Exhibit No.:

Issue: Rate of Return

Witness: Shana Griffin
Sponsoring Party: MoPSC Staff
Type of Exhibit: Surrebuttal Testimony
Case No.: ER-2014-0351
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### MISSOURI PUBLIC SERVICE COMMISSION

## REGULATORY REVIEW DIVISION UTILITY SERVICES – FINANCIAL ANALYSIS

### SURREBUTTAL TESTIMONY

**OF** 

### **SHANA GRIFFIN**

# THE EMPIRE DISTRICT ELECTRIC COMPANY CASE NO. ER-2014-0351

Jefferson City, Missouri March 2015



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1	SURREBUTTAL TESTIMONY
2	OF
3	SHANA GRIFFIN
4	THE EMPIRE DISTRICT ELECTRIC COMPANY
5	CASE NO. ER-2014-0351
6	Q. Please state your name.
7	A. My name is Shana Griffin.
8	Q. Are you the same Shana Griffin who previously filed rebuttal testimony on
9	March 9, 2015 and prepared Section VI, Rate of Return (ROR), of the Staff's Cost of Service
10	Report ("COS Report") filed in this proceeding on January 29, 2015?
11	A. Yes, I am.
12	Q. What is the purpose of your surrebuttal testimony?
13	A. The purpose of my surrebuttal testimony is to respond to the rebuttal
14	testimonies of Dr. James H. Vander Weide, Mr. Robert W. Sager and Mr. Lance Schafer.
15	Dr. Vander Weide and Mr. Sager sponsored testimony on behalf of The Empire District
16	Electric Company ("Empire" or "Company"). Mr. Schafer sponsored testimony on behalf of
17	The Office of the Public Counsel ("OPC").
18	EXECUTIVE SUMMARY OF SURREBUTTAL TESTIMONY
19	Q. Please summarize the witnesses' rebuttal testimony as it relates to the ROR
20	Section of Staff's COS Report.
21	A. Dr. Vander Weide's rebuttal testimony addresses the size of Staff's proxy
22	group, Staff's application of the Discounted Cash Flow (DCF) model, Staff's projected
23	growth rates, and Staff's tests of reasonableness. Dr. Vander Weide also updated his electric

utility DCF analysis from his direct testimony. Mr. Schafer disagrees with Staff basing its recommendation on making an adjustment to the Commission's previously authorized return on equity (ROE). In his rebuttal testimony, Mr. Sager addresses the disallowance of certain debt costs Staff recommended in Staff's COS Report.

- Q. What are the major flaws in each of these witnesses' arguments?
- A. Dr. Vander Weide's criticism of Staff's smaller proxy group is misplaced. A larger proxy group should not come at the expense of comparability. Dr. Vander Weide's update of his constant growth DCF analysis could mislead one to believe the cost of equity (COE) for regulated electric utility companies has not significantly declined since he filed his direct testimony. He does this by changing his proxy group when he updates his DCF analysis in his rebuttal testimony. Investors expect regulated utilities' authorized ROEs to be lower and Dr. Vander Weide fails to recognize that the COE has declined significantly since Empire's 2012 rate case.

Mr. Schafer criticizes Staff's proposed adjustment to the previous allowed ROEs based on the relative change in the cost of equity because it's based on the Commission's assessment that Staff's growth rates used in the past were "just too low". However, Staff will show that using Mr. Schafer's own multi-stage DCF methodology along with his preferred use of Gross Domestic Product (GDP) for perpetual growth, Staff's quantification of the decline in the COE is reliable and should be considered by the Commission when deciding on a fair and reasonable authorized ROE for Empire.

Mr. Sager implies in his rebuttal testimony that the actions Empire took in 2008 to amend Empire's Indenture, to provide it additional flexibility to pay its dividend, were essential to maintaining an investment grade credit rating. However, Empire's corporate

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1 credit rating was not downgraded after Empire suspended its dividend for the last two quarters of 2011.

### **TRUE-UP RECOMMENDATION**

- Q. Has Empire provided capital structure and embedded cost of capital information that allows you to update your recommendation through the true-up period in this case?
  - A. Yes. They provided me information through December 31, 2014.
- Q. Are you revising your recommended allowed ROE in conjunction with the true-up of the capital structure and the embedded cost of debt?
  - A. No.
- Q. What are the components of the capital structure and the cost of capital after using data through December 31, 2014?
  - A. They are as follows (*see also* Schedules SG-1, SG-2 and SG-3):

				of Return Using quity Return of:	•
Capital Component	Percentage of Capital	Embedded Cost	9.25%	9.50%	9.75%
Common Stock Equity	49.98%		4.62%	4.75%	4.87%
Long-Term Debt	<u>50.02%</u>	<u>5.47%</u>	<u>2.74%</u>	<u>2.74%</u>	2.74%
Total	100.00%		7.36%	7.48%	7.61%
Source: Empire's True-Up Workpapers					

Q. In Staff's true-up embedded cost of long-term debt calculation for Empire, did Staff still exclude the remaining unamortized expense balance associated with Empire's \$2.5 million of debt expenses incurred to amend its mortgage bond indenture?

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- 1 Yes. Consistent with the general rate case proceedings, Staff's cost of debt A. 2 calculation still excludes the remaining unamortized expense balance associated with 3 Empire's debt expenses incurred to amend its mortgage bond indenture in order to allow it to 4 maintain its dividend per share of \$1.28 at the time. The remaining unamortized expense 5 balance is now approximately \$1,477,675. Staff subtracted this amount from Empire's cost 6 of debt calculation for the period ending December 31, 2014. Staff provides the underlying 7 details of its embedded cost of debt estimate in Schedule SG-3. 8 Q. How much short-term debt did Empire have outstanding as of the end of the 9 true-up period of December 31, 2014? 10 According to Empire's response to Staff Data Request No. 0084, Empire had A. 11 \$44 million of short-term debt outstanding as of the true-up December 31, 2014. Staff does 12 not include the \$44 million of short-term debt outstanding in its updated recommended 13 ratemaking capital structure because as of December 31, 2014, Empire's Construction Work 14 in Progress balance exceeded its short-term debt balance. 15 RESPONSE TO DR. VANDER WEIDE'S REBUTTAL TESTIMONY 16 Q. On page seven of his rebuttal testimony, Dr. Vander Weide discusses his 17 concern with Staff's proxy group selection criteria. What is Staff's response? 18 Staff's criteria for purposes of selecting companies for its proxy group are A.
  - 1. Classified as a power company by SNL;
    - 2. Publicly-traded stock;

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as follows:

- 3. Followed by the Edison Electric Institute (EEI) and classified as a regulated electric utility;
- 4. At least 50% of plant from electric utility operations;
- 5. At least 25% of electric plant from generation;
- 6. At least 80% of income from regulated utility operations;

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- 7. No reduced dividend since 2011;
- 8. At least investment grade credit rating;
- 9. At least 2 equity analysts providing long-term growth projections in the last 90 days; and,
- 10. No significant merger or acquisition announced recently.

Staff used these criteria to improve the risk comparability of its proxy group to the risk of Empire. Companies incur two types of risk, business risk and financial risk. The financial risk of an entity is driven by the amount of fixed obligations created by issuing debt. Some analysts will attempt to screen their comparable companies for financial risk by selecting companies with a certain common equity percentage in their capital structure. I controlled for this type of risk by selecting companies that have at least an investment grade credit rating. The business risk of an entity is primarily driven by the dominant operations of the company. The best way to select companies that face similar business risk is to select companies that are in the same business as the operations being evaluated. Most finance textbooks commonly refer to this approach as the "pure play method". Because we are attempting to determine the appropriate cost of capital for the risks inherent in Empire's regulated electric utility operations, it is important to select for companies in the proxy group whose stock prices are primarily influenced by risks consistent with rate-regulated, integrated electric utility operations (assets included generation, transmission and distribution). Consequently, Staff chose companies that were classified as a "Regulated" electric utility by EEI, at least 50% of plant from their electric utility operations, at least 25% electric plant from generation and at least 80% of income from regulated utility operations. The combination of these criteria ensures the selection of companies that have both a large asset base and a large income base from their regulated utility operations comparable to Empire.

- Q. On pages 7 and 8 of his rebuttal testimony, Dr. Vander Weide criticizes

  Staff's comparable company criteria of requiring that companies be classified as "Regulated"

  by EEI to be selected as a member of the proxy group. Does Staff have any response to

  Dr. Vander Weide's criticism?
  - A. Yes, companies in EEI's "Regulated" asset group have less risk than companies in EEI's "Mostly Regulated" and "Diversified" groups; therefore, limiting the members in the proxy group to companies in EEI's "Regulated" asset group results in a better proxy group because Empire is also classified as "Regulated" by EEI.
  - Q. On pages 19 through 22 in his rebuttal testimony, Dr. Vander Weide discusses a variety of matters regarding the growth rates Staff analyzed when performing Staff's constant-growth DCF analysis, including Staff's use of historical growth rates and analysts' earnings per share ("EPS") growth forecasts in estimating the growth component of its constant-growth DCF model. What is Staff's response?
  - A. Staff clearly explains in the ROR Section of the COS Report in this case that the constant-growth DCF method may not yield reliable results if industry and/or economic circumstances cause expected near-term growth rates to be inconsistent with sustainable perpetual growth rates.<sup>1</sup> Consequently, Staff decided that a multi-stage DCF analysis would provide a more reliable COE estimate. Further, Staff did not rely on the constant-growth DCF to quantify the change in the cost of equity since the 2012 rate cases.

<sup>&</sup>lt;sup>1</sup> Dr. Aswath Damodaran, Professor of Finance of the New York University Stern School of Business, advocates using a multi-stage methodology if the constant-growth rate is expected to be 1-2% different than the earlier stage growth rates. Aswath Damodaran, *Investment Valuation: Tools and techniques for determining the value of any asset*, University Edition, John Wiley & Sons, Inc., 1996, p. 193.

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At page 23, line 24 through page 24, line 8 of Dr. Vander Weide's rebuttal Q. testimony, he criticizes Staff's opinion that analysts' projected growth rates for electric utilities are not sustainable in the long run. What is Staff's response to his criticisms?

