BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION AUTHORIZING APPLICANT TO MODIFY ITS RATES, CHARGES, AND TARIFFS FOR RETAIL ELECTRIC SERVICE IN OKLAHOMA	))))))	**CAUSE NO. PUD 201700496**

RESPONSIVE TESTIMONY OF

GEOFFREY M. RUSH

MAY 2, 2018

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INTRODUCTION

Q: Please state your name and your business address.

A: My name is Geoffrey M. Rush. My business address is Oklahoma Corporation Commission, Public Utility Division, Jim Thorpe Office Building, Room 580, 2101 North Lincoln Boulevard, Oklahoma City, Oklahoma 73105.

Q: Have you previously testified before the Oklahoma Corporation Commission ("OCC" or "Commission") and were your qualifications accepted?

A: Yes. I have previously testified before this Commission, and my credentials were accepted at that time.

Q: Who employs you and what is your position?

A: I am employed as a Public Utility Energy Coordinator by the Public Utility Division ("PUD") of the OCC.

Q: How long have you been so employed?

A: I have been employed by the Commission since March 2013.

Q: What are your duties and responsibilities with PUD?

A: As an Energy Coordinator, I am the direct supervisor for a team of PUD analysts that, as authorized by the State of Oklahoma, regulate electric and gas transmission rates, terms, conditions of service, and safety, that are in Oklahoma's public interest, and as a surrogate for competition, provides rates that are fair, just, and reasonable. For a

complete list of my work history and educational background, please review my attached curriculum vitae.[1]

In addition, I conduct research and perform comparative analysis of utility applications, reports, financial records, exhibits, and workpapers to ensure PUD makes accurate recommendations. My work also focuses on PUD's involvement with Southwest Power Pool ("SPP") in the areas of Settlements, the Integrated Marketplace ("IM"), and the processes relating to the Day-Ahead Market ("DAM").[2] I monitor SPP Working Groups and Task Forces, which include the Market Working Group, Change Working Group, Settlement User Group, Export Pricing Task Force, and the Z2 Task Force. Previously, I worked with SPP during the test markets and the transmission rights market development. From June 2014 to December 2014, I was also a voting member of SPP's Mitigated Offer Task Force.

[1] Exhibit GMR – 1.
[2] SPP is one of nine Independent System Operators/Regional Transmission Organizations, and one of eight North American Electric Reliability Corporation regional entities. SPP is mandated by the Federal Energy Regulatory Commission ("FERC") to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices for electricity.

PURPOSE

Q: What is the purpose of this Responsive Testimony regarding the Application filed by Oklahoma Gas and Electric Company ("OG&E" or "Company") for an Order of the Commission authorizing Applicant to modify its rates, charges, and tariffs for retail electric service in Oklahoma as filed in Cause No. PUD 201700496?

A: The purpose of this Responsive Testimony is to detail the areas that PUD reviewed, as well as its review process. In addition, the purpose of this Responsive Testimony is to present PUD's recommendation in this Cause regarding the following areas:

(1) Return on Equity ("ROE");

(2) Cost of Debt and Capital Structure;

(3) Short-Term Incentive Compensation ("STI");

(4) Long-Term Incentive Compensation ("LTI");

(5) Payroll Expense;

(6) Amortization of Pension Regulatory Liability;

(7) Materials and Supplies;

(8) Adjust Coal & Oil to reflect 13 month average;

(9) Adjust Gas in Storage to reflect 13 month average;

(10) Fuels and Purchased Power Expenses Removal;

(11) Unbilled Revenues and Over/Under Recoveries;

(12) Prepayments Expense;

(13) Outside Services/Attorney Fees;

(14) Rate Case Expense; and

(15) Regulatory Expense

In addition, PUD reviewed the areas of Day-Ahead Pricing, Pension/Post Retirement Benefits, Directors' Fees & Executive Salaries, Executive Salary Surveys, Wage and Salary Surveys, and Payroll Distribution.

EXECUTIVE SUMMARY

On January 16, 2018, Oklahoma Gas and Electric ("OG&E" or "Company") filed its Application for an adjustment in its rates, charges, and tariffs for retail electric service in Oklahoma. The Public Utility Division ("PUD") reviewed the Application, testimony of Company witnesses, and Company workpapers. PUD also interviewed Company personnel regarding various areas of assignment and conducted onsite audits to review confidential information at the Company's corporate office in Oklahoma City, Oklahoma. Items specifically covered in this Responsive Testimony are as follows: Return on Equity ("ROE"), Cost of Debt and Capital Structure, Short-Term Incentive Compensation ("STI"), Long-Term Incentive Compensation ("LTI"), Payroll Expense, Amortization of Pension Regulatory Liability, Materials and Supplies, Adjust Coal & Oil to reflect 13 month average, Adjust Gas in Storage to reflect 13 month average, Fuels and Purchased Power Expenses, Unbilled Revenues and Over/Under Recoveries, Prepayments Expense, Outside Services/Attorney Fees, Rate Case Expense and Regulatory Expense. Additionally, this Responsive Testimony will list all of the areas that PUD reviewed.

OG&E's cost of capital is comprised of two components: debt and equity. Fixed, contractual interest payments determine the cost of debt, while the cost of equity must be estimated through financial models and other analyses. PUD employed three financial

models on a group of similar proxy companies to arrive at an estimate of the Company's cost of equity in this Cause, including (1) the Discounted Cash Flow Model ("DCF"); (2) the Capital Asset Pricing Model ("CAPM"); and (3) the Comparable Earnings ("CE") Model. In addition, PUD added a market analysis to review the return of utility fund companies compared to the market as a whole. Finally, PUD conducted an analysis to determine the Company's optimal capital structure.

The DCF Model is based on a fundamental financial model called the dividend discount model, which maintains that the value of a security is equal to the present value of the future cash flows that it generates. The average DCF result for the proxy companies using the Quarterly Approximation DCF model is 9.84%. The CAPM is a market-based model where investors require higher returns for adding additional risk. The average CAPM result for the proxy companies is 6.65%. The CE Model involves averaging the earned returns on other utility companies. The composite average and result of the CE Model is 9.84%. The market analysis looked at fourteen of the top utility funds, as well as the seventeen proxy group companies, and compared the returns over a 3-year, 5-year, and 10-year time span. The average market analysis result, using the 10-year time span of the seventeen proxy companies, is 8.62%. PUD's recommended ROE is 8.75%, which represents the midpoint, rounded to the nearest quarter percent, in a range of reasonableness as determined by PUD.

Capital Structure refers to the way a firm finances its overall operations through external debt and equity capital. PUD recommends the Company's proposed debt to equity ratio of 46.7% debt and 53.3% equity.

The Company has requested $17,973,228 in STI Compensation. PUD recommends that the Commission allow full recovery of STI. PUD believes that STI is appropriate to include in the overall compensation package of OG&E and recommends full allowance of its cost recovery from customers. PUD believes that short-term incentives are an important way for OG&E to attract and retain qualified employees. In addition, because the Company's incentive compensation package is not directly tied to financial performance, there is no "trigger" which, if met, would provide incentive payout. Focusing on the entire incentive package benefits both ratepayers and shareholders, as employees are focused on creating a company which is not only financially sound and strong, but also one that is safe, reliable, and has efficient infrastructure in place.

PUD recommends the Company's proposed removal of LTI Compensation in the amount of $5,487,519.

PUD recommends the Company's proposed amortization of the Pension Regulatory Liability in the amount of $44,020,103 and with the proposed amortization period of five years, results in a reduction to expenses (i.e., a credit to customers) in the amount of $8,804,003.

PUD recommends the Commission accept OG&E's Adjustment No. 1, removing the over-recovery of fuel and rider collections, decreasing revenue by $56,056,608, removing the provision for rate refund through decreasing revenue by $12,346,571, and adding unbilled revenue by increasing revenue by $1,600,000. These adjustments, proposed by the Company, result in a net adjustment to decrease revenue by $66,803,179.

PUD recommends the Commission accept PUD's Adjustment No. B-2 to increase Materials and Supplies by $299,243 to the 13-month average balance based on the six-month post test year. PUD compared the Materials and Supplies 13-month average balance based on the six-month post test year of $127,899,873 to OG&E's 13-month average balance of $127,600,630.

PUD recommends the Commission accept PUD's Adjustment No. B-3 to increase Coal and Oil Inventories by $1,389,919 to the 13-month average balance based on the six-month post test year. PUD compared the Coal and Oil Inventories 13-month average based on the six-month post test year of $79,241,890 to OG&E's 13-month average balance of $77,851,970.

PUD recommends the Commission accept PUD Adjustment No. B-4, in the amount of $1,229,162, to decrease the level of Gas in Storage to the 13-month average balance based on the six-month post test year. PUD compared the Gas in Storage 13-month average based on the six-month post test year of $4,806,032 to OG&E's 13-month average balance of $6,035,194.

PUD recommends Adjustment No. B-5 to increase Prepayments Expense by $278,416 to the 13-month average balance based on the six-month post test year. PUD compared the Prepayments Expense 13-month average based on the six-month post test year of $7,121,945 to OG&E's 13-month average balance of $6,843,529.

PUD recommends PUD Adjustment No. H-3 which will decrease OG&E's requested Outside Services / Attorney Fees by $2,835. While reviewing invoices, PUD discovered that 7% of a $40,500 invoice was estimated to be related to influencing legislation. As this amount of $2,835 does not facilitate the provision of electric service, and because legislative advocacy expenses are to be reported below the line, PUD recommends that this expense should not be passed on to the ratepayers. Thus, 7% of the $40,500 results in a PUD-recommended adjustment to decrease Outside Services / Attorney Fees by $2,835.

PUD recommends PUD Adjustment No. H-4 to amortize Rate Case Expenses to the actual incurred level of expenses. PUD's recommended adjustment will result in a decrease of $152,230 from the $533,445 per year of Rate Case Expenses requested by OG&E. PUD recommends that the Company only recover the actual Rate Case Expenses incurred and that these expenses are amortized over two years. This adjustment would decrease OG&E's Rate Case Expenses from $1,066,891 to $762,432.

PUD recommends PUD Adjustment No. H-5 to remove unnecessary expenses from Rate Case Expenses. This adjustment removes the actual amount the Company has incurred

thus far, with respect to the expert witness fees of Dr. Russell R. Evans, which results in a decrease of $10,325 per year for two years. Further, PUD recommends the Commission disallow all future fees associated with this expert witness for this Cause.

