

The Empire District Electric Company

Rebuttal Schedules

Rebuttal Schedule DAM-1:	Standard & Poor's RatingsDirect, September 28, 2004
Rebuttal Schedule DAM-2:	Standard & Poor's RatingsDirect, July 13, 2004
Rebuttal Schedule DAM-3:	Staff's Funds From Operations to Total Debt
Rebuttal Schedule DAM-4:	Staff's Funds From Operations Interest Coverage
Rebuttal Schedule DAM-5:	CAPM Tables from Ibbotson Associates' 2004 SBBI Yearbook
Rebuttal Schedule DAM-6:	Corrected Staff CAPM for the Empire District Electric Company
Rebuttal Schedule DAM-7:	Correction of Staff's <i>Pro Forma</i> Pretax Interest Coverage
Rebuttal Schedule DAM-8:	OPC's Funds From Operations to Total Debt
Rebuttal Schedule DAM-9:	OPC's Funds From Operations Interest Coverage
Rebuttal Schedule DAM-10:	Comparison of OPC "Sustainable" DCF to Assumed ROE
Rebuttal Schedule DAM-11:	Corrected OPC Capital Asset Pricing Model

This report was reproduced from Standard & Poor's RatingsDirect, the premier source of real-time, Web-based credit ratings and research from an organization that has been a leader in objective credit analysis for more than 140 years. To preview this dynamic on-line product, visit our RatingsDirect Web site at www.standardandpoors.com/ratingsdirect. Click here to apply for a FREE 30-day trial!

Your Connection to Standard & Poor's Utilities Ratings Team

Standard & Poor's is pleased to provide ongoing service to the investment community.

Empire District Electric Rating Placed on CreditWatch Negative

Publication date: 28-Sep-2004

Analyst(s): Barbara A Eiseman, New York (1) 212-438-7666;
Gerrit Jepsen, New York (1) 212-438-7916

Credit Rating: BBB/Watch Neg/A-2

Rationale

On Sept. 28, 2004, Standard & Poor's Ratings Services placed its 'BBB/A-2' corporate credit rating on Empire District Electric Co. on CreditWatch with negative implications. The CreditWatch listing reflects prospects for erosion of Empire's pressured financial condition if recent testimony by the Missouri Public Service Commission (MPSC) staff in Empire's pending general rate case is ultimately endorsed by the MPSC. Hearings begin in early December with a final order due by March 27, 2005.

Joplin, Mo.-based Empire has about \$400 million in long-term debt outstanding.

Empire is seeking a \$38.3 million (14.8%) rate increase that is predicated on a return on common equity (ROE) of 11.65%. The utility is also requesting a five-year interim energy charge (IEC) to help manage risk and recover fuel costs. The MPSC staff has recommended an ROE range of 8.29% to 9.29% with 8.79% as the midpoint which would result in a revenue increase of only \$9.5 million at 8.29%, \$12 million 8.79%, and \$14.4 million at 9.29%, inclusive of the IEC period. Furthermore, the staff has proposed that the IEC be adopted for a period of only 24 months, owing to the extreme volatility of natural gas prices. Because there is no fuel adjustment clause in Missouri, reinstatement of the IEC for a longer period would provide for more predictable and stable earnings.

Although the staff's recommendation is not binding on the commission, an MPSC order that mirrors the staff's recommendation would harm Empire's

creditworthiness. The requested rate hike is needed to recover additions, including two peaking units that were installed in 2003, higher operating and maintenance expense, escalating pension and health care costs, and rising fuel and purchased power costs.

Empire's credit quality reflects an average business profile and a financial position (adjusted for off-balance-sheet, purchased-power obligations) that remains somewhat weak, albeit improving, for the current ratings. Empire benefits from a service territory with a well-diversified business mix, below-average rates due to the low embedded cost of its coal plants, and adequate liquidity. However, the company remains challenged by its regulatory environment. Empire is a public utility involved in the generation, purchase, transmission, distribution, and sale of electricity primarily in Missouri (89% of electric operating revenues), Kansas (6%), Oklahoma (3%), and Arkansas (3%).