A. Dr. Vander Weide argues that Staff should use equity analysts' five-year EPS growth forecasts, regardless of whether investors consider these growth forecasts to be "sustainable." He also argues that Staff fails to recognize that equity analysts' growth forecasts affect stock prices. Dr. Vander Weide argues that Staff should adjust the stock prices for the companies in Staff's DCF analyses, as well as the growth forecasts, if Staff believes that the equity analysts' five-year EPS growth forecasts are irrational. Although Staff does not believe investors blindly accept equity analysts' five-year EPS forecasts for purposes of making investment decisions, it appears to Staff that Dr. Vander Weide is missing Staff's point. While equity analysts' opinions do matter to investors, this does not mean that investors will project the growth of electric utility companies' stock prices to be the same as equity analysts' five-year EPS forecasts. Staff has **never** seen an equity analyst use his/her own projected five-year EPS forecasts as a perpetual growth rate in a constantgrowth DCF analysis. Practical investment analyses simply do not support Dr. Vander Weide's position on this matter.

Regardless, Staff believes that if a growth rate estimate does not reflect rational investor expectations of long-term sustainable growth, then an analyst is justified in rejecting that growth rate estimate, at least for periods exceeding the five years for which the growth rate was projected. According to The Cost of Capital-A Practitioners Guide by David Parcell, page 8-5, "The DCF method assumes that investors evaluate stocks in a classical economic framework and buy and sell securities rationally at prices which reflect

- that value assessment. Classical economic, or valuation, theory maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows. As a result, DCF theory assumes that the stock price of a firm fully considers and reflects the return expected by stockholders." This assumption implies that the current stock price reflects investor expectations, which includes not only near-term growth, but also more rational long-term constant growth. Dr. Vander Weide is incorrect in assuming that rational investors would rely on equity analysts' forecasts for five-year EPS compound annual growth rates for a sustainable long-term growth rate in valuing a stock.
- Q. On page 18, line 15 through page 19, line 2, of his rebuttal testimony, Dr. Vander Weide criticizes Staff for not using the quarterly compounding version of the DCF model as he did. Do you have any response to his criticism?
- A. Yes. Investors receive investment research information from publications such as Value Line, which does not publish quarterly projected dividends. Value Line provides projected dividends on an annual basis. The dividend yield provided by Value Line in its Ratings and Reports tear sheets is based on the expected dividend for the next year without quarterly compounding. The following definition of "dividend yield" is contained in the *Value Line Investment Survey for Windows: User's Manual*, © 1995 through 2002:

The common dividends declared per share expressed as a percentage of the average annual price of the stock. Dividend yield = common dividends declared per share divided by the average annual price of a stock. The year-ahead estimated dividend yield (shown in the top right-hand corner of the Value Line page) is the estimated total of cash dividends to be declared over the next 12 months, divided by the recent price of the stock.

- Staff believes that investors make their investment decisions primarily based upon the annual dividend assumption, and for that reason it is appropriate to estimate investors' required returns based on that assumption.

  Q. Did Dr. Vander Weide update his DCF analysis in his rebuttal testimony?

  A. Yes. On page 22, lines 12 through 18 of his rebuttal testimony, Dr. Vander Weide indicates that he updated his analysis to assess the reasonableness of Staff's
  - Weide indicates that he updated his analysis to assess the reasonableness of Staff's recommended ROE. For purposes of his updated DCF analysis, Dr. Vander Weide used capital market data through December 2014. Dr. Vander Weide indicated that his updated DCF analysis result equaled 9.94 percent.
  - Q. Does Dr. Vander Weide's updated single-stage DCF model result appropriately recognize the change in COE from the time he did his analysis for purposes of his direct testimony filed in August 2014, which used data through May 2014, as compared to his updated analysis which used data through December 2014?
    - A. No.
  - Q. What happened through December 2014 that would have been reflected in a reliable cost of capital analysis?
  - A. Utility stock prices increased significantly in the last quarter of 2014. Any reliable DCF analysis would show that the COE declined fairly significantly. While there has been a contraction in utility stock prices since February 2015, the fact that Dr. Vander Weide's updated analysis implies there was only a 6 basis point decline in the COE indicates why his analysis is unreliable.

- Q. Why didn't his updated analysis show a more significant decline in the COE?
- A. He changed his proxy group.<sup>2</sup>
- Q. What companies did Dr. Vander Weide exclude in his updated DCF analysis that were in his original DCF analysis?
- A. Black Hills Corporation, Cleco Corporation, Hawaiian Electric Industries, Inc. and Integrys Energy Group, Inc. According to Dr. Vander Weide's workpapers, he eliminates Black Hills because there were fewer than two IBES growth rate estimates available, and Cleco Corp., Hawaiian Electric and Integrys Energy were eliminated because they are being acquired. However, he did not eliminate NextEra Energy and Wisconsin Energy, but these companies are the acquirers of Hawaiian Electric and Integrys Energy, respectively.
- Q. What companies did Dr. Vander Weide include in his updated DCF analysis that were not in his original DCF analysis?
- A. CenterPoint Energy, Inc. and Ameren Corporation. He eliminated these companies in his original DCF analyses because their DCF results were too low. In order to be included in his proxy group a company's DCF result must be greater than the forecasted bond yield, which is much higher than the current bond yield, for a company's bond rating, but less than 16%. Ameren was excluded in his original DCF analysis because he estimated a DCF result for Ameren at the time of 6.10%, but is included in his updated DCF analysis because he estimated Ameren's updated DCF result to be 13.2%. Just the mere fact that his COE estimate for a single company doubles in the matter of months should cause the

<sup>&</sup>lt;sup>2</sup> Staff notes that in the Report and Order of the recent KCPL and GMO cases, Case Nos. ER-2012-0174 and ER-2012-0175, the Commission was critical of the companies witness Samuel C. Hadaway for changing his proxy group between the filing of his direct and rebuttal testimony. (Report and Order at pp. 20-22, including footnote 51.)

Commission to question the reliability of Dr. Vander Weide's approach. CenterPoint Energy 1 2 was also excluded in his original DCF analysis for having, in Dr. Vander Weide's opinion, 3 too low of a result, but was included in his updated DCF analysis. 4 Q. What would the simple average of his updated average DCF result be if he 5 excluded CenterPoint and Ameren from his updated proxy group? 6 A. A simple average of 9.87%. 7 Q. What would the simple average of Dr. Vander Weide's original DCF result 8 have been if he used the exact same proxy group as his updated DCF analysis (excluding 9 CenterPoint and Ameren)? 10 A simple average of 10.09%. A. 11 Q. What does this illustrate? Using consistent proxy groups, Dr. Vander Weide's DCF results show a 12 A. 13 decline of 22 basis points due simply to updating the financial data through December 2014. 14 Therefore, Dr. Vander Weide's proxy group selection process proves to be unreliable in 15 providing a reasonable insight on the changes in the electric utility industries' COE. 16 Q. On page 31 of his rebuttal testimony Dr. Vander Weide claims Staff's cost of equity estimate understates Empire's cost of equity by at least 200 to 300 basis points and 17 18 that Staff's recommended ROE is inadequate to allow Empire to earn a return on equity that 19 is commensurate with authorized returns for other utilities of comparable risk. What is 20 Staff's response? 21 A. The cost of common equity is the return required by investors, determined by 22 expert analysis of market data relating to a carefully-constructed group of proxy companies. 23 The allowed ROE, on the other hand, is the value selected by the Commission for use in

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calculating a utility's forward-looking rates for implementation at the end of the rate case. As Staff explained in Staff's COS Report, because it appears the Commission has some concern in setting an allowed ROE based on Staff's estimate of the COE, Staff recommends the Commission recognize at least the relative decline in the COE since the Commission last set fair and reasonable allowed ROEs for Missouri's electric utilities in 2012. Staff's analysis suggests that an allowed ROE of 9.50% for Empire would be fair and reasonable using the Commission's 2012 electric utility allowed ROEs as the benchmark. recommended allowed ROE for Empire is 25 basis points higher than Staff's recent allowed ROE recommendation for Ameren Missouri because Staff added 25 basis points to recognize Empire's lower credit rating. Staff's analysis showed a decline in the COE of up to 95 basis points since 2012. Although this would have justified an even larger reduction to the 2012 allowed ROEs than Staff's recommended reduction of 25 to 75 basis points in Ameren Missouri's pending rate case, Staff decided it would be prudent and fair to wait and see if utility stock prices maintained the higher valuation levels experienced through the end of 2014 and into January 2015 (a period which Staff had not considered in Ameren Missouri's rate case for purposes of providing a fair and reasonable estimate of a 25 to 75 basis point decline in the COE) before recommending an even larger reduction to allowed ROEs. Although utility stock prices have given up much of their gains for the period of November 2014 through January 2015, they are still consistent or slightly higher than the stock prices Staff analyzed for purposes of its recommendation in the Ameren Missouri rate case. Although this is above what Staff estimates the true COE to be in the current capital market environment, an allowed ROE of 9.50% would balance the Commission's concern about the

impact a lower allowed ROE would have on investors' view of Missouri's regulatory environment, while still passing along the benefit of lower capital costs to ratepayers.

Dr. Vander Weide finds that the COE for his proxy group companies is 10.5 percent in his direct testimony. This is only 10 basis points lower than the cost of equity he estimated for his proxy group companies in Empire's 2012 rate case, Case No. ER-2012-0345. Considering the significant changes in the capital markets since Dr. Vander Weide filed his testimony on July 6, 2012, in Empire's 2012 rate case, perhaps Dr. Vander Weide is not allowing the information he analyzed to inform him of a fair and reasonable COE estimate.

