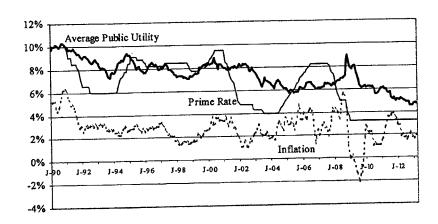
capital markets or their access to it, or a significant increase in the cost of capital, adversely affecting their ability to provide safe and reliable service to existing and future customers. In addition, water/sewer IOU's ability to retain and attract capital is subject to changes in state and federal tax laws and accounting standards, which could adversely affect their cash flows and financial condition.

Finally, because most aspects of a water/sewer IOU's operations (e.g., rates; operating terms and conditions of service; types of services offered; construction of new facilities; the integrity, safety, and security of facilities and operations; acquisition, extension, or abandonment of services or facilities; reporting and information posting requirements; maintenance of accounts and records; and relationships with affiliate companies) are subject to government oversight, investors are understandably concerned with rate, safety, and environmental regulation. Potential changes in laws, regulations, and policies, as well as the inherent uncertainty surrounding regulatory decisions, all represent significant risks to water/sewer IOUs.

#### C. Capital Markets

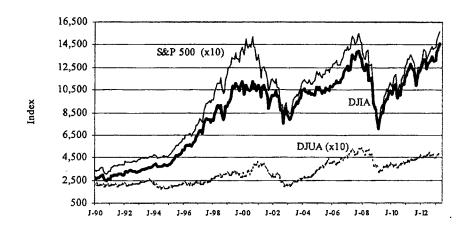
Average long-term public utility bond rates, the monthly borrowing prime rate, and inflation as measured by the Consumer Price Index ("CPI") since 1990 are plotted in the graph below. After rising to approximately 10% in mid-1990, the average yield on long-term public utility bonds generally fell because of monetary and fiscal policies designed to keep the economy growing. This ended abruptly with the 2008 financial market meltdown and global recession. Investors became exceedingly risk averse, causing interest rates on corporate bonds to

spike, while government policies pushed down the prime rate and depressed economic conditions and lower energy prices reduced inflation. Since that time, various actions by the Federal Reserve Board ("Fed") to stimulate the economy through low interest rates have resulted in the prime rate and long-term utility rates reaching record lows:



Turning to common stocks, between 1990 and early 2000, stock prices climbed steadily higher as the longest bull market in United States history continued unabated. In mid-2000, mounting concerns over prospects for future growth, particularly for firms in the high technology and telecommunications sectors, pushed equity prices lower, in some cases precipitously. Common stock prices generally recovered and reached record highs, buoyed in large part by widespread acquisition activity, until the capital market crisis and global recession hit in 2008. Stock prices tumbled by some 40%, and although they have mostly recovered, the market remains volatile, with share values routinely changing in full percentage points during a single day's trading. The graph below plots the performances of

the Dow-Jones Industrial Average, the S&P 500, and the Dow Jones Utility Average since 1990 (the latter two indices were scaled for comparability).



While there are signs that the U.S. economy is beginning to recover from the Great Recession, unemployment remains high, business and consumer spending continues to be cautious, and economic activity is guarded. There are questions whether the federal stimulus package and the actions by the Fed to keep interest rates low are having their desired effects on economic recovery. Indeed, the outlook remains tenuous, with persistent stock and bond price volatility providing tangible evidence of the uncertainties faced by the U.S. economy.

Uncertainties over an economic recovery heighten the risks faced by water and sewer utilities, which, as described earlier, face a variety of operating and financial challenges. Current levels of unprecedented federal deficit spending and government borrowing portend higher inflation and interest rates, which will place additional pressure on the adequacy of existing service rates. The capital markets continue to be in a state of turmoil, affecting both the availability and cost of debt and equity that water and sewer utilities rely on to fund their capital

spending requirements. Overshadowing everything, the U.S. and global economies remain precarious, which only increases the risks faced by the IOU water/sewer industry.

## III. RATE OF RETURN ON EQUITY

This section of the report begins by introducing the cost of equity concept, which generally serves as the basis for determining a fair and reasonable ROE for a utility, and is followed by a discussion of the risk-return tradeoff principle fundamental to capital markets and the importance of using multiple approaches to estimate the cost of equity. The DCF model is then developed and applied to a group of publicly traded water/sewer IOUs to estimate their cost of equity. Next, the CAPM is described and alternative cost of equity estimates developed using this method. The cost of equity is also estimated using the comparable earnings method. The results of these analyses are then combined to arrive at a cost of equity range, from which an ROE for SWWC Utilities is subsequently selected.

## A. Cost of Equity Concept

Unlike debt capital, there is no contractually guaranteed return on common equity capital, since shareholders are the residual owners of the utility. Nonetheless, common equity investors still require a return on their investment, with the "cost of equity" being the minimum rent that must be paid for the use of their money.

The cost of equity concept is predicated on the notion that investors are risk averse and willingly accept additional risk only if they expect to be compensated for bearing that risk. In capital markets where relatively risk-free assets are

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available, such as U.S. Treasury securities, investors can be induced to hold more risky assets only if they are offered a premium, or additional return, above the rate of return on a risk-free asset. Since all assets compete with each other for investors' funds, riskier assets must yield a higher expected rate of return than less risky assets in order for investors to be willing to hold them.

Given this risk-return tradeoff, the minimum required rate of return (k) from an asset (i) can be generally expressed as:

$$k_i = R_f + RPi$$

where:  $R_f$  = Risk-free rate of return; and

RP<sub>I</sub> = Risk premium required to hold more risky asset i.

Thus, the minimum required rate of return for a particular asset at any point in time is a function of: 1) the yield on risk-free assets, and 2) its relative risk, with investors demanding correspondingly larger risk premiums for assets bearing greater risk.

The risk-return tradeoff can be readily documented in certain segments of the capital markets where required rates of return can be directly inferred from market data and generally accepted measures of risk exist. For example, bond yields are reflective of investors' expected rates of return, and bond ratings are indicative of the risk of fixed income securities. The observed yields on government securities and bonds of various rating categories demonstrate that the risk-return tradeoff does, in fact, exist in the capital markets.

To illustrate, average yields during May 2013 on 30-year U.S. Treasury bonds and public utility bonds of different ratings reported by Moody's are shown in the table below. As evidenced there, as risk increases (measured by progres-

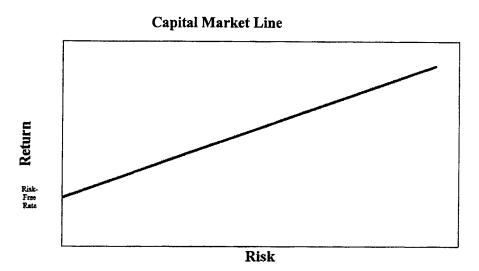
sively lower bond ratings), the required rate of return (measured by yields) rises accordingly. Also shown are the indicated risk premiums over long-term government securities for the additional risk associated with each bond rating category.

Bond and Rating	May 2013 <u>Yield</u>	Risk Premium Over 30-Year Treasury
U.S. Treasury 30-Year	3.11%	•-
Public Utility Aa A Baa	3.91% 4.17% 4.65%	0.80% 1.06% 1.54%

Documenting the risk-return tradeoff for assets other than fixed income securities is complicated by two factors. First, there is no standard measure of risk applicable to all assets. Second, for most assets (e.g., common stock), required rates of return cannot be directly observed. Yet there is every reason to believe that investors exhibit risk aversion in deciding whether to hold common stocks and other assets, just as when choosing among fixed income securities. Accordingly, it is generally accepted that the risk-return tradeoff evidenced with long-term debt extends to all assets.

The extension of the risk-return tradeoff from assets with observable required rates of return (e.g., bonds) to other assets is represented by the concept of a "capital market line." In particular, competition between securities and among investors in the capital markets drives the prices of assets to equilibrium such that the expected rate of return from each is commensurate with its risk. Thus, the expected rate of return from any asset is a risk-free rate of return plus a correspond-

ing risk premium. This concept of a capital market line is illustrated in the graph below. The vertical axis represents required rates of return and the horizontal axis indicates relative riskiness, with the intercept of the capital market line being the risk-free rate of return.



The risk-return tradeoff principle applies not only to investments in different firms, but also to different securities issued by the same firm. As discussed earlier, the securities issued by a utility vary considerably in risk because they have different characteristics and priorities. Long-term debt secured by a mortgage on property is senior among all capital in its claim on a utility's net revenues and is, therefore, the least risky because mortgage bondholders have a direct claim on the utility's property. Following first mortgage bonds are other debt instruments also holding contractual claims on the utility's net revenues, such as debentures. The last investors in line are common shareholders. They only receive the net revenues, if any, that remain after all other claimants have been paid. As a result, the minimum rate of return that investors require from a utility's

common stock, the most junior and riskiest of its securities, must be considerably higher than the yield offered by the utility's senior, long-term debt.

Although the cost of equity cannot be observed directly, it is a function of the returns available from other investment alternatives and the risks to which the equity capital is exposed. Because it is unobservable, the cost of equity for a particular utility must be estimated by analyzing information about capital market conditions generally, assessing the relative risks of the utility specifically, and employing various quantitative methods that focus on investors' required rates of return. These various quantitative methods typically attempt to infer investors' required rates of return from stock prices, by extrapolating interest rates, or through an analysis of other financial data.

Despite the theoretical appeal of or precedent for using a particular method to estimate the cost of equity, no single approach can be regarded as wholly reliable. Therefore, multiple methods are used to estimate the cost of equity in this report. Indeed, it is essential that estimates of investors' minimum required rate of return produced by one method be compared with those produced by other methods, and that all cost of equity estimates be required to pass fundamental tests of reasonableness and economic logic.

## B. Discounted Cash Flow Model

The use of DCF models to estimate the cost of equity is essentially an attempt to replicate the market valuation process which led to the price investors are willing to pay for a share of a company's common stock. It is predicated on the assumption that investors evaluate the risks and expected rates of return from all

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securities in the capital markets. Given these expected rates of return, the price of each share of stock is adjusted by the market so that investors are adequately compensated for the risks to which they are exposed. Therefore, one can look to the market to determine what investors believe a share of common stock is worth, and by estimating the cash flows they expect to receive from the stock in the way of future dividends and stock price, their required rate of return can be mathematically imputed. In other words, the cash flows that investors expect from a stock are estimated, and given the stock's current market price, we can "back-into" the discount rate, or cost of equity, investors presumably used in arriving at that price.

DCF models are derived from a theory of valuation which posits that the price of a share of common stock is equal to the present value of the expected cash flows (i.e., future dividends and stock price) that will be received while holding the stock, discounted at investors' required rate of return, or the cost of equity. Notationally, the general form of the DCF model is as follows:

$$P_0 = \frac{D_1}{(1 + K_e)^1} + \frac{D_2}{(1 + K_e)^2} + \dots + \frac{D_t}{(1 + K_e)^t} + \frac{P_t}{(1 + K_e)^t}$$

where:

 $P_0$  = Current price per share;

 $P_t$  = Future price per share in period t;

 $D_t = Expected dividend per share in period t;$ 

 $K_e = \text{Cost of equity.}$ 

In an effort to reduce the number of required estimates and computational difficulties, the general form of the DCF model has been simplified to a "constant growth" form. In order to convert the general form of the DCF model to the constant growth DCF model, a number of assumptions must be made. These include:

- A constant growth rate for both dividends and earnings;
- A stable dividend payout ratio;
- The discount rate exceeds the growth rate;
- A constant growth rate for book value and price;
- A constant earned rate of return on book value;
- No sales of stock at a price above or below book value;
- A constant price-earnings ratio;
- A constant discount rate (i.e., no changes in risk or interest rate levels and a flat yield curve); and
- All of the above extend to infinity.

Given these assumptions, the general form of the DCF model can be reduced to the more manageable formula of:

$$P_0 = \frac{D_1}{K_e - g}$$

where: g = Investors' long-term growth expectations.

The cost of equity, or Ke, can be isolated by rearranging terms:

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

The constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: 1) dividend yield  $(D_1/P_0)$ , and 2) growth (g). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation.

