**Tariff for Electric Service**
**Wind Energy Transmission Texas, LLC**

# WHOLESALE TRANSMISSION SERVICE (WTS) RATE

Application: Entire System
Original
Effective Date:

Section No: ____
Sheet No.: ____
Page 3 of 5

Rules. Based on the results of the System Security Screening Study, if additions or upgrades to the transmission system are needed to supply the Transmission Service Customer's forecasted transmission requirements, WETT will, upon the approval of the requesting Transmission Service Customer, initiate a facilities study, in accordance with the Transmission Rules. An executed Facility Study Agreement with the Transmission Service Customer is required prior to WETT performing a facilities study. In the event that existing facilities are inadequate to support the requested Wholesale Transmission Service, the Transmission Service Customer may be required to provide a contribution in aid of construction, as provided in the Transmission Rules.

## Load Shedding and Curtailment

Wholesale Transmission Service hereunder shall be subject to, and WETT and the Transmission Service Customer will comply with, the load shedding and curtailment procedures established under the Transmission Rules.

## Pricing

Charges for Wholesale Transmission Service shall be in accordance with the Transmission Rules. The Wholesale Transmission Service Rate for WETT is as follows:

| | Annual | Monthly |
|---|---|---|
| Wholesale Transmission Service Rate (CCN1-2): | $0.58855 per kW | $0.04905 per kW |
| Wholesale Transmission Service Rate (CCN3): | $0.63667 per kW | $0.05056 per kW |

The Wholesale Transmission Service Rate (CCN1-2) shall become effective upon the CCN1 and CCN2 facilities becoming capable of providing service. The Wholesale Transmission Service Rate (CCN3) shall become effective upon the CCN3 facilities becoming capable of providing service.

## Voltage Support

WETT will provide all devices necessary to maintain proper operating voltages on the transmission system in accordance with good utility practice for voltage support and in accordance with the requirements of the ERCOT ISO, or its successor.

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Application: Entire System
Original
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Section No: ____
Sheet No.: ____
Page 4 of 5

## Reliability Guidelines

To maintain reliability of the ERCOT transmission grid, WETT shall operate its transmission system in accordance with ERCOT Protocols and Operating Guides, NERC guidelines, and any guidelines of the ISO that may apply to WETT's transmission system. WETT reserves the right, consistent with good utility practice and on a non-discriminatory basis, to interrupt Wholesale Transmission Service without liability on WETT's part for the purpose of making necessary adjustments to, changes in, or repairs to its lines, substations, and other facilities, or where the continuance of Wholesale Transmission Service would endanger persons or property. In the event of any adverse condition or disturbance on WETT's transmission system or on any other system directly or indirectly interconnected with WETT's transmission system, WETT, consistent with good utility practice, also may interrupt Wholesale Transmission Service on a non-discriminatory basis in order to limit the extent or damage of the adverse condition or disturbance, to prevent damage to generating or transmission facilities, or to expedite restoration of service.

WETT will give the Transmission Service Customer as much advance notice as is practicable in the event of such interruption, and shall restore service with due diligence.

## Payment

Any charges due to WETT under this rate schedule shall be billed in accordance with the Transmission Rules. The Transmission Service Customer shall make payment to WETT in a manner consistent with the procedures and deadlines set forth in the Transmission Rules. Any late payments by Transmission Service Customer or Transmission Service Customer default shall be handled in accordance with the Transmission Rules.

## Amendment to Rules

In the event the Transmission Rules are amended or if a new rule is adopted governing the subject matter of this tariff, this tariff shall, nevertheless, remain effective until new tariff(s) filed pursuant to any such amendment(s) or such new rule are approved, unless the amendment(s) or new rule or an agreement of the parties provide otherwise.

**Tariff for Electric Service**
**Wind Energy Transmission Texas, LLC**

# WHOLESALE TRANSMISSION SERVICE (WTS) RATE

Application: Entire System
Original
Effective Date:

Section No: ____
Sheet No.: ____
Page 5 of 5

## Rate-Case Expense Surcharge

In addition to the above charges, the Transmission Service Customer shall pay a monthly rate of _____ per kW of coincident peak demand for 24 months after the effective date of this rate schedule or until the rate case expense approved in Docket No. _____ are fully recovered.

## Notice

This rate schedule is subject to WETT's Tariff and Applicable Legal Authorities.

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PUC DOCKET NO. 40606

| | | |
|---|---|---|
| APPLICATION OF WIND ENERGY TRANSMISSION TEXAS, LLC FOR AUTHORITY TO ESTABLISH INITIAL RATES AND TARIFFS | § § § § § | BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS |

# DIRECT TESTIMONY OF

# ROBERT B. HEVERT

# ON BEHALF OF

# WIND ENERGY TRANSMISSION TEXAS, LLC

AUGUST 2012

## TABLE OF CONTENTS TO THE DIRECT TESTIMONY OF ROBERT B. HEVERT, WITNESS FOR WIND ENERGY TRANSMISSION TEXAS, LLC



## LIST OF EXHIBITS

## LIST OF SPONSORED/CO-SPONSORED SCHEDULES

| Schedule | | Sponsor |
|---|---|---|
| II-C-1 | Rate of Return Calculation | Robert B. Hevert |
| II-C-1.1 | Rate of Return Method | Robert B. Hevert |
| II-C-2.1 | Weighted Average Cost of Capital | Robert B. Hevert |
| II-C-2.2 | Weighted Average Cost of Preferred Stock | Robert B. Hevert |
| II-C-2.2a | Adjusted Cost of Preferred Stock | Robert B. Hevert |
| II-C-2.3 | Weighted Average Cost of Preferred Trust Securities | Robert B. Hevert |
| II-C-2.3a | Adjusted Cost of Preferred Trust Securities | Robert B. Hevert |
| II-C-2.8 | Historical Financial Statistics | Robert B. Hevert |
| II-C-2.9 | Growth in Earnings, Dividends, and Book Value | Robert B. Hevert |
| II-C-2.10 | Rating Agency Reports | Robert B. Hevert |

## EXECUTIVE SUMMARY

In my testimony I present evidence and provide a recommendation regarding Wind Energy Transmission Texas, LLC's ("WETT" or the "Company") Return on Equity ("ROE"), and present the Company's capital structure and overall Rate of Return. My analyses indicate that the Company's Cost of Equity currently is in the range of 10.75 percent to 11.50 percent and, within that range, I conclude that an ROE of 10.90 percent is reasonable and appropriate, if not conservative, given the incremental risk and financial implications associated with the regulatory lag that the Company will experience as a new entrant. My recommended ROE considers the Company's risk profile in comparison the ROE of other utilities in Texas, including: (1) incremental risks associated with the Company's new entry into the Texas transmission market; (2) the undiversified stand-alone risks of the Company's underlying projects; (3) the Company's financial leverage; and (4) the Company's regulatory risk compared to the regulatory jurisdictions of the proxy group companies. Based on those factors, it is appropriate to establish an ROE that is above average, and a return on common equity of 10.90 percent reasonably represents the return required to invest in a company with a risk profile comparable to WETT and considering the incremental risk and financial effects associated with regulatory lag. Given the Company's requested ROE of 10.90 percent, a cost of debt of 5.624 percent, and a capital structure of 40.00 percent equity and 60.00 percent debt, the overall Rate of Return is 7.73 percent.

# DIRECT TESTIMONY OF ROBERT B. HEVERT

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.**

A. My name is Robert B. Hevert. I am Managing Partner of Sussex Economic Advisors, LLC Inc. ("Sussex"). My business address is 3 Trailside Way, Norfolk, Massachusetts 02056.

**Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?**

A. I am submitting this direct testimony ("Direct Testimony") before the Public Utility Commission of Texas ("Commission") on behalf of Wind Energy Transmission Texas, LLC ("WETT" or the "Company").

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.**

A. I hold a Bachelor's degree in Business and Economics from the University of Delaware, and an MBA with a concentration in Finance from the University of Massachusetts. I also hold the Chartered Financial Analyst designation.

