Exhibit No.:
Issues: Rate of Return for St. Joseph
Frozen Capital Structure
Acquistion Premium
Witness: David P. Broadwater
Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: EM-2000-292

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

REBUTTAL TESTIMONY

OF

DAVID P. BROADWATER

UTILICORP UNITED INC.
AND
ST. JOSEPH LIGHT & POWER COMPANY

CASE NO. EM-2000-292

Jefferson City, Missouri
May, 2000

****Denotes Highly Confidential Information****

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Q. Please state your name.

A. My name is David P. Broadwater.

Q. Please state your business address.

A. My business address is 3675 Noland Road, Independence, Missouri 64055.

Q. What is your present occupation?

A. I am employed as a Financial Analyst for the Missouri Public Service Commission (Commission). I accepted this position in March 1995. From December 1993 to February 1995, I was employed as a Management Services Specialist with the Commission. I would note that while a member of the Management Services Department, I assisted with cost of capital reviews for the Financial Analysis Department.

Q. What has been the nature of your duties while in the employ of this Commission?

A. Principally, I have analyzed the cost of capital of public utility companies operating within the state of Missouri. Please refer to Schedule 1 for a listing of the major cases in which I have previously filed testimony. In addition to the cases listed in

Schedule 1, I have analyzed the cost of capital for numerous small water, sewer and telephone utilities.

Q. Were you previously employed before you joined the Commission's Staff (Staff)?

A. Yes, I was employed by Cullum & Brown, Inc. from July 1991 through November 1993 in a sales and sales support capacity.

Q. What is your educational background?

A. In 1991, I earned a Bachelor of Science degree in Business Finance from Northwest Missouri State University. In 1995, I earned a Master of Business Administration degree with an emphasis in Finance from the University of Missouri at Kansas City.

Q. Are you a member of any professional associations?

A. Yes. I am a member of the Society of Utility and Regulatory Financial Analysts (SURFA), formerly the National Society of Rate of Return Analysts.

Q. Do you hold any professional designations?

A. Yes. On May 13, 1997, I was awarded the professional designation of "Certified Rate of Return Analyst" (CRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience and the successful completion of a comprehensive examination.

Q. What is the purpose of this testimony?

A. The purpose of my testimony is to: (1) provide a capital structure and rate of return for the cost of service analysis that has been done for St. Joseph Light & Power Company (St. Joseph); (2) respond to UtiliCorp United Inc.'s (UtiliCorp) proposal to

"freeze" the capital structure of St. Joseph for ratemaking purposes at a level Staff proposed in St. Joseph's last rate case; and (3) respond to UtiliCorp's proposal to recover 50% of the acquisition premium associated with the purchase of St. Joseph directly through rates.

RATE OF RETURN FOR ST. JOSEPH

Q. Why have you developed a rate of return for St. Joseph?

A. The regulatory plan that UtiliCorp has proposed calls for the St. Joseph division of UtiliCorp to file a rate case in five years and, as part of that case, the savings that UtiliCorp has generated will be shared between UtiliCorp and the St. Joseph customers. In response to UtiliCorp's regulatory plan the Staff has produced a revenue requirement for St. Joseph on a pre-merger basis that should be used as a benchmark to measure what savings UtiliCorp has been able to generate, if the Commission adopts UtiliCorp's proposal for "tracking" of merger savings.

Historical Economic Conditions

Q. Please discuss the relevant historical economic conditions in which St. Joseph has operated.

A. One of the most commonly accepted indicators of economic conditions is the discount rate set by the Federal Reserve Board (Federal Reserve). The Federal Reserve tries to achieve its monetary policy objectives by controlling the discount rate (the interest rate charged by the Federal Reserve for loans of reserves to depository institutions) and the Fed Funds Rate (the overnight lending rate between banks). At the end of 1982, the U.S. economy was in the early stages of an economic expansion,

following the longest post-World War II recession. This economic expansion began when the Federal Reserve reduced the discount rate seven times in the second half of 1982 in an attempt to stimulate the economy (see Schedule 2). This reduction in the discount rate led to a reduction in the prime interest rate (the rate charged by banks on short-term loans to borrowers with high credit ratings) from 16.50% in June 1982, to 11.50% in December 1982. The economic expansion continued for approximately eight years until July 1990, when the economy entered into a recession.

In December 1990, the Federal Reserve responded to the slumping economy by lowering the discount rate to 6.50%. Over the next year-and-one-half, the Federal Reserve lowered the discount rate another six times to a low of 3.00%, which had the effect of lowering the prime interest rate to 6.00%. (See Schedule 3)

By the fourth quarter of 1993, the rate of economic growth was one the Federal Reserve believed could not be sustained without experiencing higher inflation. In the first quarter of 1994, the Federal Reserve took steps to try to restrict the economy by increasing interest rates. As a result, on March 24, 1994, the prime interest rate increased to 6.25%. On April 18, 1994, the Federal Reserve announced its intention to raise its targeted interest rates, which resulted in the prime interest rate being increased to 6.75%. The Federal Reserve took action on May 17, 1994, by raising the discount rate to 3.5%. Three additional restrictive monetary actions were taken by the Federal Reserve with the last occurring on February 1, 1995. These actions raised the discount rate to 5.25% and, in turn, banks raised the prime interest rate to 9.00%.

The Federal Reserve then reversed its policy in late 1995 by lowering its target for the Fed Funds Rate 0.25 percentage points on two different occasions. This had the

effect of lowering the prime interest rate to 8.50%. On January 31, 1996, the Federal Reserve lowered the discount rate to a rate of 4.50%.

The actions of the Federal Reserve over the last five years have been primarily focused at keeping the level of inflation under control, and they have been successful. The inflation rate, as measured by the Consumer Price Index (CPI), was at 2.90% in January 1995, and it had remained below 3.00% for much of the last five years (see Schedule 4-1). Only recently has the increase in CPI climbed significantly above the 3.00% level. The low inflation rate has been coupled with a low unemployment rate for much of the last five years. The fact that both unemployment and inflation remained at historically low levels for an extended period of time is an indicator that the Federal Reserve has been largely successful for much of the last five years at managing the economy to allow sustainable growth in the economy while keeping the pressure on prices low. In the last quarter of 1999 and the first quarter of 2000 the rate of growth in the economy has increased to a level the Federal Reserve believes is not sustainable. This has caused the Fed to increase interest rates, is one of the factors that has led to the radical swings in the stock market.

Current economic topics revolve around the speculation about the Federal Reserve's next move on interest rates. On March 21, 2000, the Federal Reserve raised the targeted federal funds rate from 5.75% to 6.00%. This is the fifth time that the Federal Reserve has raised the federal funds rate since mid-1999. The Federal Reserve also increased the discount rate from 5.25% to 5.50%. The main reason for these increases has been the Federal Reserve's desire to slow the pace of economic growth in order to keep inflation under control.

As of March 2000, the economy has been growing at a record-breaking pace for the past 108 months. The economy grew at a rate of 6.9% for the final three months of 1999 and many economists believe growth in the current quarter will be around 5%. However, the Federal Reserve would like to keep growth around the 3.5% mark, so this could imply further adjustments to both the short-term interest rates and the discount rate. On April 25, 2000, the 30-year Treasury bond yielded 5.87%.

These economic changes have resulted in cost of capital changes for utilities and are closely reflected in the yields on public utility bonds and yields of 30-year U.S. Treasury Bonds (see Schedule 5-1 and 5-2). Schedule 5-3 shows how closely the Moody's "Public Utility Bond Yields" have followed the yields of 30-year U.S. Treasury Bonds during the period from 1983 to the present. The average spread for this time period between these two composite indices has been 129 basis points, with the spread ranging from a low of 80 basis points to a high of 283 basis points (see Schedule 5-4). These spread parameters can be utilized with numerous published forecasts of 30-year U.S. Treasury Bond yields to estimate future long-term debt costs for utility companies. Moody's "Public Utility Bond Yields" are also graphically compared to both Standard & Poor's "Utilities Stock Yields" and Standard & Poor's "Industrials Stock Yields" (see Schedule 6).

Economic Projections

Q. What are the inflationary expectations for the remainder of 2000 and beyond?

A. The latest inflation rate, as measured by the *Consumer Price Index-All Urban Consumers* (CPI), was 3.7% for the 12 months ended March 31, 2000. *The Value Line Investment Survey: Selection & Opinion*, March 3, 2000, predicts inflation to be 2.1% for 1999, 2.5% for 2000 and 2.3% for 2001. One of the major fears of the Federal Reserve is that the United States will experience a severe labor shortage that will eventually drive up wages and cause an inflationary spiral.

Q. What are interest rate forecasts for 1999, 2000 and 2001?

A. Short-term interest rates, those measured by three-month U.S. Treasury Bills, are expected to be 5.7% in 2000, and 5.4% in 2001 according to Value Line's predictions. Value Line expects long-term interest rates; those measured by the 30-year U.S. Treasury Bond, to average from 6.2% in 2000 and 5.8% in 2001.

The current rates as of April 25, 2000, are 5.60% for three-month T-Bills and 5.87% for 30-year T-Bonds, as state in *The Wall Street Journal*. *The Wall Street Journal* reported that as of March 22, 2000 the Treasury yield curve was "inverted," with the two-year Treasury note yielding more than the 30-year Treasury bond. This means that on March 22, 2000, the yield for the 30-year Treasury bond was 53 basis points below the 6.49% yield reported for the two-year Treasury note on that same date. This inversion began in January of this year and is "the widest such inversion in more than a decade" according to *The Wall Street Journal*.

Q. What are the growth expectations for real Gross Domestic Product (GDP) in the future?

A. GDP is a benchmark utilized by the Commerce Department to measure economic growth within the United States' borders. Real GDP is measured by the actual

GDP adjusted for inflation. During the first quarter of 2000, real GDP increased by 5.4%. Value Line stated that real GDP growth increased by 4.1% in 1999, and expects real GDP to increase by 3.6% in 2000, and by 3.0% in 2001. Salomon Smith Barney stated that real GDP increased by 3.7% in 1999 and expects real GDP to increase by 2.1% in 2000.

Q. Please summarize the expectations of the economic conditions for the next few years.

A. In summary, when combining the previously mentioned sources, inflation is expected to be in the range of 2.1% to 3.7%, the increase in real GDP in the range of 2.1 to 5.4%, and long-term interest rates are expected to range from 5.8% to 6.2%. *The Value Line Investment Survey: Selection & Opinion*, April 21, 2000, stated that:

> **The news on inflation has turned mixed.** For example, oil prices have fallen sharply in recent weeks, in response to higher production levels by the world's major oil exporting countries. But other inflation gauges, including prices for tobacco, medical care, and airline tickets, have shown sharp increases in recent surveys. In fact, it was a sharp upward move in the cost of each of these items – which contributed to a surprisingly large overall rise in the March Consumer Price Index – that sparked a record drop in the Dow Jones Industrial Average on Friday, April 14th.
>
> . . . .
>
> **Hopefully, the rate of economic growth will begin to slow before much longer.** But, as yet, we have seen little to suggest that such a deceleration is at hand. Indeed, the latest data on retail spending and employment show that the economy is still roaring ahead. Nevertheless, it does seem likely that the higher costs of financing a home, a car, and other retail purchases will start to put some pressure on the economy before too much longer. In fact, we continue to believe that the heady pace of growth currently being experienced will mark the high point for the year.

Business Operations of St. Joseph

Q. Please describe St. Joseph's business operations.

A. In St. Joseph Power and Light Company's 1999 Stockholders' Annual Report, St. Joseph states:

> As an investor-owned utility, St. Joseph Light and Power Company serves more than 3,300 square miles in all or part of 10 northwest Missouri counties.
>
> Light and Power provides electric energy to nearly 63,000 customers in 74 cities, towns and villages, and in a large rural area. The home office is in St. Joseph, a city of about 73,000, which represents about one-half the population of the service territory. Electric retail revenues represented about 72 percent of the company's 1999 revenues
>
> The company supplies natural gas to almost 6,400 natural gas customers in Maryville, a state university town of about 10,000 and 14 other communities. Light & Power does not provide natural gas to St. Joseph. The company also supplies industrial steam to six customers in St. Joseph.
>
> Light & Power owns SJLP Inc., a non-regulated investment subsidiary.
>
> St. Joseph Light & Power Company has been in the public utility business since 1883. It became an independent, investor-owned business in 1950. St. Joseph Light & Power has more than 4,700 shareholders, representing all 50 states. The company's stock is traded on the New York Stock Exchange under the symbol SAJ.

St. Joseph's total operating revenues were $120,949,000 for the 12-month period ended December 31, 1999, of which approximately 75% ($90,499,000) was accounted for by the Company's electric utility operations. These total-operating revenues resulted in an overall net income of $6,127,000. These revenues and net incomes were generated from a net utility plant in service with a book value of $169,224,369 on December 31, 1999. These figures were taken from St. Joseph's response to Staff Data Request No. 3801 and the *St. Joseph Light & Power Company 1999 Annual Report.*

Q. Please describe the credit rating of St. Joseph.

A. Currently, St. Joseph's corporate credit rating from Standard & Poor's Corporation is "A-/Stable," and categorizes St. Joseph's business profile rating as a "6" (on a scale of 1 through 10 with 1 being strong and 10 being weak). This rating is considered to be "investment grade" ("investment grade" as defined as a "BBB" rating or higher). The Corporate Credit Rating issued by Standard & Poor's reflects a stable outlook for St. Joseph.

Q. Please provide Standard & Poor's Corporation's most recent outlook concerning the credit rating assigned to St. Joseph.

A. Standard & Poor's Corporation's *Global Utilities Ratings Service*, July 1998, provides a summary explaining the outlook. Specifically, the report states:

> Credit stability is envisioned for SAJ, reflecting low production costs and competitive rates, tight cost controls, conservative financing practices, no stranded investment, and a rebounding service area. Significant dependence on one generating station and absence of a fuel adjustment clause restrain upward rating potential, Sizeable purchased power commitments in early 2000 could negatively impact the company's financial position and pressure ratings.

Q. Please provide some historical financial information for St. Joseph.

A. Schedules 7 and 8 present historical capital structures and selected financial ratios from 1995 to 1999 for St. Joseph. St. Joseph's common equity ratio has ranged from a high of 54.19% to a low of 51.10% over the time period of 1995 though 1999. *The Value Line Investment Survey: Ratings & Reports* April 7, 2000, reported that the average common equity ratio (figured excluding short-term debt) for the electric industry for 1998 was 44.5% and is estimated to be 46.0% for 1999. St. Joseph's common equity ratio is higher than the "industry average," but that is one factor that has led to St. Joseph's solid credit rating. St. Joseph's return on year-end common equity

(ROE) has fluctuated during this time period ranging from a high of 13.56% in 1995 to a low of 6.37% in 1999. *The Value Line Investment Survey: Ratings & Reports*, April 7, 2000, estimates that St. Joseph's return on equity for 2000 will be 11.0%, which is in line with their reports that the average projected return on common equity for the electric utility industry will be 12.5% for 2000. St. Joseph's market-to-book ratio has varied from a high of 1.76 times to a low of 1.41 for the time period 1995 through 2000.

Business Operations of UtiliCorp

Q. Please describe UtiliCorp's business operations.

A. At UtiliCorp's web site (http://www.utilicorp.com/aboutUCU/CGI-bin/cgibuilder.cgi?aboutucu.html – visited April 27, 2000) under a section entitled "About UtiliCorp," UtiliCorp describes itself as follows:

> UtiliCorp United (NYSE:UCU) is an international, growth-oriented energy and services company based in Kansas City, Missouri. At December 31, 1998, the company had total assets of $6.0 billion and annual sales of $12.6 billion.
>
> Named 1997 Utility of the Year by a leading energy trade publication, UtiliCorp has a strong national presence as a provider of competitive and innovative energy solutions, and a growing presence in the international arena. The company serves more than three million electric and gas utility customers in eight states, one Canadian province, the United Kingdom, New Zealand and Australia. UtiliCorp launched EnergyOne℠, the utility industry's first national brand, in 1995. The company has earned numerous business awards and distinctions. In 1998, UtiliCorp was named by *Fortune Magazine* as one of America's Most Admired Companies; ranked 176th in sales for 1997 on the *Fortune 500* list; and made the *Forbes Magazine* Platinum 400 listing based on growth and profitability.
>
> Aquila Energy, a wholly owned subsidiary of UtiliCorp, in 1998 became the second largest volume wholesaler of natural gas, and the third largest volume wholesaler of electricity in the U.S. Aquila

markets natural gas and electricity to industrial and wholesale customers in nearly all of the contiguous 48 states. It is also active in much of Canada. In addition to being a marketer, it also gathers, transports and processes natural gas and sells natural gas liquids through its subsidiary, Aquila Gas Pipeline Corporation.

Aquila is continually expanding its offerings of energy, commodity and risk management products and services. It is a leader in the trading of energy and risk management products, such as weather derivatives, and was selected as the Risk Management Company of 1998 by McGraw-Hill, publisher of more than a dozen energy industry newsletters and magazines, including *Business Week*. Aquila was the only company singled out for this honor, and is the first-ever recipient of this award for excellence in energy risk management.