While the constant growth form of the DCF model provides a more manageable formula to estimate the cost of equity, it is important to note that the assumptions required to convert the general form of the DCF model to the constant growth form are never strictly met in practice. In some instances, where earnings are derived solely from stable activities, and earnings, dividends, and book value track fairly closely, the constant growth form of the DCF model may be a reason-

able working approximation of stock valuation. However, in other cases, where the circumstances cause the required assumptions to be severely violated, the constant growth DCF model may produce widely divergent and meaningless results. This is especially the case if the firm's earnings or dividends are unstable, or if investors are expecting the stock price to be affected by factors other than earnings and dividends.

As discussed earlier, SWWC Utilities is ultimately wholly owned by privately held SWWC. Because neither SWWC Utilities nor SWWC has publicly traded common stock, the constant growth form of the DCF model is applied to the following group of seven publicly traded firms comprising in *The Value Line Investment Survey's* ("Value Line") Water Utility industry:

- American States Water Company
- American Water Works Company
- Aqua America, Inc.
- California Water Service
- Connecticut Water Service
- Middlesex Water Company
- SJW Corporation

The first step in implementing the constant growth DCF model is to determine the expected dividend yield ( $D_1/P_0$ ) for the firm in question. This is usually calculated based on an estimate of dividends to be paid in the coming year divided by the current price of the stock. Because estimating the cost of equity using the DCF model is an attempt to replicate how investors arrived at an observed stock price, all of its components should be contemporaneous. Price, dividend, and growth data from different points in time, or averaged over long time periods, violate the matching principle underlying the DCF model. Therefore,

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dividend yield is calculated by dividing an estimate of dividends to be paid by each firm in the water utility industry group over the next twelve months, obtained from the index to *Value Line's* May 31, 2013 edition, by the average closing price of each firm's stock for the month of May 2013. The expected dividends, representative price, and resulting dividend yield for each of the seven water/sewer IOUs are displayed on Schedule BHF-1. As also shown there, the average dividend yield for the industry group is 3.04%.

In constant growth DCF theory, earnings, dividends, book value, and market price are all assumed to grow in lockstep, and the growth horizon of the DCF model is infinite. But implementation of the DCF model is more than just a theoretical exercise; it is an effort to replicate the mechanism investors used to arrive at observable stock prices. Therefore, the only "g" that matters in using the DCF model to estimate the cost of equity is that which investors expect and have embodied in current market prices.

Trends in earnings, which ultimately support future dividends and share price, play a pivotal role in determining investors' long-term growth expectations. The 5-year earnings growth projections by security analysts for each of the seven water/sewer utilities reported by *Value Line*, Thomson Reuters' Institutional Brokers Estimate System (*I/B/E/S*), and Zacks Investment Research (*Zacks*) are displayed on Schedule BHF-2, with the averages for the group being summarized in the table below:

	Industry Group
Value Line	6.9%

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*I/B/E/S* 6.2% *Zack's* 5.9%

Also shown on Schedule BHF-2 are the 10-year and 5-year historical earnings growth rates for each of the seven water/sewer IOUs, which average 3.8% and 4.1%, respectively.

In DCF theory and practice, growth in book equity comes from the reinvestment of earnings within the business and the effects of external financing. Accordingly, conventional applications of the constant growth DCF model often examine the relationships between variables that determine the "sustainable" growth attributable to these two factors. The sustainable growth rate is calculated by the formula:

$$g = br + sv$$

where "b" is the expected earnings retention ratio (one minus the dividend payout ratio), "r" is the expected rate of return earned on book equity, "s" is the percent of common equity expected to be issued annually as new common stock, and "v" is the equity accretion ratio. The "br" term represents the growth from reinvesting earnings within the firm while the "sv" term represents the growth from external financing. This external financing growth results because existing shareholders share in a portion of any excess received from selling new shares at a price above book value.

The sustainable growth rate for each firm in the industry group based on *Value Line's* projections for 2016-2018 is developed in Schedule BHF-3. As

shown there, the sustainable growth method implies an average long-term growth rate for the water utility group of 6.6%.

Schedule BHF-4 displays *Value Line* projected growth rates and 10- and 5-year historical growth rates in book value per share, dividends per share, and stock price for each firm in the water utility industry group. The averages for the group range from 3.3% (10-year historical dividend per share growth) to 5.9% (5-year price per share growth). Besides the fact that several of these growth rates, when combined with the group's approximately 3.0% dividend yield, imply implausible cost of equity estimates, the variation in these other growth rates results in them providing limited guidance as to the prospective growth that investors expect.

After excluding clearly unreliable indicators of growth, the plausible growth rates shown on Schedules BHF-2, BHF-3, and BHF-4 indicate a range for the water utility industry group of between approximately 5.0% and 7.0%. However, Zacks and Yahoo Finance report considerably higher projected earnings growth rates for their water utility industries of 7.4% and 13.61%, respectively. Taken together, it is concluded that investors expect long-term growth from the industry group in the 6.5% to 7.5% range. Summing this growth rate range with the group's average dividend yield of approximately 3.0% indicates a DCF cost of equity for the water/sewer IOU group of between 9.5% and 10.5%.

This 9.5% to 10.5% DCF cost of equity range applies to the group of seven publicly traded water/sewer utilities that, as shown on Schedule BHF-5, have an average market capitalization of approximately \$2.1 billion, whereas SWWC's

book capitalization is only approximately \$270 million. As will be discussed more completely in the next section on the CAPM, it is well accepted in the financial literature that investors require a higher return from smaller firms than from larger firms, all other things equal. Accordingly, to make the water utility industry DCF cost of equity range determined above applicable to SWWC, an adjustment is necessary to account for the smaller size of SWWC relative to the firms in the water utility group.

Morningstar (formerly Ibbotson Associates), in its Stocks, Bonds, Bills and Inflation, publishes a schedule of rate of return premiums to account for differences in the market capitalization of a firm's equity relative to the S&P 500. For the water utility industry group having an average market capitalization of \$2.1 billion (Schedule BHF-5), the size premium is 1.70%. Although SWWC does not have a market capitalization per se because its stock is not publicly traded, multiplying its \$270 million book equity by the approximately 2 times average marketto-book ratio of the firms in the water utility industry group (also developed on Schedule BHF-5) implies a market capitalization for SWWC of approximately \$540 million. The size premium for a firm with a \$540 million market capitalization is 2.46%. Thus, the return premium necessary to account for SWWC's smaller size relative to the water utility industry group is approximately 0.75% (i.e., 2.46% minus 1.70%). Adding a 0.75% adjustment for SWWC's smaller size to the 9.5% to 10.5% DCF cost of equity range determined for the water utility industry group produces a DCF cost of equity range for SWWC Utilities of between 10.25% and 11.25%.

### C. Capital Asset Pricing Model

The cost of equity for SWWC Utilities is also estimated using the CAPM, which is a theory of market equilibrium that serves as the basis for current financial education and management. Under the CAPM, investors are assumed fully diversified, so that the relevant risk of an individual asset (e.g., common stock) is its volatility relative to the market as a whole, which is measured using a "beta" coefficient. Beta reflects the tendency of a stock's price to follow changes in the market, with stocks having a beta less than 1.00 being considered less risky and stocks with a beta greater than 1.00 being regarded as more risky. The CAPM is mathematically expressed as:

$$R_j = R_f + \beta_j (R_m - R_f)$$

where:  $R_j$  = required rate of return for stock j;

 $R_f = risk$ -free interest rate;

 $R_m$  = expected return on the market portfolio; and

 $\beta_j$  = beta, or systematic risk, for stock j.

While the CAPM is not without controversy, it is routinely referenced in the financial literature and regulatory proceedings, and firms' beta values are widely reported.

The CAPM was applied using two methods to determine the risk premium for the market as a whole, or the  $(R_m - R_f)$  term in the CAPM formula. The first was based on historical rates of return and the second was based on forward-looking estimates of investors' required rates of return. In both instances, the companies included in the S&P 500 index were used as a proxy for the market portfolio and the 30-year U.S. Treasury bond served as the risk-free investment.

duces theoretical CAPM cost of equity estimates for the firms in the water/sewer industry group of 7.80% and 9.57%. These cost of equity estimates are based on CAPM theory. However, as explained by Morningstar in its 2013 Valuation Yearbook edition of Stocks, Bonds, Bills and Inflation:

One of the most remarkable discoveries of modern finance is that of a relationship between firm size and return. The relationship cuts across the entire size spectrum but is most evident among smaller companies, which have higher returns on average than larger ones. (page 85, footnote omitted)

In other words, in addition to the systematic risk measured by beta, investors' required rate of return depends on a firm's relative size.

As discussed earlier, SWWC's market capitalization is estimated to be approximately \$540 million, with the appropriate size premium relative to the S&P 500 from Morningstar's schedule being 2.70%. This means that the theoretical CAPM cost of equity estimates of 7.80% and 9.57% need to be increased by 2.46% to account for SWWC's relatively smaller size. As shown on Schedule BHF-6, increasing the theoretical CAPM cost of equity estimates based on historical rates of return and forward-looking rates of return by this size premium results in CAPM cost of equity estimates for SWWC Utilities of 10.26% and 12.03%, respectively.

#### D. Comparable Earnings Method

Often referred to as the comparable earnings method, this approach looks to the rates of return that other firms of comparable risk and that compete for investors' capital are expected to earn on their book equity. Reference to the expected return on book equity of other water/sewer IOUs indicates the level of

earnings that SWWC Utilities needs in order to offer investors a competitive return, be able to attract capital on reasonable terms, and maintain its financial integrity.

Schedule BHF-7 displays the return on book equity projected for each of the seven firms in the water utility industry group for the 2013, 2014, and 2016-2018 timeframes, calculated by dividing *Value Line's* projected earnings per share by average book value per share. As shown there, the average expected book ROE for the industry group is 9.3% in 2013, 9.5% for 2014, and 9.8% for 2016-2018. Again adjusting these values to account for the smaller size of SWWC relative to the water utility industry group using the 0.75% premium developed in the DCF section earlier produces a comparable earnings range for SWWC Utilities of between approximately 10.1% and 10.6%.

#### E. Cost of Equity Range

The DCF method indicates a cost of equity range for SWWC Utilities of between 10.25% and 11.25%, while the CAPM indicates a cost of equity range of between approximately 10.26% and 12.03%. Meanwhile, the comparable earnings method indicates a range, based on the size-adjusted returns other water/sewer IOUs are expected to earn on their book equity, of between 10.1% and 10.6%. Taken together, it is concluded that investors currently require an ROE from SWWC Utilities in the 10.25% to 11.25% range.

#### IV. RETURN ON EQUITY RECOMMENDATION

Having identified a 10.25% to 11.25% cost of equity range, the final step is to select a specific ROE for SWWC Utilities from within this range.

As illustrated earlier, interest rates dropped to historic lows following the financial crises of 2008 and early 2009. This was a direct result of reduced loan demand due to the Great Recession, reluctance by lenders to make loans, the U.S. government having extended credit to financial institutions at artificially suppressed interest rates approaching zero, and the Fed purchasing hundreds of billions of dollars in U.S. Treasury bonds. Simultaneously, the federal government authorized hundreds of billions of dollars in spending to stimulate the economy, which it is borrowing to finance. As the recession ends and the government subsidies subside, long-term interest rates are expected to rise in response to market forces and inflationary pressures. This rise in interest rates will in turn increase the cost of permanent capital, including common equity, above current levels.

Projections by investment advisors, forecasting services, and government agencies all show long-term interest rates increasing over the next few years. The table below compares current interest rates (as reported by the Fed and Moody's) on 30-year U.S. Treasury, triple-A corporate bonds, and double-A utility bonds with those projected for 2014 through 2017 by *Value Line* in its *Forecast for the U.S. Economy* (May 24, 2013), *Blue Chip Financial Forecasts* (June 1, 2013), Global Insight in its *The U.S. Economy: The 30-Year Focus* (First Quarter 2013), and the Energy Information Administration in its *Annual Energy Outlook 2013* (April 2013):

	May 2013	2014	2015	2016	2017
30-Year Treasury					
Value Line	3.1%	3.6%	4.0%	4.3%	4.5%
Blue Chip Forecast	3.1%	3.6%	4.2%	4.8%	5.4%
Global Insight	3.1%	3.7%	4.0%	4.5%	5.2%
AAA Corporate					
Value Line	3.9%	4.3%	4.7%	5.3%	5.8%
Blue Chip Forecast	3.9%	4.2%	4.9%	5.5%	6.0%
Global Insight	3.9%	4.4%	4.8%	5.5%	6.1%
AA-Utility					
Global Insight	3.9%	4.9%	5.3%	6.1%	6.9%
EIA	3.9%	5.2%	6.2%	6.8%	6.9%

These projections evidence a clear consensus that the cost of permanent capital will be higher in the 2014-2017 timeframe, when the rates being set in this proceeding will be in effect, than it is today. In order for SWWC Utilities to offer investors a competitive return, attract capital on reasonable terms, and maintain its financial integrity, its ROE needs to reflect these higher projected capital market requirements.