PUD requests the Commission accept the following recommendations:

(1) PUD's recommended cost of equity of 8.75%, which is the midpoint, rounded to the nearest quarter percent, in a range of reasonableness between 8.24% and 9.24%;
(2) The Company's proposed cost of debt of 5.32%, and capital structure consisting of 46.7% debt and 53.3% equity;
(3) Full recovery of Short-Term Incentive Compensation in the amount of $17,973,228;
(4) The Company's proposed removal of Long-Term Incentive Compensation in the amount of $5,487,519;
(5) The Company's proposed increase to Payroll Expense in the amount of $3,292,166;
(6) The Company's proposed increase to Pension Expense and related Pension Regulatory Liability in the amount of $44,020,013, and its proposed amortization period of five years, resulting in an annual benefit to customers in the amount of $8,804,003;
(7) PUD Adjustment No. B-2, to increase Materials and Supplies by $299,243 to the 13-month average balance based on the six-month post test year;
(8) PUD Adjustment No. B-3, to increase Coal and Oil Inventories by $1,389,919 to the 13-month average balance based on the six-month post test year;
(9) PUD Adjustment No. B-4, to decrease the level of Gas in Storage by $1,229,162 to the 13-month average balance based on the six-month post test year;
(10) The Company's proposed an adjustment to remove all fuel expenses and purchased power costs for the test year in the amount of $787,820,444 from operating expense, while leaving $76,402,988 in base rates for cogeneration capacity payments;
(11) The Company's proposed an adjustment for Unbilled Revenue and Over/Under Recoveries amount of net decrease in revenues of $66,803,179;
(12) PUD Adjustment No. B-5, to increase Prepayments Expense by $278,416 to the 13-month average balance based on the six-month post test year;
(13) PUD's recommended adjustment H-3 to decrease Outside Services / Attorney Fees by $2,835;
(14) PUD's recommended adjustment H-4 to amortize Rate Case Expenses to the actual incurred level of expenses. This adjustment will result in a decrease of $152,230 from the $533,445 per year of Rate Case Expenses requested by OG&E; and
(15) PUD's recommended adjustment H-5 to remove unnecessary expenses from Rate Case Expenses over two years. This adjustment will remove $10,325 of unnecessary expenses from Rate Case Expenses over two years.

OVERVIEW OF PUD REVIEW

Q: Please list the areas reviewed by members of PUD.

A: The table below outlines PUD analysts and their assigned areas in this Cause:

Analyst	Assigned Areas
Geoffrey M. Rush	Lead Analyst
Andrew Scribner	Advertising Expenses Dues & Donations Information/Instructional/Misc./Sales Expense Legal Settlements
Tonya Hinex-Ford	Internal Auditor's Reports Regulatory Financial Report SEC Form 10-K Board Minutes Organizational Chart Annual Report Revenue Not-at-Issue
Isaac Stroup	Storm Amortization Expense Removal Corporate Expenses/Overheads and Allocations Other Amortization Adjustment to Regulatory Assets and Liabilities
Amy Taylor	Administrative Expenses Misc. General Expenses Employee Medical Benefits Insurance/Self Insurance Expenses Misc. Revenues Bad Debt Expense Lease/Rent Expenses
EJ Thomas	Contribution-in-Aid of Construction/Customer Advances Refundable CIAC Interest on Customer Deposits Renewable Energy Certificates Wind Power Expense Customer Deposits Investment Tax Credits

David Melvin	Depreciation Expense Accumulated Depreciation adjusted to the 6-month post test year Accumulated Depreciation Differential adjustment AR AFUDC Adjustment Adjust TYE CWIP balance for projects with a completion date more than 6 months past the TYE, reimbursable projects, and projects that are revenue producing Plant, Depreciation, and Deferred Taxes related to the holding company assets Transfers and Adjust CWIP completed from October 2017-March 2018 Adjust Plant-in-Service for Plant Held for Future Use Adjust Plant to reflect estimated balance transferred to Plant-in-Service at March 31, 2018 Plant O&M Expenses Acquisition Adjustment Amortization Summary of Operating Expenses
Jason Chaplin	SPP Expenses Transmission Expense Recovered from LSEs SPPCT Rider Expense Removal Intercompany SPP Fees Remove Transmission Investment charged to third parties Mustang Plant Cost of Service Vegetation Management – Distribution Vegetation Management – Transmission
Kathy Champion	Manual Posting Adjustment Rider Revenues Best Bill Customer Growth and Annualization Demand Program Savings Free Service, LIAP, and Sr. Citizen Discount Rate Recalculation Demand Side Management Expense Removal Re-establish Special Contracts Tariff Changes Revenue Growth Rate Design
Geoffrey M. Rush	Pension and Post-Retirement Benefits Amortization of Pension Regulatory Liability Pension Cost Accrual Procedure Long-Term Incentives Short-Term Incentives Directors' Fees & Executive Salaries Executive Salary Surveys

	Wage and Salary Surveys Payroll Expense Return on Equity Outside Services/Attorney Fees Rate Case Expenses Regulatory Expenses Non-Recoverable Expenses
Zachary Quintero	Current Income and Accumulated Deferred Income Taxes Federal and State Income Tax Computation Property Tax Expense Ad Valorem Taxes Adjustment to Cash Working Capital Lead Lag Study Factoring Expense Adjustments Cash Working Capital Interest Synchronization Adjustment to ADIT and Deferred Tax Regulatory Liability
Marydoris Casey	Large Invoices
Jason Lawter	Weather Normalization
Zachary Quintero	Accounting Exhibit

Q: How did PUD determine the areas to be reviewed in this Cause?

A: PUD reviewed OG&E's application package and assigned all of the major areas listed in the application package.

Q: Please explain PUD's overall review process in this Cause.

A: PUD reviewed all testimony, schedules, and workpapers provided by the Company as part of the Application in this Cause. Further, PUD reviewed Commission orders, testimony related to areas in prior causes, and workpapers relating to OG&E. PUD communicated with the Company through email, phone calls, in-person reviews, data requests, and reviewed responses to those requests, including the data requests issued by other parties along with the related responses.

Q: Did PUD perform any onsite audits during its review of this Cause?

A: Yes. PUD performed weekly onsite audits at the Company's office in Oklahoma City, Oklahoma, in addition to attending tours of the Mustang, Sooner, and McClain power plants.

Q: In reviewing the Application, was PUD able to audit every book entry made by OG&E during the test year?

A: No. It is impractical for PUD to review every account and entry made during the test year. However, PUD reviewed areas that had a major impact on the rates and charges passed through to ratepayers. PUD performed a review of sample entries to accounts to ensure proper posting, accounting, and allocation.

Q: From a policy viewpoint, would you please describe PUD's role in this Cause?

A: PUD's role in this review, and analysis of any Company filing for a change or modification in rates and tariffs, is to be as objective as possible. PUD balances the interests between the Company and the ratepayers. PUD strives to make recommendations that are considered fair, just, and reasonable, and that allow the Company to provide safe and reliable service to its ratepayers at a reasonable rate.

PUD'S REVIEW PROCESS

Q: Please explain the review process for the specific assignments in this Cause.

A: PUD reviewed the application of OG&E, as well as the Direct Testimony and supporting workpapers of Company witnesses. In addition, PUD issued and reviewed data requests and conducted weekly onsite audits at the Company's corporate office in Oklahoma City, Oklahoma, to review confidential information.

LEGAL STANDARD

Q: What is the legal standard governing the allowed rate of return on capital investments for regulated utilities?

A: I am not an attorney, and the cases below are to provide historical context. In *Wilcox v. Consolidated Gas Co. of New York*, the U.S. Supreme Court first addressed the meaning of a fair rate of return for public utilities. The Court found that "the amount of risk in the business is a most important factor" in determining the appropriate, allowed rate of return. Later, in two landmark cases, the U.S. Supreme Court set forth the standards by which public utilities are allowed to earn a return on capital investments. In *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, the Court stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public . . . but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and

> economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.[3]

In *Federal Power Commission v. Hope Natural Gas Company*, the Court expanded on the guidelines set forth in *Bluefield* and stated:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[4]

The *Hope* and *Bluefield* decisions set forth the following primary standards to be considered when determining a fair rate of return for public utilities:

1. Corresponding Risk – Risk is the most important factor when assessing the required return on equity. A utility's return should be less than the return of riskier enterprises; and
2. Financial Soundness – A utility is entitled to a return sufficient to maintain its credit, attract capital, and remain financially sound under efficient and economical management.

The cost of capital models used in PUD's review aligns with these standards and has been widely accepted by regulatory commissions around the country for many years.

Q: Should the allowed rate of return equal the return required by the Company's investors?

A: Yes. The Supreme Court standards indicate that the allowed return set by the Commission in this Cause should equal the true required rate of return of the Company's equity investors. The models used in this Cause assist in indicating the true required rate

[3] *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923).
[4] *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

of return for the Company. If the Commission sets the allowed return equal to the true required return, it will allow the Company to maintain its financial integrity and satisfy the claims of its investors. On the other hand, if the Commission sets the allowed rate of return higher than the true required return, it can result in a transfer of wealth from ratepayers to shareholders. In an effort to strike a balance, traditional regulatory practice allows the Commission to establish a rate of return within a range of reasonableness – one that balances the interests of ratepayers and shareholders. The best starting point for assessing a reasonable range for the allowed return, however, is assessing the true required return on equity.

GENERAL CONCEPTS AND METHODOLOGY

Q: Please describe the general concept of the cost of capital.

A: The cost of capital for a firm refers to the weighted average cost of all types of securities issued by the firm, including debt and equity. Determining the cost of debt is relatively straightforward. Interest payments on bonds are contractual, and are calculated by dividing total interest payments by the book value of outstanding debt. Determining the cost of equity, however, is more complex. Unlike the known, contractual cost for fixed debt securities, there is no explicit cost of common equity. The return on equity is not known until after the prior claims of bondholders have been satisfied. While the return on equity is known after the fact, the cost of equity, or the required return of stockholders, must be estimated before a firm begins a capital project so it can be sure the project will generate enough cash flow to satisfy the required return of its investors. To determine the appropriate cost of equity capital, firms estimate the return their equity

investors will demand in exchange for giving up their opportunity to invest in other securities or postponing their own consumption, all while assuming some level of risk that they will realize a negative return on their investment. Once firms estimate the required return on equity, they can calculate their overall weighted average cost of capital ("WACC"), which includes the cost of debt. Competitive firms use their WACC as the discount rate to determine the value of capital projects. The cost of equity (C_E) is one of the most important variables for the Commission to impute accurately. In addition, the Commission must also determine the appropriate capital structure, which is comprised of the debt ratio (D/ (D+E)) and the equity ratio (E/ (D+E)).

Q: What is PUD's general approach in estimating the cost of equity in this Cause?

A: While a competitive firm must estimate its own cost of capital to assess the profitability of capital projects, regulators act as a surrogate for competition, and must estimate a utility's cost of capital to determine a fair rate of return. The legal standards set forth above do not include specific guidelines regarding the models that must be used to estimate the cost of equity. Over the years, however, regulatory commissions have consistently relied on several models. The following models used in this Cause have been widely used and accepted in regulatory proceedings for many years: (1) Discounted Cash Flow Model ("DCF"); (2) Capital Asset Pricing Model ("CAPM"); and (3) Comparable Earnings Model ("CEM"). In addition, a market analysis was performed to outline utility company risks in relation to the market as a whole, and provide insight as to the level of return that actual investors are expecting to receive when investing in these

types of funds. The specific inputs and calculations for these models will be described in more detail.

Q: Why were multiple models used to estimate the cost of equity?

A: The models used to estimate the cost of equity attempt to measure the required return of equity for investors by estimating a number of different inputs. It is preferable to use multiple models because the results of any one model may contain a degree of inconsistency, especially depending on the reliability of the inputs used in the model. By using multiple models, the analyst can compare the results of the models and look for outlying results and inconsistencies. Likewise, if multiple models produce a similar result, it may indicate a narrower range for the allowed rate of return.

THE PROXY GROUP

Q: What are the benefits of choosing a proxy group of companies in conducting cost of capital analyses?

