APPENDIX B

In-Service Test Criteria

Coal Plant In-Service Test Criteria

1. Unit must demonstrate that it can operate at its design minimum load or above.

$$\frac{\text{Hours at or above design minimum load}}{\text{400 hours}} \;▒\; 0.80$$

2. Unit must be able to operate at or above its design capacity factor for a reasonable period of time. If the design capacity factor is not specified it will be assumed to be 0.60 unless the utility can offer evidence justifying a lower value.

$$\text{Design capacity factor} \;▒\; \frac{\text{energy generated for a continuous period of 168 hours}}{\text{Design full load x 168 hours}}$$

3. Unit must operate at an average capacity equal to 98% of its design maximum continuous rating for four (4) hours.

4. Unit must be operated so as to show a clear and obvious trend toward the predominate use of coal as its primary fuel. Test period will be thirty (30) days. The following items will be used as an indication of the trend for coal operation:

   a) Boiler control tuning completed such that the unit can operate safely with all control systems in auto.

   b) Ash build up in the furnace and backpass areas shall be monitored and be within expected levels.

   c) All boiler/turbine interlocks shall be proven to work as designed.

   d) Sootblowing timing and sequences shall be set properly to clean the tube areas.

e) All critical alarms brought into the control room shall be operational and functioning properly.

f) At the end of the test period, oil burn levels, if applicable, will be at or near design levels while burning coal.

g) Oil ignitors are functioning in accordance with specifications.

5. Unit must have successfully completed all major equipment startup test procedures.

6. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the newest unit is declared fully operational and used for service.

7. Sufficient transmission facilities shall exist for Empire's share of the total plant design net electrical capacity from the generating station into the Empire service territory at the time the newest unit is declared fully operational and used for service.

8. Equipment installed to comply with emission requirements shall be operational and demonstrate the ability to remove 93% or more of the NOX, SO_2, particulate, and mercury emissions they were installed to remove over a continuous four (4) hour period while operating at or above 95% of its design load. This equipment shall also be required to demonstrate that it is able to remove 88% or more of these same emissions it was installed to remove over a continuous 120 hour period while operating at or above 80% of its design load.

Combustion Turbine Unit (Over 95 MW) In-Service Test Criteria

1. All major construction is completed.

2. All pre-operational tests have been successfully completed.

3. Unit successfully meets all contract operational guarantees.

4. Unit will successfully demonstrate the ability to initiate the proper start sequence resulting in the unit operating from zero (0) rpm (or turning gear) to full load when prompted at a location (or locations) from which it will be normally operated.

5. If unit has fast start capability, unit will demonstrate the ability to meet fast start capability.

6. Unit will successfully demonstrate the ability to initiate the proper shutdown sequence from full load resulting in zero (0) rpm (or turning gear) when prompted at a location (or locations) from which it will be normally operated.

7. Unit will successfully demonstrate the ability to operate at minimum load for one (1) hour.

8. Unit will successfully demonstrate the ability to operate at or above 95% of nominal capacity for four (4) continuous hours.

9. Unit will successfully demonstrate the ability to produce an amount of energy (MWh) within a 72 hour period that results in a capacity factor of at least 50% during the period when calculated by the formula:

$$\text{capacity factor} = \frac{\text{MWh generated in 72 hours}}{(\text{nominal capacity x 72 hours})}$$

10. Transmission and distribution facilities will demonstrate their capability to export the entire plant net capacity.

11. If unit has dual fuel capability, the unit will successfully demonstrate the ability to start on the back up/secondary fuel as described in item 4.

12. If unit has dual fuel capability, the unit will successfully demonstrate the ability to transfer between the two fuels while on line.

Appendix C

Financial Ratios

Credit Ratio Ranges & Definitions – Standard & Poor's – Business Risk Level 6

	BBB		
	Min	Middle 1/3	Max
Adjusted Total Debt to Total Capitalization (1)	48%	51% - 55%	58%
Adjusted Funds From Operations Interest Coverage (2)	3.0x	3.4x - 3.8x	4.2x
Adjusted Funds From Operations as % of Average Total Debt (3)	18%	21% - 25%	28%

Ratio Definitions * :

(1) "Adjusted Total Debt to Total Capitalization" is calculated as Adjusted Total Debt ÷ Total Capitalization where Adjusted Total Debt and Total Capitalization are defined as below:

- Adjusted Total Debt is calculated as:
    - Notes Payable + Current Maturities of Long-Term Debt + Current Capitalized Lease Obligations + Long-Term Debt + Capitalized Lease Obligations + Total Off-Balance Sheet Debt
        - Total Off Balance Sheet Debt includes off-balance sheet financings such as:
            - Operating leases and purchase power debt-equivalent

- Total Capitalization is equal to:
    - Total Debt + Common Stock Equity

(2) "Adjusted Funds From Operations Interest Coverage" is calculated as (Funds From Operations + Cash Interest Paid + AFUDC Debt + Interest on OBS Debt) ÷ Interest Expense where Funds From Operations and Interest Expense are defined as below:

- Funds From Operations is calculated as:
    - Net Income + Depreciation and Amortization + Pension Expense – AFUDC + Deferred taxes

- Interest Expense is calculated as:
    - Interest Expense (net) + Allowance for Funds Used During Construction (debt) + Interest on OBS debt

(3) "Adjusted Funds From Operations as a % of Average Total Debt" is calculated as (Funds From Operations + Depreciation Adjustment for Operating Leases) ÷ Adjusted Average Total Debt where Funds From Operations and Adjusted Total Debt are defined as above.