So that the rates approved in this proceeding reflect the capital costs prevailing when those rates are in effect, an adjustment to the current cost of equity is necessary to account for the higher capital costs expected in 2014 and beyond. However, while there is a consensus that capital costs will be higher in the 2014-2017 timeframe than they are currently, there is some disagreement about the magnitude of that increase. Therefore, it is recommended that the higher capital costs expected when rates are in effect be accommodated by selecting an ROE from the upper end of the 10.25% to 11.25% cost of equity range. Accordingly, an ROE for SWWC Utilities of 11.25% is recommended so that it will be able to

offer investors a competitive return, attract capital on reasonable terms, and maintain its financial integrity.

The reasonableness of this recommended 11.25% ROE for SWWC Utilities can be judged by reference to the ROEs previously granted by the Commission. Historically, the Commission has authorized water and sewer utilities ROEs in the approximately 12% vicinity, with the Commission most recently allowing a 10.88% ROE in Docket No. 1210-1841-UCR (SJWTX, Inc., d/b/a Canyon Lake Water Service Company). The recommended ROE of 11.25% for SWWC Utilities is near the bottom of the historical range and is only slightly higher than that granted by the Commission in its most recent order, which fully supports its reasonableness.

#### **APPENDIX A**

#### BRUCE H. FAIRCHILD

FINCAP, INC.
Financial Concepts and Applications
Economic and Financial Counsel

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#### **Summary of Qualifications**

M.B.A. and Ph.D. in finance, accounting, and economics; Certified Public Accountant. Extensive consulting experience involving regulated industries, valuation of closely-held businesses, and other economic analyses. Previously held managerial and technical positions in government, academia, and business, and taught at the undergraduate, graduate, and executive education levels. Broad experience in technical research, computer modeling, and expert witness testimony.

#### **Employment**

Principal, FINCAP, Inc. (Sep. 1979 to present) Economic consulting firm specializing in regulated industries and valuation of closely-held businesses. Assignments have involved electric. telecommunication, and water/sewer utilities, with clients including utilities, consumer groups, municipalities, regulatory agencies, and cogenerators. Areas of participation have included revenue requirements, rate of return, rate design, tariff analysis, avoided cost, forecasting, and negotiations. Other assignments have involved some seventy valuations as well as various economic (e.g., damage) analyses, typically in connection with litigation. Presented expert witness testimony before courts and regulatory agencies on over one hundred occasions.

Adjunct Assistant Professor, University of Texas at Austin (Sep. 1979 to May. 1981)

Assistant Director, Economic Research Division, Public Utility Commission of Texas (Sep. 1976 to Aug. 1979) Taught undergraduate courses in finance: Fin. 370 – Integrative Finance and Fin. 357 – Managerial Finance.

Division consisted of approximately twenty-five financial analysts, economists, and systems analysts responsible for rate of return, rate design, special projects, and computer systems. Directed Staff participation in rate cases, presented testimony on approximately thirty-five occasions, and was involved in some forty other cases Instrumental in the initial ultimately settled. development of rate of return and financial policy for newly-created agency. Performed independent research and managed State and Federal funded projects. Assisted in preparing appeals to the Texas Supreme Court and testimony presented before the Interstate Commerce Commission and Department of Energy. Maintained communications with financial community, industry representatives, media, and consumer groups. Appointed by Commissioners as Acting Director.

Assistant Professor, College of Business Administration, University of Colorado at Boulder (Jan. 1977 to Dec. 1978)

Teaching Assistant, University of Texas at Austin (Jan. 1973 to Dec. 1976)

Internal Auditor,
Sears, Roebuck and Company,
Dallas, Texas
(Nov. 1970 to Aug 1972)

Accounts Payable Clerk, Transcontinental Gas Pipeline Corp., Houston, Texas (May. 1969 to Aug. 1969) Taught graduate and undergraduate courses in finance: Fin. 305 – Introductory Finance, Fin. 401 – Managerial Finance, Fin. 402 – Case Problems in Finance, and Fin. 602 – Graduate Corporate Finance.

Taught undergraduate courses in finance and accounting: Acc. 311 – Financial Accounting, Acc. 312 – Managerial Accounting, and Fin. 357 – Managerial Finance. Elected to College of Business Administration Teaching Assistants' Committee.

Performed audits on internal operations involving cash, accounts receivable, merchandise, accounting, and operational controls, purchasing, payroll, etc. Developed operating and administrative policy and instruction. Performed special assignments on inventory irregularities and Justice Department Civil Investigative Demands.

Processed documentation and authorized payments to suppliers and creditors.

#### **Education**

Ph.D., Finance, Accounting, and Economics, University of Texas at Austin (Sep. 1974 to May 1980)

Doctoral program included coursework in corporate finance, investment theory, accounting, and economics. Elected to honor society of Phi Kappa Phi. Received University outstanding doctoral dissertation award

Dissertation: Estimating the Cost of Equity to Texas Public Utility Companies

M.B.A., Finance and Accounting, University of Texas at Austin, (Sep. 1972 to Aug. 1974)

Awarded Wright Patman Scholarship by World and Texas Credit Union Leagues.

Professional Report: Planning a Small Business Enterprise in Austin, Texas

B.B.A., Accounting and Finance, Southern Methodist University, Dallas, Texas (Sep. 1967 to Dec. 1971)

Dean's List 1967-1971 and member of Phi Gamma Delta Fraternity.

### Other Professional Activities

Certified Public Accountant, Texas Certificate No. 13,710 (October 1974); entire exam passed in May 1972. Member of the American Institute of Certified Public Accountants and Texas Society of Certified Public Accountants.

Member of Financial Management Association, Southwestern Finance Association, and American Finance Association. Participated as session chairman, moderator, and paper discussant at annual meetings of these and other professional associations.

Visiting lecturer in Executive M.B.A program at the University of Stellenbosch Graduate Business School, Belleville, South Africa (1983 and 1984).

Associate Editor of *Austin Financial Digest*, 1974-1975. Wrote and edited a series of investment and economic articles published in a local investment advisory service. 3934762.1

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#### **Military**

Texas Army National Guard, Feb. 1970 to Sep. 1976. Specialist 5th Class with duty assignments including recovery vehicle operator for armor unit and company clerk for finance unit.

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#### **Monographs**

- "On the Use of Security Analysts' Growth Projections in the DCF Model," with William E. Avera, Earnings Regulation Under Inflation, J. R. Foster and S. R. Holmberg, eds., Institute for Study of Regulation (1982).
- "An Examination of the Concept of Using Relative Customer Class Risk to Set Target Rates of Return in Electric Cost-of-Service Studies", with William E. Avera, Electricity Consumers Resource Council (ELCON) (1981); portions reprinted in *Public Utilities Fortnightly* (Nov. 11, 1982).
- "The Spring Thing (A) and (B)" and "Teaching Notes", with Mike E. Miles, a two-part case study in the evaluation, management, and control of risk; distributed by *Harvard's Intercollegiate Case Clearing House*; reprinted in *Strategy and Policy: Concepts and Cases*, A. A. Strickland and A. J. Thompson, Business Publications, Inc. (1978) and *Cases in Managing Financial Resources*, I. Matur and D. Loy, Reston Publishing Co., Inc. (1984).
- "Energy Conservation in Existing Residences, Project Director for development of instruction manual and workshops promoting retrofitting of existing homes, Governor's Office of Energy Resources and Department of Energy (1977-1978).
- "Linear Algebra," "Calculus," "Sets and Functions," and "Simulation Techniques," contributed to and edited four mathematics programmed learning texts for MBA students, *Texas Bureau of Business Research* (1975).

#### **Articles and Notes**

- "How to Value Personal Service Practices," with Keith Wm. Fairchild, *The Practical Accountant* (August 1989).
- "The Impact of Regulatory Climate on Utility Capital Costs: An Alternative Test," with Adrien M. McKenzie, *Public Utilities Fortnightly* (May 25, 1989).
- "North Arctic Industries, Limited," with Keith Wm. Fairchild, Case Research Journal (Spring 1988).
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- "Capital Needs for Electric Utility Companies in Texas: 1976-1985", *Texas Business Review* (January-February 1979), reprinted in "The Energy Picture: Problems and Prospects", J. E. Pluta, ed., *Bureau of Business Research* (1980).
- "Some Thoughts on the Rate of Return to Public Utility Companies," with William E. Avera, Proceedings of the NARUC Biennial Regulatory Information Conference (1978).
- "Regulatory Problems of EFTS," with Robert McLeod, Issues in Bank Regulation (Summer 1978) reprinted in Illinois Banker (January 1979).
- "Regulation of EFTS as a Public Utility," with Robert McLeod, Proceedings of the Conference on Bank Structure and Competition (1978).
- "Equity Management of REA Cooperatives," with Jerry Thomas, *Proceedings of the Southwestern Finance Association* (1978).
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- "The Cost of Capital to a Wholly-Owned Public Utility Subsidiary," *Proceedings of the Southwestern Finance Association* (1977).

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### **Selected Papers and Presentations**

"Legislative Changes Affecting Texas Utilities," Texas Committee of Utility and Railroad Tax Representatives, Fall Meeting, Austin, Texas (September 1995).

- "Rate of Return," "Origins of Information," Economics," and "Deferred Taxes and ITC's," New Mexico State University and National Association of Regulatory Utility Commissioners Public Utility Conferences on Regulation and the Rate-Making Process, Albuquerque, New Mexico (October 1983, 1984, 1985, 1986, 1987, 1988, 1990, 1991, 1992, 1994, and 1995, and September 1989); Pittsburgh, Pennsylvania (April 1993); and Baltimore, Maryland (May 1994 and 1995).
- "Developing a Cost-of-Service Study," 1994 Texas Section American Water Works Association Annual Conference, Amarillo, Texas (March 1994).
- "Financial Aspects of Cost of Capital and Common Cost Considerations," Kidder, Peabody & Co. Two-Day Rate Case Workshop for Regulated Utility Companies, New York, New York (June 1993).
- "Cost-of-Service Studies and Rate Design," General Management of Electric Utilities (A Training Program for Electric Utility Managers from Developing Countries), Austin, Texas (October 1989 and November 1990 and 1991).
- "Rate Base and Revenue Requirements," The University of Texas Regulatory Institute Fundamentals of Utility Regulation, Austin, Texas (June 1989 and 1990).
- "Determining the Cost of Capital in Today's Diversified Companies," New Mexico State University Public Utilities Course Part II, Advanced Analysis of Pricing and Utility Revenues, San Francisco, California (June 1990).
- "Estimating the Cost of Equity," Oklahoma Association of Tax Representatives, Tulsa, Oklahoma (May 1990).
- "Impact of Regulations," Business and the Economy, Leadership Dallas, Dallas, Texas (November 1989).
- "Accounting and Finance Workshop" and "Divisional Cost of Capital," New Mexico State University Current Issues Challenging the Regulatory Process, Albuquerque, New Mexico (April 1985 and 1986) and Santa Fe, New Mexico (March 1989).
- "Divisional Cost of Equity by Risk Comparability and DCF Analyses," NARUC Advanced Regulatory Studies Program, Williamsburg, Virginia (February 1988) and USTA Rate of Return Task Force, Chicago, Illinois (June 1988).
- "Revenue Requirements," Revenue, Pricing, and Regulation in Texas Water Utilities, Texas Water Utilities Conference, Austin, Texas (August 1987 and May 1988).
- "Rate Filing Basic Ratemaking," Texas Gas Association Accounting Workshop, Austin, Texas (March 1988).
- "The Effects of Regulation on Fair Market Value: P.H. Robinson A Case Study," Annual Meeting of the Texas Committee of Utility and Railroad Tax Representatives, Austin, Texas (September 1987).
- "How to Value Closely-held Businesses," TSCPA 1987 Entrepreneurs Conference, San Antonio, Texas (May 1987).
- "Revenue Requirements" and "Determining the Rate of Return", New Mexico State University Regulation and the Rate-Making Process, Southwestern Water Utilities Conference, Albuquerque, New Mexico (July 1986) and El Paso, Texas (November 1980).
- "How to Evaluate Personal Service Practices," TSCPA CPE Exposition 1985, Houston and Dallas, Texas (December 1985).
- "How to Start a Small Business Accounting and Record Keeping," University of Texas Management Development Program, Austin, Texas (October 1984).
- "Project Financing of Public Utility Facilities", TSCPA Conference on Public Utilities Accounting and Ratemaking, San Antonio, Texas (April 1984).
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"Valuation of Closely-Held Businesses," Concho Valley Estate Planning Council, San Angelo, Texas (September 1982).