. I have worked in regulated industries for over twenty five years, having served as an executive and manager with consulting firms, a financial officer of a publicly-traded natural gas utility (at the time, Bay State Gas Company), and an analyst at a telecommunications utility. In my role as a consultant, I have advised numerous energy and utility clients on a wide range of financial and economic issues including corporate and asset-based transactions, asset and enterprise valuation, transaction due diligence, and strategic matters.

**Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY TO THE PUBLIC UTILITY COMMISSION OF TEXAS?**

A. Yes, I have. As an expert witness, I have provided testimony in over 80 proceedings regarding various financial and regulatory matters before numerous state utility regulatory agencies, including the Commission. A summary of my professional and educational background, including a list of my testimony in prior proceedings, is included in Attachment A to my Direct Testimony.

## II. PURPOSE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my Direct Testimony is to present evidence and provide a recommendation regarding the Company's Return on Equity ("ROE"),[1] and to present the Company's capital structure and overall Rate of Return.

**Q. ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR TESTIMONY?**

A. Yes. I am sponsoring the exhibits listed in the table of contents of this testimony.

**Q. WERE YOUR TESTIMONY AND THE EXHIBITS ATTACHED THERETO PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?**

A. Yes.

[1] Throughout my testimony, I interchangeably use the terms "ROE" and "Cost of Equity."

**Q. ARE YOU SPONSORING ANY SCHEDULES IN THE RATE FILING PACKAGE?**

A. Yes. I am sponsoring the schedules listed in the table of contents of this testimony.

**Q. WAS THIS SCHEDULE PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?**

A. Yes.

**Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE COST OF EQUITY?**

A. My analyses indicate that the Company's Cost of Equity currently is in the range of 10.75 percent to 11.50 percent. Based on the quantitative and qualitative analyses discussed throughout my Direct Testimony and WETT's risk profile, I conclude that an ROE of 10.90 percent is reasonable and appropriate, if not conservative, given the incremental risk and financial implications associated with the regulatory lag that the Company will experience as a new entrant.

**Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT LED TO YOUR ROE RECOMMENDATION.**

A. As discussed in more detail in Section VI, in light of recent market conditions, and given the fact that equity analysts and investors tend to use multiple methodologies in developing their return requirements, it is important to consider the results of several analytical approaches in determining the Company's ROE. In order to develop my ROE recommendation, I therefore applied the Constant Growth Discounted Cash Flow ("DCF") model, the Capital

Asset Pricing Model ("CAPM"), and the Risk Premium approach. As discussed later in my testimony, it is important to consider a range of factors, both quantitative and qualitative, in arriving at an ROE determination.

In addition to the methodologies noted above, my recommendation also takes into consideration: (1) incremental risks associated with the Company's new entry into the Texas transmission market; (2) the undiversified stand-alone risks of the Company's underlying projects; (3) the Company's financial leverage relative to the proxy group; and (4) the Company's regulatory risk compared to the regulatory jurisdictions of the proxy group companies. While I did not make any explicit adjustments to my ROE estimates for those factors, I did take them into consideration when determining where the Company's Cost of Equity should be established within the range of results.

**Q. WHAT IS THE COMPANY'S PROPOSED RATE OF RETURN?**

A. The Company's proposed overall Rate of Return ("ROR") is 7.73 percent. As shown in Table 1, the proposed ROR is based on my Return on Equity recommendation of 10.90 percent, a cost of debt of 5.624 percent (*see* Direct Testimony of Dr. Bruce Fairchild), and a proposed capital structure of 40.00 percent equity and 60.00 percent debt.

**Table 1: Overall Rate of Return**

| | Percent of Capitalization | Cost of Capital | Weighted Cost of Capital |
|---|---|---|---|
| **Equity** | 40.00% | 10.900% | 4.36% |
| **Debt** | 60.00% | 5.624% | 3.37% |
| **Total** | 100.00% | | 7.73% |

**Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?**

A. The remainder of my Direct Testimony is organized as follows:

Section III – Provides a summary of my conclusions and recommendations;

Section IV – Discusses the regulatory guidelines and financial considerations pertinent to the development of the cost of capital;

Section V – Explains my selection of the proxy group of electric utilities used to develop my analytical results;

Section VI – Explains my analyses and the analytical bases for my ROE recommendation;

Section VII – Provides a discussion of specific business risks that have a direct bearing on the Company's Cost of Equity;

Section VIII – Briefly discusses the current capital market conditions and the effect of those conditions on the Company's Cost of Equity; and

Section IX – Summarizes my conclusions and recommendations.

## III. SUMMARY OF CONCLUSIONS

**Q. WHAT ARE THE KEY FACTORS CONSIDERED IN YOUR ANALYSES AND UPON WHICH YOU BASE YOUR RECOMMENDED ROE?**

A. My analyses and recommendations considered the following:

- The *Hope* and *Bluefield* decisions[2] that established the standards for determining a fair and reasonable allowed Return on Equity including; consistency of the

[2] *Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia,* 262 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591 (1944).

allowed return with other businesses having similar risk; adequacy of the return to provide access to capital and support credit quality; and that the end result must lead to just and reasonable rates.

- The effect of the current capital market conditions on investors' Return on Equity requirements, and in particular, the Company's ability to access the capital markets.
- The Company's business risks relative to the proxy group of comparable companies and the implications of those risks in arriving at the appropriate ROE.

**Q. WHAT ARE THE RESULTS OF YOUR ANALYSES?**

A. The results of my analyses are summarized in Tables 2a and 2b, below.

**Table 2a: Summary of Constant Growth DCF Results**

| | *Low Growth Rate* | *Mean Growth Rate* | *High Growth Rate* |
|---|---|---|---|
| 30-Day Average | 9.39% | 11.03% | 13.17% |
| 90-Day Average | 9.47% | 11.11% | 13.25% |
| 180-Day Average | 9.49% | 11.13% | 13.27% |

**Table 2b: Summary of Risk Premium Results**

| | ***Sharpe Ratio Derived Market Risk Premium*** | ***Bloomberg Derived Market Risk Premium*** | ***Capital IQ Derived Market Risk Premium*** |
|---|---|---|---|
| *Average Value Line Beta Coefficient* | | | |
| Current 30-Year Treasury (2.73%) | 9.34% | 10.39% | 10.57% |
| Near Term Projected 30-Year Treasury (3.40%) | 10.01% | 11.06% | 11.24% |
| *Average Bloomberg Beta Coefficient* | | | |
| Current 30-Year Treasury (2.73%) | 9.07% | 10.08% | 10.26% |
| Near Term Projected 30-Year Treasury (3.40%) | 9.74% | 10.75% | 10.93% |
| *Average Calculated Beta Coefficient* | | | |
| Current 30-Year Treasury (2.73%) | 9.46% | 10.53% | 10.72% |
| Near Term Projected 30-Year Treasury (3.40%) | 10.13% | 11.20% | 11.39% |
| *Bond Yield Plus Risk Premium Approach* | | | |
| Near Term Projected 30-Year Treasury (3.40%) | 10.30% | | |

Based on the analytical results presented in Tables 2a and 2b, and in light of the considerations discussed throughout the balance of my Direct Testimony regarding the Company's business risks relative to the proxy group, it is my view that a reasonable range of estimates is from 10.75 percent to 11.50 percent, and within that range, an ROE of 10.90 percent is reasonable and appropriate, if not conservative, based on my consideration of the Company's risk profile and the incremental risks and financial effects associated with regulatory lag. My recommended ROE results in an overall Rate of Return of 7.73 percent for the Company.