Empire's business profile is supported by a healthy service area with little industrial concentration. The territory consists primarily of small, rural customers that benefit from Empire's below-average rates, which the company derives from low-cost coal plants. The company does conduct some higher-risk, nonregulated activities, but they are extremely limited and Empire has demonstrated its willingness to exit ventures if financial performance does not materialize.

A challenging regulatory environment tempers the strengths of Empire's business profile. Under the jurisdiction of the MPSC, Empire suffers from relatively low allowed ROEs, receives low depreciation allowances, and lacks a fuel-adjustment clause to help shield the company from its markedly increased natural gas dependence. The absence of a fuel-adjustment clause exposes Empire to potential fuel and purchased-power price volatility, which concerns Standard & Poor's. Timely recovery of prudently incurred fuel and purchased-power expenses is important for Empire's credit quality.

Regarding its financial profile, Empire is focused on improving its earnings and cash flow protection measures by hedging fuel expenses and controlling other costs. As long as the company continues to aggressively hedge its forecast natural gas needs (as of April 2004, Empire had hedged about 65% of its remaining expected gas burn for 2004 with rates at or below those budgeted in its rate structure) and receives timely and adequate rate relief, key financial measures should fall be marginally suitable for the established risk profile at the 'BBB' level.

Empire's credit facility is rated one notch below the corporate credit rating to reflect its subordination to Empire's secured debt. Because the loan is unsecured, Standard & Poor's expects that lenders will fare the same as senior unsecured creditors in the event of a default.

Short-term credit factors.

The short-term rating on Empire is 'A-2'. For the short term, Standard & Poor's expects cash flow from operations to fully fund maintenance capital expenditures and dividends, assuming continued, timely recovery of regulatory-related costs. Future actions by the MPSC will weigh heavily on Empire's credit profile because of the lack of conventional regulatory support (no fuel-adjustment clause and no construction-work-in-progress recovery). The current short-term rating incorporates additional rate relief over the near term, given currently strong natural gas and coal prices. Empire's primary coal supply contract expires in December 2004, and current coal prices exceed those in its

existing fixed-price contract. The lack of adequate rate re: affect the company's profitability.

Empire's adequate liquidity is supported by access to a \$100 million unsecured revolving credit facility that matures in April 2005 and limited, long-term debt maturities in the next five years. As of June 30, 2004, the facility was fully available and adequate for working-capital needs, assuming Empire continues to prudently hedge its expected natural gas burn. The facility includes no rating triggers, but requires total debt (excluding trust-preferred securities) to be less than 62.5% of total capital, and EBITDA to be at least 2x interest charges (including distributions from trust-preferred securities). Empire safely met the debt-to-capital requirement (46.5%) and the EBITDA-to-interest covenant (3.34x) as of June 30, 2004.

Other points of note include:

- The company annually distributes about \$30 million in common dividends, which would provide flexibility in a liquidity crunch.
- Restrictions in Empire's mortgage bond charter, particularly an interest coverage requirement, would limit the issuance of new first mortgage bonds to roughly \$213 million as of June 30, 2004. However, no such restrictions exist on unsecured debt issuances.
- Empire has limited room for capital expenditure reductions, as projected generation outlays are required to maintain reserve margins. Projected growth expenditures will require external funding.
- Although the company operates various diversified businesses, Standard & Poor's believes that their sale would generate few proceeds.

Ratings List

	To	From
Empire District Electric Co.		
Corporate credit rating	BBB/Watch Neg/A-2	BBB/Stable/A-2
Senior secured debt	A-/Watch Neg	A-
Senior unsecured debt	BBB-/Watch Neg	BBB-
Preferred stock	BB+/Watch Neg	BB+
Commercial paper	A-2/Watch Neg	A-2

Complete ratings information is available to subscribers of RatingsDirect, Standard & Poor's Web-based credit analysis system, at www.ratingsdirect.com. All ratings affected by this rating action can be found on Standard & Poor's public Web site at www.standardandpoors.com; under Credit Ratings in the left navigation bar, select Find a Rating, then Credit Ratings Search.