- "Rating Regulatory Performance and its Impact on the Cost of Capital," New Mexico State University Seminar on Regulation and the Cost of Capital, El Paso, Texas (May 1982).
- "Effect of Inflation on Rate of Return," Cost of Capital Conference and Workshop, Pinehurst, North Carolina (April 1981).
- "Original Cost Versus Current Cost Regulation: A Re-examination," Financial Management Association, New Orleans, Louisiana (October 1980).
- "Capital Investment Analysis for Electric Utilities," The University of Texas at Dallas, Richardson, Texas (June 1980).
- "The Determinants of Capital Costs to the Electric Utility Industry," with Cedric E. Grice, Southwestern Finance Association, San Antonio, Texas (March 1980).
- "The Entrepreneur and Management: A Case Study," Small Business Administration Seminar, Austin, Texas (October 1979).
- "Capital Budgeting by Public Utilities: A New Perspective," with W. Clifford Atherton, Jr., Financial Management Association, Boston, Massachusetts (October 1979).
- "Issues in Regulated Industries Electric Utilities," University of Texas at Dallas 4th Annual Public Utilities Conference, Dallas, Texas (July 1979).
- "Investment Conditions and Strategies in Today's Markets," American Society of Women Accountants, Austin, Texas (January 1979).
- "Attrition: A Practical Problem in Determining a Fair Return to Public Utility Companies," Financial Management Association, Minneapolis, Minnesota (October 1978).
- "The Cost of Equity to Wholly-Owned Electric Utility Subsidiaries," with William L. Beedles, Financial Management Association, Minneapolis, Minnesota (October 1978).
- "PUC Retrofitting Program," Texas Electric Cooperatives Spring Workshop, Austin, Texas (May 1978).
- "The Economics of Regulated Industries," Consumer Economics Forum, Houston, Texas (November 1977).
- "Public Utilities as Consumer Targets Is the Pressure Justified?," University of Texas at Dallas 2nd Annual Public Utilities Conference, Dallas, Texas (July 1977).

### **APPENDIX B**

# **BRUCE H. FAIRCHILD**

# SUMMARY OF TESTIMONY BEFORE REGULATORY AGENCIES

	Utility Case	Agency	Docket	Date	Nature of Testimony
1.	Arkansas Electric Cooperative	Arkansas PSC	U-3071	Aug-80	Wholesale Rate Design
2.	East Central Oklahoma Electric Cooperative	Oklahoma CC	26925 Sep-80		Retail Rate Design
3.	Kansas Gas & Electric Company	Kansas CC	115379-U	Nov-80	PURPA Rate Design Standards
4.	Kansas Gas & Electric Company	Kansas CC	128139-U	May-81	Attrition
5.	City of Austin Electric Department	City of Austin		Jun-81	PURPA Rate Design Standards
6.	Tarrant County Water Control and Improvement District No. 1	Texas Water Commission		Oct-81	Wholesale Rate Design
7. 	Owentown Gas Company	Texas RRC	2720	Jan-82	Revenue Requirements and Retail Rate Design
8.	Kansas Gas & Electric Company	Kansas CC	134792-U	Aug-82	Attrition
9.	Mississippi Power Company	Mississippi PSC	U-4190	Sep-82	Working Capital
10.	Lone Star Gas Company	Texas RRC	3757; 3794	Feb-83	Rate of Return on Equity
11.	Kansas Gas & Electric Company	Kansas CC	134792-U	Feb-83	Rate of Return on Equity
	Southwestern Bell Telephone Company	Oklahoma CC	28002 Oct-83		Rate of Return on Equity
13.	Morgas Company	Texas RRC	4063	Nov-83	Revenue Requirements
14.	Seagull Energy	Texas RRC	4541	Jul-84	Rate of Return
	Southwestern Bell Telephone Company	FCC	84-800	Nov-84	Rate of Return on Equity
1	Kansas Gas & Electric Company, Kansas City Power & Light Company, and Kansas Electric Power Cooperatives	Kansas CC	142098-U; 142099-U; 142100-U	May-85	Nuclear Plant Capital Costs and Allowance for Funds Used During Construction
17.	Lone Star Gas Company	Texas RRC	5207	Oct-85	Overhead Cost Allocation
18.	Westar Transmission Company	Texas RRC	5787	Nov-85 Jan-86 Jul-86	Rate of Return, Rate Design, and Gas Processing Plant Economics
19.	City of Houston	Texas Water Commission	RC-022; RC- 023	Nov-86	Line Losses and Known and Measurable Changes
2ò. I	ENSTAR Natural Company	Alaska PUC	TA 50-4; R-87-2; U-87-2	Nov-86 May-87 May-87	Cost Allocation, Rate Design, and Tax Rate Changes
21.	Brazos River Authority	Texas Water Commission	RC-020	Jan-87	Revenue Requirements and Rate Design
22. I	East Texas Industrial Gas Company	Texas RRC	5878	Feb-87	Revenue Requirements and Rate Design
23.	Seaguli Energy	Texas RRC	6629	Jun-87	Revenue Requirements

No.	Utility Case	Agency	Docket	Date	Nature of Testimony
24.	ENSTAR Natural Company	Alaska PUC	U-87-42	Jul-87	Cost Allocation, Rate Design, and Contracts
				Sep-87	and Contracts
				Sep-87	
25.	High Plains Natural Gas Company	Texas RRC	6779	Sep-87	Rate of Return
26.	Hughes Texas Petroleum	Texas RRC	2-91,855	Jan-88	Interim Rates
27.	Cavallo Pipeline Company	Texas RRC	7086	Sep-88	Revenue Requirements
28.	Union Gas System, Inc.	Kansas CC	165591-U	Mar-89 Aug-89	Rate of Return
29.	ENSTAR Natural Gas Company	Alaska PUC	U-88-70	Mar-89	Cost Allocation and Bypass
30.	Morgas Co.	Texas RRC	7538	Aug-89	Rate of Return and Cost Allocation
31.	Corpus Christi Transmission Company	Texas RRC	7346	Sep-89	Revenue Requirements
32.	Amoco Gas Co.	Texas RRC	7550	Oct-89	Rate of Return and Cost Allocation
33.	Iowa Southern Utilities	Iowa Utilities Board	RPU-89-7	Nov-89 Mar-90	Rate of Return on Equity
34.	Southwestern Bell Telephone Company	FCC	89-624	Feb-90 Apr-90	Rate of Return on Equity
35.	Lower Colorado River Authority	Texas PUC	9427	Mar-90 Aug-90 Aug-90	Revenue Requirements
36.	Rio Grande Valley Gas Company	Texas RRC	7604	May-90	Consolidated FIT and Depreciation
37.	Southern Union Gas Company	El Paso PURB		Oct-90	Disallowed Expenses and FIT
38.	Iowa Southern Utilities	lowa Utilities Board	RPU-90-8	Nov-90 Feb-91	Rate of Return on Equity
39.	East Texas Gas Systems	Texas RRC	7863	Dec-90	Revenue Requirements
40.	San Jacinto Gas Transmission	Texas RRC	7865	Dec-90	Revenue Requirements
41.	Southern Union Gas Company	Austin; Texas RRC	 7878	Feb-91 Feb-91	•
42.	Southern Union Gas Company	Port Arthur; Texas RRC			Adjustment
43.	Cavallo Pipeline Company	Texas RRC	8016	Jun-91	Revenue Requirements
44.	New Orleans Public Service Inc.	New Orleans City Council	CD-91-1	Jun-91 Mar-92	
45.	Houston Pipe Line Company	Texas RRC	8017	Jul-91	Rate of Return

No.	Utility Case	Agency	Docket	Date	Nature of Testimony
46.	Southern Union Gas Company	El Paso PURB	-	Aug-91 Sep-91	Acquisition Adjustment
47.	Southwestern Gas Pipeline, Inc.	Texas RRC	8040	Jan-92 Feb-92	Rate Design and Settlement
48.	City of Fort Worth	Texas Water Commission	8748-A 9261-A	Mar-92 Aug-92 Dec-92 Oct-94 Nov-94	
49.	Southern Union Gas Company	Oklahoma Corp. Com.		Jun-92	Rate of Return
50.	Minnegasco	Minnesota PUC	G-008/GR- 92-400	Jul-92 Dec-92	Rate of Return
51.	Guadalupe-Blanco River Authority	Texas PUC	11266	Sep-92	Cost Allocation and Bond Funds
52.	Dorchester Intra-State Gas System	Texas RRC	8111	Oct-92 Nov-92	Rate Impact of System Upgrade
53.	Corpus Christi Transmission Company GP and GPII	Texas RRC	8300 Oct-92 8301 Oct-92		Revenue Requirements
54.	East Texas Industrial Gas Company	Texas RRC	8326	Mar-93	Revenue Requirements
55.	Arkansas Louisiana Gas Company	Arkansas PSC	93-081-U	Apr-93 Oct-93	Rate of Return on Equity
56.	Texas Utilities Electric Company	Texas PUC	11735	Jun-93 Jul-93	Impact of Nuclear Plant Construction Delay
57.	Minnegasco	Minnesota PUC	G-008/GR- 93-1090	Nov-93 Apr-94	Rate of Return
58.	Gulf States Utilities Company	Municipalities		May-94 Oct-94 Nov-94	Rate of Return on Equity
59.	Louisiana Power & Light Company	Louisiana PSC	U-20925	Aug-94 Feb-95	Rate of Return on Equity
60.	San Jacinto Gas Transmission	Texas RRC	8429	Sep-94	Revenue Requirements
61.	Cavallo Pipeline Company	Texas RRC	8465	Sep-94	Revenue Requirements
62.	Eastrans Limited Partnership	Texas RRC	8385	Oct-94	Revenue Requirements
33.	Gulf States Utilities Company	Louisiana PSC	U-19904	Oct-94	Rate of Return on Equity
54.	Entergy Services, Inc.	FERC	ER95-112- 000	Mar-95 Nov-95	Rate of Return on Equity
35.	East Texas Gas Systems	Texas RRC	8435	Apr-95	Revenue Requirements
56.	System Energy Resources, Inc.	FERC	ER95-1042- May-9 000 Dec-9 Jan-9		Rate of Return on Equity

