BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

REVISED APPLICATION OF ENTERGY	)	
NEW ORLEANS, LLC FOR A CHANGE	)	
IN ELECTRIC AND GAS RATES	)	**DOCKET NO. UD-18-07**
PURSUANT TO COUNCIL RESOLUTIONS	)	
R-15-194 AND R-17-504 AND	)	
FOR RELATED RELIEF	)	

DIRECT TESTIMONY

AND EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF THE

CRESCENT CITY POWER USERS' GROUP

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

FEBRUARY 2019

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DIRECT TESTIMONY OF RICHARD A. BAUDINO

I. QUALIFICATIONS AND SUMMARY

Q. Please state your name and business address.

A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by whom are you employed?

A. I am a consultant with Kennedy and Associates.

Q. Please describe your education and professional experience.

A. I received my Master of Arts degree with a major in Economics and a minor in Statistics from New Mexico State University in 1982. I also received my Bachelor of Arts Degree with majors in Economics and English from New Mexico State in 1979.

I began my professional career with the New Mexico Public Service Commission Staff in October 1982 and was employed there as a Utility Economist. During my employment with the Staff, my responsibilities included the analysis of a broad range of issues in the ratemaking field. Areas in which I testified included cost of service, rate of return, rate design, revenue requirements, analysis of sale/leasebacks of generating plants, utility finance issues, and generating plant phase-ins.

In October 1989, I joined the utility consulting firm of Kennedy and Associates as a Senior Consultant where my duties and responsibilities covered substantially the same areas as those during my tenure with the New Mexico Public Service Commission Staff. I became Manager in July 1992 and was named Director of Consulting in January 1995. Currently, I am a consultant with Kennedy and Associates.

Exhibit ____(RAB-1) summarizes my expert testimony experience.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the Crescent City Power Users Group ("CCPUG"), a group of commercial and government customers taking electric service at retail from Entergy New Orleans, LLC ("ENO" or "Company").

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to address the allowed return on equity for ENO. I will also respond to the Revised Direct Testimony of Mr. Robert Hevert, witness for the Company.

In addition to rate of return, I have reviewed the Company's proposed Gas Infrastructure Replacement Program ("GIRP") rider, its proposed Reliability Incentive

Mechanism ("RIM"), and its proposed Distribution Grid Modernization ("DGM") rider.

Q. Please summarize your conclusions and recommendations.

A. I recommend that the Council adopt a return on equity ("ROE") of 9.35% for the base electric and gas revenue requirements, as well as for use in the Electric Formula Rate Plan ("EFRP") and Gas Formula Rate Plan ("GFRP") if they are adopted. I performed a Discounted Cash Flow ("DCF") analysis using the same proxy group of companies used by ENO witness Hevert. I also performed two Capital Asset Pricing Model ("CAPM") analyses, one based on expected returns for the stock market and one based on a risk premium using historical market returns. I relied on the DCF result for my ROE recommendation, although my CAPM analyses support my 9.35% recommendation as being reasonable.

In Section IV of my testimony I will respond to ENO witness Hevert's Revised Direct Testimony and his ROE recommendation of 10.75%. I will demonstrate to the Council that Mr. Hevert's recommended ROE of 10.75% grossly overstates a fair rate of return for ENO and that his recommendation should be rejected.

In Section V, I recommend that the Council reject the proposed RIM. Given ENO's recent poor reliability performance, ENO should not be given incentives in its allowed return on equity for performance that New Orleans ratepayers should expect from their regulated provider of electric service.

In Section VI, I recommend that the Council reject ENO's proposed GIRP and DGM riders. The GIRP and DGM are not needed if the Council adopts CCPUG's recommended EFRP and GFRP.

II. REVIEW OF ECONOMIC AND FINANCIAL CONDITIONS

Q. Mr. Baudino, what has the trend been in long-term capital costs over the last 10 years?

A. Since 2007 and 2008, the overall trend in interest rates in the U.S. and the world economy has been sharply lower. This trend was precipitated by the 2007 financial crisis and severe recession that followed in December 2007. In response to this economic crisis, the Federal Reserve ("Fed") undertook an unprecedented series of steps to stabilize the economy, ease credit conditions, and lower unemployment and interest rates. These steps are commonly known as Quantitative Easing ("QE") and were implemented in three distinct stages: QE1, QE2, and QE3. The Fed's stated purpose of QE was "to support the liquidity of financial institutions and foster improved conditions in financial markets."[1]

Q. Mr. Baudino, before you continue please provide a brief explanation of how the Fed uses interest rates to improve conditions in the financial markets.

A. Generally, the Fed uses monetary policy to implement certain economic goals. The Fed explained its monetary policy as follows:

> Monetary policy in the United States comprises the Federal Reserve's actions and communications to promote maximum employment, stable prices, and moderate long-

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[1] (http://www.federalreserve.gov/monetarypolicy/bst_crisisresponse.htm).

term interest rates--the three economic goals the Congress has instructed the Federal Reserve to pursue.

The Federal Reserve conducts the nation's monetary policy by managing the level of short-term interest rates and influencing the overall availability and cost of credit in the economy.[2]

One of the Fed's primary tools for conducting monetary policy is setting the federal funds rate. The federal funds rate is the interest rate set by the Fed that banks and credit unions charge each other for overnight loans of reserve balances. Traditionally the federal funds rate directly influences short-term interest rates, such as the Treasury bill rate and interest rates on savings and checking accounts. The federal funds rate has a more indirect effect on long-term interest rates, such as the 30-Year Treasury bond and private and corporate long-term debt. Long-term interest rates are set more by market forces that influence the supply and demand of loanable funds.

Q. Please continue with your discussion of the Fed's quantitative easing programs.

A. QE1 was implemented from November 2008 through approximately March 2010. During this time, the Fed cut its key Federal Funds Rate to nearly 0% and purchased $1.25 trillion of mortgage-backed securities and $175 billion of agency debt purchases. QE2 was implemented in November 2010 with the Fed announcing that it would purchase an additional $600 billion of Treasury securities by the second quarter of 2011.[3] Beginning in September 2011, the Fed initiated a "maturity extension program" in which it sold or redeemed $667 billion of shorter-term Treasury securities

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2 From the Federal Reserve's web site and the section entitled "Monetary Policy".

3 (http://www.federalreserve.gov/newsevents/press/monetary/20101103a.htm)

and used the proceeds to buy longer-term Treasury securities. This program, also known as "Operation Twist," was designed by the Fed to lower long-term interest rates and support the economic recovery. Finally, QE3 began in September 2012 with the Fed announcing an additional bond purchasing program of $40 billion per month of agency mortgage backed securities.

The Fed began to pare back its purchases of securities in the last few years. On January 29, 2014 the Fed stated that beginning in February 2014 it would reduce its purchases of long-term Treasury securities to $35 billion per month. The Fed continued to reduce these purchases throughout the year and in a press release issued October 29, 2014 announced that it decided to close this asset purchase program in October.[4]

Figure 1 below presents a graph that tracks the 30-Year Treasury Bond yield and the Mergent average utility bond yield.

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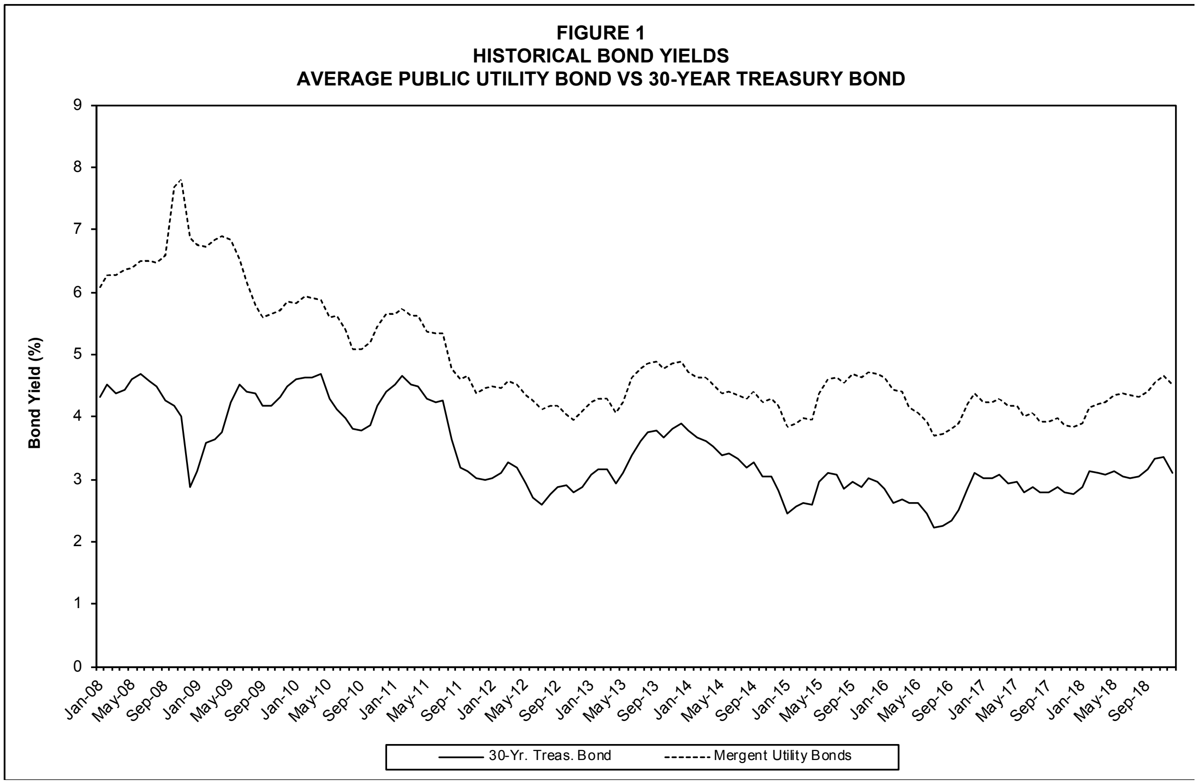
[4] (http://www.federalreserve.gov/newsevents/press/monetary/20141029a.htm)



The Fed's QE program and federal funds rate cuts were effective in lowering the long-term cost of borrowing in the United States. The 30-Year Treasury Bond yield declined from 5.11% in July 2007 to a low of 2.59% in July 2012. The average utility bond yield also fell substantially, from 6.28% in July 2007 to 4.12% in July 2012.

Q. Has the Fed recently indicated any important changes to its monetary policy?

A. Yes. In March 2016, the Fed began to raise its target range for the federal funds rate, increasing it to 1/4% to 1/2% from 0% to 1/4%. Since that time, the Fed increased the federal funds rate several more times, with the most recent increase announced on December 19, 2018. The federal funds rate now stands in the range of 2.25% - 2.50%. In its press release dated December 19, 2018 the Fed stated the following:

"Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee judges that some further gradual increases in the target range for the federal funds rate will be consistent with sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective over the medium term. The Committee judges that risks to the economic outlook are roughly balanced, but will continue to monitor global economic and financial developments and assess their implications for the economic outlook.

In view of realized and expected labor market conditions and inflation, the Committee decided to raise the target range for the federal funds rate to 2-1/4 to 2-1/2 percent.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric 2 percent inflation objective. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments."

The Fed also provided certain economic projections that accompanied its December 19, 2018 press release showing the following:

- Projected federal funds rate of 2.4% for 2018, 2.9% for 2019, 3.1% for 2020, and 2.8% for the longer run.
- Inflation running at 1.9% for 2018 and 2.0% for 2019 and 2020.

The Fed has signaled that it will likely continue increasing the federal funds rate this year.

Q. Mr. Baudino, why is it important to understand the Fed's actions over the last 10 years?

A. The Fed's monetary policy actions since 2008 were deliberately undertaken to lower interest rates and support economic recovery. Even with several recent increases in the federal funds rate, the U.S. economy is still in a relatively low interest rate environment. This environment has affected the common stocks of regulated utilities, which are interest rate sensitive due to their high concentration of fixed assets. Thus, as interest rates increase in the general economy, the prices of utility common stocks fall and their dividend yields rise. Alternatively, as interest rates fall, the dividend yields on utility common stocks tend to fall as their prices rise.

Q. Are current interest rates indicative of investor expectations regarding the future direction of interest rates?

A. Yes. Securities markets are efficient and most likely reflect investors' expectations about future interest rates. As Dr. Roger Morin pointed out in *New Regulatory Finance:*

> "A considerable body of empirical evidence indicates that U.S. capital markets are efficient with respect to a broad set of information, including historical and publicly available information."[5]

Dr. Morin also noted the following:

> “There is extensive literature concerning the prediction of interest rates. From this evidence, it appears that the no-change model of interest rates frequently provides the most accurate forecasts of future interest rates while at other times, the experts are more accurate. Naïve extrapolations of current interest rates frequently outperform published forecasts. The literature suggests that on balance, the bond market is very efficient in that it is difficult to consistently forecast interest rates with greater accuracy than a no-change model. The latter model provides similar, and in some cases, superior accuracy than professional forecasts.”[6]

Despite recent increases in the general level of short-term interest rates since the second half of 2016, the U.S. economy continues to operate in a relatively low interest rate environment. It is important to realize that investor expectations of higher future interest rates, if any, are already likely already embodied in current securities prices, which include debt securities and stock prices.

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5 Morin, Roger A., *New Regulatory Finance,* Public Utilities Reports, Inc. (2006) at 279.

6 *Ibid* at 172.

Moreover, the current low interest rate environment still favors lower risk regulated utilities. Although the Fed anticipates raising the federal funds rate later this year, I still firmly believe that it would not be advisable for utility regulators to raise ROEs in anticipation of higher forecasted long-term interest rates that may or may not occur**.**

Q. How has the increase in the federal funds rate since 2016 affected utility stocks in terms of bond yields and stock prices?

A. Table 1 shows the federal funds rate, the yield on the 30-Year Treasury bond, the yield on the average utility bond, and the Dow Jones Utility Average from January 2016 through December 2018.

TABLE 1
Bond Yields and DJUA

	Federal Funds Rate %	30-Year Treasury %	Avg. Utility Bond %	DJUA
2016				
January	0.34	2.86	4.62	611.35
February	0.38	2.62	4.44	620.70
March	0.36	2.68	4.40	668.57
April	0.37	2.62	4.16	654.44
May	0.37	2.63	4.06	659.44
June	0.38	2.45	3.93	716.52
July	0.39	2.23	3.70	711.42
August	0.40	2.26	3.73	666.87
September	0.40	2.35	3.80	668.13
October	0.40	2.50	3.90	675.23
November	0.41	2.86	4.21	632.67
December	0.54	3.11	4.39	645.86
2017				
January	0.65	3.02	4.24	668.87
February	0.66	3.03	4.25	703.16
March	0.79	3.08	4.30	697.28
April	0.90	2.94	4.19	704.35
May	0.91	2.96	4.19	726.62
June	1.04	2.80	4.01	706.91
July	1.15	2.88	4.06	726.48
August	1.16	2.80	3.92	743.24
September	1.15	2.78	3.93	723.60
October	1.15	2.88	3.97	753.20
November	1.16	2.80	3.88	770.39
December	1.30	2.77	3.85	723.37
2018				
January	1.41	2.88	3.91	699.25
February	1.42	3.13	4.15	668.81
March	1.51	3.09	4.21	692.63
April	1.69	3.07	4.24	707.01
May	1.70	3.13	4.36	695.21
June	1.82	3.05	4.37	711.64
July	1.91	3.01	4.38	724.24
August	1.91	3.04	4.33	726.41
September	1.95	3.15	4.41	720.60
October	2.19	3.34	4.56	733.84
November	2.20	3.36	4.65	741.92
December	2.27	3.10	4.51	712.93

Source: Federal Reserve, Mergent Bond Record, Yahoo! Finance

Note that as the federal funds rate rose significantly from January through December 2017, the 30-Year Treasury yield declined. The DJUA rose throughout 2017, declined sharply in December and through February 2018, then began to rise again through November 2018. Although the federal funds rate steadily increased from 2016, the 30-Year Treasury yield was not much different in December 2018 than it was in January 2017. The average utility bond yield was slightly lower in December 2018 (4.51%) than it was is January 2016 (4.62%), despite the steep increases in the federal funds rate.

Q. How does the investment community regard the electric utility industry currently?

A. The Value Line Investment Survey's December 14, 2018 report on the Electric Utility (Central) Industry concluded as follows:

"Stocks in the Electric Utility Industry have had a mixed performance so far in 2018, but (as a group) have outpaced the broader market averages. *Utility equities attract income-oriented investors for their above average dividend yields, and their defensive characteristics are appealing to many investors in times of market turbulence.* Among utility issues reviewed in Issue 5, the prices of OGE Energy and Ameren are up 22% and 18%, respectively, year to date. Vectren stock has performed well, too (up 11%), thanks to the pending takeover of the company by CenterPoint Energy.

Most equities in this Industry have a high valuation. Most are trading within their 2021-2023 Target Price Range, and some recent quotations are even near the upper end of this range. The average dividend yield of stocks in the Electric Utility Industry is 3.3%, which is low, by historical standards. Total return potential over the 3- to 5-year period is just 3%, on average." (italics added)

Q. Please provide an overview of the electric utility industry's credit ratings and current authorized ROEs.

A. The Edison Electric Institute ("EEI") assembles and publishes a quarterly credit ratings and rate review of the electric industry on its web site.[7] For the third quarter of 2018, EEI's analysis showed that for the 47 electric utilities included in its survey analysis, the average Standard and Poor's credit rating was BBB+, with 55% of the companies having credit ratings of BBB+/BBB. Entergy Corporation was one of the 17 companies in the survey with a BBB+ credit rating. Through the third quarter of 2018, 42% of the ratings actions were credit upgrades and 58% were downgrades. This was a change from 2017, during which 73.6% of ratings actions were upgrades. However, the average credit rating for the industry was unchanged from the 2017 rating of BBB+.

