

*Exhibit No.:*  
*Issue:* Cost of Capital  
*Witness:* Roberta A. McKiddy  
*Sponsoring Party:* MoPSC Staff  
*Type of Exhibit:* Direct Testimony  
*Case No.:* ER-2001-299  
*Date Testimony Prepared:* August 7, 2001

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DIVISION**

**TRUE-UP DIRECT TESTIMONY**

**OF**

**ROBERTA A. MCKIDDY**

**THE EMPIRE DISTRICT ELECTRIC COMPANY**

**CASE NO. ER-2001-299**

*Jefferson City, Missouri*  
*August 2001*

*Exhibit No.* 124  
*Date* 8/23/01 *Case No.* ER-2001-299  
*Reporter* Kem

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TRUE-UP DIRECT TESTIMONY  
OF  
ROBERTA A. MCKIDDY**

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1 Q. What was the result of your analysis?

2 A. As of June 30, 2001, EDE's capital structure is as follows: 37.76% common  
3 stock equity; 7.88% preferred stock and 54.36% long-term debt. (see Schedule 1)

4 Q. How does this compare to the capital structure used in your direct testimony  
5 evaluation of EDE?

6 A. EDE's capital structure as of June 30, 2001 is slightly different from that used  
7 for the period ending December 31, 2000, which was as follows: 39.80% common stock  
8 equity and 60.20% long-term debt. The major difference in the capital structure from  
9 December 31, 2000 and June 30, 2001 is the issuance of Trust Preferred Stock (TOPrS),  
10 which occurred on or about March 1, 2001. The common equity and long-term debt ratios  
11 were adjusted accordingly to account for the inclusion of TOPrS.

12 **Embedded Cost of Trust Preferred Stock (TOPrS)**

13 Q. Did you perform an analysis of the embedded cost of preferred stock as of  
14 June 30, 2001?

15 A. Yes, I did.

16 Q. What was the result of your analysis?

17 A. As of June 30, 2001, Staff recommends an embedded cost for preferred stock  
18 of 8.88 percent. (see Schedule 4)

19 **Embedded Cost of Long-term Debt**

20 Q. Did you perform an analysis of the embedded cost of long-term debt as of  
21 June 30, 2001?

22 A. Yes, I did.

23 Q. What was the result of your analysis?

A. As of June 30, 2001, Staff recommends an embedded cost for long-term debt of 7.87 percent. (see Schedules 2 and 3)

Q. How does this compare with the embedded cost of long-term debt recommended for the period ending December 31, 2000?

A. EDE's embedded cost of long-term debt is 1 basis point lower than the embedded cost of long-term debt recommended for the period ending December 31, 2000.

**Overall Rate of Return**

Q. How have the changes to capital structure and embedded costs affected the overall rate of return for EDE?

A. EDE's overall rate of return as of June 30, 2001 has increased slightly. Staff recommends the following overall rates of return based on a return on equity range of 8.50 percent to 9.50 percent with a midpoint of 9.00 percent. (see Schedule 5)

| <u>Return on Equity</u> | <u>8.50%</u> | <u>9.00%</u> | <u>9.50%</u> |
|-------------------------|--------------|--------------|--------------|
| Common Stock Equity     | 3.21%        | 3.40%        | 3.59%        |
| Preferred Stock         | .70%         | .70%         | .70%         |
| <u>Long-term Debt</u>   | <u>4.28%</u> | <u>4.28%</u> | <u>4.28%</u> |
| Overall Rate of Return  | 8.19%        | 8.38%        | 8.57%        |

Q. For comparison purposes, what was the overall rate of return recommended for the period ending December 31, 2000?

A. Staff's recommended overall rates of return for MAWC for the period ending December 31, 2000, based on the above-referenced range for return on equity, were as follows:

| <u>Return on Equity</u> | <u>8.50%</u> | <u>9.00%</u> | <u>9.50%</u> |
|-------------------------|--------------|--------------|--------------|
| Common Stock Equity     | 3.38%        | 3.58%        | 3.78%        |
| Preferred Stock         | .00%         | .00%         | .00%         |
| <u>Long-term Debt</u>   | <u>4.74%</u> | <u>4.74%</u> | <u>4.74%</u> |
| Overall Rate of Return  | 8.13%        | 8.33%        | 8.52%        |

True-Up Direct Testimony of  
Roberta A. McKiddy

1 Q. Does this conclude your prepared true-up direct testimony?

2 A. Yes, it does.

**TONI M. CHARLTON**  
**NOTARY PUBLIC STATE OF MISSOURI**  
**COUNTY OF COLE**  
**My Commission Expires December 28, 2004**