No.	Utility Case	Agency	Docket	Date	Nature of Testimony
67.	Minnegasco	Minnesota PUC	G-008/GR- 95-700	Aug-95 Dec-95	Rate of Return
68.	Entex	Louisiana PSC	U-21586	Aug-95	Rate of Return
69.	City of Fort Worth	Texas NRCC	SOAH 582- 95-1084	Nov-95	Public Interest of Contract
70.	Seagull Energy Corporation	Texas RRC	8589	Nov-95	Revenue Requirements
71.	Corpus Christi Transmission Company LP	Texas RRC	8449	Feb-96	Revenue Requirements
72.	Missouri Gas Energy	Missouri PSC	GR-96-285	Apr-96 Sep-96 Oct-96	Rate of Return
73.	Entex	Mississippi PSC	96-UA-202	May-96	Rate of Return
74.	Entergy Gulf States, Inc.	Louisiana PSC	U-22084	May-96	Rate of Return on Equity (Gas)
75.	Entergy Gulf States, Inc.	Louisiana PSC	U-22092	May-96 Oct-96	Rate of Return on Equity
76.	American Gas Storage, L.P.	Texas RRC	8591	Sep-96	Revenue Requirements
77.	Entergy Louisiana, Inc.	Louisiana PSC	U-20925	Sep-96 Oct-96	Rate of Return on Equity
78.	Lone Star Pipeline and Gas Company	Texas RRC	8664	Oct-96 Jan-97	Rate of Return
79.	Entergy Arkansas, Inc.	Arkansas PSC	96-360-U	Oct-96 Sep-97	Rate of Return on Equity
80.	East Texas Gas Systems	Texas RRC	8658	Nov-96	Revenue Requirements
81.	Entergy Gulf States, Inc.	Texas PUC	16705	Nov-96 Jul-97	Rate of Return on Equity
82.	Eastrans Limited Partnership	Texas RRC	8657	Nov-96	Revenue Requirements
83.	Enserch Processing, Inc.	Texas RRC	8763	Nov-96	Interim Rates
84.	Entergy New Orleans, Inc.	City of New Orleans	UD-97-1	Feb-97 Mar-97 May-98	Rate of Return on Equity
85.	ENSTAR Natural Gas Company	Alaska PUC	U-96-108	Mar-97 Apr-97	Service Area Certificate
86.	San Jacinto Gas Transmission	Texas RRC	8741	Sep-97	Revenue Requirements
87.	Missouri Gas Energy	Missouri PSC	GR-98-140	Nov-97 Apr-98 May-98	Rate of Return
88.	Corpus Christi Transmission Company LP	Texas RRC	8762	Dec-97	Revenue Requirements
89.	Texas-New Mexico Power Company	Texas PUC	17751	Feb-98	Excess Cost Over Market
90.	Southern Union Gas Company	Texas RRC	8878	May-98	Rate of Return

No.	Utility Case	Agency	Docket	Date	Nature of Testimony
91.	Entergy Louisiana, Inc.	Louisiana PSC	U-20925	May-98 Jul-98	Financial Integrity
92.	Entergy Gulf States, Inc.	Louisiana PSC	U-22092 May-98 I Jul-98		Financial Integrity
93.	ACGC Gathering Company, LLC	Texas RRC	8896	Sep-98	Cost-based Rates
94.	American Gas Storage, L.P.	Texas RRC	8855	Oct-98	Revenue Requirements
95.	Duke Energy Intrastate Network	Texas RRC	8940	Jun-99	Rate of Return
96.	Aquila Energy Corporation	Texas RRC	8970	Aug-99	Revenue Requirements
97.	San Jacinto Gas Transmission	Texas RRC	8974	Sep-99	Revenue Requirements
98.	Southern Union Gas Company	El Paso PURB		Oct-99	Rate of Return
99.	TXU Lone Star Pipeline	Texas RRC	8976	Oct-99 Feb-00	Rate of Return
100.	Sharyland Utilities, L.P.	Texas PUC	21591	Nov-99	Rate of Return
101.	TXU Lone Star Gas Distribution	Texas RRC	9145 Apr-00 Aug-00		Rate of Return
102.	Rotherwood Eastex Gas Storage	Texas RRC	9136	May-00	Revenue Requirements
103.	Eastex Gas Storage & Exchange, Inc.	Texas RRC	9137 <b>M</b> ay-00		Revenue Requirements
104.	Eastex Gas Storage & Exchange, Inc.	Texas RRC	9138 Jul-00		Revenue Requirements
105.	East Texas Gas Systems	Texas RRC	9139	Jul-00	Revenue Requirements
106.	Eastrans Limited Partnership	Texas RRC	9140	Aug-00	Revenue Requirements
107.	Reliant Energy – Entex	City of Tyler		Oct-00	Rate of Return
108.	City of Fort Worth	Texas NRCC	SOAH 582- 00-1092	Dec-00	CCN – Rates and Financial Ability
109.	Entergy Services, Inc.	FERC	RTO1-75	Dec-00	Rate of Return on Equity
110	ENSTAR Natural Gas Company	Alaska PUC	U-00-88	Jun-01 Aug-01 Nov-01 Sep-02 Dec-02	Revenue Requirements, Cost Allocation, and Rate Design
111.	TXU Gas Distribution	Texas RRC	9225	Jul-01	Rate of Return
112.	Centana Intrastate Pipeline LLC	Texas RRC	9243	Aug-01	Rate of Return
113.	Maxwell Water Supply Corp.	Texas NRCC	SOAH-582- 01-0802	Oct-01 Mar-02 Apr-02	Reasonableness of Rates
114.	Reliant Energy Arkla	Arkansas PSC	01-243-U	Dec-01 Jun-01	Rate of Return
115.	Entergy Services, Inc.	FERC	ER01-2214- 000	Mar-02	Rate of Return on Equity

No.	Utility Case	Agency	Docket	Date	Nature of Testimony
116.	TXU Lone Star Pipeline	Texas RRC	9292	Apr-02	Rate of Return
117.	Southern Union Gas Company	El Paso PURB	Apr-02		Rate of Return
118.	San Jacinto Gas Transmission Co.	Texas RRC	9301	May-02	Rate of Return
119.	Duke Energy Intrastate Network	Texas RRC	9302	May-02	Rate of Return
120.	Reliant Energy Arkla	Oklahoma CC	200200166	May-02	Rate of Return
121.	TXU Gas Distribution	Texas RRC	9313	Jul-02 Sep-02	Rate of Return
122.	Entergy Mississippi, Inc.	Mississippi PSC	2002-UN-256	Aug-02	Rate of Return on Equity
123.	Aquila Storage & Transportation LP	Texas RRC	9323	Sep-02	Revenue Requirements
124.	Panther Pipeline Ltd.	Texas RRC	9291	Oct-02	Revenue Requirements
125.	SEMCO Energy	Michigan PSC	U-13575	Nov-02	Revenue Requirements
126.	CenterPoint Energy Entex	Louisiana PSC	U-26720	Jan-03	Rate of Return
127.	Crosstex CCNG Transmission Ltd.	Texas RRC	9363	May-03	Revenue Requirements
128.	TXU Gas Company	Texas RRC	9400 M		Rate of Return
129.	Eastrans Limited Partnership	Texas RRC	9386 May-0		Rate of Return
130.	CenterPoint Energy Entex	City of Houston		Jun-03	Rate of Return
131.	East Texas Gas Systems, L.P.	Texas RRC	9385	Jun-03	Rate of Return
132.	ENSTAR Natural Gas Company	Alaska RCA	U-03-084	Aug-03 Nov-03	Line Extension Surcharge
133.	CenterPoint Energy Arkla	Louisiana PSC		Nov-03	Rate of Return
134.	ENSTAR Natural Gas Company	Alaska RCA	U-03-091	Feb-04	Cost Separation and Taxes
135.	Sid Richardson Pipeline, Ltd.	Texas RRC	9532	Jun-04	Revenue Requirements
				Nov-04	
136.	ETC Katy Pipeline, Ltd.	Texas RRC	9524	Sep-04	Revenue Requirements
137.	CenterPoint Energy Entex	Mississippi PSC	03-UN-0831	Sep-04	Rate Formula
138.	Centana Intrastate Pipeline LLC	Texas RRC	9527	Sep-04	Rate of Return
139.	SEMCO Energy	Michigan PSC	U-14338	Dec-04	Revenue Requirements
140.	Atmos Energy – Energas	Texas RRC	9539	Feb-05	Regulatory Policy
141.	Crosstex North Texas Pipeline, L.P.	Texas RRC	9613	Sep-05	Revenue Requirements
142.	SiEnergy, L.P.	Texas RRC	9604	Dec-05	Rate of Return, Income Taxes, and Cost Allocation
143.	ENSTAR Natural Gas Company	Alaska RCA	TA-140-4	Feb-06	Connection Fees
144.	SEMCO Energy	Michigan PSC	U-14984	May-06 Dec-06	Revenue Requirements



(Continued)

No.	Utility Case	Agency	Docket	Date	Nature of Testimony
145.	Atmos Energy – Mid-Tex	Texas RRC	9676	May-06 Oct-06	Revenue Requirements
146.	EasTrans Limited Partnership	Texas RRC	9659	Jun-06	Rate of Return
147.	Kinder Morgan Texas Pipeline, L.P.	Texas RRC	9688	Jul-06	Rate of Return
148.	Crosstex CCNG Transmission Ltd.	Texas RRC	9660	Aug-06	Revenue Requirements
149.	Enbridge Pipelines (North Texas), LP	Texas RRC	9691	Oct-06	Rate of Return
150.	Panther Interstate Pipeline Energy	FERC	CP03-338-00	Mar-07	Revenue Requirements
151.	El Paso Electric Company	Texas PUC	34494	Jul-07	CCN
152.	El Paso Electric Company	NM PRC	07-00301-UT	Jul-07	CCN
153.	Atmos Energy	Kansas CC	08-ATMG- 280-RTS	Sep-07 Feb-08	Rate of Return on Equity
154.	Centana Intrastate Pipeline LLC	Texas RRC	9759	Sep-07	Rate of Return
155.	Texas Gas Service Company	Texas RRC	9770	Nov-07	Rate of Return
156.	ENSTAR Natural Gas Company	Alaska RCA	U-08-25	Jun-08	Rate Class Switching
157.	ConocoPhillips Transportation Alaska	Alaska RCA	TL-131-301	Oct-08	Rate of Return
158.	ExxonMobil Pipeline Co.	Alaska RCA	TL-140-304	Nov-08	Rate of Return
159.	Crosstex North Texas Pipeline, L.P.	Texas RRC	9843	Dec-08	Revenue Requirements
160.	Koch Alaska Pipeline Company	Alaska RCA	TL 128-308	Dec-08	Rate of Return
161.	Unocal Pipeline Company	Alaska RCA	TL 118-312	Dec-08	Rate of Return
162.	ETC Katy Pipeline, Ltd.	Texas RRC	9841	Dec-08	Revenue Requirements
163.	Oklahoma Natural Gas	Oklahoma CC	200800348	Jan-09	Rate of Return on Equity
164.	Entergy Mississippi, Inc.	Mississippi PSC	EC-123-0082	Mar 09	Rate of Return on Equity
165.	ENSTAR Natural Gas Company	Alaska RCA	U-09-69 U-09-70	Jun-09 Jul-09 Oct-09	Revenue Requirements, Cost Allocation, and Rate Design
166.	EasTrans, LLC	Texas RRC	9857	Jun-09	Rate of Return
167.	Oklahoma Natural Gas	Oklahoma CC	200900110	Jun-09	Rate of Return
168.	Crosstex CCNG Transmission Ltd.	Texas RRC	9858	Jun-09	Revenue Requirements
169.	ConocoPhillips Transportation Alaska	Alaska RCA	TL-137-301	Jul-09	Rate of Return
170.	ENSTAR Natural Gas Company	Alaska RCA	U-08-142	Jul-09	Gas Cost Adjustment
171.	Kinder Morgan Texas Pipeline, LLC	Texas RRC	9889	Jul-09	Rate of Return
172.	Koch Alaska Pipeline Company	Alaska RCA	TL 133-308	Aug-09	Rate of Return
173.	ExxonMobil Pipeline Co.	Alaska RCA	TL-147-304	Nov-09	Rate of Return
174.	Texas Gas Service Company	El Paso PURB		Dec-09	Rate of Return
175.	Unocal Pipeline Company	Alaska RCA	TL126-312	Dec-09	Rate of Return