- Q. Do investors expect commissions to lower regulated utilities' allowed ROEs?
- A. Yes. Moody's stated the following in its March 10, 2015 report, "US Regulated Utilities, Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles:"

The credit profiles of US regulated utilities will remain intact over the next few years despite our expectation that regulators will continue to trim the sector's profitability by lowering its authorized returns on equity (ROE). Persistently low interest rates and a comprehensive suite of cost recovery mechanisms ensure a low business risk profile for utilities, prompting regulators to scrutinize their profitability, which is defined as the ratio of net income to book equity. We view cash flow measures as a more important rating driver than authorized ROEs, and we note that regulators can lower authorized ROEs without hurting cash flow, for instance by targeting depreciation, or through special rate structures.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Jim Hempstead, Ryan Wobbrock, Jeffrey F. Cassella, Lesley Ritter, Jairo Chung, Natividad Martel, Susana Vivares, Toby Shea, Swami Venkataraman, "US Regulated Utilities, Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles," March 10, 2015, Moody's Investors Service. (Schedule SG-4)

#### RESPONSE TO MR. SCHAFER'S REBUTTAL TESTIMONY

	Q.	On page 36 of his rebuttal testimony, Mr. Schafer criticizes Staff's proposed
adjustr	nent to	the previous allowed ROEs based on the relative change in the cost of equity
What i	s vour r	esponse?

- A. Staff's analysis in this case has shown that the cost of equity for regulated electric utilities has declined since the 2012 rate cases. As Mr. Schafer has recognized, Staff believes commissions generally set allowed ROEs above the cost of capital. Staff's COE estimates are reliable, but Staff recognizes that allowed ROEs tend to be set at a spread over the COE. While commissions may not be intentionally setting the allowed ROE at a spread higher than the COE, Staff has reviewed several investment analyst research reports that recognize allowed ROEs are higher than the COE and these investors expect this trend to continue. Consequently, Staff is recommending the Commission reduce the allowed ROEs for its electric utilities to at least maintain this expected spread. Being that this spread is expected by investors, a reasonable reduction to the allowed ROE to reflect the declined in the COE since 2012 will not harm the Company's ability to attract capital in the current capital market environment.
  - Q. What concerns does Mr. Schafer have with Staff's multi-stage DCF analysis?
- A. Mr. Schafer believes Staff should have used the expected long-term growth in GDP as a proxy for the electric utility industry's perpetual growth.
- Q. Did Mr. Schafer have any other criticisms of the fundamentals of Staff's multi-stage DCF methodology?
  - A. No.

- Q. What is the relative change in COE from the 2012 rate cases to the current case using nominal GDP as the perpetual growth rate using Staff's multi-stage DCF methodology?
- A. Approximately 85 basis point decline through December 2014 using Staff's current proxy group.
- Q. Backdating Mr. Schafer's multi-stage DCF analysis to estimate the COE in 2012, what would his implied COE estimate be?
- A. 9.08% without the dividend yield adjustment and excluding Ameren. I did not include Ameren in backdating Mr. Schafer's multi-stage DCF because the FactSet long term EPS growth rate for Ameren at the end of May 2012 was negative.
- Q. What does this COE result imply about the relative change in COE using Mr. Schafer's multi-stage DCF methodology?
- A. The COE has declined by approximately 104 basis points. Staff excluded Ameren from Mr. Schafer's current proxy group because Staff did not include it in the backdated results. It is important to note that Staff eliminated Mr. Schafer's dividend yield adjustment because his adjustment is inconsistent with the fundamental assumption required to estimate the market cost of equity, which is that the market is efficient. Therefore, even with using Mr. Schafer's multi-stage DCF methodology it reiterates the reasonableness of Staff's COE analysis that the COE has declined by at least 25 to 75 basis points.

#### RESPONSE TO MR. SAGER'S REBUTTAL TESTIMONY

Q. In his rebuttal testimony Mr. Sager challenges Staff's disallowance of the remaining unamortized expense balance of approximately \$1.5 million associated with Empire's \$2.5 million of debt expenses incurred to amend its mortgage bond indenture in

order to provide a larger cushion in Empire's retained earnings balance so that shareholder

dividends could continue to be paid during the Company's largest construction period. What

is Staff's response?

- A. Mr. Sager states on page 4 of his rebuttal testimony "The Company's retained earnings balance had dropped to approximately \$17.2 million (12/31/07), in part because the Company had absorbed \$85.5 million of fuel and purchased power costs in the 2003-2006 period due to the lack of a fuel adjustment clause in Missouri (Staff's Cost of Service Report, Case No. ER-2008-0093). The Company's Indenture did not allow Empire to pay dividends with a negative retained earnings balance. "Therefore, according to Empire's 2008 Annual Report, Empire amended the Indenture on March 11, 2008 to provide it with the flexibility to pay dividends up to a negative retained earnings balance of \$10.75 million. Empire chose to pay a \$1.28 annual dividend per share from 1993 through 2010 and only had sufficient earnings per share to support that level of dividends per share in 6 of those 18 years.
- Q. Mr. Sager implies in his rebuttal testimony that if Empire had reduced or been unable to pay its dividend, Empire's COE would be higher. Did any other Missouri utility request a higher allowed ROE because of an alleged higher COE after it reduced its dividend?
- A. No. In fact, according to a S&P summary analysis of Ameren Corp. in August 2009 after Ameren Corp. reduced its dividend in February 2009, S&P stated, "The financial profile of the consolidated entity is maintained as 'significant,' enhanced by the company's decision to reduce its dividend by \$1 per share, which we view as **credit supportive**." (Emphasis added) Also, in a September 2009 S&P summary analysis of Great Plains Energy Inc., (the parent company of KCPL) after it reduced its dividend in

1	February 2009	, S&P stated, "Additionally, the company has taken concrete measures to
2	improve its cr	edit quality. These include the issuance of equity, a 50% dividend reduction,
3	and the operation	onal improvement of its existing power plants." (Emphasis added).
4	Q.	Mr. Sager implies in his rebuttal testimony, on page 3 and 5, that the actions
5	Empire took in	2008 to amend Empire's Indenture, to provide it additional flexibility to pay
6	its dividend, w	ere essential to maintaining an investment grade credit rating. Did S&P or
7	Moody's down	grade Empire's corporate credit rating in response to Empire suspending its
8	dividend for the	e last two quarters of 2011?
9	A	No. In fact Moody's stated the following in its May 26, 2011 Global Credit
10	Research On E	mpire:
11	:	**
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13	-	
14	-	
15	-	
16	_	
17	-	**
18	SUMMARY A	AND CONCLUSIONS
19	Q.	Would you please summarize Staff's conclusions presented in your surrebuttal
20	testimony?	
21	A.	Yes. Staff continues to believe its ROE recommendation of 9.50% for Empire
22	is reasonable ar	nd has presented capital market evidence that supports this reduction from the
23	Commission al	lowed ROE in the 2012 rate cases. Dr. Vander Weide's criticism of Staff's
24	smaller proxy §	group is misplaced. A larger proxy group should not come at the expense of



comparability. Dr. Vander Weide's update of his constant growth DCF analysis could mislead one to believe the COE for regulated electric utility companies has not significantly declined since he filed his direct testimony. He does this by changing his proxy group when he updates his DCF analysis in his rebuttal testimony. Investors expect regulated utilities' authorized ROEs to be lower and Dr. Vander Weide fails to recognize that the COE has declined significantly since Empire's 2012 rate case.

Staff's analysis of backdating Mr. Schafer's multi-stage DCF methodology to 2012 and comparing that COE estimate to his current COE estimate supports the reliability of Staff's analysis.

Also, Staff believes that its debt disallowance is necessary and appropriate at this time.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

### BEFORE THE PUBLIC SERVICE COMMISSION

### **OF THE STATE OF MISSOURI**

In the Matter of The Empire Distriction Company for Authority to Fi Increasing Rates for Electric Service to Customers in the Company's Service Area	le Tariffs ) e Provided )	Case No. ER-2014-0351	
AFFII	DAVIT OF SHA	ANA GRIFFIN	
STATE OF MISSOURI	)		
COUNTY OF COLE	) ss.		
of the foregoing Surrebuttal Testimo to be presented in the above case; th	ony in question and the answers in lige of the matter	that she has participated in the preparation and answer form, consisting of pages in the foregoing Surrebuttal Testimony were ers set forth in such answers; and that such edge and belief.	s e
		Ang Living Shana Griffin	
Subscribed and sworn to before me t	his <u>I4 +</u>	day of March, 2015.	
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2016 Commission Number: 12412070		Suziellankin Notary Public	

# The Empire District Electric Company Case No. ER-2014-0351

# Recommended Allowed Rate of Return as of December 31, 2014 for The Empire District Electric Company

Allowed Rate of Return Using Common Equity Return of:

	Percentage	Embedded			
Capital Component	of Capital	Cost	9.25%	9.50%	9.75%
Common Stock Equity	49.98%		4.62%	4.75%	4.87%
Long-Term Debt	50.02%	5.47%	2.74%	2.74%	2.74%
Total	100.00%		7.36%	7.48%	7.61%

Notes:

See Schedule SG- 2 for the Capital Structure Ratios.

# The Empire District Electric Company Case No. ER-2014-0351

# Capital Structure as of December 31, 2014 for The Empire District Electric Company

Ar	Dollar mount (000's)	Percentage of Capital	
\$	783,298,594	49.98%	
\$	-	0.00%	
\$	783,823,903	50.02%	
\$	<u>-</u> _	0.00%	
\$	1,567,122,497	100.00%	
	\$ \$ \$	\$ 783,298,594 \$ - \$ 783,823,903	

Source: Empire's True up workpapers

# The Empire District Electric Company Case No. ER-2014-0351

# Embedded Cost of Long-Term Debt as of December 31, 2014 For The Empire District Electric Company

	Amount Outstanding	Annual Cost
Bonds and Unsecured Notes Series:		
7.2% Series, Due 2016	\$25,000,000	\$1,800,000
6.375% Series due 2018	\$90,000,000	\$5,737,500
5.2% Series, due in 2040	\$50,000,000	\$2,600,000
6.7% Sr. Notes, Series, Due 2033	\$62,000,000	\$4,154,000
5.8% Sr. Notes, Series, Due 7/1/2035	\$40,000,000	\$2,320,000
4.65% Series, Due 6/1/2020	\$100,000,000	\$4,650,000
5.875%, Due 2037	\$80,000,000	\$4,700,000
6.82% Series, Due 6/1/2036-EDG	\$55,000,000	\$3,751,000
3.58% Series, due 4-2-2027	\$88,000,000	\$3,150,400
3.73% Series, Due 5/30/2033	\$30,000,000	\$1,119,000
4.32% Series, Due 5/30/2043	\$120,000,000	\$5,184,000
4.27% Series, Due 12/1/2044	\$60,000,000	\$2,562,000
Premium, Discount and Expense	-\$16,176,097 <sup>1</sup>	\$1,134,917
Total	\$783,823,903	\$42,862,817
Embedded Cost of Long-term Debt		5.47%

Source: Empire's True Up workpapers

<sup>&</sup>lt;sup>1</sup> Adjustment made for disallowance associated with Empire's debt expenses incurred to amend its mortgage bond indenture in order to provide additional flexibility to pay its dividend.