**Capital Structure as of June 30, 2001  
for The Empire District Electric Company**

| Capital Component           | Amount<br>in Dollars | Percentage<br>of Capital |
|-----------------------------|----------------------|--------------------------|
| Common Stock Equity         | \$231,960,394        | 37.76%                   |
| Preferred Stock             | 48,442,500           | 7.88%                    |
| Long-Term Debt              | 334,006,533          | 54.36%                   |
| Short-Term Debt             | 0                    | 0.00%                    |
| <b>Total Capitalization</b> | <b>\$614,409,427</b> | <b>100.00%</b>           |

**Financial Ratio Benchmarks  
Total Debt / Total Capital - Including Preferred Stock**

Standard & Poor's Corporation's  
Utility Rating Service as of July 7, 2000  
Electric Utility Companies  
(Median)

| AA  | A   | BBB |
|-----|-----|-----|
| 41% | 45% | 50% |

Note: See Schedule 11-1 for the amount of Long-Term Debt at June 30, 2001;  
Short-term debt, net of construction work in progress (CWIP), is negative and, therefore, is  
assumed to be zero (12-month average short-term debt of \$48,166,667 less 12-month average  
Missouri Allocation of CWIP of \$92,472,478).

Source: The Empire District Electric Company's updated response to Staff's Data Information Request No. 3802.



**Embedded Cost of Long-Term Debt as of June 30, 2001  
for The Empire District Electric Company**

|   | (1)                             | (2)  | (3)   |
|---|---------------------------------|--|---|
| Long-Term Debt  | Interest<br>Rate                | Principal<br>Amount<br>Outstanding<br>(06/30/01) | Annualized<br>Cost to<br>Company<br>( 1 * 2 ) |
| First Mortgage Bonds:                                   |                                 |  |   |
| 9 3/4% Series, due 2020                                 | 9.750%                          | \$2,250,000                                      | \$219,375                                     |
| 7 1/2% Series, due 2002                                 | 7.500%                          | 37,500,000                                       | 2,812,500                                     |
| 6 1/2% Series, due 2010                                 | 6.500%                          | 50,000,000                                       | 3,250,000                                     |
| 8 1/8% Series, due 2009                                 | 8.125%                          | 20,000,000                                       | 1,625,000                                     |
| 7% Series, due 2023                                     | 7.000%                          | 45,000,000                                       | 3,150,000                                     |
| 7 1/4% Series, due 2028                                 | 7.250%                          | 13,212,000                                       | 957,870                                       |
| 5.3% Series, due 2013                                   | 5.300%                          | 8,000,000  | 424,000                                       |
| 5.2% Series, due 2013                                   | 5.200%                          | 5,200,000  | 270,400                                       |
| 7.6% Series, due 2005                                   | 7.600%                          | 10,000,000                                       | 760,000                                       |
| 7.2% Series, due 2016                                   | 7.200%                          | 25,000,000                                       | 1,800,000                                     |
| 7 3/4% Series, due 2019                                 | 7.750%                          | 30,000,000                                       | 2,325,000                                     |
| 7.7% Series, due 2004                                   | 7.700%                          | 100,000,000                                      | 7,700,000                                     |
| Less: Unamortized Premium & Debt Discount               |                                 | (596,435)  |   |
| Less: Unamortized Debt Issuance Expense                 |                                 | (3,558,612)                                      |   |
| Less: Unamortized Losses on Reacquired Debt             |                                 | (8,000,420)                                      |   |
| Add: Annual Amortized Debt Discount Expense             |                                 |  | 0   |
| Add: Annual Amortized Debt Issuance Expense             |                                 |  | 420,517                                       |
| Add: Annual Amortized Losses on Reacquired Debt Expense |                                 |  | 563,276                                       |
| Total   |                                 | \$334,006,533                                    | \$26,277,938                                  |
|   |                                 |  | \$26,277,938                                  |
|   | Embedded Cost of Long-Term Debt | =  | \$334,006,533                                 |
|   |                                 | =  | 7.87%   |

Notes:

**Annual Amortized Debt Issuance Expense  
as of June 30, 2001 for The Empire District Electric Company**

|                                  |            | (1)        | (2)                        | (3)                     |
|----------------------------------|------------|------------|----------------------------|-------------------------|
|                                  |            | Number of  | Unamortized Losses         | Annualized              |
|                                  | Maturity   | Months to  | on Reacquired Debt         | Debt Issuance           |
|                                  | Date       | Maturity   | and Unamortized            | Expense (1)             |
| Long-Term Debt                   |            | (06/30/01) | Debt Issuance              | Expense (1)             |
|                                  |            |            | Expense                    | (06/30/01)              |
|                                  |            |            | (06/30/01)                 |                         |
| <b>First Mortgage Bonds:</b>     |            |            |                            |                         |
| 9 3/4% Series, due 2020          | (12/01/20) | 236.5      | \$24,745                   | \$1,256                 |
| 7 1/2% Series, due 2002          | (07/01/02) | 12.2       | 49,047                     | 48,243                  |
| 6 1/2% Series, due 2010          | (04/01/10) | 106.6      | 404,325                    | 45,529                  |
| 8 1/8% Series, due 2009          | (11/01/09) | 101.5      | 138,244                    | 16,339                  |
| 7% Series, due 2023              | (10/01/23) | 270.9      | 466,378                    | 20,657                  |
| 7 1/4% Series, due 2028          | (06/01/28) | 327.8      | 605,259                    | 22,159                  |
| 5.3% Series, due 2013            | (11/01/13) | 150.2      | 298,340                    | 23,830                  |
| 5.2% Series, due 2013            | (11/01/13) | 150.2      | 233,338                    | 18,638                  |
| 7.6% Series, due 2005            | (04/01/05) | 45.7       | 78,277                     | 20,554                  |
| 7.2% Series, due 2016            | (12/01/16) | 187.8      | 366,028                    | 23,393                  |
| 7 3/4% Series, due 2019          | (06/01/19) | 218.2      | 350,179                    | 19,261                  |
| 7.7% Series, due 2004            | (11/01/04) | 40.7       | 544,452                    | 160,658                 |
| Subtotal                         |            |            | <u>\$3,558,612</u>         | <u>420,517</u>          |
| <b>Losses on Reacquired Debt</b> |            |            |                            |                         |
| 7 1/2% Series, due 2002          | (07/01/02) | 12.2       | 179,511                    | 176,568                 |
| 7% Series, due 2023              | (10/01/23) | 270.9      | 4,708,118                  | 208,529                 |
| 5.3% Series, due 2013            | (11/01/13) | 150.2      | 175,812                    | 14,043                  |
| 5.2% Series, due 2013            | (11/01/13) | 150.2      | 104,184                    | 8,322                   |
| 7 3/4% Series, due 2019          | (06/01/19) | 218.2      | 2,832,795                  | 155,815                 |
| Subtotal                         |            |            | <u>8,000,420</u>           | <u>563,276</u>          |
| <b>Total</b>                     |            |            | <u><b>\$11,559,032</b></u> | <u><b>\$983,793</b></u> |

**Notes:**

(1) Column 3 = [ ( Column 2 / Column 1 ) \* 12 ].

Source: The Empire District Electric Company's updated response to Staff's Data Information Request No. 3802

**Embedded Cost of Preferred Stock as of June 30, 2001  
for The Empire District Electric Company**

|  | (1)              | (2)   | (3)   |
|--|------------------|---|---|
| Preferred Stock  | Dividend<br>Rate | Principal<br>Amount<br>Outstanding<br>(6/30/01) | Annualized<br>Cost to<br>Company<br>( 1 * 2 ) |
| Subject to Mandatory Redemption:<br>Stated Value of \$25 Per Share   |                  |   |   |
| Preferred Securities of a Subsidiary Trust<br>Holding Solely Junior Subordinated Debentures<br>of Empire, due 2031 | 8.500%           | \$50,000,000                                    | \$4,250,000                                   |
| Less: Net Unamortized Issuance   |                  | (1,557,500) (1)                                 |   |
| Add: Annual Amortization of Issuance Expense   |                  |   | 52,500 (2)                                    |
| Total  |                  | <u>\$48,442,500</u>                             | <u>\$4,302,500</u>                            |
|  |                  |   | \$4,302,500                                   |
|  |                  | Embedded Cost of Preferred Stock =              | <u>\$48,442,500</u>                           |
|  |                  |   | = <b>8.88%</b>                                |

Notes:

(1) Net Unamortized Issuance is equal to Total Issuance Cost less 4 months of Amortized Issuance Expense

(2) Annual Amortization of Issuance Expense is equal to Total Issuance Expense divided by Number of Years to Maturity

Source: The Empire District Electric Company's response to Staff's Data Request No. 3811.

## Weighted Cost of Capital as of June 30, 2001 for The Empire District Electric Company

| Capital Component   | Percentage<br>of Capital | Embedded<br>Cost | Weighted Cost of Capital Using<br>Common Equity Return of: |              |              |
|---------------------|--------------------------|------------------|--|--------------|--------------|
|                     |                          |                  | 8.50%  | 9.00%        | 9.50%        |
| Common Stock Equity | 37.76%                   | ----             | 3.21%  | 3.40%        | 3.59%        |
| Preferred Stock     | 7.88%                    | 8.88%            | 0.70%  | 0.70%        | 0.70%        |
| Long-Term Debt      | 54.36%                   | 7.87%            | 4.28%  | 4.28%        | 4.28%        |
| Short-Term Debt     | 0.00%                    | ----             | 0.00%  | 0.00%        | 0.00%        |
| Total               | <u>100.00%</u>           |                  | <u>8.19%</u>   | <u>8.38%</u> | <u>8.57%</u> |

**Notes:**

See Schedule 10 for the Capital Structure Ratios.

See Schedule 11-1 for the Embedded Cost of Long-Term Debt.