## IV. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS

**Q. PLEASE PROVIDE A BRIEF SUMMARY OF THE GUIDELINES ESTABLISHED BY THE UNITED STATES SUPREME COURT (THE "COURT") FOR THE PURPOSE OF DETERMINING THE RETURN ON EQUITY.**

A. The Court established the guiding principles for establishing a fair return for capital in two cases: (1) *Bluefield Water Works and Improvement Co. v. Public Service* Comm'n. ("*Bluefield*");[3] and (2) *Federal Power Comm'n v. Hope Natural Gas Co.* ("*Hope*").[4] In *Bluefield*, the Court stated:

> A public utility is entitled to such rates as will permit it to earn a return upon the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; 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.[5]

The Court therefore recognizes that: (1) a regulated company cannot remain financially sound unless the return it is allowed to earn on its invested capital is at least equal to the cost of capital (the principle relating to the demand for capital);

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3 *Bluefield Water Works and Improvement Co. v. Public Service Comm'n.* 262 U.S. 679, 692 (1923).

4 *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944)

5 *Bluefield Water Works and Improvement Co. v. Public Service Comm'n.* 262 U.S. 679, 692 (1923).

and (2) a regulated company will not be able to attract capital if it does not offer investors an opportunity to earn a return on their investment equal to the return they expect to earn on other investments of the same risk (the principle relating to the supply of capital).

In *Hope*, the Court reiterates the financial integrity and capital attraction principles of the *Bluefield* case:

> 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.[6]

In summary, the Court clearly has recognized that the fair Rate of Return on Equity should be: (1) comparable to returns investors expect to earn on other investments of similar risk; (2) sufficient to assure confidence in the company's financial integrity; and (3) adequate to maintain and support the company's credit and to attract capital.

**Q. DOES TEXAS PRECEDENT PROVIDE SIMILAR GUIDANCE?**

A. Yes. The Commission and the Texas courts uphold the precedents of the *Hope* and *Bluefield* cases, and regularly acknowledge that a utility is entitled to a fair and reasonable return. The Public Utility Regulatory Act describes the Commission's obligation with regard to establishing a reasonable return:

[6] *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

> In establishing an electric utility's rates, the regulatory authority shall establish the utility's overall revenues at an amount that will permit the utility a reasonable opportunity to earn a reasonable return on the utility's invested capital used and useful in providing service to the public in excess of the utility's reasonable and necessary operating expenses.[7]

This position was affirmatively stated in *Gulf States Utilities Company v. Public Utility Commission of Texas*, where the court stated:

> The Commission's rate fixing power operates exclusively within a range of reasonableness, bounded on the one hand by the utility's constitutional right to a fair and reasonable return, and on the other hand by its customers' statutory right to rates that are not unreasonable or exorbitant.[8]

Based on those standards, the consequence of the Commission's order in this case should enable the Company to earn a fair and reasonable return and maintain its financial flexibility over the period during which rates are expected to remain in effect.

**Q. ASIDE FROM THE STANDARDS ESTABLISHED BY THE COURTS, IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE OPPORTUNITY TO EARN A RETURN THAT IS ADEQUATE TO ATTRACT EQUITY CAPITAL AT REASONABLE TERMS?**

A. Yes, it is. A return that is adequate to attract capital at reasonable terms, under varying market conditions, will enable the subject utility to provide safe, reliable electric service while maintaining its financial integrity. While the "capital attraction" and "financial integrity" standards are important principles in

[7] TEX. UTIL. CODE § 36.051.

[8] *Gulf States Utilities Company v. Public Utility Commission of Texas*, 784 S.W.2d 519, 520-21 n.2 (Tex. App.-Austin 1990), *aff'd*, 809 S.W.2d 201 (Tex. 1991).

normal economic conditions, the practical implications of those standards are even more pronounced when, as discussed in more detail in Section VIII, continued equity market volatility, together with sustained increases in the incremental spread on utility debt (*i.e.*, the difference in debt yields of utilities varying credit ratings) have intensified the importance of maintaining a strong financial profile.

## V. PROXY GROUP SELECTION

**Q. AS A PRELIMINARY MATTER, WHY IS IT NECESSARY TO SELECT A GROUP OF PROXY COMPANIES TO DETERMINE THE COST OF EQUITY FOR WETT?**

A. First, it is important to bear in mind that the Cost of Equity for a given enterprise depends on the risks attendant to the business in which the company is engaged. According to financial theory, the value of a given company is equal to the aggregate market value of its constituent business units. The value of the individual business units reflects the risks and opportunities inherent in the business sectors in which those units operate. In this proceeding, we are focused on estimating the Cost of Equity for WETT. Since the ROE is a market-based concept and WETT is not a publicly traded entity, it is necessary to establish a group of companies that are both publicly traded and comparable to WETT in certain fundamental respects to serve as its "proxy" in the ROE estimation process.

Even if WETT were a publicly traded entity, it is possible that short-term events could bias its market value in one way or another during a given period of

time. A significant benefit of using a proxy group, therefore, is that it serves to moderate the effects of anomalous, temporary events that may be associated with any one company.

**Q. DOES THE SELECTION OF A PROXY GROUP SUGGEST THAT ANALYTICAL RESULTS WILL BE TIGHTLY CLUSTERED AROUND AVERAGE (*I.E.*, MEAN) RESULTS?**

A. Not necessarily. The DCF approach is based on the theory that a stock's current price represents the present value of its future expected cash flows. The Constant Growth form of the DCF model is defined as the sum of the expected dividend yield and projected long-term growth. Notwithstanding the care taken to ensure risk comparability, market expectations with respect to future risks and growth opportunities will vary from company to company. Therefore, even within a group of similarly situated companies, it is common for analytical results to reflect a seemingly wide range. At issue, then, is how to select an ROE estimate from within that range. That determination necessarily must be based on the informed judgment and experience of the analyst.

**Q. PLEASE PROVIDE A SUMMARY PROFILE OF WETT.**

A. Wind Energy Transmission Texas, LLC is a joint venture between Brookfield Asset Management and Isolux Corsan Concesiones. WETT is constructing electric transmission facilities in regions designated by the Commission as Competitive Renewable Energy Zones ("CREZ") in West Texas. The WETT transmission facilities will consist of seven distinct electric

transmission line projects connecting new and existing substations, approximately 374 miles of new 345 kV transmission lines, and six new substations.

**Q. HOW DID YOU SELECT THE COMPANIES INCLUDED IN YOUR PROXY GROUP?**

A. With the objective of selecting a proxy group that is highly representative of the risks and prospects faced by WETT, I used the following criteria:

- I began with the universe of companies that Value Line classifies as Electric Utilities, which includes a group of 50 domestic U.S. utilities;
- I excluded companies that do not consistently pay quarterly cash dividends;
- All of the companies in my proxy group have been covered by at least two utility industry equity analysts;
- All of the companies in my proxy group had investment grade senior bond and/or corporate credit ratings from Standard and Poor's; [9]
- I excluded companies whose regulated operating income over the three most recently reported fiscal years comprised less than 60.00 percent of the respective total operating income for that company;
- I excluded companies whose regulated electric operating income over the three most recently reported fiscal years represented less than 90.00 percent of total regulated operating income;

[9] PNM Resources Inc.'s long-term issuer rating was upgraded to BBB- by Standard and Poor's on April 13, 2012. However, its senior unsecured rating of BB+ remains below investment grade and its Moody's long-term rating of Ba1 also is below investment grade. Consequently, I have excluded PNM Resources Inc. from my proxy group.

- I eliminated companies that are currently known to be party to a merger, or other significant transaction.