UtiliCorp Energy Solutions (UES), is a wholly owned subsidiary of UtiliCorp United. This affiliation enables UES to find competitive energy prices and meet energy delivery commitments to help its retail customers stay competitive and succeed in the deregulated energy marketplace. UES helps a broad range of commercial businesses control and stabilize their energy costs - including irrigation and farming operations, dry cleaners, schools, restaurants, hotels, hospitals and more.

UtiliCorp Energy Management (UEM), is a wholly owned subsidiary of UtiliCorp United. UEM specializes in independent and objective third-party energy consulting and procurement services for industrial and large commercial, multi-site customers and municipal utilities nationwide. The outsourced services offered by UEM help companies take full advantage of cost-saving opportunities in today's changing energy marketplace by providing in-depth knowledge and experience in the energy industry.

Another UtiliCorp subsidiary, UtilCo Group, owns interests in 17 independent power projects in seven states and Jamaica.

UtiliCorp's total operating revenues were $18,621.5 million for the 12-month period ended December 31, 1999. These total-operating revenues resulted in an overall net income of $160.5 million. These revenues and net incomes were generated from total

assets with a book value of $7,538.6 million on December 31, 1999. These figures were taken from UtiliCorp United's *1999 Annual Report.*

Q. Please describe the credit rating of UtiliCorp.

A. Currently, UtiliCorp's corporate credit rating from Standard & Poor's Corporation is "BBB/Stable," and categorizes UtiliCorp's business profile rating as a "6" (on a scale of 1 through 10 with 1 being strong and 10 being weak). This rating is considered to be "investment grade" ("investment grade" as defined as a "BBB" rating or higher). The Corporate Credit Rating issued by Standard & Poor's reflects a stable outlook for UtiliCorp

Q. Please provide Standard & Poor's Corporation's most recent outlook concerning the credit rating assigned to UtiliCorp.

A. Standard & Poor's Corporation's *Global Utilities Ratings Service*, January 2000, provides a summary explaining the outlook. Specifically, the report states:

> Ratings stability reflects moderate utility spending needs and sound utility operations, offset by the company's need to strengthen financial measures in response to changing business profile that includes higher-risk, non-regulated ventures, like energy marketing and trading. As the nonregulated businesses continue to grow more quickly than the utility operations, UtiliCorp's financial profile will have to strengthen to compensate for the increased business risk.

Q. Please provide some historical financial information for UtiliCorp.

A. Schedules 9 and 10 present historical capital structures and selected financial ratios from 1995 through 1999 for UtiliCorp. UtiliCorp's common equity ratio has ranged from a high of 42.45% to a low of 34.65% over the time period of 1995 though 1999. *The Value Line Investment Survey: Ratings & Reports* April 7, 2000, reported that the average common equity ratio (figured excluding short-term debt) for the

electric industry for 1998 was 44.5% and is estimated to be 46.0% for 1999. UtiliCorp's common equity ratio has been consistently lower than the "industry average," but that is UtiliCorp's management decision. UtiliCorp's return on year-end common equity (ROE) has fluctuated during this time period ranging from a high of 11.52% in 1997 to a low of 8.43% in 1995. UtiliCorp's 1999 ROE of 10.52% was on par with the average earned by other electric utilities of 11.00% according to *The Value Line Investment Survey: Ratings & Reports*, April 7, 2000. Value Line also estimates that UtiliCorp's return on equity for 2000 will be 11.5%. In addition, *The Value Line Investment Survey: Ratings & Reports*, April 7, 2000, reports that the average projected return on common equity for the electric utility industry is 12.5% for 2000. UtiliCorp's market-to-book ratio has varied from a high of 1.79 times to a low of 1.19 times for the time period 1995 through 2000.

Determination of the Cost of Capital

Q. Please describe the cost of capital approach for determining a utility company's cost of capital.

A. The total dollars of capital for a utility company are determined for a specific point in time. This total dollar amount is proportioned into each specific capital component. A weighted cost for each capital component is determined by multiplying each capital component ratio by the appropriate embedded cost or the estimated cost of common equity. The individual weighted costs are summed to arrive at a total weighted cost of capital. This total weighted cost of capital is synonymous with the fair rate of return for the utility company.

Q. Why is a total weighted cost of capital synonymous with a fair rate of return?

A. From a financial viewpoint, a company employs different forms of capital to support or fund the assets of the company. Each different form of capital has a cost and these costs are weighted proportionately to fund each dollar invested in the assets.

Assuming that the various forms of capital are within a reasonable balance and are costed correctly, the resulting total weighted cost of capital, when applied to rate base, will provide the funds necessary to service the various forms of capital. Thus, the total weighted cost of capital corresponds to a fair rate of return for the utility company.

Capital Structure and Embedded Costs

Q. What capital structure have you employed in developing a weighted cost of capital for St. Joseph?

A. My analysis is based upon St. Joseph's capital structure as of December 31, 1999. Schedule 11 presents St. Joseph's capital structure and associated capital ratios. The resulting capital structure consists of 53.99% common stock equity, 0.00% preferred stock, 39.07% long-term debt and 6.94% short-term debt. St. Joseph had no preferred stock outstanding at December 31, 1999. The amount of long-term debt includes current maturities due within one year and was reduced by $1,238,415 (see Schedules 12-2 and 12-3) for the net balance associated with losses on reacquired debt and unamortized debt issuance expenses.

Q. Is this the capital structure you are recommending that the Commission adopt in this case, or are you recommending a hypothetical capital structure?

A. No. In the past the Staff has used a hypothetical capital structure for St. Joseph due to the excessive amount of common equity that was used in their capital structure. However, as of December 31, 1999, St. Joseph's capital structure did not contain an excessive amount of common equity based on the methodology Staff has historically used to make this determination. Therefore, Staff is recommending that the Commission adopt St. Joseph's actual capital structure as of December 31, 1999.

Q. Would you please explain the methodology Staff used to determine if a company's capital structure contains an excessive amount of common equity?

A. First the Staff applies appropriate criteria to select a group of companies that are comparable to the company being analyzed. In this case that company is St. Joseph. Once the comparable companies have been selected, the Staff calculates an average capital structure for the comparable company group as well as the standard deviation. From the average capital structure for the comparable companies the equity ratio is taken and then a range of one standard deviation on each side of the average is determined. If the company being analyzed has a common equity ratio that falls within this range of one standard deviation from the average, then the common equity ratio for the company being analyzed considered reasonable.

Q. What was the embedded cost of debt for St. Joseph on December 31, 1998?

A. I determined it to be 8.14% (see Schedule 12). I also determined the embedded cost of short-term debt to be 6.32%. The embedded cost of short-term debt is equal to St. Joseph's cost of short-term debt for the month of December 1999.

Cost of Equity

Q. How do you propose to analyze those factors by which the cost of equity for St. Joseph may be determined?

A. I have selected the Discounted Cash Flow (DCF) model as the primary tool to determine the cost of equity for St. Joseph.

The DCF Model

Q. Please describe the DCF model.

A. The DCF model is a market-oriented approach for deriving the cost of equity. The return on equity calculated from the DCF model is inherently capable of attracting capital. This results from the theory that security prices adjust continually over time, so that an equilibrium price exists, and the stock is neither under-valued nor over-valued. It can also be stated that stock prices continually fluctuate to reflect the required and expected return for the investor.

The continuous growth form of the DCF model was used in estimating the cost of equity for St. Joseph. This model relies upon the fact that a company's common stock price is dependent on the expected cash dividends and on cash flows received through capital gains or losses that result from stock price changes. The rate that discounts the sum of the future expected cash flows to the current market price of the common stock is the calculated cost of equity. This can be expressed algebraically as:

$$\text{Present Price} = \underset{\text{Discounted by k}}{\underline{\text{Expected Dividends}}} + \underset{\text{Discounted by k}}{\underline{\text{Expected Price in 1 year}}} \quad (1)$$

Since the expected price of a stock in one year is equal to the present price multiplied by one plus the growth rate, equation (1) can be restated as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{(1+k)} + \frac{\text{Present Price } (1+g)}{(1+k)} \qquad (2)$$

where g equals the growth rate, and k equals the cost of equity. Letting the present price equal P_0 and expected dividends equal D_1, the equation appears as:

$$P_0 = \frac{D_1}{(1+k)} + \frac{P_0(1+g)}{(1+k)} \qquad (3)$$

The cost of equity equation may also be algebraically represented as:

$$k = \frac{D_1}{P_0} + g \qquad (4)$$

Thus, the cost of common stock equity, k, is equal to the expected dividend yield (D_1/P_0) plus the expected growth in dividends (g) continuously summed into the future. The growth in dividends and implied growth in earnings will be reflected in the current price. Therefore, this model also recognizes the potential of capital gains or losses associated with owning a share of common stock.

The DCF method is a continuous stock valuation model. The DCF theory is based on the following assumptions:

1. Market equilibrium,
2. Perpetual life of the company,
3. Constant payout ratio,
4. Payout of less than 100% earnings,
5. Constant price/earnings ratio,
6. Constant growth in cash dividends,
7. Stability in interest rates over time,
8. Stability in required rates of return over time, and

9. Stability in earned returns over time.

Flowing from these, it is further assumed that an investor's growth horizon is unlimited and that earnings, book values and market prices grow hand-in-hand. Even though the entire list of above assumptions is rarely met, the DCF model is a reasonable working model describing an actual investor's expectations and resulting behaviors.

Q. Can you directly analyze the cost of equity for St. Joseph?

A. Yes. In order to arrive at a company-specific DCF result, the company must have common stock that is market-traded and must pay dividends. St. Joseph's stock is publicly traded on the New York Stock Exchange under the ticker symbol of "SAJ" and St. Joseph has paid cash dividends each year since 1950. However, St. Joseph is in the process of merging with UtiliCorp. The merger agreement states that UtiliCorp will pay the shareholders of St. Joseph $23.00 in UtiliCorp stock for each share of St. Joseph stock they own. Therefore, the Staff has assumed that St. Joseph's stock is currently trading based on the anticipation of receiving $23.00 in UtiliCorp stock for each share of St. Joseph stock they own, and not the value of St. Joseph as an ongoing company. Based on this assumption Staff has used the return on common equity range developed by Staff in St. Joseph's last rate case and used that as the starting point for the return on equity range for this analysis. Staff then developed a group of five comparable companies. Once the comparable companies were selected the Staff then estimated the return on common equity for the comparable companies using the DCF model and the Capital Asset Pricing Model (CAPM) to either justify the range or indicate that deviation was necessary.

Q. Please explain the cost of equity analysis performed on other utility companies?

A. Yes. I have selected a group of comparable electric companies to analyze for the purpose of determining the reasonableness of the return on common equity range developed by Staff in St. Joseph's last rate case. Schedule 13 presents a list of 74 market-traded electric companies followed by Value Line of which St. Joseph is one. This list was reviewed for the following criteria:

1. Stock publicly traded and information printed in Value Line: This criterion did not eliminate any companies;

2. S&P Utility Credit Rating between A+ and BBB: This criterion eliminated eighteen companies;

3. Nuclear Operations 10% or Less of Total Generation: This criterion eliminated twenty-seven additional companies;

4. Electric Revenues greater than 60% of Total Revenues: This criterion eliminated six additional companies;

5. Total Capital < $2.5 billion: This criterion eliminated twelve additional companies;

6. Positive Dividends Per Share Annual Compound Growth Rate for the period of 1989 through 1999: This criterion eliminated four additional companies; and

7. No Missouri Operations: This criterion eliminated St. Joseph and The Empire District Electric Company.

On average, this final group of five publicly traded electric companies (comparable companies) is comparable to St. Joseph because of similar business operations and financial conditions. The five comparable companies are listed on Schedule 14.

Q. Please explain how you approached the determination of the cost of equity for the comparable companies.

A. I have calculated a DCF cost of equity for each of the five comparable companies. The first step was to calculate a growth rate. The first step in determining an appropriate growth rate is to calculate the historical compound growth rate of dividends, earnings and, book value for each company (see Schedule 15). The next step was to review projected growth rates for each company. The Staff reviewed projected growth rates from three different sources: I/B/E/S Inc.'s *Institutional Brokers Estimate System*, March 16, 2000; Standard & Poor's Corporation's *Earnings Guide*, April 2000; and *Value Line's Investment Survey; Ratings & Reports*, February 16, 2000, and April 7, 2000. The historical growth rates ranged from 0.95% to 5.24% with an overall average of 3.09% for the group (Column 1 of Schedule 16). The projected growth rates ranged from 2.00% to 9.00% with an average of 4.84%. Taking into account the projected and historical growth rates, an average growth rate of 3.96% (see Schedule 16) was used in the DCF calculation for the comparable companies.

The next step was to calculate an expected yield term (D_1/P_0) for each of the comparable companies. The expected yield term is calculated by dividing the amount of common dividends per share expected to be paid over the next 12 months (D_1) by the current market price per share of the firm's common stock (P_0). Even though the model requires the use of a current or spot market price, I have chosen to use a monthly high/low average market price for each of the comparable companies. Schedule 17 shows the high/low stock price for each of the comparable companies for the time period December 1, 1999, through March 31, 2000. This averaging technique is an attempt to

minimize the effects on the dividend yield that can occur due to daily volatility in the stock market.

The Value Line Investment Survey: Ratings & Reports, February 16, 2000 and April 7, 2000, report estimates of the common dividend for each of the comparable companies for the next 12 months. Column 3 of Schedule 18 shows that the projected dividend yields ranged from 4.81% to 8.79% for the five comparable companies with the average at 6.45%.

The projected growth rates and projected dividend yields were then added together to reach an estimated DCF cost of equity for each of the five comparable companies (see Column 5 of Schedule 18). These estimates produced a DCF cost of equity ranging from 9.52% to 11.68% for the comparable companies with an average of 10.41%. This solidly supports the return on equity range developed by Staff in St. Joseph's last rate case of 9.27% to 10.51%.

Q. What analysis was performed to determine the reasonableness of your DCF model derived return on common equity for the comparable company group?

A. I performed a CAPM cost of equity analysis for the comparable company group. The CAPM describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return that investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

$$k = R_f + \beta (R_m - R_f)$$

where:

k = the expected return on equity for a specific security,

R_f = the risk-free rate,

β = beta; and

$R_m - R_f$ = the market risk premium.

The first term of the CAPM is the risk-free rate (R_f). The risk-free rate reflects the level of return, which can be achieved without accepting any risk. In reality, there is no such riskless asset, but it is generally approximated by U.S. Treasury securities because of the government's unlimited ability to tax and create money. For purposes of this analysis, the risk-free rate was represented by the yield on 30-Year U.S. Treasury Bonds. The appropriate rate was determined to be 5.87% as of April 25, 2000, as published in *The Wall Street Journal.*

The second term of the CAPM is beta (β). Beta is an indicator of a security's investment risk. It represents the relative movement and relative risk between a particular security and the market as a whole (where beta for the market equals 1.00). Securities with betas greater than 1.00 exhibit greater volatility than do securities with betas less than 1.00. This causes a higher beta security to be riskier and therefore requires a higher return in order to attract investor capital away from a lower beta security. For purposes of this analysis, the appropriate beta for each of the comparable companies was determined to be the beta published in *The Value Line Investment Survey: Ratings & Reports*, February 16, 2000 and April 7, 2000. The betas for the comparable companies ranged from 0.50 to 0.40 with an average of 0.47 (see Schedule 19).

The final term of the CAPM is the market risk premium ($R_m - R_f$). The market risk premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk-free investment. For purposes of this analysis,

the appropriate market risk premium was determined to the market risk premium for the time period 1926 through 1998 as calculated in Ibbotson Associates, Inc.'s *Stocks, Bonds, Bills, and Inflation: 1999 Yearbook.*

Schedule 19 presents the CAPM analysis with regard to the comparable companies. The CAPM analysis produces an estimated cost of equity range of 8.87% to 9.62% for the comparable companies with an average of 9.39%. This provides support to the DCF cost of equity estimate developed by Staff in St. Joseph's last rate case, and proposed to be used by Staff in this analysis of St. Joseph

Rate of Return for St. Joseph

Q. Please explain how the returns developed for each capital component are used in the ratemaking approach you have adopted to be applied to St. Joseph's operations.

A. The cost of service ratemaking method was adopted in this case. This approach develops the public utility's revenue requirement. The cost of service (revenue requirement) is based on the following components: revenues, prudent operation costs, rate base and a return allowed on the rate base (see Schedule 20).

It is my responsibility to calculate and recommend a rate of return that should be authorized on the rate base of St. Joseph. Under the cost of service ratemaking approach, a weighted cost of capital in the range of 8.62% to 9.29% was developed for St. Joseph's operations (see Schedule 21). This rate was calculated by applying an embedded cost of short-term debt of 6.32%, an embedded cost of long-term debt of 8.14%, and a return on common equity range of 9.27% to 10.51% to a capital structure consisting of 6.94% short-term debt, 39.07% long-term debt, and 53.99% common equity. Therefore, as I

suggested earlier, I am recommending that St. Joseph Light & Power's Missouri utility operations be allowed to earn a return on its original cost rate base in the range of 8.62% to 9.29%.