- Adjusted Total debt is the average of two years

* Information based upon Standard & Poor's Ratings Services Utility Financial Ratio Definitions updated January 13, 2005.

APPENDIX D

PROCESS ILLUSTRATION

Adjustment of Amortization Amounts

Explanation of the Method Used to Determine the Adjustment to Amortization Amounts Required for Empire to Meet the Financial Ratio Targets.

Method:

For this illustration, the adjusted rate base as used in ER-2004-0570 provides the base financial information used in these calculations. Empire made adjustments to this base financial information to include certain off balance sheet items. These adjustments were to conform with rating agency methods for balance sheet re-statement. Empire identified these accounting adjustments, such as the equivalent debt treatment of operating leases and capacity contracts. The equivalent debt treatment of these off balance sheet items was determined by calculating the net present value of the future stream of lease or contract payments, discounted at 10%,. The base financial information was then adjusted by the equivalent debt balances and the interest expense associated with the equivalent debt balances. From this adjusted information, Empire then calculated the three guideline ratios defined in Appendix C for total regulated company and as allocated to the Missouri jurisdiction. If either of the two financial ratios failed to meet the required criteria below, then Empire determined the amount of additional funds from operations that would be required for Empire to meet the financial metric target.

Financial Ratio Targets for Additional Amortization Calculation:
a. 3.2x Adjusted Funds from operations interest coverage (an operational guideline)
b. 19.5% Adjusted Funds from operations as a percentage of average total debt (an operational guideline)

The Signatory Parties acknowledge a 56.5% Adjusted Total Debt to Total Capital objective. This objective will not be addressed through this amortization but will be satisfied through future Empire financing requests before the Commission during the term of this Agreement.

Explanation of Attachment to Appendix D:

This illustration is based on EDE financial information consisting of information filed in case ER-2004-0570 and other EDE financial documents. This illustration assumes that the Commission has found all expenditures to be prudent and reasonable and has accepted the jurisdictional allocation factor. For this illustration, EDE statements were placed on a jurisdictional basis by applying an allocation factor to the EDE balances. The base jurisdictional information was used to calculate the three (3) financial ratios. In this illustration, the Missouri electric jurisdictional adjusted funds from operations (FFO) as a percent of average debt was found to be 17.59%, which is below the financial ratio target of 19.5%. In order for the target to be achieved, $6,399,213 of additional FFO would be needed from Missouri. The additional FFO was then studied to determine if there would be any additional tax impacts on cash flow resulting from the additional FFO. This illustration assumes that the entire additional FFO would have negative tax cash flow impacts, thereby resulting in an additional amortization of $3,987,265 needed in order to meet the target. The Signatory Parties have not agreed to a methodology to determine the tax impacts related to additional FFO. In this illustration, the revenue requirement amount equals the amortization amount. The overall impact on Missouri customers would be a 2.58% increase in revenue requirement. This example is an illustration only. The actual amount of amortization needed will be determined in Empire's next rate case.

Explanation of Adjustments to balance sheet for rating agency methodology:

- Operating Lease Debt Equivalent - Present value of future lease payments for the operating lease for the aluminum railcars using a 10% discount rate.
- Purchase Power Debt Equivalent - Present value of future capacity payments of purchased power capacity obligation using a 10% discount rate. A portion of this amount is then treated as debt-equivalent, based on the risk factor (10-20%, 30%, or 50%) assigned to each contract.

Transactions included in the amounts above are subject to review by the Commission for prudence. Amounts determined to be not prudent will not be included in the calculation of the financial ratios for purposes of adjusting the amortization amount. The prudence and reasonableness of these transactions will be determined in Empire's next general rate case.

The illustration does not include the effect of SO_2 sales on cash flow because currently these sales have not occurred. To the extent actual SO_2 sales occur, these sales will be included as cash flow for purposes of Appendix D and whether the resulting projected cash flow meets the targets.