With respect to requested and allowed ROEs, EEI's rate review reported the following.

TABLE 2

2018
QUARTERLY REQUESTED
AND ALLOWED ROES

	Requested	Allowed
Quarter 1	10.02	9.58
Quarter 2	9.86	9.51
Quarter 3	10.25	9.53
Average	10.04	9.54

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[7] Please refer to EEI's web site and the page entitled *Electric Utility Industry Financial Data And Trend Analysis* and the 2018 Q3 – Financial Updates.

Q. What are the current credit ratings and bond ratings for ENO?

A. Standard and Poor's ("S&P") current issuer credit rating for ENO is BBB+, with a senior secured bond rating of A. ENO's issuer credit rating from S&P is consistent with the average electric utility credit rating reported by EEI above. Moody's long term issuer rating for the Company is Ba1, with a first mortgage bond rating of Baa2. Both Moody's and S&P have a stable credit outlook for ENO.

ENO provided S&P's September 21, 2018 credit rating report in response to discovery in this case.[8] S&P's report noted the following with respect to ENO's business risk:

- Low-risk, fully rate-regulated utility concentrated in the city of New Orleans.
- Generally stable regulatory framework.
- Susceptible to weather-related disasters.
- Small customer base with modest growth.
- Limited regulatory or business diversity.

S&P also noted that ENO had "modestly negative cash flow resulting from tax reform impacts." With respect to the Company's ongoing operating revenues, S&P stated that "[a]bout 80% of operating revenues are from residential and commercial customers, providing a measure of stability to revenue and cash flow."

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[8] See ENO response to APC 2-4.

Moody's October 13, 2017 credit opinion, also provided by ENO in response to discovery, stated that ENO's "low lying service territory will continue to constrain its credit rating going forward, despite the strength of the credit profile."

Q. Considering the credit reports from Moody's and S&P, what are your conclusions and recommendations to the Council with respect to the approach to estimating the allowed ROE for ENO in this proceeding?

A. I recommend that the Council approach its allowed ROE using a proxy group of investment grade regulated electric and gas companies. Given that ENO's BBB+ S&P credit rating is equivalent to the average electric industry credit rating, it is reasonable to assume that equity investors would view the Company as having a similar risk/return relationship as the industry in general. For purposes of this case, I have adopted the proxy group used by ENO witness Hevert to estimate the Company's cost of equity in this proceeding.

III. DETERMINATION OF FAIR RATE OF RETURN

Q. Please describe the methods you employed in estimating a fair rate of return for ENO.

A. I employed a Discounted Cash Flow ("DCF") analysis using the proxy group of 22 regulated electric utilities used by Mr. Hevert in the ROE analysis he submitted on behalf of the Company. My DCF analysis is the standard constant growth form of the model that employs four different growth rate forecasts from the Value Line Investment Survey, Yahoo! Finance, and Zacks. I also employed Capital Asset Pricing Model ("CAPM") analyses using both historical and forward-looking data. The results from the CAPM tend to support the reasonableness of my DCF results as well as my ROE recommendation for ENO.

Q. What are the main guidelines to which you adhere in estimating the cost of equity for a firm?

A. The estimated cost of equity should be comparable to the returns of other firms with similar risk structures and should be sufficient for the firm to attract capital. These are the basic standards set out by the United States Supreme Court in Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944) and Bluefield W.W. & Improv. Co. v. Public Service Comm'n, 262 U.S. 679 (1922).

From an economist's perspective, the notion of "opportunity cost" plays a vital role in estimating the return on equity. One measures the opportunity cost of an investment equal to what one would have obtained in the next best alternative. For example, let us suppose that an investor decides to purchase the stock of a publicly traded electric utility. That investor made the decision based on the expectation of dividend payments and perhaps some appreciation in the stock's value over time; however, that investor's opportunity cost is measured by what she or he could have invested in as the next best alternative. That alternative could have been another utility stock, a utility bond, a mutual fund, a money market fund, or any other number of investment vehicles.

The key determinant in deciding whether to invest, however, is based on comparative levels of risk. Our hypothetical investor would not invest in a particular electric company stock if it offered a return lower than other investments of similar risk. The opportunity cost simply would not justify such an investment. Thus, the task for the rate of return analyst is to estimate a return that is equal to the return being offered by other risk-comparable firms.

Q. What are the major types of risk faced by utility companies?

A. In general, risk associated with the holding of common stock can be separated into three major categories: business risk, financial risk, and liquidity risk. Business risk refers to risks inherent in the operation of the business. Volatility of the firm's sales, long-term demand for its product(s), the amount of operating leverage, and quality of management are all factors that affect business risk. The quality of regulation at the state and federal levels also plays an important role in business risk for regulated utility companies.

Financial risk refers to the impact on a firm's future cash flows from the use of debt in the capital structure. Interest payments to bondholders represent a prior call on the firm's cash flows and must be met before income is available to the common shareholders. Additional debt means additional variability in the firm's earnings, leading to additional risk.

Liquidity risk refers to the ability of an investor to quickly sell an investment without a substantial price concession. The easier it is for an investor to sell an investment for cash, the lower the liquidity risk will be. Stock markets, such as the New York and American Stock Exchanges, help ease liquidity risk substantially. Investors who own stocks that are traded in these markets know on a daily basis what the market prices of their investments are and that they can sell these investments fairly quickly. Many electric utility stocks are traded on the New York Stock Exchange and are considered liquid investments.

Q. Are there any sources available to investors that quantify the total risk of a company?

A. Bond and credit ratings are tools that investors use to assess the risk comparability of firms. Bond rating agencies such as Moody's and Standard and Poor's perform detailed analyses of factors that contribute to the risk of an investment. The result of their analyses is a bond and/or credit rating that reflect these risks.

<u>Discounted Cash Flow ("DCF") Model</u>

Q. Please describe the basic DCF approach.

A. The basic DCF approach is rooted in valuation theory. It is based on the premise that the value of a financial asset is determined by its ability to generate future net cash flows. In the case of a common stock, those future cash flows generally take the form of dividends and appreciation in stock price. The value of the stock to investors is the discounted present value of future cash flows. The general equation then is:

$$V = \frac{R}{(1+r)} + \frac{R}{(1+r)^2} + \frac{R}{(1+r)^3} + \cdots \frac{R}{(1+r)^n}$$

Where: V = *asset value*
R = *yearly cash flows*
r = *discount rate*

This is no different from determining the value of any asset from an economic point of view; however, the commonly employed DCF model makes certain simplifying assumptions. One is that the stream of income from the equity share is assumed to be perpetual; that is, there is no salvage or residual value at the end of some maturity date (as is the case with a bond). Another important assumption is that financial markets are reasonably efficient; that is, they correctly evaluate the cash flows relative to the appropriate discount rate, thus rendering the stock price efficient relative to other alternatives. Finally, the model I typically employ also assumes a constant growth rate in dividends. The fundamental relationship employed in the DCF method is described by the formula:

$$k = {D_1}/{P_0} + g$$

Where: D_1 = *the next period dividend*
P_0 = *current stock price*
g = *expected growth rate*
k = *investor-required return*

Under the formula, it is apparent that "k" must reflect the investors' expected return. Use of the DCF method to determine an investor-required return is complicated by the need to express investors' expectations relative to dividends, earnings, and book value over an infinite time horizon. Financial theory suggests that stockholders purchase common stock on the assumption that there will be some change in the rate of dividend payments over time. We assume that the rate of growth in dividends is constant over the assumed time horizon, but the model could easily handle varying growth rates if we knew what they were. Finally, the relevant time frame is prospective rather than retrospective.

Q. What was your first step in conducting your DCF analysis for ENO?

A. My first step was to choose a proxy group of companies with a risk profile that is reasonably similar to ENO. For purposes of this case, it is reasonable to proceed with the proxy group of 22 companies shown by Mr. Hevert on page 14, Table 2 of his Revised Direct Testimony.

Q. What was your first step in determining the DCF return on equity for the proxy group?

A. I first determined the current dividend yield, D_1/P_0, from the basic equation. My general practice is to use six months as the most reasonable period over which to estimate the dividend yield. The six-month period I used covered the months from July through December 2018. I obtained historical prices and dividends from Yahoo! Finance. The annualized dividend divided by the average monthly price represents the average dividend yield for each month in the period.

The resulting average dividend yield for the comparison group is 3.26%. These calculations are shown in Exhibit ____(RAB-2).

Exhibit ____(RAB-2) also shows the monthly dividend yield for the proxy group. The monthly average dividend yield ranged from 3.23% (December) to 3.30% (July), so there was not significant variation in the average proxy group dividend yield over the six-month period.

Q. Having established the average dividend yield, how did you determine the investors' expected growth rate for the electric comparison group?

A. The investors' expected growth rate, in theory, correctly forecasts the constant rate of growth in dividends. The dividend growth rate is a function of earnings growth and the payout ratio, neither of which is known precisely for the future. We refer to a perpetual growth rate since the DCF model has no arbitrary cut-off point. We must estimate the investors' expected growth rate because there is no way to know with absolute certainty what investors expect the growth rate to be in the short term, much less in perpetuity.

For my analysis in this proceeding, I used three major sources of analysts' forecasts for growth. These sources are The Value Line Investment Survey, Zacks, and Yahoo! Finance. These are the sources I typically use for estimating growth for my DCF calculations.

Q. Please briefly describe Value Line, Zacks, and Yahoo! Finance.

A. The Value Line Investment Survey is a widely used and respected source of investor information that covers approximately 1,700 companies in its Standard Edition and several thousand in its Plus Edition. It is updated quarterly and probably represents the most comprehensive of all investment information services. It provides both historical and forecasted information on a number of important data elements. Value Line neither participates in financial markets as a broker nor works for the utility industry in any capacity of which I am aware.

Zacks gathers opinions from a variety of analysts on earnings growth forecasts for numerous firms including regulated electric utilities. The estimates of the analysts responding are combined to produce consensus average estimates of earnings growth. I obtained Zacks' earnings growth forecasts from its web site.

Like Zacks, Yahoo! Finance also compiles reports consensus analysts' forecasts of earnings growth.

Q. Why did you rely on analysts' forecasts in your analysis?

A. Return on equity analysis is a forward-looking process. Five-year or ten-year historical growth rates may not accurately represent investor expectations for dividend growth. Analysts' forecasts for earnings and dividend growth provide better proxies for the expected growth component in the DCF model than historical growth rates. Analysts' forecasts are also widely available to investors and one can reasonably assume that they influence investor expectations.

Q. Please explain how you used analysts' dividend and earnings growth forecasts in your constant growth DCF analysis.

Q. Page 1, Columns (1) through (4) of Exhibit ___(RAB-3) shows the forecasted dividend and earnings growth rates from Value Line and the earnings growth forecasts from Zacks and Yahoo! Finance. It is important to include dividend growth forecasts in the DCF model since the model calls for forecasted cash flows received by the investor. Value Line is the only source of which I am aware that forecasts dividend growth and my approach gives this forecast equal weight with the three earnings growth forecasts.

Q. How did you proceed to determine the DCF return of equity for the comparison group?

A. To estimate the expected dividend yield (D_1), the current dividend yield must be moved forward in time to account for dividend increases over the next twelve months. I estimated the expected dividend yield by multiplying the current dividend yield by one plus one-half the expected growth rate.

Page 2 of Exhibit ____(RAB-3) presents my standard method of calculating dividend yields, growth rates, and return on equity for the proxy group of companies. The DCF Return on Equity Calculation section shows the application of each of four growth rates I used in my analysis to the current group dividend yield of 3.26% to calculate the expected dividend yield. I then added the expected growth rates to the expected dividend yield. In evaluating investor expected growth rates, I use both the average and the median values for the group under consideration. Method 1 uses the group average expected growth rate and Method 2 uses the group median expected growth rate.

Q. What are the results of your constant growth DCF model?

A. For the average growth rates in Method 1, the results range from 8.71% to 9.36%, with the average of these results being 9.05%. Using the median growth rates in Method 2, the results range from 8.52% to 9.36%, with the average of these results being 8.97%.

Capital Asset Pricing Model

Q. Briefly summarize the Capital Asset Pricing Model ("CAPM") approach.

A. The theory underlying the CAPM approach is that investors, through diversified portfolios, may combine assets to minimize the total risk of the portfolio. Diversification allows investors to diversify away all risks specific to a particular company and be left only with market risk that affects all companies. Thus, the CAPM theory identifies two types of risks for a security: company-specific risk and market risk. Company-specific risk includes such events as strikes, management errors, marketing failures, lawsuits, and other events that are unique to a particular firm. Market risk includes inflation, business cycles, war, variations in interest rates, and changes in consumer confidence. Market risk tends to affect all stocks and cannot be diversified away. The idea behind the CAPM is that diversified investors are rewarded with returns based on market risk.

Within the CAPM framework, the expected return on a security is equal to the risk-free rate of return plus a risk premium that is proportional to the security's market, or non-diversifiable, risk. Beta is the factor that reflects the inherent market risk of a security and measures the volatility of a security relative to the overall market for securities. For example, a stock with a beta of 1.0 indicates that if the market rises by 15%, that stock will also rise by 15%. This stock moves in tandem with movements in the overall market. Stocks with a beta of 0.5 will only rise or fall 50% as much as the overall market. So with an increase in the market of 15%, this stock will only rise 7.5%. Stocks with betas greater than 1.0 will rise and fall more than the overall market. Thus, beta is the measure of the relative risk of individual securities vis-à-vis the market.

Based on the foregoing discussion, the equation for determining the return for a security in the CAPM framework is:

$$K = Rf + \beta(MRP)$$

Where: *K* = *Required Return on equity*
Rf = *Risk-free rate*
MRP = *Market risk premium*
β = *Beta*

This equation tells us about the risk/return relationship posited by the CAPM. Investors are risk averse and will only accept higher risk if they expect to receive higher returns. These returns can be determined in relation to a stock's beta and the market risk premium. The general level of risk aversion in the economy determines the market risk premium. If the risk-free rate of return is 3.0% and the required return on the total market is 15%, then the risk premium is 12%. Any stock's required return can be determined by multiplying its beta by the market risk premium. Stocks with betas greater than 1.0 are considered riskier than the overall market and will have higher required returns. Conversely, stocks with betas less than 1.0 will have required returns lower than the market.

Q. In general, are there concerns regarding the use of the CAPM in estimating the return on equity?

A. Yes. There is some controversy surrounding the use of the CAPM.[9] There is evidence that beta is not the primary factor in determining the risk of a security. For example, Value Line's "Safety Rank" is a measure of total risk, not its calculated beta coefficient. Beta coefficients usually describe only a small amount of total investment risk.

There is also substantial judgment involved in estimating the required market return. In theory, the CAPM requires an estimate of the return on the total market for investments, including stocks, bonds, real estate, etc. It is nearly impossible for the analyst to estimate such a broad-based return. Often in utility cases, a market return is estimated using the S&P 500 or the return on Value Line's stock market composite. However, these are limited sources of information with respect to estimating the investor's required return for all investments. In practice, the total market return

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[9] For a more complete discussion of some of the controversy surrounding the use of the CAPM, refer to *A Random Walk Down Wall Street* by Burton Malkiel, pp. 219-223, 11th edition.

estimate faces significant limitations to its estimation and, ultimately, its usefulness in quantifying the investor required ROE.

In the final analysis, a considerable amount of judgment must be employed in determining the risk-free rate and market return portions of the CAPM equation. The analyst's application of judgment can significantly influence the results obtained from the CAPM. My experience with the CAPM indicates that it is prudent to use a wide variety of data in estimating investor-required returns. Of course, the range of results may also be wide, indicating the difficulty in obtaining a reliable estimate from the CAPM.

Q. How did you estimate the market return portion of the CAPM?

A. The first source I used was the Value Line Investment Analyzer Plus Edition, for December 27, 2018. This edition covers several thousand stocks. The Value Line Investment Analyzer provides a summary statistical report detailing, among other things, forecasted growth rates for earnings and book value for the companies Value Line follows as well as the projected total annual return over the next 3 to 5 years. I present these growth rates and Value Line's projected annual return on page 2 of Exhibit ____(RAB-4). I included median earnings and book value growth rates. The estimated market returns using Value Line's market data range from 11.50% to 16.00%. The average of these market returns is 13.75%.

Q. Why did you use median growth rate estimates rather than the average growth rate estimates for the Value Line companies?

A. Using median growth rates is likely a more accurate approach to estimating the central tendency of Value Line's large data set compared to the average growth rates. Average earnings and book value growth rates may be unduly influenced by very high or very low 3 - 5-year growth rates that are unsustainable in the long run. For example, Value Line's Statistical Summary shows both the highest and lowest value for earnings and book value growth forecasts. For earnings growth, Value Line showed the highest earnings growth forecast to be 93.5% and the lowest growth rate to be -31%. With respect to book value, the highest growth rate was 85.5% and the lowest was a -30%. None of these growth rate projections is compatible with long-run growth prospects for the market as a whole. The median growth rate is not influenced by such extremes because it represents the middle value of a very wide range of earnings growth rates.

Q. Please continue with your market return analysis.

A. I also considered a supplemental check to the Value Line projected market return estimates. Duff and Phelps compiled a study of historical returns on the stock market in its 2018 SBBI Yearbook. Some analysts employ this historical data to estimate the market risk premium of stocks over the risk-free rate. The assumption is that a risk premium calculated over a long period of time is reflective of investor expectations going forward. Exhibit ____(RAB-5) presents the calculation of the market returns using the historical data.

