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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

Staff Exhibit No. 218 NP
Date 4-14-15 Reporter KF
File No. ER-2014-0351

*Jefferson City, Missouri
March 2015*

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

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

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

5 Q. What are the major flaws in each of these witnesses' arguments?

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

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

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

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

3 **TRUE-UP RECOMMENDATION**

4 Q. Has Empire provided capital structure and embedded cost of capital
5 information that allows you to update your recommendation through the true-up period in
6 this case?

7 A. Yes. They provided me information through December 31, 2014.

8 Q. Are you revising your recommended allowed ROE in conjunction with the
9 true-up of the capital structure and the embedded cost of debt?

10 A. No.

11 Q. What are the components of the capital structure and the cost of capital after
12 using data through December 31, 2014?

13 A. They are as follows (*see also* Schedules SG-1, SG-2 and SG-3):

14

Capital Component	Percentage of Capital	Embedded Cost	Allowed Rate of Return Using Common Equity Return of:		
			9.25%	9.50%	9.75%
Common Stock Equity	49.98%	---	4.62%	4.75%	4.87%
<u>Long-Term Debt</u>	<u>50.02%</u>	<u>5.47%</u>	<u>2.74%</u>	<u>2.74%</u>	<u>2.74%</u>
Total	100.00%		7.36%	7.48%	7.61%

Source: Empire's
True-Up Workpapers

15
16 Q. In Staff's true-up embedded cost of long-term debt calculation for Empire, did
17 Staff still exclude the remaining unamortized expense balance associated with Empire's
18 \$2.5 million of debt expenses incurred to amend its mortgage bond indenture?

1 A. Yes. Consistent with the general rate case proceedings, Staff's cost of debt
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 A. According to Empire's response to Staff Data Request No. 0084, Empire had
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 A. Staff's criteria for purposes of selecting companies for its proxy group are
19 as follows:

- 20 1. Classified as a power company by SNL;
- 21 2. Publicly-traded stock;
- 22 3. Followed by the Edison Electric Institute (EEI) and classified
23 as a regulated electric utility;
- 24 4. At least 50% of plant from electric utility operations;
- 25 5. At least 25% of electric plant from generation;
- 26 6. At least 80% of income from regulated utility operations;

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

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

1 Q. On pages 7 and 8 of his rebuttal testimony, Dr. Vander Weide criticizes
2 Staff's comparable company criteria of requiring that companies be classified as "Regulated"
3 by EEI to be selected as a member of the proxy group. Does Staff have any response to
4 Dr. Vander Weide's criticism?

5 A. Yes, companies in EEI's "Regulated" asset group have less risk than
6 companies in EEI's "Mostly Regulated" and "Diversified" groups; therefore, limiting the
7 members in the proxy group to companies in EEI's "Regulated" asset group results in a
8 better proxy group because Empire is also classified as "Regulated" by EEI.

9 Q. On pages 19 through 22 in his rebuttal testimony, Dr. Vander Weide discusses
10 a variety of matters regarding the growth rates Staff analyzed when performing Staff's
11 constant-growth DCF analysis, including Staff's use of historical growth rates and analysts'
12 earnings per share ("EPS") growth forecasts in estimating the growth component of its
13 constant-growth DCF model. What is Staff's response?

14 A. Staff clearly explains in the ROR Section of the COS Report in this case that
15 the constant-growth DCF method may not yield reliable results if industry and/or economic
16 circumstances cause expected near-term growth rates to be inconsistent with sustainable
17 perpetual growth rates.¹ Consequently, Staff decided that a multi-stage DCF analysis would
18 provide a more reliable COE estimate. Further, Staff did not rely on the constant-growth
19 DCF to quantify the change in the cost of equity since the 2012 rate cases.

¹ 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.

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

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

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

1 that value assessment. Classical economic, or valuation, theory maintains that the value of a
2 financial asset is determined by its earning power, or its ability to generate future cash flows.
3 As a result, DCF theory assumes that the stock price of a firm fully considers and reflects the
4 return expected by stockholders.” This assumption implies that the current stock price
5 reflects investor expectations, which includes not only near-term growth, but also more
6 rational long-term constant growth. Dr. Vander Weide is incorrect in assuming that rational
7 investors would rely on equity analysts’ forecasts for five-year EPS compound annual growth
8 rates for a sustainable long-term growth rate in valuing a stock.

9 Q. On page 18, line 15 through page 19, line 2, of his rebuttal testimony,
10 Dr. Vander Weide criticizes Staff for not using the quarterly compounding version of the
11 DCF model as he did. Do you have any response to his criticism?

12 A. Yes. Investors receive investment research information from publications
13 such as Value Line, which does not publish quarterly projected dividends. Value Line
14 provides projected dividends on an annual basis. The dividend yield provided by Value Line
15 in its Ratings and Reports tear sheets is based on the expected dividend for the next year
16 without quarterly compounding. The following definition of “dividend yield” is contained in
17 the *Value Line Investment Survey for Windows: User’s Manual*, © 1995 through 2002:

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

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

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

5 A. Yes. On page 22, lines 12 through 18 of his rebuttal testimony, Dr. Vander
6 Weide indicates that he updated his analysis to assess the reasonableness of Staff's
7 recommended ROE. For purposes of his updated DCF analysis, Dr. Vander Weide used
8 capital market data through December 2014. Dr. Vander Weide indicated that his updated
9 DCF analysis result equaled 9.94 percent.