# MOODY'S

### **SECTOR IN-DEPTH**

10 MARCH 2015

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#### **ANALYST CONTACTS**

Jim Hempstead 212-553-4318
Associate Managing Director
james.hempstead@moodys.com

Ryan Wobbrock 212-553-7104 AVP-Analyst

ryan.wobbrock@moodys.com

Jeffrey F. Cassella 212-553-1665 AVP-Analyst jeffrey.cassella@moodys.com

Lesley Ritter 212-553-1607

Analyst

lesley.ritter@moodys.com

Jairo Chung 212-553-5123
Analyst

jairo.chung@moodys.com

Natividad Martel 212-553-4561 VP-Senior Analyst

natividad.martel@moodys.com

Susana Vivares 212-553-4694
VP-Senior Analyst
susana.vivares@moodys.com

**Toby Shea** 212-553-1779 *VP-Senior Analyst* toby.shea@moodys.com

Swami Venkataraman, CFA 212-553-7950 VP-Sr Credit Officer swami.venkat@moodys.com US Regulated Utilities

# Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles

The credit profiles of US regulated utilities will remain intact over the next few years despite our expectation that regulators will continue to trim the sector's profitability by lowering its authorized returns on equity (ROE). Persistently low interest rates and a comprehensive suite of cost recovery mechanisms ensure a low business risk profile for utilities, prompting regulators to scrutinise their profitability, which is defined as the ratio of net income to book equity. We view cash flow measures as a more important rating driver than authorized ROEs, and we note that regulators can lower authorized ROEs without hurting cash flow, for instance by targeting depreciation, or through special rate structures. Regulators can also adjust a utility's equity capitalization in its rate base. All else being equal, we think most utilities would prefer a thicker equity base and a lower authorized ROE over a small equity layer and a high authorized ROE.

- » More timely cost recovery helps offset falling ROEs. Regulators continue to permit a robust suite of mechanisms that enable utilities to recoup prudently incurred operating costs, including capital investments such as environment related or infrastructure hardening expenditures. Strong cost recovery is credit positive because it ensures a stable financial profile. Despite lower authorized ROEs, we see the sector maintaining a ratio of Funds From Operations (FFO) to debt near 20%, a level that continues to support strong investment-grade ratings.
- » Utilities' cash flow is somewhat insulated from lower ROEs. Net income represents about 30% 40% of utilities' cash flow, so lower authorized returns won't necessarily affect cash flow or key financial credit ratios, especially when the denominator (equity) is rising. Regulators set the equity layer when capitalizing rate base, and the equity layer multiplied by the authorized ROE drives the annual revenue requirements. Across the sector, the ratio of equity to total assets has remained flat in the 30% range since 2007.
- » Utilities' actual financial performance remains stable. Earned ROEs, which typically lag authorized ROEs, have not fallen as much as authorized returns in recent years. Since 2007, vertically integrated utilities, transmission and distribution only utilities, and natural gas local distribution companies have maintained steady earned ROE's in the 9% 10% range. Holding companies with primarily regulated businesses also earned ROEs of around 9% 10%, while returns for holding companies with diversified operations, namely unregulated generation, have fallen from 11% (over the past seven year average) to around 9% today.

#### **Robust Suite of Cost Recovery Mechanisms Is Credit Positive**

Over the past few years, the US regulatory environment has been very supportive of utilities. We think this is partly because regulators acknowledge that utility infrastructure needs a material amount of ongoing investment for maintenance, refurbishment and renovation. Utilities have also been able to garner support from both politicians and regulators for prudent investment in these critical assets because it helps create jobs, spurring economic growth. We also think regulators prefer to regulate financially healthy utilities.

Across the US, we continue to see regulators approving mechanisms that allow for more timely recovery of costs, a material credit positive. These mechanisms, which keep utilities' business risk profile low compared to most industrial corporate sectors, include: formulaic rate structures; special purpose trackers or riders; decoupling programs (which delink volumes from revenue); the use of future test years or other pre-approval arrangements. We also see a sustained increase in the frequency of rate case filings.

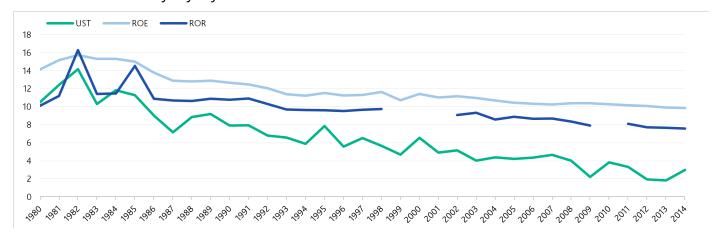
A supportive regulatory environment translates into a more transparent and stable financial profile, which in turn results in reasonably unfettered access to capital markets - for both debt and equity. Today, we think utilities enjoy an attractive set of market conditions that will remain in place over the next few years. By themselves, neither a slow (but steady) decline in authorized profitability, nor a material revision in equity market valuation multiples, will derail the stable credit profile of US regulated utilities.

#### Cost recovery will help offset falling ROEs

Robust cost recovery mechanisms will help ensure that US regulated utilities' credit quality remains intact over the next few years. As a result, falling authorized ROEs are not a material credit driver at this time, but rather reflect regulators' struggle to justify the cost of capital gap between the industry's authorized ROEs and persistently low interest rates. We also see utilities struggling to defend this gap, while at the same time recovering the vast majority of their costs and investments through a variety of rate mechanisms.

In the table below, we show the US Treasury 10-year yield, which has steadily fallen from the 5% range in the summer of 2007 to the 2% range today. US utilities benefit from these lower interest rates because they borrow approximately \$50 billion a year. For some utilities, a lower cost of debt translates directly into a higher return on equity, as long as their rate structure includes an embedded weighted average cost of capital (and the utilities can stay out of a general rate case proceeding).

Exhibit 1
Regulators hold up their end of the bargain by limiting reduction in return on equity (ROE) and overall rate of return (ROR) when compared with the decline in US Treasury 10-year yields



SOURCE: SNL Financial, LP, Moody's

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

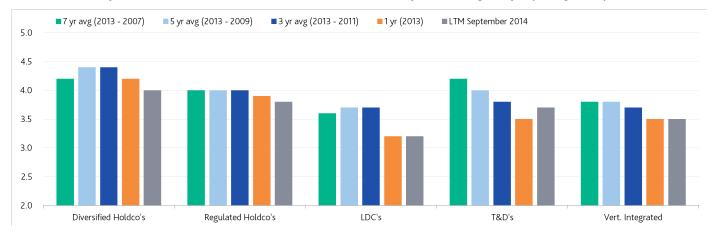
As utilities increasingly secure more up-front assurance for cost recovery in their rate proceedings, we think regulators will increasingly view the sector as less risky. The combination of low capital costs, high equity market valuation multiples (which are better than or on par with the broader market despite the regulated utilities' low risk profile), and a transparent assurance of cost recovery tend to support the case for lower authorized returns, although because utilities will argue they should rise, or at least stay unchanged.

One of the arguments for keeping authorized ROEs steady is that lowering them would make utilities less attractive to providers of capital. Utility holding companies assert that they would rather invest in higher risk-adjusted opportunities than in a regulated utility with sub-par return prospects. We see a risk that this argument could lead to a more contentious regulatory environment, a material credit negative. We do not think this scenario will develop over the next few years.

Our default and recovery data provides strong evidence that regulated utilities are indeed less risky (from the perspective of a probability of default and expected loss given default, as defined by Moody's) than their non-financial corporate peers. On a global basis, we nonetheless see a material amount of capital looking for regulated utility investment opportunities, and the same is true in the US despite, despite a lower authorized return. This is partly because investors can use holding company leverage to increase their actual equity returns, by borrowing capital at today's low interest rates and investing in the equity of a regulated utility.

Despite the reduction in authorized ROEs, US utilities are thankful to their regulators for the robust suite of timely cost recovery mechanisms which allow them to recoup prudently incurred operating costs such as fuel, as well as some investment expenses. These recovery mechanisms drive a stable and transparent dividend policy, which translates into historically very high equity multiples. Moreover, cost recovery helps keep the sector's overall financial profile stable, thereby supporting strong investment-grade ratings.

Exhibit 2
With better recovery mechanisms, the ratio of debt-to-EBITDA can rise, modestly, without negatively impacting credit profiles



SOURCE: Company filings; Moody's

Exhibit 3

The ratio of Funds From Operations to debt is rising, a material credit positive, but the rise is partly funded by bonus depreciation and deferred taxes, which will eventually reverse



SOURCE: Company filings; Moody's

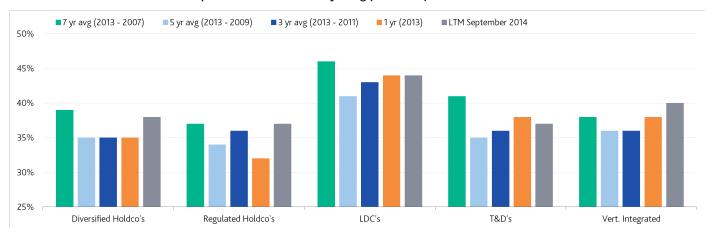
### Utilities' cash flow is somewhat insulated from declining ROEs

Across all our utility group sub-sectors (see Appendix), net income - the numerator in the calculation of ROE – accounts for between 30% - 40% of cash flow. While net income is important, cash flow exerts a much greater influence over creditworthiness. This is primarily because cash flow takes into account depreciation and amortization expenses, along with other deferred tax adjustments. We note that deferred taxes have risen over the past few years, in part due to bonus depreciation elections, which will eventually reverse. From a credit perspective, there is a difference between the nominal amount of net income, which goes into cash flow, and the relationship of net income to book equity (a measure of profitability).