Through this analysis, I believe I have developed a fair and reasonable rate of return. My rate of return is based on a return on common equity range of 9.27% to 10.51%. My return range is based on the current and projected economic conditions. This range is sufficient to assure confidence in the financial soundness of the utility and will be adequate, under efficient and economical management, to allow St. Joseph to raise the money necessary for the proper discharge of its public duties.

FROZEN CAPITAL STRUCTURE

Q. Why does the Staff believe that UtiliCorp is proposing to use the current capital structure of St. Joseph to set rates for St. Joseph customers after the merger?

A. UtiliCorp's capital costs are less that those of St. Joseph and this is one of several indirect ways in which UtiliCorp plans on recovering 50% of the acquisition premium for which they are not seeking direct recovery.

Q. What is St. Joseph's current capital structure that UtiliCorp referred to in its Regulatory Plan?

A. On page of 28 of the Direct Testimony of John W. McKinney, he states that UtiliCorp is proposing the capital structure for St. Joseph be maintained at the level proposed by Staff in St. Joseph's last rate case (Case No. ER-99-247) that consisted of approximately 53% common equity and 47% long-term debt. St Joseph's current capital structure is approximately 58.37% common equity and 41.63% long-term debt (excluding

short-term debt) but, its targeted capital structure is **___** common equity and **___** long-term debt, while UtiliCorp's current targeted capital structure is 40% common equity and 60% long-term debt.

Q. Is it true that, absent the merger, St. Joseph's capital structure will not change appreciably over the next five to 10 years?

A. It is impossible to say what St. Joseph's capital structure would be going forward but, according to St. Joseph's forecasts, the anticipated common equity ratio would vary from **___** to **___** for the years 1999 through 2008 (Source: Material made available to Staff at St. Joseph's Corporate Headquarters, and was represented as due diligence material made available to the bidders). It is also true that with common equity ratios in that range, Staff would probably be recommending a hypothetical capital structure for St. Joseph. Staff has historically proposed to use a hypothetical capital structure when a company employs an excessive amount of equity and the weighted cost of capital becomes excessive.

What is not quite so easy to say is what hypothetical capital structure the Staff would propose for St. Joseph over the next 10 years. Staff has historically calculated a hypothetical capital structure by determining the mean and standard deviation of the common equity ratio for a group of companies that are comparable to St. Joseph. The Staff then imputes a common equity ratio for St. Joseph that is one standard deviation above the mean common equity ratio for the group of comparable companies. There is no reason to believe that Staff would alter this approach, but it is impossible to determine what the average common equity ratio for a group of comparable companies would be 10 years into the future. There appears to be little question that the electric utility industry is

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in the midst of a transformation, but whether that transformation will result in companies comparable to St. Joseph being financed with more or less common equity is impossible to say at this time.

Q. Would a capital structure consisting of 53% common equity and 47% long-term debt be appropriate for St. Joseph going forward?

A. It is impossible to know with certainty going forward what types of changes will occur within the electric utility industry. To the extent that changes in the industry and the corresponding business risk of electric utilities is not known, then the changes in the capital structure that logically result are not known.

Q. How will the St. Joseph utility operations be financed going forward, and what are the real capital costs that will be incurred in the operation of the St. Joseph utility operations?

A. The St. Joseph utility operations will be financed by UtiliCorp once the merger is consummated. St. Joseph will operate as a division of UtiliCorp after the merger is consummated. As a result, St. Joseph will not have any common stock outstanding, publicly traded or otherwise. The actual capital costs of the merged entity will be UtiliCorp's capital costs. UtiliCorp has repeatedly stated that it intends to keep its targeted capital structure at approximately **___** common equity and **___** long-term debt. Therefore, assuming that rates are set based on actual costs, the capital costs that should be included in rates are UtiliCorp's financing costs, not St. Joseph's pre-merger financing costs.

Q. How does UtiliCorp's capital structure practices differ from that of St. Joseph?

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A. UtiliCorp's targeted capital structure contains **___** common equity and **___** long-term debt. UtiliCorp's forecasts show that its common equity ratio will vary between **___** and **___** for time period 1999 through 2003, which is significantly different from St. Joseph's targeted capital structure of **___** common equity and **___** long-term debt for the same time period. The real issue is that of the cost of capital differences between the companies come from different attitudes that the companies have regarding the use of debt and ultimately how those differences are reflected in rates. Standard & Poor's *Global Utilities Rating Service Utility Credit Report for UtiliCorp* January 2000 states the following regarding UtiliCorp:

> **Capital Structure.** Management's aggressive attitude regarding debt leverage and off-balance-sheet obligations appears in the balance sheet ratios, where total debt to capital approaches 60% and is projected to decrease only moderately in the future. Some ebbing in the attitude toward leverage has been manifested at times, but Standard & Poor's believes that management's historic affinity for the use of leverage is still present and will limit credit quality in the future.

The consensus is that UtiliCorp will fund its operations with approximately 40% common equity on a going forward basis. In fact, below is an excerpt from the transcript of the August 5, 1999 conference call with security analysts discussing second quarter 1999 earnings where UtiliCorp Chairman and CEO Richard C. Green, Jr., stated that UtiliCorp is still very comfortable with a 40% common equity/60% debt capital structure.

. . . .

> Q: Okay. And presumably, have you determined at this point – would these be financed as ones have similarly in the past as far as the US capital markets?
>
> RCG: Yes and let me talk a little bit broader about that because it is our strong intent to be very effective and good at deploying our capital and growing our business base and balance sheet.

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> And underneath that, what we're talking about is when we get to the point of doing equity offerings those are equity offerings in conjunction with accretive deals.
>
> You'll remember that the offering we did last year was an accretive stock offering.
>
> And that when we do these transactions they're **based at least on a 60/40 equity/debt or debt/equity balance here.** [emphasis added]
>
> So we have a lot of confidence that when you put together accretive deals like we've been doing in the South Pacific that that's just going to, you know, be positive the bottom line even when we have to put out the equity to balance the - to shore up the balance sheet.
>
> Q: And you're still comfortable with that 60/40 split as the business expands and is further dispersed around the world?
>
> RCG: Yes. Yes we are. . . .

The approach to UtiliCorp's capital structure as illustrated above is significantly different than St. Joseph's. Standard & Poor's *Global Utilities Rating Service Utility Credit Report for UtiliCorp* July 1998 states the following regarding St. Joseph's capital structure:

> **Capital Structure**. Historically, SAJ [St. Joseph] has used conservative financing practices. The company maintains a strong common equity base, has no long-term variable-rate debt outstanding. At Dec. 31, 1997, adjusted debt leverage was roughly 49% marginally satisfactory for current ratings. However, the common equity layer is a robust 51.4%, and there is no preferred stock outstanding. Debt leverage could rise to nearly 56% in 2000 when capacity payments under the NPPD purchased power arrangement begin. Most of the company's long-term debt is not publicly traded. At Dec. 31, 1997 SAJ has $22.5 million principal amount of first mortgage bonds outstanding, all of which had been privately placed. The company also has $45 million of unsecured medium-term notes and $5.6 million of unsecured pollution control bonds outstanding. SAJ's average debt life is 16 years, with an embedded cost of 8.3%

This illustrates the vastly different approach that St. Joseph and UtiliCorp take to their capital structures.

Q. What is the impact of the UtiliCorp/St. Joseph merger on the combined company's cost of capital?

A. The impact of this proposal is two-fold. First, St. Joseph's cost of capital is higher than UtiliCorp's so there will be an immediate reduction in the capital cost to operate the St. Joseph properties after the merger. This will be a potentially significant source of merger savings from the perspective of St. Joseph customers. Secondly, there will be a reduction in UtiliCorp's risk with the addition of the St. Joseph and The Empire District Electric Company (Empire) properties, further reducing UtiliCorp's cost of capital.

The first reduction in capital costs from those associated with St. Joseph to those associated with UtiliCorp will create approximately $1.7 million per year for a total savings of approximately $17 million over the ten-year period UtiliCorp is proposing to freeze St. Joseph's capital structure. (See Schedule 22) Staff's analysis of the $1.7 million per year in capital cost savings is based upon UtiliCorp and St. Joseph's capital costs from their most recent rate cases. If the Staff would use UtiliCorp's cost of capital estimate they are using in this case to calculate capitalized merger savings (11.37% per merger saving estimate workpapers, response to Staff Data Request No. 1), the annual savings would rise to approximately $2.7 million. The second reduction in capital costs will come from the reduction in risk that the acquisition of St. Joseph and Empire will have on UtiliCorp. The amount of savings that will be generated from these acquisitions is not known. The Staff is confident that the risk and corresponding capital costs of

UtiliCorp will be reduced due to the addition of regulated operations. The certainty that is associated with cash flows of regulated utility operations is greater than that of unregulated operations. Through these acquisitions, the percentage of cash flows that come from regulated operations will be greater thus creating greater certainty of the total cash flows of UtiliCorp. UtiliCorp has not acknowledged this benefit in its direct testimony, but does acknowledge it in a written transcript of "UtiliCorp's Investor Call, July 13, 1999 - $250MM Senior Notes." UtiliCorp's CEO Richard C. Green referred to the pending St. Joseph and Empire transactions as low risk; however, the magnitude of the effect this transaction will have on UtiliCorp's cost of capital is not known. It appears that the Staff and UtiliCorp both agree that the effect of the St. Joseph and Empire transactions will be lower risk and lower capital costs to UtiliCorp, which ordinarily would result in lower costs to the customers of St. Joseph, Empire and UtiliCorp.

Q. Has the Commission previously heard the issue of "frozen capital structure?"

A. No. This issue has not been presented to the Commission previously in this manner, but a very similar version of this proposal was proposed by UtiliCorp in Case Nos. ER-97-394, ER-93-37 and ER-90-101, its last three general rate proceedings in Missouri. In those cases, UtiliCorp was proposing a capital structure for its Missouri Public Service (MPS or MoPub) division that had significantly more equity than was being used to finance MoPub's assets. The Staff argued in Case No. ER-97-394 that the allocated capital structure proposed by MoPub would have the effect of artificially

increasing the cost of capital to be paid by MoPub customers. More specifically, in the Direct Testimony of Consultant Steven G. Hill, Staff stated the following:

. . . .

> . . . [O]verall capital costs based on the Company's allocated capital structure will not equal the actual overall cost of capital because the allocated capitalization is different than the capital structure on which the Company's actual costs are based. For example, UtiliCorp management has selected an allocated ratemaking capital structure for MPS which has an equity ratio of approximately 47%. Other electric utilities that have similar capital structures have bond ratings which are several ratings categories higher than the bond rating of MPS's parent, UtiliCorp. The Companies included in Mr. Dunn's electric utility sample have an average equity ratio of approximately 48% and an average Standard & Poor's (S&P) bond rating of "A+." UtiliCorp has an equity ratio closer to 40% and has a bond rating of "BBB."
>
> The cost rates associated with the debt issued by UtiliCorp (and subsequently allocated to MPS) are a function of UtiliCorp's "BBB" bond rating, not of the allocated capital structure. Those embedded debt cost rates are not the cost rates that would exist for MPS if it had actually been capitalized in a manner similar to the allocated capital structure. Therefore, in order to accurately estimate MPS's actual overall capital costs those embedded debt cost rates should be matched with the capital structure on which the cost of that debt is predicated – the consolidated capital structure of UtiliCorp.
>
> It is important to remember that capital dollars are not color-coded. Once they enter the corporate treasury accounts, dollars derived from retained earnings, equity issuances, debt issuances or investment tax credits are not differentiable from each other. When those dollars are disbursed to subsidiary operations, they can certainly be classified as being from a certain percentage of debt or equity (as UtiliCorp has done in allocating capital to its subsidiaries) but, in reality, it is not possible to distinguish the source of those monies once they are deposited in the corporate treasury. Therefore, the cost rate which is most appropriately associated with those monies is the parent company's overall cost of capital. (pp. 13-14)

. . . .

> . . . [W]ith the use of an allocated capital structure there exists the potential for the overrecovery of capital costs. Overrecovery can occur on the debt capital costs through the allocation of debt to the regulated subsidiary which carry a cost rate higher than the overall consolidated embedded cost of debt. For example, UtiliCorp reported to its shareholders in "The 1996 Corporate Profile" a statistical supplement which the parent characterizes as a "companion piece to the UtiliCorp United 1996 Annual report to shareholders," indicates that the consolidated embedded debt cost at year–end 1996 was 8.14%. However, Schedule JCD-10 attached to the Direct Testimony of Company witness Dunn indicates that the Company requests that its rates be set using an embedded cost of 8.39%
>
> Also, if rates are set for MPS using a capital structure which has a higher percentage of equity capital than that actually utilized by the parent, the parent company will have the opportunity to realize a return on equity higher than that which is allowed in utility rates. (pp. 15-16)

Q. How did the Commission rule on that issue in that case?

A. The Commission's Report And Order dated March 6, 1998, stated the following:

> Based on substantial evidence of record, the Commission finds that the consolidated capital structure as proposed by the Staff accurately reflects the correct capital structure of UtiliCorp itself, and therefore MPS, during the actual test year.
>
> The Commission adopts the Staff-proposed capital structure of 56.14 percent debt to 43.86 percent equity.

Q. How were the two previous cases decided?

A. In Case No. ER-93-37, the Commission ruled in UtiliCorp's favor, but in Case No. ER-90-101, the Commission ruled in the Staff's favor and stated the following:

> The Commission determines that the capital structure proposed by Staff/Public Counsel, as modified hereinafter, should be adopted in this case. In ratemaking, establishing the correct capital structure is part of the process of setting the rate of return on the Company's facilities. The goal of selecting a rate of return is to attract sufficient capital for the company's needs in financing its facilities. It is important that the rate of return established realistically reflect

> the assessment of prospective investors in that company. The Commission finds that it is more reasonable to use the consolidated capital structure for MPS than it is to assign a hypothetical capital structure to MPS. As noted by Staff/Public Counsel, MPS has no capital structure of its own and its stock is not traded on the stock market. Investors cannot invest in MPS but can invest in UtiliCorp. It is the capital structure of UtiliCorp that prospective investors will examine when contemplating the investment. It is UtiliCorp which must attract capital for the use of its divisions and subsidiaries including MPS.
>
> The Commission determines that the use of a consolidated capital structure in this instance will not, per se, expose MPS's ratepayers to any adverse consequences arising from UtiliCorp's other activities any more than the use of a hypothetical, assigned capital structure will insulate them from these consequences. As stated by Staff/Public Counsel's witness, the present capital structure of UtiliCorp is not harmful to MPS's ratepayers. However, an adjustment would need to be made in future rate cases should UtiliCorp develop a capital structure that would subject MPS's ratepayers to adverse consequences arising from UtiliCorp's other activities.
>
> The Commission further determines that it is not germane to establishing of an appropriate rate of return that the consolidated capital structure is unavailable to finance MPS's future construction. As pointed out by Staff/Public Counsel's witness, only new capital is available to MPS for new construction. Since UtiliCorp raises the capital for MPS's use, it is UtiliCorp's capital structure which is the more important in raising capital from investors to finance MPS's construction program.

Q. From a more general perspective, would you discuss why companies enter into mergers and acquisitions?

A. Yes. The value of a company or any asset is derived from the present value of its future cash flows. Based on this concept, the following formula can be used to establish the value of a company:

$$V = FCF / (K - G)$$

Where

V	=	Value of the company
FCF	=	Unleveraged free cash flow defined as
FCF	=	EBIT (1-tax rate) + Depreciation – Change in net working capital – capital expenditures
K	=	Company's cost of capital
G	=	Company's long-term growth in unleveraged free cash flow

From this formula, we can conclude that a company's value is based on its unleveraged free cash flow, its cost of capital and the long run growth prospects of the Company. An example of how this equation is relevant to valuing a potential merger candidate would be to assume two companies, A and B. If company B (in this case UtiliCorp) wants to purchase company A (in this case St. Joseph), but company A is demanding a premium to its current market value, then the only way the deal can make sense economically is if company B can either increase the unleveraged cash flow of company A, decrease the capital costs of company A, and/or increase the growth rate of company A.

Q. How does that general theory relate to this merger and, more specifically, the issue of freezing the capital structure for St. Joseph customers?

A. In this specific case, UtiliCorp has agreed to purchase St. Joseph for $23.00 per share which was approximately $6.00 per share above St. Joseph's market value at the time of announcement. Implicitly, UtiliCorp believes St. Joseph is worth more to them than it is on the open market because they will be able to increase unleveraged free cash flow (synergies), lower capital costs and/or increase the long range growth prospects of the combined entity.

Regarding UtiliCorp's proposal to freeze St. Joseph's capital structure at pre-merger levels for ratemaking purposes, it is simply a way for UtiliCorp to artificially

increase the cost of service to St. Joseph ratepayers, therefore, allowing UtiliCorp to recover, in part, the acquisition premium they paid to St. Joseph shareholders.