A: The cost of equity models in this Cause can be used to estimate the cost of capital of any individual, publicly traded company. There are advantages to conducting cost of capital analysis on a "proxy group" of companies that are comparable to the target company. First, it is better to assess the financial soundness of a utility by comparing it to a group of other financially sound utilities. Second, using a proxy group provides more reliability and confidence in the overall results because there is a larger sample size. Finally, the use of a proxy group is often a necessity when the target company is a subsidiary that is not publicly traded, as is the case with OG&E. This is because the financial models used

in this Cause require information from publicly traded firms, such as stock prices and dividends.

Q: What were the criteria used to determine the proxy group selection?

A: The proxy group consisted of 17 publicly traded companies identified by Value Line Investment Survey as electric utilities. Additional criteria for the proxy group were as follows:

1. At least 70% of revenues from electric sales;
2. A Value Line safety rank of "3" or better; and
3. A Value Line financial strength of "B" or better.

DISCOUNTED CASH FLOW ANALYSIS

Q: Please describe the Discounted Cash Flow model.

A: The DCF Model is based on a fundamental financial model called the dividend discount model, which maintains that the value of a security is equal to the present value of the future cash flows it generates. Cash flows from common stock are paid to investors in the form of dividends. There are several variations of the DCF Model. The General DCF Model would require an estimation of an infinite stream of dividends. Since this would be impractical, analysts use more feasible variations of the General DCF Model.

Q: Do all DCF Models rely on several underlying assumptions?

A: Yes, the DCF Models rely on the following four assumptions:

1. Investors evaluate common stocks in the classical valuation framework; that is, they trade securities rationally at prices reflecting their perceptions of value;

2. Investors discount the expected cash flows at the same rate (k) in every future period;
3. The (k) obtained from the DCF equation corresponds to that specific stream of future cash flows alone; and
4. Dividends, rather than earnings, constitute the source of value.

Q: Describe the Constant Growth DCF Model.

A: The General DCF can be rearranged to make it more practical for estimating the cost of equity; therefore, regulators typically rely on some variation of the Constant Growth DCF Model. Unlike the General DCF Model, the Constant Growth DCF Model solves directly for the required return (k). In addition, by assuming that dividends grow at a constant rate, the dividend stream from the General DCF Model may be substituted with a term representing the expected constant growth rate of future dividends (g). The Constant Growth DCF Model may be considered in two parts. The first part is the dividend yield (D_1/P_0), and the second part is the growth rate (g). In other words, the required return in the DCF Model is equivalent to the dividend yield plus the growth rate.

Q: Does the use of the Constant Growth DCF Model require additional assumptions?

A: Yes. In addition to the four assumptions listed above, the Constant Growth DCF Model relies on four additional assumptions as follows:

1. The discount rate (k) must exceed the growth rate (g);
2. The growth rate (g) is constant in every year to infinity;
3. Investors require the same return (k) in every year; and
4. There is no external financing; that is, growth is provided only by the retention of earnings.

Since the growth rate is assumed to be constant, it is important not to use growth rates that are unreasonably high.

Q. Describe the Quarterly Approximation DCF Model.

A: The basic form of the Constant Growth DCF Model described above is sometimes referred to as the Annual DCF Model. This is because the model assumes an annual dividend payment to be paid at the end of every year, as well as an increase in dividends once each year. In reality, however, most utilities pay dividends on a quarterly basis. The Constant Growth DCF equation may be modified to reflect the assumption that investors receive successive quarterly dividends and reinvest them throughout the year at the discount rate. This variation is called the Quarterly Approximation DCF Model. The Quarterly Approximation DCF Model assumes that dividends are paid quarterly and that each dividend is constant for four consecutive quarters. All else held constant, this model actually results in the highest cost of equity estimate for the utility in comparison to other DCF Models because it accounts for the quarterly compounding of dividends. There are several other variations of the Constant Growth DCF Model, including a Semi-Annual DCF Model, which is used by the Federal Energy Regulatory Commission. Regulatory proceedings have accepted these models, along with the Quarterly Approximation DCF Model, as useful tools for estimating the cost of equity. For this Cause, PUD chose the Quarterly Approximation DCF Model described above.

Q: What are the inputs of the DCF Model?

A: There are three primary inputs in the DCF Model: stock price (P_0), current dividend (D_0), and the growth rate (g). The stock prices and dividends are known inputs based on recorded data, while the growth rate projection must be estimated.

Q: How was the stock price input of the DCF Model determined?

A: For the stock price (P_0), a one-month average of stock prices for each company in the proxy group was used. Analysts sometimes rely on average stock prices for longer periods. However, according to the efficient market hypothesis, markets reflect all relevant information available at a particular time, and prices adjust instantaneously with the arrival of new information. Past stock prices reflect outdated information. The DCF Model used in utility rate cases is a derivation of the dividend discount model, which is used to determine the current value of an asset. Thus, according to the dividend discount model and the efficient market hypothesis, the value for the "P_0" term in the DCF Model should technically be the current stock price, rather than an average.

Q: Why was a 30-day average used for the current stock price input?

A: Using a short-term average of stock prices for the current stock price input adheres to market efficiency principles. This avoids any irregularities that may arise from using a single current stock price. Choosing a current stock price for one particular day during that time could raise an issue concerning which day was chosen to be used in the analysis. In addition, a single stock price on a particular day may be unusually high or low. It is not advised to use a single stock price in a model that is ultimately used to set rates for several years, especially if a stock is experiencing volatility. As a result, it is preferable to use a short-term average of stock prices, which represents a good balance between adhering to concepts of market efficiency and avoiding any irregularities that may arise from using a single stock price on a given day. The stock prices used in the

DCF analysis are one-month averages of adjusted closing stock prices for each company in the proxy group.

Q: How was the dividend input of the DCF Model determined?

A: The dividend term in the Quarterly Approximation DCF Model is the current quarterly dividend per share. The quarterly dividend paid in the first quarter of 2018 for each proxy company was obtained. The Quarterly Approximation DCF Model assumes that the company increases its dividend payments each quarter. Therefore, the model assumes that each quarterly dividend is greater than the previous one by $(1 + g)^{0.25}$. This expression could be described as the dividend quarterly growth rate, where the term "g" is the growth rate and the exponential term "0.25" signifies one quarter of the year.

Q: Does the Quarterly Approximation DCF Model result in a higher cost of equity relative to other DCF Models, all else held constant?

A: Yes. The DCF Model used in this Cause results in a higher DCF cost of equity estimate than the annual or semi-annual DCF Models due to the quarterly compounding of dividends inherent in the model.

Q: How was the growth rate input of the DCF Model determined?

A: While the stock price and dividend inputs of the DCF Model are known figures that can be obtained, the growth rate must be estimated. For this reason, the growth rate is usually the most contested input of the DCF Model. The methods used to estimate the growth

rate for each proxy company were: (1) historical dividend growth; and (2) projected earnings growth.

Historical Dividend Growth

Observing historical growth rates in dividends, earnings, and book value is a reasonable method for estimating future growth, especially for utility companies. This is because utilities tend to have stable earnings and pay dividends in a consistent manner. One primary advantage of using historical data is that it is known. In the DCF Model, historical dividend growth over the last five years for each proxy company was used. While it would not be unreasonable to use historic earnings or book value, the DCF theory states that it is the expected future cash flows in the form of dividends that constitute investment value. As a result, it makes sense to consider actual dividend growth when estimating the growth rate in the DCF Model.

Projected Earnings Growth

In addition to considering historic dividend growth, projected earnings growth was considered. Since the ability to pay dividends stems from a company's ability to generate earnings, it is expected that earnings growth will have an influence on dividend growth. One potential drawback of using earnings growth is that earnings tend to be much more volatile than dividends. In the DCF Model, the projected earnings for each proxy company were considered.

Q: What are the results of your DCF Model?

A: The Quarterly Approximation DCF Model was used to estimate the cost of capital for each proxy company. The inputs of the DCF Model for each proxy company included a

30-day average of stock prices for the current stock price, the dividends reported in the first quarter of 2018, and an average of two reasonable methods for determining the growth rate. The average DCF result of the 17 proxy companies using the Quarterly Approximation DCF Model is 9.84%, which is the result that was considered in PUD's final cost of capital recommendation, along with the results of the other models.

CAPITAL ASSET PRICING MODEL ANALYSIS

Q: Describe the CAPM.

A: The CAPM is a market-based model founded on the principle that investors demand higher returns for incurring additional risk. The CAPM estimates this required return.

Q: What are the assumptions inherent in the CAPM?

A: The CAPM relies on the following assumptions:

(1) Investors are rational, risk-averse, and strive to maximize profit and terminal wealth;
(2) Investors make choices on the basis of risk and return. Return is measured by the mean returns expected from a portfolio of assets; risk is measured by the variance of these portfolio returns;
(3) Investors have homogenous expectations of risk and return;
(4) Investors have identical time horizons;
(5) Information is freely and simultaneously available to investors;
(6) There is a risk-free asset, and investors can borrow and lend unlimited amounts at the risk-free rate;
(7) There are no taxes, transaction costs, restrictions on selling short, or other market imperfections; and
(8) Total asset quality is fixed, and all assets are marketable and divisible.

The CAPM has been widely used by firms, analysts, and regulators for decades to estimate the cost of equity capital.

Q: Does the CAPM promote the legal standards set forth by the U.S. Supreme Court?

A: Yes. The CAPM directly considers the amount of risk inherent in an individual company. According to the Supreme Court in its decision in *Federal Power Commission v. Hope Natural Gas Company*, "the amount of risk in the business is a most important factor" in determining the appropriate, allowed rate of return. The Court also held that "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks." The CAPM is the strongest of the three models presented in this Cause, because it is the only model that directly measures the most important component of a fair rate of return analysis: risk.

Q: Please describe the CAPM equation.

A: There are three terms within the CAPM equation that are required to calculate the required return (K): (1) the risk-free rate (R_F); (2) the beta coefficient (β_i); and (3) the market risk premium ($R_M - R_F$), which is the required return on the overall market less the risk-free rate. Each term is discussed in more detail below, along with the inputs that were used for each term.

Q: What is the risk-free rate?

A: The first term in the CAPM is the risk-free rate (R_F). The risk-free rate is the level of return investors can achieve without assuming any risk. The risk-free rate represents the bare minimum return that any investor would require on a risky asset. Even though no investment is technically void of risk, investors often use U.S. Treasury securities to represent the risk-free rate because they accept that those securities essentially contain no

default risk. The Treasury issues securities with different maturities, including short-term Treasury Bills, intermediate-term Treasury Notes, and long-term Treasury Bonds.

Q: Is it preferable to use the yield on long-term Treasury Bonds for the risk-free rate in the CAPM?

A: Yes. In valuing an asset, investors estimate cash flows over long periods. Common stock is viewed as a long-term investment, and the cash flows from dividends are assumed to last indefinitely. As a result, short-term Treasury Bill yields should not be used in the CAPM to represent the risk-free rate. Short-term rates are subject to greater volatility and can thus lead to unreliable estimates. Instead, long-term Treasury Bonds are used to represent the risk-free rate in the CAPM. A 30-day average of daily Treasury yield curve rates on 30-year Treasury Bonds was used as the risk-free rate estimate, which resulted in a risk-free rate of 3.05%.

Q: What is the beta coefficient?