176.	Kuparuk Transportation Company	Alaska RCA	P-08-05	Apr-10	Rate of Return
177.	Trans-Alaska Pipeline System	FERC	ISO9-348-000	Apr 10	Rate of Return
178.	Texas Gas Service	Texas RRC	9988	May 10 Aug 10	Rate of Return
179.	SEMCO Energy Gas Company	Michigan PSC	U-16169	Jun 10 Dec 10	Revenue Requirements
180.	ConocoPhillips Transportation Alaska	Alaska RCA	TL-137-301	Jul 10	Rate of Return
181.	Koch Alaska Pipeline Company, LLC	Alaska RCA	TL-138-308	Aug 10	Rate of Return
182.	CPS Energy	Texas PUC	36633	Sep 10 Apr 11	Rate of Return for MOU
183.	ExxonMobil Pipeline Co.	Alaska RCA	TL-151-304	Dec 10	Rate of Return
184.	Unocal Pipeline Company	Alaska RCA	TL132-312	Feb 11	Rate of Return
185.	New Mexico Gas Company	NM PRC	11-00042-UT	Mar 11	Rate of Return
186.	ConocoPhillips Transportation Alaska	Alaska RCA	TL-143-301	May 11	Rate of Return
187.	Enbridge Pipelines (Southern Lights)	FERC	IS11-146-000	Jun 11 Nov 11	Rate of Return
188.	Koch Alaska Pipeline Company, LLC	Alaska RCA	TL-138	Jul 11	Rate of Return
189.	Unocal Pipeline Company	Alaska RCA	TL126	Dec 11	Rate of Return
190.	Kansas Gas Service	Kansas CC	12-KGSC- 835-RTS	May 12 Oct 12	Rate of Return
191.	ExxonMobil Pipeline Co.	Alaska RCA	TL-157-304	Jun 12	Rate of Return
192.	ConocoPhillips Transportation Alaska	Alaska RCA	TL-149-301	Jul 12	Rate of Return
193.	Seaway Crude Pipeline Company	FERC	IS12-226-000	Aug 12 Feb 13	Rate of Return
194.	Cross Texas Transmission, LLC	Texas PUC	40604	Aug 12 Oct 12 Nov 12	Revenue Requirements
195.	Wind Energy Transmission Texas	Texas PUC	40606	Aug 12 Nov 12	Revenue Requirements
196.	Lone Star Transmission LLC	Texas PUC	40798	Nov 12	Revenue Requirements
197.	West Texas Gas Company	Texas RRC	10235	Jan 13	Rate of Return
198.	Cross Texas Transmission, LLC	Texas PUC	41190	Feb 13	Revenue Requirements
199.	ExxonMobil Pipeline Co.	Alaska RCA	TL-162-304	Apr 13	Rate of Return

#### APPENDIX C

#### **BRUCE H. FAIRCHILD**

#### WATER AND SEWER EXPERIENCE

Marathon Water Supply \*
Levi Water Supply \*

Woodland Estates Subdivision \*

Bayridge Maintenance \*
Elm Creek Water Supply \*

Lindale Rural Water Supply \*
Eagle Canyon Water Works \*

Sturdivant Water \*
Wildwood Acres Water \*

Oak Ridge-South Gale Water Supply \*

Ellis Water 1

Wildwood Acres Water \*

Sunbelt Utilities \* Douglas Utility \*

Haskins Water \*

South Tawokoni Water Supply \* Glen Haven Utilities \*

Barton Creek Water Supply \*
Crest Utilities \*
Mitchell Utilities

Galveston County Water Authority

Hi Texas Water Co. Green Valley WSC

Uplands

City of Fort Worth Military Hiway WSC Denver Water Board \*

Guadalupe-Blanco River Authority

Davenport Ranch MUD Walnut Creek SUD Kruger Water Works Bell Arthur WSC City of Killeen \*

Upper Guadalupe River Authority

Crystal Clear WSC BY Water District El Oso WSC Toby Smith Water \*

Taylor Lake Estates Water System \*

M&M Water Supply \*

Duck Creek Water Supply \*
Pelican Bay Service \*
Piking Meter Supply \*

Riviera Water Supply \* Minerva Water Supply \*

Lorena Community Water Supply \* Mountain Springs Water Supply \*

Northwest Water Systems \* Indian Lake Estates \*

Tawokoni Water Utility \* Hidden Valley Additions \*

Cliff Creek Estates \*
Haskin Water Supply \*
Kerrville South Utilities \*

Prairie Hills Water Supply \*

Lone Oak Water \*

Tarrant County Water District \*

Brazos River Authority \*

Lakeway MUD \*
City of Austin \*
Village of Lakeway
City of Houston \*
Southwest Utilities, Inc.
Houston-Galveston CSD

S. Texas Utilities

Bexar Metropolitan Water District

Hill Country Water Maxwell WSC City of Longview

Southeast Polk Rural WD City of Dripping Springs

Lower Colorado River Authority Lincoln County Rural Water System

City of Thorndale

<sup>\*</sup> On behalf of PUC Staff or intervenor.

SWWC UTILITIES, INC.

Schedule BHF-1 Page 1 of 1

#### DCF MODEL - DIVIDEND YIELD

Company	Expected Dividend (a)		Price (b)		Dividend Yield (c)
American States Water Co.	\$	1.62	\$	54.30	2.98%
American Water Works Co.	\$	1.12	\$	41.88	2.67%
Agua America, Inc.	\$	0.76	\$	32.10	2.37%
California Water Service	\$	0.64	\$	20.05	3.19%
Connecticut Water Service	\$	0.99	\$	28.76	3.44%
Middlesex Water Company	\$	0.75	\$	19.55	3.84%
SJW Corporation	\$	0.73	\$	26.52	2.75%
LDC GROUP AVERAGE					3.04%

<sup>(</sup>a) The Value Line Investment Survey (May 31, 2013).

<sup>(</sup>b) Yahoo Finance (May 2013).

<sup>(</sup>c) Expected Dividend / Price.

Schedule BHF-2 Page 1 of 1

## **DCF MODEL -- EARNINGS GROWTH RATES**

	P	rojected Grow	rth .	Historica	I Growth
Company	Value Line (a)	I/B/E/S (b)	Zacks (c)	10-Year (a)	5-Year (a)
American States Water Co. American Water Works Co. Aqua America, Inc. California Water Service Connecticut Water Service Middlesex Water Company SJW Corporation	8.0% 9.5% 8.0% 5.5% 6.0% 4.0% 7.5%	2.0% 8.5% 5.9% 6.0% 4.0% 2.7% 14.0%	6.0% 8.0% 5.5% 6.0% 4.0% N/A N/A	6.5% N/A 6.5% 4.0% 0.5% 3.5% 2.0%	11.5% N/A 4.5% 5.0% 4.0% 2.5% -3.0%
LDC GROUP AVERAGE	6.9%	6.2%	5.9%	3.8%	4.1%

<sup>(</sup>a) The Value Line Investment Survey (April 19, 2013).

<sup>(</sup>b) Thomson Reuters Company Reports and Yahoo Finance (Retrieved May 23, 2013).

<sup>(</sup>c) Zacks Quotes and Research (Retrieved May 23, 2013).

Schedule BHF-3 Page 1 of 1

DCF MODEL -- SUSTAINABLE GROWTH RATES (a)

SWWC UTILITIES, INC.

		ಸ	316-2018	r Prok	acted					Earning	Earnings Retention Growth	Growth		External F	External Financing Growth	owth		
	Earning	JO St	Earnings Dividends Book	Į.	pok	Ē	ι'	Shares Outstanding	standing				2015-2017	Growth				
	ьес		ъе	Za Ya	alue per	ă.	per		Proj.	Retention Return on	Return on			Rate in				Sustainable
Сомрапу	Share		Share	S	Share	ŝ	are	2012	16-18	Ratio	Equity	"b×r"	Book Ratio	Shares	"s"	<u>.</u>	"s x v"	Growth
American States Water Co.	3(	3.00 \$	1.70	69	24.25	69	35.00	19 28	21.50	43.3%	12.4%	5.4%	2.27	2.2%	5.0%	55.9%	2.8%	8.2%
American Water Works Co.	\$	2.85	1.40	s	30.00	49	00 00	176.99	190.00	50.9%	9.5%	4.8%	167	1 4%	2.4%	40.0%	10%	5.8%
Agua America, Inc.	\$	\$ 091	9	69	13.30	es es	35.00	140.35	143.00	37.5%	12.0%	4.5%	263	0.4%	1.0%	62.0%	969.0	5.1%
California Water Service		1.35 \$	080	6	15.00	69	35.00	41.91	20.00	33.3%	9.0%	3.0%	1.67	3.6%	80%	40.0%	2.4%	5.4%
Connecticut Water Service		1 70 \$	1.10	6	20.40	69	32.50	10.97	20.40	35.3%	8.3%	2.9%	1.59	13.2%	21.0%	37.2%	7.8%	10.8%
Middlesex Water Company	. <del>.</del>	15 \$	0.80	•	12.90	69	22.50	15.82	17.00	30.4%	8.9%	2.7%	1.74	1.4%	2.5%	42.7%	1.1%	3.8%
SJW Corporation	\$	160 \$	06.0	S	19.15	69	35.00	18.70	23.00	43.8%	8.4%	3.7%	1.83	4.2%	7.7%	45.3%	3.5%	7.2%
											•					•		
LDC GROUP AVERAGE												3.9%					2.7%	6.6%

(a) The Value Line Investment Survey (April 19, 2013).

SWWC UTILITIES, INC.

DCF MODEL -- OTHER PROJECTED AND HISTORICAL GROWTH RATES

	Net	Net Book Value (a)	(a)	Divid	Dividends per Share (a)	are (a)	Ą	Price per Share	5
	Pro-	Historical	rical	Pro-	Historical	rical	Pro-	Historical (b)	cal (b)
Company	jected	10-Year	5-Year	jected	10-Year	5-Year	jected (a)	10-Year	5-Year
American States Water Co.	6.5%	2.0%	5.5%	8.0%	3.0%	4.5%	0.3%	7.8%	10.0%
American Water Works Co.	3.5%	¥	-0.5%	7.5%	A A	Ā	4.5%	NMF	14.5%
Aqua America, Inc.	6.5%	9.0%	7.0%	8.0%	7.5%	8.0%	2.2%	3.6%	13.3%
California Water Service	5.5%	5.0%	2.0%	%0.9	1.0%	1.0%	5.7%	4.3%	2.5%
Connecticut Water Service	6.5%	4.0%	3.0%	2.5%	1.5%	1.5%	3.1%	1.4%	2.9%
Middlesex Water Company	2.0%	4.5%	4.0%	1.5%	1.5%	1.5%	3.6%	-1.2%	0.8%
SJW Corporation	5.0%	5.5%	4.0%	4.5%	2.0%	5.0%	7.2%	6.7%	-2.5%
LDC GROUP AVERAGE	5.1%	5.5%	4.0%	5.4%	3.3%	3.6%	3.8%	3.8%	5.9%

(a) The Value Line Investment Survey (April 19, 2013). (b) Yahoo Finance (May 8, 2003 and May 8, 2008).

SWWC UTILITIES, INC.

Schedule BHF-5 Page 1 of 1

## BOND RATINGS, BETA, AND MARKET CAPITALIZATION

Company	Market Capitalization (millions) (a)	Market- to-Book Ratio (b)	Beta (a)
American States Water Co.	1,100	2.30	0.70
American Water Works Co.	7,400	1.67	0.65
Agua America, Inc.	4,500	3.25	0.60
California Water Service	825	1.77	0.65
Connecticut Water Service	325	1.70	0.75
Middlesex Water Company	300	1.70	0.70
SJW Corporation	500	1.81	0.85
LDC GROUP AVERAGE	2,136	2.03	0.70

<sup>(</sup>a) The Value Line Investment Survey (April 19, 2013).

<sup>(</sup>b) Price from Schedule BHF-1 divided by 2012 Book Value per Share reported by Value Line (a).

Schedule BHF-6 Page 1 of 1

#### **CAPITAL ASSET PRICING MODEL**

	Historical Rates of Return (a)	Forward- Looking Rates of Return (b)
Market Required Rate of Return	11.80%	12.33%
Long-term Government Bond Return	5.10%	3.11%
Market Risk Premium (d)	6.70%	9.22%
Water Industry Group Beta (e)	0.70	0.70
Water Industry Group Risk Premium (f)	4.69%	6.46%
Risk-free Rate of Interest (c)	3.11%	3.11%
Theoretical CAPM Cost of Equity Estimate (g)	7.80%	9.57%
Size Premium (a)	2.46%	2.46%
CAPM Cost of Equity Estimates (h)	10.26%	12.03%

- (a) Morningstar SBBI 2013 Valuation Yearbook: Market Results for Stocks, Bonds, Bills and Inflation 1926-2012.
- (b) Calculated by applying DCF model applied to S&P 500 firms paying dividends: **Expected Dividend Yield** 2.40% Projected Earnings Growth Rate: Value Line 10.40% I/B/E/S 10.10% Zacks 9.30% Average 9.93% Market Required Rate of Return 12.33% (c) May 2013 yield on 30-yr U.S. Treasury bonds (FederalReserve.gov). 3.11%
- (d) Market Required Rate of Return minus Long-term Government Bond Return.
- (e) Schedule BHF-5.
- (f) Market risk premium times beta.
- (g) Sum of Risk Premium and Risk-free Rate of Interest.
- (h) Sum of Unadjusted CAPM Cost of Equity Estimate and Size Premium.