Q. Could you please summarize Staff's position on UtiliCorp's proposal to freeze the capital structure of St. Joseph at the pre-merger level for ratemaking purposes?

A. It is Staff's position that there are going to be capital cost savings created from this merger in two different ways. First, the cost of capital required to operate the St. Joseph properties will be lower with UtiliCorp's current capital costs than they were with St. Joseph as a separate company. Secondly, there is the effect that this merger will have on UtiliCorp's cost of capital. The merger of St. Joseph, as well as the merger of Empire into UtiliCorp will have the effect of lowering UtiliCorp's overall risk profile; therefore, the future cash flows should be more certain and less risky, requiring a lower discount rate. This discount rate at which future cash flows are discounted is the company's overall cost of capital. In this case, UtiliCorp's cost of capital should be less after the merger than it is prior to the merger, creating additional savings in the area of capital costs. While UtiliCorp should have a reasonable opportunity to retain some portion of its merger savings including cost of capital savings, St. Joseph customers should also reap some benefits from these savings as well.

Therefore, it is the Staff's opinion that UtiliCorp's proposal to freeze St. Joseph's capital structure for ratemaking purposes at a pre-merger level is not necessary or appropriate, as discussed in the Rebuttal Testimony of Staff witness Mark L. Oligschlaeger and Cary G. Featherstone of the Accounting Department. Staff's position is to allow the company to retain a portion of merger savings through the use of regulatory lag. Use of regulatory lag will allow UtiliCorp to retain for some period of

time cost of capital savings associated with the St. Joseph merger. Allowing UtiliCorp to retain merger savings in the cost of capital area through artificial restrictions and movement from cost-based ratemaking should not be approved by the Commission.

ACQUISITION PREMIUM

Q. Is the Staff supporting UtiliCorp's proposal regarding the recovery of one-half the acquisition premium directly through rates?

A. No. It is the Staff's position that this merger is ultimately about the shareholders and maximizing shareholder value. This merger is not being done for the customers of St. Joseph, the employees of St. Joseph or the communities that St. Joseph operates within. In the *Proxy Statement of St. Joseph Light & Power Company,* St. Joseph lists the following eight reasons why this transaction is a good deal. As can be seen by their recitation below, they are all shareholder issues:

- That the merger consideration offers St. Joseph's shareholders an attractive premium over the recent historical trading prices of St. Joseph's common stock;

- That the merger offers St. Joseph's shareholders a more liquid market for their shares;

- That as a result of the merger, St. Joseph's shareholders will most likely benefit from UtiliCorp's dividend rate, which currently is, and in recent years has been, higher than St. Joseph's dividend rate;

- That St. Joseph's shareholders will benefit by participating in the combined economic growth of the service territories of UtiliCorp and St. Joseph, and from the inherent increase in scale, the market diversification and the resulting increased financial stability and strength of the combined entity;

- That the merger will result in cost savings from decreased electric production and gas supply costs, a reduction in operating and maintenance expenses and other factors;

- That the combined enterprise can more effectively participate in the increasingly competitive market for the generation of power;

- That UtiliCorp has significant non-utility operations and, as a larger and stronger financial entity following the merger, should be able to manage and pursue further non-utility diversification activities more efficiently and effectively than St. Joseph as a stand-alone entity; and

- That the merger and various provisions of the merger agreement offer St. Joseph's shareholders, customers and employees and the St. Joseph community a unique opportunity to realize the benefits created by combining the two companies.

In St. Joseph witness Terry F. Steinbecker's direct testimony, he makes the claim that this merger will benefit customers. This merger is not about customers – it's about getting the most for the shareholder. The St. Joseph Board of Directors is employed by the St. Joseph's shareholders and it is their duty to protect the shareholders' interests. That is exactly what they have done here in negotiating a price for St. Joseph. As a matter of fact, the St. Joseph Board of Directors put St. Joseph up for sale upon the recommendation of the consulting firm of Scott, Madden & Associates, which stated the following:

> It is Scott, Madden's recommendation that the Company look for a buyer or partner willing to pay a premium for the Company. As we previously discussed, SJL&P does not have a strategic advantage in either mass, scope or niche and is not likely to gain one. This creates long-term high risk and low returns for the shareholder. Therefore, it does not make sense for the Company to 'go it alone.' The process for this is outline in the report.

As that statement illustrates, the drivers behind the decision to sell St. Joseph are shareholder issues, not customer issues. The direct costs of this merger should accordingly be borne by shareholders.

St. Joseph Light & Power Company Valuation

Q. Theoretically, how are companies valued?

A. A company is just like any other asset that needs to be valued. The value of an asset is based on the present value of future cash flows. When a company is being valued, the future benefits are dollars available to investors. In the discussion of the frozen capital structure issue, we discussed the following valuation formula:

$$V = FCF / (K - G)$$

This formula derives the value of a company from the cash flow that is available to the shareholder. There is also the more conventional discounted cash flow model which, when solving for price, is as follows:

$$P = D/ (K - G)$$

Both of these formulas value a company based on the present value of future cash flows. Once the value of a company has been estimated using some type of discounted cash flow analysis, it is prudent to consider the results versus how a group of comparable companies have been valued in the market. Also consideration is given to comparable companies that have previously been involved in merger transactions. There are several ratios that can be used for this process such as sales price to any of the following: earnings, operating cash flow, book value, sales, EBITDA (earnings before interest, taxes, depreciation and amortization) and/or EBIT (earnings before interest and taxes) as

well as what premium is being paid over and above market value as compared to the unaffected market value per share. These are just some of the possible ratios that can be used to ensure that the discounted cash flow price for the company in question is reasonable.

Q. How did UtiliCorp determine a value for St. Joseph?

A. UtiliCorp did not hire an investment banker to assist with the process of evaluating St. Joseph -- the process was done in-house. UtiliCorp reviewed the financials of St. Joseph, analyzed what the consolidated financials would look like if UtiliCorp would purchase St. Joseph, and UtiliCorp reviewed what the ratios would be as a result of paying a variety of prices for St. Joseph. They then compared the ratios to those of several recent transactions within the electric industry. UtiliCorp did not do an independent analysis of St. Joseph's value. While what UtiliCorp did was good, it just did not go far enough.

It is critical that an analysis of the specific assets be done when a company is valued. What UtiliCorp has done is make the assumption that each of the other transactions they reviewed as part of their analysis were valued correctly and have relevance to UtiliCorp's purchase of St. Joseph. It is just like you are looking to buy a specific house and determine what you would be willing to pay for it. You look at what other houses in the area have sold for and make your offer to buy based only on the analysis of other homes. That analysis may lead to you getting a good house in a good area at a good price, but it could just as easily lead you to overpaying for that house in the good area if that house is not comparable to the other homes. A better approach to determining what a home's value would be based upon characteristics that are specific to

that home and what they would be worth to you, and then compare that price to the price at which others have sold.

What I believe UtiliCorp has done is assume that the market for electric utility companies is a competitive market and quite simply it is not. It is true, by some definition, the "market price" of St. Joseph is $23.00 per share, but that market price is not the result of a competitive market. St. Joseph did put the company "up for sale" through an auction process, but a competitive market is defined by having many buyers and sellers, all with perfect information, competing for a homogenious product. In the mergers and acquisitions market, you have only a few players and the products are all unique. UtiliCorp was one of three companies that had an interest in St. Joseph and there is not another company exactly like St. Joseph. Therefore, the "market price," that has been determined by the sale of St. Joseph is not the result of real competition, and should not be assumed to be the "fair market value" of St. Joseph. To take that idea to the next logical step, the value of other companies as part of the precedent transactions analysis should not be assumed to represent the market value of any specific electric company.

Q. What was the process used by St. Joseph to determine its value?

A. St. Joseph hired the firm of Morgan Stanley Dean Witter (Morgan Stanley) to assist the Board of Directors with its sale. Morgan Stanley did an independent DCF analysis of St. Joseph, as well as a comparison to other electric companies and an analysis of other mergers in the electric and gas utility industry. Morgan Stanley conducted a DCF analysis of the value of St. Joseph at two different points in time. The first was for the October 6, 1998, Board of Directors Meeting, and again for the February 19, 1999, Board of Directors Meeting. Morgan Stanley also

looked at trading statistics for comparable electric companies, as well as mergers in the electric utility industry from 1998, and mergers in the gas utility industry for 1997 and 1998.

In the DCF analysis conducted by Morgan Stanley, it determined the estimated cash flows for a nine-year period, then it discounted the cash flows to present and finally Morgan Stanley determined the present value of the terminal value of St. Joseph. Morgan Stanley used a range of growth rates in its analysis of **_____** to **_____**. Morgan Stanley also estimated the discount rate for St. Joseph to be in the range of **____** to **____**.

Q. What is the significance of the discount rate used to discount future cash flows?

A. The discount rate used to value a company should be the weighted average cost of capital of the acquiring firm. When St. Joseph was determining its value, it would have been appropriate for Morgan Stanley to use St. Joseph's cost of capital as the discount rate in the analysis. The weighted average cost of capital would be 13.017% based on St. Joseph's last rate case.

Q. At the time of Morgan Stanley's February 19, 1999 presentation to the Board of Directors of St. Joseph, had Staff filed its testimony on Case No. ER-99-247?

A. No, but the Staff had filed testimony in Case No. EC-98-573. In Case No. EC-98-573, the pre-tax cost of capital proposed by Staff was essentially identical to what Staff filed in Case No. ER-99-247.

Q. What were the assumptions and results of the discounted cash flow analysis performed by Morgan Stanley on St. Joseph's behalf?

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A. As stated above, Morgan Stanley used growth rates in the range of **_____** to **_____** and discount rates of **____** to **____**. With those variables and the cash flow projections done by Morgan Stanley, they estimated St. Joseph's value to be in the range of **_____** to **_____** per share.

Q. Given the cash flow projections of St. Joseph by Morgan Stanley and the savings projections given by UtiliCorp, what are the implied assumptions (i.e., discount rate and growth rate) of the $23.00 per share bid for St. Joseph's common stock?

A. Staff relied primarily on Morgan Stanley's February 19, 1999 cash flow projections because Morgan Stanley acknowledged in discussions with Staff that they were more accurate than the October 6, 1998 analysis. For purposes of the February 19, 1999 DCF analysis, Morgan Stanley used a growth rate of **_____** to **_____**. Using those parameters for growth, those amounts would imply a discount rate of approximately **_____** to **_____** used by UtiliCorp. (See Schedule 23-4)

Q. What would be the price per share of St. Joseph given the cash flow projections of Morgan Stanley and the cost of capital from the last St. Joseph rate case as the discount rate?

A. In St. Joseph's most recent rate proceeding, the Staff estimated the pretax cost of capital to be approximately 13.017%. When that is used as the discount rate to find the present value of the cash flows as estimated by St. Joseph and Morgan Stanley, for that is augmented by the savings estimates of UtiliCorp, then you come up with a value for St. Joseph of approximately **_____** per share is derived. (See Schedule 23-2)

NP

Q. What would be the price per share of St. Joseph given the growth rates defined by Morgan Stanley and UtiliCorp's cost of capital?

A. UtiliCorp is proposing an **_____** pretax cost of capital, for purposes of its analysis of the amortization of the acquisition premium. Including UtiliCorp's cost of capital in the discounted cash flow analysis of St. Joseph including the additional cash flows produced by the savings from the merger, it produces a value for St. Joseph of between approximately **_____** and **_____** per share. (See Schedule 23-3)

Q. Which of the above values for St. Joseph should the Commission consider when valuing the amount of the acquisition premium?

A. The Commission needs to decide what the appropriate value of St. Joseph is if it plans on reflecting all, or a portion, of the acquisition premium in rates. Determining the value of a utility company is nothing new for a utility commission. It is done in every contested rate case in which cost of capital is an issue. The only difference is in this analysis; the Commission needs to decide what the value of the St. Joseph is and, in a rate case, the value is a given and the appropriate discount rate is what is at question. In both cases, the theoretical concept is identical. The only difference is the factor of the equation that we are solving for.

The Staff believes that the most appropriate value for St. Joseph is the value that uses UtiliCorp's cost of capital as the discount rate. When UtiliCorp's cost of capital is used to discount the future cash flows of St. Joseph that have been estimated by Morgan Stanley and St. Joseph that include the merger savings estimated by UtiliCorp, it produces a value for St. Joseph on a per-share basis of between approximately

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_____ and **_____** per share. The high end of Staff's valuation range supports the market value of St. Joseph prior to the merger.

Q. Is recovery of the acquisition premium using this valuation the position that the Staff is supporting in this case?

A. No. The Staff's position is that UtiliCorp should not receive any direct recovery of the acquisition premium. The acquisition premium is a shareholder cost and should not be allowed in rates. To further illustrate this point, let us look at an example where a utility sells an asset at a premium to its book value. In this example, the Staff position would be that the gain goes to shareholders and is not included in rates as an offset to rate base. The Staff's position concerning the acquisition premium is consistent with the Commission's historical treatment of premiums on assets sales. If, and only if, the Commission decides to change its policy and allow direct recovery of all or part of the acquisition premium, does there come a need to determine what is the true value for St. Joseph. In that event, the Commission should utilize the Staff's recommended discount rates which produce a value of St. Joseph of **_____** to **_____** per share.

Bid Evaluation Process

Q. Please explain the bid evaluation process as it relates to St. Joseph.

A. As discussed in the direct testimony of Mr. Steinbecker, St. Joseph received preliminary bids in December 1998 from three companies. In January 1999, St. Joseph provided the bidders with information to do their due diligence work. In February 1999, the binding bids were received. There were two binding bids received by St. Joseph -- one for $21.28 per share and UtiliCorp's bid of $22.50 per share. After the

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binding bids were received by St. Joseph, the Board of Directors authorized Morgan Stanley to negotiate with UtiliCorp. Out of those negotiations, UtiliCorp increased its offer to St. Joseph from $22.50 per share to $23.00 per share.

Q. Why did UtiliCorp increase its offer from $22.50 per share to $23.00 per share?

A. UtiliCorp increased its offer because it wanted St. Joseph, and St. Joseph had requested that the bid be increased. UtiliCorp wants to be a player in the energy market going forward and to do that, it needs to get bigger. The reason for UtiliCorp increasing their offer to St. Joseph did not have anything to do with its customers or the customers of St. Joseph; it had everything to do with its corporate goal of being a multi-national energy solutions provider.

Q. Are you saying there is something wrong with UtiliCorp's corporate goal of becoming a multi-national energy solutions provider?

A. No. What I am saying is the reason UtiliCorp increased the price it would be willing to pay for St. Joseph from $22.50 per share to $23.00 per share did not have anything to do with the customers of St. Joseph. It was about UtiliCorp working to carry out its corporate vision and that is about how UtiliCorp is going to maximize its shareholder's wealth. There is nothing wrong with that either, but the customers of St. Joseph should not be forced to pay more for their electric service because UtiliCorp wants to be a multi-national energy solutions provider.

Q. Why did the St. Joseph's Board of Directors have Morgan Stanley go back to UtiliCorp and try to get a higher price for their company?

A. St. Joseph's Board of Directors has a responsibility solely to the shareholders to make all decision on their behalf. It is the Board of Directors' duty to maximize the shareholder's wealth. Therefore, it is the St. Joseph Board of Directors' obligation to ask for more money if they believe it is possible to get more money for the shareholders. That is not a negative either; that is the role of the Board of Directors. The only reason I bring it up is to further illustrate the point that the increase in the price of St. Joseph from $22.50 per share to $23.00 per share had nothing to do with customers. It did have everything to do with shareholders. St. Joseph's Board of Directors did not believe that by getting more money for St. Joseph, they would be helping the customers. They asked for more money and they got it because it was their duty to the St. Joseph shareholders to maximize the shareholders' wealth.

Q. Could you please summarize your position on this issue?

A. Yes. It is the Staff's position that the portion of the acquisition adjustment that is attributable to the increase in price for St. Joseph from $22.50 per share to $23.00 per share has nothing to do with customers and should be considered a shareholder cost. If the Commission decides to allow UtiliCorp to recover a portion of the acquisition adjustment through rates, the approximately $4.1 million that results from the $0.50 per share increase that was negotiated between St. Joseph and UtiliCorp should be eliminated and not factored into the equation.

Q. How was the $4.1 million determined?

A. The $4.1 million reduction to the premium is the result of the additional $0.50 per share that UtiliCorp paid to St. Joseph shareholders at the request of

St. Joseph's Board of Directors multiplied by the total number of shares outstanding of St. Joseph's common stock.

Q. Is the Staff's position that all of the acquisition premium be allowed into rates with the exception of the $0.50 you just discussed?

A. No. The Staff's position is that UtiliCorp should not receive any direct recovery of the acquisition premium. The acquisition premium is a shareholder cost and should not be allowed in rates. If, and only if, the Commission decides to change its policy and allow direct recovery of all or part of the acquisition premium does there come a need to determine what St. Joseph's true value is. In that event, the $0.50 offer increment be denied.