**Q. WHAT COMPANIES MET THOSE SCREENING CRITERIA?**

A. The criteria discussed above resulted in a proxy group of the following sixteen companies:

**Table 3: Initial Screening Results**[10]

| Company | Ticker |
|---|---|
| American Electric Power Company, Inc. | AEP |
| Cleco Corporation | CNL |
| Edison International | EIX |
| Empire District Electric Company | EDE |
| FirstEnergy Corp. | FE |
| Great Plains Energy Inc. | GXP |
| Hawaiian Electric Industries, Inc. | HE |
| IDACORP, Inc. | IDA |
| Integrys Energy Group, Inc. | TEG |
| ITC Holdings Corp.[11] | ITC |
| Otter Tail Corporation | OTTR |
| Pepco Holdings, Inc. | POM |
| Pinnacle West Capital Corporation | PNW |
| Portland General Electric Company | POR |
| Southern Company | SO |
| Westar Energy, Inc. | WR |

**Q. IS THIS YOUR FINAL PROXY GROUP?**

A. No, it is not. I examined the operating profile of each of the sixteen companies that met my initial screens to be certain that none displayed characteristics that were inconsistent with my intent to produce a proxy group that

[10] American Electric Power Company operates service territories regulated by the Commission, but other companies regulated by the Commission did not meet my screening criteria. Specifically, for both CenterPoint Energy and Xcel Energy, the companies' electric operating income represented less than 90.00 percent of total regulated operations. El Paso Electric does not have a sufficient history of consistently paying quarterly cash dividends to meet my screening criteria. Entergy Corporation is currently a party to a significant transaction and therefore is excluded. As previously discussed, PNM Resource Inc.' fails to meet my credit rating screen. Finally, Oncor Electric Delivery Company is not publicly traded, and therefore cannot be considered in my analysis.

[11] ITC Holdings Corp. ("ITC") has recently agreed to merge a newly-created subsidiary with Mid-South TransCo LLC, an entity of Entergy Corp. Despite failing one of my screening criteria, given ITC's comparability to WETT in other important aspects as the only publicly traded independent electric transmission company, I included ITC Holdings Corp in my proxy group.

is fundamentally similar to the Company. As a result, I excluded two companies based on recently published 2011 financial information. First, Edison International ("EIX") experienced significant unregulated operating losses in 2009 and 2011. In 2009, those operating losses were the result of a global tax settlement and payment to the Internal Revenue Service ("IRS"), which caused the company's unregulated marketing and trading segment to incur over $1.00 billion in payments to settle a claim with the IRS.[12] In 2011, EIX recorded a loss of $1.09 billion in its competitive power generation segment[13] resulting from an after-tax earnings charge (recorded in the fourth quarter of 2011) relating to the impairment of its Homer City, Fisk, Crawford and Waukegan power plants, wind related charges, and other expenses.[14] Given the extent of those losses, it is difficult to assess the degree to which regulated electric utility operations would be expected to contribute to the company's consolidated financial performance in the near and longer terms. Consequently, I have excluded EIX from my final proxy group.

In addition, Integrys Energy Group, Inc. ("Integrys") experienced a 2009 operating loss of $114.6 million in its Natural Gas Utility Segment due primarily to a non-cash goodwill impairment loss of $284.6 million.[15] Given that (1) Integrys' operating results since 2009 indicate that its gas utility operations

12 Edison International, 2009 SEC Form 10-K, at 129.

13 Edison International, 2011 SEC Form 10-K, at 53.

14 *Ibid.*, at 54.

15 Integrys 2009 SEC Form 10-K, at 35.

consistently comprise approximately 50.00 percent of total regulated income, and (2) the company's 2009 results may not necessarily reflect its current and future operations, I have excluded Integrys from the proxy group.

**Q. BASED ON THE CRITERIA AND ISSUES DISCUSSED ABOVE, WHAT IS THE COMPOSITION OF YOUR PROXY GROUP?**

A. The final proxy group is presented in Table 4 (below).

**Table 4: Final Proxy Group**

| Company | Ticker |
|---|---|
| American Electric Power Company, Inc. | AEP |
| Cleco Corporation | CNL |
| Empire District Electric Company | EDE |
| FirstEnergy Corp. | FE |
| Great Plains Energy Inc. | GXP |
| Hawaiian Electric Industries, Inc. | HE |
| IDACORP, Inc. | IDA |
| ITC Holdings Corp. | ITC |
| Otter Tail Corporation | OTTR |
| Pepco Holdings, Inc. | POM |
| Pinnacle West Capital Corporation | PNW |
| Portland General Electric Company | POR |
| Southern Company | SO |
| Westar Energy, Inc. | WR |

## VI. COST OF EQUITY ESTIMATION

**Q. PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF THE REGULATED RATE OF RETURN.**

A. Regulated utilities primarily use common stock and long-term debt to finance their permanent property, plant, and equipment. The overall Rate of Return ("ROR") for a regulated utility is based on its weighted average cost of

capital, in which the cost rates of the individual sources of capital are weighted by their respective book values. While the costs of debt and preferred stock can be directly observed, the Cost of Equity is market-based and, therefore, must be estimated based on observable market information.

**Q. HOW IS THE REQUIRED ROE DETERMINED?**

A. The required ROE is estimated by using one or more analytical techniques that rely on market-based data to quantify investor expectations regarding required equity returns, adjusted for certain incremental costs and risks. By their very nature, quantitative models produce a range of results from which the market required ROE must be selected. As discussed throughout my Direct Testimony, that selection must be based on a comprehensive review of relevant data and information, and does not necessarily lend itself to a strict mathematical solution. Consequently, the key consideration in determining the Cost of Equity is to ensure that the methodologies employed reasonably reflect investors' view of the financial markets in general, and the subject company (in the context of the proxy group) in particular.

**Q. WHY DO YOU BELIEVE IT IS IMPORTANT TO USE MORE THAN ONE ANALYTICAL APPROACH?**

A. Because the Cost of Equity is not directly observable, it must be estimated based on both quantitative and qualitative information. As a result, a number of models have been developed to estimate the Cost of Equity. As a practical matter, however, all of the models available for estimating the Cost of Equity are subject to limiting assumptions or other methodological constraints. Consequently, many

finance texts recommend using multiple approaches when estimating the Cost of Equity. When faced with the task of estimating the Cost of Equity, analysts and investors are inclined to gather and evaluate as much relevant data as reasonably can be analyzed and, therefore, are inclined to rely on multiple analytical approaches.

In essence, practitioners and academics recognize that financial models simply are tools to be used in the ROE estimation process, and that the strict adherence to any single approach, or to the specific results of any single approach, can lead to flawed or misleading conclusions. That position is consistent with the *Hope* and *Bluefield* finding that it is the analytical result, as opposed to the methodology, that is controlling in arriving at ROE determinations. Thus, a reasonable ROE estimate appropriately considers alternate methodologies and the reasonableness of their individual and collective results.

Consequently, I believe it is both prudent and appropriate to use multiple methodologies in order to mitigate the effects of assumptions and inputs associated with relying exclusively on any single approach. Such use, however, must be tempered with due caution as to the results generated by each individual approach. As such, I have relied on results the Constant Growth DCF model as my primary analytical approach, and considered the Capital Asset Pricing Model, and the Risk Premium approach as corroborating methods.

### *A. Constant Growth DCF Model*

**Q. ARE DCF MODELS WIDELY USED IN REGULATORY PROCEEDINGS?**

A. Yes, in my experience the Constant Growth DCF model is widely recognized in regulatory proceedings. Nonetheless, neither the DCF nor any other model should be applied without considerable judgment in the selection of data and the interpretation of results.

**Q. PLEASE DESCRIBE THE DCF APPROACH.**

A. The DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows. In its simplest form, the DCF model expresses the Cost of Equity as the sum of the expected dividend yield and long-term growth rate, and is expressed as follows:

$$P = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \cdots + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

Where $P$ represents the current stock price, $D_1 \ldots D_\infty$ represent expected future dividends, and $k$ is the discount rate, or required ROE. Equation [1] is a standard present value calculation that can be simplified and rearranged into the familiar form:

$$k = \frac{D_0\,(1+g)}{P} + g \quad [2]$$

Equation [2] often is referred to as the "Constant Growth DCF" model, in which the first term is the expected dividend yield and the second term is the expected long-term growth rate.

**Q. WHAT ASSUMPTIONS ARE REQUIRED FOR THE CONSTANT GROWTH DCF MODEL?**

A. The Constant Growth DCF model requires the following assumptions: (1) a constant average growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the expected growth rate.