SWWC UTILITIES, INC.

Schedule BHF-7 Page 1 of 1

## **COMPARABLE EARNINGS METHOD**

	Projected Ear	ned Return on Bo	ok Equity (a)
Company	2013	2014	2016-18
American States Water Co.	11.4%	12.0%	12.4%
American Water Works Co.	8.7%	8.9%	9.5%
Aqua America, Inc.	12.8%	11.5%	12.0%
California Water Service	6.9%	8.1%	9.0%
Connecticut Water Service	8.2%	8.8%	8.3%
Middlesex Water Company	8.2%	8.4%	8.9%
SJW Corporation	8.6%	8.8%	8.4%
LDC GROUP AVERAGE	9.3%	9.5%	9.8%

<sup>(</sup>a) The Value Line Investment Survey (April 19, 2013).



## **Franchise Tax Account Status**

As of: 06/26/2013 09:49:14 AM

## This Page is Not Sufficient for Filings with the Secretary of State

	SWWC UTILITIES, INC.
Texas Taxpayer Number	12602872199
Mailing Address	12535 REED RD ATTN: TAX DEPT (FSC) SUGAR LAND, TX 77478-2837
Right to Transact Business in Texas	ACTIVE
State of Formation	DE
Effective SOS Registration Date	06/19/2007
Texas SOS File Number	0800832416
Registered Agent Name	CORPORATION SERVICE COMPANY DBA CSC - LAWYERS INCO
	211 E. 7TH STREET SUITE 620 AUSTIN, TX 78701

# Application for a Rate/Tariff Change - SWWC Utilities, Inc

Appendix 4 - Public Water Systems and Wastewater Treatment Plants IDs and Counties

## Table Appendix 4.I.A - Systems Names, IDs and Counties

	Water Services, In	c. CCN 1106	
PWS Name	PWS ID	County	Increase Applicable?
Bavarian Hills	0150235	Bexar	Yes
Cascade	1300005	Kendall	Yes
Coolcrest	0150046	Bexar	Yes
Country Springs (Country Bend)	0150421	Bexar	Yes
Garden Oaks	0940030	Guadalupe	Yes
Oaks North	0150135	Bexar	Yes
Oak Village North	0460037	Comal	Yes
Stage Coach	0150096	Bexar	Yes

	Hornsby Bend Utility Co	mpany CCN 11978	
PWS Name	PWS ID	County	Increase Applicable?
Austin's Colony	2270255	Travis	Yes

	Hornsby Bend Utility Co	mpany CCN 20650	
Plant Name	TPDES	County	Increase Applicable?
Austin's Colony Wastewater Treatment Facility	13138001	Travis	Yes

## **EMPLOYEES AND CONTRACT LABOR**

Employee Roster as of 05/19/2013

		Imployee Noster as of OS/15/2013		FLSA Status - Job
First Name	<u>Last Name</u>	<u>Job Title</u>	<u>Duty Location</u>	<u>Dta</u>
Rockey	Aguilar	Operator Water	Bulverde	Reg. FT- Hourly
Jeremiah	Alcantar	Utility Worker	Austin	Reg. FT- Hourly
Silvia	Alvarez	Administrative Assistant	Houston	Reg. FT -salaried
Leandro	Ambros Jr.	Supervisor	Houston	Reg. FT -salaried
Albert	Amezquita	Manager	Bulverde	Reg. FT –salaried
Michael	Bryant	Utility Worker	Austin	Reg. FT- Hourly
Diana	Cardona	Representative/Customer Care	Houston	Reg. FT- Hourly
Jimmy	Castaneda	Utility Worker	Austin	Reg. FT- Hourly
Debbie	Combs	Clerk	Austin	Reg. FT- Hourly
Bruce	Connolly	Accountant	Corp.Houston	Reg. FT -salaried
Edward	Taussig	Director	Houston	Reg. FT -salaried
Deborah	Foston	Representative/Customer Care	Houston	Reg. FT- Hourly
George	Freitag	Manager	Austin	Reg. FT -salaried
Ryan	Glosson	Operator Water	Austin	Reg. FT- Hourly
Danny	Gomez	Analyst	Houston	Reg. FT -salaried
Rosalba	Gomez	Supervisor	Houston	Reg. FT -salaried
Jose	Gonzalez	Operator Water	Bulverde	Reg. FT- Hourly
Germaine	Harris	Clerk	Corp.Houston	Reg. FT- Hourly
Janice	Hayes	Manager	Houston	Reg. FT -salaried
Melissa	Helton	Analyst	Houston	Reg. FT- Hourly
Cecil	Holliday	Utility Worker	Bulverde	Reg. FT- Hourly
Randall	Jackson	Electrician	Bulverde	Reg. FT- Hourly
Amado	Ledesma	Technician	Bulverde	Reg. FT- Hourly
Daniel	Maldonado	Operator Water	Bulverde	Reg. FT- Hourly
Michael	Marine	Technician	Austin	Reg. FT- Hourly
Reginald	May	Representative/Customer Care	Houston	Reg. FT- Hourly
John	McClellan	Vice President	Austin	Reg. FT -salaried
Ulysses	Moore	Representative/Customer Care	Houston	Reg. FT- Hourly
Kenneth	Pratt	Technician	Austin	Reg. FT- Hourly
Charles	Profilet Jr.	Vice President	Houston	Reg. FT -salaried
Kenneth	Quigley	Director	Conroe	Reg. FT -salaried
Linda	Reed	Representative/Customer Care	Houston	Reg. FT- Hourly
Jessica	Rodriguez	Representative/Customer Care	Houston	Reg. FT- Hourly
Gary	Rose	Director	Austin	Reg. FT -salaried
Cheri	Ryals	Supervisor	Houston	Reg. FT -salaried
Holly	Salisbury	Administrative Assistant	Austin	Reg. FT- Hourly
Michael	Sarot	Electrician	Austin	Reg. FT- Hourly
Virginia	Scott	Administrative Assistant	Houston	Reg. FT- Hourly
James	Seals	Accountant	Corp.Houston	Reg. FT -salaried
Trey	Sibert	Operator Water	Austin	Reg. FT- Hourly
JoAnn	Soraiz	Representative/Customer Care	Houston	Reg. FT- Hourly
David	Spivey Jr.	Operator Water	Bulverde	Reg. FT- Hourly
Kimberly	Strickland	Administrative Assistant	Austin	Reg. FT- Hourly
Shannon	Taylor	Analyst	Houston	Reg. FT- Hourly

NOTE: for Confidentiality Purposes, employee salary data is not provided, but will be made available upon request by TCEQ staff

Appendix 5 page 2 of 2

				FLSA Status - Job
<u>First Name</u>	<u>Last Name</u>	Job Title	<u>Duty Location</u>	<u>Dta</u>
Joe	Torralva	Manager	Austin	Reg. FT -salaried
Melissa	Trevino	Analyst	Houston	Reg. FT- Hourly
Ronniea	Tycer	Manager	Houston	Reg. FT -salaried
Chris	Villareal	Operator Water	Austin	Reg. FT- Hourly
Dominique	Williams	Analyst	Houston	Reg. FT- Hourly
Timothy	Williford	Manager	Austin	Reg. FT -salaried
Macario	Ybarra Jr.	Manager	Austin	Reg. FT -salaried
Vacano	y as of May 2013	Operator Water	Austin	Reg. FT- Hourly
Vacano	y as of May 2013	Operator Water	Austin	Reg. FT- Hourly
Vacano	y as of May 2013	Operator Water	Bulverde	Reg. FT- Hourly
Vacano	y as of May 2013	Analyst	Houston	Reg. FT- Hourly
Vacano	y as of May 2013	Representative/Customer Care	Houston	Reg. FT- Hourly
Vacano	y as of May 2013	Representative/Customer Care	Houston	Reg. FT- Hourly
Vacano	y as of May 2013	Representative/Customer Care	Houston	Reg. FT- Hourly
Vacano	y as of May 2013	Representative/Customer Care	Houston	Reg. FT- Hourly
Vacano	y as of May 2013	Representative/Customer Care	Houston	Reg. FT- Hourly
Vacano	y as of May 2013	Engineer	Houston	Reg. FT -salaried

## Contracted Labor

Contractor	Services Provided	<u>Duty Location</u>
Burnett Staffing	Temporary Staffing	Houston
Resource Staffing	Temporary Staffing	Houston
Horn Solutions	Temporary Staffing	Houston
VACO	Temporary Staffing	Houston
Dad's Lawn Service	Facilities Mowing	Austin/Bulverde



MEMPLOYED TO		CERTIFICATE TO	PALDATE DE SALPHI	AND DATE OF THE
	ENTIFICATIONS TE		HELDISUE LE BE	EXPIRATION
Aguilar, Rockey	Texas Water Certificate - D	WO0032717	1/30/2013	1/30/2016
Aguilar, Rockey	Texas Wastewater - D	VWV0048451	0319/2013	3/19/2016
Alcantar, Jeremiah	Texas Surface Water Certificate - C	WS0009675	8/22/2009	8/22/2015
Alcantar, Jeremiah	Texas Ground Water Certificate - C	WG0014206	10/22/2012	10/22/2015
Alcantar, Jeremiah	Texas Water Distribution Operator - C	WD0004853	6/21/2010	6/21/2013 4/22/2015
Alcantar, Jeremiah	Texas Wastewater Certificate - C	WW0039203	4/22/2009	2/11/2016
Alcantar, Jeremiah	Backflow Prevention Assembly	BP0012810	2/11/2010 7/15/2011	7/15/2014
Alcantar, Jeremiah	Customer Service Inspector	CI0008741 WS0008829	6/11/2008	6/11/2014
Amezquita, Albert	Texas Surface Water Certificate - B	WG0013556	8/9/2011	8/9/2014
Gonzalez, Jose Jr.	Texas Ground Water Certificate - B Texas Surface Water Certificate - C	WS0011133	1/17/2013	1/17/2016
Gonzalez, Jose Jr.	Texas Water Certificate - D	WO0025716	6/16/2009	6/16/2015
Hahn, Donovan Holliday, Cecil	Texas Ground Water Certificate - B	WG0013843	3/12/2012	3/12/2015
Holliday, Cecil	Texas Surface Water Cerficiate - C	WS 0009996	6/10/2010	6/10/2016
Holliday, Cecil	Texas Wastewater Certificate - C	WW0043281	12/21/2010	12/21/2013
Jackson, Randall	Texas Water Certificate - D	WO0026769	10/2/2009	10/2/2015
Maldonado, Daniel	Texas Ground Water Certificate - C	WG0010566	2/18/2010	3/16/2016
Maldonado, Daniel	Customer Service Inspector	CI0004833	1/24/2008	1/27/2014
Maldonado, Daniel	Texas Wastewater Certificate - D	WW0036215	2/29/2008	2/28/2014
Mallini, Paul	Texas Ground Water Certificate - C	WG0000745	9/13/2010	11/15/2013
Mallini, Paul	Texas Wastewater Certificate - C	WW0015590	3/7/2012	4/22/2015
McClellan, John H.	Texas Surface Water Certificate - B	WS0006690	3/9/2010	5/18/2016
McClellan, John H.	Texas Wastewater Certificate - B	WW0018852	7/8/2011	7/13/2014
Sarot, Michael	Texas Water Cerficate - D	WO0030217	7/22/2011	7/22/2014
Sibert, Trey	Texas Surface Water Certificate - C	WS 0007950	10/21/2011	12/30/2014
Sibert, Trey	Texas Ground Water Certificate - C	WG0008582	10/23/2012	11/21/2015
Spivey, David Jr.	Texas Surface Water Certificate - C	WS0009997	5/10/2010	5/10/2016
Spivey, David Jr.	Texas Ground Water Certificate - B	WG0013842	3/12/2012	3/12/2015
Spivey, David Jr.	Customer Service Inspector	CI0008722	4/15/2011	4/15/2014
Spivey, David Jr.	Texas Wastewater Certificate - C	WW0044527	6/28/2011	6/28/2014
Villareal, Chris	Texas Wastewater Certificate - C	WW0043554	1/6/2011	1/6/2014
Villareal, Chris	Texas Surface Water Certificate - C	WS0009496	4/8/2009	4/8/2015
Villareal, Chris	Texas Ground Water Certificate - C	WG0013350	6/16/2011	6/16/2014
Villareal, Chris	Texas Water Distribution Operator - C	WD0005251	2/8/2011	2/14/2014
Williford, Tim	Texas Wastewater Certificate - A	WW0047685	2/7/2013	2/7/2016
Williford, Tim	Texas Water Certificate - A	WO0032204	12/13/2012	12/13/2015
Ybarra, Macario	Texas Ground Water Certificate - B	WG0013703	5/16/2012	5/16/2015
Ybarra, Macario	Texas Surface Water Certificate - C	WS 0008813	5/17/2011	5/23/2014
Ybarra, Macario	Texas Water Distribution Operator - C	WD0010190	7/22/2011	7/22/2014
Ybarra, Macario	Texas Wastewater Certificate - C	WW0006188	4/6/2010	4/13/2016