10 Q. Does Dr. Vander Weide's updated single-stage DCF model result
11 appropriately recognize the change in COE from the time he did his analysis for purposes of
12 his direct testimony filed in August 2014, which used data through May 2014, as compared
13 to his updated analysis which used data through December 2014?

14 A. No.

15 Q. What happened through December 2014 that would have been reflected in a
16 reliable cost of capital analysis?

17 A. Utility stock prices increased significantly in the last quarter of 2014. Any
18 reliable DCF analysis would show that the COE declined fairly significantly. While there
19 has been a contraction in utility stock prices since February 2015, the fact that Dr. Vander
20 Weide's updated analysis implies there was only a 6 basis point decline in the COE indicates
21 why his analysis is unreliable.

1 Q. Why didn't his updated analysis show a more significant decline in the COE?

2 A. He changed his proxy group.²

3 Q. What companies did Dr. Vander Weide exclude in his updated DCF analysis
4 that were in his original DCF analysis?

5 A. Black Hills Corporation, Cleco Corporation, Hawaiian Electric Industries, Inc.
6 and Integrys Energy Group, Inc. According to Dr. Vander Weide's workpapers, he
7 eliminates Black Hills because there were fewer than two IBES growth rate estimates
8 available, and Cleco Corp., Hawaiian Electric and Integrys Energy were eliminated because
9 they are being acquired. However, he did not eliminate NextEra Energy and Wisconsin
10 Energy, but these companies are the acquirers of Hawaiian Electric and Integrys Energy,
11 respectively.

12 Q. What companies did Dr. Vander Weide include in his updated DCF analysis
13 that were not in his original DCF analysis?

14 A. CenterPoint Energy, Inc. and Ameren Corporation. He eliminated these
15 companies in his original DCF analyses because their DCF results were too low. In order to
16 be included in his proxy group a company's DCF result must be greater than the forecasted
17 bond yield, which is much higher than the current bond yield, for a company's bond rating,
18 but less than 16%. Ameren was excluded in his original DCF analysis because he estimated
19 a DCF result for Ameren at the time of 6.10%, but is included in his updated DCF analysis
20 because he estimated Ameren's updated DCF result to be 13.2%. Just the mere fact that his
21 COE estimate for a single company doubles in the matter of months should cause the

² 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.)

1 Commission to question the reliability of Dr. Vander Weide's approach. CenterPoint Energy
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. A simple average of 10.09%.

11 Q. What does this illustrate?

12 A. Using consistent proxy groups, Dr. Vander Weide's DCF results show 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
17 equity estimate understates Empire's cost of equity by at least 200 to 300 basis points and
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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1 calculating a utility's forward-looking rates for implementation at the end of the rate case.
2 As Staff explained in Staff's COS Report, because it appears the Commission has some
3 concern in setting an allowed ROE based on Staff's estimate of the COE, Staff recommends
4 the Commission recognize at least the relative decline in the COE since the Commission last
5 set fair and reasonable allowed ROEs for Missouri's electric utilities in 2012. Staff's
6 analysis suggests that an allowed ROE of 9.50% for Empire would be fair and reasonable
7 using the Commission's 2012 electric utility allowed ROEs as the benchmark. Staff's
8 recommended allowed ROE for Empire is 25 basis points higher than Staff's recent allowed
9 ROE recommendation for Ameren Missouri because Staff added 25 basis points to recognize
10 Empire's lower credit rating. Staff's analysis showed a decline in the COE of up to 95 basis
11 points since 2012. Although this would have justified an even larger reduction to the 2012
12 allowed ROEs than Staff's recommended reduction of 25 to 75 basis points in Ameren
13 Missouri's pending rate case, Staff decided it would be prudent and fair to wait and see if
14 utility stock prices maintained the higher valuation levels experienced through the end of
15 2014 and into January 2015 (a period which Staff had not considered in Ameren Missouri's
16 rate case for purposes of providing a fair and reasonable estimate of a 25 to 75 basis point
17 decline in the COE) before recommending an even larger reduction to allowed ROEs.
18 Although utility stock prices have given up much of their gains for the period of November
19 2014 through January 2015, they are still consistent or slightly higher than the stock prices
20 Staff analyzed for purposes of its recommendation in the Ameren Missouri rate case.
21 Although this is above what Staff estimates the true COE to be in the current capital market
22 environment, an allowed ROE of 9.50% would balance the Commission's concern about the

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

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

10 Q. Do investors expect commissions to lower regulated utilities' allowed ROEs?

11 A. Yes. Moody's stated the following in its March 10, 2015 report,
12 "US Regulated Utilities, Lower Authorized Equity Returns Will Not Hurt Near-Term
13 Credit Profiles:"

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

³ Jim Hempstead, Ryan Wobbrock, Jeffrey F. Cassella, Lesley Ritter, Jairo Chung, Natividad Martel, Susana Vives, 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)

1 RESPONSE TO MR. SCHAFER'S REBUTTAL TESTIMONY

2 Q. On page 36 of his rebuttal testimony, Mr. Schafer criticizes Staff's proposed
3 adjustment to the previous allowed ROEs based on the relative change in the cost of equity.
4 What is your response?