For a complete list of ratings, please click the hyperlink provided here

<http://www2.standardandpoors.com/NASApp/cs/ContentServer?pagename=sp/Page/FixedIncomeRatingActionsPg>

RatingsDirect Link is a FREE service provided by Standard & Poor's. If you do not wish to receive further E-mails related to this topic only, please click [here](#) or send a blank E-mail to leave-utility@ratingslist.standardandpoors.com.

If you do not wish to receive further E-mails on any topic, please click [here](#) or send an E-mail with the subject "Unsubscribe" to purge@ratingslist.standardandpoors.com.

For additional information on Standard & Poor's visit our web site at <http://www.standardandpoors.com>.

Published by Standard & Poor's, a Division of The McGraw-Hill Companies, Inc. Executive offices: 1221 Avenue of the Americas, New York, N.Y. 10020. Editorial offices: 55 Water

Street, New York, NY 10041. Subscriber services: (1) 212-438-7280. Copyright 2004 by The McGraw-Hill Companies, Inc. Reproduction in permission. All rights reserved. Information has been obtained by Standard & Poor's from sources believed to be reliable. However, because by our sources, Standard & Poor's or others, Standard & Poor's does not guarantee the accuracy, adequacy, or completeness of any information or the result obtained from the use of such information. Ratings are statements of opinion, not statements of fact or recommendations to buy, hold, or sell any securities.

Standard & Poor's receives compensation for rating obligations from issuers of the rated securities or the underwriters participating in the distribution thereof. The fees generally vary from US\$5,000 to over US\$1,500,000. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications. Ratings are statements of opinion, not statements of fact or recommendations to buy, hold, or sell any securities. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services.

Standard & Poor's uses web usage, billing, and contact data from subscribers for billing and order fulfillment purposes, for new product development and occasionally to inform subscribers about products or services from Standard & Poor's and The McGraw-Hill Companies. If you have any questions about our privacy practices or would like to review the accuracy of the information you've provided, please contact Edward Tyburczy at edward_tyburczy@standardandpoors.com or refer to The McGraw-Hill Companies Customer Privacy Policy at <http://www.mcgraw-hill.com/privacy.html>.

STANDARD & POOR'S	RATINGS DIRECT
----------------------	----------------

Research:

Return to Regular Format

Summary: Empire District Electric Co.

Publication date: 13-Jul-2004

Credit Analyst: Barbara A Eiseman, New York (1) 212-438-7666

Credit Rating: BBB/Stable/A-2

■ Rationale

The ratings on Empire District Electric Co. reflect an average business profile and a financial position (adjusted for off-balance-sheet, purchased-power obligations) that remains somewhat weak, albeit improving, for the current ratings. Empire benefits from a service territory with a well-diversified business mix, below-average rates due to the low embedded cost of its coal plants, and adequate liquidity. However, the company remains challenged by its regulatory environment. Empire is a public utility involved in the generation, purchase, transmission, distribution, and sale of electricity primarily in Missouri (89% of electric operating revenues), Kansas (6%), Oklahoma (3%), and Arkansas (3%).

Empire's business profile is supported by a healthy service area with little industrial concentration. The territory consists primarily of small, rural customers that benefit from Empire's below-average rates, which the company derives from low-cost coal plants. The company does conduct some higher-risk, nonregulated activities, but they are extremely limited and Empire has demonstrated its willingness to exit ventures if financial performance does not materialize.

A challenging regulatory environment tempers the strengths of Empire's business profile. Under the jurisdiction of the Missouri Public Service Commission (MPSC), Empire suffers from relatively low allowed ROEs, receives low depreciation allowances, lacks recovery for construction work in progress (CWIP), and lacks a fuel-adjustment clause to help shield the company from its markedly increased natural gas dependence. The lack of a fuel-adjustment clause exposes Empire to potential fuel and purchased-power price volatility, which concerns Standard & Poor's. Timely recovery of prudently incurred fuel and purchased-power expenses is important for Empire's credit quality.

Regarding its financial profile, Empire is trying to improve its earnings and cash flow protection measures by hedging fuel expenses and controlling other costs. As long as the company continues to aggressively hedge its forecast natural gas needs (as of April 2004, Empire had hedged about 65% of its remaining expected gas burn for 2004 with rates at or below those budgeted in its rate structure) and receives timely rate relief, the principal financial measures should fall in line with lower levels suitable for the established risk profile at the 'BBB' level. Specifically, funds from operations (FFO) to total debt should be between 20% and 27% and FFO interest coverage between 3x and 4x.