**Q. WHAT MARKET DATA DID YOU USE TO CALCULATE THE DIVIDEND YIELD COMPONENT OF YOUR DCF MODEL?**

A. The dividend yield is based on the proxy companies' current annualized dividend, and average closing stock prices over the 30, 90, and 180-trading days as of June 29, 2012.

**Q. WHY DID YOU USE THREE AVERAGING PERIODS TO CALCULATE THE AVERAGE STOCK PRICE?**

A. I did so to ensure that the model's results are not skewed by anomalous events that may affect stock prices on any given trading day. At the same time, the averaging period should be reasonably representative of expected capital market conditions over the long term. In my view, the use of the 30-, 90- and 180-day averaging periods reasonably balances those concerns.

**Q. DID YOU MAKE ANY ADJUSTMENTS TO THE DIVIDEND YIELD TO ACCOUNT FOR PERIODIC GROWTH IN DIVIDENDS?**

A. Yes, I did. Since utility companies tend to increase their quarterly dividends at different times throughout the year, it is reasonable to assume that dividend increases will be evenly distributed over calendar quarters. Given that

assumption, it is appropriate to calculate the expected dividend yield by applying one-half of the long-term growth rate to the current dividend yield.[16] That adjustment ensures that the expected dividend yield is, on average, representative of the coming twelve-month period, and does not overstate the dividends to be paid during that time.

**Q. IS IT IMPORTANT TO SELECT APPROPRIATE MEASURES OF LONG-TERM GROWTH IN APPLYING THE DCF MODEL?**

A. Yes. In its Constant Growth form, the DCF model (*i.e.*, as presented in Equation [2] above) assumes a single growth estimate in perpetuity. In order to reduce the long-term growth rate to a single measure, one must assume a constant payout ratio, and that earnings per share, dividends per share and book value per share all grow at the same constant rate. Over the long term, however, dividend growth can only be sustained by earnings growth. Consequently, it is important to incorporate a variety of measures of long-term earnings growth into the Constant Growth DCF model.

**Q. PLEASE SUMMARIZE YOUR INPUTS TO THE CONSTANT GROWTH DCF MODEL.**

A. I applied the DCF model to the proxy group of integrated electric utility companies using the following inputs for the price and dividend terms:

1. The average daily closing prices for the 30-trading days, 90-trading days, and 180-trading days ended June 29, 2012 for the term $P_0$; and

16 See Exhibit No. RBH-1.

2. The annualized dividend per share as of June 29, 2012 for the term $D_0$.

I then calculated the DCF results using each of the following growth terms:

1. The Zacks consensus long-term earnings growth estimates;
2. The First Call consensus long-term earnings growth estimates; and
3. The Value Line long-term earnings growth estimates.

**Q. HOW DID YOU CALCULATE THE HIGH AND LOW DCF RESULTS?**

A. I calculated the proxy group mean high DCF result using the maximum EPS growth rate as reported by Value Line, Zack's, and First Call for each proxy group company in combination with the dividend yield for each of the proxy group companies. The average mean high result then reflects the average maximum DCF result for the proxy group as a whole. I used a similar approach to calculate the proxy group mean low results, using instead the minimum growth rate as reported by Value Line, Zack's, and First Call for each proxy group company.

**Q. WHAT ARE THE RESULTS OF YOUR DCF ANALYSIS?**

A. My Constant Growth DCF results are summarized in Table 5, below (*see* also Exhibit No. RBH-1).

**Table 5: DCF Results**

| | ***Low Growth Rate*** | ***Mean Growth Rate*** | ***High Growth Rate*** |
|---|---|---|---|
| 30-Day Average | 9.39% | 11.03% | 13.17% |
| 90-Day Average | 9.47% | 11.11% | 13.25% |
| 180-Day Average | 9.49% | 11.13% | 13.27% |

**Q. DID YOU UNDERTAKE ANY ADDITIONAL ANALYSES TO SUPPORT YOUR DCF MODEL RESULTS?**

A. Yes. As noted earlier, I also applied the CAPM and Bond Yield Plus Risk Premium analyses in estimating the Company's Cost of Equity.

***B. CAPM Analysis***

**Q. PLEASE BRIEFLY DESCRIBE THE GENERAL FORM OF THE CAPM ANALYSIS.**

A. The CAPM analysis is a risk premium approach that estimates the Cost of Equity for a given security as a function of a risk-free return plus a risk premium (to compensate investors for the non-diversifiable or "systematic" risk of that security). As shown in Equation [3], the CAPM is defined by four components, each of which theoretically must be a forward-looking estimate:

$$k = r_f + \beta(r_m - r_f) \quad [3]$$

where:

$k$ = the required market ROE;
$\beta$ = Beta coefficient of an individual security;
$r_f$ = the risk-free rate of return; and
$r_m$ = the required return on the market as a whole.

In Equation [3], the term $(r_m - r_f)$ represents the Market Risk Premium. According to the theory underlying the CAPM (and as discussed in Section V), since unsystematic risk can be diversified away by adding securities to their investment portfolio, investors should be concerned only with systematic or non-diversifiable risk. Non-diversifiable risk is measured by the Beta coefficient, which is defined as:

$$\beta_j = \frac{\sigma_j}{\sigma_m} x\, \rho_{j,m} \text{ [4]}$$

where $\sigma_j$ is the standard deviation of returns for company "*j*"; $\sigma_m$ is the standard deviation of returns for the broad market (as measured, for example, by the S&P 500 Index), and $\rho_{j,m}$ is the correlation of returns in between company *j* and the broad market. Thus, the Beta coefficient represents both relative volatility (*i.e.*, the standard deviation) of returns, and the correlation in returns between the subject company and the overall market.

**Q. HAS THE CAPM BEEN AFFECTED BY RECENT ECONOMIC CONDITIONS?**

A. Yes, it has. First, as noted above, the risk-free rate, "*rf*", in the CAPM formula is represented by the interest rate on long-term U.S. Treasury securities. As discussed in Section VIII (below), during periods of increased equity market volatility investors tend to seek the relative safety low-risk securities such as Treasury bonds. In addition, since the 2008 Lehman Brothers bankruptcy filing, Federal policy has focused on maintaining low long-term interest rates. As a result, the first term in the model (i.e., the risk-free rate) is lower than it would have been absent such events. As also discussed in Section VIII, the persistently high level of correlations between electric utility stocks and the broad market has put upward pressure on Beta coefficients.

Finally, as a result of the extraordinary loss in equity values during 2008, the Market Risk Premium, when measured on a historical basis, actually decreased from the prior year, even though other measures of risk sentiment, in

particular market volatility, indicated extremely high levels of risk aversion. That result is, of course, counter-intuitive. While the subsequent market rally resulted in a somewhat higher historical average Market Risk Premium, it still remains below its pre-financial crisis level.

**Q. WITH THOSE OBSERVATIONS IN MIND, WHAT ASSUMPTIONS DID YOU INCLUDE IN YOUR CAPM ANALYSIS?**

A. Since utility assets represent long-term investments, I used two different estimates of the risk-free rate: (1) the current 30-day average yield on 30-year Treasury bonds (*i.e.*, 2.73 percent); and (2) the projected 30-year Treasury yield (*i.e.*, 3.40 percent).[17]

**Q. WHAT MARKET RISK PREMIUM DID YOU USE IN YOUR CAPM ANALYSIS?**

A. For the reasons discussed above, I did not use a historical average; rather, I developed two forward-looking (ex-ante) estimates of the Market Risk Premium.

**Q. PLEASE DESCRIBE YOUR FIRST EX-ANTE APPROACH TO ESTIMATING THE MARKET RISK PREMIUM ("MRP").**

A. The first approach is based on the market required return, less the current 30-year Treasury bond yield. To estimate the market required return, I calculated the market capitalization weighted average ROE based on the Constant Growth DCF model. To do so, I relied on data from two sources: (1) Bloomberg; and (2)

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17 Blue Chip Financial Forecasts, Vol. 31, No. 6, June 1, 2012, at 2.