Q. Has UtiliCorp historically been comfortable with the policy of this and other state commissions regarding non-recovery in rates of acquisition premiums?

A. Yes. The policy of this Commission and most other state commissions has been that acquisition premiums have not been allowed in rates. UtiliCorp is aware of the historical treatment of acquisition premiums and, in fact, believes they do not necessarily need to interfere with making a profit. In the early 1990's, Mr. Richard Green made the following remarks to a group of security analysts at a conference in St. Louis:

> Where I'd like to go from here is into about 3 slides that focus on some questions I've been asked about the company and why we're able to do what we're able to do and still be very strong financially. This first one here deals with the premiums that we have paid for our acquisitions in comparing them to operating income. As you can see, the premium is a significant amount. So that people that understand you have to pay a premium to get an acquisition, also can understand that the premium doesn't have to be such that interferes with making a profit. I think this very

> clearly illustrates that we've been able to buy our properties at a price that we're still able to make good money at.
>
> This, I think, is the most interesting of the three because it is an attempt to explain to people how one can mitigate the premiums of a price paid for a property and, therefore, take away a lot of, if any, of the negative effects of doing an acquisition. You can see in the red lines that is the UCU stock sale premiums. The premium over book in which we have put our stock out on the market and the other line is the premiums we've paid for the acquisitions. Of course, adjusted for asset growth, that's simply saying that as assets have been added to those acquisitions, they've added at book value and, therefore, they average down the premium paid over time. But, essentially, you can see that we're getting more for our price of stock than we're paying for the properties we're buying, so you're really mitigating a lot of that premium and that's a function that's allowed us to be as aggressive as we have been in the acquisition market, and as long as we keep those two curves relatively close, I think we're going to still make a very profitable and prudent acquisition.

What this excerpt illustrates is that UtiliCorp believes that acquisitions are possible at a premium, and do not require any direct recovery of that premium as long as the price is within reason for what is being purchased. At approximately the same time, UtiliCorp published an Issue Report entitled *Mergers and Acquisitions in the Utility Industry*. In that report, UtiliCorp states the following:

> In the view of some analysts, growth that is achieved though acquisition of regulated utility properties is an uneconomic way of building value. Because the utility being purchased has an earnings potential that is restricted to the book value of assets allowed in rate base, they contend that it is difficult to justify the expense of paying a premium over the book value of a utility's assets. They further assert that because premiums are not recovered through cost-of-service-based rates, the utility will not perform as well as others in its peer group.
>
> In UtiliCorp's view, the success of our growth strategy can best be measured by the performance of our securities in the debt and equity markets. The conclusion cited above can be proved by an analysis of UtiliCorp's total return to investors in the five years since it began its growth strategy.

These statements should be read in conjunction with the following handwritten notes taken by Mr. Gary Myers, General Counsel of St. Joseph at a meeting between UtiliCorp and St. Joseph discussing the regulatory out provision contained in the merger agreement between St. Joseph and UtiliCorp:

> **____________________
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> ______________________________
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> ____
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> ___________________________
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> ______________________________
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> ____
> ___________
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> ____
> ______________________
>
> ____**

The conclusion that can be reasonably drawn from the above comments is that UtiliCorp believes that if it can purchase additional regulated utility companies at a fair price, there is no need to directly recover the acquisition premium. To take that the next logical step and apply it to this case, UtiliCorp has no need to receive direct recovery of the acquisition premium paid to St. Joseph shareholders unless it has overpaid for the properties. **____ ____ ______** Even if UtiliCorp does have the ability to back out of the merger if they don't

get the regulatory treatment they want, it does not seem that it would be a deal breaker based on UtiliCorp's beliefs concerning acquisition premiums and their regulatory attorney's estimate of a 50% chance of getting the acquisition premium in rates.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Joint Application of UtiliCorp United Inc. and St. Joseph Light & Power Company for Authority to Merge St. Joseph Light & Power Company With and Into UtiliCorp United Inc. and, In Connection Therewith, Certain Other Related Transactions.	))))))	Case No. EM-2000-292

AFFIDAVIT OF DAVID P. BROADWATER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

David P. Broadwater, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of 51 pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David P. Broadwater

Subscribed and sworn to before me this 18th day of May 2000.

Toni M. Willmeno
Notary Public, State of Missouri
County of Callaway
My Commission Expires June 24, 2000

TONI M. WILLMENO NOTARY SEAL NOTARY PUBLIC STATE OF MISSOURI

DAVID BROADWATER

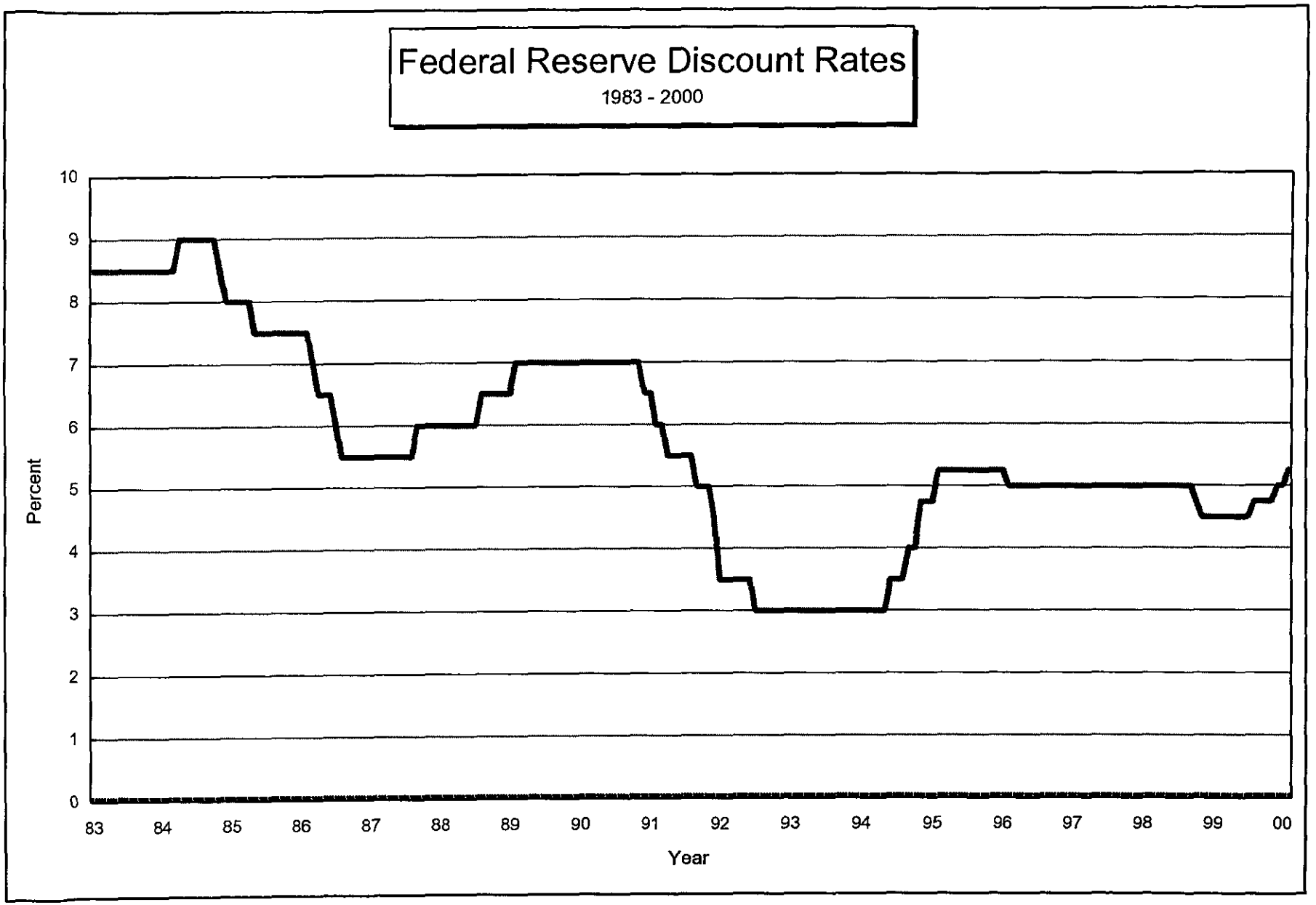
COMPANY	CASE NO.
Empire District Electric	ER-95-279
Laclede Gas Company	GR-96-193
Missouri Gas Energy	GR-96-285
Empire District Electric	ER-97-81
Empire District Electric	ER-97-82
Kansas City Power & Light	EO-97-84
Union Electric	EO-97-86
Missouri-American Water Company	WR-97-237
St. Louis County Water	WR-97-382
Laclede Gas Company	GR-98-374
Laclede Gas Company	GR-99-315
GTE Midwest /Spectra Communications	TM-2000-182
AmerenUE	EO-2000-205
Kansas City Power & Light	EO-2000-210
Atmos Energy Corp./Associated Natural Gas Company	GM-2000-312

UTILICORP UNITED INC & ST JOSPH LIGHT & POWER COMPANY
CASE NO. EM-2000-292

Federal Reserve Discount Rate Changes

Date	Discount Rate
01/01/83	8.50%
12/31	8.50%
04/09/84	9.00%
11/21	8.50%
12/24	8.00%
05/20/85	7.50%
03/07/86	7.00%
04/21	6.50%
07/11	6.00%
08/21	5.50%
09/04/87	6.00%
08/09/88	6.50%
02/24/89	7.00%
12/19/90	6.50%
02/01/91	6.00%
04/30	5.50%
09/13	5.00%
11/06	4.50%
12/20	3.50%
07/02/92	3.00%
01/01/93	3.00%
12/31	3.00%
05/17/94	3.50%
08/16	4.00%
11/15	4.75%
02/01/95	5.25%
01/31/96	5.00%
12/12/97	5.00%
01/09/98	5.00%
03/06/98	5.00%
10/15/98	4.75%
11/17/98	4.50%
06/30/99	4.50%
08/24/99	4.75%
11/16/99	5.00%
02/02/00	5.25%
03/21/00	5.50%

Sources: Federal Reserve Bulletin & The Wall Street Journal.


Federal Reserve Discount Rates
1983 - 2000
Percent
10
9
8
7
6
5
4
3
2
1
0
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
00
Year

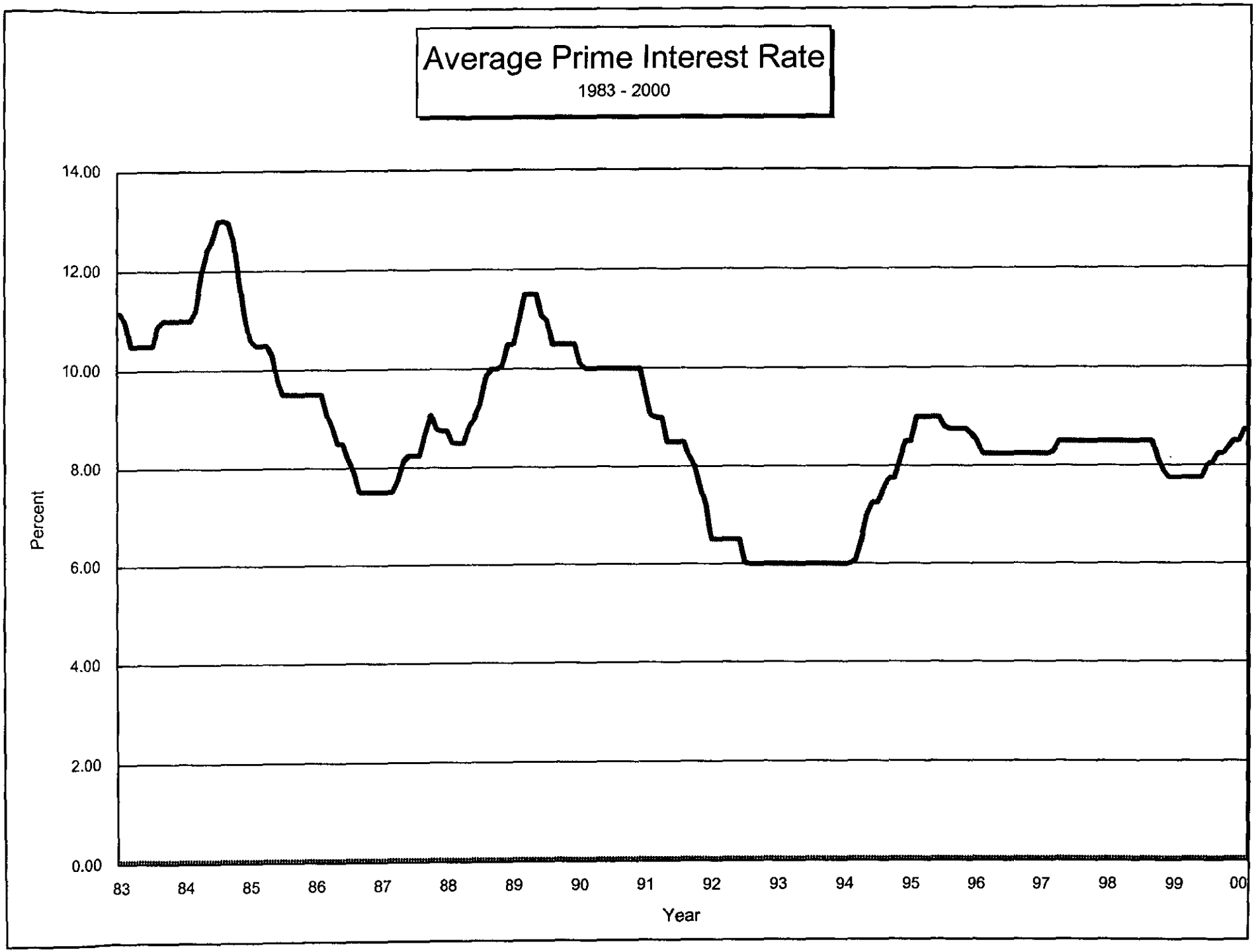
Schedule 2-2

UTILICORP UNITED INC & ST JOSPH LIGHT & POWER COMPANY
CASE NO. EM-2000-292

Average Prime Interest Rates

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	11.00	Jan 1988	8.75	Jan 1992	6.50	Jan 1996	8.50
Feb	11.00	Feb	8.51	Feb	6.50	Feb	8.25
Mar	11.21	Mar	8.50	Mar	6.50	Mar	8.25
Apr	11.93	Apr	8.50	Apr	6.50	Apr	8.25
May	12.39	May	8.84	May	6.50	May	8.25
Jun	12.60	Jun	9.00	Jun	6.50	Jun	8.25
Jul	13.00	Jul	9.29	Jul	6.02	Jul	8.25
Aug	13.00	Aug	9.84	Aug	6.00	Aug	8.25
Sep	12.97	Sep	10.00	Sep	6.00	Sep	8.25
Oct	12.58	Oct	10.00	Oct	6.00	Oct	8.25
Nov	11.77	Nov	10.05	Nov	6.00	Nov	8.25
Dec	11.06	Dec	10.50	Dec	6.00	Dec	8.25
Jan 1985	10.61	Jan 1989	10.50	Jan 1993	6.00	Jan 1997	8.26
Feb	10.50	Feb	10.93	Feb	6.00	Feb	8.25
Mar	10.50	Mar	11.50	Mar	6.00	Mar	8.30
Apr	10.50	Apr	11.50	Apr	6.00	Apr	8.50
May	10.31	May	11.50	May	6.00	May	8.50
Jun	9.78	Jun	11.07	Jun	6.00	Jun	8.50
Jul	9.50	Jul	10.98	Jul	6.00	Jul	8.50
Aug	9.50	Aug	10.50	Aug	6.00	Aug	8.50
Sep	9.50	Sep	10.50	Sep	6.00	Sep	8.50
Oct	9.50	Oct	10.50	Oct	6.00	Oct	8.50
Nov	9.50	Nov	10.50	Nov	6.00	Nov	8.50
Dec	9.50	Dec	10.50	Dec	6.00	Dec	8.50
Jan 1986	9.50	Jan 1990	10.11	Jan 1994	6.00	Jan 1998	8.50
Feb	9.50	Feb	10.00	Feb	6.00	Feb	8.50
Mar	9.10	Mar	10.00	Mar	6.06	Mar	8.50
Apr	8.83	Apr	10.00	Apr	6.45	Apr	8.50
May	8.50	May	10.00	May	6.99	May	8.50
Jun	8.50	Jun	10.00	Jun	7.25	Jun	8.50
Jul	8.16	Jul	10.00	Jul	7.25	Jul	8.50
Aug	7.90	Aug	10.00	Aug	7.51	Aug	8.50
Sep	7.50	Sep	10.00	Sep	7.75	Sep	8.49
Oct	7.50	Oct	10.00	Oct	7.75	Oct	8.12
Nov	7.50	Nov	10.00	Nov	8.15	Nov	7.89
Dec	7.50	Dec	10.00	Dec	8.50	Dec	7.75
Jan 1987	7.50	Jan 1991	9.52	Jan 1995	8.50	Jan 1999	7.75
Feb	7.50	Feb	9.05	Feb	9.00	Feb	7.75
Mar	7.50	Mar	9.00	Mar	9.00	Mar	7.75
Apr	7.75	Apr	9.00	Apr	9.00	Apr	7.75
May	8.14	May	8.50	May	9.00	May	7.75
Jun	8.25	Jun	8.50	Jun	9.00	Jun	7.75
Jul	8.25	Jul	8.50	Jul	8.80	Jul	8.00
Aug	8.25	Aug	8.50	Aug	8.75	Aug	8.06
Sep	8.70	Sep	8.20	Sep	8.75	Sep	8.25
Oct	9.07	Oct	8.00	Oct	8.75	Oct	8.25
Nov	8.78	Nov	7.58	Nov	8.75	Nov	8.37
Dec	8.75	Dec	7.21	Dec	8.65	Dec	8.50
						Jan 2000	8.50
						Feb	8.73
						Mar	8.84

Sources: Federal Reserve Bulletin & The Wall Street Journal.