5 A. Staff's analysis in this case has shown that the cost of equity for regulated
6 electric utilities has declined since the 2012 rate cases. As Mr. Schafer has recognized, Staff
7 believes commissions generally set allowed ROEs above the cost of capital. Staff's COE
8 estimates are reliable, but Staff recognizes that allowed ROEs tend to be set at a spread over
9 the COE. While commissions may not be intentionally setting the allowed ROE at a spread
10 higher than the COE, Staff has reviewed several investment analyst research reports that
11 recognize allowed ROEs are higher than the COE and these investors expect this trend to
12 continue. Consequently, Staff is recommending the Commission reduce the allowed ROEs
13 for its electric utilities to at least maintain this expected spread. Being that this spread is
14 expected by investors, a reasonable reduction to the allowed ROE to reflect the declined in
15 the COE since 2012 will not harm the Company's ability to attract capital in the current
16 capital market environment.

17 Q. What concerns does Mr. Schafer have with Staff's multi-stage DCF analysis?

18 A. Mr. Schafer believes Staff should have used the expected long-term growth in
19 GDP as a proxy for the electric utility industry's perpetual growth.

20 Q. Did Mr. Schafer have any other criticisms of the fundamentals of Staff's
21 multi-stage DCF methodology?

22 A. No.

1 Q. What is the relative change in COE from the 2012 rate cases to the current
2 case using nominal GDP as the perpetual growth rate using Staff's multi-stage DCF
3 methodology?

4 A. Approximately 85 basis point decline through December 2014 using Staff's
5 current proxy group.

6 Q. Backdating Mr. Schafer's multi-stage DCF analysis to estimate the COE in
7 2012, what would his implied COE estimate be?

8 A. 9.08% without the dividend yield adjustment and excluding Ameren. I did not
9 include Ameren in backdating Mr. Schafer's multi-stage DCF because the FactSet long term
10 EPS growth rate for Ameren at the end of May 2012 was negative.

11 Q. What does this COE result imply about the relative change in COE using
12 Mr. Schafer's multi-stage DCF methodology?

13 A. The COE has declined by approximately 104 basis points. Staff excluded
14 Ameren from Mr. Schafer's current proxy group because Staff did not include it in the
15 backdated results. It is important to note that Staff eliminated Mr. Schafer's dividend yield
16 adjustment because his adjustment is inconsistent with the fundamental assumption required
17 to estimate the market cost of equity, which is that the market is efficient. Therefore, even
18 with using Mr. Schafer's multi-stage DCF methodology it reiterates the reasonableness of
19 Staff's COE analysis that the COE has declined by at least 25 to 75 basis points.

20 **RESPONSE TO MR. SAGER'S REBUTTAL TESTIMONY**

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

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1 order to provide a larger cushion in Empire's retained earnings balance so that shareholder
2 dividends could continue to be paid during the Company's largest construction period. What
3 is Staff's response?

4 A. Mr. Sager states on page 4 of his rebuttal testimony "The Company's retained
5 earnings balance had dropped to approximately \$17.2 million (12/31/07), in part because the
6 Company had absorbed \$85.5 million of fuel and purchased power costs in the 2003-2006
7 period due to the lack of a fuel adjustment clause in Missouri (Staff's Cost of Service Report,
8 Case No. ER-2008-0093). The Company's Indenture did not allow Empire to pay dividends
9 with a negative retained earnings balance." Therefore, according to Empire's 2008 Annual
10 Report, Empire amended the Indenture on March 11, 2008 to provide it with the flexibility to
11 pay dividends up to a negative retained earnings balance of \$10.75 million. Empire chose to
12 pay a \$1.28 annual dividend per share from 1993 through 2010 and only had sufficient
13 earnings per share to support that level of dividends per share in 6 of those 18 years.

14 Q. Mr. Sager implies in his rebuttal testimony that if Empire had reduced or been
15 unable to pay its dividend, Empire's COE would be higher. Did any other Missouri utility
16 request a higher allowed ROE because of an alleged higher COE after it reduced its
17 dividend?