Q. Please explain how this historical risk premium is calculated.

A. Exhibit ____(RAB-5) shows both the geometric and arithmetic average of yearly historical stock market returns over the historical period from 1926 - 2017. The average annual income return for 20-year Treasury bond is subtracted from these historical stocks returns to obtain the historical market risk premium of stock returns over long-term Treasury bond income returns. The historical market risk premium range is 5.2% - 7.1%.

Q. Did you add an additional measure of the historical risk premium in this case?

A. Yes. Duff and Phelps reported the results of a study by Dr. Roger Ibbotson and Dr. Peng Chen indicating that the historical risk premium of stock returns over long-term government bond returns has been significantly influenced upward by substantial growth in the price/earnings ("P/E") ratio for stocks from 1980 through 2001.[10] Duff and Phelps noted that this growth in the P/E ratio for stocks was subtracted out of the historical risk premium because "it is not believed that P/E will continue to increase in the future." The adjusted historical arithmetic market risk premium is 6.04%, which I have also included in Exhibit ____(RAB-5). This risk premium estimate falls near the middle of the market risk premium range.

Q. How did you determine the risk free rate?

A. I used the average yields on the 30-year Treasury bond and five-year Treasury note over the six-month period from July through December 2018. The 30-year Treasury bond is often used by rate of return analysts as the risk-free rate, but it contains a significant amount of interest rate risk. The five-year Treasury note carries less interest rate risk than the 30-year bond and is more stable than short-term Treasury bills. Therefore, I have employed both securities as proxies for the risk-free rate of

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[10] *2018 SBBI Yearbook,* Duff and Phelps, pp. 10-28 through 10-30.

return. This approach provides a reasonable range over which the CAPM return on equity may be estimated.

Q. How did you determine the value for beta?

A. I obtained the betas for the companies in the electric company comparison group from most recent Value Line reports. The average of the Value Line betas for the comparison group is 0.60.

Q. Please summarize the CAPM results.

A. From Exhibit ____(RAB-4), my forward-looking CAPM return on equity estimates are 9.34% - 9.47%. Using historical risk premiums in Exhibit ____(RAB-5), the CAPM results are 6.26% - 7.39%.

<u>Conclusions and Recommendations</u>

Q. Please summarize the cost of equity results for your DCF and CAPM analyses.

A. Table 3 below summarizes my return on equity results using the DCF and CAPM for my comparison group of companies.

TABLE 3 SUMMARY OF ROE ESTIMATES	
DCF Methodology:	
Average Growth Rates	
- High	9.36%
- Low	8.71%
- Average	9.05%
Median Growth Rates:	
- High	9.36%
- Low	8.52%
- Average	8.97%
CAPM:	
- 5-Year Treasury Bond	9.34%
- 30-Year Treasury Bond	9.47%
- Historical Returns	6.26% - 7.39%

Q. What is your recommended return on equity for ENO?

A. My independent analyses of the return on equity for ENO indicate a reasonable investor required return on equity ("ROE") in the range of 8.70% - 9.35% based on the DCF analyses I performed. My recommended ROE for ENO in this proceeding would be 9.35%. My 9.35% ROE recommendation represents the top of the range of DCF estimates and is also reasonably consistent with my CAPM results as well.

ENO's S&P credit rating of BBB+ is consistent with the average credit rating for regulated electric utilities at this time. Given recent concerns with increasing interest rates near the end of 2018 and for this year as well, I chose to place my recommended ROE at the top of the DCF range for purposes of this case. Moreover, given ENO's split credit rating from S&P and Moody's, it is my view that placing my recommended

ROE at the top of the DCF range more than compensates for Moody's lower credit rating.

Q. On page 44, lines 10 through 14 of his Revised Direct Testimony Mr. Hevert testified that S&P's BBB+ rating reflects ENO's affiliation with Entergy Corporation and that its stand-alone credit rating would be two notches lower (BBB-). Is this a valid reason for setting ENO's allowed ROE higher than the proxy group average in this proceeding?

A. No. ENO's lower stand-alone credit rating does not justify a higher ROE than the proxy group average ROE. ENO's credit and risk profiles benefit from its affiliation with Entergy Corporation and its ROE should fully reflect that relationship. ENO is not, in fact, a stand-alone entity and should not be treated as such for purposes of the Council's allowed ROE in this proceeding.

Q. Did you review ENO's requested cost of long-term debt?

A. Yes. I reviewed the components of ENO's requested long-term debt cost and find that ENO's requested cost of debt is reasonable and should be adopted by the Council.

Q. Did you address the Company's requested capital structure?

A. No. Mr. Kollen addresses ENO's capital structure and the inclusion of short-term debt in his Direct Testimony. Mr. Kollen also quantifies the effect of including short-term debt in ENO's capital structure and the revenue requirement impact of my recommended 9.35% ROE.

IV. RESPONSE TO ENO ROE TESTIMONY

Q. Have you reviewed the Revised Direct Testimony of Mr. Robert Hevert?

A. Yes.

Q. Please summarize Mr. Hevert's testimony and approach to return on equity.

A. Mr. Hevert employed four methods to estimate the investor required rate of return for ENO: (1) the constant growth DCF model, (2) two multi-stage DCF models, (3) the CAPM, and (4) the bond yield plus risk premium model.

For his constant growth DCF approach, he used Value Line, First Call, and Zacks for the investor expected growth rate. For the proxy group, Mr. Hevert's mean growth rate ROE results ranged from 9.16% to 9.29%.

Regarding his multi-stage DCF analyses, Mr. Hevert's models are comprised of three distinct stages with assumptions regarding growth rates and payout ratio changes. Mr. Hevert used his own forecast of growth in nominal Gross Domestic Product ("GDP") for his long-term growth rate. The mean ROE results for Mr. Hevert's multi-stage DCF methods ranged from 9.67% to 10.02%.

With respect to the CAPM, Mr. Hevert utilized a current and projected yield on the 30-Year Treasury bond for his risk-free rate. He also used beta values from both Value Line and Bloomberg. Using the current Treasury bond yield of 3.11%, his CAPM results ranged from 10.13% to 11.91%. Using the near-term projected Treasury yield of 3.48%, his CAPM results ranged from 10.5% to 12.28%.

Finally, Mr. Hevert's bond yield plus risk premium analyses employed current and long-term projected 30-Year Treasury bond yields ranging from 3.11% to 4.30% and commission authorized returns on equity from January 1980 through June 15, 2018. Mr. Hevert's ROE results using this method were 9.96% - 10.28%.

Q. Before you proceed to the particulars of your review of Mr. Hevert's testimony, what is your overall conclusion with respect to Mr. Hevert's recommended ROE range?

A. Mr. Hevert's recommended ROE range of 10.25% - 11.00% fails to reflect the full range of results from his analyses. His mean DCF results, which are fairly consistent with mine, were completely excluded from his range of recommendations. This means that Mr. Hevert rejected the results from two of his four ROE methodologies, choosing instead to mainly rely on the results from the CAPM. To put this another way, consider the following:

- Mr. Hevert effectively rejected the average (mean) results from the constant growth DCF in total.
- Mr. Hevert effectively rejected the mean results from his multi-stage DCF models in total.
- Mr. Hevert effectively rejected two of the three bond yield plus risk premium results (9.96% - 10.03%).

Mr. Hevert also apparently rejected the CAPM results that used the average Value Line beta, which ranged from 11.66% - 12.28%. Indeed, these results are so unreasonably high that they should be rejected out of hand. Mr. Hevert's own historical data presented in his Exhibit RBH-7 show that more recent allowed returns are far below these calculated returns, making them extreme outliers. I will explain this in more detail later in my response to Mr. Hevert.

What we are left with to understand the basis for Mr. Hevert's ROE range, then, is the CAPM results from the average Bloomberg beta (10.13% - 10.71%) and the upper end of the bond yield plus risk premium result of 10.28% using a forecasted Treasury bond yield. I was not able to determine how he obtained the 11.0% high end of his recommended ROE range. Mr. Hevert's recommended ROE of 10.75% for ENO is slightly higher than the upper bound of his CAPM results using the Bloomberg beta.

In conclusion, although Mr. Hevert presented four different approaches to ROE analysis, he primarily relied on the results of one method, the CAPM.

Q. Is it appropriate for Mr. Hevert to reject the mean results from his constant growth and multi-stage DCF analyses?

A. No, definitely not. It is incorrect for Mr. Hevert to exclude the mean results of all of the DCF models in his recommended ROE for ENO. The constant growth DCF model utilizes verifiable public information with respect to investor return requirements for electric utilities. Current stock prices are the best indicators we have of investor expectations and analysts' earnings and dividend growth forecasts may reasonably be assumed to influence investors' required ROEs. Simply discarding this important publicly available information, as Mr. Hevert has done, serves to significantly overstate his recommended investor required return for the average regulated utility company. The DCF model currently shows that investor required returns are considerably lower for utility stocks given their safety and security relative to the stock market as a whole.

Q. Is using the high mean results from the DCF models appropriate?

A. No. Mr. Hevert's high mean results simply use the highest ROE for each company in the proxy group, which is driven by the highest expected growth rate. There is no basis for assuming that investors are more likely to expect the highest growth rate from the three sources used by Mr. Hevert. The average of the three sources is a far more likely and reasonable assumption. Further, the proxy group high mean is unduly influenced by Avangrid, which has a high ROE result of over 16%.

Referring to Mr. Hevert's Tables 3 and 4, there is not one DCF mean ROE result that supports the low end of Mr. Hevert's recommended range of 10.25%. In addition, the high mean results for Mr. Hevert's multi-stage DCF models cannot be used because they are greatly overstated due to an excessively high GDP growth forecast that Mr. Hevert developed himself. I will address this in more detail later in my testimony.

Q. On page 23 of his Revised Direct Testimony, Mr. Hevert described two DCF model assumptions that he claimed "are not consistent with current market conditions." Please summarize the assumptions addressed by Mr. Hevert.

A. Mr. Hevert addressed the following assumptions:

- A constant payout ratio
- A constant price/earnings ("P/E") ratio
- Constant required return on equity

These are three of the basic assumptions that underlie the DCF model. The payout ratio refers to the percentage of earnings that are paid out in dividends. For example, if a utility company earns $1.00 per share and pays out $0.80 per share in dividends, then the payout ratio is 0.80. The constant growth DCF analysis assumes that this ratio is constant over time and is a very reasonable simplifying assumption.

The DCF model also assumes that the investor has a constant required return on equity over time. This is a logical assumption given that investors base their investment decisions on assessing expectations of the future outcomes using a current market required return on equity.

Q. Did Mr. Hevert provide sufficient basis for the Council to question the DCF results?

A. No, he did not. Before I proceed to a more detailed response to Mr. Hevert's criticisms of the DCF model's assumptions, it is important to realize that none of the models Mr. Hevert and I use to estimate the investor required ROE strictly adhere to their underlying assumptions 100% of the time. The DCF, CAPM, and risk premium models all operate with certain simplifying assumptions. Earlier in my testimony I pointed out the limitations of the CAPM that must be considered in assessing its effectiveness relative to the DCF model. One of those limitations is estimating the market required rate of return. Estimating the market required rate of return requires considerable judgment on the part of the analyst, judgment that may result in a wide range of possible returns. And in fact, Mr. Hevert and I used very different estimates of the market rate of return that caused our CAPM results to differ considerably. I will address the serious underlying problems with Mr. Hevert's CAPM later in my testimony.

I suggest that the Council keep in mind that no ROE estimation model strictly adheres to its underlying assumptions all the time.

Q. Please continue with your response to Mr. Hevert's criticism of the DCF model's assumptions.

A. With respect to the assumption of a constant payout ratio, simply because the industry's current payout ratio may be above or below the long-term average payout ratio does not mean that the DCF results based on current data are questionable and should be thrown out completely. This is also the case with respect to the industry's price/earnings ("P/E") ratio and the assumption of a constant expected future return. As I have stated previously in my testimony, capital markets are efficient and can be assumed to reflect investor preferences in the prices they are willing and able to pay for a regulated utility's common stock. This includes publicly available information to which investors have access including payout and P/E ratios. The current stock price, then, is reflective of the discounted future cash flows to the investor in the form of dividends as well as the expected price of the stock when it is sold. It does not make sense for a rational investor to expect a capital loss in the future based on the price that investor pays today. What this means is that it is reasonable to assume that current stock prices are reflective of investors' required ROE and that the DCF model can provide valid information to the Council in its determination of the allowed ROE for regulated utilities generally. Similarly, payout ratios will also vary around their long-term historical averages based on current market conditions, but this by no means invalidates the DCF model results.

Q. On page 23 of his Revised Direct Testimony, Mr. Hevert testified that the "Federal Reserve's process of policy normalization, including the uncertainty

surrounding the "unwinding" of the approximately $4 trillion of assets put on its balance sheet during its "Quantitative Easing" initiative introduce a degree of risk and a likelihood of increasing interest rates not present in the current market." Do you agree with this statement?

A. No. Instead, it is more likely than not that investors have taken this information into account since it is already public knowledge given the Federal Reserve's statements regarding its plans for unwinding its Quantitative Easing program and increasing short-term interest rates. In fact, Mr. Hevert referred to these statements on page 72 of his Revised Direct Testimony.

Q. On pages 23 and 24 of his Revised Direct Testimony, Mr. Hevert testified that since 1980 only eight utility rate cases included an authorized ROE of less than 9.0% and that for vertically integrated utilities there were no authorized ROEs less than 9.0%. Please respond to Mr. Hevert's testimony on this point.

A. Including rate cases since 1980 is, quite frankly, an irrelevant exercise because it places too much emphasis on stale data. In the 1980s and 1990s interest rates and allowed ROEs were far higher than they have been in the last few years. Consider the following information I developed using the information in Mr. Hevert's Exhibit RBH-7:

- From 1980 through 1989, the average awarded ROE was 14.80% and the average 30-Year Treasury bond yield was 11.35%.
- From 1990 through 1999, the average awarded ROE was 11.91% and the average 30-Year Treasury bond yield was 7.51%.
- From 2000 through 2009, the average awarded ROE was 10.62% and the average 30-Year Treasury bond yield was 4.81%.

Note that this data includes all ROE awards since 1980, not just those for vertically integrated companies. Nonetheless, these averages give the Council a general picture of the interest rate and ROE levels from the 1980s, 1990s, and 2000s and represent 1,218 of the 1,556 observations in Mr. Hevert's data set in Exhibit RBH-7. They are in no way indicative of investor required returns today given how much higher interest rates were during these prior periods. According to Mr. Hevert's data, since January 2016 the average awarded ROE was 9.63% and in 2018 the average allowed ROE was 9.58%. These more recent ROE awards show how grossly overstated Mr. Hevert's 10.75% ROE recommendation is in today's environment.

Q. Considering the foregoing discussion, please summarize your conclusions with respect to Mr. Hevert's recommended ROE range and his ROE recommendation for ENO.

A. I strongly recommend that the Council reject Mr. Hevert's recommended ROE range and his recommended ROE of 10.75%. Mr. Hevert's ROE range omits critically important information from the DCF model and, as a result, greatly overstates the investor required ROE for investment grade regulated electric utilities.

Q. Would Mr. Hevert's recommended ROE of 10.75% harm New Orleans ratepayers?

A. Yes, it certainly would. Although Entergy, Corporation shareholders would benefit from the excessive ROE of 10.75%, New Orleans ratepayers would have to shoulder the burden of an excessive revenue requirement to support it. Mr. Kollen calculated that lowering the Company's extreme ROE request to 9.35% would provide $6.268 million per year of rate relief to New Orleans customers.

<u>Multi-stage DCF Model</u>

Q. Please summarize the components of Mr. Hevert's multi-stage DCF model.

A. Mr. Hevert described the structure and the inputs for his multi-stage DCF model on pages 25 through 28 of his Revised Direct Testimony. The main elements of Mr. Hevert's multi-stage DCF analyses are as follows:

- 30, 90, and 180 average stock prices.
- First stage of growth based on the average earnings growth rates from Value Line, Zacks, and First Call.
- A transition period from near-term to long-term growth.
- Long-term growth estimated using GDP growth based on historical real GDP growth from 1929 through 2017 (3.21%) and a forecasted inflation rate. The total nominal GDP growth rate was 5.45%.
- Expected dividend in the final year divided by solved cost of equity less long-term growth rate.
- Payout ratio assumptions based on Value Line for the first stage, a transition period, and a long-term expected payout ratio.

Q. In your opinion, did Mr. Hevert overstate expected GDP growth?

A. Yes. There are two publicly available forecasts of GDP growth that have been relied upon by the Federal Energy Regulatory Commission ("FERC") in the determination of the second stage of the two-stage growth rate in its DCF return on equity formula. These forecasts come from the Energy Information Administration ("EIA"), and the Social Security Administration's ("SSA") Trustees Report.[11] The latest EIA GDP

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[11] Please see the Energy Information Administration, *Annual Energy Outlook 2018* and Social Security Administration, 2018 OASDI Trustees Report, Table VI.G6 - Selected Economic Variables.

forecast shows expected growth in nominal GDP of 4.39%. The SSA Report forecasts nominal growth in GDP of 4.38%. I included the calculation of these two GDP growth rates on Exhibit ____(RAB-6). My calculations are based on my understanding of how the FERC Staff used the data contained in the EIA and SSA documents to calculate long-term GDP growth for the second stage of its two-stage DCF model.