In the chart below, we highlight the ratio of net income to cash flow from operations (CFO) for our selected peer groups. Across all of the sectors, the longer term historical average of net income to CFO has fallen compared with the late 2000s, but has been rising over the more recent past. This is partly a function of deferred taxes, which have become a larger component of CFO over the past decade.

Exhibit 4

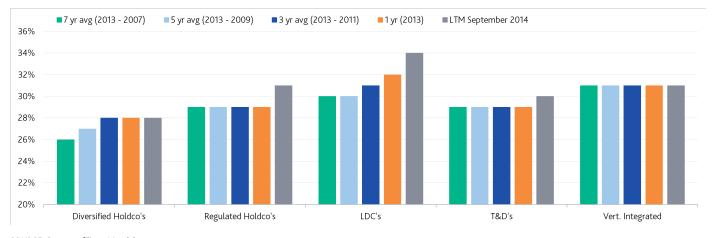
Net income as a % of cash flow from operations has been steadily rising (since 2011)



SOURCE: Company filings, Moody's

We can also envisage scenarios where regulators seek to achieve a reduction in authorized ROEs without harming credit profiles by focusing on utilities' equity layer. In the chart below, we illustrate median equity as a percentage of total assets for our selected peer groups. In our illustration, utilities will benefit from acquisition related goodwill on one hand, and impairments on the other.

Exhibit 5
Equity as a % of total assets, not capitalization, includes both goodwill and impairments



SOURCE: Company filings; Moody's

#### Utilities' actual financial performance remains stable

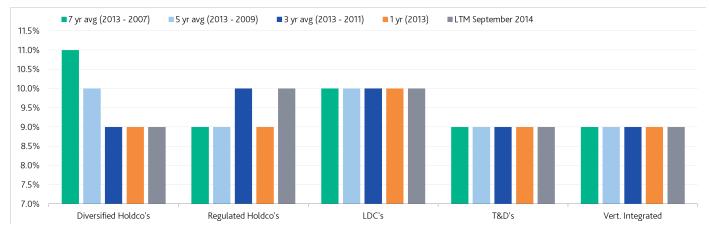
Earned ROE's, as reported by utilities and adjusted by Moody's, have been relatively flat over the past few years, despite the decline in authorized ROEs. This means utilities are closer to earning their authorized equity returns, which is positive from an equity market valuation perspective.

The authorized ROE is a popular focal point in many regulatory rate case proceedings. In addition, many regulatory jurisdictions look to established precedents that rely on various methodologies to determine an appropriate ROE, such as the capital asset pricing model or discounted cash flow analysis. In some jurisdictions where formulaic based rate structures point to lower ROEs for a longer projected period of time, regulators are incorporating a view that today's interest rate environment is "artificially" being held low.

Regardless, we think interest rates will go up, eventually. When they do, we also think authorized ROEs will trend up as well. However, just as authorized ROEs declined in a lagging fashion when compared to falling interest rates, we expect authorized ROEs to rise in a lagging fashion when interest rates rise.

Depending on alternative sources of risk-adjusted capital investment opportunities, this could spell trouble for utilities. For now, utilities can enjoy their (historically) high equity valuations, in terms of dividend yield and price-earnings ratios.

Exhibit 6
GAAP adjusted earned ROE's are relatively flat across all sub-sectors except Holding Companies with Diversified Operations, while the lower-risk LDC sector is outperforming



NOTE: GAAP adjusted ROE, not regulated ROE, does not adjust for goodwill or impairments.

Source: Company filings; Moody's

### **Appendix**

Exhibit 7
Utilities with the highest earned ROEs (ranked by 7-year average)

					5-year	
			1-year	3-year	average	7-year average
Company Name	Section	D-4i	average	average (2013	(2013 -	(2013 -
Company Name	Sector	Rating A3	(2013) ROE 33%	- <b>2011) ROE</b> 32%	2009) ROE 25%	2007) ROE 23%
CenterPoint Energy Houston Electric, LLC			14%	18%	25%	23%
Questar Corporation	Holdco - Primarily Regulated	A2				
AEP Texas Central Company	T&D	Baa1	14%	28%	22%	20%
Exelon Corporation	Holdco - Diversified	Baa2	7%	10%	14%	17%
CenterPoint Energy, Inc.	Holdco - Primarily Regulated	Baa1	7%	16%	15%	17%
Ohio Edison Company	T&D	Baa1	23%	18%	17%	16%
Public Service Enterprise Group	Holdco - Diversified	Baa2	11%	12%	14%	15%
Dayton Power & Light Company	T&D	Baa3	7%	9%	13%	15%
Dominion Resources Inc.	Holdco - Diversified	Baa2	13%	9%	12%	15%
Southern California Gas Company	LDC	A1	14%	13%	14%	15%
PECO Energy Company	T&D	A2	12%	12%	12%	14%
PPL Corporation	Holdco - Diversified	Baa3	9%	12%	11%	14%
UGI Utilities, Inc.	LDC	A2	15%	13%	13%	13%
Entergy Corporation	Holdco - Diversified	Baa3	7%	11%	12%	13%
Cleco Corporation	Holdco - Primarily Regulated	Baa1	10%	12%	13%	13%
Alabama Gas Corporation	LDC	A2	4%	11%	12%	13%
Entergy New Orleans, Inc.	Vertically Integrated Utility	Ba2	5%	10%	11%	12%
Entergy Gulf States Louisiana, LLC	Vertically Integrated Utility	Baa1	11%	13%	12%	12%
Piedmont Natural Gas Company, Inc.	LDC	A2	11%	11%	12%	12%
Ohio Power Company	T&D	Baa1	25%	14%	13%	12%
Southern Company (The)	Holdco - Primarily Regulated	Baa1	9%	11%	11%	12%
Georgia Power Company	Vertically Integrated Utility	A3	12%	12%	12%	12%
Alabama Power Company	Vertically Integrated Utility	A1	12%	12%	12%	12%
Southern California Edison Company	Vertically Integrated Utility	A2	8%	12%	12%	12%
NextEra Energy, Inc.	Holdco - Diversified	Baa1	10%	11%	11%	12%
Wisconsin Energy Corporation	Holdco - Primarily Regulated	A2	13%	13%	12%	12%
West Penn Power Company	T&D	Baa1	17%	13%	12%	12%
San Diego Gas & Electric Company	Vertically Integrated Utility	A1	9%	10%	11%	12%
Interstate Power and Light Company	Vertically Integrated Utility	A3	10%	9%	9%	12%
	.,	-				<u>-</u>

NOTE: GAAP adjusted ROE, not regulated ROE, does not adjust for goodwill or impairments.

SOURCE: Moody's; company filings

Exhibit 8 Highest (over 30%) and lowest (less than 20%) equity level as a % of total assets (ranked by 7-year average) [NOTE: Book equity is not adjusted for goodwill or impairments]