Empire's credit facility is rated one notch below the corporate credit rating to reflect its subordination to Empire's secured debt. Because the loan is unsecured, Standard & Poor's expects that lenders will fare the same as senior unsecured creditors in the event of a default.

Short-term credit factors.

Empire's short-term rating is 'A-2'. Over the short term, Standard & Poor's expects cash flow from operations to fully fund maintenance capital expenditures and dividends, assuming continued, timely recovery of regulatory-related costs. Future actions by the MPSC will weigh heavily on Empire's credit profile because of the lack of conventional regulatory support (no fuel-adjustment clause and no CWIP recovery). The current short-term rating incorporates additional rate relief over the near term, given currently strong natural gas and coal prices. Empire's primary coal supply contract expires in December 2004, and current coal prices exceed those in its existing fixed-price contract.

The lack of adequate rate relief would adversely affect the company's profitability.

Empire's adequate liquidity is supported by access to a \$100 million unsecured revolving credit facility that matures in April 2005 and limited long-term debt maturities in the next five years. As of March 31, 2004, the facility was fully available and adequate for working capital needs, assuming Empire continues to prudently hedge its expected natural gas burn. The facility includes no rating triggers, but requires total debt (excluding trust-preferred securities) to be less than 62.5% of total capital, and EBITDA to be at least 2x interest charges (including distributions from trust-preferred securities). Empire safely meets the debt-to-capital requirement (45.6%) and the EBITDA-to-interest covenant (3.31x) as of March 31, 2004.

Other points of note include the following:

- The company annually distributes about \$30 million in common dividends, which would provide flexibility in a liquidity crunch.
- Restrictions in Empire's mortgage bond charter, particularly an interest coverage requirement, would limit the issuance of new first mortgage bonds to roughly \$227 million as of March 31, 2004. However, no such restrictions exist on unsecured debt issuances.
- Empire has limited room for capital expenditure reductions, as projected generation outlays are required to maintain reserve margins. Projected growth expenditures will require external funding.
- Though the company operates various diversified businesses, Standard & Poor's believes that their sale would generate few proceeds.

Outlook

The stable outlook on Empire assumes several factors. These include adequate regulatory treatment in future rate proceedings, manageable environmental compliance costs that are recoverable through rates in a timely manner, and continued attention to risk management of the company's generation fleet, fuel procurement, and purchased-power needs. Given the current volatile commodity price environment, failure to effectively hedge natural gas costs would pressure the ratings. In addition, the need for additional generation capacity could strain the company's long-term financial profile. Of paramount importance, however, will be the MPSC's treatment of the company's upcoming rate case.

The Empire District Electric Company

Commission Staff Witness David Murray

Calculation of Funds from Operations / Total Debt

Line No.	Assumptions		Source
1	Long Term Debt Ratio	44.54%	Murray Schedule 28
2	Trust Preferred Securities Ratio	<u>6.32%</u>	Murray Schedule 28
3	Total Debt Ratio	50.86%	
4	Rate Base	\$607,420,688	Staff Accounting Schedule 2 Line 21
Calculation of Funds From Operations			
5	Net Income from continuing operations		
6	Net Operating Income	\$50,658,885	Staff Accounting Schedule 11 Line 1
7	Interest Expense	<u>(\$22,899,760)</u>	Staff Accounting Schedule 11 Line 15
8	Total Net Income from Continuing Operations	\$27,759,125	
9	Depreciation	\$24,324,947	Staff Accounting Schedule 9 Line 29
10	Amortization	\$589,223	Staff Accounting Schedule 9 Line 30
11	Deferred Income Taxes	<u>\$5,513,557</u>	Staff Accounting Schedule 9 Line 42
12	Total Funds From Operations	\$58,186,852	Sum of Lines 8-11
13	Allocated Debt	\$308,934,162	Rate Base * Debt Ratio
14	Ratio of Funds From Operations/ Total Debt	<u>18.83%</u>	