Capital IQ which are both widely accepted sources of market information. For both Bloomberg and Capital IQ, I calculated the expected dividend yield (using the same one-half growth rate assumption described earlier), and combined that amount with the projected earnings growth rate to arrive at the market capitalization weighted average DCF result. I performed that calculation for each of the companies for which data was available, and summed the individual company results to derive the estimated market capitalization weighted average return. I then subtracted the current 30-year Treasury yield from that amount to arrive at the market DCF-derived ex-ante MRP estimate. The results of those calculations are provided in Exhibit No. RBH-2.

**Q. PLEASE NOW DESCRIBE THE SECOND EX-ANTE APPROACH.**

A. The second approach assumes a constant Sharpe Ratio, which is the ratio of the risk premium relative to the risk, or standard deviation of a given security or index of securities. The Sharpe Ratio is relied upon by financial professionals to assess the incremental return received for holding a risky (*i.e.*, more volatile) asset rather than a risk-free (*i.e.*, less volatile) asset. The formula for calculating the Sharpe Ratio is expressed as follows:

$$S_x = \frac{(R_x - R_f)}{\sigma_x} \quad [5]$$

where:

$S_x$ = Sharpe Ratio for security "$x$";
$R_x$ = the average return of "$x$";
$R_f$ = the rate of return of a risk-free security; and
$\sigma_x$ = the standard deviation of $r_x$.

As shown in Exhibit No. RBH-2, the constant Sharpe Ratio is the ratio of the historical market risk premium of 6.60 percent (the numerator of Equation [5]

above) and the historical market volatility of 20.19 percent (the denominator of Equation [5]).[18] The expected market risk premium is then calculated as the product of the Sharpe Ratio and the expected market volatility. For the purpose of that calculation, I used the thirty-day average of the CBOE's three-month volatility index (*i.e.*, the VXV) and the average of settlement prices over the same thirty-day period of futures on the CBOE's one-month volatility index (*i.e.*, the VIX) for November 2012 through January 2013.[19]

**Q. HOW DID YOU APPLY YOUR EXPECTED MARKET RISK PREMIUM AND RISK-FREE RATE ESTIMATES?**

A. I relied on each of the *ex-ante* Market Risk Premia discussed above, together with the current and near-term projected 30-year Treasury bond yields as inputs to my CAPM analyses.

**Q. WHAT BETA COEFFICIENTS DID YOU USE IN YOUR CAPM MODEL?**

A. I considered two methods of calculation. My first approach simply employs the average reported Beta coefficient from Bloomberg and Value Line for each of the proxy group companies. While both of those services adjust their calculated (or "raw") Beta coefficients to reflect the tendency of the Beta coefficient to regress to the market mean of 1.00, Value Line calculates the Beta coefficient over a five-year period, while Bloomberg's calculation is based on two

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[18] The standard deviation is calculated from data provided by Morningstar in its annual Valuation Yearbook. (*See,* Morningstar Inc., Ibbotson SBBI 2012 Valuation Yearbook, Large Company Stocks: Total Returns Table B-1, at 168-169).

[19] I recognize that the VIX forward settlement prices are liquid for approximately six to eight months; nonetheless, that data represents a market-based measure of expected volatility that should be considered in estimating the *ex-ante* Market Risk Premium.

years of data. I also calculated Beta coefficients over a more recent time period to provide a more current view as to investors' perspectives with respect to the systematic risk represented by the proxy group companies.

**Q. PLEASE DESCRIBE HOW YOU CALCULATED THE MEAN ADJUSTED BETA COEFFICIENT FOR YOUR PROXY GROUP.**

A. As shown in Equation [4], the Beta coefficient is calculated as the ratio of the standard deviation of returns for the subject company and the market, respectively, multiplied by the correlation of returns between the two. I therefore calculated the "raw" Beta coefficient for each member of the proxy group, based on Equation [4], and adjusted those raw Beta coefficients to address the tendency to regress toward the market Beta coefficient of unity. For the purpose of that calculation, I used weekly returns, and calculated the standard deviation and correlations over the twelve month period ended June 29, 2012. Averaging those results produces an adjusted Beta coefficient of 0.742.

**Q. HOW AND WHY DID YOU ADJUST THE RAW BETA COEFFICIENT?**

A. I adjusted my raw Beta coefficient consistent with the methodology used by Bloomberg, which multiplies the raw Beta coefficient by 0.67, and adds 0.33 to that product. The purpose of that adjustment is to reflect the results of substantial academic research indicating that, over time, raw Beta coefficients tend to regress to the market mean of 1.00.[20]

[20] The regression tendency of Beta coefficients to converge to 1.0 over time is well known and widely discussed in financial literature. (*See, e.g.,* Blume, Marshall E., "On the Assessment of Risk", *The Journal of Finance*, Vol. 26, No. 1, March 1971, at 1-10). Please note that Value Line uses a similar adjustment methodology.

**Q. PLEASE EXPLAIN WHY YOU RELIED ON A TWELVE-MONTH ESTIMATE OF THE PROXY GROUP MEAN ADJUSTED BETA COEFFICIENT.**

A. As noted in Section VIII, while volatility in the broad market and the utility sector recently has begun to moderate, the correlation in returns has remained at historically elevated levels. And, as discussed above, the Market Risk Premium tends to change over time. In my view, the use of Beta Coefficients calculated over shorter periods is consistent with the notion that market conditions, and the risk premium required by investors in response to those conditions, also may change over shorter periods.[21] In any case, by relying on both Value Line and Bloomberg, my CAPM analysis reflects Beta Coefficients calculated over longer periods, as well.

**Q. IS YOUR CALCULATED BETA COEFFICIENT REASONABLE RELATIVE TO THOSE CALCULATED BY VALUE LINE AND BLOOMBERG?**

A. Yes, it is. As shown in Exhibit No. RBH-3, the proxy group average Value Line, Bloomberg, and Calculated Beta Coefficients are 0.73, 0.70, and 0.74, respectively. In light of the market dynamics noted earlier, the calculated Beta Coefficient reasonably reflects current conditions, although it is not materially different than those provided by Value Line and Bloomberg.

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21 *See* Felicia Marston, Robert Harris, Peter Crawford, *Risk and Return in Equity Markets: Evidence Using Financial Analysts' Forecasts*, in J. Guerard and M. Gultekin (eds) Handbook of Security Analysts Forecasting and Asset Allocation, JAI Press, 199.

**Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES?**

A. The results of my CAPM analysis are summarized in Table 6, below (*see* also Exhibit No. RBH-4).

**Table 6: Summary of CAPM Results**

| | ***Sharpe Ratio Derived Market Risk Premium*** | ***Bloomberg Derived Market Risk Premium*** | ***Capital IQ Derived Market Risk Premium*** |
|---|---|---|---|
| *Average Value Line Beta Coefficient* | | | |
| Current 30-Year Treasury (2.73%) | 9.34% | 10.39% | 10.57% |
| Near Term Projected 30-Year Treasury (3.40%) | 10.01% | 11.06% | 11.24% |
| *Average Bloomberg Beta Coefficient* | | | |
| Current 30-Year Treasury (2.73%) | 9.07% | 10.08% | 10.26% |
| Near Term Projected 30-Year Treasury (3.40%) | 9.74% | 10.75% | 10.93% |
| *Average Calculated Beta Coefficient* | | | |
| Current 30-Year Treasury (2.73%) | 9.46% | 10.53% | 10.72% |
| Near Term Projected 30-Year Treasury (3.40%) | 10.13% | 11.20% | 11.39% |

**Q. DID YOU GIVE YOUR CAPM RESULTS ANY PARTICULAR WEIGHT IN ARRIVING AT YOUR ROE RECOMMENDATION?**

A. No, I did not. Rather, I used the CAPM as a means of assessing and corroborating the DCF results.

*C. Bond Yield Plus Risk Premium Approach*

**Q. PLEASE GENERALLY DESCRIBE THE BOND YIELD PLUS RISK PREMIUM APPROACH.**

A. In general terms, this approach is based on the fundamental principle that equity investors bear the residual risk associated with ownership and therefore require a premium over the return they would have earned as a bondholder. That is, since returns to equity holders are more risky than returns to bondholders, equity investors must be compensated for bearing that risk. Risk premium approaches, therefore, estimate the cost of equity as the sum of the equity risk premium and the yield on a particular class of bonds. As noted in my discussion of the CAPM, since the equity risk premium is not directly observable, it typically is estimated using a variety of approaches, some of which incorporate *ex-ante,* or forward-looking estimates of the cost of equity, and others that consider historical, or *ex-post,* estimates. An alternative approach is to use actual authorized returns for electric utilities to estimate the Equity Risk Premium.