These independent sources are forecasting nominal GDP growth to be substantially lower than the forecast developed by Mr. Hevert (4.38% vs. Mr. Hevert's forecast of 5.45%). In conclusion, Mr. Hevert's GDP forecast contributes to a significant overstatement of his multi-stage DCF results.

Q. Did you recalculate Mr. Hevert's multi-stage DCF model with the lower GDP forecasts from EAI and the SSA?

A. Yes. Exhibit ____(RAB-7), pages 1 and 2 show the revised results from Mr. Hevert's multi-stage DCF models using the 180-day average prices and a long-term GDP growth forecast of 4.4%, which is the rounded average of the GDP forecasts from EAI and the SSA. ***The revised mean results from the two multi-stage DCF methods are 8.28% and 9.15%.***

If the Council considers a multi-stage DCF approach in this case, then it should use the publicly available independent GDP forecasts I have provided, not the one developed by Mr. Hevert.

CAPM

Q. Briefly summarize the main elements of Mr. Hevert's CAPM approach.

A. On page 32 of his Direct Testimony, Mr. Hevert testified that he used two different measures of the risk-free interest rate: the current 30-day average yield on the 30-year Treasury bond (3.11%) and a projected 30-year Treasury bond yield (3.48%). Mr. Hevert did not consider any shorter maturity bonds, such as the 5-year Treasury note.

Mr. Hevert then calculated ex-ante measures of total market returns using data from Bloomberg and Value Line. Total market returns from these two sources were 15.73% using Bloomberg data and a 16.10% return using Value Line data. Mr. Hevert also used two different estimates for beta from Bloomberg and Value Line.

Q. Is it appropriate to use forecasted or projected bond yields in the CAPM?

A. No. Current interest rates and bond yields embody all the relevant market data and expectations of investors, including expectations of changing future interest rates. The forecasted bond yield used by Mr. Hevert is speculative at best and may never come to pass. Current interest rates provide tangible and verifiable market evidence of investor return requirements today, and these are the interest rates and bond yields that should be used in both the CAPM and in the bond yield plus risk premium analyses. To the extent that investors give forecasted interest rates any weight at all, they are already incorporated in current securities prices.

Q. You noted earlier that Mr. Hevert used a forecasted 30-year Treasury bond yield of 3.48%, while the current yield was 3.11%. What does this suggest with respect to investors currently holding 30-year treasury bonds?

A. It suggests that investors today should expect to incur huge losses in the value of their investments in long-term Treasury bonds, which suggests economic irrationality on their part. There is no sound basis for such an assumption.

The price of a bond moves in the opposite direction of its yield. In other words, given a certain current bond coupon and price, if the required yield on that bond increases then the price of the bond goes down. Alternatively, if the required yield declines then the price of the bond increases. This relationship can be illustrated with the following simplified example. Assume a current 30-year Treasury bond has a coupon of $3.00 and a price of $100, resulting in a current yield of 3.00%. If interest rates were to rise in the economy such that the required yield on the 30-year Treasury increased to 3.50%, then the price of our existing 30-year Treasury bond would fall to $85.71 from $100, given the coupon of $3.00. This represents a loss to our current bond investor of 14.30%.

The point here is that if investors were certain that there would soon be a substantial increase in interest rates, the rational response would be to immediately discount what they were willing to pay currently for the 30-year Treasury bond rather than pay $100 and suffer certain significant losses to the value of their bonds.

Q. Should Mr. Hevert have considered shorter-term Treasury yields in his CAPM analyses?

A. Yes. In theory, the risk-free rate should have no interest rate risk. 30-year Treasury bonds do tend to face interest rate risk, which is the risk that interest rates could rise in the future and lead to a capital loss for the bondholder. Typically, the longer the duration of the bond, the greater the interest rate risk. The 5-year Treasury note has much less interest rate risk than the 30-year Treasury bond and may be considered one reasonable proxy for a risk-free security.

Q. Please comment on Mr. Hevert's use of Bloomberg and Value Line earnings growth estimates for the S&P 500.

A. Mr. Hevert used earnings growth estimates from these two sources to estimate the expected market return for his CAPM. According to the data contained in Exhibit RBH-4, the average Value Line growth rate is 11.79% and the average Bloomberg growth rate is 12.33%. These are by no means long-run sustainable growth rates. They are well over double the long-term GDP forecast of 5.45% that Mr. Hevert used in his multi-stage DCF analysis. If forecasted GDP growth were used as the long-term growth rate for the S&P 500, then both Mr. Hevert's and my own market return estimates would fall significantly.

Q. HOW DO MR. HEVERT'S ESTIMATES OF THE OVERALL MARKET RETURN COMPARE TO YOURS?

A. My estimates of the market required return are as follows:

- Value Line 3-5 Year Total Return: 16.0%
- Value Line Growth Rates: 11.50%
- S&P Average Historical Returns: 10.2% - 12.1%

Mr. Hevert's market returns of 15.73% - 16.10% are extraordinarily high compared to historical norms. I recommend that the Council give Mr. Hevert's inflated market returns very little weight in this proceeding.

Q. How do the Value Line beta values used by Mr. Hevert compare to those you used in your CAPM analyses?

A. My updated Value Line betas are generally lower than the dated beta values in Mr. Hevert's Exhibit RBH-5. His average proxy group beta was 0.667, while my updated proxy group beta is 0.60. Using the updated beta value in Mr. Hevert's CAPM analysis would lower the results to the range of 10.69% - 11.27%. However, these revised results are still excessively high and should be rejected by the Council.

<u>Risk Premium</u>

Q. Please summarize Mr. Hevert's risk premium approach.

A. Mr. Hevert developed a historical risk premium using Commission-allowed returns for regulated electric utility companies and 30-year Treasury bond yields from January 1980 through June 15, 2018. He used regression analysis to estimate the value of the inverse relationship between interest rates and risk premiums during that period. Applying the regression coefficients to the average risk premium and using current and projected 30-year Treasury yields I discussed earlier, Mr. Hevert's risk premium ROE estimate range is 9.96% - 10.28%.

Q. Please respond to Mr. Hevert's risk premium analysis.

A. First, the bond yield plus risk premium approach is imprecise and can only provide very general guidance on the current authorized ROE for a regulated electric utility. Risk premiums can change substantially over time. As such, this approach is a "blunt instrument," if you will, for estimating the ROE in regulated proceedings. In my view, a properly formulated DCF model using current stock prices and growth forecasts is far more reliable and accurate than the bond yield plus risk premium approach, which relies on a historical risk premium analysis over a certain period of time.

Second, I recommend that the Council reject the use of the forecasted Treasury bond yield for the same reasons I described in my response to Mr. Hevert's CAPM approach. Using a forecasted Treasury bond yield, rather than the current yield, will overestimate the investor required return.

<u>Business Risks and Other Considerations</u>

Q. Beginning on page 38 of his Revised Direct Testimony, Mr. Hevert presented a discussion of business risks and other considerations that informed his judgement regarding his recommended ROE range. Please summarize your understanding of these considerations.

A. On page 38 of his Revised Direct Testimony, Mr. Hevert presented the risks and other considerations that he believes should be taken into account in setting the allowed cost of equity for ENO. These considerations include:

- Planned capital expenditure program
- ENO's credit profile
- Geographic risk associated with severe weather
- Lack of customer diversity
- ENO's small size relative to the proxy group
- Flotation costs
- Effect of the Tax Cut and Jobs Act ("TCJA")

Q. Were many of these risks considered by the credit rating agencies in the reports on ENO that you reviewed?

A. Based on my reading of the credit reports, I believe they were. Moody's and S&P mentioned these risks in various places in the reports I reviewed. These reports evaluated ENO's credit profile, its risk associated with severe weather, its small size, and the effect of the TCJA. Regarding customer diversity, the S&P report I cited earlier noted that ENO's customer mix was a credit strength, not a weakness.

After assessing these risks, as well as credit strengths possessed by ENO, S&P assigned credit ratings to ENO that were consistent with the proxy group and with the electric utility industry in general. From this perspective, I do not recommend any additional risk premium for ENO relative to the proxy group.

Q. Mr. Hevert presented a 101 basis point small size premium for ENO on page 54 of his Revised Direct Testimony. Should the Council consider a size premium for ENO in its determination of the allowed ROE in this proceeding?

A. No, definitely not. The data that Mr. Hevert relied on to quantify this adjustment came from the *2018 Cost of Capital: Annual U.S. Guidance and Examples* by Duff and Phelps. The group of companies from which Mr. Hevert calculated this significant upward adjustment more likely than not contains many small unregulated companies. Mr. Hevert thus assumes, without any foundation whatsoever, that a return premium for higher risk unregulated companies would apply to ENO. Given the fact that the Company engages in low-risk regulated electric and gas operations, it is incorrect to assume that ENO would be as risky as a group of unregulated companies simply on the basis of its size. Mr. Hevert's small size premium should be rejected.

Q. Will CCPUG's proposed Formula Rate Plans ("FRP") reduce ENO's risk with respect to recouping costs associated with its future capital expenditure program?

A. Yes, it will. I have not evaluated the reasonableness or prudence of ENO's proposed capital expenditure program, including the level of yearly investments. Nevertheless, ENO currently operates without the benefit of a FRP for its regulated electric and gas operations. CCPUG witness Kollen supports the adoption of a 3-year FRP for both electric and gas operations. The FRPs will enable ENO to collect its yearly prudently incurred investments associated with its capital expenditure program that have closed to plant-in-service without the regulatory lag associated with traditional rate cases. This will be an ongoing future benefit to ENO and will be supportive to its credit profile.

Q. Mr. Hevert provided a detailed discussion of his concerns relating to the TCJA on pages 58 through 66 of his Revised Direct Testimony. What is your response to Mr. Hevert's testimony regarding the TCJA as it affects ENO?

A. The effect of the TCJA on ENO has already been settled and implemented by the Council. ENO's Tax Reform Plan and its associated benefits was described by ENO witness Joshua Thomas on pages 31 and 32 of his Revised Direct Testimony. ENO's stable credit outlook from S&P and Moody's already reflects the implementation of this plan and warrants no further consideration in determining ENO allowed ROE in this proceeding.

Q. Beginning on page 55 of his Direct Testimony Mr. Hevert discusses flotation costs. Please respond to Mr. Hevert's testimony on this issue.

A. In my opinion, it is likely that flotation costs are already accounted for in current stock prices and that adding an adjustment for flotation costs amounts to double counting. A DCF model using current stock prices should already account for investor expectations regarding the collection of flotation costs. Multiplying the dividend yield by a 4% flotation cost adjustment, for example, essentially assumes that the current stock price is wrong and that it must be adjusted downward to increase the dividend yield and the resulting cost of equity. I do not believe that this is an appropriate assumption. Current stock prices most likely already account for flotation costs, to the extent that such costs are even accounted for by investors.

V. ENO PROPOSED RELIABILITY INCENTIVE MECHANISM (RIM) PLAN

Q. Briefly summarize ENO's proposed RIM Plan.

A. The mechanics of the Company's proposed RIM Plan were presented in the Revised Direct Testimony of Mr. Joshua B. Thomas beginning on page 23. Mr. Thomas testified that the goal of the RIM Plan "is to align the earnings component of ENO's base rates to its distribution reliability performance." The primary components of the proposed RIM Plan are:

- The adjusted ROE in the Electric FRP would be the sum of the baseline ROE approved in this case plus a reliability adjustment in the range of +/- 25 basis points (0.25%).
- The electric base revenue requirement in this proceeding would include Mr. Hevert's recommended ROE of 10.75% less a downward 0.25% adjustment for an adjusted ROE of 10.50%.
- ENO would need to demonstrate an improvement in its service reliability to achieve rates through the operation of the Electric FRP to achieve the 10.75% ROE.
- Reliability performance would be measured by the System Average Interruption Frequency Index ("SAIFI"). If ENO's SAIFI improves to 1.24, then the Reliability Adjustment is zero, and the baseline ROE is unaffected. If

> ENO's SAIFI is more than 1.24, the Reliability Adjustment reduces the baseline ROE, and at a SAIFI of 1.40 or greater, the Reliability Adjustment reduces the baseline ROE by the maximum 25 basis points. If ENO's SAIFI is less than 1.24, the Reliability Adjustment increases the baseline ROE, and at a SAIFI of 1.05 or less, the Reliability Adjustment increases the baseline ROE by the maximum 25 basis points.

Q. Should the proposed RIM Plan be approved by the Council?

A. No. The proposed RIM should be rejected by the Council.

Q. Please explain why the RIM Plan should be rejected.

A. Given ENO's unacceptably poor electric system reliability over the last few years, the Council should not under any circumstances approve a regulatory incentive mechanism that provides the possibility of ENO earning a higher ROE for improved system reliability. Reliable service is part and parcel of every utility company's duty, including ENO, under the Regulatory Compact. In other words, in return for its monopoly status and the absence of competition, its power of eminent domain, and the opportunity to earn an almost guaranteed rate of return, the utility's service must be reliable.

Company witnesses admitted problems with ENO's system reliability. Mr. Thomas stated: "The Company is proposing the RIM Plan because the Company recognizes that its reliability performance has not met the expectations of ENO, its customers, and the Council." Thomas Revised Direct Testimony, page 23, lines 4 through 6. Likewise, Ms. Melonie Stewart testified: "While ENO's reliability performance metrics, which I discuss later, reflect reasonably reliable service during the early portion of the last five years, those performance metrics began to decline over the last couple of years." Steward Revised Direct Testimony, page 9, lines 19 through 22.

Q. Please summarize ENO's reliability performance metrics over the last few years.

A. Table 4 presents System Average Interruption Frequency Index ("SAIFI") and the System Average Interruption Duration Index ("SAIDI") statistics from Ms. Stewart's Revised Direct Testimony as well as ENO's earned ROEs that were provided in response to a discovery request from CCPUG. SAIDI is a measure of the length of time (duration) during a year that the average customer experienced an outage. SAIFI is a measure of how frequently customers were interrupted during the year. Table 4 below presents ENO's SAIDI and SAIFI values for the years 2013- 2017 and the 3-year average for the period 2013 - 2015.

TABLE 4

ENO SAIFI, SAIDI, And Earned ROE

	2013	2014	2015	2016	2017	Avg. 2013 - 2015
SAIFI	1.04	1.209	1.234	1.61	1.584	1.161
SAIDI	92	121.3	128	167.9	179.8	113.767
Earned ROE	5.64%	13.18%	12.56%	11.22%	10.52%	

Earned ROE Source: ENO response to CCPUG 1-13

For 2017, ENO's SAIDI was 179.8, which means that the average customer experienced 179.8 minutes of interrupted service during the year. For 2017, ENO's SAIFI was 1.584, meaning that the average customer was interrupted 1.584 times during 2017. Lower SAIDI and SAIFI number indicate interruptions of shorter duration and fewer interruptions, respectively.

Compare the 2017 SAIFI and SAIDI values with the 3-year average from 2013 – 2015. The average SAIFI during this period was 1.161 and the average SAIDI was 113.767. Table 4 clearly shows the significant deterioration of system reliability for New Orleans customers over the last two years.

Finally, it is useful to examine ENO's earned ROEs over the 5-year period covered in Table 4. ENO earned healthy, even excessive ROE's during this period, including 2016 and 2017 when service had markedly declined.

Q. How do you recommend that the Council move forward regarding ENO's accountability for improving service quality to the ratepayers of New Orleans?

A. First, ENO needs to demonstrate a track record of improved service quality as measured by significant improvements to its SAIFI and SAIDI numbers. The Company should in no way be rewarded with an excessive ROE for providing safe and reliable service that customers are entitled to expect from their regulated monopoly provider of electric service.

Second, the Council should set base level performance attainment levels for ENO in this proceeding. I recommend that these base levels be set at the 3-year average SAIFI and SAIDI levels for the 2013 – 2015 period shown in my Table 4. These base service levels would be 1.16 for SAIFI and 113.8 for SAIDI.

ENO should be required to report its yearly SAIFI and SAIDI levels with its yearly Electric FRP filings. If ENO falls below either of the base service level SAIFI or SAIDI values, the Council should consider a penalty of a 25 basis point reduction in the baseline ROE approved by the Council in this case. Mr. Thomas indicated in his Revised Direct Testimony that ENO's expected SAIFI for 2018 is 1.65. Therefore, I also recommend that the Council waive the 25 basis point penalty in the first year of the Electric FRP to allow ENO to continue making investments in its system to enable its service reliability to catch up with the 2013 – 2015 average SAIFI and SAIDI values.

Q. Is your service reliability proposal fair to both ENO and its ratepayers?

A. Yes. My service reliability proposal is a fair balancing of the interests between ENO and its ratepayers. It bears repeating that ENO should not be allowed to earn an extra incentive ROE for making investments in its system to improve its poor reliability. Instead, the Council should reaffirm ENO's obligation under the Regulatory Company I mentioned earlier to improve its service quality measures to levels that reflects the safe and reliable service to which New Orleans customers are entitled.

Q. Has ENO increased spending to improve reliability in recent years?

A. Yes. Ms. Stewart provided the additional spending undertaken by ENO to address system reliability in Figures 5 and 6 of her Direct Testimony. In 2017, for example, the Company increased its spending on routine reliability to $7.3 million from $3.363 million in 2016. Reliability Blitz and Storm Hardening spending were increased from $10.47 million in 2016 to $15.68 million in 2017. CCPUG does not oppose the costs included in the historic test year to improve ENO's electric system reliability.

However, CCPUG is vigorously opposed to any ROE bonuses for making system reliability improvements.