A: Beta measures the sensitivity of a given security to movements in the overall market. The CAPM states that in efficient capital markets, the expected risk premium on each investment is proportional to its beta. A stock's beta equals the covariance of the asset's returns with the returns on a market portfolio, divided by the portfolio's variance.

Q: How were the betas discovered for the proxy companies?

A: PUD obtained the beta results from Value Line Investment Survey.

Q: What is the equity risk premium?

A: The final term of the CAPM is the equity risk premium ("ERP"), which is the level of return investors expect above the risk-free rate in exchange for investing in risky securities. There are three ways to estimate the ERP: (1) calculating a historical average; (2) taking a survey of experts; and (3) calculating the implied equity risk premium. The CAPM analysis incorporated each of these methods in determining the ERP.

Q: Describe the historical equity risk premium.

A: The historical ERP may be calculated by simply taking the difference between returns on stocks and returns on government bonds over a certain period. Many practitioners rely on the historical ERP as an estimate for the forward-looking ERP because the data is easy to obtain. There are three important factors to consider when estimating the historical ERP: (1) the period of time; (2) the choice of the risk-free rate; and (3) whether to use geometric or arithmetic averages.

Q: Is it preferable to use longer periods when calculating the historic ERP?

A: Yes. Calculating returns over longer periods is preferable because the results produce a smaller standard error, and are thus more reliable. Using at least 50 years of data is ideal. Returns from 1926 through 2014 were considered in developing PUD's historical ERP estimate in this Cause.

Q: Should the rate on long-term Treasury Bonds be used as the risk-free rate?

A: Yes. In corporate finance and valuation, the rate on long-term Treasury Bonds is typically used as the risk-free rate, and as discussed above, short-term Treasury Bill yields are rarely used in the CAPM to represent the risk-free rate because they are subject to greater volatility and can lead to unreliable estimates. The difference between returns on stocks and returns on long-term government bonds was considered in the historical ERP estimate.

Q: Is it better to use the geometric average rather than the arithmetic average when looking at historical returns over time?

A: Stocks are negatively correlated (i.e., good years are more likely to be followed by poor years and vice versa), and thus the arithmetic average tends to overstate the true ERP. When returns are volatile, the arithmetic average can produce questionable results.

The geometric average, however, is more appropriate when measuring returns over a long period of time, which is done when calculating the historical ERP. Although the geometric average is considered more appropriate when looking at the historical ERP, the higher arithmetic average was considered in the historical ERP calculation.

Q: Describe the actual results of the historical ERP analysis.

A: According to Ibbotson, the historical ERP using the geometric average is 4.4%, while the historical ERP using the arithmetic average is 6.0%. The average of these two numbers is 5.2%, which is the figure used in the historical ERP estimate.

Q: What are the limitations of relying solely on a historical average to estimate the forward-looking ERP?

A: Many investors use the historical ERP because it is convenient and easy to calculate. What matters in the CAPM model is not the actual risk premium from the past, but rather the expected risk premium looking forward. Some investors may think that a historic ERP provides some indication of what the prospective risk premium is, but there is empirical evidence to suggest the prospective, forward-looking ERP is actually lower than the historical ERP. Regardless of the variations in historic ERP estimates, many scholars and practitioners agree that simply relying on a historic ERP to estimate the risk premium going forward is not ideal.

Q: Describe the expert survey approach to estimating the ERP.

A: The expert survey approach to estimating the ERP involves conducting a survey of experts ranging from professors, analysts, chief financial officers, and other executives around the country and asking them what they think the expected ERP is. Graham and Harvey have performed such a survey every quarter since 1996. In their survey during the first quarter of 2016, they found that experts around the country believe that the current risk premium is 4.51%. The IESE Business School conducts a similar expert survey. Its expert survey reported an average ERP of 5.5%. Averaging the ERP results from both surveys provides an ERP of 5.01%.

Q: What are the results of the final ERP estimate?

A: In determining the final ERP to use for the CAPM model, PUD used a weighted average of the expert survey and the implied equity risk premium. While it would not be unreasonable to use any of these methods by themselves to estimate the ERP, it is more prudent to consider both methods, as the methods are not equal in value. PUD used a final ERP of 5.04% in the CAPM calculation.

Q: What are the results of the CAPM analysis?

A: Using the inputs for the risk-free rate, beta coefficient, and equity risk premium discussed above, PUD calculated the CAPM cost of equity for each proxy company. The average CAPM cost of equity of the 17 proxy companies is 6.65%, which was the rate that was considered in the final cost of equity analysis in this Cause.

COMPARABLE EARNINGS ANALYSIS

Q: Describe the Comparable Earnings Model.

A: In contrast to the DCF and CAPM models, which are market-based models, the CEM is an accounting-based model. That is, the CEM relies on available accounting data, particularly the return earned on book equity. The CEM involves averaging the earned returns on equity of other utility companies.

Q: Is it more appropriate to conduct the CEM on a group of competitive firms, rather than a group of regulated utilities?

A: Yes. In utility rate cases, analysts often perform the CEM on the same proxy group of regulated utilities used in the CAPM and DCF analyses. Technically, however, it would be better to conduct this analysis on a group of unregulated, competitive firms with similar risk profiles and business operations. The reason analysts do not conduct the CEM on such a group of comparable competitive firms is that they arguably do not exist.

Q: What is the rationale behind choosing competitive firms for the CEM analysis?

A: The rationale behind choosing competitive firms for the CEM analysis is that the returns on equity of regulated utilities are based on past information, and were not earned under the restraints of competition. Regulators have a duty to stand in the place of competition, and that duty cannot be accomplished adequately by awarding returns on equity based on the earned returns of other utilities.

Q: How does the CEM analysis compare to the other models used in this Cause?

A: The CEM is the weakest of the three models presented in this Cause, as it does not account for any prospective, forward-looking factors (such as the growth rate in the DCF or the implied ERP in the CAPM), and it does not have any measure for risk (such as beta in the CAPM). Nonetheless, the CEM has been included here because it is unique to the regulatory environment, and as a result, regulators have become familiar with seeing this model in rate cases.

Q: What are the results of the Comparable Earnings Model?

A: In conducting the CEM analysis, PUD averaged the annual earned returns on equity for each of the 17 proxy companies from 2013 through 2017. The composite average and final result of the CEM is 9.84%, which was the rate that was considered in the final cost of equity analysis in this Cause.

MARKET ANALYSIS

Q: What is the general relationship between risk and return?

A: According to the Supreme Court decision rendered in *Federal Power Commission v. Hope Natural Gas Company*, risk is among the most important factors for the Commission to consider when determining the allowed return. There is a direct relationship between risk and return in that the more risk an investor assumes, the larger return the investor will demand. Two primary types of risk affect equity investors – firm-specific risk and market risk. Firm-specific risk affects individual firms, while market risk affects all companies in the market to varying degrees.

Q: What are the differences between firm-specific risk and market risk?

A: Firm-specific risk affects individual companies rather than the entire market. There are several types of firm-specific risks, including:

(1) Financial Risk – The risk that equity investors of leveraged firms face as residual claimants on earnings;
(2) Default Risk – The risk that a firm will default on its debt securities; and
(3) Business Risk – The risk that encompasses all other operating and managerial factors that may result in investors realizing less than their expected return in that particular company.

While firm-specific risk affects individual companies, market risk affects all companies in the market to varying degrees. Examples of market risk include interest rate risk, inflation risk, and the risk of major socio-economic events. When there are changes in these risk factors, it affects all firms in the market.

Q: Is firm-specific risk diversifiable?

A: Yes. Diversification eliminates firm-specific risk. Rational investors are risk-averse and seek to eliminate risk they can control. Investors can eliminate firm-specific risk by adding more stocks to their portfolio through diversification. There are two reasons why diversification eliminates firm-specific risk. First, each stock in a diversified portfolio represents a much smaller percentage of the overall portfolio than it would in a portfolio of just one or a few stocks. As a result, any firm-specific action that changes the stock price of one stock in the diversified portfolio will have only a small impact on the entire portfolio. Second, the effects of firm-specific actions on stock prices can be either positive or negative for each stock. In large portfolios, the net effect of these positive and negative firm-specific risk factors will be essentially zero and will not affect the value of the overall portfolio.

Q: Does the market reward firm-specific risk?

A: No. Because investors eliminate firm-specific risk through diversification, they know they cannot expect a higher return for assuming the firm-specific risk in any one company, and the market does not reward all risks associated with an individual firm's operations. In contrast, diversification cannot eliminate market risk. Market risks, such

as interest rate risk and inflation risk, affect all stocks in the market to different degrees. Because diversification cannot eliminate market risk, investors who assume higher levels of market risk also expect higher returns. Market risk is the only type of risk the market rewards and is the primary type of risk the Commission should consider when determining the allowed return. Utility companies are considered defensive companies. This means that the demands for utilities are consistent regardless of the state of the economy. In times of recession, individuals may opt to cut back on items that are not necessary (vacations, movies, dinners out, etc.) to compensate. However, during times of recession, individuals will always have a need for gas, water, and electricity.

Q: How is market risk measured?

A: Market risk is considered when estimating the cost of equity. Investors who want to eliminate firm-specific risk must hold a fully-diversified portfolio. To determine the amount of risk that a single stock adds to the overall market portfolio, investors measure the covariance between a single stock and the market portfolio. The result of this calculation is called "beta." Beta represents the sensitivity of a given security to the market as a whole. The market portfolio of all stocks has a beta equal to one. Stocks with betas greater than one are relatively more sensitive to market risk than the average stock. For example, if the market increases by 1.0%, a stock with a beta of 1.5 will, on average, increase by 1.5%. In contrast, stocks with betas of less than one are less sensitive to market risk. Thus, stocks with low betas are relatively insulated from market conditions. Beta is used in the Capital Asset Pricing Model to estimate the required return on equity.

Q: Are public utilities defensive firms that have low betas, low market risk, and are relatively insulated from overall market conditions?

A: Yes. Although market risk affects all firms in the market, it affects utilities to varying degrees. Firms with high betas are affected more by market risk than firms with low betas, which is why firms with high betas are more risky. Companies in defensive industries, such as utility companies, will have low betas and performance that is relatively unaffected by overall market conditions. When the economy is in a recession, as occurred toward the end of the 2000s and continued into the early 2010s, consumers can be assured that their utility companies will be able to maintain normal business operations, and utility investors can be confident that utility stock prices will not widely fluctuate. While it is preferable that utilities, as defensive firms, experience little market risk and are relatively insulated from market conditions, this fact should also be appropriately reflected in the Commission's allowed return.

Q: Do investors in firms with low betas require a smaller return than the average required return on the market?

A: Yes. This is the basic concept of the risk and return: the more risk an investor assumes, the larger return the investor will demand. So, if a particular stock is less risky than the market average, an investor holding that stock will require a smaller return than the average return on the market. Since utilities are low-risk companies with low betas, the required return for utilities is lower than the required return on the overall market.

Q: Why does PUD believe this is a reasonable approach?

A: Observing and monitoring actual returns of utility funds in the market is reasonable for two reasons: (1) it highlights the types of returns that individuals who invest in these types of companies expect to earn; and (2) market returns provide a guideline by which to properly incentivize utility companies based on their actual risk.

Q: Describe the Market Analysis that was used.