Appendix 7.1. Page 1 of 1

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	/ Farm Change - Sww. Cilines, Inc.	
	e/Jarm.cnange - Sww. compes, inc.	
	re/rarm.cnange - sww.c. umues, no.	
	e/Jarm.cnange - Sww. compes, inc.	
	Kate/iamichange - Swwc umines, inc	
	a kate/iarm.change - sww.cumies, inc.	
	r a kate/ tarm change - sww. utillules, inc	
	a kate/iarm.change - sww.cumies, inc.	
	n tor a kate/iarin Change - Swwc Villiues, inc.	
	on tor a kate/ farm Change - SWW. Utilities, no.	
	on tor a kate/ farm Change - SWW. Utilities, no.	
	on tor a kate/rarm Lnange - Swww. Utilities, Inc.	
	on tor a kate/ farm Change - SWW. Utilities, no.	
	plication to a wate, raint hange - swwc utilities, inc.	
	pplication for a Kate/ larm Lhange - SWWL utilities, inc	
	pplication to a kate/raimt.pange- swww. utilities, inc.	

Appendix 7 - Customer Contributions Detail

Net Book Value	31,966	\$ 5,363																					
Depreciation Reserve	\$ 8,842 \$	\$ 3,334 \$																					
Annualized Depreciation	\$ 1,360	\$ 290																					
Life in Months	360	360																					
Date in Service	90/08/90	10/30/01																					
Original Cost	\$ 40,808	\$ 8,697											3										
Asset Description Original Cost Service N	New 500' Well 4 inch Casing	2 - 25 Hp Pump & Motor																					
District Name	Water Services, Inc Oaks Village North New 500' Well 4	County Bend					,																
Company	Nater Services, Inc	Water Services, Inc County Bend																					
SWWC	307 M	311													1	1	7	1	1	T	1	T	

Appendix 8.1.A Page 1 of 4

Application for a Rate/Tariff Change - SWWC Utilities, Inc.

Appendix 8 - Developer Contributions Detail

		pazi	ation
		Annualized	Depreciation
		Life in	Years
Water		Date in	Service
Contributions	ī.		Onginal Cost
Table Appendix 8.1.A - Developer Contributions Water	Water Services, Inc.		Asset Description
			Asset No.
			ame

			Water Services, Inc.	<u>ا</u> ر							
SWWC Account	District Name	Asset No.	Asset Description	Öri	Original Cost	Date in Service	Life in Years	Annualized Depreciation	Accumulated Depreciation		Net Book Value
304.2	Bavarian Hills Wtr Ops	8010000006	Meters-Services	۰,		69/08/90	20	\$	\$	\$	,
304.2	Oaks N. Mobile	_	Distribution System	\$	72,517.00	69/0ε/90	20	\$ 1,450	\$ 63,126	\$ 9	9,391
304.2	Oaks N. Mobile	8010000007	Distribution System	\$	21,379.00	06/30/70	20	\$ 428	\$ 18,182	\$ 2	3,197
304.2	Oak Village N.		10'X12' Rock Pump House CIAC	\$	1,152.00	06/30/73	30	- \$	\$ 1,152	2 \$	,
304.2	Oak Village N.	8010000009	10'X12' Rock Pump House CIAC	\$	2,137.00	06/30/73	30	\$	\$ 2,137	2 \$	1
307.2	Oak Village North Wtr Ops	8020000015	Meters-Services	\$	,	06/30/63	20	\$	\$	v	'
307.2	Bavarian Hills Wtr Ops	802000019	Distribution System	\$	222,129.00	69/08/90	.50	\$ 4,443	\$ 193,362	2 \$	28,767
307.2	Cascade Wtr Ops		485' Well with 6 inch casing CIAC	\$	7,764.00	69/08/90	30	- \$	\$ 7,764	4 \$	
307.2	Garden Oaks Wtr Ops	8020000020	Fire Hydrants	\$	6,194.00	69/08/90	20	\$ 124	\$ 5,392	\$ 2	805
307 2	Bavarian Hills Wtr Ops	8020000024	Meters-Services	\$		06/30/70	20	\$	\$	\$	1
307.2	Garden Oaks Wtr Ops	8020000023	Fire Hydrants	\$	964.00	06/30/70	50	\$ 19	\$ 820	\$ 0	144
307.2	Oak Village North Wtr Ops	8020000025	2 - 550' deep Well Ginch Casing CIAC	\$	15,171.00	06/30/70	30	\$	\$ 15,171	1 \$	,
3072	Oak Village North Wtr Ops	8020000026	2 - 550' deep Well Ginch Casing CIAC	\$	1.00	04/30/30	30	\$	\$	1 \$	
307.2	Garden Daks Wtr Ops	8020000028	Fire Hydrants	\$	7,448 00	06/30/71	50	\$ 149	\$ 6,185	\$ \$	1,263
307.2	Coolcrest Wtr Ops	802000031	600' Deep Well 4inch Casing CIAC	\$	5,632.00	06/30/72	30	. \$	\$ 5,632	2 \$	
307.2	Stage Coach Wtr Ops	802000032	488' Well with 8 inch Casing CIAC	\$	13,485 00	06/30/72	30	÷ \$	\$ 13,485	\$	,
307.2	Cascade Wtr Ops	8020000041	Booster Pumps	\$	434.00	06/30/74	30	- \$	\$ 434	4 \$	'
307.2	Country Bend Wtr Ops	8020000042	Gas Clorinators	\$	685.00	06/30/74	10	. \$	\$ 685	5 \$	•
307.2	Country Bend Wtr Ops	8020000043	Gas Clorinators	۰۸	1,446.00	06/30/75	10	\$	\$ 1,446	\$ 9	-
307.2	Oaks North Mobile Home Park Wtr Ops	8020000044	525' Well 4inch Casing CIAC	\$	7,684.00	06/30/76	30	,	\$ 7,684	4 \$	٠
307.2	Oaks North Mobile Home Park Wtr Ops	8020000045	560' Well 4inch Casing CIAC	\$	16,291.00	06/30/76	30	, \$	\$ 16,291	1 \$	-
307.2	Oak Village North Wtr Ops	8020000386	New 500' Well 4inch Casing	\$	40,808.00	90/30/90	30	\$ 1,360	\$ 8,857	2 \$	31,951
309.2	Oak Village North Wtr Ops		Booster Pumps	\$	64	06/30/71	30	\$	\$	64 \$	
309.2	Oak Village North Wtr Ops	8020000030	Booster Pumps	\$	1	06/30/71	30	\$	\$	1 \$	,
309.2	Bavarian Hills Wtr Ops	8020000038	Meters-Services	ş	'	06/30/73	20		\$	S	
309.2	Oaks North Mobile Home Park Wtr Ops	802000037	Gas Clorinators	\$	1,058	06/30/73	10		\$ 1,058	\$ 8	
309.2	Oak Village North Wtr Ops	802000036	Wells	\$	7,826	06/30/73	30	\$	\$ 7,826	\$ 9	

Application for a Rate/Tariff Change - SWWC Utilities, Inc.

Appendix 8 - Developer Contributions Detail

Water	
Contributions	
Developer (	
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309.2	Bavarian Hills Wtr Ops	8020000049	Meters-Services	- \$	06/30/77	20	\$	٠,	\$	10	T
309.2	Country Bend Wtr Ops	8020000048	Distribution System	\$ 67,493	22/08/90	50	\$ 1,350	\$ 00	47,940	3 19,553	m
320.3	Bavarian Hills Wtr Ops	8020000022	Meters-Services	- \$	69/08/90	20	\$	\$	,		T
320.3	Oaks North Mobile Home Park Wtr Ops	8020000027	Distribution System	980'99 \$	02/02/90	50	\$ 1,322	\$ 2.	56,203	\$ 9,883	വ
320.3	Oak Village North Wtr Ops	T	Fire Hydrants	\$ 3,100	06/30/72	50	\$	\$ 29	2,512	25.	588
330.4		802000039	Fire Hydrants	\$ 219	6/30/73	50	\$	4 \$	173	,	46
330.4		8020000040	(Not in use) 20,000 gallon Concrete Standpipe	3,600	06/30/73	50	\$	72 \$	2,845		755
330.4	Country Bend Wtr Ops	8020000074	Fire Hydrants	<u>\$</u>	06/30/85	50	\$	1 \$	36	10	62
333 4	Stage Coach Wtr Ops	8020000471	4 Inch Water Line - Boerne State Vet Clinic CIAC	\$ 40,800	09/01/09	50	\$ 87	816 \$	2,718	\$ 38,082	اي
334.4	Country Bend Wtr Ops	8020000016	Fire Hydrants	\$ 1,207	69/30/93	50	\$	10 \$	1,197	\$6	2
334.4	1	8020000017	Struct. & Imp.	\$ 3,321	06/30/63	30	\$	~	3,321	,	Т
334.4		802000018	Distribution System	\$ 23,852	89/08/90	50	\$ 4.	477 \$	21,241	\$ 2,611	<u> </u>
334.4		8020000035	Meters-Services	- \$	06/30/72	20	\$	\$	,	10	Ţ
334 4		8020000034	Booster Pumps	\$ 760	22/08/90	30	\$	<u>~</u>	290	,	T
334.4	1	8020000047	Meters-Services	- \$	92/08/90	20	\$	<u>~</u>	•	\$	Т
334.4		8020000046	Misc. Plant	\$ 3,941	92/06/90	50	\$	\$ 62	2,878	\$ 1,063	ξij
Total W				\$ 666,714	<b>新加</b>		\$ 12,166	\$ 99	518,578	\$ 148,136	اي
											ĺ

			Hornsby Bend Utility Company - Water	any - Water					
SWWC	District Name	Asset No.	Asset Description	Original Cost	Date in Service	Life in Years	Annualized Depreciation	Accumulated Depreciation	Net Book Value
304.3	Hornehy Rend	8010000024	024 Hornsby Bend - Water	\$ 558,453	01/01/08	45	\$ 12,296	\$ 61,506 \$	\$ 496,947
304.3	Horachy Bend	120	Hornsby Bend - Water	\$ 396,930	01/01/09	45	\$ 8,740	\$ 34,953	\$ 361,977
304.3	Hornsty Bend	080	Hornsby Bend - Water	\$ 115,630	06/01/10	45	\$ 2,546	\$ 6,582	\$ 109,048
200	Hornshy Bend	8010000031	Hornsby Bend - Water	\$ 16,707	08/01/10	45	\$ 368	\$ 890	\$ 15,818
304.3	Hornsby Bend	8010000032	HB - Water LUE to CIAC Q3	\$ 22,267	10/01/10	45	\$ 490	\$ 1,103	\$ 21,164
304.3	Hornsby Bend	8010000001	LUE-CIAC WATER	\$ 18,000	01/01/11	45	\$ 397	\$ 794	\$ 17,206
304.3	Hornsby Bend	8010000000	LUE-CIAC Water Assets	\$ 34,718	07/01/11	45	\$ 766	\$ 1,149	\$ 33,569
304 3	Hornsby Bend	8010000034	LUE - CIAC Water Assets	056'9£ \$	12/01/12	43	\$ 848	\$ 71	\$ 36,879
2						ĺ			