Company Name         Sector         Rating         (2013)         (2013-2011)         (2013-2009)         (2013-2		,		1-year	3-year average	5-year	7-year
Duke Energy Ohio, Inc.         T&D         Baa1         48%         47%         48%         50%           Yankee Gas Services Company         LDC         Baa1         41%         42%         43%         40%         41%         43%         43%         43%         40%         43%         40% <th>Company Name</th> <th>Sector</th> <th>Rating</th> <th></th> <th></th> <th>•</th> <th>average (2013 - 2007)</th>	Company Name	Sector	Rating			•	average (2013 - 2007)
Yankee Cas Services Company         LDC         Baa1         41%         42%         43%         40%         80%         34%         40%         80%         34%         40%         80%         34%         40%         80%         34%         40%         43%         38%         37%         38%         37%         38%         37%         38%         37%         38%         37%         38%         37%         38%         37%         38%         38%         37%         38%         37%         38%         38%         37%         37%         38%         38%         37%         37%         38%         38%         37%         37%         38%         38%         37%							
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Tampa Electric Company Vertically Integrated Utility A2 34% 33% 33% 33% 33% 33% 33% 33% 33% 33%		<u> </u>					
Wisconsin Power and Light Company Vertically Integrated Utility A1 34% 33% 32% 33% Questar Corporation Holdco - Primarily Regulated A2 29% 28% 31% 33% 33% Duke Energy Kentucky, Inc. Vertically Integrated Utility Baa1 31% 30% 33% 33% 33% Florida Power & Light Company Vertically Integrated Utility A1 36% 35% 34% 33% Alabama Gas Corporation LDC A2 59% 40% 35% 33% El Paso Electric Company Vertically Integrated Utility Baa1 34% 32% 32% 33% IDACORP, Inc. Holdco - Primarily Regulated Baa1 34% 33% 33% 33% 33% PPL Electric Utilities Corporation Vertically Integrated Utility Baa1 34% 34% 34% 34% 33% Commonwealth Edison Company T&D Baa1 31% 32% 32% 33% Georgia Power Company Vertically Integrated Utility A3 33% 33% 33% 33% CMS Energy Corporation Holdco - Primarily Regulated Baa2 20% 19% 18% 18% Hawaiian Electric Industries, Inc. Holdco - Diversified 17% 16% 16% 16% CenterPoint Energy, Inc. Holdco - Primarily Regulated Baa1 20% 19% 17% 15% CenterPoint Energy Houston Electric, LLCT&D A3 9% 15% 15% 15%			A2	34%	33%	33%	33%
Questar CorporationHoldco - Primarily RegulatedA229%28%31%33%Duke Energy Kentucky, Inc.Vertically Integrated UtilityBaa131%30%33%33%Florida Power & Light CompanyVertically Integrated UtilityA136%35%34%33%Alabama Gas CorporationLDCA259%40%35%33%El Paso Electric CompanyVertically Integrated UtilityBaa134%32%32%33%IDACORP, Inc.Holdco - Primarily RegulatedBaa134%33%33%33%PPL Electric Utilities CorporationVertically Integrated UtilityBaa134%34%34%33%Commonwealth Edison CompanyT&DBaa131%32%32%33%Georgia Power CompanyVertically Integrated UtilityA333%33%33%33%CMS Energy CorporationHoldco - Primarily RegulatedBaa220%19%18%18%Hawaiian Electric Industries, Inc.Holdco - Diversified17%16%16%16%CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%				34%	33%	32%	33%
Duke Energy Kentucky, Inc.Vertically Integrated UtilityBaa131%30%33%33%Florida Power & Light CompanyVertically Integrated UtilityA136%35%34%33%Alabama Gas CorporationLDCA259%40%35%33%El Paso Electric CompanyVertically Integrated UtilityBaa134%32%32%33%IDACORP, Inc.Holdco - Primarily RegulatedBaa134%33%33%33%PPL Electric Utilities CorporationVertically Integrated UtilityBaa134%34%34%33%Commonwealth Edison CompanyT&DBaa131%32%32%33%Georgia Power CompanyVertically Integrated UtilityA333%33%33%33%CMS Energy CorporationHoldco - Primarily RegulatedBaa220%19%18%18%Hawaiian Electric Industries, Inc.Holdco - Diversified17%16%16%16%CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%			A2	29%	28%	31%	33%
Florida Power & Light Company Vertically Integrated Utility A1 36% 35% 34% 33% Alabama Gas Corporation LDC A2 59% 40% 35% 33% El Paso Electric Company Vertically Integrated Utility Baa1 34% 32% 32% 33% IDACORP, Inc. Holdco - Primarily Regulated Baa1 34% 33% 33% 33% 33% 33% 33% 33% 33% 33%							
Alabama Gas Corporation LDC A2 59% 40% 35% 33% El Paso Electric Company Vertically Integrated Utility Baa1 34% 32% 32% 33% IDACORP, Inc. Holdco - Primarily Regulated Baa1 34% 33% 33% 33% 33% PPL Electric Utilities Corporation Vertically Integrated Utility Baa1 34% 34% 34% 34% 33% Commonwealth Edison Company T&D Baa1 31% 32% 32% 32% 33% Georgia Power Company Vertically Integrated Utility A3 33% 33% 33% 33% 33% 33% CMS Energy Corporation Holdco - Primarily Regulated Baa2 20% 19% 18% 18% Hawaiian Electric Industries, Inc. Holdco - Diversified 17% 16% 16% 16% CenterPoint Energy, Inc. Holdco - Primarily Regulated Baa1 20% 19% 17% 15% CenterPoint Energy Houston Electric, LLCT&D A3 9% 15% 15% 15%			A1	36%	35%	34%	33%
El Paso Electric Company Vertically Integrated Utility Baa1 34% 32% 32% 33% IDACORP, Inc. Holdco - Primarily Regulated Baa1 34% 33% 33% 33% 33% SPPL Electric Utilities Corporation Vertically Integrated Utility Baa1 34% 34% 34% 34% 33% Commonwealth Edison Company T&D Baa1 31% 32% 32% 32% 33% Georgia Power Company Vertically Integrated Utility A3 33% 33% 33% 33% 33% 33% CMS Energy Corporation Holdco - Primarily Regulated Baa2 20% 19% 18% 18% Hawaiian Electric Industries, Inc. Holdco - Diversified 17% 16% 16% 16% CenterPoint Energy, Inc. Holdco - Primarily Regulated Baa1 20% 19% 17% 15% CenterPoint Energy Houston Electric, LLCT&D A3 9% 15% 15% 15%			A2	59%	40%	35%	33%
IDACORP, Inc. Holdco - Primarily Regulated Baa1 34% 33% 33% 33% 33% PPL Electric Utilities Corporation Vertically Integrated Utility Baa1 34% 34% 34% 33% Commonwealth Edison Company T&D Baa1 31% 32% 32% 33% Georgia Power Company Vertically Integrated Utility A3 33% 33% 33% 33% 33% CMS Energy Corporation Holdco - Primarily Regulated Baa2 20% 19% 18% 18% Hawaiian Electric Industries, Inc. Holdco - Diversified 17% 16% 16% 16% CenterPoint Energy, Inc. Holdco - Primarily Regulated Baa1 20% 19% 17% 15% CenterPoint Energy Houston Electric, LLCT&D A3 9% 15% 15% 15%	·	Vertically Integrated Utility	Baa1	34%		32%	33%
PPL Electric Utilities Corporation Vertically Integrated Utility Baa1 34% 34% 34% 33% Commonwealth Edison Company T&D Baa1 31% 32% 32% 33% Georgia Power Company Vertically Integrated Utility A3 33% 33% 33% 33% 33% CMS Energy Corporation Holdco - Primarily Regulated Baa2 20% 19% 18% 18% Hawaiian Electric Industries, Inc. Holdco - Diversified 17% 16% 16% 16% CenterPoint Energy, Inc. Holdco - Primarily Regulated Baa1 20% 19% 17% 15% CenterPoint Energy Houston Electric, LLCT&D A3 9% 15% 15% 15%	IDACORP, Inc.		Baa1	34%	33%	33%	33%
Commonwealth Edison CompanyT&DBaa131%32%32%33%Georgia Power CompanyVertically Integrated UtilityA333%33%33%33%CMS Energy CorporationHoldco - Primarily RegulatedBaa220%19%18%18%Hawaiian Electric Industries, Inc.Holdco - Diversified17%16%16%16%CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%			Baa1	34%	34%	34%	33%
Georgia Power CompanyVertically Integrated UtilityA333%33%33%CMS Energy CorporationHoldco - Primarily RegulatedBaa220%19%18%18%Hawaiian Electric Industries, Inc.Holdco - Diversified17%16%16%16%CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%	·		Baa1	31%	32%	32%	33%
CMS Energy CorporationHoldco - Primarily RegulatedBaa220%19%18%18%Hawaiian Electric Industries, Inc.Holdco - Diversified17%16%16%16%CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%		Vertically Integrated Utility	A3	33%	33%	33%	33%
Hawaiian Electric Industries, Inc.Holdco - Diversified17%16%16%16%CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%							
CenterPoint Energy, Inc.Holdco - Primarily RegulatedBaa120%19%17%15%CenterPoint Energy Houston Electric, LLCT&DA39%15%15%15%				17%	16%	16%	16%
CenterPoint Energy Houston Electric, LLCT&D A3 9% 15% 15% 15%			Baa1	20%			
6.5		<u> </u>	А3	9%	15%	15%	15%
	AEP Texas Central Company		Baa1	13%	15%	14%	13%

SOURCE: Moody's; company filings

Exhibit 9
Highest (over 30%) and lowest (less than 15%) ratio of FFO to debt (ranked by 7-year average)

				3-year	5-year	7-year
			1-year	average	average	average
			average	(2013	(2013 -	(2013 -
Company Name	Sector	Rating	(2013)	- 2011)	2009)	2007)
Dayton Power & Light Company	T&D	Baa3	32%	34%	42%	42%
Questar Corporation	Holdco - Primarily Regulated	A2	29%	30%	31%	42%
Pennsylvania Power Company	T&D	Baa1	30%	34%	32%	37%
Exelon Corporation	Holdco - Diversified	Baa2	28%	34%	37%	37%
Alabama Gas Corporation	LDC	A2	23%	27%	32%	36%
Florida Power & Light Company	Vertically Integrated Utility	A1	34%	35%	35%	35%
Southern California Gas Company	LDC	A1	42%	37%	35%	34%
Southern California Edison Company	Vertically Integrated Utility	A2	32%	33%	35%	32%
Madison Gas and Electric Company	Vertically Integrated Utility	A1	39%	35%	34%	31%
PECO Energy Company	T&D	A2	29%	31%	33%	31%
Dominion Resources Inc.	Holdco - Diversified	Baa2	16%	17%	16%	14%
Entergy Texas, Inc.	Vertically Integrated Utility	Baa3	15%	14%	12%	14%
Monongahela Power Company	T&D	Baa2	13%	16%	15%	14%
CMS Energy Corporation	Holdco - Primarily Regulated	Baa2	18%	16%	15%	14%
Appalachian Power Company	Vertically Integrated Utility	Baa1	15%	13%	14%	14%
Pennsylvania Electric Company	T&D	Baa2	15%	14%	12%	13%
NiSource Inc.	Holdco - Diversified	Baa2	15%	14%	14%	13%
Puget Energy, Inc.	Vertically Integrated Utility	Baa3	14%	12%	12%	13%
Toledo Edison Company	T&D	Baa3	10%	10%	8%	13%
Cleveland Electric Illuminating Company	T&D	Baa3	11%	11%	12%	13%
AEP Texas Central Company	T&D	Baa1	14%	15%	13%	12%

SOURCE: Moody's; company filings

Exhibit 10 Highest (over 4.5x) and lowest (less than 3.0x) ratio of debt to EBITDA (ranked by 1-year average, 2013, to focus on more recent performance)