A: PUD reviewed the market prospectuses and fact sheets of the top 14 utility funds.[5] A fund prospectus is a disclosure document which provides investors with material information, such as a description of the fund, biographies of officers and directors, and information outlining the historical performance of the fund in different segments of time. The historical performance listed represents the actual historical returns, and these returns are what investors look at to anticipate an expected return when investing in these funds. PUD's analysis included the actual returns during 3-year, 5-year, and 10-year periods, and the 10-year average for the utility funds fell in the range of 5.91% to 8.57%.[6] The average of the 14 funds analyzed was 6.49%.

PUD also looked at the historical performance of the 17 companies in the proxy group. PUD's analysis included the actual returns during 3-year, 5-year, and 10-year periods, and the 10-year average for the utility funds fell in the range of 4.60% to 11.73%.[7] The average of the proxy group, as used in PUD's final analysis, was 8.62%.

[5] http://news.morningstar.com/fund-category-returns/utilities/$FOCA$SU.aspx.
[6] Putnam Global Utilities return of 1.71% was disregarded as an outlier.
[7] PPL Corporation's return of -0.02% and PNM Resource's return of 13.71% were disregarded as outliers.

Q: Why was the 10-year average used in the analysis?

A: Utilities are likely to underperform during times of market growth; however, during periods of recession, as experienced during the late 2000s and early 2010s, utilities tend to outperform the market. Monitoring the performance of a fund over a longer period is more conducive to arriving at an accurate number, and reflects a more comprehensive sample of market conditions.

Q: Please describe the trend with respect to Awarded ROEs.

A: PUD reviewed the historical awarded ROEs of the two largest Investor-Owned Electric Utilities in Oklahoma. The results are listed on Table 1 below:

Table 1: Awarded ROE – Oklahoma Investor Owned Utilities

	Company	Cause No.	Final Order No.	Requested ROE	Awarded ROE
1	OG&E	2005-00151	516261	11.75%	10.75%
		2008-00398	596281	12.25%	10.75%
		2015-00273	662059	10.25%	9.50%
		2017-00496	TBD	9.90%	TBD
2	PSO	2013-00217	639314	10.50%	9.85%
		2015-00208	657877	10.50%	9.50%
		2017-00151	672864	10.00%	9.30%

As this table illustrates, the ROEs that have been requested by the companies have not been granted. In addition, the awarded ROEs have been gradually declining toward a more appropriate level.

COST OF DEBT

Q: Describe OG&E's position regarding long-term debt financing.

A: OG&E had $2,985,002,653 of long-term debt capital during the test year at a cost of 5.32%.

Q: Discuss PUD's recommendation regarding OG&E's proposed cost of debt.

A: As discussed above, unlike the cost of equity, the cost of debt is based on contractual interest rates. The Company's proposed cost of debt of 5.32% is reasonable, and PUD recommends the pre-tax cost of debt rate of 5.32% as proposed by the Company.

COST OF DEBT AND CAPITAL STRUCTURE

Q: Describe the concept of capital structure.

A: Capital structure refers to the way a firm finances its overall operations through external financing. The primary sources of long-term, external financing are debt capital and equity capital. Debt capital usually comes in the form of contractual bond issues that require the firm make payments, while equity capital represents an ownership interest in the form of stock. Because a firm cannot pay dividends on common stock until it satisfies its debt obligations to bondholders, stockholders are referred to as residual claimants. The fact that stockholders have a lower priority to claims on company assets increases their risk and required return relative to bondholders. Thus, equity capital has a higher cost than debt capital. Firms can reduce their weighted average cost of capital ("WACC") by recapitalizing and increasing their debt financing. In addition, because interest expense is deductible, increasing debt also adds value to the firm by reducing the firm's tax obligation.

Q: Can competitive firms add value and reduce their WACC by increasing debt?

A: Yes, a competitive firm can add value by increasing debt. After a certain point, however, the marginal cost of additional debt outweighs its marginal benefit. This is because the more debt the firm uses, the higher interest expense it must pay, and the likelihood of loss increases. This increases the risk of recovery for both bondholders and shareholders, causing both groups of investors to demand a greater return on their investment. If debt financing is too high, the firm's WACC will increase instead of decrease. A competitive firm's value is maximized when the WACC is minimized. By increasing its debt ratio, a competitive firm can minimize its WACC and maximize its value. At a certain point, however, the benefits of increasing debt do not outweigh the costs of the additional risks to both bondholders and shareholders, as each type of investor will demand a higher return for the additional risk they have assumed.

Q: Does the rate base rate of return model incentivize utilities to operate at the optimal capital structure?

A: No. While it is true that competitive firms can maximize their value by minimizing their WACC, this is not the case for regulated utilities. Under the rate base rate of return model, a higher WACC results in higher rates, all else held constant.

Q: Can utilities afford to have higher debt levels than other industries?

A: Yes. Because regulated utilities have large amounts of fixed assets, stable earnings, and low risk relative to other industries, they can afford to have higher levels of debt. Because utilities have low levels of risk and operate a stable business, they should

generally operate with relatively high levels of debt to achieve their optimal capital structure. There are objective, technical methods available and discussed below to estimate the optimal capital structure.

Q: Discuss the capital structure of the proxy companies.

A: The capital structure for each proxy company was examined, as was the average of their debt and equity ratios. The average debt ratio of the proxy group is 50.9%. Regulators will sometimes simply look at the average debt ratio of the proxy group as a measure to determine the appropriate debt ratio of the target company. This type of analysis is oversimplified and insufficient for three important reasons:

(1) **Utilities do not have a financial incentive to operate at the optimal capital structure.**

Under the rate base rate of return model, utilities do not have a natural financial incentive to minimize their cost of capital. Competitive firms, in contrast, can maximize their value by minimizing their cost of capital. Simply comparing the debt ratios of other regulated utilities will not indicate an appropriate capital structure. Rather, it will indicate debt ratios that are too low. It is the Commission's duty to act as a surrogate for competition and ensure that the Company's capital structure is similar to one that the Company would have in a competitive environment. This duty cannot be accomplished by simply reviewing the current debt ratios of the proxy group or the target company.

(2) **The optimal capital structure is unique to each firm.**

As discussed further below, the optimal capital structure for a firm is dependent on several unique financial metrics for that firm. The other companies in the proxy group have different financial metrics than the target company, and thus have different optimal capital structures. An objective analysis should be performed using the financial metrics of the target utility in order to estimate its unique optimal capital structure.

(3) **The capital structures of the proxy group may not have been approved by their regulatory commissions.**

The actual capital structure of any utility falls within the realm of managerial discretion. Regulatory commissions, however, have a duty to impute a proper capital structure if the company's actual capital structure is inappropriate. Thus, the actual capital structures of other utilities may have been deemed inappropriate by their own regulatory commission. For all of the foregoing reasons, simply comparing the capital structures of other regulated utilities has no place in a proper capital structure analysis.

Q: Discuss PUD's recommended capital structure for OG&E.

A: OG&E has proposed a debt ratio of 47% in this Cause. Because it is the Commission's duty to act as a surrogate for competition, the Commission should approve a capital structure coincident with one that would exist in a competitive environment. As a result, PUD recommends OG&E's capital structure, which consists of 46.7% debt and 53.3% equity.

SHORT-TERM INCENTIVE COMPENSATION

Q: Please explain the Company's adjustment regarding Incentive Compensation.

A: OG&E's pro forma expense levels include $17,973,228 of annual or short-term incentive compensation. The Company has a compensation plan which encompasses four metrics: Earnings per Share ("EPS"), Operations and Maintenance ("O&M"), Customer Satisfaction, and Safety.

Q: What amount of recovery should the Commission allow with respect to short-term incentive compensation?

A: PUD recommends that the Commission allow full recovery of short-term incentive compensation for the following reasons:

(1) The Company's incentive plan includes compensation studies which look at companies that OG&E competes with for employees.

(2) The metrics are not inclusive of each other. As a result, there is no "trigger" which, when met, provides incentive payout.

(3) All four metrics benefit the Company, the ratepayers, and the shareholders.

Q: Why should a robust incentive plan include compensation studies?

A: The Company needs a variety of employees with experience, knowledge, and skills to provide efficient and affordable electric service to its customers. Two examples illustrate:

(1) The Company asks employees to fix and repair power lines that are damaged due to periods of inclement weather. These employees are required to have the

requisite skill and experience to safely and efficiently complete these tasks, sometimes while the inclement and dangerous weather is in progress. This is done to ensure service disruption is minimal, and power is fully restored to affected ratepayers in the most efficient manner.

(2) The Company asks employees to understand and maneuver increased operational complexities with its membership in SPP. To begin with, it is incumbent on the Company to have employees with proficient knowledge present in the many Working Groups and Task Forces that take place throughout the stakeholder process, to advocate OG&E's position. Further, the Company must have personnel at the plant with the skill and knowledge to not only be able to speak intelligently with SPP with respect to the constant changes in dispatch, etc., but also to actively participate in the Integrated Marketplace. Employees must effectively understand technical terms and concepts such as Locational Marginal Prices, Congestion, specifics of the plant, etc., to ensure they are bidding correct prices in both the Day-Ahead and Real-Time Markets. Membership and active participation in SPP provides the Company's ratepayers with increased savings in the form of lower prices for electricity.

Q: Why is it important to have the four metrics independent of each other, with respect to payout?

A: Although there is a financial component included in the Company's incentive compensation package, payout of incentive compensation is not "triggered" by financial performance. Each of the four metrics provided in the Company's incentive

compensation plan provides a benefit to the Company, the ratepayers, and the shareholders. The Company benefits by having employees focused on creating a company which is financially sound, safe, reliable, and has efficient infrastructure in place. This in turn benefits ratepayers, as they can be assured of electric service which is reliable and provided at the lowest cost possible. Shareholders benefit by investing in a company which is financially strong, profitable, and has qualities that conservative investors are looking for when seeking new investment opportunities, which are low risk, defensive companies, which pays out a consistent dividend. Finally, because the metrics are independent of each other, and not based on financial performance, the Company's incentive compensation package allows employees to receive compensation for the areas that were met, and miss out on compensation in any areas that were not met. In not meeting payout in certain metrics, the Company is able to ascertain areas in which to improve.

(1) Focus on Earnings per Share benefits the Company, its shareholders, and its ratepayers. A high Earnings per Share is a very good indicator of the profitability of a utility, and indicates a financially strong company. This is attractive to shareholders, as a financially strong company has, among other things, low risk. In addition, being a financially strong electric utility company is important, as it is necessary for OG&E to be able to fund and support its operational processes. With the ability to support and fund its operational processes, the Company's ratepayers benefit, as they have a stake in the financial well-being of the Company through cheaper power that is more reliable and efficient. Technology is constantly changing, and as the Company endeavors to become more efficient,

it is imperative for OG&E to have the means to invest in the necessary infrastructure, systems, and processes necessary to provide its ratepayers with efficient power at a lower cost.

(2) Focus on O&M costs allows generating facilities to become cheaper to run and maintain. Attracting and retaining qualified personnel who are trained to proactively maintain OG&E's generating units provide benefits to both shareholders and ratepayers. Investors in utilities are looking for financially strong companies with stable interest and dividend income. If the Company has generating units that are routinely maintained and updated as necessary, these conservative investors have additional assurances and confidence that investing in a financially strong company, such as OG&E, will provide a consistent and stable return. Ratepayers also benefit through a focus on O&M. As systems are updated with newer and more effective technology, generating units can run more productively, power has the potential to be generated more cheaply, and additional generating units are able to potentially be committed by SPP in the Day-Ahead or Real-Time Markets.