VI. ENO'S PROPOSED GRID MODERNIZATION AND GIRP RIDERS

Q. Please describe the Grid Modernization Rider.

A. The mechanics of the Grid Modernization Rider were provided in the Revised Direct Testimony of Mr. Gillam beginning of page 52. Mr. Gillam testified that Rider DGM was proposed by the Company "in order to recover the capital investment costs associated with Council-approved grid modernization projects not recovered in base rates from this proceeding …" Rider DGM functions in a similar fashion to Rider GIRP in that it would initially collect costs associated with these projects that are placed into service from January 1, 2020 through March 31, 2020 assuming the Council includes plant in service through December 31, 2019 in the electric base revenue requirement. Otherwise the Initial Service Period will depend on the plant in service date approved in this rate case. The proposed Rider DGM includes quarterly filings with quarterly rate redeterminations as additional plant in service is added to accumulated plant included in Rider DGM. Rider DGM also includes an annual reconciliation of the difference between the revenue requirement and actual revenue collected through the rider. The proposed term of Rider DGM would be until the next base rate case filing unless it is terminated by order of the Council.

Q. Please summarize the proposed GIRP Rider.

A. The mechanics of the GIRP are described by Mr. Phillip Gillam beginning on page 48 of his Revised Direct Testimony. Rider GIRP was proposed by the Company "in order to recover the costs associated with replacing aging infrastructure to improve the safety and reliability of the gas distribution system." Gillam Revised Direct Testimony, page 48, lines 8 through 9.

Rider GIRP would initially collect costs associated with these projects that are placed into service from January 1, 2020 through March 31, 2020 assuming the Council includes plant in service through December 31, 2019 in the gas base revenue requirement. Otherwise the Initial Service Period will depend on the plant in service date approved in this rate case. The proposed Rider GIRP includes quarterly filings with quarterly rate redeterminations as additional plant in service is added to accumulated plant included in Rider GIRP. Rider GIRP also includes an annual reconciliation of the difference between the revenue requirement and actual revenue collected through the rider. The proposed term of Rider DGM would be until the next base rate case filing unless it is terminated by order of the Council.

Q. What is the Company's policy justification for proposed Riders GIRP and DGM?

A. Mr. Thomas provided the policy reasons for approval of the GIRP and DGM riders beginning on page 53 of his Revised Direct Testimony. One of the main reasons cited by Mr. Thomas is: "A regulatory environment that provides for contemporaneous cost recovery of large investments outside of the traditional rate case provides the utility the necessary opportunity to earn its allowed return while continuing to invest in the system and mitigate operational risks." Mr. Thomas also noted the Council's prior approval of contemporaneous cost recovery for Ninemile 6 and Union Power Block 1 and testified that customers' "contemporaneous receipt of benefits further justified contemporaneous cost recovery in those instances." Mr. Thomas also asserted that absent the recovery afforded to the Company from the proposed riders "ENO's cash flow will deteriorate and capital will be lost and will not be available for reinvestment in investment in improvements in the Company's infrastructure at a time when cash flow and capital is critical to the Company."

Q. Should the Council approve ENO's proposed Riders DGM and GIRP?

A. No. The Council should reject ENO's proposed Riders DGM and GIRP.

Q. Please explain why the Council should reject these proposed riders.

A. The primary reason for rejecting these riders is that they overlap with the proposed EFRP and GFRP. There is no reason to carve out certain electric and gas plant costs and include them in separate riders when these costs can be included in and recovered through the EFRP and GFRP along with all other and in the same manner as all other prudently incurred costs. These FRPs will provide ENO the opportunity to collect its increased costs and investments in plant in service, including grid modernization and gas infrastructure replacement and improvements, using an historic 12-month period. The FRP approach is similar to a regular base rate case that employs an historical test year, but will eliminate much of the regulatory lag and the expenses associated with filing a full base rate proceeding. The Electric and Gas FRP will provide ENO an enhanced opportunity for increased cash flow and return on new plant in service to serve New Orleans customers. It will also provide for a reasonable review process for the Council to ensure just and reasonable rates.

ENO's proposed Riders GIRP and DGM would carve out certain electric and gas plant costs and provide accelerated and increased recovery through the use of a forecast test year instead of including these costs in the EFRP and GFRP on a historic test year basis. It is unnecessary and inequitable to provide these forms of recovery when the EFRP and GFRP are specifically designed to provide timely rate relief to the Company after rates are reset in this proceeding. It would be a far better balancing of the interests of ENO and its customers to have these proposed eligible investments collected through the FRPs. Note that the FRPs would include the following:

- Seventy-five day review period.
- Three-year term.
- Specified dispute resolution procedure.

These terms provide additional protections to ratepayers and additional assurance to the Council and intervenors that costs being passed through the FRPs are reasonable and prudently incurred. The proposed Riders GIRP and DGM do not contain these provisions.

Q. On page 55, lines 3 through 7 of his Revised Direct Testimony Mr. Thomas testified that if "customers receive benefits contemporaneous with the placing of assets in service, it is reasonable and equitable for the Council to permit contemporaneous recovery of the costs incurred to provide those benefits." Should the Council accept this statement as a sound basis for ratemaking?

A. No. Mr. Thomas' statement suggests a process that is neither reasonable nor equitable. I believe that Mr. Thomas' reasoning would result in the elimination of regulatory lag and any sort of review of the prudence and reasonableness of costs being collected from New Orleans customers. Taken to its logical end, contemporaneous cost recovery would eliminate rate cases as well as Council and intervenor review of a utility's revenue requirement. Indeed, it would eliminate a utility company's burden of proving that its costs are just and reasonable. I strongly recommend that the Council reject Mr. Thomas' statement in support of contemporaneous cost recovery.

Q. Does this complete your Direct Testimony?

A. Yes.

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

REVISED APPLICATION OF ENTERGY	)	
NEW ORLEANS, LLC FOR A CHANGE	)	
IN ELECTRIC AND GAS RATES	)	DOCKET NO. UD-18-07
PURSUANT TO COUNCIL RESOLUTIONS	)	
R-15-194 AND R-17-504 AND	)	
FOR RELATED RELIEF	)	

EXHIBITS

OF

RICHARD A. BAUDINO

ON BEHALF OF THE

CRESCENT CITY POWER USERS' GROUP

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

FEBRUARY 2019

AFFIDAVIT

STATE OF GEORGIA)

COUNTY OF FULTON)

RICHARD A. BAUDINO, being duly sworn, deposes and states: that the attached is his sworn testimony and that the statements contained are true and correct to the best of his knowledge, information and belief.

Richard A. Baudino

Richard A. Baudino

Sworn to and subscribed before me on this
1st day of February 2019.

Jessica K. In

Notary Public

JESSICA K INMAN
MY COMMISSION EXPIRES
NOTARY
PUBLIC
JULY 31, 2019
CHEROKEE COUNTY, GEORGIA

RESUME OF RICHARD A. BAUDINO

EDUCATION

New Mexico State University, M.A.
Major in Economics
Minor in Statistics

New Mexico State University, B.A.
Economics
English

Thirty-six years of experience in utility ratemaking and the application of principles of economics to the regulation of electric, gas, and water utilities. Broad based experience in revenue requirement analysis, cost of capital, rate of return, cost and revenue allocation, and rate design.

REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Cost of Capital for Electric, Gas and Water Companies
Electric, Gas, and Water Utility Cost Allocation and Rate Design
Revenue Requirements
Gas and Electric industry restructuring and competition
Fuel cost auditing
Ratemaking Treatment of Generating Plant Sale/Leasebacks

RESUME OF RICHARD A. BAUDINO

EXPERIENCE

1989 to Present: **Kennedy and Associates: Director of Consulting, Consultant** - Responsible for consulting assignments in revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, electric and gas industry restructuring/competition and water utility issues.

1982 to 1989: **New Mexico Public Service Commission Staff: Utility Economist** - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

CLIENTS SERVED

Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

Other Clients and Client Groups

Ad Hoc Committee for a Competitive Electric Supply System
Air Products and Chemicals, Inc.
Arkansas Electric Energy Consumers
Arkansas Gas Consumers
AK Steel
Armco Steel Company, L.P.
Aqua Large Users Group
Assn. of Business Advocating Tariff Equity
Atmos Cities Steering Committee
Canadian Federation of Independent Businesses
CF&I Steel, L.P.
Cities of Midland, McAllen, and Colorado City
Cities Served by Texas-New Mexico Power Co.
Climax Molybdenum Company
Connecticut Industrial Energy Consumers
Crescent City Power Users Group
Cripple Creek & Victor Gold Mining Co.
General Electric Company
Holcim (U.S.) Inc.
IBM Corporation
Industrial Energy Consumers
Kentucky Industrial Utility Consumers
Kentucky Office of the Attorney General
Lexington-Fayette Urban County Government
Large Electric Consumers Organization
Newport Steel
Northwest Arkansas Gas Consumers
Maryland Energy Group
Occidental Chemical
PSI Industrial Group
Large Power Intervenors (Minnesota)
Tyson Foods
West Virginia Energy Users Group
The Commercial Group
Wisconsin Industrial Energy Group
South Florida Hospital and Health Care Assn.
PP&L Industrial Customer Alliance
Philadelphia Area Industrial Energy Users Gp.
Philadelphia Large Users Group
West Penn Power Intervenors
Duquesne Industrial Intervenors
Met-Ed Industrial Users Gp.
Penelec Industrial Customer Alliance
Penn Power Users Group
Columbia Industrial Intervenors
U.S. Steel & Univ. of Pittsburg Medical Ctr.
Multiple Intervenors
Maine Office of Public Advocate
Missouri Office of Public Counsel
University of Massachusetts - Amherst
WCF Hospital Utility Alliance
West Travis County Public Utility Agency
Steering Committee of Cities Served by Oncor
Utah Office of Consumer Services
Healthcare Council of the National Capital Area
Vermont Department of Public Service

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2019

Date	Case	Jurisdict.	Party	Utility	Subject
10/83	1803, 1817	NM	New Mexico Public Service Commission	Southwestern Electric Coop.	Rate design.
11/84	1833	NM	New Mexico Public Service Commission Palo Verde	El Paso Electric Co.	Service contract approval, rate design, performance standards for nuclear generating system
1983	1835	NM	New Mexico Public Service Commission	Public Service Co. of NM	Rate design.
1984	1848	NM	New Mexico Public Service Commission	Sangre de Cristo Water Co.	Rate design.
02/85	1906	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
09/85	1907	NM	New Mexico Public Service Commission	Jornada Water Co.	Rate of return.
11/85	1957	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
04/86	2009	NM	New Mexico Public Service Commission	El Paso Electric Co.	Phase-in plan, treatment of sale/leaseback expense.
06/86	2032	NM	New Mexico Public Service Commission	El Paso Electric Co.	Sale/leaseback approval.
09/86	2033	NM	New Mexico Public Service Commission	El Paso Electric Co.	Order to show cause, PVNGS audit.
02/87	2074	NM	New Mexico Public Service Commission	El Paso Electric Co.	Diversification.
05/87	2089	NM	New Mexico Public Service Commission	El Paso Electric Co.	Fuel factor adjustment.
08/87	2092	NM	New Mexico Public Service Commission	El Paso Electric Co.	Rate design.
10/87	2146	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Financial effects of restructuring, reorganization.
07/88	2162	NM	New Mexico Public Service Commission	El Paso Electric Co.	Revenue requirements, rate design, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of February 2019**

Date	Case	Jurisdict.	Party	Utility	Subject
01/89	2194	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Economic development.
1/89	2253	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Financing.
08/89	2259	NM	New Mexico Public Service Commission	Homestead Water Co.	Rate of return, rate design.
10/89	2262	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Rate of return.
09/89	2269	NM	New Mexico Public Service Commission	Ruidoso Natural Gas Co.	Rate of return, expense from affiliated interest.
12/89	89-208-TF	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Rider M-33.
01/90	U-17282	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
09/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Cost of equity.
09/90	90-004-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Cost of equity, transportation rate.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
04/91	91-037-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Transportation rates.
12/91	91-410-EL-AIR	OH	Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Cost of equity.
05/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost of equity, rate of return.
09/92	92-032-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost of equity, rate of return, cost-of-service.
09/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost of equity, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of February 2019**

Date	Case	Jurisdict.	Party	Utility	Subject
09/92	92-009-U	AR	Tyson Foods	General Waterworks	Cost allocation, rate design.
01/93	92-346	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Cost allocation.
01/93	39498	IN	PSI Industrial Group	PSI Energy	Refund allocation.
01/93	U-10105	MI	Association of Businesses Advocating Tariff Equality (ABATE)	Michigan Consolidated Gas Co.	Return on equity.
04/93	92-1464-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Return on equity.
09/93	93-189-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Transportation service terms and conditions.
09/93	93-081-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost-of-service, transportation rates, rate supplements; return on equity; revenue requirements.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Historical reviews; evaluation of economic studies.
03/94	10320	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Trimble County CWIP revenue refund.
4/94	E-015/ GR-94-001	MN	Large Power Intervenors	Minnesota Power Co.	Evaluation of the cost of equity, capital structure, and rate of return.
5/94	R-00942993	PA	PG&W Industrial Intervenors	Pennsylvania Gas & Water Co.	Analysis of recovery of transition costs.
5/94	R-00943001	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania charge proposals.	Evaluation of cost allocation, rate design, rate plan, and carrying
7/94	R-00942986	PA	Armco, Inc., West Penn Power Industrial Intervenors	West Penn Power Co.	Return on equity and rate of return.
7/94	94-0035-E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Return on equity and rate of return.

Expert Testimony Appearances
of
Richard A. Baudino
As of February 2019

Date	Case	Jurisdict.	Party	Utility	Subject
8/94	8652	MD	Westvaco Corp. Co.	Potomac Edison	Return on equity and rate of return.
9/94	930357-C	AR	West Central Arkansas Gas Consumers	Arkansas Oklahoma Gas Corp.	Evaluation of transportation service.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Return on equity.
9/94	8629	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Transition costs.
11/94	94-175-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Cost-of-service, rate design, rate of return.
3/95	RP94-343-000	FERC	Arkansas Gas Consumers	NorAm Gas Transmission	Rate of return.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Return on equity.
6/95	U-10755	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Revenue requirements.
7/95	8697	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost allocation and rate design.
8/95	95-254-TF U-2811	AR	Tyson Foods, Inc.	Southwest Arkansas Electric Cooperative	Refund allocation.
10/95	ER95-1042 -000	FERC	Louisiana Public Service Commission	Systems Energy Resources, Inc.	Return on Equity.
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Investigation into Electric Power Competition.
5/96	96-030-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Revenue requirements, rate of return and cost of service.
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.,Potomac Electric Power Co. and Constellation Energy Corp.	Return on Equity.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Return on equity, rate of return.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.

**Expert Testimony Appearances
of
Richard A. Baudino
As of February 2019**

Date	Case	Jurisdict.	Party	Utility	Subject
1/97	RP96-199-000	FERC	The Industrial Gas Users Conference	Mississippi River Transmission Corp.	Revenue requirements, rate of return and cost of service.
3/97	96-420-U	AR	West Central Arkansas Gas Corp.	Arkansas Oklahoma Gas Corp.	Revenue requirements, rate of return, cost of service and rate design.
7/97	U-11220	MI	Association of Business Advocating Tariff Equity	Michigan Gas Co. and Southeastern Michigan Gas Co.	Transportation Balancing Provisions.
7/97	R-00973944	PA	Pennsylvania American Water Large Users Group	Pennsylvania-American Water Co.	Rate of return, cost of service, revenue requirements.
3/98	8390-U	GA	Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc.	Atlanta Gas Light	Rate of return, restructuring issues, unbundling, rate design issues.
7/98	R-00984280	PA	PG Energy, Inc. Intervenors	PGE Industrial	Cost allocation.
8/98	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements.
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Return on equity, rate of return.
10/98	U-23327	LA	Louisiana Public Service Commission	SWEPCO, CSW and AEP	Analysis of proposed merger.
12/98	98-577	ME	Maine Office of the Public Advocate	Maine Public Service Co.	Return on equity, rate of return.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity, rate of return.
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co	Return on equity.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Return on equity.
4/99	R-984554	PA	T. W. Phillips Users Group	T. W. Phillips Gas and Oil Co.	Allocation of purchased gas costs.
6/99	R-0099462	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Balancing charges.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States,Inc.	Cost of debt.

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10/99	R-00994782	PA	Peoples Industrial Intervenors	Peoples Natural Gas Co.	Restructuring issues.
10/99	R-00994781	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Restructuring, balancing charges, rate flexing, alternate fuel.
01/00	R-00994786	PA	UGI Industrial Intervenors	UGI Utilities, Inc.	Universal service costs, balancing, penalty charges, capacity Assignment.
01/00	8829	MD	Maryland Industrial Gr.	Baltimore Gas & Electric Co.	Revenue requirements, cost allocation, rate design.
02/00	R-00994788	PA	Penn Fuel Transportation	PFG Gas, Inc., and	Tariff charges, balancing provisions.
05/00	U-17735	LA	Louisiana Public Service Comm.	Louisiana Electric Cooperative	Rate restructuring.
07/00	2000-080	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric Co.	Cost allocation.
07/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket E)	LA	Louisiana Public Service Commission	Southwestern Electric Power Co.	Stranded cost analysis.
09/00	R-00005654	PA	Philadelphia Industrial And Commercial Gas Users Group.	Philadelphia Gas Works	Interim relief analysis.
10/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring, Business Separation Plan.
11/00	R-00005277 (Rebuttal)	PA	Penn Fuel Transportation Customers	PFG Gas, Inc. and North Penn Gas Co.	Cost allocation issues.
12/00	U-24993	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/01	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Stranded cost analysis.
04/01	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring issues.
04/01	R-00006042	PA	Philadelphia Industrial and Commercial Gas Users Group	Philadelphia Gas Works	Revenue requirements, cost allocation and tariff issues.