			1-year	3-year	5-year	7-year
Company Name	Santan	Dating	average	average	average	average (2013 - 2007)
Company Name	Sector Holdco - Diversified	Rating A3	7.1	(2013 - 2011) 5.8	(2013 - 2009) 5.6	5.3
Berkshire Hathaway Energy Company	Holdco - Diversified  Holdco - Diversified		6.0	5.2	4.8	4.4
FirstEnergy Corp. Wisconsin Electric Power Company	Vertically Integrated Utility	Baa3 A1	5.9	6.1	5.6	5.0
Entergy Texas, Inc.	Vertically Integrated Utility  Vertically Integrated Utility	Baa3	5.8	6.1	6.2	6.1
	T&D					
Monongahela Power Company NiSource Inc.	Holdco - Diversified	Baa2	5.6 5.2	5.2 5.5	5.7 5.4	6.0 5.5
	Holdco - Diversified  Holdco - Diversified	Baa2	5.2	4.9	5.4	4.6
PPL Corporation		Baa3				
Appalachian Power Company	Vertically Integrated Utility	Baa1	5.0	5.0	5.2	5.4
Progress Energy, Inc.	Holdco - Primarily Regulated	Baa1	4.9	5.6	5.1	4.9
Puget Energy, Inc.	Vertically Integrated Utility	Baa3	4.9	5.6	5.9	5.6
Cleveland Electric Illuminating Company	T&D	Baa3	4.9	5.2	4.7	4.2
Northwest Natural Gas Company	LDC	A3	4.8	4.8	4.5	4.2
Jersey Central Power & Light Company	T&D	Baa2	4.7	5.5	4.2	3.6
NorthWestern Corporation	Vertically Integrated Utility	A3	4.7	4.5	4.4	4.3
Pepco Holdings, Inc.	Holdco - Primarily Regulated	Baa3	4.7	5.1	5.2	5.2
Laclede Gas Company	LDC	A3	4.7	5.5	5.3	5.6
Atlantic City Electric Company	T&D	Baa2	4.7	4.9	4.8	4.7
Nevada Power Company	Vertically Integrated Utility	Baa1	4.6	4.6	4.9	5.0
Black Hills Power, Inc.	Vertically Integrated Utility	A3	2.9	3.2	3.8	3.6
Virginia Electric and Power Company	Vertically Integrated Utility	A2	2.9	3.1	3.4	3.4
Duke Energy Kentucky, Inc.	Vertically Integrated Utility	Baa1	2.9	3.3	3.3	3.4
Texas-New Mexico Power Company	T&D	Baa1	2.9	2.9	3.2	3.3
Oklahoma Gas & Electric Company	Vertically Integrated Utility	A1	2.9	2.9	2.9	3.0
Cleco Power LLC	Vertically Integrated Utility	A3	2.9	3.2	3.6	3.7
Consumers Energy Company	Vertically Integrated Utility	A1	2.9	3.1	3.3	3.5
Alabama Power Company	Vertically Integrated Utility	A1	2.8	2.9	3.0	3.1
Public Service Electric and Gas Company	T&D	A2	2.8	3.0	3.2	3.3
Alabama Gas Corporation	LDC	A2	2.8	2.7	2.5	2.4
Pinnacle West Capital Corporation	Holdco - Primarily Regulated	Baa1	2.8	3.1	3.3	3.6
Cleco Corporation	Holdco - Primarily Regulated	Baa1	2.8	2.9	3.4	3.6
PECO Energy Company	T&D	A2	2.8	3.0	2.6	2.6
Northern States Power Company (Wisconsin)	Vertically Integrated Utility	A2	2.8	2.9	2.8	2.8
Duke Energy Carolinas, LLC	Vertically Integrated Utility	A1	2.8	3.1	3.2	3.1
UGI Utilities, Inc.	LDC	A2	2.7	3.0	3.1	3.3
Exelon Corporation	Holdco - Diversified	Baa2	2.7	2.8	2.5	2.5
West Penn Power Company	T&D	Baa1	2.7	3.3	3.3	3.4
Questar Corporation	Holdco - Primarily Regulated	A2	2.7	2.8	2.7	2.3
Tampa Electric Company	Vertically Integrated Utility	A2	2.6	2.7	2.8	2.9
Arizona Public Service Company	Vertically Integrated Utility	A3	2.6	2.9	3.1	3.3
New York State Electric and Gas Corporation	T&D	A3	2.6	2.9	3.2	4.3
Dayton Power & Light Company	T&D	Baa3	2.5	2.2	2.0	1.9
Florida Power & Light Company	Vertically Integrated Utility	A1	2.4	2.7	2.6	2.6
Ohio Power Company	T&D	Baa1	2.4	2.8	3.1	3.3
Madison Gas and Electric Company	Vertically Integrated Utility	A1	2.4	2.8	2.8	2.9
Pennsylvania Power Company	T&D	Baa1	2.4	2.3	2.4	2.2
MGE Energy, Inc.	Holdco - Primarily Regulated	NR	2.3	2.7	2.9	3.1
Rochester Gas & Electric Corporation	T&D	Baa1	2.3	2.9	3.0	3.5
Public Service Enterprise Group Incorporated	Holdco - Diversified	Baa2	2.3	2.3	2.3	2.4
NSTAR Electric Company	T&D	A2	2.2	2.6	2.7	2.8
Southern California Gas Company	LDC	A1	2.2	2.5	2.4	2.5
Mississippi Power Company	Vertically Integrated Utility	Baa1	(3.2)	3.5	3.4	3.1
LL L			\- ·-/			

Exhibit 11 List of Companies (NOTE: in our appendix tables, we exclude utilities with private ratings)

Company Name	Sector	Rating
Berkshire Hathaway Energy Company	Holdco - Diversified	A3
Black Hills Corporation	Holdco - Diversified	Baa1
Oominion Resources Inc.	Holdco - Diversified	Baa2
TE Energy Company	Holdco - Diversified	A3
ntergy Corporation	Holdco - Diversified	Baa3
xelon Corporation	Holdco - Diversified	Baa2
irstEnergy Corp.	Holdco - Diversified	Baa3
Hawaiian Electric Industries, Inc.	Holdco - Diversified	NR
ntegrys Energy Group, Inc.	Holdco - Diversified	A3
NextEra Energy, Inc.	Holdco - Diversified	Baa1
NiSource Inc.	Holdco - Diversified	Baa2
PL Corporation	Holdco - Diversified	Baa3
Public Service Enterprise Group Incorporated	Holdco - Diversified	Baa2
Sempra Energy	Holdco - Diversified	Baa1
Alliant Energy Corporation	Holdco - Primarily Regulated	A3
	Holdco - Primarily Regulated  Holdco - Primarily Regulated	
American Floctric Power Company Inc		Baa2
American Electric Power Company, Inc.	Holdco - Primarily Regulated	Baa1
CenterPoint Energy, Inc.	Holdco - Primarily Regulated	Baa1
Cleco Corporation	Holdco - Primarily Regulated	Baa1
MS Energy Corporation	Holdco - Primarily Regulated	Baa2
Consolidated Edison, Inc.	Holdco - Primarily Regulated	A3
Ouke Energy Corporation	Holdco - Primarily Regulated	A3
dison International	Holdco - Primarily Regulated	A3
Great Plains Energy Incorporated	Holdco - Primarily Regulated	Baa2
DACORP, Inc.	Holdco - Primarily Regulated	Baa1
1GE Energy, Inc.	Holdco - Primarily Regulated	NR
Northeast Utilities	Holdco - Primarily Regulated	Baa1
Pepco Holdings, Inc.	Holdco - Primarily Regulated	Baa3
PG&E Corporation	Holdco - Primarily Regulated	Baa1
innacle West Capital Corporation	Holdco - Primarily Regulated	Baa1
NM Resources, Inc.	Holdco - Primarily Regulated	Baa3
Progress Energy, Inc.	Holdco - Primarily Regulated	Baa1
Questar Corporation	Holdco - Primarily Regulated	A2
SCANA Corporation	Holdco - Primarily Regulated	Baa3
Southern Company (The)	Holdco - Primarily Regulated	Baa1
Wisconsin Energy Corporation	Holdco - Primarily Regulated	A2
Keel Energy Inc.	Holdco - Primarily Regulated	AZ
Alabama Gas Corporation	LDC	A2
atmos Energy Corporation	LDC	A2
OTE Gas Company	LDC	Aa3
aclede Gas Company	LDC	A3
New Jersey Natural Gas Company	LDC	Aa2
Northern Natural Gas Company [Private]	LDC	A2
Northwest Natural Gas Company	LDC	A3
iedmont Natural Gas Company, Inc.	LDC	A2
outh Jersey Gas Company	LDC	A2
outhern California Gas Company	LDC	A1
outhwest Gas Corporation	LDC	A3
IGI Utilities, Inc.	LDC	A2
Vashington Gas Light Company	LDC	A1
Visconsin Gas LLC [Private]	LDC	A1
'ankee Gas Services Company	LDC	Baa1
ID Tours Control Conseque	T0.D	D 4
AEP Texas Central Company	T&D	Baa1
AEP Texas North Company	T&D	Baa1
Atlantic City Electric Company	T&D	Baa2