(3) Focus on customer satisfaction benefits both ratepayers and shareholders. Ratepayers benefit from a focus on customer satisfaction by taking advantage of new technology and processes which promote communication and ease of payment. Social media and digital applications have become an avenue whereby the Company can effectively communicate with customers. Shareholders benefit by investing in a forward-thinking company which is consistently focusing on increasing customer needs.

(4) Focus on safety is an all around important metric for OG&E, not only for purposes of incentive compensation, but also to provide a safe place for employees to work. With the unique hazards of generating units found in utilities, processes and procedures are in place to ensure that employees are afforded a safe environment in which to work. Safe environments lead to decreased accidents, which can save the Company money. That money can be focused elsewhere for the betterment of the Company and ratepayers.

Q: Do the four metrics outlined above benefit both the shareholders and the ratepayers?

A: Yes. The Company's incentive plan includes metrics which benefit both shareholders and ratepayers, as both have an important stake in all four of the metrics detailed in the Company's incentive compensation plan. OG&E is a defensive company, which is attractive to conservative investors who are looking for a company that is financially sound, with low volatility. Ratepayers have a stake in the Company having a high Earnings per Share, and benefit by having power supplied by a financially strong company, who employs personnel that have the experience and knowledge necessary to perform the duties necessary to allow OG&E to be as efficient and reliable as possible, in addition to providing electric service at the lowest cost possible. As a result, both ratepayers and shareholders have a vested interest in all four facets of OG&E's incentive compensation plan, and the Company should receive full recovery.

Q: What is PUD's recommendation with respect to short-term incentive compensation?

A: PUD believes that it is prudent for the Company to have a comprehensive incentive plan, which is an important part of employee attraction and retention. If incentive plans were eliminated, and those dollars were inserted as base salary instead, compensation would still be in a range that is competitive with compensation packages provided by other like-sized companies. Although the compensation package does have a financial element, it is structured to where payout is not tied to financial performance. This results in allowing both the ratepayers and shareholders to benefit in the Company's incentive compensation package. PUD recommends that the Commission should allow 100% of Short-Term Incentive Compensation in the amount of $17,973,228.

LONG-TERM INCENTIVE COMPENSATION

Q: Is the Company requesting recovery of LTI?

A: No. The Company removed $5,487,519 of LTI from expenses. Although PUD has consistently recommended the recovery of 25% of LTI, the Company is not asking for recovery of LTI in this Cause.

PAYROLL EXPENSE

Q: Please describe the Company's proposed payroll adjustment.

A: In workpaper H-2-22, the Company is requesting an increase to payroll, in the amount of $3,292,166. To arrive at this number, this adjustment has three parts:

(1) Payroll was annualized based on the number of actual employees employed at the end of the test year.

(2) An increase was made to payroll to reflect raises implemented at the end of 2017.

(3) Payroll expenses after the test year were estimated to account for new employees added to the payroll, as well as employees no longer on the payroll.

Q: Is the Company using a different methodology concerning payroll than it has in previous rate cases?

A: Yes. In previous rate cases, OG&E used a process of estimating of payroll expense using test year expenses, which were then updated for expected post test year head count and wage changes. The change in methodology in this Cause aligns the Company's payroll practices with Final Order No. 662059 in Cause No. PUD 201500273, where the Company's adjustment to payroll was based on actual test year and post test year numbers and also accounts for employee raises of approximately 3%.

Q: What is PUD's recommendation with respect to Payroll Expense?

A: PUD recommends that the Commission should allow the Company's proposed increase to Payroll Expense in the amount of $3,292,166. PUD believes that the Company's methodology to annualize payroll at March 30, 2018, provides assurances that (1) any employees no longer employed, or employees hired by OG&E after the test year period, were accurately represented in the post test year numbers, and (2) the post test year Payroll Expense reflects actual payroll amounts after raises were given in 2017.

PENSION REGULATORY LIABILITY

Q: **Please describe the Company's proposed adjustment to Pension Regulatory Liability.**

A: The Pension Tracker was authorized in Cause No. PUD 200500151. The Company shows an expense in the amount of $44,020,103 and with the proposed amortization period of five years, results in a reduction to expenses (i.e., a credit to customers) in the amount of $8,804,003.

Q: Does PUD believe that a five-year amortization is appropriate?

A: Yes. PUD believes that a five-year amortization is an appropriate timeline.

MATERIALS AND SUPPLIES

Q: **What Materials and Supplies are included in OG&E's rate base? Please explain the process used to review Materials and Supplies.**

A: Materials and Supplies consist of the cost of materials purchased primarily for use in the utility business for construction, operation, and maintenance purposes. OG&E's pro forma adjustments for Materials and Supplies total $126,663,282. PUD reviewed the Direct Testimony of Jason Bailey, WP B-05, and the response to Data Request PUD KPL-1 to update the six-month post test year amounts. PUD compared the 13-month average based on the six-month post test year to OG&E's 13-month average balance for Materials and Supplies.

Q: What is PUD's recommendation for Materials and Supplies?

A: PUD recommends Adjustment No. B-2 to increase Materials and Supplies by $299,243 to reflect the 13-month post test year average balance. PUD used a 13-month average based on the six-month post test year from workpaper B-05, as well as the Company's response to Data Request PUD KPL-1. PUD compared the 13-month average based on the six-month post test year of $127,899,873 to OG&E's 13-month average balance of $127,600,630. This treatment is consistent with Final Order No. 662059 in Cause No. PUD 201500273.

ADJUST COAL AND OIL INVENTORIES TO REFLECT 13-MONTH AVERAGE

Q: Please explain what Coal and Oil inventories are included in the Company's rate base, and PUD's process for reviewing Coal and Oil Inventories.

A: Utilities' primary objectives within the Fuel Inventories account are to: (1) ensure a continuous supply of coal and oil, of an appropriate quality, to all of its coal and oil-fired generation stations; and (2) ensure delivery of coal and oil to those stations which will result in the lowest reasonable cost per kWh of electricity, within the constraints of safety, reliability of supply, unit design, and environmental requirements. OG&E's pro forma adjustments for Coal and Oil Inventories total $73,488,992. PUD reviewed the Direct Testimony of Jason Bailey, WP B-04, and the response to Data Request PUD KPL-1 to update the six-month post test year amounts. PUD compared the 13-month average based on the six-month post test year to OG&E's 13-month average balances for Coal and Oil Inventories. This treatment is consistent with Final Order No. 662059 in Cause No. PUD 201500273.

Q: What is PUD's recommendation for Coal and Oil Inventories?

A: PUD recommends Adjustment No. B-3 to increase the Coal and Oil Inventories by $1,389,919 to the 13-month average based on the six-month post test year. PUD used OG&E's 13-month average balance from WP B-3-4 and used Company responses to Data Request PUD KPL-1. PUD compared the 13-month average based on the six-month post test year of $79,241,890 to OG&E's 13-month average balance of $77,851,970.

ADJUST GAS IN STORAGE TO REFLECT 13-MONTH AVERAGE

Q: Please describe OG&E's adjustment for Gas in Storage.

A: OG&E proposed an increase to natural gas inventory in the amount of $2,387,726. Cushion Gas Inventory was part of the current transmission agreement between OG&E and Enable Gas Transmission ("Enable"). This agreement was in effect during the test year. Under the terms of this transportation service agreement, Cushion Gas Inventory withdrawals only occur during the months of June, July, and August. The decrease in Gas in Storage for June 2017 through August 2017 is primarily due to withdrawals from the Cushion Gas Inventory. This agreement will end in April 2019 but the Gas in Storage will be fully depleted by August 31, 2018. OG&E does not lease any storage capacity from Enable and OG&E will no longer be adding Cushion Gas to Gas in Storage. PUD compared the 13-month average based on the six-month post test year of $4,806,032 to OG&E's 13-month average balance of $6,035,194. Therefore, PUD recommends Adjustment No. B-4, in the amount of $1,229,162, to decrease Gas in Storage to the 13-month average based on the six-month post test year to OG&E's 13-month average

balance. This treatment is consistent with Final Order No. 662059 in Cause No. PUD 201500273.

Q: Please describe Cushion Gas.

A: Cushion Gas, also referred to as base gas, is the volume of gas that is in a storage reservoir to maintain adequate pressure and deliverability rates throughout the withdrawal season. Another way to describe it is the amount of gas required in a storage pool to maintain sufficient pressure to keep the working gas recoverable.

Q: Does PUD recommend a reduction and/or decrease to the adjustment to OG&E's Gas in Storage?

A: Yes. PUD recommends the following adjustment:

Table 1: Gas in Storage

OG&E proposed 13-month average	$6,035,194
PUD recommended 13-month post test year	$4,806,032
PUD recommended Adjustment No. B-4	$1,229,162

FUELS AND PURCHASED POWER EXPENSES

Q: Please describe OG&E's adjustment for Fuels and/or Purchased Power Expenses.

A: OG&E proposed an adjustment to remove all fuel expenses and purchased power costs for the test year that is passed to customers through the Fuel Adjustment Clause, excluding cogeneration capacity payments.[8] This adjustment removes $787,820,444 from operating expense, while leaving $76,402,988 in base rates for cogeneration

[8] Cause No. 201500273, Final Order No. 662059.

capacity payments. PUD reviewed WP-H-2-33, the test year general ledger, cogeneration capacity payments, and the curtailment general ledger in support of this adjustment. PUD reviewed and verified that all general ledger entries tied back to the workpapers. PUD recommends no adjustment to the Fuel and/or Purchased Power Expenses.

Q: Does PUD recommend any further adjustment to the Fuel and/or Purchased Power Expenses?

A: No.

UNBILLED REVENUES AND OVER/UNDER RECOVERIES

Q: Please describe OG&E's adjustment for Unbilled Revenues and Over/Under Recoveries.

A: OG&E proposed an adjustment to remove Unbilled Revenue and Over/Under Recoveries. This adjustment results in an increase in revenue in the amount of $1,600,000, as well as an addition of 62,275,618 kWh. PUD reviewed WP-H-2-1 concerning Unbilled Revenue, and the Company's Over/Under Recovery accounts, then traced and tied the journal entries to the workpapers. The removal of the over-recovery of fuel and rider collections decreased revenue by $56,056,608 and decreased the provision for rate refund by $12,346,571. The net decrease of $68,403,179 is arrived at by adding the over-recovery of fuel and rider collections in the amount of $56,056,608 to the provision for rate refund in the amount of $12,346,571. That sum of $68,403,179 is then decreased by the addition to Unbilled Revenue in the amount of $1,600,000, resulting in a net decrease in revenue of $66,803,179.

Q: Does PUD recommend any further adjustment to Unbilled Revenues and Over/Under Recovery?

A: No.

PREPAYMENTS EXPENSE

Q: Please describe the adjustment to Prepayments Expense.

A: OG&E proposed an adjustment of $2,305,107 to Prepayments Expense. OG&E's adjustment is based on the 13-month test year average of $6,843,529, which adjusted the test year end balance of $4,538,423. PUD reviewed the Direct Testimony of Jason Bailey, WP B-10, OG&E's responses to Data Request PUD KPL-1, and the six-month post test year updated balance.

Q: What is PUD's recommendation for Prepayments Expense?