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11/01	U-25687	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/02	14311-U	GA	Georgia Public Service Commission	Atlanta Gas Light	Capital structure.
08/02	2002-00145	KY	Kentucky Industrial Utility Customers	Columbia Gas of Kentucky	Revenue requirements.
09/02	M-00021612	PA	Philadelphia Industrial And Commercial Gas Users Group	Philadelphia Gas Works	Transportation rates, terms, and conditions.
01/03	2002-00169	KY	Kentucky Industrial Utility Customers	Kentucky Power	Return on equity.
02/03	02S-594E	CO	Cripple Creek & Victor Gold Mining Company	Aquila Networks – WPC	Return on equity.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
10/03	CV020495AB	GA	The Landings Assn., Inc.	Utilities Inc. of GA	Revenue requirement & overcharge refund
03/04	2003-00433	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric	Return on equity, Cost allocation & rate design
03/04	2003-00434	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Return on equity
4/04	04S-035E	CO	Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co.	Aquila Networks – WPC	Return on equity.
9/04	U-23327, Subdocket B	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Fuel cost review
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on Equity
06/05	050045-EI	FL	South Florida Hospital and HeallthCare Assoc.	Florida Power & Light Co.	Return on equity
08/05	9036	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirement, cost allocation, rate design, Tariff issues.
01/06	2005-0034	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity.

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03/06	05-1278-E-PC-PW-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Return on equity.
04/06	U-25116 Commission	LA	Louisiana Public Service	Entergy Louisiana, LLC	Transmission Issues
07/06	U-23327 Commission	LA	Louisiana Public Service	Southwestern Electric Power Company	Return on equity, Service quality
08/06	ER-2006-0314	MO	Missouri Office of the Public Counsel	Kansas City Power & Light Co.	Return on equity, Weighted cost of capital
08/06	06S-234EG	CO	CF&I Steel, L.P. & Climax Molybdenum	Public Service Company of Colorado	Return on equity, Weighted cost of capital
01/07	06-0960-E-42T Users Group	WV	West Virginia Energy	Monongahela Power & Potomac Edison	Return on Equity
01/07	43112	AK	AK Steel, Inc.	Vectren South, Inc.	Cost allocation, rate design
05/07	2006-661	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric	Return on equity, weighted cost of capital.
09/07	07-07-01	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power	Return on equity, weighted cost of capital
10/07	05-UR-103	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Return on equity
11/07	29797	LA	Louisiana Public Service Commission	Cleco Power :LLC & Southwestern Electric Power	Lignite Pricing, support of settlement
01/08	07-551-EL-AIR	OH	Ohio Energy Group	Ohio Edison, Cleveland Electric, Toledo Edison	Return on equity
03/08	07-0585, 07-0585, 07-0587, 07-0588, 07-0589, 07-0590, (consol.)	IL	The Commercial Group	Ameren	Cost allocation, rate design
04/08	07-0566	IL	The Commercial Group	Commonwealth Edison	Cost allocation, rate design
06/08	R-2008-2011621	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Cost and revenue allocation, Tariff issues
07/08	R-2008-2028394	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy	Cost and revenue allocation, Tariff issues

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07/08	R-2008-2039634	PA	PPL Gas Large Users Group	PPL Gas	Retainage, LUFG Pct.
08/08	6680-UR-116	WI	Wisconsin Industrial Energy Group	Wisconsin P&L	Cost of Equity
08/08	6690-UR-119	WI	Wisconsin Industrial Energy Group	Wisconsin PS	Cost of Equity
09/08	ER-2008-0318	MO	The Commercial Group	AmerenUE	Cost and revenue allocation
10/08	R-2008-2029325	PA	U.S. Steel & Univ. of Pittsburgh Med. Ctr.	Equitable Gas Co.	Cost and revenue allocation
10/08	08-G-0609	NY	Multiple Intervenors	Niagara Mohawk Power	Cost and Revenue allocation
12/08	27800-U	GA	Georgia Public Service Commission	Georgia Power Company	CWIP/AFUDC issues, Review financial projections
03/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Capital Structure
04/09	E002/GR-08-1065	MN	The Commercial Group	Northern States Power	Cost and revenue allocation and rate design
05/09	08-0532	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation
07/09	080677-EI	FL	South Florida Hospital and Health Care Association	Florida Power & Light	Cost of equity, capital structure, Cost of short-term debt
07/09	U-30975	LA	Louisiana Public Service Commission	Cleco LLC, Southwestern Public Service Co.	Lignite mine purchase
10/09	4220-UR-116	WI	Wisconsin Industrial Energy Group	Northern States Power	Class cost of service, rate design
10/09	M-2009-2123945	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Smart Meter Plan cost allocation
10/09	M-2009-2123944	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Company	Smart Meter Plan cost allocation
10/09	M-2009-2123951	PA	West Penn Power Industrial Intervenors	West Penn Power	Smart Meter Plan cost allocation
11/09	M-2009-2123948	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Smart Meter Plan cost allocation
11/09	M-2009-2123950	PA	Met-Ed Industrial Users Group Penelec Industrial Customer Alliance, Penn Power Users Group	Metropolitan Edison, Pennsylvania Electric Co., Pennsylvania Power Co.	Smart Meter Plan cost allocation

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Date	Case	Jurisdict.	Party	Utility	Subject
03/10	09-1352-E-42T	WV	West Virginia Energy Users Group	Monongahela Power	Return on equity, rate of return Potomac Edison
03/10	E015/GR-09-1151	MN	Large Power Intervenors	Minnesota Power	Return on equity, rate of return
04/10	2009-00459	KY	Kentucky Industrial Utility Consumers	Kentucky Power	Return on equity
04/10	2009-00548 2009-00549	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
05/10	10-0261-E-GI	WV	West Virginia Energy Users Group	Appalachian Power Co./ Wheeling Power Co.	EE/DR Cost Recovery, Allocation, & Rate Design
05/10	R-2009-2149262	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Class cost of service & cost allocation
06/10	2010-00036	KY	Lexington-Fayette Urban County Government	Kentucky American Water Company	Return on equity, rate of return, revenue requirements
06/10	R-2010-2161694	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Rate design, cost allocation
07/10	R-2010-2161575	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Return on equity
07/10	R-2010-2161592	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Cost and revenue allocation
07/10	9230	MD	Maryland Energy Group	Baltimore Gas and Electric	Electric and gas cost and revenue allocation; return on equity
09/10	10-70	MA	University of Massachusetts-Amherst	Western Massachusetts Electric Co.	Cost allocation and rate design
10/10	R-2010-2179522	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Cost and revenue allocation, rate design
11/10	P-2010-2158084	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Transmission rate design
11/10	10-0699-E-42T	WV	West Virginia Energy Users Group	Appalachian Power Co. & Wheeling Power Co.	Return on equity, rate of Return
11/10	10-0467	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation and rate design
04/11	R-2010-2214415	PA	Central Pen Gas Large Users Group	UGI Central Penn Gas, Inc.	Tariff issues, revenue allocation
07/11	R-2011-2239263	PA	Philadelphia Area Energy Users Group	PECO Energy	Retainage rate

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08/11	R-2011-2232243	PA	AK Steel	Pennsylvania-American Water Company	Rate Design
08/11	11AL-151G	CO	Climax Molybdenum	PS of Colorado	Cost allocation
09/11	11-G-0280	NY	Multiple Intervenors	Corning Natural Gas Co.	Cost and revenue allocation
10/11	4220-UR-117	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
02/12	11AL-947E	CO	Climax Molybdenum, CF&I Steel	Public Service Company of Colorado	Return on equity, weighted cost of capital
07/12	120015-EI	FL	South Florida Hospitals and Health Care Association	Florida Power and Light Co,	Return on equity, weighted cost of capital
07/12	12-0613-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal for Century Aluminum
07/12	R-2012-2290597	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities Corp.	Cost allocation
09/12	05-UR-106	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Class cost of service, cost and revenue allocation, rate design
09/12	2012-00221 2012-00222	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
10/12	9299	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design Cost of equity, weighted cost of capital
10/12	4220-UR-118	WI	Wisconsin Industrial Energy Group	Northern States Power Company	Class cost of service, cost and revenue allocation, rate design
10/12	473-13-0199	TX	Steering Committee of Cities Served by Oncor	Cross Texas Transmission, LLC	Return on equity, capital structure
01/13	R-2012-2321748 et al.	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation
02/13	12AL-1052E	CO	Cripple Creek & Victor Gold Mining, Holcim (US) Inc.	Black Hills/Colorado Electric Utility Company	Cost and revenue allocations
06/13	8009	VT	IBM Corporation	Vermont Gas Systems	Cost and revenue allocation, rate design
07/13	130040-EI	FL	WCF Hospital Utility Alliance	Tampa Electric Co.	Return on equity, rate of return
08/13	9326	MD	Maryland Energy Group	Baltimore Gas and Electric	Cost and revenue allocation, rate design, special rider

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08/13	P-2012-2325034	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities, Corp.	Distribution System Improvement Charge
09/13	4220-UR-119	WI	Wisconsin Industrial Energy Group	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
11/13	13-1325-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal, Felman Production
06/14	R-2014-2406274	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation, rate design
08/14	05-UR-107	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
10/14	ER13-1508 et al.	FERC	Louisiana Public Service Comm.	Entergy Services, Inc.	Return on equity
11/14	14AL-0660E	CO	Climax Molybdenum Co. and CFI Steel, LP	Public Service Co. of Colorado	Return on equity, weighted cost of capital
11/14	R-2014-2428742	PA	AK Steel	West Penn Power Company	Cost and revenue allocation
12/14	42866	TX	West Travis Co. Public Utility Agency	Travis County Municipal Utility District No. 12	Response to complain of monopoly power
3/15	2014-00371 2014-00372	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
3/15	2014-00396	KY	Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity, weighted cost of capital
6/15	15-0003-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Cost and revenue allocation, Infrastructure Replacement Program
9/15	15-0676-W-42T	WV	West Virginia Energy Users Gp.	West Virginia-American Water Company	Appropriate test year, Historical vs. Future
9/15	15-1256-G-390P	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Rate design for Infrastructure Replacement and Expansion Program
10/15	4220-UR-121	WI	Wisconsin Industrial Energy Gp.	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
12/15	15-1600-G-390P	WV	West Virginia Energy Users Gp.	Dominion Hope	Rate design and allocation for Pipeline Replacement & Expansion Prog.
12/15	45188	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring-fence protections for cost of capital

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2/16	9406	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design, proposed Rider 5
3/16	39971	GA	GA Public Service Comm. Staff	Southern Company / AGL Resources	Credit quality and service quality issues
04/16	2015-00343	KY	Kentucky Office of the Attorney General	Atmos Energy	Cost of equity, cost of short-term debt, capital structure
05/16	16-G-0058 16-G-0059	NY	City of New York	Brooklyn Union Gas Co., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, service quality issues
06/16	16-0073-E-C	WV	Constellium Rolled Products Ravenswood, LLC	Appalachian Power Co.	Complaint; security deposit
07/16	9418	MD	Healthcare Council of the National Capital Area	Potomac Electric Power Co.	Cost of equity, cost of service, Cost and revenue allocation
07/16	160021-EI	FL	South Florida Hospital and Health Care Association	Florida Power and Light Co.	Return on equity, cost of debt, capital structure
07/16	16-057-01	UT	Utah Office of Consumer Svcs.	Dominion Resources, Questar Gas Co.	Credit quality and service quality issues
08/16	8710	VT	Vermont Dept. of Public Service	Vermont Gas Systems	Return on equity, cost of debt, cost of capital
08/16	R-2016-2537359	PA	AK Steel Corp.	West Penn Power Co.	Cost and revenue allocation
09/16	2016-00162	KY	Kentucky Office of the Attorney General	Columbia Gas of Ky.	Return on equity, cost of short-term debt
09/16	16-0550-W-P	WV	West Va. Energy Users Gp.	West Va. American Water Co.	Infrastructure Replacement Program Surcharge
01/17	46238	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring fencing and other conditions for acquisition, service quality and reliability
02/17	45414	TX	Cities of Midland, McAllen, and Colorado City	Sharyland Utilities, LP and Sharyland Dist. and Transmission Services, LLC	Return on equity
02/17	2016-00370 2016-00371	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
03/17	10580	TX	Atmos Cities Steering Committee	Atmos Pipeline Texas	Return on equity, capital structure, weighted cost of capital
03/17	R-3867-2013	Quebec, Canada	Canadian Federation of Independent Businesses	Gaz Metro	Marginal Cost of Service Study

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05/17	R-2017-2586783	PA	Philadelphia Industrial and Commercial Gas Users Gp.	Philadelphia Gas Works	Cost and revenue allocation, rate design, Interruptible tariffs
08/17	R-2017-2595853	PA	AK Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design
8/17	17-3112-INV	VT	Vt. Dept. of Pubic Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
9/17	4220-UR-123	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
10/17	2017-00179	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity, cost of short-term debt
12/17	2017-00321	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
1/18	2017-00349	KY	Office of the Attorney General	Atmos Energy	Return on equity, cost of debt, weighted cost of capital
5/18	Fiscal Years 2019-2021 Rates	PA	Philadelphia Large Users Group	Philadelphia Water Department	Cost and revenue allocation
8/18	18-0974-TF	VT	Vt. Dept. of Public Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
8/18	48401	TX	Cities Served by Texas-New Mexico Power Company	Texas-New Mexico Power Co.	Return on equity, capital structure
8/18	18-05-16	CT	Connecticut Industrial Energy Consumers	Connecticut Natural Gas Co.	Cost and revenue allocation
9/18	9484	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design
9/18	2017-370-E	SC	South Carolina Office of Regulatory Staff	South Carolina Electric & Gas, Dominion Resources, SCANA	Return on equity, service quality standards, credit quality conditions
10/18	18-1115-G-390P	WV	West Va. Energy Users Group	Mountaineer Gas Company	Customer protections for Infrastructure Replacement and Expansion Program
12/18	R-2018-3003558, R-2018-3003561	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation
02/19	UD-18-07	CCNO	Crescent City Power Users' Gp.	Entergy New Orleans, LLC	Return on equity, Reliability Incentive Mechanism, other proposed riders

ENTERGY NEW ORLEANS
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
ALLETE	High Price ($)	80.780	79.420	77.330	78.600	81.590	82.820
	Low Price ($)	75.850	74.470	73.390	73.490	72.750	72.420
	Avg. Price ($)	78.315	76.945	75.360	76.045	77.170	77.620
	Dividend ($)	0.560	0.560	0.560	0.560	0.560	0.560
	Mo. Avg. Div.	2.86%	2.91%	2.97%	2.95%	2.90%	2.89%
	6 mos. Avg.	2.91%					
Alliant Energy	High Price ($)	43.950	43.840	44.180	44.700	46.050	46.580
	Low Price ($)	41.410	41.390	41.730	42.010	42.220	40.680
	Avg. Price ($)	42.680	42.615	42.955	43.355	44.135	43.630
	Dividend ($)	0.335	0.335	0.335	0.335	0.335	0.335
	Mo. Avg. Div.	3.14%	3.14%	3.12%	3.09%	3.04%	3.07%
	6 mos. Avg.	3.10%					
Ameren Corp.	High Price ($)	62.410	65.090	66.110	67.230	70.680	70.950
	Low Price ($)	59.150	60.780	62.060	62.700	62.320	62.510
	Avg. Price ($)	60.780	62.935	64.085	64.965	66.500	66.730
	Dividend ($)	0.458	0.458	0.458	0.458	0.458	0.475
	Mo. Avg. Div.	3.01%	2.91%	2.86%	2.82%	2.75%	2.85%
	6 mos. Avg.	2.87%					
American Electric Power	High Price ($)	71.890	72.910	73.740	76.050	78.470	81.050
	Low Price ($)	68.130	69.320	68.920	69.310	72.070	72.530
	Avg. Price ($)	70.010	71.115	71.330	72.680	75.270	76.790
	Dividend ($)	0.620	0.620	0.620	0.620	0.670	0.670
	Mo. Avg. Div.	3.54%	3.49%	3.48%	3.41%	3.56%	3.49%
	6 mos. Avg.	3.49%					
Avangrid, Inc.	High Price ($)	54.180	51.210	50.670	49.550	51.110	53.470
	Low Price ($)	48.750	49.000	46.960	45.810	46.920	48.040
	Avg. Price ($)	51.465	50.105	48.815	47.680	49.015	50.755
	Dividend ($)	0.432	0.432	0.440	0.440	0.440	0.440
	Mo. Avg. Div.	3.36%	3.45%	3.61%	3.69%	3.59%	3.47%
	6 mos. Avg.	3.53%					
Black Hills Corp.	High Price ($)	64.140	61.460	59.980	63.090	66.240	68.230
	Low Price ($)	59.010	58.620	56.420	57.070	59.330	59.490
	Avg. Price ($)	61.575	60.040	58.200	60.080	62.785	63.860
	Dividend ($)	0.475	0.475	0.475	0.475	0.505	0.505
	Mo. Avg. Div.	3.09%	3.16%	3.26%	3.16%	3.22%	3.16%
	6 mos. Avg.	3.18%					