The Empire District Electric Company

Commission Staff Witness David Murray

Calculation of Funds from Operations / Interest Coverage

Line No.	Assumptions		Source
1	Long Term Debt Ratio	44.54%	Murray Schedule 28
2	Trust Preferred Securities Ratio	6.32%	Murray Schedule 28
3	Funds From Operations	\$58,186,852	Rebuttal Schedule DAM - 3
4	Embedded Cost of Long Term Debt	7.22%	Murray Schedule 28
5	Embedded Cost of Trust Preferred Securities	8.92%	Murray Schedule 28
6	Weighted Cost of Long Term Debt	3.78%	(Line 1 * Line 4) +(Line 2 * Line 5)
7	Rate Base	\$607,420,688	Staff Accounting Schedule 2 Line 21
8	Interest Expense	\$22,899,760	Staff Accounting Schedule 11 Line 15
9	FFO/ Interest Expense	<u>2.54</u>	

Standard Deviations

Standard deviations are estimated from historical data as described in Chapter 6. Since there is no evidence of a major change in the variability of returns on large company stocks, we use the entire period 1926–2003 to estimate the standard deviation of these asset classes. For bonds and bills, we use the period 1970–2003. The use of this more recent period reflects the fact that the volatility of bonds has increased over time.

Table 9-1

Building Blocks for Expected Return Construction

	Value (in percent)
Yields (Riskless Rates)¹	
Long-Term (20-year) U.S. Treasury Coupon Bond Yield	5.1
Intermediate-Term (5-year) U.S. Treasury Coupon Note Yield	3.0
Short-Term (30-day) U.S. Treasury Bill Yield	0.9
Fixed Income Risk Premia²	
Expected default premium: <i>long-term corporate bond total returns minus long-term government bond total returns</i>	0.2
Expected long-term horizon premium: <i>long-term government bond income returns minus U.S. Treasury bill total returns*</i>	1.6
Expected intermediate-term horizon premium: <i>intermediate-term government bond income returns minus U.S. Treasury bill total returns*</i>	1.1
Equity Risk Premia³	
Long-horizon expected equity risk premium: <i>large company stock total returns minus long-term government bond income returns</i>	7.2
Intermediate-horizon expected equity risk premium: <i>large company stock total returns minus intermediate-term government bond income returns</i>	7.6
Short-horizon expected equity risk premium: <i>large company stock total returns minus U.S. Treasury bill total returns*</i>	8.6
Small Stock Premium: <i>small company stock total return minus large company stock total return</i>	5.1

¹ As of December 31, 2003. Maturities are approximate.

² Expected risk premia for fixed income are based on the differences of historical arithmetic mean returns from 1970–2003.

³ Expected risk premia for equities are based on the differences of historical arithmetic mean returns from 1926–2003.

*For U.S. Treasury bills, the income return and total return are the same.

Table 7-5
Size-Decile Portfolios of the NYSE/AMEX/NASDAQ:
Bounds, Size, and Composition
from 1926 to 2003

Decile	Historical Average Percentage of Total Capitalization	Recent Number of Companies	Recent Decile Market Capitalization (in thousands)	Recent Percentage of Total Capitalization
1-Largest	63.33%	168	\$7,419,638,030	64.91%
2	13.99%	186	1,471,629,952	12.87%
3	7.57%	198	746,716,927	6.53%
4	4.74%	200	451,145,013	3.95%
5	3.24%	221	337,041,577	2.95%
6	2.37%	277	290,452,647	2.54%
7	1.72%	343	238,327,258	2.08%
8	1.27%	379	171,437,318	1.50%
9	0.97%	613	168,889,652	1.48%
10-Smallest	0.80%	1724	136,028,242	1.19%
Mid-Cap 3-5	15.55%	619	1,534,903,517	13.43%
Low-Cap 6-8	5.36%	999	700,217,223	6.13%
Micro-Cap 9-10	1.77%	2337	304,917,894	2.67%

Source: Center for Research in Security Prices, University of Chicago.