A: PUD recommends Adjustment No. B-5 to increase Prepayments Expense by $278,416 to the 13-month average based on the six-month post test year. PUD used the 13-month average based on the six-month post test year of $7,121,945 obtained from information provided in the Company's response to Data Request PUD KPL-1. PUD compared the 13-month average based on the six-month post test year of $7,121,945 to OG&E's 13-month average balance of $6,843,529.

OUTSIDE SERVICES / ATTORNEY FEES

Q: Did OG&E propose an adjustment for Outside Services / Attorney Fees?

A: No.

Q: Does PUD have a recommended adjustment to Outside Services / Attorney Fees?

A: Yes. PUD's recommended adjustment is PUD Adjustment No. H-3 to decrease Outside Services / Attorney Fees by $2,835.

Q: Please explain PUD Adjustment No. H-3.

A: While reviewing invoices, PUD discovered that 7% of a $40,500 invoice was estimated to be related to influencing legislation. Because this expense of $2,835 does not facilitate the provision of electric service, and because legislative advocacy expenses are to be reported below the line, PUD recommends that this expense should not be passed on to ratepayers. Thus, 7% of the $40,500 results in a PUD recommended adjustment to decrease Outside Services / Attorney Fees by $2,835.

Q: Please explain PUD's audit for Outside Services / Attorney Fees.

A: PUD reviewed a listing of all of OG&E's vendor transactions involving Outside Services/ Attorney Fees during the test year. PUD compared these expenses to the past three years by FERC account and by vendor to determine fluctuations in excess of 10%. OG&E provided explanations of the fluctuations as well as general ledgers and invoices for these expenses. PUD then selected sample invoices to review and verify the expenses, and analyze information pertaining to these vendors. Through this analysis and multiple

discussions onsite with Company representatives, PUD determined that the amount, other than the $2,835 related to Legislative Advocacy, included in the Outside Services / Attorney Fees expense was reasonable.

Q: Have there been any Company and/or accounting policy changes with respect to Outside Services / Attorney Fees?

A: No.

Q: What are some fluctuations and changes PUD discovered while auditing Outside Services / Attorney Fees?

A: PUD discovered that some vendor accounts had decreased to zero during the test year compared to 2016 expenses. OG&E's shift from performing work through Outside Services to performing work in-house caused these accounts to reflect this decrease. OG&E explained the reasons for these changes included streamlining processes, establishing cost savings, and implementing efficiency measures. PUD also discovered new vendor accounts and activity during the test year compared to previous years. PUD inquired about these new vendors and the increase of these accounts. OG&E explained that some of the new vendors that appeared on the list of vendors were added as a result of certain attorneys moving to different law firms.

REGULATORY EXPENSES

Q: Please summarize PUD's review of Regulatory Expenses.

A: PUD reviewed supporting documents and items included in Regulatory Expenses. PUD reviewed the Company's adjustment which reflects a normalized level of Regulatory Expenses. This increased operating expenses by $41,934. PUD then reviewed OG&E's adjustment to remove OCC assessment fees, which are recovered through a surcharge on customer bills, which results in a decrease of $2,316,326. Finally, PUD reviewed OG&E's adjustment to remove any remaining amortization of the deferred assets from previous Oklahoma Rate Case Expenses. This adjustment properly removes these expenses since these assets will be fully amortized by the time new rates go into effect. This adjustment resulted in a decrease of $916,392. All three of these adjustments proposed by OG&E are reflected in WP H 2-25. These three Company pro forma adjustments totaled a decrease of $3,190,785 to Regulatory Expenses.

Q: What is PUD's recommendation on OG&E's pro forma adjustment to Regulatory Expenses?

A: PUD does not recommend any adjustments to Regulatory Expenses related to the normalization of these expenses, OCC assessment fees, or prior Rate Case Expenses. PUD recommends the Commission approve OG&E's proposed pro forma adjustment WP H 2-25 in this Cause.

RATE CASE EXPENSES

Q: What is OG&E's proposed adjustment for Rate Case Expenses?

A: OG&E has estimated the total amount of Rate Case Expenses in WP H 2-39 to be $1,066,890.73. The Company requests to recover $533,445 annually for two years.

Q: What analysis did PUD perform regarding OG&E's Rate Case Expenses?

A: PUD reviewed legal fees, consultant contracts and fees, and other expense-related details included in the current test year and six-month post test year. PUD reviewed prior causes, the test year, and six-month post test year expenses. PUD also reviewed supporting documents for items included in the current Rate Case Expenses.

Q: How much of these expenses are attributable to the current rate Cause during the test year?

A: The forecast amount of current Rate Case Expenses, as reported in OG&E filings, the onsite supporting documentation, and the response to data request AG 1-23, totals $509,750. However, the amount of Rate Case Expenses actually incurred thus far is $205,290. PUD recommends that OG&E submit a final update of its Rate Case Expenses at the end of this Cause. This updated level of actual incurred and allowable costs, for Rate Case Expenses at the end of this Cause should be the level of expenses to be recovered over a two-year amortization period. Also, OG&E should provide all additional Rate Case Expenses until the Final Order is issued for this Cause.

Q: Which two adjustments is PUD recommending to Rate Case Expenses?

A: PUD is recommending PUD Adjustment No. H-4 to amortize Rate Case Expenses at the actual incurred level and PUD Adjustment No. H-5 to remove unnecessary expenses from Rate Case Expenses.

Q: Please explain PUD's Adjustment No. H-4 to amortize Rate Case Expenses at the actual incurred level of expenses.

A: OG&E has requested a recovery period of two years as shown by its pro forma adjustment in WP H 2-39, Rate Case Expense. Based on WP H 2-39, the filed application, onsite documentation, and responses to Data Request AG 1-23, the total current and remaining balance provided to PUD is as follows:

OG&E forecast and proposed Rate Case Expense	$509,750
Invoices on hand (current rate cause 17-496)	-$205,290
Remaining estimated balance to be incurred	$304,460
PUD Amortization Adjustment No. H-4 (as of now)	$152,230

Q: How does PUD Adjustment No. H-4 affect Rate Case Expenses?

A: PUD Adjustment No. H-4 will result in a decrease of $152,230 from the $533,445 per year for Rate Case Expenses requested by OG&E.

Q: What necessitates PUD Adjustment No. H-5 to remove unnecessary Rate Case Expenses?

A: Final Order No. 672864 for Cause No. PUD 201700151 states:

> Moreover, utilities should understand that not all rate case costs should be borne by ratepayers. Necessary and reasonable costs to process a rate case should be borne by ratepayers. Ratepayers should not be burdened with unreasonably inflated legal costs and expert witness fees, especially when the testimony of some expert witnesses may appear to be duplicative and/or unnecessary testimony.

PUD Adjustment No. H-5 decreases Rate Case Expenses by $10,325 to remove the actual amount the Company has incurred thus far, with respect to expert witness fees for Dr. Russell R. Evans. Further, PUD recommends the Commission disallow all future fees associated with this expert witness for this Cause. PUD believes that Dr. Evans' testimony is unnecessary and thus, his expert witness fees should not be borne by the ratepayers.

Q: Why does PUD believe that the costs associated with testimony of Dr. Evans' testimony is unnecessary?

A: First, Dr. Evans does not propose a specific Return on Equity ("ROE") in this Cause. Second, other Company witnesses, such as OG&E's Chief Financial Officer Mr. Stephen E. Merrill and outside consultant Dr. Roger A. Morin, have provided testimony relating to ROE, and PUD believes that Dr. Evans' testimony duplicates the testimony of both Dr.

Morin and Mr. Merrill. Third, PUD believes that OG&E has employees who are qualified, and have provided testimony regarding ROE in past causes, and should consider the option of having those employees testify on the subject of ROE. As the Company has qualified witnesses on staff, the costs for outside consultants are not necessary or reasonable, and should not be borne by ratepayers. However, for this cause, PUD recommends only the disallowance of the costs to retain Dr. Evans.

SPECIFIC RESPONSES TO COMPANY WITNESS TESTIMONY

Q: What general concerns do you have with respect to the testimony of Company witnesses Mr. Donald Rowlett, Dr. Russell Evans, and Mr. Steven Merrill?

A: In preparing testimony discussing ROE, the company hired two outside witnesses, Dr. Roger Morin and Dr. Russell Evans, and utilized two Company witnesses, Mr. Donald Rowlett and Mr. Steven Merrill, to speak on topics which overlap each other. Dr. Morin provides "traditional" testimony which outlines the models and analysis he used to reach his recommendation of an ROE of 9.9%. However, Dr. Evans, Mr. Rowlett, and Mr. Merrill each speak to the same general topic that a reasonable ROE (1) is necessary to obtain new financing and maintain financial integrity; (2) is necessary to compete with other companies with similar risk profiles for investors capital; and (3) is necessary for continued strong financial health. These are all important points; however, having four witnesses provide written testimony on these points is financially imprudent and redundant.

Q: What are your specific responses to Mr. Donald Rowlett?

A: Mr. Rowlett provides written testimony which discuses the overall relief requested by the Company. Included in his testimony is language which speaks to the importance of a reasonable ROE. He states, "[i]nvesting in infrastructure is a long-term commitment that typically serves customers for many decades."[9] While this statement is generally true, Mr. Rowlett fails to explain how investing in infrastructure adds risk to the Company. In fact, by making significant additions to infrastructure, the Company will be allowed to recover a return on those investments. An arrangement this favorable to a company could only exist in a regulated environment. As both shareholders and ratepayers benefit from the fact that utilities are very low risk firms, this should be appropriately reflected in the awarded rate of return.

Mr. Rowlett also states, "[b]y authorizing an ROE that is consistent with similarly rated utilities and regulatory jurisdictions, the Commission sends a clear message that investors will be treated fairly as compared to other similar investment opportunities."[10] However, the Commission, in past orders, has consistently awarded lower ROEs than requested by the Company. These lower awarded ROEs, for both OG&E and Public Service Company of Oklahoma ("PSO"), have balanced the interests of both the ratepayers and shareholders, and have allowed each Company to remain financially strong and attract capital on par with companies of similar risk.

[9] Direct Testimony of Donald R. Rowlett P. 12, L 11-12
[10] Direct Testimony of Donald Rowlet P. 13, L16-18

Q: What are your specific responses to Dr. Evans?

A: Dr. Evans states, "[t]he challenge facing the regulator is to find the outcome where the regional utility recovers all costs of production and earns a reasonable risk-adjusted profit, thus ensuring that the utility has full and competitive access to the productive resources (labor, materials and capital) needed for operations."[11] However, in making significant additions to its rate base, OG&E is adding to its overall revenue requirement. Under the rate base rate of return model, the Company will be allowed to recover all of its useful plant investments. This favorable arrangement only exists in the construct of a regulated environment.

As Mr. Rowlett stated in his testimony, Dr. Evans reiterates the same general theme by stating: "ROE models are designed to estimate the return to equity for the utility that would be tolerated by a competitive market."[12] Unlike utilities, competitive firms must constantly endure the weight of competition, which increases their risk. Public utilities are not threatened by competitive forces due to their monopoly status, captive customer base, and minimal substitutes for their services. Utilities are defensive companies, and have lower volatility with respect to the overall market. Ratepayers and shareholders benefit from the fact that utilities are extremely low risk firms, and this should also be reflected appropriately in the Company's awarded rate of return.

