.00%	-
9	363	Servcies to Customers	60,375	2.00%	1,208
10	364	Flow Measuring Devices	-	10.00%	-
11	365	Flow Measuring Installations	-	10.00%	-
12	366	Reuse Services	3,450	2.00%	69
13	367	Reuse Meters and Meter Installations	-	8.33%	-
14	370	Receiving Wells	-	3.33%	-
15	371	Pumping Equipment	-	12.50%	-
16	374	Reuse Distribution Reserviors	-	2.00%	-
17	375	Reuse Transmission and Distribution	-	2.50%	-
18	380	Treatment & Disposal Equipment	903,992	5.00%	45,200
19	381	Plant Sewers	-	5.00%	-
20	382	Outfall Sewer Lines	-	3.33%	-
21	389	Other Plant & Misc Equipment	-	6.67%	-
22	390	Office Furniture & Equipment	4,251	6.67%	284
23	390.1	Computers & Software	421	20.00%	84
24	391	Transportation Equipment	-	20.00%	-
25	392	Stores Equipment	-	4.00%	-
26	393	Tools, Shop & Garage Equipment	-	5.00%	-
27	394	Laboratory Equipment	-	10.00%	-
28	348	Power Operated Equipment	-	5.00%	-
29		Subtotal General	$ 1,397,271		$ 54,075
30		Less: Amortization of Contributions	$ 197,973	3.87%	$ 7,662
31		Staff Recommended Depreciation/Amort. Expense			$ 46,414
32		Company Proposed Depreciation/Amort. Expense			45,744
33		Increase/(Decrease) to Depreciation Expense			$ 670

UTILITY SOURCE, LLC
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-W13

OPERATING INCOME ADJUSTMENT NO. 6 -Rate Case Expense

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Rate Case Expense	$ 10,000	$ 6,667	$ 16,667

References:
Column (A), Company Schedule C-2
Column (B): Testimony P. 19
Column (C): Column (A) + Column (B)

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLKWW14

OPERATING INCOME ADJUSTMENT No. 7 - PROPERTY TAXES

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$ 119,464	$ 119,464
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	$ 238,928	$ 238,928
4	Staff Recommended Revenue	119,464	315,314
5	Subtotal (Line 4 + Line 5)	$ 358,392	$ 554,242
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	$ 119,464	$ 184,747
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	$ 238,928	$ 369,494
10	Plus: 10% of CWIP	-	-
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	$ 238,928	$ 369,494
13	Assessment Ratio	20.00%	19.00%
14	Assessment Value (Line 12 * Line 13)	$ 47,786	$ 70,204
15	Composite Property Tax Rate - Obtained from ADOR	9.22620%	9.22620%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 4,409	
17	Company Proposed Property Tax	4,476	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$ (67)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 6,477
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		4,409
21	Increase in Property Tax Due to Increase in Revenue Requirement		$ 2,068
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 2,068
23	Increase in Revenue Requirement		$ 195,850
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		**1.056096%**

REFERENCES:
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1 Page 3
Line 21: Line 19 - Line 20
Line 23: Schedule WW-2

UTILITY SOURCE, LLC, Wastewater Division
Docket No. WS-04235A-13-0331
Test Year Ended December 31, 2012

Schedule JLK-WW15

OPERATING INCOME ADJUSTMENT NO. 7 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENT	[C] STAFF RECOMMENDED
1	Income Tax Expense	$ (13,545)	$ (1,733)	$ (15,278)

References:
Column (A), Company Schedule C-2
Column (B): Testimony P. 20
Column (C): Column (A) + Column (B)

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
Meter Size (All Classes):			
5/8 x 3/4 Inch	N/A	$ 53.00	$ 50.00
3/4 Inch	N/A	53.00	65.00
1 Inch	N/A	132.50	150.00
1 1/2 Inch	N/A	265.00	350.00
2 Inch	N/A	424.00	400.00
3 Inch	N/A	848.00	600.00
4 Inch	N/A	1,325.00	800.00
6 Inch	N/A	2,650.00	1,000.00
Commodity Charge - Per 1,000 Gallons			
Residential	$ 5.84	$ 5.31	$0.00
Commercial and Industrial:			
Car washes, laudromats, Commercial, Manufact	5.71	5.20	11.28
Hotels, Motels	7.66	6.97	11.28
Restauarants	9.46	8.61	11.28
Industrial Laundries	8.39	7.63	11.28
Waste haulers	171.20	155.79	11.28
Restuarant Grease	149.80	136.32	11.28
Treatment Plant Sludge	171.20	155.79	11.28
Mud Sump Waste	535.00	486.85	11.28
Establishment	$ 20.00	$ 20.00	$ 30.00
Establishment (After Hours)	$ 40.00	$ -	No Tariff
Reconnection (Delinquent)	$ 50.00	$ 50.00	$ 25.00
Reconnection (Delinquent) - After Hours	$ 40.00	$ -	No Tariff
Deposit	*	*	*
Deposit Interest	**	**	**
Reestablishment (within 12 months)	***	***	***
NSF Check	$ 20.00	$ 20.00	$ 20.00
Late Payment Penalty (Per Month)	1.50%	1.50%	1.50%
Deferred Payment (Per Month)	1.50%	1.50%	1.50%
Service Calls - Per Hour/After Hours(a)	$ 40.00	$ 40.00	No Tariff
After Hours Service Charge	$ 40.00	$ 40.00	$ 40.00

* Per Commission Rule A.A.C. R-14-2-603(B)
** Per Commission Rule A.A.C. R-14-2-603(B)
*** Per Commission Rule A.A.C. R-14-2-603(D) - Months off the system times the monthly minimum.