18 A. No. In fact, according to a S&P summary analysis of Ameren Corp. in
19 August 2009 after Ameren Corp. reduced its dividend in February 2009, S&P stated,
20 "The financial profile of the consolidated entity is maintained as 'significant,' enhanced by
21 the company's decision to reduce its dividend by \$1 per share, which we view as
22 **credit supportive.**" (Emphasis added) Also, in a September 2009 S&P summary analysis of
23 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 credit quality.** These include the issuance of equity, a 50% dividend reduction,
3 and the operational 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, were essential to maintaining an investment grade credit rating. Did S&P or
7 Moody’s downgrade Empire’s corporate credit rating in response to Empire suspending its
8 dividend for the 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 Empire:

11 ** _____
12 _____
13 _____
14 _____
15 _____
16 _____
17 _____ **

18 **SUMMARY 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 and has presented capital market evidence that supports this reduction from the
23 Commission allowed 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

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

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

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

12 Q. Does this conclude your surrebuttal testimony?

13 A. Yes, it does.

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:

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	50.02%	5.47%	2.74%	2.74%	2.74%
Total	<u>100.00%</u>		<u>7.36%</u>	<u>7.48%</u>	<u>7.61%</u>

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

Capital Component	Dollar Amount (000's)	Percentage of Capital
Common Stock Equity	\$ 783,298,594	49.98%
Preferred Stock	\$ -	0.00%
Long-Term Debt	\$ 783,823,903	50.02%
Short-Term Debt	\$ -	0.00%
Total Capitalization	\$ 1,567,122,497	100.00%

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

	<u>Amount Outstanding</u>	<u>Annual Cost</u>
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 ¹	\$1,134,917
Total	<u><u>\$783,823,903</u></u>	<u><u>\$42,862,817</u></u>

Embedded Cost of Long-term Debt

5.47%

Source: Empire's True Up workpapers

¹ 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.

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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.

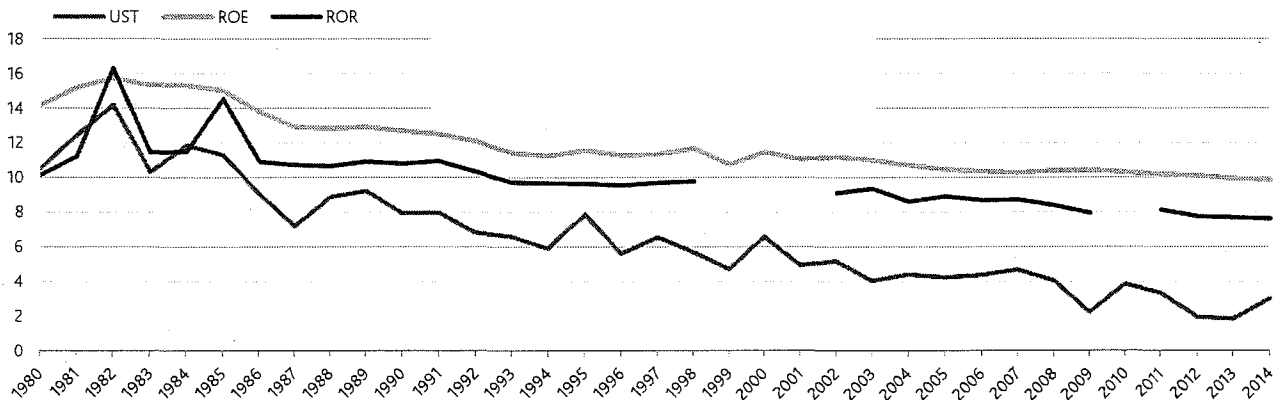
Cost recovery will help offset falling ROEs

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.

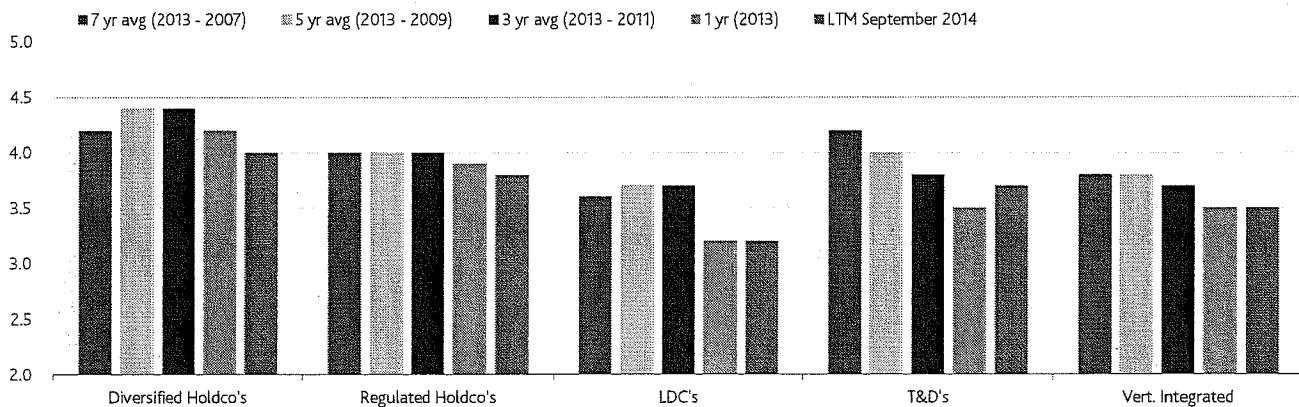
One of the arguments for keeping authorized ROEs steady is that lowering them would make utilities less attractive to providers of capital. Utility holding companies assert that they would rather invest in higher risk-adjusted opportunities than in a regulated utility with sub-par return prospects. We 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