ENTERGY NEW ORLEANS
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
CMS Energy Corp.	High Price ($)	48.680	50.120	50.810	51.910	52.250	53.820
	Low Price ($)	46.250	47.180	47.700	48.130	47.920	47.630
	Avg. Price ($)	47.465	48.650	49.255	50.020	50.085	50.725
	Dividend ($)	0.358	0.358	0.358	0.358	0.358	0.358
	Mo. Avg. Div.	3.01%	2.94%	2.90%	2.86%	2.86%	2.82%
	6 mos. Avg.	2.90%					
DTE Energy Co.	High Price ($)	109.660	114.120	114.310	118.220	121.000	120.760
	Low Price ($)	101.880	106.270	106.410	107.390	110.410	107.220
	Avg. Price ($)	105.770	110.195	110.360	112.805	115.705	113.990
	Dividend ($)	0.883	0.883	0.883	0.883	0.883	0.945
	Mo. Avg. Div.	3.34%	3.20%	3.20%	3.13%	3.05%	3.32%
	6 mos. Avg.	3.21%					
Duke Energy Corp.	High Price ($)	81.750	82.720	83.770	85.080	89.230	91.350
	Low Price ($)	77.900	79.510	78.000	78.520	80.890	82.770
	Avg. Price ($)	79.825	81.115	80.885	81.800	85.060	87.060
	Dividend ($)	0.890	0.928	0.928	0.928	0.928	0.928
	Mo. Avg. Div.	4.46%	4.58%	4.59%	4.54%	4.36%	4.26%
	6 mos. Avg.	4.47%					
El Paso Electric Co.	High Price ($)	62.700	64.350	63.050	60.220	59.270	57.330
	Low Price ($)	58.250	60.950	56.880	55.950	54.450	48.380
	Avg. Price ($)	60.475	62.650	59.965	58.085	56.860	52.855
	Dividend ($)	0.360	0.360	0.360	0.360	0.360	0.360
	Mo. Avg. Div.	2.38%	2.30%	2.40%	2.48%	2.53%	2.72%
	6 mos. Avg.	2.47%					
Hawaiian Electric Ind.	High Price ($)	36.200	36.030	36.330	37.690	38.380	39.350
	Low Price ($)	34.140	34.160	34.780	34.880	36.580	35.150
	Avg. Price ($)	35.170	35.095	35.555	36.285	37.480	37.250
	Dividend ($)	0.310	0.310	0.310	0.310	0.310	0.310
	Mo. Avg. Div.	3.53%	3.53%	3.49%	3.42%	3.31%	3.33%
	6 mos. Avg.	3.43%					
IDACORP	High Price ($)	95.350	99.280	101.490	101.890	101.410	102.440
	Low Price ($)	90.920	92.030	96.810	92.940	93.060	89.910
	Avg. Price ($)	93.135	95.655	99.150	97.415	97.235	96.175
	Dividend ($)	0.590	0.590	0.590	0.590	0.630	0.630
	Mo. Avg. Div.	2.53%	2.47%	2.38%	2.42%	2.59%	2.62%
	6 mos. Avg.	2.50%					

ENTERGY NEW ORLEANS
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
NextEra Energy, Inc.	High Price ($)	171.500	175.650	174.810	176.830	183.650	184.200
	Low Price ($)	163.510	165.450	164.250	166.190	166.750	164.780
	Avg. Price ($)	167.505	170.550	169.530	171.510	175.200	174.490
	Dividend ($)	1.110	1.110	1.110	1.110	1.110	1.110
	Mo. Avg. Div.	2.65%	2.60%	2.62%	2.59%	2.53%	2.54%
	6 mos. Avg.	2.59%					
Northwestern Corp.	High Price ($)	59.920	62.160	60.970	62.190	64.760	65.740
	Low Price ($)	55.980	58.030	56.930	56.230	58.330	57.280
	Avg. Price ($)	57.950	60.095	58.950	59.210	61.545	61.510
	Dividend ($)	0.550	0.550	0.550	0.550	0.550	0.550
	Mo. Avg. Div.	3.80%	3.66%	3.73%	3.72%	3.57%	3.58%
	6 mos. Avg.	3.68%					
OGE Energy Corp.	High Price ($)	36.590	37.690	37.740	38.130	39.970	41.800
	Low Price ($)	34.130	35.580	35.290	35.910	35.550	37.670
	Avg. Price ($)	35.360	36.635	36.515	37.020	37.760	39.735
	Dividend ($)	0.333	0.333	0.333	0.365	0.365	0.365
	Mo. Avg. Div.	3.76%	3.63%	3.64%	3.94%	3.87%	3.67%
	6 mos. Avg.	3.75%					
Otter Tail Corp.	High Price ($)	49.750	49.750	49.350	48.740	49.140	51.880
	Low Price ($)	47.000	47.350	46.850	44.820	44.220	46.260
	Avg. Price ($)	48.375	48.550	48.100	46.780	46.680	49.070
	Dividend ($)	0.335	0.335	0.335	0.335	0.335	0.335
	Mo. Avg. Div.	2.77%	2.76%	2.79%	2.86%	2.87%	2.73%
	6 mos. Avg.	2.80%					
Pinnacle West Capital	High Price ($)	83.050	82.830	81.120	86.710	90.060	92.640
	Low Price ($)	77.560	78.270	77.190	78.110	81.510	83.140
	Avg. Price ($)	80.305	80.550	79.155	82.410	85.785	87.890
	Dividend ($)	0.695	0.695	0.695	0.738	0.738	0.738
	Mo. Avg. Div.	3.46%	3.45%	3.51%	3.58%	3.44%	3.36%
	6 mos. Avg.	3.47%					
PNM Resources	High Price ($)	39.900	40.950	40.750	40.590	43.290	45.350
	Low Price ($)	37.170	38.250	38.150	37.900	37.670	39.520
	Avg. Price ($)	38.535	39.600	39.450	39.245	40.480	42.435
	Dividend ($)	0.265	0.265	0.265	0.265	0.265	0.265
	Mo. Avg. Div.	2.75%	2.68%	2.69%	2.70%	2.62%	2.50%
	6 mos. Avg.	2.66%					

ENTERGY NEW ORLEANS
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

		Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Portland General Electric	High Price ($)	46.000	47.560	47.540	47.530	49.210	50.400
	Low Price ($)	42.100	44.380	44.440	43.940	44.400	43.730
	Avg. Price ($)	44.050	45.970	45.990	45.735	46.805	47.065
	Dividend ($)	0.363	0.363	0.363	0.363	0.363	0.363
	Mo. Avg. Div.	3.29%	3.15%	3.15%	3.17%	3.10%	3.08%
	6 mos. Avg.	3.16%					
Southern Company	High Price ($)	48.650	49.430	45.980	46.330	47.690	47.980
	Low Price ($)	46.020	43.630	42.570	42.510	44.330	42.500
	Avg. Price ($)	47.335	46.530	44.275	44.420	46.010	45.240
	Dividend ($)	0.600	0.600	0.600	0.600	0.600	0.600
	Mo. Avg. Div.	5.07%	5.16%	5.42%	5.40%	5.22%	5.31%
	6 mos. Avg.	5.26%					
WEC Energy Group	High Price ($)	66.500	68.480	69.520	72.090	72.630	75.480
	Low Price ($)	63.190	64.920	64.960	66.160	66.460	66.750
	Avg. Price ($)	64.845	66.700	67.240	69.125	69.545	71.115
	Dividend ($)	0.553	0.553	0.553	0.553	0.553	0.553
	Mo. Avg. Div.	3.41%	3.31%	3.29%	3.20%	3.18%	3.11%
	6 mos. Avg.	3.25%					
Xcel Energy	High Price ($)	47.150	48.720	49.490	50.530	52.490	54.110
	Low Price ($)	44.540	45.870	46.010	46.520	47.440	48.160
	Avg. Price ($)	45.845	47.295	47.750	48.525	49.965	51.135
	Dividend ($)	0.380	0.380	0.380	0.380	0.380	0.380
	Mo. Avg. Div.	3.32%	3.21%	3.18%	3.13%	3.04%	2.97%
	6 mos. Avg.	3.14%					
Monthly Avg. Dividend Yield		3.30%	3.26%	3.29%	3.28%	3.24%	3.22%
6-month Avg. Dividend Yield		3.26%					

Source: Yahoo! Finance

ENO PROXY GROUP
DCF Growth Rate Analysis

Company	(1) Value Line DPS	(2) Value Line EPS	(3) Zacks	(4) Yahoo! Finance
ALLETE, Inc.	4.50%	3.50%	6.00%	6.00%
Alliant Energy Corporation	6.00%	6.50%	5.96%	6.90%
Ameren Corp.	5.50%	7.50%	6.79%	7.75%
American Electric Power Co.	6.00%	4.50%	5.71%	5.83%
Avangrid, Inc.	5.00%	13.00%	8.70%	9.20%
Black Hills Corporation	6.00%	6.50%	4.53%	4.37%
CMS Energy Corporation	7.00%	7.00%	6.18%	7.08%
DTE Energy Company	6.50%	7.50%	6.00%	5.50%
Duke Energy	4.00%	5.50%	5.03%	4.41%
El Paso Electric Co.	7.00%	4.50%	5.08%	5.10%
Hawaiian Electric	2.00%	3.50%	6.57%	8.10%
IDACORP, Inc.	6.50%	3.00%	2.78%	2.60%
NextEra Energy, Inc.	11.00%	9.00%	8.65%	8.57%
Northwestern Corporation	4.50%	3.50%	2.27%	2.42%
OGE Energy Corp.	8.00%	6.00%	5.17%	-2.25%
Otter Tail Corporation	3.50%	9.00%	N/A	9.00%
Pinnacle West Capital Corp.	5.50%	5.00%	4.47%	4.11%
PNM Resources, Inc.	7.00%	7.50%	4.70%	4.10%
Portland General Electric Company	6.00%	4.00%	3.29%	5.10%
Southern Company	3.50%	3.00%	4.50%	1.36%
WEC Energy Group	6.00%	7.00%	4.39%	4.67%
Xcel Energy Inc.	5.50%	5.50%	5.86%	6.64%
Averages excluding negatives	5.75%	6.00%	5.36%	5.66%
Median Values excluding negatives	6.00%	5.75%	5.17%	5.50%

Sources: Value Line Investment Survey, October 26, November 16, and December 14, 2018
Yahoo! Finance growth rates retrieved December 28, 2018
Zacks growth rates retrieved December 28, 2018

ENO PROXY GROUP
DCF RETURN ON EQUITY

	(1) Value Line Dividend Gr.	(2) Value Line Earnings Gr.	(3) Zack's Earning Gr.	(4) Yahoo! Earning Gr.	(5) Average of All Gr. Rates
Method 1:					
Dividend Yield	3.26%	3.26%	3.26%	3.26%	3.26%
Average Growth Rate	5.75%	6.00%	5.36%	5.66%	5.69%
Expected Div. Yield	3.36%	3.36%	3.35%	3.36%	3.36%
DCF Return on Equity	***9.11%***	***9.36%***	***8.71%***	***9.02%***	***9.05%***
Method 2:					
Dividend Yield	3.26%	3.26%	3.26%	3.26%	3.26%
Median Growth Rate	6.00%	5.75%	5.17%	5.50%	5.61%
Expected Div. Yield	3.36%	3.36%	3.35%	3.35%	3.36%
DCF Return on Equity	***9.36%***	***9.11%***	***8.52%***	***8.85%***	***8.97%***

ENO PROXY GROUP
Capital Asset Pricing Model Analysis

30-Year Treasury Bond, Value Line Beta

Line No.		Value Line
1	Market Required Return Estimate	13.75%
2	Risk-free Rate of Return, 30-Year Treasury Bond	
3	Average of Last Six Months	3.17%
4	Risk Premium	
5	(Line 1 minus Line 3)	10.58%
6	Comparison Group Beta	0.60
7	Comparison Group Beta * Risk Premium	
8	(Line 5 * Line 6)	6.30%
9	CAPM Return on Equity	
10	(Line 3 plus Line 8)	9.47%

5-Year Treasury Bond, Value Line Beta

Line No.		Value Line
1	Market Required Return Estimate	13.75%
2	Risk-free Rate of Return, 5-Year Treasury Bond	
3	Average of Last Six Months	2.85%
4	Risk Premium	
5	(Line 1 minus Line 3)	10.91%
6	Comparison Group Beta	0.60
7	Comparison Group Beta * Risk Premium	
8	(Line 5 * Line 6)	6.49%
9	CAPM Return on Equity	
10	(Line 3 plus Line 8)	9.34%

ENO PROXY GROUP
Capital Asset Pricing Model Analysis

Supporting Data for CAPM Analyses

30 Year Treasury Bond Data

	Avg. Yield
July-18	3.01%
August-18	3.04%
September-18	3.15%
October-18	3.34%
November-18	3.36%
December-18	3.10%
6 month average	3.17%

5 Year Treasury Bond Data

	Avg. Yield
July-18	2.78%
August-18	2.77%
September-18	2.89%
October-18	3.00%
November-18	2.95%
December-18	2.68%
6 month average	2.85%

Source: www.federalreserve.gov/datadownload/

Value Line Market Return Data:

Forecasted Data:

Value Line Median Growth Rates:	
Earnings	12.00%
Book Value	8.50%
Average	10.25%
Average Dividend Yield	1.19%
Estimated Market Return	11.50%
Value Line Projected 3-5 Yr. Median Annual Total Return	16.00%
Average of Projected Mkt. Returns	13.75%

Source: Value Line Investment Survey for Windows retrieved December 28, 2018

Comparison Group Betas:	Value Line
ALLETE, Inc.	0.65
Alliant Energy Corporation	0.60
Ameren Corp.	0.55
American Electric Power Co.	0.55
Avangrid, Inc.	0.30
Black Hills Corporation	0.80
CMS Energy Corporation	0.55
DTE Energy Company	0.55
Duke Energy	0.50
El Paso Electric Co.	0.70
Hawaiian Electric	0.60
IDACORP, Inc.	0.60
NextEra Energy	0.55
Northwestern Corp.	0.60
OGE Energy Corp.	0.85
Otter Tail Corp.	0.75
Pinnacle West Capital Corp.	0.60
PNM Resources	0.65
Portland General Electric Company	0.60
Southern Company	0.50
WEC Energy Group	0.50
Xcel Energy Inc.	0.55
Average	0.60

ENO PROXY GROUP
Capital Asset Pricing Model Analysis
Historic Market Premium

	Geometric Mean	Arithmetic Mean	Adjusted Arithmetic Mean
Long-Term Annual Return on Stocks	10.20%	12.10%	
Long-Term Annual Income Return on Long-Term Treas. Bonds	5.00%	5.00%	
Historical Market Risk Premium	5.20%	7.10%	6.04%
Comparison Group Beta, Value Line	0.60	0.60	0.60
Beta * Market Premium	3.10%	4.23%	3.60%
Current 30-Year Treasury Bond Yield	3.17%	3.17%	3.17%
CAPM Cost of Equity, Value Line Beta	**6.26%**	**7.39%**	**6.76%**

Source: *2018 SBBI Yearbook, Stocks, Bonds, Bills, and Inflation*, Duff and Phelps; pp. 6-17, 10-31

FERC GDP GROWTH RATE

	2020	2050	2070	
Energy Information Administration				
Real GDP	18,335	33,205		
GDP Deflator	1.217	2.437		
	22,314	80,921		4.39%
SSA Trustees Report	22,288		189,838	4.38%
Average GDP Growth Rate				4.38%

Sources:

Energy Information Administration, *Annual Energy Outlook 2018* (Macroeconomic Indicators).
Social Security Administration, 2018 OASDI Trustees Report, Table VI.G6

Hevert Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage, 4.40% Projected GDP Growth