Service and Meter Installation Charges

Service Size	Total Present Charge	Proposed Service Line Charge	Proposed Meter Insallation Charge	Total Proposed Charge	Recommended Service Line Charge	Recommended Meter Insallation Charge	Total Recommended Charge
5/8 x 3/4 Inch	$ 520	$ 385	$ 135	$ 520	$ 415	$ 105	$ 520.00
3/4 Inch	575	415	205	620	415	205	620
1 Inch	660	465	265	730	465	265	730
1 1/2 Inch	900	520	475	995	520	475	995
2 Inch Turbine	1,525	800	995	1,795	800	995	1,795
2 Inch Compound	2,320	800	1,840	2,640	800	1,840	2,640
3 Inch Turbine	2,275	1,015	1,620	2,635	1,015	1,620	2,635
3 Inch Compound	3,110	1,135	2,495	3,630	1,135	2,495	3,630
4 Inch Turbine	3,360	1,430	2,570	4,000	1,430	2,570	4,000
4 Inch Compound	4,475	1,610	3,545	5,155	1,610	3,545	5,155
6 Inch Turbine	6,035	2,150	4,925	7,075	2,150	4,925	7,075
6 Inch Compound	8,050	2,270	6,820	9,090	2,270	6,820	9,090

Utility Source, LLC
Docket No. WS-04235A-13-0331
Test Year Ended: December 31, 2012

Schedule JLK-WW17

Typical Bill Analysis
Residential 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	4,123	$ 24.08	$ 74.89	$ 50.81	211.04%
Median Usage	3,500	20.44	71.59	$ 51.15	250.22%
Staff Recommended					
Average Usage	4,123	$ 24.08	$ 65.00	$ 40.92	169.95%
Median Usage	3,500	20.44	65.00	$ 44.56	218.00%

Present & Proposed Rates (Without Taxes)
General Service 3/4-Inch Meter

	Present Rates		Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
	3/4"		3/4"		3/4"	
	Minimum Charge	$ -	Minimum Charge	$ 53.00	Minimum Charge	$ 65.00
	1st Tier Rate	5.8400	1st Tier Rate	5.3100	1st Tier Rate	-
	1st Tier Breakover	99,999	1st Tier Breakover	999,999	1st Tier Breakover	-
	2nd Tier Rate		2nd Tier Rate		2nd Tier Rate	-
Gallons	2nd Tier Breakover		2nd Tier Breakover		2nd Tier Breakover	-
Consumption	3rd Tier Rate		3rd Tier Rate		3rd Tier Rate	-
-	$ -		$ 53.00		$ 65.00	
1,000	5.84		58.31	898.46%	65.00	1013.01%
2,000	11.68		63.62	444.69%	65.00	456.51%
3,000	17.52		68.93	293.44%	65.00	271.00%
4,000	23.36		74.24	217.81%	65.00	178.25%
3,500	20.44		71.59	250.22%	65.00	218.00%
5,000	29.20		79.55	172.43%	65.00	122.60%
6,000	35.04		84.86	142.18%	65.00	85.50%
7,000	40.88		90.17	120.57%	65.00	59.00%
8,000	46.72		95.48	104.37%	65.00	39.13%
4,123	24.08		74.89	211.04%	65.00	169.95%
9,000	52.56		100.79	91.76%	65.00	23.67%
10,000	58.40		106.10	81.68%	65.00	11.30%
11,000	64.24		111.41	73.43%	65.00	1.18%
12,000	70.08		116.72	66.55%	65.00	-7.25%
13,000	75.92		122.03	60.73%	65.00	-14.38%
14,000	81.76		127.34	55.75%	65.00	-20.50%
15,000	87.60		132.65	51.43%	65.00	-25.80%
16,000	93.44		137.96	47.65%	65.00	-30.44%
17,000	99.28		143.27	44.31%	65.00	-34.53%
18,000	105.12		148.58	41.34%	65.00	-38.17%
19,000	110.96		153.89	38.69%	65.00	-41.42%
20,000	116.80		159.20	36.30%	65.00	-44.35%
25,000	146.00		185.75	27.23%	65.00	-55.48%
30,000	175.20		212.30	21.18%	65.00	-62.90%
35,000	204.40		238.85	16.85%	65.00	-68.20%
40,000	233.60		265.40	13.61%	65.00	-72.17%
45,000	262.80		291.95	11.09%	65.00	-75.27%
50,000	292.00		318.50	9.08%	65.00	-77.74%
75,000	438.00		451.25	3.03%	65.00	-85.16%
100,000	583.99		584.00	0.00%	65.00	-88.87%