**Q. PLEASE NOW EXPLAIN HOW YOU PERFORMED YOUR BOND YIELD PLUS RISK PREMIUM ANALYSIS.**

A. As suggested above, I first defined the Risk Premium as the difference between the authorized ROE and the then-prevailing level of long-term (*i.e.*, 30-year) Treasury yield. I then gathered data for 1,353 electric utility rate proceedings between January 1, 1980 and June 29, 2012. In addition to the authorized ROE, I also calculated the average period between the filing of the case and the date of the final order (the "lag period"). In order to reflect the

prevailing level of interest rates during the pendency of the proceedings, I calculated the average 30-year Treasury yield over the average lag period (approximately 202 days).

Because the data cover a number of economic cycles,[22] the analysis also may be used to assess the stability of the Equity Risk Premium. Prior research, for example, has shown that the Equity Risk Premium is inversely related to the level of interest rates.[23] That analysis is particularly relevant given the historically low level of current Treasury yields.

**Q. HOW DID YOU MODEL THE RELATIONSHIP BETWEEN INTEREST RATES AND THE EQUITY RISK PREMIUM?**

A. The basic method used was regression analysis, in which the observed Equity Risk Premium is the dependent variable, and the average 30-year Treasury yield is the independent variable. Because the analytical period includes interest rates and authorized ROEs that during one period (*i.e.*, the 1980's) are quite high and another (the post-Lehman bankruptcy period) that are quite low relative to the long-term historical average, I used the semi-log regression, in which the Equity Risk Premium is expresses as a function of the natural log of the 30-year Treasury yield:

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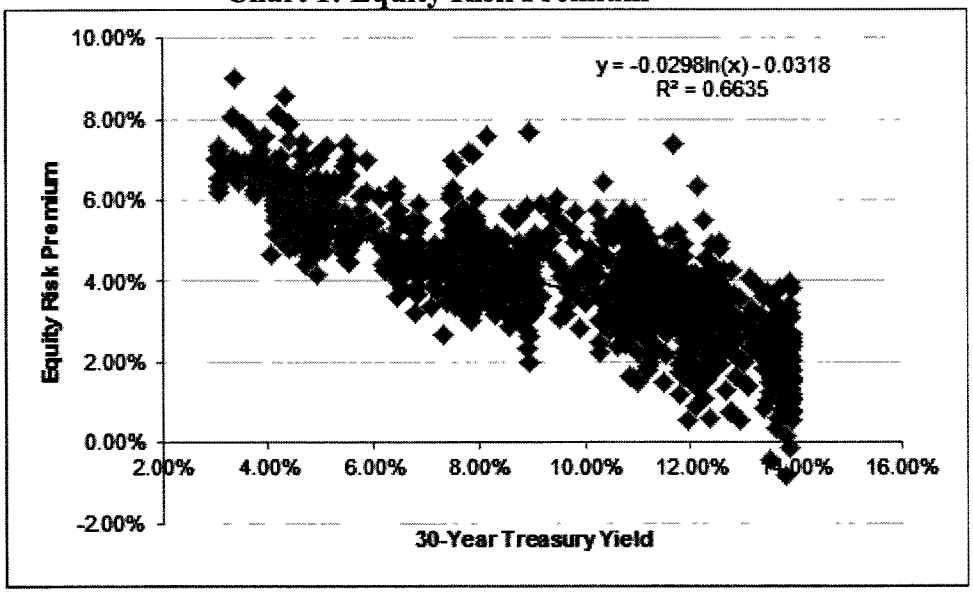
22 National Bureau of Economic Research, U.S. Business Cycle Expansion and Contractions.

23 *See*, for example, Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, Summer 1992, at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, Spring 1985, at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, *An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry*, Financial Management, Autumn 1995, at 89-95.

$$RP = \alpha + \beta(\mathrm{LN}(T_{30})) \quad [6]$$

As shown on Chart 1 (below), the semi-log form is useful when measuring an absolute change in the dependent variable (in this case, the Risk Premium) relative to a proportional change in the independent variable (the 30-year Treasury yield).

**Chart 1: Equity Risk Premium**




As Chart 1 demonstrates, over time there has been a statistically significant, negative relationship between the 30-year Treasury yield and the Equity Risk Premium. Consequently, applying the simple long-term average Equity Risk Premium of 4.32 percent (*see* Exhibit No. RBH-5) would significantly under-state the Cost of Equity; assuming the current projected 30-year Treasury yield of 3.40 percent, for example, the simple average Equity Risk Premium would suggest an ROE of 7.72 percent. That, of course, is well below any reasonable estimate. Based on the regression coefficients in Chart 1,

however, the implied ROE is 10.30 percent (*see* Exhibit No. RBH-5). In any event, the analysis demonstrates that there has been a significant inverse relationship between the 30-year Treasury yield and the Equity Risk Premium.

## VII. BUSINESS RISKS

**Q. DO THE MEAN DCF AND CAPM RESULTS FOR THE PROXY GROUP PROVIDE AN APPROPRIATE ESTIMATE OF THE COST OF EQUITY FOR THE COMPANY?**

A. No, the mean results do not necessarily provide an appropriate estimate of the Company's Cost of Equity. In my view, there are additional factors that must be taken into consideration when determining where the Company's Cost of Equity falls within the range of results, in particular the incremental risks associated with new entry into the electric transmission market, the undiversified stand-alone risk associated with the underlying project, the effect of financial leverage on the Cost of Equity, and regulatory risk.

### *A. New Entrant Risk*

**Q. PLEASE BRIEFLY DESCRIBE THE RISKS ASSOCIATED WITH A NEW ENTRANT IN THE ELECTRIC TRANSMISSION MARKET.**

A. In general, a new entity seeking entry into the electric transmission market faces greater risks than a well-established company. Since the Company has not achieved a mature status as a business entity, it does not have a history of earnings performance or debt-service as compared to that of an established, going concern. While the Cost of Equity is a forward-looking concept, historical measures may serve as reasonable indicators of a given company's ability to achieve the

financial metrics (such as debt service coverage ratios) on which early stage financing relies. Absent such a history, and without the benefit of continuing operations, investors and lenders must incorporate early-stage risks into their assessments of the investment and, therefore, in the returns that they require from that investment.

**Q. WHAT ARE SOME OF THE LONG-TERM CHALLENGES THAT AFFECT A COMPANY'S FINANCIAL PROFILE?**

A. From the perspective of fixed income investors, there are several long-term challenges for utilities' financial health. Standard and Poor's ("S&P") has noted that:

> To sustain their current credit quality in the face of these long-lived challenges, utilities need to have established—and be able to maintain—a firm credit foundation. This will require a strong and effective working relationship among management, regulators, and increasingly legislators and governors, in the planning and execution of strategies. A comprehensive vetting and understanding of the risks associated with the regulatory mechanisms under which the utility will recover its investment, which could include a cash return during construction and timely recognition of volatile costs, will be paramount in preserving creditworthiness.[24]

Since WETT is a new entrant, the working relationships described by S&P are not as well developed as they are for established companies. As such, in the early stages of commercial operation, there will be greater uncertainty associated with the Company's long-term risks, prospects, and therefore, its expected cash flow.

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[24] Standard & Poor's, "Industry Report Card: Utility Sectors In the Americas Remain Stable, While Challenges Beset European, Australian, and New Zealand Counterparts", *RatingsDirect*, June 27, 2008, at 4.