[11] Direct Testimony of Dr. Russell R. Evans. Page 4, Lines 8-11.
[12] Direct Testimony of Dr. Russell R. Evans. Page 7, Lines 16-18.

Dr. Evans also states, "[i]t falls to the regulator to determine a reasonable signal via an authorized ROE. This signal in turn determines the allocation of productive resources allocated in the economy to the utility."[13] In Final Order No. 662059 in Cause No. PUD 201500273, the Commission concluded that "the 9.50 percent ROE determined herein is fair, just and reasonable to both ratepayers and OG&E. Further, a 9.50 percent ROE will afford OG&E the opportunity to earn a fair and reasonable rate of return. The Commission has undertaken a concerted effort to balance the interests of both the investor and the consumer and believes that the 9.50 percent ROE will be sufficient to allow OG&E to maintain and support its credit, assure confidence in its financial integrity and allow it to continue to attract capital." The Commission has provided similar language in past rate cases for both OG&E and PSO.

Q: What are your specific responses to Mr. Merrill?

A: As Dr. Evans stated in his Direct Testimony, Mr. Merrill reiterates that, "[s]ignificant investment is necessary each year to keep operations current. The financial community's perception of our ability to earn a fair rate of return drives the cost of funding those capital investments."[14] As mentioned earlier when addressing a similar concern in Dr. Evans' testimony, by making significant additions to its rate base, OG&E is adding to its overall revenue requirement. Under the rate base rate of return model, the Company will be allowed to recover all of its useful plant investments. This favorable arrangement only exists in the construct of a regulated environment.

[13] Direct Testimony of Dr. Russell R. Evans – Page 9, Lines 21-23.
[14] Direct Testimony of Mr. Steven E. Merrill – Page 3, Lines 11-13.

Mr. Merrill also states in his Direct Testimony that "the interests of the customers and the investors should be aligned. In a recent essay, Scott Hempling, a noted regulatory attorney who often advises state utility commissions, observed "Shareholder and ratepayer interests, if legitimate, are not opposites. Shareholders want satisfied customers; customers want healthy companies. In regulating public utilities, the public interest is served when shareholder and ratepayer interests are aligned; that is, when pursuit of the shareholder interest simultaneously advances the consumer interest." Here is what this quote means to me. Customers need and expect reliable service. To provide that service OG&E needs the resources to make that possible. One of those resources is equity investment. Equity and debt investors play a critical role in the financing of utility operations. As stated earlier they experience the variability inherent in business outcomes. In order to attract and retain investment dollars the returns must match investors' market-driven expectations. In the end, customers and investors alike are best served by fair, balanced, and predictable returns."[15] PUD agrees with this statement, but for different reasons than Mr. Merrill suggested. First, the alignment of interests of the Company, its ratepayers, and its shareholders will still be achieved with a more appropriate and lower ROE. This Commission has consistently awarded lower ROEs, and has maintained that the awarded ROE provides balance towards the interests of both the investor and the consumer. Second, this methodology is appropriate in the context of incentive compensation. By meeting the four metrics detailed in the Company's incentive compensation plan, the Company can increase profitability, allow generating facilities to become cheaper to run and maintain, increase focus on increasing

[15] Direct Testimony of Mr. Stephen E. Merrill – Page 4, Lines 19-30

customer needs, and provide a safe working environment. OG&E is a financially strong defensive company, with low risk and volatility, which is a double-edged sword and circular. The Company is relatively insulated from market risk. This should be reflected in a lower awarded ROE. However, as OG&E strives to create a company that has low volatility and is financially strong, programs must be implemented to award employees for meeting these metrics geared to achieve a high EPS, an efficient infrastructure, and safe and reliable service.

Q: What are your specific responses to Dr. Morin?

A: The Commission should not allow recovery of flotation costs. When companies issue securities, they typically hire an investment bank as an underwriter for the securities. Flotation costs generally refer to the underwriter's compensation. Flotation should not be considered for three reasons:

(1) Flotation costs are not actual out-of-pocket costs. Underwriters are compensated through an underwriting spread. This spread is the difference between the price at which the underwriter purchases the shares and the price at which the underwriter sells the shares to investors.

(2) Flotation costs are already built in to the market. Through full disclosure in the prospectus, investors are already aware that a portion of the price they are paying for the shares does not go directly to the company. Investors' decisions to purchase shares include flotation costs. It would be inappropriate for the Commission to give credence to Dr. Morin's inclusion of flotation costs in his analysis.

(3) Dr. Morin's recommended ROE is already above the true required return. It is inappropriate to suggest flotation costs be considered in ROE analysis.

OVERALL RECOMMENDATION

Q: Please summarize the key points of your testimony.

A: According to the Supreme Court decision rendered in *Federal Power Commission v. Hope Natural Gas Company*, risk is one of the most important factors to consider when estimating the cost of equity. OG&E, like any utility, is a firm with very low levels of risk – below the market average. As a result, the Company's true required return on equity must be lower than the required return on the overall market. PUD used three widely-accepted methods, plus market analysis, to estimate OG&E's required return on equity: (1) Discounted Cash Flow; (2) Capital Asset Pricing Model; and (3) Comparable Earnings Model. According to these models, as well as the market analysis, OG&E's true required return on equity is likely less than 8.0%. Awarding an appropriate Return on Equity would allow the Company to remain financially healthy and attract capital under efficient and economical management; however, the awarded return must be commensurate with the actual risk of OG&E. To be fair and reasonable to the Company, and in the interest of gradualism, PUD is recommending a return on equity above OG&E's true required return, rather than a more abrupt move toward the true required return. Each of the models discussed in this Cause uses various inputs and estimates. In addition, PUD analyzed the Company's optimal capital structure, and is recommending the Commission adopt the Company's requested capital structure.

PUD believes that full allowance of STI is appropriate to include in the overall compensation package of OG&E, and its recovery from customers. PUD believes that STI are an important way for OG&E to attract and retain qualified employees. In addition, because the Company's incentive compensation package is not directly tied to financial performance, there is no "trigger" which, if met, would provide incentive payout. Focusing on the entire incentive package benefits both ratepayers and shareholders, as employees are focused on creating a company which is not only financially sound and strong, but also one that is safe, reliable, and has efficient infrastructure in place.

Q: Please state PUD's recommendations to the Commission.

A: PUD requests the Commission accept the following recommendations:

(1) PUD's recommended cost of equity of 8.75%, which is the midpoint, rounded to the nearest quarter percent, in a range of reasonableness between 8.24% and 9.24%;

(2) The Company's proposed cost of debt of 5.32%, and capital structure consisting of 46.7% debt and 53.3% equity;

(3) Full recovery of Short-Term Incentive Compensation in the amount of $17,973,228;

(4) The Company's proposed removal of Long-Term Incentive Compensation in the amount of $5,487,519;

(5) The Company's proposed increase to Payroll Expense in the amount of $3,292,166;

(6) The Company's proposed increase to Pension Expense and related Pension Regulatory Liability in the amount of $44,020,013, and its proposed amortization period of five years, resulting in an annual benefit to customers in the amount of $8,804,003;

(7) PUD Adjustment No. B-2, to increase Materials and Supplies by $299,243 to the 13-month average balance based on the six-month post test year;

(8) PUD Adjustment No. B-3, to increase Coal and Oil Inventories by $1,389,919 to the 13-month average balance based on the six-month post test year;

(9) PUD Adjustment No. B-4, to decrease the level of Gas in Storage by $1,229,162 to the 13-month average balance based on the six-month post test year;

(10) The Company's proposed an adjustment to remove all fuel expenses and purchased power costs for the test year in the amount of $787,820,444 from

operating expense, while leaving $76,402,988 in base rates for cogeneration capacity payments;

(11) The Company's proposed an adjustment for Unbilled Revenue and Over/Under Recoveries amount of net decrease in revenues of $66,803,179;

(12) PUD Adjustment No. B-5, to increase Prepayments Expense by $278,416 to the 13-month average balance based on the six-month post test year;

(13) PUD adjustment H-3 to decrease Outside Services / Attorney Fees by $2,835;

(14) PUD adjustment H-4 to amortize Rate Case Expenses to the actual incurred level of expenses. This adjustment will result in a decrease of $152,230 from the $533,445 per year of Rate Case Expenses requested by OG&E;

(15) PUD adjustment H-5 to remove unnecessary expenses from Rate Case Expenses over two years. This adjustment will remove $10,325 of unnecessary expenses from Rate Case Expenses over two years;

I state, under penalty of perjury under the laws of Oklahoma, that the foregoing is true and correct to the best of my knowledge and belief.

Geoffrey M. Rush

State of Oklahoma

County of Oklahoma

Subscribed and sworn to before me this 2nd day of May, 2018.

TISH R. COATS NOTARY # 16005761 EXP. 06/13/20 PUBLIC STATE OF OKLAHOMA

Tish R. Coats
NOTARY PUBLIC

(Seal, if any)

My Commission Number: 16005761

My Commission Expires: June 13, 2020

Oklahoma Gas and Electric Company – Cause No. PUD 201700496

LIST OF EXHIBITS

GMR - 1 *Curriculum Vitae*

Exhibit GMR - 1

Curriculum Vitae of Geoffrey M. Rush

Jim Thorpe Office Building, Room 580, 2101 N. Lincoln Blvd, Oklahoma City, OK 73105
(405) 521-3336, g.rush@occemail.com

Work Experience

Oklahoma Corporation Commission – March 2013 - Present

Energy Coordinator: July 1, 2017 - Present

- Directly supervise a team of Public Utility Division that, as authorized by the State of Oklahoma, regulate electric and gas utility rates, terms, conditions of service, and safety that is in Oklahoma's public interest and serves Oklahoma ratepayers in a fair, just and reasonable manner.

SPP Integrated Marketplace/Day-Ahead Market: March, 2013 - Present

- Monitor all SPP's Day-Ahead processes and create an in-depth work routine of auditing procedures
- Worked with SPP during test markets and transmission rights development
- Monitor the Settlement User Group (SUG), Change Working Group (CWG) and Market Working Group (MWG), Z2 Task Force (Z2TF), Export Pricing Task Force (EPTF)

Bank of Oklahoma – 2011 - 2013

Financial Consultant

- Acquire, retain, and deepen customer relationships.
- Assist the branch to meet sales objectives.
- Proactively meet with clients to discover financial needs and provide recommendations.

JP Morgan Chase/Bank One – 2001 - 2011

Vice President – Investments

- Responsible for developing and maintaining financial and investment relationships, while appropriately managing clients' assets and brokerage accounts.
- Provide advisory and execution capabilities to individuals and families, as well as private and public corporations.

Education

Michigan State University

- Psychology: 1993 - 1997

Professional Licenses

- NASD Series 6: Investment Company Products/Variable Life
- NASD Series 7: General Securities Representative
- NASD Series 63: Uniform Securities Agent State Law
- State of Oklahoma Insurance
- Society of Utility and Regulatory Financial Analysts – Certified Rate of Return Analyst (CRRA)

Professional Training

- Introduction to Energy Trading & Hedging
- Electric Power Engineering Workshop
- Society of Utility and Regulatory Financial Advisors

CERTIFICATE OF SERVICE

I, the undersigned, do hereby certify that on the 2nd day of May, 2018, a true and correct copy of the above and foregoing was sent **electronically**, addressed to the following:

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Victoria Korrect
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