Average Prime Interest Rate
1983 - 2000
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Percent
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
00
Year

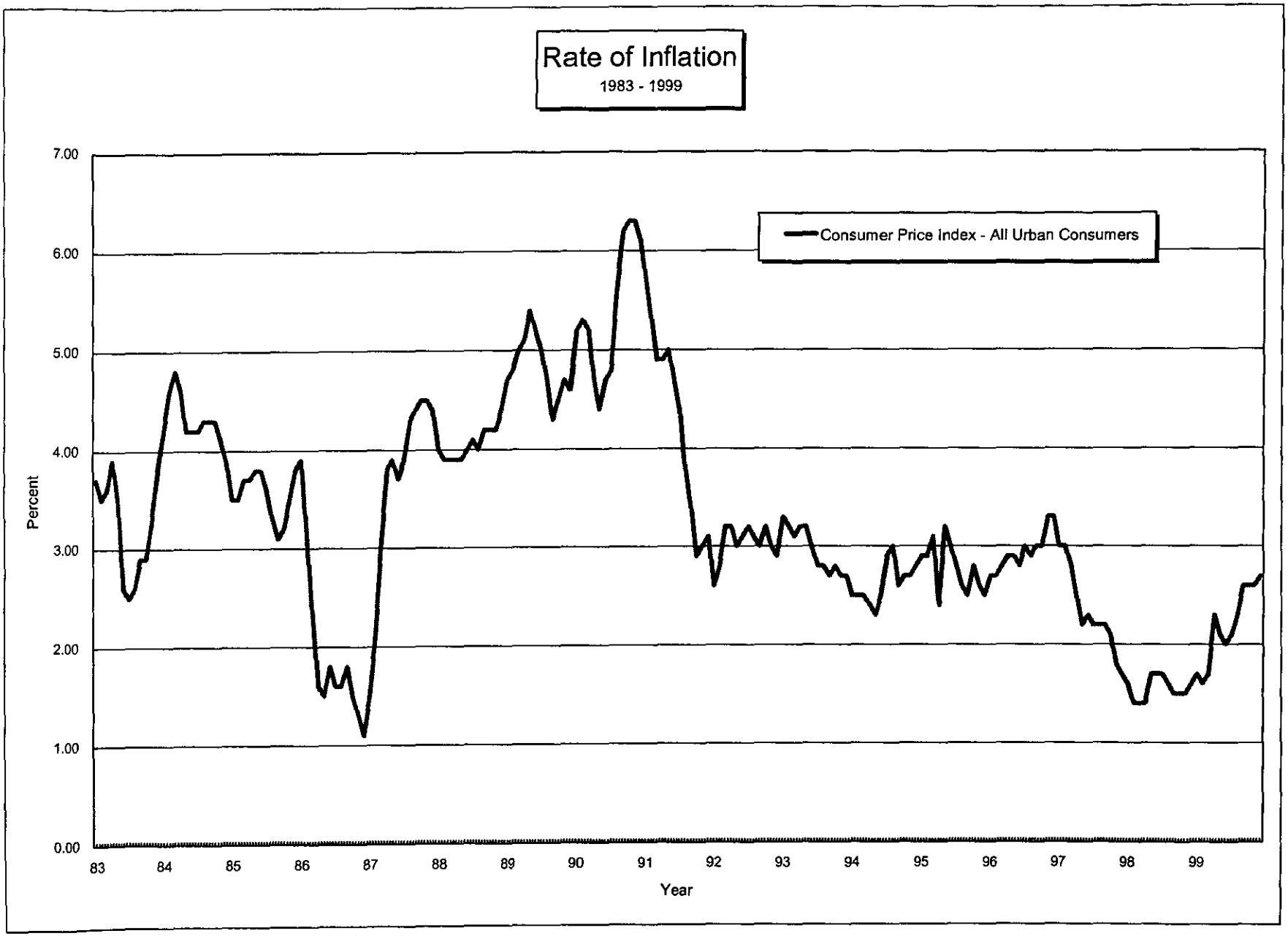
Schedule 3-2

UTILICORP UNITED INC & ST JOSPH LIGHT & POWER COMPANY
CASE NO. EM-2000-292

Rate of Inflation

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	4.20	Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70
Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70
Mar	4.80	Mar	3.90	Mar	3.20	Mar	2.80
Apr	4.60	Apr	3.90	Apr	3.20	Apr	2.90
May	4.20	May	3.90	May	3.00	May	2.90
Jun	4.20	Jun	4.00	Jun	3.10	Jun	2.80
Jul	4.20	Jul	4.10	Jul	3.20	Jul	3.00
Aug	4.30	Aug	4.00	Aug	3.10	Aug	2.90
Sep	4.30	Sep	4.20	Sep	3.00	Sep	3.00
Oct	4.30	Oct	4.20	Oct	3.20	Oct	3.00
Nov	4.10	Nov	4.20	Nov	3.00	Nov	3.30
Dec	3.90	Dec	4.40	Dec	2.90	Dec	3.30
Jan 1985	3.50	Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00
Feb	3.50	Feb	4.80	Feb	3.20	Feb	3.00
Mar	3.70	Mar	5.00	Mar	3.10	Mar	2.80
Apr	3.70	Apr	5.10	Apr	3.20	Apr	2.50
May	3.80	May	5.40	May	3.20	May	2.20
Jun	3.80	Jun	5.20	Jun	3.00	Jun	2.30
Jul	3.60	Jul	5.00	Jul	2.80	Jul	2.20
Aug	3.30	Aug	4.70	Aug	2.80	Aug	2.20
Sep	3.10	Sep	4.30	Sep	2.70	Sep	2.20
Oct	3.20	Oct	4.50	Oct	2.80	Oct	2.10
Nov	3.50	Nov	4.70	Nov	2.70	Nov	1.80
Dec	3.80	Dec	4.60	Dec	2.70	Dec	1.70
Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60
Feb	3.10	Feb	5.30	Feb	2.50	Feb	1.40
Mar	2.30	Mar	5.20	Mar	2.50	Mar	1.40
Apr	1.60	Apr	4.70	Apr	2.40	Apr	1.40
May	1.50	May	4.40	May	2.30	May	1.70
Jun	1.80	Jun	4.70	Jun	2.50	Jun	1.70
Jul	1.60	Jul	4.80	Jul	2.90	Jul	1.70
Aug	1.60	Aug	5.60	Aug	3.00	Aug	1.60
Sep	1.80	Sep	6.20	Sep	2.60	Sep	1.50
Oct	1.50	Oct	6.30	Oct	2.70	Oct	1.50
Nov	1.30	Nov	6.30	Nov	2.70	Nov	1.50
Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60
Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70
Feb	2.10	Feb	5.30	Feb	2.90	Feb	1.60
Mar	3.00	Mar	4.90	Mar	3.10	Mar	1.70
Apr	3.80	Apr	4.90	Apr	2.40	Apr	2.30
May	3.90	May	5.00	May	3.20	May	2.10
Jun	3.70	Jun	4.70	Jun	3.00	Jun	2.00
Jul	3.90	Jul	4.40	Jul	2.80	Jul	2.10
Aug	4.30	Aug	3.80	Aug	2.60	Aug	2.30
Sep	4.40	Sep	3.40	Sep	2.50	Sep	2.60
Oct	4.50	Oct	2.90	Oct	2.80	Oct	2.60
Nov	4.50	Nov	3.00	Nov	2.60	Nov	2.60
Dec	4.40	Dec	3.10	Dec	2.50	Dec	2.70

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, Change for 12-Month Period, Bureau of Labor Statistics Website and Wall Street Journal.


Rate of Inflation
1983 - 1999
Consumer Price Index - All Urban Consumers
Percent
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year

Schedule 4-2

UTILICORP UNITED INC & ST JOSPH LIGHT & POWER COMPANY
CASE NO. EM-2000-292

Average Yields on Moody's Public Utility Bonds

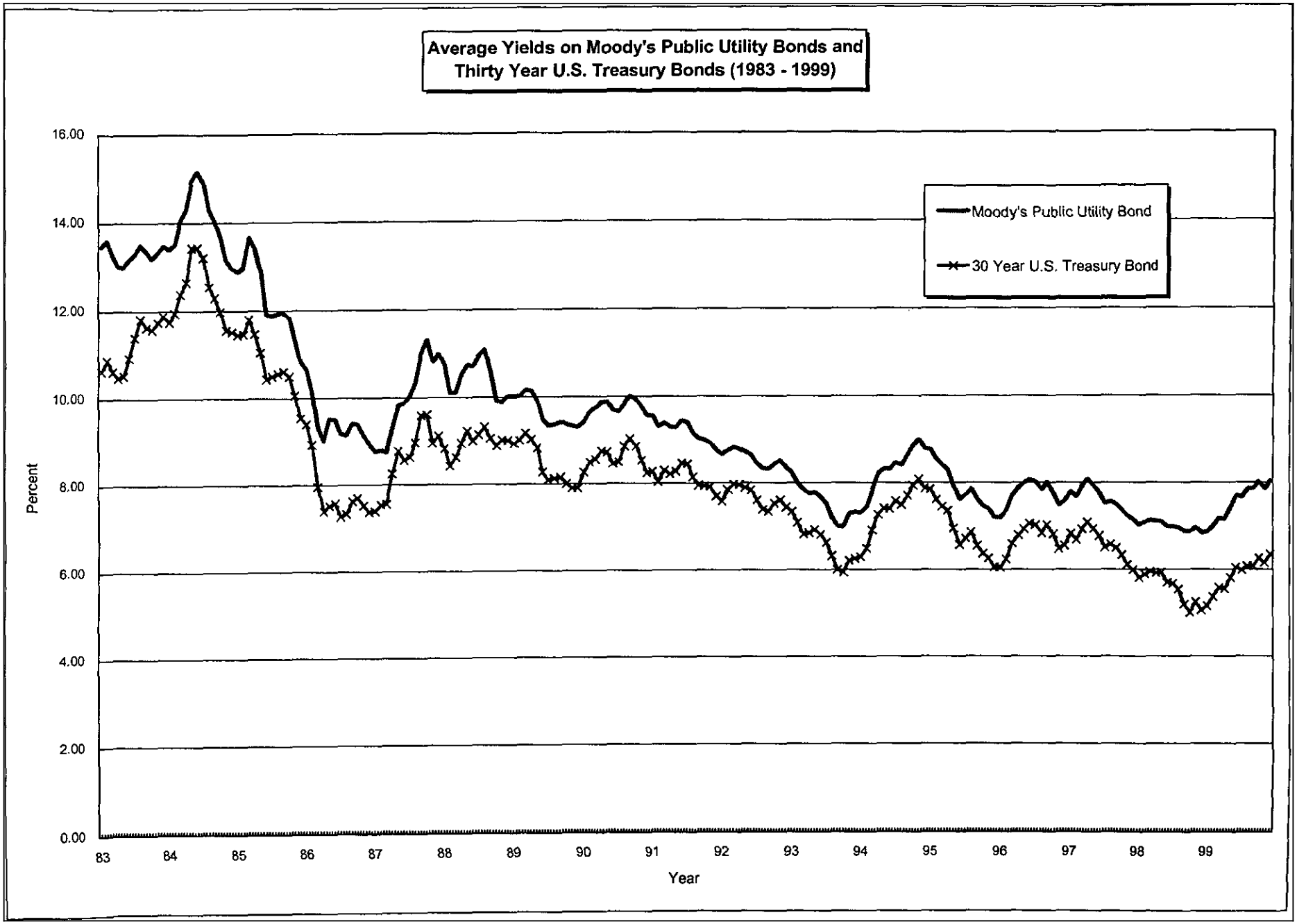
Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	13.40	Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20
Feb	13.50	Feb	10.11	Feb	8.77	Feb	7.37
Mar	14.03	Mar	10.11	Mar	8.84	Mar	7.72
Apr	14.30	Apr	10.53	Apr	8.79	Apr	7.88
May	14.95	May	10.75	May	8.72	May	7.99
Jun	15.16	Jun	10.71	Jun	8.64	Jun	8.07
Jul	14.92	Jul	10.96	Jul	8.46	Jul	8.02
Aug	14.29	Aug	11.09	Aug	8.34	Aug	7.84
Sep	14.04	Sep	10.56	Sep	8.32	Sep	8.01
Oct	13.68	Oct	9.92	Oct	8.44	Oct	7.76
Nov	13.15	Nov	9.89	Nov	8.53	Nov	7.48
Dec	12.96	Dec	10.02	Dec	8.36	Dec	7.58
Jan 1985	12.88	Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79
Feb	13.00	Feb	10.02	Feb	8.00	Feb	7.68
Mar	13.66	Mar	10.16	Mar	7.85	Mar	7.92
Apr	13.42	Apr	10.14	Apr	7.76	Apr	8.08
May	12.89	May	9.92	May	7.78	May	7.94
Jun	11.91	Jun	9.49	Jun	7.68	Jun	7.77
Jul	11.88	Jul	9.34	Jul	7.53	Jul	7.52
Aug	11.93	Aug	9.37	Aug	7.21	Aug	7.57
Sep	11.95	Sep	9.43	Sep	7.01	Sep	7.50
Oct	11.84	Oct	9.37	Oct	6.99	Oct	7.37
Nov	11.33	Nov	9.33	Nov	7.30	Nov	7.24
Dec	10.82	Dec	9.31	Dec	7.33	Dec	7.16
Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03
Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09
Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13
Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12
May	9.52	May	9.89	May	8.32	May	7.11
Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99
Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99
Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96
Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88
Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88
Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96
Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84
Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87
Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00
Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18
Apr	9.30	Apr	9.30	Apr	8.30	Apr	7.16
May	9.82	May	9.29	May	7.93	May	7.42
Jun	9.67	Jun	9.44	Jun	7.62	Jun	7.70
Jul	10.01	Jul	9.40	Jul	7.73	Jul	7.66
Aug	10.33	Aug	9.16	Aug	7.86	Aug	7.86
Sep	11.00	Sep	9.03	Sep	7.62	Sep	7.87
Oct	11.32	Oct	8.99	Oct	7.46	Oct	8.02
Nov	10.82	Nov	8.93	Nov	7.40	Nov	7.86
Dec	10.99	Dec	8.76	Dec	7.21	Dec	8.04

Source: Moody's Bond Record.