Given that measures of financial integrity often are cash flow-based, such uncertainty directly affects the Company's financial profile.

**Q. WHAT RISKS DOES A NEW ENTITY FACE THAT WOULD AFFECT ITS ABILITY TO EARN A RETURN ON EQUITY FOR ITS INVESTORS?**

A. First, a new entity bears development, financing, and construction risk prior to commercial operation of the project. Project development is dependent on the economic environment, including capital markets conditions. To the extent the actual project development differs from its business plan, equity investors bear the residual risk associated with insufficient cash flows. In addition, the Company's projects are "greenfield" investments, which introduce additional uncertainties during the development phase. Uncertainties related to permitting and establishing right of way all pose incremental risks that established assets do not face. Such risks can potentially affect the success of the project and, therefore, its eventual cash flows.

Once the project begins commercial operation, equity investors also bear the risk that actual cash flows will differ from the expected level of cash flows. As such, there is no guarantee that any individual transmission project will be a success, and that it will able to earn the Return on Equity required by its investors. In both the development and commercial operations phases, therefore, equity investors bear the risk of insufficient or uncertain cash flows.

**Q. HOW DOES THE RISK OF NEW ENTRY AFFECT THE COMPANY'S COST OF EQUITY?**

A. As a practical matter, without a credit rating or historical cash flows, the Company has limited access to the capital market. In order to be compensated for the uncertainty associated with project development and realization of business cash flows, equity investors will require a higher Return on Equity, suggesting an ROE somewhat above the midpoint of the analytical results that would otherwise be consistent with recent Commission precedent.

***B. Stand-Alone Risk and Diversification***

**Q. PLEASE DESCRIBE STAND-ALONE RISK AND HOW IT AFFECTS CORPORATE RISK.**

A. Stand-alone risk is the undiversified risk associated with a single asset or project when assessed as an independent entity. That is, it represents the specific risk associated with a given project as a single asset, as opposed to the risk of a given project (or asset) in the context of a corporate portfolio of projects. For a given project, any company would face the same stand-alone risks, regardless of the company's corporate profile. When multiple assets of varying stand-alone risks are combined, their differing risk profiles provide a degree of diversification that cannot be realized by a single asset portfolio. In essence, to the extent that the returns of the individual projects are less than perfectly correlated, the effect of multiple assets is to reduce the overall portfolio risk relative to its expected return.

**Q. HOW DO THE STAND-ALONE RISKS OF THE COMPANY'S INVESTMENTS AFFECT ITS CORPORATE PROFILE?**

A. WETT is developing electric transmission projects connecting new and existing substations. Those projects are all currently under construction, and will operate in Commission-designated Competitive Renewable Energy Zone ("CREZ") regions to make wind power available to major population centers in Texas. The projects will operate in the same geographic region, and begin commercial operation at approximately the same time.[25] As such, the stand-alone risk of each project is virtually identical. Since WETT does not own any other assets, its entire asset base will be subject to the same risks; there will be no diversification of these risks over a variety of other projects. Consequently, the stand-alone risks of its CREZ transmission projects represent WETT's undiversified, overall corporate risk.

**Q. HOW DOES THE COMPANY'S LEVEL OF UNDIVERSIFIED STAND-ALONE RISK COMPARE TO THE PROXY GROUP?**

A. The proxy group companies are large companies, mostly operating in multiple jurisdictions, with assets at different stages in their life-cycles, as well as projects in varying stages of development. Of the fourteen proxy group companies, eight operate in multiple jurisdictions. Also, as shown in Exhibit No. RBH-6, the companies are developing multiple projects at different stages of development in various geographic regions. As such, stand-alone risk, exhibited

[25] That is, they would be expected to be highly correlated.

by the individual assets and borne by the proxy group companies, is mitigated through such diversification. None of the proxy group companies' earnings are solely dependent on a single project in the way that the Company is solely dependent on its CREZ investment. Moreover, the proxy group companies benefit from greater geographic diversification and a varied mix of assets and projects under development.

**Q. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S RISK PROFILE AS A RESULT OF UNDIVERSIFIED STAND-ALONE RISK?**

A. It is clear that WETT is not able to mitigate a level of stand-alone risk in a way that proxy group companies are able to accomplish through a diversification of assets. The stand-alone risk of the Company's CREZ transmission projects effectively represents WETT's overall corporate risk. In my view, this suggests an incremental element of risk relative to the proxy group.

***C. Financial Leverage and the Cost of Equity***

**Q. WHAT IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE?**

A. Consistent with recent Commission decisions,[26] WETT's proposed capital structure consists of 40.00 percent equity and 60.00 percent debt.

**Q. HOW DOES CAPITAL STRUCTURE AFFECT THE COST OF EQUITY?**

A. The capital structure relates to financial risk, which represents the risk that a company may not have adequate cash flows to meet its financial obligations, and is a function of the percentage of debt (or financial leverage) in its capital

[26] The Commission authorized a capital structure containing 40.00 percent equity in the capital structure in the following proceedings: PUC Docket No. 38929, PUC Docket No.35717, PUC Docket No. 33309, PUC Docket No. 33734, and PUC Docket No. 28840.

structure. In that regard, as the percentage of debt in the capital structure increases, so do the fixed obligations for the repayment of that debt. Consequently, as the degree of financial leverage increases, the risk of financial distress (i.e., financial risk) also increases. Since the capital structure can affect the subject company's overall level of risk, it is an important consideration in establishing a just and reasonable Return on Equity.

**Q. IS THERE SUPPORT FOR THE PROPOSITION THAT CAPITAL STRUCTURE IS A KEY CONSIDERATION IN ESTABLISHING AN APPROPRIATE ROE?**

A. Yes. The United States Supreme Court and various utility commissions have long recognized the role of capital structure in the development of a just and reasonable rate of return for a regulated utility. In particular, a utility's leverage, or debt ratio, has been explicitly recognized as an important element in determining a just and reasonable rate of return:

> Although the determination of whether bonds or stocks should be issued is for management, the matter of debt ratio is not exclusively within its province. Debt ratio substantially affects the manner and cost of obtaining new capital. It is therefore an important factor in the rate of return and must necessarily be considered by and come within the authority of the body charged by law with the duty of fixing a just and reasonable rate of return.[27]

Perhaps ultimate authority for balancing the issues of cost and financial integrity is found in the Supreme Court's statement in *Hope*:

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[27] *New England Telephone & Telegraph Co. v. State, 98 N.H. 211, 220, 97 A.2d 213, 220 (1953), citing New England Tel. & Tel. Co. v. Department of Pub. Util., (Mass.) 327 Mass. 81, 97 N.E. 2d 509, 514 (1951); Petitions of New England Tel. & Tel. Co. 116 Vt. 480, 80 A.2d 671 (1951).*

> The rate-making process under the Act, i.e ., the fixing of "just and reasonable rates, involves a balancing of the investor and the consumer interests." 320 U.S. at 603, 64 S. Ct. at 288. The equity investor's stake is made less secure as the Company's debt rises, but the consumer rate-payer's burden is alleviated.[28]

Consequently, the principles of fairness and reasonableness with respect to the allowed Return on Equity and capital structure are considered at both the federal and state levels.

**Q. HOW DID YOU ASSESS THE REASONABLENESS OF THE COMPANY'S RECOMMENDED CAPITAL STRUCTURE WITH RESPECT TO THE PROXY GROUP?**

A. The proxy group has been selected to reflect comparable companies in terms of financial, business, and regulatory risks. Therefore, it is appropriate to compare the capital structures of the proxy group companies to that of the subject company in order to assess whether the proposed capital structure is consistent with industry standards for companies with commensurate risk profiles. To the extent that the Company's capital structure differs from industry standards, the difference in financial risk should be considered when estimating its required ROE.

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[28] *Communications Satellite Corp. v. FCC, 198 US. App. D.C. 60, 63-64,611 F.2d 883 (D.C. Cir. 1977)*