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
		Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution		Terminal	Terminal
Company	Ticker	Price	Zacks	First Call	Value Line	Average	Growth	2018	2022	2028	Proof	IRR	P/E Ratio	PEG Ratio
ALLETE, Inc.	ALE	$74.39	6.00%	6.00%	5.00%	5.67%	4.40%	65.00%	64.00%	65.57%	($0.00)	7.69%	20.78	4.72
Alliant Energy Corporation	LNT	$41.41	5.60%	5.85%	6.50%	5.98%	4.40%	64.00%	64.00%	65.57%	($0.00)	8.24%	17.84	4.05
Ameren Corporation	AEE	$58.05	6.50%	6.30%	7.50%	6.77%	4.40%	60.00%	59.00%	65.57%	($0.00)	8.34%	17.35	3.94
American Electric Power Company, Inc.	AEP	$69.91	5.70%	5.79%	4.50%	5.33%	4.40%	67.00%	63.00%	65.57%	($0.00)	8.37%	17.24	3.92
Avangrid, Inc.	AGR	$50.25	9.10%	10.40%	13.00%	10.83%	4.40%	76.00%	66.00%	65.57%	($0.00)	8.07%	18.68	4.25
Black Hills Corporation	BKH	$57.41	4.10%	3.86%	5.00%	4.32%	4.40%	55.00%	60.00%	65.57%	($0.00)	8.54%	16.54	3.76
CMS Energy Corporation	CMS	$45.84	6.40%	7.05%	7.00%	6.82%	4.40%	61.00%	61.00%	65.57%	$0.00	8.35%	17.34	3.94
DTE Energy Company	DTE	$105.75	5.30%	5.59%	7.00%	5.96%	4.40%	61.00%	60.00%	65.57%	$0.00	8.67%	16.05	3.65
Duke Energy Corporation	DUK	$80.74	4.70%	4.22%	5.50%	4.81%	4.40%	76.00%	80.00%	65.57%	($0.00)	8.47%	16.81	3.82
El Paso Electric	EE	$54.16	5.10%	5.20%	4.50%	4.93%	4.40%	57.00%	61.00%	65.57%	($0.00)	7.69%	20.82	4.73
Hawaiian Electric Industries, Inc.	HE	$34.70	7.10%	9.10%	3.50%	6.57%	4.40%	66.00%	59.00%	65.57%	($0.00)	8.28%	17.62	4.01
IDACORP, Inc.	IDA	$89.13	3.90%	3.10%	3.50%	3.50%	4.40%	57.00%	63.00%	65.57%	$0.00	7.57%	21.56	4.90
NextEra Energy, Inc.	NEE	$156.22	8.60%	9.79%	8.50%	8.96%	4.40%	55.00%	63.00%	65.57%	$0.00	8.37%	17.24	3.92
NorthWestern Corporation	NWE	$55.80	3.00%	3.16%	3.50%	3.22%	4.40%	64.00%	64.00%	65.57%	($0.00)	8.40%	17.10	3.89
OGE Energy Corp.	OGE	$33.47	6.00%	4.30%	6.00%	5.43%	4.40%	69.00%	71.00%	65.57%	($0.00)	8.93%	15.10	3.43
Otter Tail Corporation	OTTR	$44.07	NA	9.00%	7.50%	8.25%	4.40%	66.00%	60.00%	65.57%	$0.00	8.27%	17.69	4.02
Pinnacle West Capital Corporation	PNW	$81.85	4.50%	3.78%	5.00%	4.43%	4.40%	63.00%	63.00%	65.57%	($0.00)	8.30%	17.57	3.99
PNM Resources, Inc.	PNM	$39.36	5.10%	4.30%	7.50%	5.63%	4.40%	53.00%	50.00%	65.57%	($0.00)	8.05%	18.74	4.26
Portland General Electric Company	POR	$43.26	2.80%	2.65%	4.00%	3.15%	4.40%	64.00%	63.00%	65.57%	$0.00	7.91%	19.52	4.44
Southern Company	SO	$46.80	4.50%	2.72%	3.00%	3.41%	4.40%	80.00%	74.00%	65.57%	($0.00)	9.31%	13.95	3.17
WEC Energy Group, Inc.	WEC	$63.81	4.10%	4.43%	7.00%	5.18%	4.40%	66.00%	64.00%	65.57%	$0.00	8.14%	18.31	4.16
Xcel Energy Inc.	XEL	$46.44	5.70%	5.89%	5.50%	5.70%	4.40%	62.00%	63.00%	65.57%	($0.00)	8.27%	17.71	4.02
											Mean	8.28%	17.80	
											Max	9.31%		
											Min	7.57%		

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
Company	Ticker	2017	2018	2019	2020	2021	2022	**2023**	2024	2025	2026	2027	**2028**	2029	2030	2031	2032
ALLETE, Inc.	ALE	$3.13	$3.31	$3.49	$3.69	$3.90	$4.12	$4.35	$4.58	$4.81	$5.04	$5.27	$5.50	$5.74	$6.00	$6.26	$6.54
Alliant Energy Corporation	LNT	$1.99	$2.11	$2.24	$2.37	$2.51	$2.66	$2.81	$2.97	$3.12	$3.27	$3.43	$3.58	$3.74	$3.90	$4.07	$4.25
Ameren Corporation	AEE	$2.77	$2.96	$3.16	$3.37	$3.60	$3.84	$4.09	$4.33	$4.57	$4.81	$5.04	$5.26	$5.50	$5.74	$5.99	$6.25
American Electric Power Company, Inc.	AEP	$3.62	$3.81	$4.02	$4.23	$4.46	$4.69	$4.94	$5.18	$5.44	$5.69	$5.95	$6.21	$6.49	$6.77	$7.07	$7.38
Avangrid, Inc.	AGR	$1.67	$1.85	$2.05	$2.27	$2.52	$2.79	$3.07	$3.33	$3.59	$3.82	$4.03	$4.21	$4.39	$4.59	$4.79	$5.00
Black Hills Corporation	BKH	$3.38	$3.53	$3.68	$3.84	$4.00	$4.18	$4.36	$4.55	$4.74	$4.95	$5.17	$5.40	$5.63	$5.88	$6.14	$6.41
CMS Energy Corporation	CMS	$2.17	$2.32	$2.48	$2.64	$2.82	$3.02	$3.21	$3.40	$3.60	$3.78	$3.96	$4.14	$4.32	$4.51	$4.71	$4.92
DTE Energy Company	DTE	$5.73	$6.07	$6.43	$6.82	$7.22	$7.65	$8.09	$8.53	$8.97	$9.42	$9.85	$10.29	$10.74	$11.21	$11.71	$12.22
Duke Energy Corporation	DUK	$4.22	$4.42	$4.64	$4.86	$5.09	$5.34	$5.59	$5.85	$6.12	$6.40	$6.68	$6.98	$7.28	$7.60	$7.94	$8.29
El Paso Electric	EE	$2.42	$2.54	$2.66	$2.80	$2.93	$3.08	$3.23	$3.38	$3.54	$3.70	$3.87	$4.04	$4.22	$4.40	$4.59	$4.80
Hawaiian Electric Industries, Inc.	HE	$1.64	$1.75	$1.86	$1.98	$2.12	$2.25	$2.39	$2.53	$2.67	$2.81	$2.94	$3.07	$3.21	$3.35	$3.50	$3.65
IDACORP, Inc.	IDA	$4.21	$4.36	$4.51	$4.67	$4.83	$5.00	$5.18	$5.38	$5.59	$5.82	$6.07	$6.34	$6.61	$6.91	$7.21	$7.53
NextEra Energy, Inc.	NEE	$6.50	$7.08	$7.72	$8.41	$9.16	$9.98	$10.80	$11.61	$12.38	$13.12	$13.79	$14.40	$15.03	$15.69	$16.39	$17.11
NorthWestern Corporation	NWE	$3.34	$3.45	$3.56	$3.67	$3.79	$3.91	$4.05	$4.19	$4.35	$4.53	$4.72	$4.93	$5.14	$5.37	$5.60	$5.85
OGE Energy Corp.	OGE	$1.92	$2.02	$2.13	$2.25	$2.37	$2.50	$2.63	$2.77	$2.90	$3.04	$3.18	$3.32	$3.47	$3.62	$3.78	$3.94
Otter Tail Corporation	OTTR	$1.86	$2.01	$2.18	$2.36	$2.55	$2.76	$2.98	$3.18	$3.38	$3.58	$3.76	$3.92	$4.09	$4.27	$4.46	$4.66
Pinnacle West Capital Corporation	PNW	$4.43	$4.63	$4.83	$5.04	$5.27	$5.50	$5.74	$6.00	$6.26	$6.54	$6.83	$7.13	$7.44	$7.77	$8.11	$8.47
PNM Resources, Inc.	PNM	$1.92	$2.03	$2.14	$2.26	$2.39	$2.53	$2.66	$2.80	$2.94	$3.08	$3.23	$3.37	$3.52	$3.67	$3.83	$4.00
Portland General Electric Company	POR	$2.29	$2.36	$2.44	$2.51	$2.59	$2.67	$2.76	$2.86	$2.97	$3.09	$3.22	$3.36	$3.51	$3.66	$3.82	$3.99
Southern Company	SO	$3.21	$3.32	$3.43	$3.55	$3.67	$3.80	$3.93	$4.08	$4.24	$4.41	$4.60	$4.80	$5.01	$5.23	$5.46	$5.70
WEC Energy Group, Inc.	WEC	$3.14	$3.30	$3.47	$3.65	$3.84	$4.04	$4.25	$4.45	$4.67	$4.88	$5.11	$5.33	$5.57	$5.81	$6.07	$6.33
Xcel Energy Inc.	XEL	$2.30	$2.43	$2.57	$2.72	$2.87	$3.03	$3.20	$3.37	$3.54	$3.71	$3.88	$4.05	$4.23	$4.42	$4.61	$4.81

Multi-Stage Growth Discounted Cash Flow Model - Terminal P/E Ratio Equals 20.54
180 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage, 4.40% Long-Term GDP Growth

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
		Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio		Iterative Solution		Terminal	Terminal
Company	Ticker	Price	Zacks	First Call	Value Line	Average	Growth	2018	2022	2028	Proof	IRR	P/E Ratio	PEG Ratio
ALLETE, Inc.	ALE	$74.39	6.00%	6.00%	5.00%	5.67%	4.40%	65.00%	64.00%	65.57%	($0.00)	7.63%	20.54	4.67
Alliant Energy Corporation	LNT	$41.41	5.60%	5.85%	6.50%	5.98%	4.40%	64.00%	64.00%	65.57%	($0.00)	9.07%	20.54	4.67
Ameren Corporation	AEE	$58.05	6.50%	6.30%	7.50%	6.77%	4.40%	60.00%	59.00%	65.57%	$0.00	9.35%	20.54	4.67
American Electric Power Company, Inc.	AEP	$69.91	5.70%	5.79%	4.50%	5.33%	4.40%	67.00%	63.00%	65.57%	($0.00)	9.41%	20.54	4.67
Avangrid, Inc.	AGR	$50.25	9.10%	10.40%	13.00%	10.83%	4.40%	76.00%	66.00%	65.57%	$0.00	8.64%	20.54	4.67
Black Hills Corporation	BKH	$57.41	4.10%	3.86%	5.00%	4.32%	4.40%	55.00%	60.00%	65.57%	$0.00	9.82%	20.54	4.67
CMS Energy Corporation	CMS	$45.84	6.40%	7.05%	7.00%	6.82%	4.40%	61.00%	61.00%	65.57%	($0.00)	9.35%	20.54	4.67
DTE Energy Company	DTE	$105.75	5.30%	5.59%	7.00%	5.96%	4.40%	61.00%	60.00%	65.57%	($0.00)	10.12%	20.54	4.67
Duke Energy Corporation	DUK	$80.74	4.70%	4.22%	5.50%	4.81%	4.40%	76.00%	80.00%	65.57%	($0.00)	9.63%	20.54	4.67
El Paso Electric	EE	$54.16	5.10%	5.20%	4.50%	4.93%	4.40%	57.00%	61.00%	65.57%	$0.00	7.61%	20.54	4.67
Hawaiian Electric Industries, Inc.	HE	$34.70	7.10%	9.10%	3.50%	6.57%	4.40%	66.00%	59.00%	65.57%	($0.00)	9.20%	20.54	4.67
IDACORP, Inc.	IDA	$89.13	3.90%	3.10%	3.50%	3.50%	4.40%	57.00%	63.00%	65.57%	($0.00)	7.28%	20.54	4.67
NextEra Energy, Inc.	NEE	$156.22	8.60%	9.79%	8.50%	8.96%	4.40%	55.00%	63.00%	65.57%	$0.00	9.41%	20.54	4.67
NorthWestern Corporation	NWE	$55.80	3.00%	3.16%	3.50%	3.22%	4.40%	64.00%	64.00%	65.57%	($0.00)	9.48%	20.54	4.67
OGE Energy Corp.	OGE	$33.47	6.00%	4.30%	6.00%	5.43%	4.40%	69.00%	71.00%	65.57%	($0.00)	10.70%	20.54	4.67
Otter Tail Corporation	OTTR	$44.07	NA	9.00%	7.50%	8.25%	4.40%	66.00%	60.00%	65.57%	($0.00)	9.16%	20.54	4.67
Pinnacle West Capital Corporation	PNW	$81.85	4.50%	3.78%	5.00%	4.43%	4.40%	63.00%	63.00%	65.57%	($0.00)	9.22%	20.54	4.67
PNM Resources, Inc.	PNM	$39.36	5.10%	4.30%	7.50%	5.63%	4.40%	53.00%	50.00%	65.57%	($0.00)	8.61%	20.54	4.67
Portland General Electric Company	POR	$43.26	2.80%	2.65%	4.00%	3.15%	4.40%	64.00%	63.00%	65.57%	($0.00)	8.21%	20.54	4.67
Southern Company	SO	$46.80	4.50%	2.72%	3.00%	3.41%	4.40%	80.00%	74.00%	65.57%	$0.00	11.48%	20.54	4.67
WEC Energy Group, Inc.	WEC	$63.81	4.10%	4.43%	7.00%	5.18%	4.40%	66.00%	64.00%	65.57%	($0.00)	8.82%	20.54	4.67
Xcel Energy Inc.	XEL	$46.44	5.70%	5.89%	5.50%	5.70%	4.40%	62.00%	63.00%	65.57%	($0.00)	9.15%	20.54	4.67
											Mean	9.15%	20.54	
											Max	11.48%		
											Min	7.28%		

Projected Annual Earnings per Share		[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]
Company	Ticker	2017	2018	2019	2020	2021	2022	**2023**	2024	2025	2026	2027	**2028**	2029	2030	2031	2032
ALLETE, Inc.	ALE	$3.13	$3.31	$3.49	$3.69	$3.90	$4.12	$4.35	$4.58	$4.81	$5.04	$5.27	$5.50	$5.74	$6.00	$6.26	$6.54
Alliant Energy Corporation	LNT	$1.99	$2.11	$2.24	$2.37	$2.51	$2.66	$2.81	$2.97	$3.12	$3.27	$3.43	$3.58	$3.74	$3.90	$4.07	$4.25
Ameren Corporation	AEE	$2.77	$2.96	$3.16	$3.37	$3.60	$3.84	$4.09	$4.33	$4.57	$4.81	$5.04	$5.26	$5.50	$5.74	$5.99	$6.25
American Electric Power Company, Inc.	AEP	$3.62	$3.81	$4.02	$4.23	$4.46	$4.69	$4.94	$5.18	$5.44	$5.69	$5.95	$6.21	$6.49	$6.77	$7.07	$7.38
Avangrid, Inc.	AGR	$1.67	$1.85	$2.05	$2.27	$2.52	$2.79	$3.07	$3.33	$3.59	$3.82	$4.03	$4.21	$4.39	$4.59	$4.79	$5.00
Black Hills Corporation	BKH	$3.38	$3.53	$3.68	$3.84	$4.00	$4.18	$4.36	$4.55	$4.74	$4.95	$5.17	$5.40	$5.63	$5.88	$6.14	$6.41
CMS Energy Corporation	CMS	$2.17	$2.32	$2.48	$2.64	$2.82	$3.02	$3.21	$3.40	$3.60	$3.78	$3.96	$4.14	$4.32	$4.51	$4.71	$4.92
DTE Energy Company	DTE	$5.73	$6.07	$6.43	$6.82	$7.22	$7.65	$8.09	$8.53	$8.97	$9.42	$9.85	$10.29	$10.74	$11.21	$11.71	$12.22
Duke Energy Corporation	DUK	$4.22	$4.42	$4.64	$4.86	$5.09	$5.34	$5.59	$5.85	$6.12	$6.40	$6.68	$6.98	$7.28	$7.60	$7.94	$8.29
El Paso Electric	EE	$2.42	$2.54	$2.66	$2.80	$2.93	$3.08	$3.23	$3.38	$3.54	$3.70	$3.87	$4.04	$4.22	$4.40	$4.59	$4.80
Hawaiian Electric Industries, Inc.	HE	$1.64	$1.75	$1.86	$1.98	$2.12	$2.25	$2.39	$2.53	$2.67	$2.81	$2.94	$3.07	$3.21	$3.35	$3.50	$3.65
IDACORP, Inc.	IDA	$4.21	$4.36	$4.51	$4.67	$4.83	$5.00	$5.18	$5.38	$5.59	$5.82	$6.07	$6.34	$6.61	$6.91	$7.21	$7.53
NextEra Energy, Inc.	NEE	$6.50	$7.08	$7.72	$8.41	$9.16	$9.98	$10.80	$11.61	$12.38	$13.12	$13.79	$14.40	$15.03	$15.69	$16.39	$17.11
NorthWestern Corporation	NWE	$3.34	$3.45	$3.56	$3.67	$3.79	$3.91	$4.05	$4.19	$4.35	$4.53	$4.72	$4.93	$5.14	$5.37	$5.60	$5.85
OGE Energy Corp.	OGE	$1.92	$2.02	$2.13	$2.25	$2.37	$2.50	$2.63	$2.77	$2.90	$3.04	$3.18	$3.32	$3.47	$3.62	$3.78	$3.94
Otter Tail Corporation	OTTR	$1.86	$2.01	$2.18	$2.36	$2.55	$2.76	$2.98	$3.18	$3.38	$3.58	$3.76	$3.92	$4.09	$4.27	$4.46	$4.66
Pinnacle West Capital Corporation	PNW	$4.43	$4.63	$4.83	$5.04	$5.27	$5.50	$5.74	$6.00	$6.26	$6.54	$6.83	$7.13	$7.44	$7.77	$8.11	$8.47
PNM Resources, Inc.	PNM	$1.92	$2.03	$2.14	$2.26	$2.39	$2.53	$2.66	$2.80	$2.94	$3.08	$3.23	$3.37	$3.52	$3.67	$3.83	$4.00
Portland General Electric Company	POR	$2.29	$2.36	$2.44	$2.51	$2.59	$2.67	$2.76	$2.86	$2.97	$3.09	$3.22	$3.36	$3.51	$3.66	$3.82	$3.99
Southern Company	SO	$3.21	$3.32	$3.43	$3.55	$3.67	$3.80	$3.93	$4.08	$4.24	$4.41	$4.60	$4.80	$5.01	$5.23	$5.46	$5.70
WEC Energy Group, Inc.	WEC	$3.14	$3.30	$3.47	$3.65	$3.84	$4.04	$4.25	$4.45	$4.67	$4.88	$5.11	$5.33	$5.57	$5.81	$6.07	$6.33
Xcel Energy Inc.	XEL	$2.30	$2.43	$2.57	$2.72	$2.87	$3.03	$3.20	$3.37	$3.54	$3.71	$3.88	$4.05	$4.23	$4.42	$4.61	$4.81