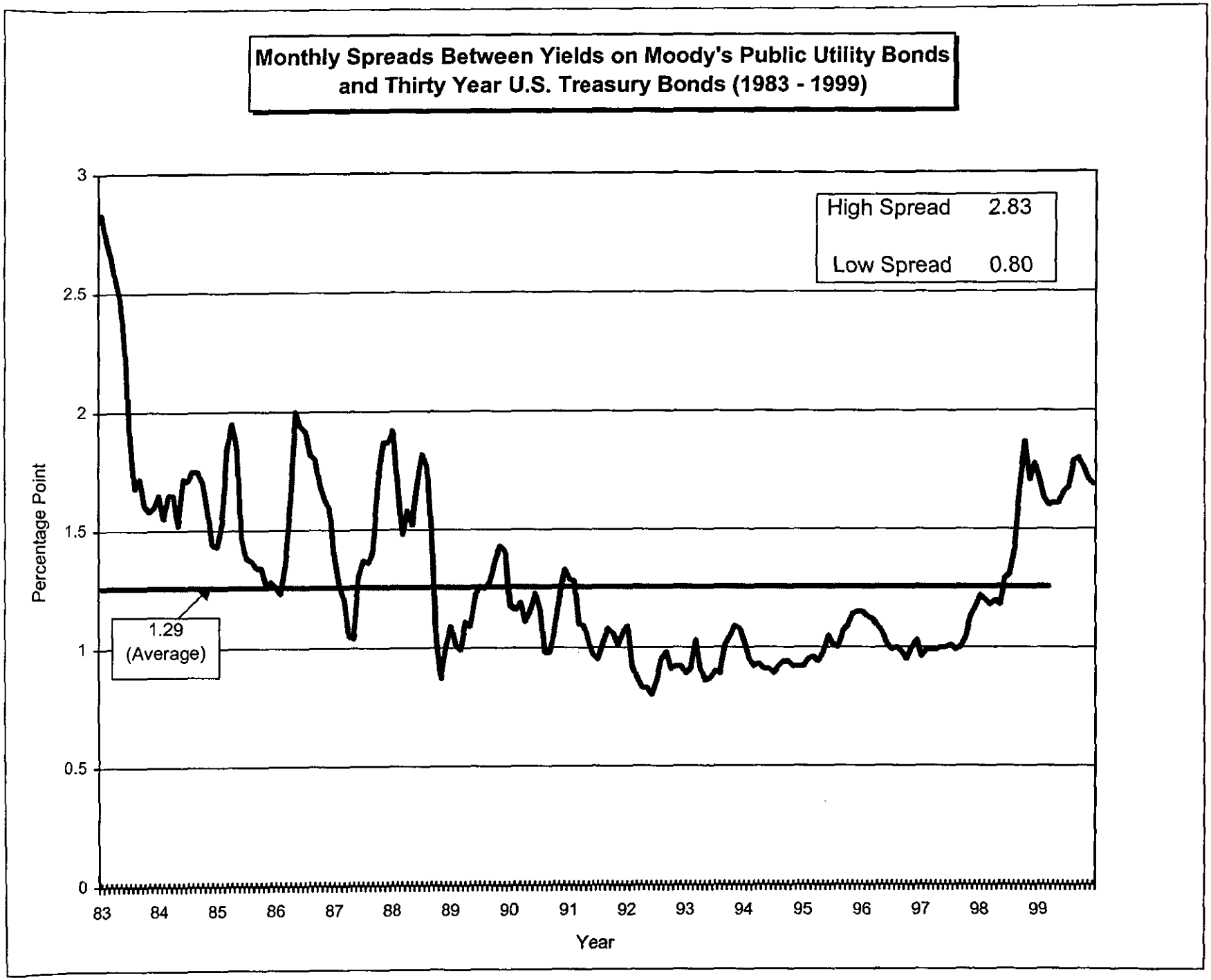
Average Yields on Thirty Year U.S. Treasury Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%
Jan 1984	11.75	Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.05
Feb	11.95	Feb	8.43	Feb	7.85	Feb	6.24
Mar	12.38	Mar	8.63	Mar	7.97	Mar	6.60
Apr	12.65	Apr	8.95	Apr	7.96	Apr	6.79
May	13.43	May	9.23	May	7.89	May	6.93
Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.06
Jul	13.21	Jul	9.14	Jul	7.60	Jul	7.03
Aug	12.54	Aug	9.32	Aug	7.39	Aug	6.84
Sep	12.29	Sep	9.06	Sep	7.34	Sep	7.03
Oct	11.98	Oct	8.89	Oct	7.53	Oct	6.81
Nov	11.56	Nov	9.02	Nov	7.61	Nov	6.48
Dec	11.52	Dec	9.01	Dec	7.44	Dec	6.55
Jan 1985	11.45	Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83
Feb	11.47	Feb	9.01	Feb	7.09	Feb	6.69
Mar	11.81	Mar	9.17	Mar	6.82	Mar	6.93
Apr	11.47	Apr	9.03	Apr	6.85	Apr	7.09
May	11.05	May	8.83	May	6.92	May	6.94
Jun	10.44	Jun	8.27	Jun	6.81	Jun	6.77
Jul	10.50	Jul	8.08	Jul	6.63	Jul	6.51
Aug	10.56	Aug	8.12	Aug	6.32	Aug	6.58
Sep	10.61	Sep	8.15	Sep	6.00	Sep	6.50
Oct	10.50	Oct	8.00	Oct	5.94	Oct	6.33
Nov	10.06	Nov	7.90	Nov	6.21	Nov	6.11
Dec	9.54	Dec	7.90	Dec	6.25	Dec	5.99
Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81
Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89
Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95
Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92
May	7.52	May	8.73	May	7.41	May	5.93
Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70
Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68
Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54
Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20
Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01
Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25
Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06
Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16
Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37
Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58
Apr	8.25	Apr	8.21	Apr	7.36	Apr	5.55
May	8.78	May	8.27	May	6.95	May	5.81
Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04
Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98
Aug	8.97	Aug	8.14	Aug	6.86	Aug	6.07
Sep	9.59	Sep	7.95	Sep	6.55	Sep	6.07
Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26
Nov	8.95	Nov	7.92	Nov	6.26	Nov	6.15
Dec	9.12	Dec	7.70	Dec	6.06	Dec	6.35

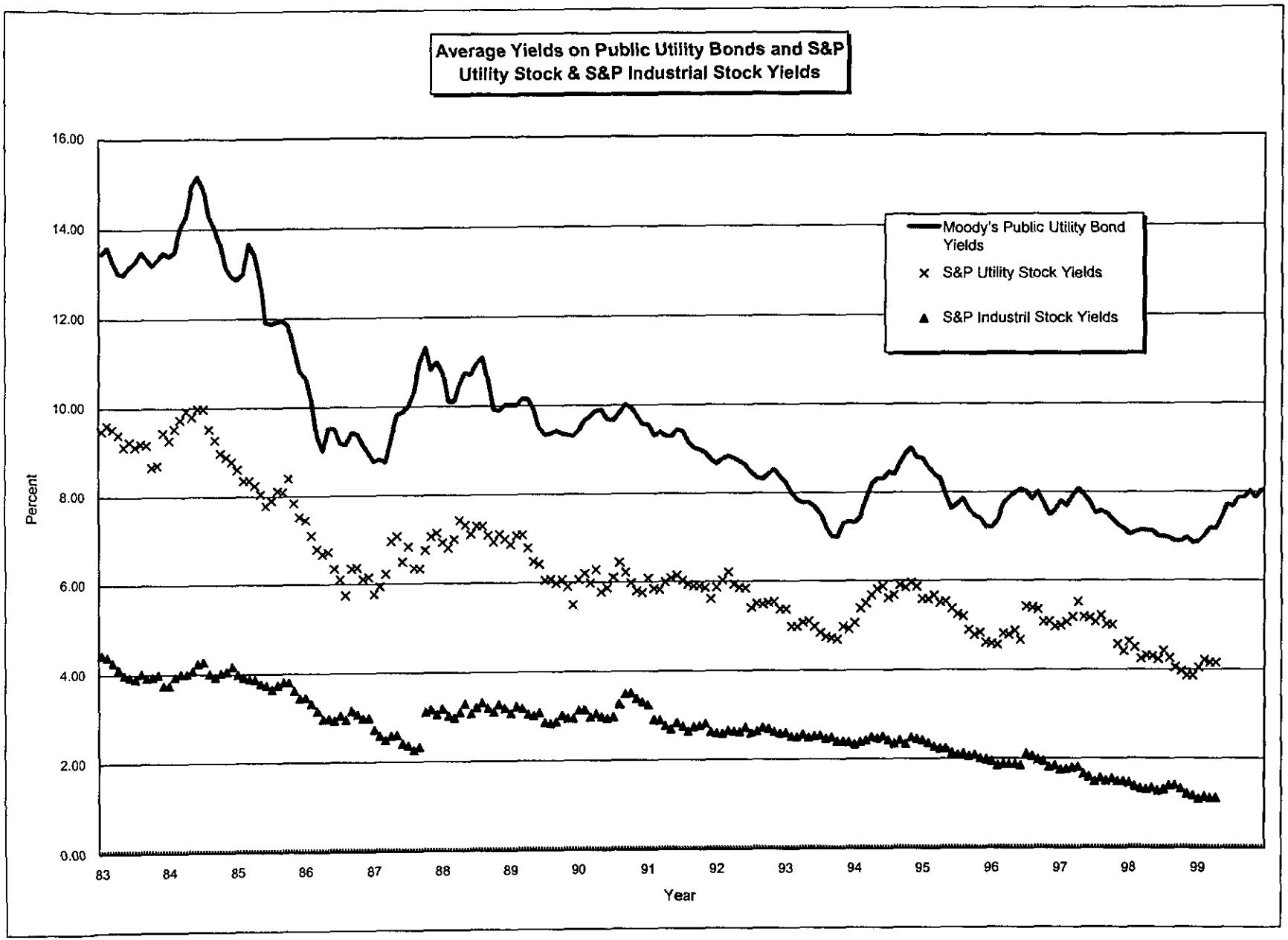
Source: Federal Reserve Bulletin and Federal Reserve Website: http://www.stls.frb.org/fred/data/irates/gs30


Average Yields on Moody's Public Utility Bonds and Thirty Year U.S. Treasury Bonds (1983 - 1999)
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Percent
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year
Moody's Public Utility Bond
30 Year U.S. Treasury Bond

Schedule 5-3


Monthly Spreads Between Yields on Moody's Public Utility Bonds and Thirty Year U.S. Treasury Bonds (1983 - 1999)
High Spread 2.83
Low Spread 0.80
1.29 (Average)
Percentage Point
Year
3
2.5
2
1.5
1
0.5
0
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99

Schedule 5-4


Average Yields on Public Utility Bonds and S&P Utility Stock & S&P Industrial Stock Yields
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Percent
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year
Moody's Public Utility Bond Yields
S&P Utility Stock Yields
S&P Industril Stock Yields

Schedule 6

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Historical Consolidated Capital Structures for St. Joseph Light and Power Company (Consolidated Basis)

(Thousands of Dollars)

Capital Components	1995	1996	1997	1998	1999
Common Equity	$ 81,394.0	$ 86,170.0	$ 91,168.0	$ 95,805.0	$ 96,188.0
Preferred Stock	$ -	$ -	$ -	$ -	$ -
Long-Term Debt	$ 73,100.0	$ 73,100.0	$ 77,372.0	$ 77,372.0	$ 74,282.0
Short-Term Debt	$ -	$ -	$ 2,621.0	$ 3,621.0	$ 17,762.0
Total	$154,494.0	$159,270.0	$171,161.0	$176,798.0	$188,232.0

Capital Structure	1994	1995	1996	1997	1998
Common Equity	52.68%	54.10%	53.26%	54.19%	51.10%
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	47.32%	45.90%	45.20%	43.76%	39.46%
Short-Term Debt	0.00%	0.00%	1.53%	2.05%	9.44%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Source: St. Joseph Light and Power Company's Shareholder Annual Reports

Schedule 7

Selected Financial Ratios for St. Joseph Light and Power Company (Consolidated Basis)

Financial Ratios	1995	1996	1997	1998	1999
Return on Year-End Common Equity	13.56%	12.02%	11.89%	11.13%	6.37%
Earnings Per Common Share	$ 1.41	$ 1.32	$ 1.36	$ 1.32	$ 0.75
Common Dividend Payout Ratio	65.25%	71.21%	70.59%	74.81%	133%
Year-End Market Price Per Common Share	$ 17.75	$ 15.38	$ 17.75	$ 17.94	$ 20.50
Year-End Book Value Per Common Share	$ 10.42	$ 10.87	$ 11.34	$ 11.76	$ 11.63
Year-End Market to Book Ratio	1.70 x	1.41 x	1.57 x	1.53 x	1.76 x
Pre-Tax Interest Coverage Ratio	3.78 x	3.59 x	3.60 x	3.38 x	2.34 x
Credit Rating (Standard & Poor's Corporation)	A-	A-	A-	A-	A-

Notes:

Return on Year-End Common Equity = Net Income Available for Common Stock / Year-End Common Shareholders' Equity.

Common Dividend Payout Ratio = Common Dividends Paid / Net Income Available for Common Stock.

Year-End Market to Book Ratio = Year-End Market Price Per Common Share / Year-End Book Value Per Common Share.

Pre-Tax Interest Coverage Ratio = Net Income + Income Taxes + Total Interest Expense / Total Interest Expense.

Sources: St. Joseph Light and Power Company's Shareholder Annual Reports, Standard & Poor's Corporation's Utility Rating Service, July, 1998

Schedule 8

Historical Consolidated Capital Structures for UtiliCorp United Inc.
(Consolidated Basis)

(Thousands of Dollars)

Capital Components	1995	1996	1997	1998	1999
Common Equity	$ 946.3	$ 1,158.0	$ 1,163.6	$ 1,446.3	$ 1,525.4
Preferred Stock	$ 125.4	$ 125.0	$ 100.0	$ 100.0	$ 350.0
Long-Term Debt	$ 1,370.5	$ 1,496.4	$ 1,508.9	$ 1,625.4	$ 2,245.1
Short-Term Debt	$ 288.6	$ 252.0	$ 113.8	$ 235.6	$ 248.9
Total	$2,730.8	$3,031.4	$2,886.3	$3,407.3	$4,369.4

Capital Structure	1994	1995	1996	1997	1998
Common Equity	34.65%	38.20%	40.31%	42.45%	34.91%
Preferred Stock	4.59%	4.12%	3.46%	2.93%	8.01%
Long-Term Debt	50.19%	49.36%	52.28%	47.70%	51.38%
Short-Term Debt	10.57%	8.31%	3.94%	6.91%	5.70%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Source: UtiliCorp United Inc's Shareholder Annual Reports

Schedule 9

Selected Financial Ratios for UtiliCorp United Inc.
(Consolidated Basis)

Financial Ratios	1995	1996	1997	1998	1999
Return on Year-End Common Equity	8.43%	9.14%	11.52%	9.14%	10.52%
Earnings Per Common Share	$ 1.14	$ 1.46	$ 1.51	$ 1.63	$ 1.75
Common Dividend Payout Ratio	100.88%	80.14%	77.48%	73.62%	68.57%
Year-End Market Price Per Common Share	$ 19.59	$ 18.00	$ 25.87	$ 24.46	$ 19.44
Year-End Book Value Per Common Share	$ 13.73	$ 14.50	$ 14.43	$ 15.83	$ 16.34
Year-End Market to Book Ratio	1.43 x	1.24 x	1.79 x	1.55 x	1.19 x
Pre-Tax Interest Coverage Ratio	2.08 x	2.34 x	2.65 x	2.65 x	2.23 x
Credit Rating (Standard & Poor's Corporation)	BBB	BBB	BBB	BBB	BBB

Notes:

Return on Year-End Common Equity = Net Income Available for Common Stock / Year-End Common Shareholders' Equity.

Common Dividend Payout Ratio = Common Dividends Paid / Net Income Available for Common Stock.

Year-End Market to Book Ratio = Year-End Market Price Per Common Share / Year-End Book Value Per Common Share.

Pre-Tax Interest Coverage Ratio = Net Income + Income Taxes + Total Interest Expense / Total Interest Expense.

Sources: UtiliCorp United Inc's Shareholder Annual Reports, Standard & Poor's Corporation's Utiliy Rating Service, January, 2000

Schedule 10

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Capital Structure as of December 31, 1999
for St. Joseph Light and Power Company (Consolidated Basis)

Capital Component	Amount in Dollars	Percentage of Capital
Common Stock Equity	$95,805,325	53.99%
Preferred Stock	0	0.00%
Long-Term Debt	69,338,415	39.07%
Short-Term Debt	12,309,411	6.94%
Total Capitalization	**$177,453,151**	**100.00%**

Financial Ratio Benchmarks
Total Debt / Total Capital - Including Preferred Stock

Standard & Poor's Corporation's Utility Rating Service 9/30/98 Electric Utility Companies (Average Business Position)	AA	A	BBB
	42%	56%	63%

Schedule 11

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Embedded Cost of Long-Term Debt as of December 31, 1999 for St. Joseph Light and Power Company

Long-Term Debt	(1) Interest Rate	(2) Prinicipal Amount Outstanding (12/31/98)	(3) Annualized Cost to Company (1 * 2)
First Mortgage Bonds:			
9.44% Series due February 1, 2021	9.440%	$22,500,000	$2,124,000
5.85% Series due February 1, 2013	5.850%	5,600,000	327,600
Medium-Term Notes			
7.13% Series due November 29, 2013	7.130%	1,000,000	71,300
7.16% Series due November 29, 2013	7.160%	3,000,000	214,800
7.16% Series due November 29, 2013	7.160%	3,000,000	214,800
7.16% Series due November 29, 2013	7.160%	3,000,000	214,800
7.17% Series due December 1, 2023	7.170%	2,000,000	143,400
7.17% Series due December 1, 2023	7.170%	5,000,000	358,500
7.33% Series due November 30, 2023	7.330%	3,000,000	219,900
8.36% Series due March 15, 2005	8.360%	20,000,000	1,672,000
Less: Unamortized Debt Issuance Expense		438,009	
Less: Unamortized Losses on Reacquired Debt		800,406	
Add: Annual Amortized Debt Issuance Expense			35,774
Add: Annual Amortized Losses on Reacquired Debt Expense			48,100
Total		$69,338,415	$5,644,974

Embedded Cost of Long-Term Debt = $5,644,974 / $69,338,415

= **8.14%**

Notes:

See Schedule 12-2 for the amounts of the Unamortized Premium & Debt Discount and the Annual Amortized Debt Discount Expense.

Sources: St. Joseph Light and Power Company's response to Staff's Data Information Requests No. 3802.