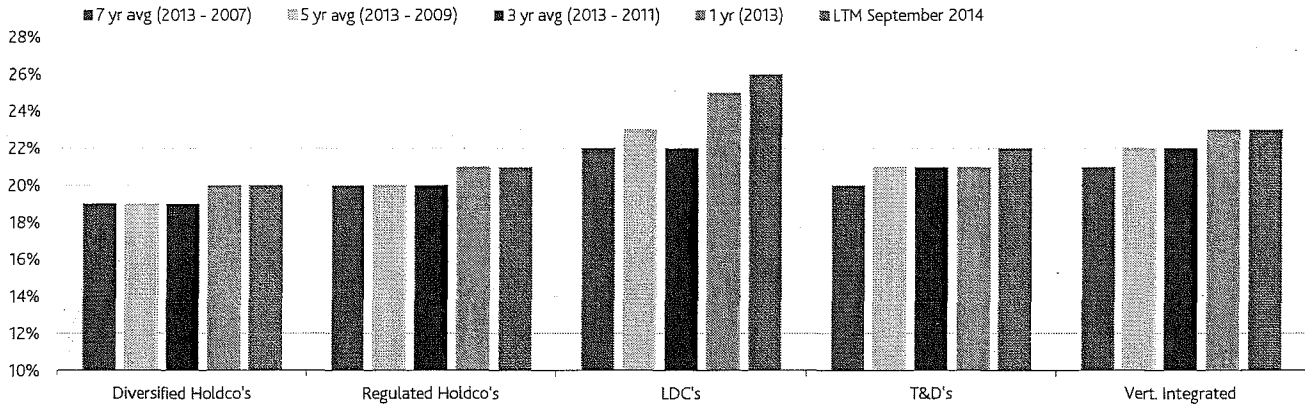
With better recovery mechanisms, the ratio of debt-to-EBITDA can rise, modestly, without negatively impacting credit profiles



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

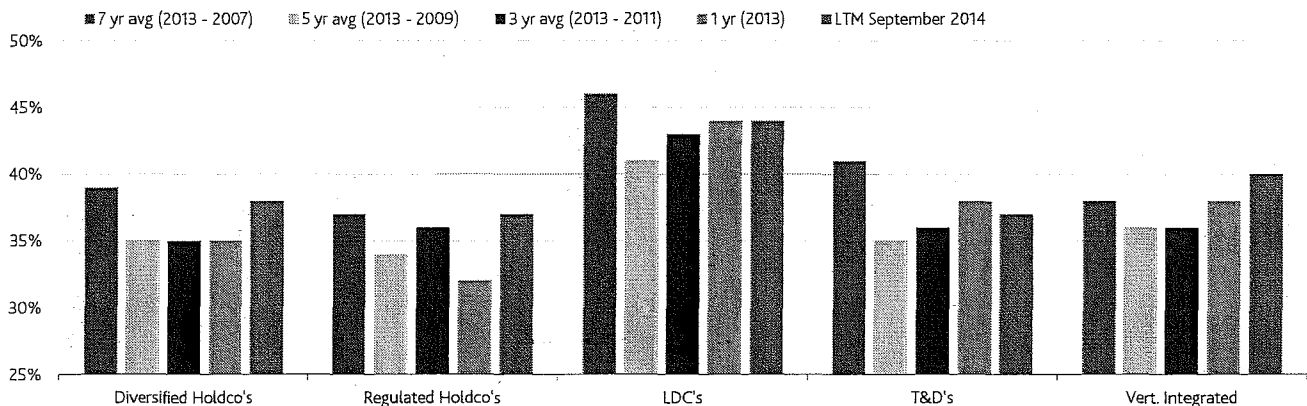
Utilities' cash flow is somewhat insulated from declining ROEs

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)