Historical average percentage of total capitalization shows the average, over the last 78 years, of the decile market values as a percentage of the total NYSE/AMEX/NASDAQ calculated each month. Number of companies in deciles, recent market capitalization of deciles and recent percentage of total capitalization are as of September 30, 2003.

Decile	Recent Market Capitalization (in thousands)	Company Name
1-Largest	\$286,638,305	General Electric Co.
2	11,366,767	Masco Corp.
3	4,794,027	EOG Resources Inc.
4	2,585,984	Toys R Us Inc.
5	1,720,959	International Rectifier Corp.
6	1,166,799	Thor Industries Inc.
7	795,983	Granite Construction Inc.
8	507,820	Steelcase Inc.
9	330,608	Sterling Bancorp
10-Smallest	166,414	Ethyl Corp.

Source: Center for Research in Security Prices, University of Chicago.

Market capitalization and name of largest company in each decile as of September 30, 2003.

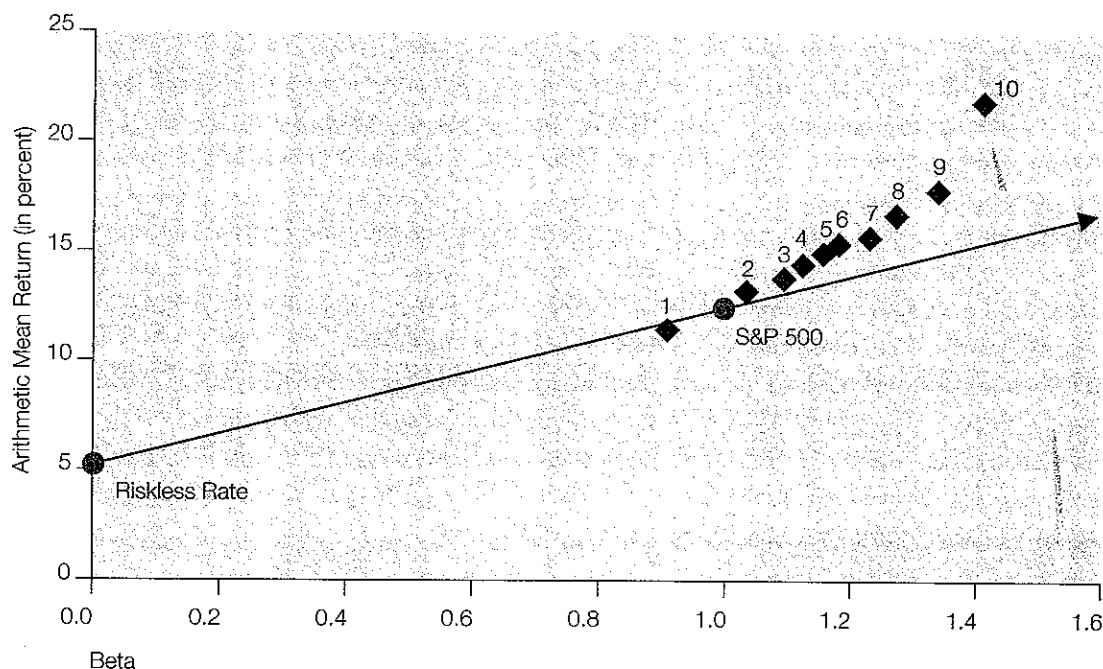
Table 7-6
Size-Decile Portfolios of the NYSE/AMEX/NASDAQ:
Long-Term Returns in Excess of CAPM
from 1926 to 2003

Decile	Beta*	Arithmetic Mean Return	Actual Return in Excess of Riskless Rate**	CAPM Return in Excess of Riskless Rate**	Size Premium (Return in Excess of CAPM)
1	0.91%	11.43%	6.21%	6.54%	-0.34%
2	1.04	13.16%	7.94%	7.44%	0.50%
3	1.10	13.78%	8.55%	7.88%	0.67%
4	1.13	14.43%	9.20%	8.09%	1.11%
5	1.16	14.91%	9.68%	8.32%	1.36%
6	1.18	15.32%	10.09%	8.50%	1.59%
7	1.23	15.65%	10.42%	8.85%	1.57%
8	1.28	16.64%	11.42%	9.16%	2.25%
9	1.34	17.76%	12.53%	9.63%	2.90%
10	1.41	21.73%	16.50%	10.16%	6.34%
Mid-Cap, 3-5	1.12	14.16%	8.93%	8.02%	0.91%
Low-Cap, 6-8	1.22	15.67%	10.44%	8.74%	1.70%
Micro-Cap, 9-10	1.36	18.98%	13.75%	9.74%	4.01%

*Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2003.