timore Gas and Electric Company	T&D	A3
nterPoint Energy Houston Electric, LLC	T&D	A3
ntral Hudson Gas & Electric Corporation	T&D	A2
ntral Maine Power Company	T&D	A3
veland Electric Illuminating Company (The)	T&D	Baa3
nmonwealth Edison Company	T&D	Baa1
nnecticut Light and Power Company	T&D	Baa1
nsolidated Edison Company of New York, Inc.	T&D	A2
ton Power & Light Company	T&D	Baa3
marva Power & Light Company	T&D	Baa1
ke Energy Ohio, Inc.	T&D	Baa1
sey Central Power & Light Company	T&D	Baa2
tropolitan Edison Company	T&D	Baa1
nongahela Power Company	T&D	Baa2
w York State Electric and Gas Corporation	T&D	A3
TAR Electric Company	T&D	A2
io Edison Company	T&D	Baa1
io Power Company	T&D	Baa1
cor Electric Delivery Company LLC	T&D	Baa1
ange and Rockland Utilities, Inc.	T&D	A3
O Energy Company	T&D	A2
nsylvania Electric Company	T&D	Baa2
nsylvania Power Company	T&D	Baa1
omac Edison Company (The)	T&D	Baa2
omac Electric Power Company	T&D	Baa1
olic Service Electric and Gas Company	T&D	A2
chester Gas & Electric Corporation	T&D	Baa1
as-New Mexico Power Company	T&D	Baa1
edo Edison Company	T&D	Baa3
st Penn Power Company	T&D	Baa1
stern Massachusetts Electric Company	T&D	A3
bama Power Company	Vertically Integrated Utility	A1
ETE, Inc.	Vertically Integrated Utility	A3
palachian Power Company	Vertically Integrated Utility	Baa1
zona Public Service Company	Vertically Integrated Utility	A3
sta Corp.	Vertically Integrated Utility	Baa1
ck Hills Power, Inc.	Vertically Integrated Utility	A3
co Power LLC	Vertically Integrated Utility	A3
nsumers Energy Company	Vertically Integrated Utility	A1
Electric Company	Vertically Integrated Utility	A2
ke Energy Carolinas, LLC	Vertically Integrated Utility	A1
ke Energy Florida, Inc.	Vertically Integrated Utility	A3
ke Energy Kentucky, Inc.	Vertically Integrated Utility	Baa1
ke Energy Progress, Inc.	Vertically Integrated Utility	A1
aso Electric Company	Vertically Integrated Utility	Baa1
pire District Electric Company (The)	Vertically Integrated Utility	Baa1
ergy Arkansas, Inc.	Vertically Integrated Utility	Baa2
ergy Gulf States Louisiana, LLC	Vertically Integrated Utility	Baa1
ergy Louisiana, LLC	Vertically Integrated Utility	Baa1
ergy Mississippi, Inc.	Vertically Integrated Utility  Vertically Integrated Utility	Baa2
ergy New Orleans, Inc.	Vertically Integrated Utility  Vertically Integrated Utility	Ba2
ergy Texas, Inc.	Vertically Integrated Utility  Vertically Integrated Utility	Baa3
rida Power & Light Company	Vertically Integrated Utility  Vertically Integrated Utility	A1
orgia Power Company	Vertically Integrated Utility  Vertically Integrated Utility	A3
f Power Company	Vertically Integrated Utility  Vertically Integrated Utility	A2
i rower company		AL
vaijan Flootric Company, Inc		Paa1
waiian Electric Company, Inc.	Vertically Integrated Utility	Baa1
no Power Company	Vertically Integrated Utility  Vertically Integrated Utility	A3
no Power Company iana Michigan Power Company	Vertically Integrated Utility Vertically Integrated Utility Vertically Integrated Utility	A3 Baa1
no Power Company iana Michigan Power Company erstate Power and Light Company	Vertically Integrated Utility Vertically Integrated Utility Vertically Integrated Utility Vertically Integrated Utility	A3 Baa1 A3
no Power Company iana Michigan Power Company	Vertically Integrated Utility Vertically Integrated Utility Vertically Integrated Utility	A3 Baa1

Midsinsippi Power Company Vertically Integrated Utility Baa1 Nevada Power Company Vertically Integrated Utility Baa1 Northern States Power Company (Minnesota) Northern States Power Company (Minnesota) Northern States Power Company (Wisconsin) Vertically Integrated Utility A2 Northwestern Corporation Vertically Integrated Utility A3 Northern States Power Company (Wisconsin) Vertically Integrated Utility A3 Northwestern Corporation Vertically Integrated Utility A3 Pacific Gas & Electric Company Vertically Integrated Utility A3 Pacific Gas & Electric Company Vertically Integrated Utility A3 Portland General Electric Company Vertically Integrated Utility A3 Portland General Electric Company Vertically Integrated Utility A3 PPL Electric Utilities Corporation Vertically Integrated Utility Baa1 Public Service Company of Colorado Vertically Integrated Utility Baa1 Public Service Company of New Hampshire Vertically Integrated Utility Baa1 Public Service Company of New Mexico Vertically Integrated Utility Baa2 Public Service Company of New Mexico Vertically Integrated Utility Baa2 Public Service Company of New Mexico Vertically Integrated Utility Baa2 Public Service Company of New Mexico Vertically Integrated Utility Baa2 Public Service Company of New Mexico Vertically Integrated Utility Baa3 Puget Sound Energy, Inc. Vertically Integrated Utility Baa1 Sourbern Company Vertically Integrated Utility Baa1 Sourbern California Edison Company Vertically Integrated Utility Baa1 Southern California Edison Company Vertically Integrated Utility Baa2 Southern Electric & Gas Company Vertically Integrated Utility Baa1 Tampa Electric Company Vertically Integrated Utility Baa1 Vertically Inte	Madison Gas and Electric Company	Vertically Integrated Utility	A1
Nevada Power Company (Minnesota) Northern States Power Company (Minnesota) Northern States Power Company (Minnesota) Northern States Power Company (Misconsin) Vertically Integrated Utility A2 NorthWestern Corporation Vertically Integrated Utility A3 NotAlanoma Gas & Electric Company Vertically Integrated Utility A1 Pacific Gas & Electric Company Vertically Integrated Utility A3 Pacific Gas & Electric Company Vertically Integrated Utility A3 Portland General Electric Company Vertically Integrated Utility A3 Portland General Electric Company Vertically Integrated Utility A3 Public Service Company of Colorado Vertically Integrated Utility Baa1 Public Service Company of New Hampshire Vertically Integrated Utility Baa1 Public Service Company of New Mexico Vertically Integrated Utility Baa2 Public Service Company of New Mexico Vertically Integrated Utility Baa3 Puget Energy, Inc. Vertically Integrated Utility Baa3 Puget Energy, Inc. Vertically Integrated Utility Baa3 Puget Sound Energy, Inc. Vertically Integrated Utility Baa1 South Carolina Electric Company Vertically Integrated Utility Baa1 South Carolina Electric Company Vertically Integrated Utility Baa1 South Carolina Electric Rower Company Vertically Integrated Utility Baa1 Southern California Edison Company Vertically Integrated Utility Baa1 Southern California Edison Company Vertically Integrated Utility Baa2 Southwestern Fublic Service Company Vertically Integrated Utility Baa2 Southwestern Public Service Company Vertically Integrated Utility Baa2 Southwestern Public Service Company Vertically Integrated Utility Baa1 Tampa Electric Power Company Vertically Integrated Utility Baa1 V	MidAmerican Energy Company	Vertically Integrated Utility	A1
Northern States Power Company (Minnesota)  Northern States Power Company (Wisconsin)  Vertically Integrated Utility  A2  NorthWestern Corporation  Vertically Integrated Utility  A3  Oklahoma Gas & Electric Company  Vertically Integrated Utility  A1  Pacific Gas & Electric Company  Vertically Integrated Utility  A3  Pacificorp  Vertically Integrated Utility  A3  Portland General Electric Company  Vertically Integrated Utility  A3  PPL Electric Utilities Corporation  Vertically Integrated Utility  Baa1  Public Service Company of Colorado  Vertically Integrated Utility  A3  Public Service Company of New Hampshire  Vertically Integrated Utility  Baa1  Public Service Company of New Mexico  Vertically Integrated Utility  Baa2  Public Service Company of New Mexico  Vertically Integrated Utility  Baa2  Public Service Company of New Mexico  Vertically Integrated Utility  Baa2  Public Service Company of New Mexico  Vertically Integrated Utility  Baa2  Public Service Company of New Mexico  Vertically Integrated Utility  Baa2  Puget Sound Energy, Inc.  Vertically Integrated Utility  Baa3  Southern Energy, Inc.  Vertically Integrated Utility  Baa1  San Diego Gas & Electric Company  Vertically Integrated Utility  Baa1  South Carolina Electric & Gas Company  Vertically Integrated Utility  Baa1  South Carolina Electric & Gas Company  Vertically Integrated Utility  Baa1  Southern California Edison Company  Vertically Integrated Utility  Baa2  Southwestern Public Service Company  Vertically Integrated Utility  Baa2  Southwestern Electric Power Company  Vertically Integrated Utility  Baa1  Vertically Integrated Utility  Baa1  Vertically Integrated Utility  Baa2  Southwestern Public Service Company  Vertically Integrated Utility  Baa1  Vert		Vertically Integrated Utility	Baa1
Northern States Power Company (Wisconsin)  NorthWestern Corporation  Vertically Integrated Utility  A3  Oklahoma Gas & Electric Company  Vertically Integrated Utility  A1  Pacific Gas & Electric Company  Vertically Integrated Utility  A3  Pacificorp  Vertically Integrated Utility  A3  Portland General Electric Company  Vertically Integrated Utility  A3  PPL Electric Utilities Corporation  Vertically Integrated Utility  Baa1  Public Service Company of Colorado  Vertically Integrated Utility  A3  Public Service Company of New Hampshire  Vertically Integrated Utility  Baa1  Public Service Company of New Mexico  Vertically Integrated Utility  Baa1  Public Service Company of New Mexico  Vertically Integrated Utility  Baa2  Public Service Company of Oklahoma  Vertically Integrated Utility  Baa2  Puget Energy, Inc.  Vertically Integrated Utility  Baa3  Puget Energy, Inc.  Vertically Integrated Utility  Baa3  Puget Sound Energy, Inc.  Vertically Integrated Utility  Baa1  San Diego Gas & Electric Company  Vertically Integrated Utility  Baa1  San Diego Gas & Electric Company  Vertically Integrated Utility  Baa1  South Carolina Electric Company  Vertically Integrated Utility  Baa1  Southern California Edison Company  Vertically Integrated Utility  Baa2  Southwestern Electric Power Company  Vertically Integrated Utility  Baa1  Tampa Electric Company  Vertically Integrated Utility  Baa1  Tampa Electric Company  Vertically Integrated Utility  Baa1  Vertically Integrated Utility  B	Nevada Power Company	Vertically Integrated Utility	Baa1
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Wisconsin Power and Light Company  Vertically Integrated Utility  A1			A2
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Wisconsin Public Service Corporation Vertically Integrated Utility A1			A1
	Wisconsin Public Service Corporation	Vertically Integrated Utility	A1

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#### **ANALYST CONTACTS**

NEW YORK	212-553-1653
Mihoko Manabe Senior Vice President mihoko.manabe@moodys.com	212-553-1942
Michael Haggarty Associate Managing Director michael.haggerty@moodys.com	212-553-7172
William L. Hess  Managing Director - Utilities william.hess@moodys.com	212-553-3837



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