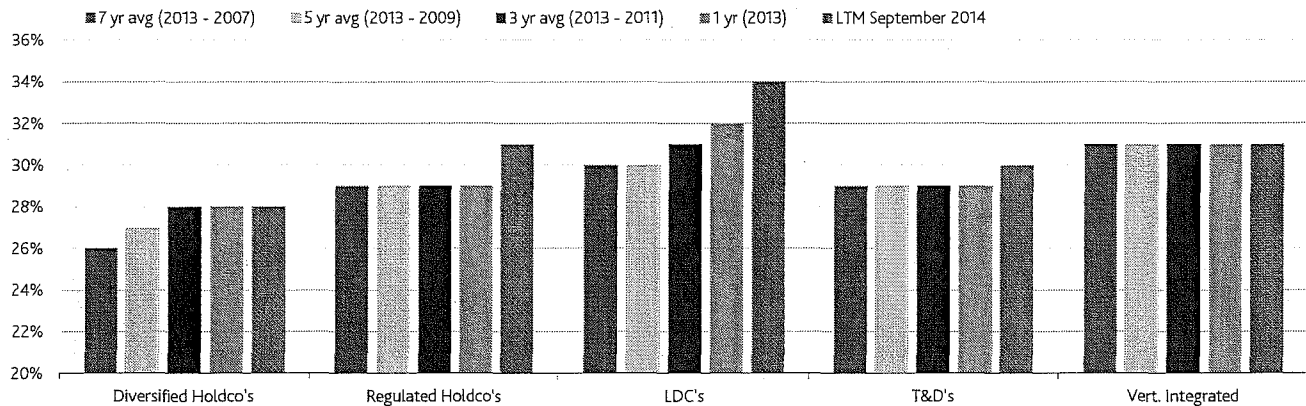


SOURCE: Company filings, Moody's

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.

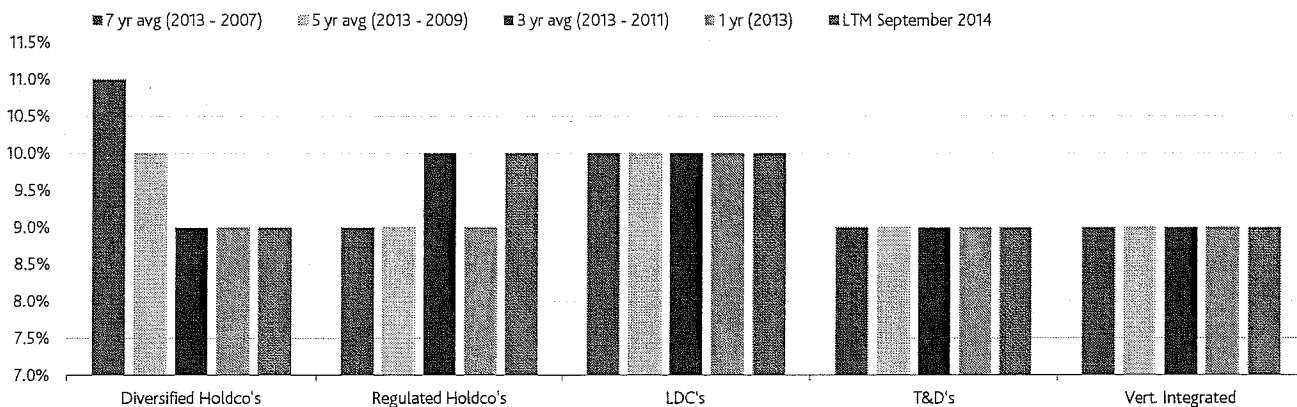
The authorized ROE is a popular focal point in many regulatory rate case proceedings. In addition, many regulatory jurisdictions look to established precedents that rely on various methodologies to determine an appropriate ROE, such as the capital asset pricing model or discounted cash flow analysis. 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)

Company Name	Sector	Rating	1-year average (2013) ROE	3-year average (2013 - 2011) ROE	5-year average (2013 - 2009) ROE	7-year average (2013 - 2007) ROE
CenterPoint Energy Houston Electric, LLC	T&D	A3	33%	32%	25%	23%
Questar Corporation	Holdco - Primarily Regulated	A2	14%	18%	20%	20%
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%

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	1-year average (2013)	3-year average (2013 - 2011)	5-year average (2013 - 2009)	7-year average (2013 - 2007)
Duke Energy Ohio, Inc.	T&D	Baa1	48%	47%	48%	50%
Yankee Gas Services Company	LDC	Baa1	41%	42%	43%	43%
Texas-New Mexico Power Company	T&D	Baa1	43%	43%	43%	43%
Oncor Electric Delivery Company LLC	T&D	Baa1	40%	41%	41%	43%
Dayton Power & Light Company	T&D	Baa3	37%	38%	39%	40%
Pennsylvania Power Company	T&D	Baa1	25%	30%	34%	40%
Black Hills Power, Inc.	Vertically Integrated Utility	A3	38%	38%	37%	38%
ALLETE, Inc.	Vertically Integrated Utility	A3	38%	37%	37%	38%
Central Maine Power Company	T&D	A3	39%	38%	38%	38%
MGE Energy, Inc.	Holdco - Primarily Regulated	NR	39%	37%	38%	38%
Duke Energy Corporation	Holdco - Primarily Regulated	A3	36%	36%	37%	38%
Jersey Central Power & Light Company	T&D	Baa2	32%	33%	36%	38%
Oklahoma Gas & Electric Company	Vertically Integrated Utility	A1	36%	37%	37%	37%
Public Service Company of Colorado	Vertically Integrated Utility	A3	37%	37%	37%	37%
Virginia Electric and Power Company	Vertically Integrated Utility	A2	37%	37%	37%	35%
Wisconsin Public Service Corporation	Vertically Integrated Utility	A1	34%	34%	34%	35%
PacifiCorp	Vertically Integrated Utility	A3	36%	35%	35%	35%
UGI Utilities, Inc.	LDC	A2	35%	34%	34%	34%
Cleco Corporation	Holdco - Primarily Regulated	Baa1	37%	36%	34%	34%
Empire District Electric Company (The)	Vertically Integrated Utility	Baa1	35%	34%	34%	34%
Great Plains Energy Incorporated	Holdco - Primarily Regulated	Baa2	35%	35%	34%	34%
Nevada Power Company	Vertically Integrated Utility	Baa1	32%	33%	33%	33%
Tampa Electric Company	Vertically Integrated Utility	A2	34%	33%	33%	33%
Wisconsin Power and Light Company	Vertically Integrated Utility	A1	34%	33%	32%	33%
Questar Corporation	Holdco - Primarily Regulated	A2	29%	28%	31%	33%
Duke Energy Kentucky, Inc.	Vertically Integrated Utility	Baa1	31%	30%	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%
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%
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%
AEP Texas Central Company	T&D	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)