**Historical riskless rate measured by the 78-year arithmetic mean income return component of 20-year government bonds (5.23).

Graph 7-2
Size-Decile Portfolios of the NYSE/AMEX/NASDAQ:
Security Market Line



Source: Center for Research in Security Prices, University of Chicago (decile data).

The Empire District Electric Company

Commission Staff Witness David Murray

Corrected Capital Asset Pricing Model (CAPM) Cost of Equity Estimate

EDE's Cost of Common Equity	=	Risk Free Rate (August 2004)	+	(EDE's Beta	*	Market Risk Premium (1926-2003))	+	Size Premium
11.44%	=	5.06%	+	(0.65	*	7.20%)	+	1.70%

Sources:

Schedule 15 of the Direct Testimony of MPSC Staff Witness David Murray
Ibbotson Associates SBBI 2004 Yearbook, Tables 7-5, 7-6 and 9-1

The Empire District Electric Company
Commission Staff Witness David Murray
Corrected Pro Forma Pre-Tax Interest Coverage

Capital Component	<u>Percentage of Capital</u>	<u>Embedded Cost</u>	<u>Weighted Cost of Capital Using Common Equity Return of:</u>			<u>Tax Multiplier</u>	<u>Before Tax ROE</u>		
			<u>8.29%</u>	<u>8.79%</u>	<u>9.29%</u>		<u>8.29%</u>	<u>8.79%</u>	<u>9.29%</u>
Common Stock Equity	49.14%		4.07%	4.32%	4.57%	1.6231	6.61%	7.01%	7.41%
Preferred Stock	6.32%	8.92%	0.56%	0.56%	0.56%	1.0000	0.56%	0.56%	0.56%
Long-Term Debt	44.54%	7.22%	3.22%	3.22%	3.22%	1.0000	3.22%	3.22%	3.22%
Short-Term Debt	<u>0.00%</u>		<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	1.0000	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Cost of Capital	100.00%		7.85%	8.10%	8.34%		10.39%	10.79%	11.19%
Pro Forma Pre-Tax Interest Coverage							2.75	2.85	2.96

Sources: Direct Testimony of David Murray Schedules 18 and 28

The Empire District Electric Company

Office of Public Counsel Witness Travis Allen

Calculation of Funds from Operations / Total Debt

Line No.	Assumptions		Source
1	Total Equity Ratio	49.49%	Allen Schedule TA-1
2	Embedded Cost of Equity	9.29%	Allen Direct page 22 Lines 4-6
3	Weighted Cost of Equity	4.60%	Line 1 * Line 2
4	Long Term Debt Ratio	43.99%	Allen Schedule TA-1
5	Trust Preferred Securities Ratio	<u>6.52%</u>	Allen Schedule TA-1
6	Total Debt Ratio	50.51%	
7	Rate Base	\$602,830,619	Schedule BAM RD DIR-2.1 Line 16
Calculation of Funds From Operations			
8	Net Income from Continuing Operations	\$27,715,867	Rate Base * Weighted Cost of Equity
9	Depreciation and Amortization	\$24,317,880	Schedule BAM RD DIR-2.1 Line 2
10	Deferred Income Taxes	<u>\$5,513,557</u>	Staff Accounting Schedule 9 Line 42
11	Total Funds From Operations	\$57,547,304	Sum of Lines 8-10
12	Allocated Debt	\$304,489,745.66	Rate Base * Debt Ratio
13	Ratio of Funds From Operations/ Total Debt	<u><u>18.90%</u></u>	