Annual Amortized Debt Issuance Expense
as of December 31, 1999 for St. Joseph Light and Power Company

Long-Term Debt	Maturity Date	(1) Number of Months to Maturity (12/31/99)	(2) Unamortized Debt Issuance Expense (12/31/99)	(3) Annualized Debt Issuance Expense (1) (12/31/99)
First Mortgage Bonds:				
9.44% Series due February 1, 2021	(02/01/21)	256.8	$81,445	$3,806
5.85% Series due February 1, 2013	(02/01/13)	159.4	114,685	8,636
Medium-Term Notes				
7.13% Series due November 29, 2013	(11/29/13)	169.4	7,788	552
7.16% Series due November 29, 2013	(11/29/13)	169.4	23,365	1,655
7.16% Series due November 29, 2013	(11/29/13)	169.4	23,365	1,655
7.16% Series due November 29, 2013	(11/29/13)	169.4	23,365	1,655
7.17% Series due December 1, 2023	(12/01/23)	291.2	17,878	737
7.17% Series due December 1, 2023	(12/01/23)	291.2	44,694	1,842
7.33% Series due November 30, 2023	(11/30/23)	291.2	26,797	1,104
8.36% Series due March 15, 2005	(03/15/05)	63.4	74,627	14,132
Total			**$438,009**	**$35,774**

Notes:

(1) Column 3 = [(Column 2 / Column 1) * 12].

Source: St. Joseph Light and Power Company's response to Staff's Data Information Request No. 3802

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Annual Amortized of Losses on Reaquired Debt as of December 31, 1999 for St. Joseph Light and Power Company

Long-Term Debt	Maturity Date	(1) Number of Months to Maturity (12/31/99)	(2) Unamortized Debt Issuance Expense (12/31/99)	(3) Annualized Debt Issuance Expense (1) (12/31/99)
First Mortgage Bonds:				
9.44% Series due February 1, 2021	(02/01/21)	256.8	$196,340	$9,176
5.85% Series due February 1, 2013	(02/01/13)	159.4	281,100	21,166
Medium-Term Notes				
7.13% Series due November 29, 2013	(11/29/13)	169.4	15,014	1,064
7.16% Series due November 29, 2013	(11/29/13)	169.4	45,043	3,191
7.16% Series due November 29, 2013	(11/29/13)	169.4	45,043	3,191
7.16% Series due November 29, 2013	(11/29/13)	169.4	45,043	3,191
7.17% Series due December 1, 2023	(12/01/23)	291.2	34,598	1,426
7.17% Series due December 1, 2023	(12/01/23)	291.2	86,495	3,564
7.33% Series due November 30, 2023	(11/30/23)	291.2	51,730	2,132
Total			**$800,406**	**$48,100**

Notes:

(1) Column 3 = [(Column 2 / Column 1) * 12].

Source: St. Joseph Light and Power Company's response to Staff's Data Information Request No. 3804

UtiliCorp United Inc. St. Joseph Light Power Comapny
EM-2000-292

Company	Stock Publicly Traded & Information Printed in Value Line	S & P Utility Credit Rating between A+ and BBB	Nuclear Operations 10% or Less of Total Generation	Electric Revenues > 60% of Total Revenues	Total Capital < $2.5 billion	Positive DPS annual Compound Growth Rate (1990 - 1999)	No Missouri Operations	Comparable Company
AES Corp	YES	NA						
Allegheny Energy	YES	YES	YES	YES	NO			
Alliant Energy	YES	YES	NO					
Ameren Corp	YES	YES	NO					
Avista Corp	YES	YES	YES	NO				
Black Hills	YES	YES	YES	YES	YES	YES	YES	YES
Carolina Power & Light	YES	YES	NO					
Central and South West Corporation	YES	YES	YES	YES	NO			
Central Vermont Public Service	YES	NO						
CH Energy Group	YES	YES	NO					
Cinergy Corp	YES	YES	YES	YES	NO			
Cleco Corp	YES	YES	YES	YES	YES	YES	YES	YES
CMS Energy Corp	YES	NO						
Conectiv	YES	YES	NO					
Consolidated Edison, Inc	YES	YES	YES	YES	NO			
Constellation Energy Group	YES	YES	NO					
Dominion Resources	YES	YES	NO					
DPL Inc	YES	YES	YES	YES	NO			
DQU	YES	YES	NO					
DTE Energy Company	YES	YES	NO					
Duke Energy	YES	YES	NO					
Eastern Utilities Associates	YES	NA						
Edison International	YES	YES	NO					
El Paso Electric	YES	NO						
Empire District Electric Company	YES	YES	YES	YES	YES	YES	NO	
Energy East Corp	YES	YES	YES	YES	YES	NO		
Entergy Corp	YES	YES	NO					
FirstEnergy Corp	YES	NO						
Florida Progress Corp	YES	YES	NO					
FPL Group, Inc	YES	YES	NO					
Green Mountain Power	YES	NO						

Schedule 13-1

UtiliCorp United Inc. St. Joseph Light Power Comapny
EM-2000-292

GUP, Inc.	YES	YES	NO					
Hawaiian Electric Industries	YES	YES	YES	YES	YES	YES	YES	YES
IDACORP, Inc.	YES	YES	YES	YES	YES	NO		
IPALCO Enterprises, Inc	YES	YES	YES	YES	YES	NO		
Kansas City Power & Light	YES	YES	NO					
LG&E Energy Corp	YES	YES	YES	YES	NO			
MDU Resources Group, Inc	YES	YES	YES	NO				
Minnesota Power	YES	YES	YES	YES	YES	YES	YES	YES
Montana Power Company	YES	YES	YES	NO				
New Century Energies	YES	YES	YES	YES	NO			
Niagara Mohawk Holdings Inc	YES	YES	NO					
NiSource, Inc.	YES	YES	YES	NO				
Northeast Utilities	YES	NO						
Northern States Power	YES	NO						
NorthWestern Corp	YES	NA						
NSTAR	YES	YES	YES	YES	NO			
OGE Energy	YES	YES	YES	YES	YES	YES	YES	YES
Otter Tail Power	YES	NO						
PECO Energy Company	YES	YES	NO					
PG&E Corp	YES	YES	YES					
Pinnacle West Capital Corp	YES	YES	NO					
Potomac Electric Power Company	YES	YES	YES	YES	NO			
PPL Corp	YES	YES	NO					
Public Service Company of New Mexico	YES	NO						
Public Service Enterprise Group, Inc.	YES	YES	NO					
Puget Sound Energy, Inc	YES	YES	YES	YES	NO			
Reliant Energy	YES	YES	YES	YES	NO			
RGS Energy Group	YES	YES	NO					
SCANA Corp	YES	YES	NO					
Sempra Energy	YES	YES	NO					
Sierra Pacific Resources	YES	YES	YES	YES	YES	NO		
SIGCORP Inc	YES	NO	YES	NO				
Southern Company	YES	YES	NO					
St, Joseph Light & Power	YES	YES	YES	YES	YES	YES	NO	
TECO Energy	YES	NO	YES	YES	NO			
Texas Utlities	YES	YES	NO					
Unicom Corp	YES	YES	YES					
UniSource Energy	YES	NO						
United Illuminating	YES	YES	NO					
UtiliCorp United	YES	YES	YES	NO				
Western Resources	YES	NO						
Wisconsin Energy	YES	NO						
WPS Resources	YES	NO						

Schedule 13-2

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Five Comparable Electric Utility Companies

	Comparable Company	Ticker
1	Black Hills Corp	BKH
2	Cleco Corp	CNL
3	Hawaiian Electric Industries	HE
4	Minnesota Power	MPL
5	OGE Energy	OGE

UtiliCorp United Inc. & St. Joseph Light & Power Company
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Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Five Comparable Companies

	Dividends Per Share		Earnings Per Share		Book Value Per Share	
Company Name	1989	1999	1989	1999	1989	1999
Black Hills Corporation	$0.68	$1.04	$1.07	$1.72	$6.21	$10.35
Cleco Corporation	$1.21	$1.65	$1.78	$2.37	$13.74	$18.88
Hawaiian Electric Industries	$2.07	$2.48	$3.06	$2.89	$21.27	$32.21
Minnesota Power	$0.89	$1.07	$1.01	$1.49	$8.73	$10.96
OGE Energy	$1.21	$1.33	$1.53	$1.94	$10.64	$13.09

Annual Compound Growth Rates

	DPS	EPS	BVPS
Company Name	1989-1999	1989-1999	1989-1999
Black Hills Corporation	4.34%	4.86%	5.24%
Cleco Corporation	3.15%	2.90%	3.23%
Hawaiian Electric Industries	1.82%	-0.57%	4.24%
Minnesota Power	1.86%	3.96%	2.30%
OGE Energy	0.95%	2.40%	2.09%
Average	**2.42%**	**2.71%**	**3.42%**
Standard Deviation	1.19%	1.85%	1.19%

Source: The Value Line Ratings and Reports, February 18, 2000 and April 7, 2000.

Schedule 15

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Historical and Projected Growth Rates for the Five Comparable Companies

Company Name	(1) Average 10 Year Annual Compound	(2) Projected 5 Year Growth IBES (Mean)	(3) Projected 5 Year EPS Growth (S&P)	(4) Projected 3-5 Year EPS Growth (Value Line)	(6) Average Projected Growth	(7) Average of Historical & Projected Growth
Black Hills Corporation	4.81%	4.00%	4.00%	6.00%	4.67%	4.74%
Cleco Corporation	3.09%	5.30%	5.00%	6.00%	5.43%	4.26%
Hawaiian Electric Industries	3.03%	3.23%	3.00%	2.00%	2.74%	2.89%
Minnesota Power	2.71%	5.62%	6.00%	9.00%	6.87%	4.79%
OGE Energy	1.82%	4.38%	4.00%	5.00%	4.46%	3.14%
Average	**3.09%**	**4.51%**	**4.40%**	**5.60%**	**4.84%**	**3.96%**

Notes: Column 6 = [(Column 2 + Column 3 + Column 4 + Column 5) / 4].

Column 7 = [(Column 1 + Column 6) / 2].

Sources: Column 1 = Average of 10 Year Annual Compound Growth Rates from Schedule 21.

Column 2 = I/B/E/S Inc.'s Institutional Brokers Estimate System, March 16, 2000.

Column 3 = Standard & Poor's Corporation's Earnings Guide, April 2000.

Column 4 = The Value Line Ratings & Reports, February 18, 2000 and April 7, 2000.

Schedule 16

UtiliCorp United Inc. & St. Joseph Light & Power Company
EM-2000-292

Average High / Low Stock Price for December 1, 1999 through March 31, 2000 for the Five Comparable Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	---- December ----		---- January ----		----February ----		---- March ----		
Company Name	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High/Low Stock Price (12/1/98 - 3/31/98)
Black Hills Corporation	23.000	21.500	25.000	21.125	25.187	20.437	23.437	21.500	22.648
Cleco Corporation	33.500	31.125	34.125	30.125	34.312	30.937	34.250	30.500	32.359
Hawaiian Electric Industries	30.625	18.687	30.500	27.687	31.125	27.750	31.437	27.812	28.203
Minnesota Power	17.437	16.000	17.750	16.000	17.750	14.750	17.437	17.750	16.859
OGE Energy	21.687	18.437	20.312	17.812	20.875	17.000	18.875	16.500	18.937

Notes:

Column 9 = [(Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 + Column 7 + Column 8) / 8].

Source: Standard & Poor's Comstock

Schedule 17

UtiliCorp United Inc. & St. Joseph Light & Power Company
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DCF Estimated Costs of Common Equity for the Five Comparable Companies

	(1)	(2)	(3)	(4)	(5)
Company Name	Expected Annual Dividend	Average High/Low Stock Price	Projected Dividend Yield	Average of Historical & Projected Growth	Estimated Cost of Common Equity
Black Hills Corporation	$1.09	$22.648	4.81%	4.74%	9.55%
Cleco Corporation	$1.70	$32.359	5.25%	4.26%	9.52%
Hawaiian Electric Industries	$2.48	$28.203	8.79%	2.89%	11.68%
Minnesota Power	$1.07	$16.859	6.35%	4.79%	11.14%
OGE Energy	$1.33	$18.937	7.02%	3.14%	10.16%
Average			**6.45%**	**3.96%**	**10.41%**

Notes: Column 1 = Estimated Dividends Declared per share represents the average projected dividends for the last three quarters of 1999 and the first quarter of 2000.

Column 3 = (Column 1 / Column 2).

Column 5 = (Column 3 + Column 4).

Sources: Column 1 = The Value Line Investment Survey: Ratings & Reports, February 18, 2000 and April 7, 2000.

Column 2 = Schedule 23.

Column 4 = Schedule 22.

Schedule 18

Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates for the Five Comparable Companies

Company Name	(1) Risk Free Rate	(2) Company's Value Line Beta	(3) Market Risk Premium (1926-1997)	(4) CAPM Cost of Common Equity Estimate
Black Hills Corporation	5.87%	0.50	7.50%	9.62%
Cleco Corporation	5.87%	0.50	7.50%	9.62%
Hawaiian Electric Industries	5.87%	0.50	7.50%	9.62%
Minnesota Power	5.87%	0.45	7.50%	9.24%
OGE Energy	5.87%	0.40	7.50%	8.87%
Average		**0.47**		**9.39%**

Sources: Column 1 = The Risk Free Rate of Interest which is equal to the 30-year U.S. Treasury Rate as quoted in the Wall Street Journal, April 25, 2000.

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by the Value Line Investment Survey: Ratings & Reports, February 18, 2000; and April 7, 2000.

Column 3 = The Market Risk Premium is the amount over the Risk Free Rate that is demanded by investors for holding a portfolio of equal risk to the market for 1989 - 1998 and was reported by Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 1999 Yearbook

Schedule 19

Public Utility Revenue Requirement

or

Cost of Service

The formula for the revenue requirement of a public utility may be stated as follows :

Equation 1 : **Revenue Requirement = Cost of Service**

or

Equation 2 : **R R = O + (V - D) R**

The symbols in the second equation are represented by the following factors :

R R	=	Revenue Requirement
O	=	Prudent Operating Costs, including Depreciation and Taxes
V	=	Gross Valuation of the Property Serving the Public
D	=	Accumulated Depreciation
(V - D)	=	Rate Base (Net Valuation)
(V - D) R	=	Return Amount ($$) or Earnings Allowed on Rate Base
R	=	i L + d P + k E or Overall Rate of Return (%)
i	=	Embedded Cost of Debt
L	=	Proportion of Debt in the Capital Structure
d	=	Embedded Cost of Preferred Stock
P	=	Proportion of Preferred Stock in the Capital Structure
k	=	Required Return on Common Equity (ROE)
E	=	Proportion of Common Equity in the Capital Structure

UtiliCorp United Inc. & St. Joseph Light & Power Company
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Weighted Cost of Capital as of December 31, 1999 for St. Joseph Light and Power Company (Consolidated Basis)

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of: 9.27%	9.89%	10.51%
Common Stock Equity	53.99%	-----	5.00%	5.34%	5.67%
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	39.07%	8.14%	3.18%	3.18%	3.18%
Short-Term Debt	6.94%	6.32%	0.44%	0.44%	0.44%
Total	**100.00%**		**8.62%**	**8.96%**	**9.29%**

Notes:

See Schedule 11 for the Capital Structure Ratios.

See Schedule 12-1 for the Embedded Cost of Long-Term Debt.

UtiliCorp United Inc. & St. Joseph Light and Power Comapny
EM-2000-292

UtiliCorp United Inc's Cost of Capital Including St. Joseph Light & Power Company Capital Structure

Capital Component	Capital Dollars	Percentage	Cost	Weighted Cost	Tax Factor	Pretax Cost
Common Equity	$0	53.00%	10.75%	5.698%	1.6231	9.248%
Preferred Stock	$0	0.00%	0.00%	0.000%	1.6231	0.000%
Long-term Debt	$0	47.00%	8.18%	3.845%	1.0000	3.845%
Short-term Debt	$0	0.00%	0.00%	0.000%	1.0000	0.000%
Total	$0	100.00%		9.542%		13.092%

UtiliCorp United Inc's Cost of Capital

Capital Component	Capital Dollars	Percentage	Cost	Weighted Cost	Tax Factor	Pretax Cost
Common Equity	$1,525,400,000	39.41%	10.75%	4.237%	1.6231	6.877%
Preferred Stock	$100,000,000	2.58%	8.81%	0.228%	1.6231	0.369%
Long-term Debt	$2,245,100,000	58.01%	8.18%	4.744%	1.0000	4.744%
Short-term Debt	$0	0.00%	0.00%	0.000%	1.0000	0.000%
Total	$3,870,500,000	100.00%		9.209%		11.990%

Cost of Capital Difference	1.102%
St. Joseph's Rate Base	$155,783,955
Dollar Impact / Year	$1,716,756

Source: St. Joseph Light & Power Company's Capital Structrue was taken from UtiliCorp United's Direct Testimony

UtiliCorp United's Capital Structure was taken from UtiliCorp United's response to Data Information Request 3816