Company Name	Sector	Rating	1-year average (2013)	3-year average (2013 - 2011)	5-year average (2013 - 2009)	7-year average (2013 - 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)

Company Name	Sector	Rating	1-year average (2013)	3-year average (2013 - 2011)	5-year average (2013 - 2009)	7-year average (2013 - 2007)
Berkshire Hathaway Energy Company	Holdco - Diversified	A3	7.1	5.8	5.6	5.3
FirstEnergy Corp.	Holdco - Diversified	Baa3	6.0	5.2	4.8	4.4
Wisconsin Electric Power Company	Vertically Integrated Utility	A1	5.9	6.1	5.6	5.0
Entergy Texas, Inc.	Vertically Integrated Utility	Baa3	5.8	6.1	6.2	6.1
Monongahela Power Company	T&D	Baa2	5.6	5.2	5.7	6.0
NiSource Inc.	Holdco - Diversified	Baa2	5.2	5.5	5.4	5.5
PPL Corporation	Holdco - Diversified	Baa3	5.1	4.9	5.1	4.6
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

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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
Dominion Resources Inc.	Holdco - Diversified	Baa2
DTE Energy Company	Holdco - Diversified	A3
Entergy Corporation	Holdco - Diversified	Baa3
Exelon Corporation	Holdco - Diversified	Baa2
FirstEnergy Corp.	Holdco - Diversified	Baa3
Hawaiian Electric Industries, Inc.	Holdco - Diversified	NR
Integrus Energy Group, Inc.	Holdco - Diversified	A3
NextEra Energy, Inc.	Holdco - Diversified	Baa1
NiSource Inc.	Holdco - Diversified	Baa2
PPL Corporation	Holdco - Diversified	Baa3
Public Service Enterprise Group Incorporated	Holdco - Diversified	Baa2
Sempra Energy	Holdco - Diversified	Baa1
Alliant Energy Corporation	Holdco - Primarily Regulated	A3
Ameren Corporation	Holdco - Primarily Regulated	Baa2
American Electric Power Company, Inc.	Holdco - Primarily Regulated	Baa1
CenterPoint Energy, Inc.	Holdco - Primarily Regulated	Baa1
Cleco Corporation	Holdco - Primarily Regulated	Baa1
CMS Energy Corporation	Holdco - Primarily Regulated	Baa2
Consolidated Edison, Inc.	Holdco - Primarily Regulated	A3
Duke Energy Corporation	Holdco - Primarily Regulated	A3
Edison International	Holdco - Primarily Regulated	A3
Great Plains Energy Incorporated	Holdco - Primarily Regulated	Baa2
IDACORP, Inc.	Holdco - Primarily Regulated	Baa1
MGE 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
Pinnacle West Capital Corporation	Holdco - Primarily Regulated	Baa1
PNM 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
Xcel Energy Inc.	Holdco - Primarily Regulated	A3
Alabama Gas Corporation	LDC	A2
Atmos Energy Corporation	LDC	A2
DTE Gas Company	LDC	Aa3
Laclede Gas Company	LDC	A3
New Jersey Natural Gas Company	LDC	Aa2
Northern Natural Gas Company [Private]	LDC	A2
Northwest Natural Gas Company	LDC	A3
Piedmont Natural Gas Company, Inc.	LDC	A2
South Jersey Gas Company	LDC	A2
Southern California Gas Company	LDC	A1
Southwest Gas Corporation	LDC	A3
UGI Utilities, Inc.	LDC	A2
Washington Gas Light Company	LDC	A1
Wisconsin Gas LLC [Private]	LDC	A1
Yankee Gas Services Company	LDC	Baa1
AEP Texas Central Company	T&D	Baa1
AEP Texas North Company	T&D	Baa1
Atlantic City Electric Company	T&D	Baa2