The Empire District Electric Company

Office of Public Counsel Witness Travis Allen

Calculation of Funds from Operations / Interest Coverage

Line No.	Assumptions		Source
1	Long Term Debt Ratio	43.99%	Allen Schedule TA-1
2	Trust Preferred Securities Ratio	6.52%	Allen Schedule TA-1
3	Funds from Operations	\$57,547,304	Rebuttal Schedule DAM - 8
4	Embedded Cost of Long Term Debt	7.23%	Allen Schedule TA-3
5	Embedded Cost of Trust Preferred Securities	8.83%	Allen Schedule TA-2
6	Weighted Cost of Interest Obligations	3.76%	(Line 1 * Line 4) +(Line 2 * Line 5)
7	Rate Base	\$602,830,619	Schedule BAM RD DIR-2.1 Line 16
8	Interest Expense	\$22,644,661	Rate Base * Weighted Cost of Interest Obligations
9	FFO/ Interest Expense	<u>2.54</u>	

The Empire District Electric Company

Office of Public Counsel Witness Travis Allen

Comparison of Equity Returns Used to Calculate "Sustainable" Discounted Cash Flow

<u>Company</u>	<u>Travis Allen's Assumed ROE</u>			<u>Travis Allen's DCF</u>
	<u>2004E</u>	<u>2005E</u>	<u>07-09E</u>	<u>Using "Sustainable"</u> <u>Growth</u>
American Electric Power	11.50%	11.00%	11.00%	10.18%
Cent. Vermont Public Service	9.00%	9.00%	9.50%	9.20%
Cleco Corporation	12.00%	12.50%	12.00%	10.35%
Duquesne Light	14.00%	15.00%	16.00%	11.68%
FirstEnergy	10.00%	10.00%	11.50%	10.27%
FPL Group, Inc.	12.50%	11.50%	10.50%	10.72%
Green Mountain Power	10.50%	10.50%	10.50%	9.24%
Hawaiian Electric	9.00%	11.00%	10.50%	8.00%
Idacorp, Inc.	8.50%	8.50%	8.00%	7.91%
Pinnacle West	8.00%	10.00%	10.00%	8.57%
Progress Energy	11.00%	11.00%	9.00%	8.88%
Southern Co.	14.50%	14.00%	13.50%	9.99%
UIL Holdings	7.50%	8.00%	8.50%	7.14%
Average	10.62%	10.92%	10.81%	9.39%

Source:

Direct Testimony of Mr. Allen (Schedule TA-9 pages 2 through 15 and Schedule TA-11)

The Empire District Electric Company
Office of Public Counsel Witness Travis Allen's Proxy
Size - Adjusted Capital Asset Pricing Model

Company	Risk Free Return	Beta	Equity Risk Premium	Adjusted Equity Risk Premium	Size Premium	Cost of Equity
The Empire District Electric Company	4.89%	0.65	7.20%	4.68%	1.70%	11.27%
American Electric Power	4.89%	1.10	7.20%	7.92%	0.00%	12.81%
Cent. Vermont Public Service	4.89%	0.50	7.20%	3.60%	4.01%	12.50%
Cleco Corporation	4.89%	1.05	7.20%	7.56%	1.70%	14.15%
Duquesne Light	4.89%	0.75	7.20%	5.40%	0.91%	11.20%
FirstEnergy	4.89%	0.75	7.20%	5.40%	0.00%	10.29%
FPL Group, Inc.	4.89%	0.70	7.20%	5.04%	0.00%	9.93%
Green Mountain Power	4.89%	0.65	7.20%	4.68%	4.01%	13.58%
Hawaiian Electric	4.89%	0.65	7.20%	4.68%	0.91%	10.48%
Idacorp, Inc.	4.89%	0.85	7.20%	6.12%	1.70%	12.71%
Pinnacle West	4.89%	0.80	7.20%	5.76%	0.91%	11.56%
Progress Energy	4.89%	0.85	7.20%	6.12%	0.00%	11.01%
Southern Co.	4.89%	0.65	7.20%	4.68%	0.00%	9.57%
UIL Holdings	4.89%	0.80	7.20%	5.76%	1.70%	12.35%
Comparable Companies' Average	4.89%	0.78	7.20%	5.59%	1.22%	11.70%

Sources :
Value Line Investment Survey
Schedule DAM - R5
Federal Reserve Statistical Release