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Baltimore Gas and Electric Company	T&D	A3
CenterPoint Energy Houston Electric, LLC	T&D	A3
Central Hudson Gas & Electric Corporation	T&D	A2
Central Maine Power Company	T&D	A3
Cleveland Electric Illuminating Company (The)	T&D	Baa3
Commonwealth Edison Company	T&D	Baa1
Connecticut Light and Power Company	T&D	Baa1
Consolidated Edison Company of New York, Inc.	T&D	A2
Dayton Power & Light Company	T&D	Baa3
Delmarva Power & Light Company	T&D	Baa1
Duke Energy Ohio, Inc.	T&D	Baa1
Jersey Central Power & Light Company	T&D	Baa2
Metropolitan Edison Company	T&D	Baa1
Monongahela Power Company	T&D	Baa2
New York State Electric and Gas Corporation	T&D	A3
NSTAR Electric Company	T&D	A2
Ohio Edison Company	T&D	Baa1
Ohio Power Company	T&D	Baa1
Oncor Electric Delivery Company LLC	T&D	Baa1
Orange and Rockland Utilities, Inc.	T&D	A3
PECO Energy Company	T&D	A2
Pennsylvania Electric Company	T&D	Baa2
Pennsylvania Power Company	T&D	Baa1
Potomac Edison Company (The)	T&D	Baa2
Potomac Electric Power Company	T&D	Baa1
Public Service Electric and Gas Company	T&D	A2
Rochester Gas & Electric Corporation	T&D	Baa1
Texas-New Mexico Power Company	T&D	Baa1
Toledo Edison Company	T&D	Baa3
West Penn Power Company	T&D	Baa1
Western Massachusetts Electric Company	T&D	A3
Alabama Power Company	Vertically Integrated Utility	A1
ALLETE, Inc.	Vertically Integrated Utility	A3
Appalachian Power Company	Vertically Integrated Utility	Baa1
Arizona Public Service Company	Vertically Integrated Utility	A3
Avista Corp.	Vertically Integrated Utility	Baa1
Black Hills Power, Inc.	Vertically Integrated Utility	A3
Cleco Power LLC	Vertically Integrated Utility	A3
Consumers Energy Company	Vertically Integrated Utility	A1
DTE Electric Company	Vertically Integrated Utility	A2
Duke Energy Carolinas, LLC	Vertically Integrated Utility	A1
Duke Energy Florida, Inc.	Vertically Integrated Utility	A3
Duke Energy Kentucky, Inc.	Vertically Integrated Utility	Baa1
Duke Energy Progress, Inc.	Vertically Integrated Utility	A1
El Paso Electric Company	Vertically Integrated Utility	Baa1
Empire District Electric Company (The)	Vertically Integrated Utility	Baa1
Entergy Arkansas, Inc.	Vertically Integrated Utility	Baa2
Entergy Gulf States Louisiana, LLC	Vertically Integrated Utility	Baa1
Entergy Louisiana, LLC	Vertically Integrated Utility	Baa1
Entergy Mississippi, Inc.	Vertically Integrated Utility	Baa2
Entergy New Orleans, Inc.	Vertically Integrated Utility	Ba2
Entergy Texas, Inc.	Vertically Integrated Utility	Baa3
Florida Power & Light Company	Vertically Integrated Utility	A1
Georgia Power Company	Vertically Integrated Utility	A3
Gulf Power Company	Vertically Integrated Utility	A2
Hawaiian Electric Company, Inc.	Vertically Integrated Utility	Baa1
Idaho Power Company	Vertically Integrated Utility	A3
Indiana Michigan Power Company	Vertically Integrated Utility	Baa1
Interstate Power and Light Company	Vertically Integrated Utility	A3
Kansas City Power & Light Company	Vertically Integrated Utility	Baa1
Kentucky Power Company	Vertically Integrated Utility	Baa2

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Madison Gas and Electric Company	Vertically Integrated Utility	A1
MidAmerican Energy Company	Vertically Integrated Utility	A1
Mississippi Power Company	Vertically Integrated Utility	Baa1
Nevada Power Company	Vertically Integrated Utility	Baa1
Northern States Power Company (Minnesota)	Vertically Integrated Utility	A2
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 Oklahoma	Vertically Integrated Utility	A3
Puget Energy, Inc.	Vertically Integrated Utility	Baa3
Puget Sound Energy, Inc.	Vertically Integrated Utility	Baa1
San Diego Gas & Electric Company	Vertically Integrated Utility	A1
Sierra Pacific Power Company	Vertically Integrated Utility	Baa1
South Carolina Electric & Gas Company	Vertically Integrated Utility	Baa2
Southern California Edison Company	Vertically Integrated Utility	A2
Southwestern Electric Power Company	Vertically Integrated Utility	Baa2
Southwestern Public Service Company	Vertically Integrated Utility	Baa1
Tampa Electric Company	Vertically Integrated Utility	A2
Tucson Electric Power Company	Vertically Integrated Utility	Baa1
Union Electric Company	Vertically Integrated Utility	Baa1
Virginia Electric and Power Company	Vertically Integrated Utility	A2
Wisconsin Electric Power Company	Vertically Integrated Utility	A1
Wisconsin Power and Light Company	Vertically Integrated Utility	A1
Wisconsin Public Service Corporation	Vertically Integrated Utility	A1

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