Calculation of amortization to meet Financial Ratio Targets:

Attachment to Appendix D

Line			Total Company	Jurisdictional Allocation	Jurisdictional Adjustments	Jurisdictional Proforma
		Information from the Company's 2004 Rate Case Filing				
6	Rate Base	Schedule C-1, line 4		611,396,947		
7	Jurisdictional Allocation for Capital			82%		
8						
9	Total Capital	Schedule H-1, line 5 (adjusted capital)	766,724,718	628,714,269	-	628,714,269
10	Equity	Schedule H-1, line 3 (adjusted capital)	381,935,258	313,186,912	-	313,186,912
11	Trust Preferred	Schedule H-1, line 2 (adjusted capital)	48,292,848	39,600,135	-	39,600,135
12	Long-term Debt	Schedule H-1, line 1 (adjusted capital)	336,496,612	275,927,222	-	275,927,222
13	Cost of Debt	Schedule H-1, line 1 (adjusted capital)	7.25%	7.25%		7.25%
14	Interest Expense	Line 12 * Line 13	24,396,004	20,004,724	-	20,004,724
15						
16	Electric Sales Revenue	Schedule J-1, Page 1, Total Sales of Electricity	301,138,766	255,195,952	10,386,479	265,582,431
17	Other Electric Operating Revenue	Schedule J-1, Page 1, Other Electric Revenues	3,489,706	3,121,865	-	3,121,865
18	Water Revenue	Schedule J-1, Page 2, Water Utility Operating Revenues	-	-	-	-
19	Operating Revenue	Line 16 + Line 17 + Line 18	304,628,472	258,317,817	10,386,479	268,704,296
20						
21	Operating & Maintenance Expense	Schedule J-1, Page 1, total of Numbers 401-2	202,830,064	168,416,983	-	168,416,983
22	Depreciation	Schedule J-1, Page 1, Number 403	55,162,520	47,177,168	-	47,177,168
23	Amortization		-	-	6,399,213	6,399,213
24	Interest on Customer Deposits	Schedule J-1, Page 1, Number 431.1	-	233,718	-	233,718
25	Taxes other than income taxes	Schedule J-1, Page 1, Number 408.1	17,789,561	15,363,629	-	15,363,629
26	Federal and State income taxes	Schedule J-1, Page 1, Numbers 409.1, 410.1, 411.1, 411.4	96,208	1,074,717	3,987,265	5,061,982
27	Gains on disposition of plant		-	-	-	-
28	Total Water Operating Expenses	Schedule J-1, Page 2, Total Water Operating Expense	-	-	-	-
29	Total Electric and Water Operating Expenses	Sum of lines 21 through 28	275,878,353	232,266,215	10,386,479	242,652,694
30						
31	Operating Income--Electric	Schedule J-1, Page 1, Net Electric Utility Operating Income	28,750,120	26,051,602	-	26,051,602
32	Operating Income--Water	Schedule J-1, Page 2, Net Water Utility Operating Income	-	-	-	-
33	less Interest Expense	- Line 14	(24,396,004)	(20,004,724)	-	(20,004,724)
34	Depreciation	Line 22	55,162,520	47,177,168	-	47,177,168
35	Amortization	Line 23	-	-	6,399,213	6,399,213
36	Deferred Taxes	Schedule J-1, Page 1, 410.1,411.1; Page 2, 410.1	6,368,927	5,379,691	-	5,379,691
37	Funds from Operations (FFO)	Sum of lines 31 through 36	65,885,563	58,603,737	6,399,213	65,002,951
38						
39	Net Income	Schedule L-2, Page 1, Line 3	28,750,120	26,051,602	-	26,051,602
40	Return on Equity	Schedule C-1, Line 9	11.65%			
41	Unadjusted Equity Ratio	Schedule C-1, Line 8	1.19%			
		Additional financial information needed for the calculation of ratios				
44	Capitalized Lease Obligations	EDE General Ledger Accounts 227000 and 243000	503,211	412,633	-	412,633
45	Short-term Debt Balance	Schedule H-1, Line 4 (top of page)	13,000,000	10,660,000	-	10,660,000
46	Short-term Debt Interest	EDE General Ledger Accounts 417891, 417893, 431400	631,711	518,003	-	518,003
47	Cash Interest Paid	EDE 2003 10K, Page 42, bottom paragraph--first sentence	30,935,000	25,366,700	-	25,366,700
48	AFUDC debt (capitalized interest)	EDE 2003 10K, Page 38, Allowance for borrowed funds...	282,268	231,460	-	231,460
		Adjustments made by Rating Agencies for Off-Balance sheet Obligations				
51	Debt Adjustments for Off-Balance Sheet Obligations					
52	Operating Lease Debt Equivalent	Present Value of Operating Lease Obligations discounted @ 10%	1,800,000	1,476,000	-	1,476,000
53	Purchase Power Debt Equivalent	Present Value of Purchase Power Obligations discounted @ 10%	45,091,476	36,975,010	-	36,975,010
54	Total OBS Debt Adjustment	Line 52 + Line 53	46,891,476	38,451,010	-	38,451,010
55						
56	Operating Lease Depreciation Adjustment	Year 1 Operating lease commitment less imputed operating lease interest expen:	418,125	342,863	-	342,863
57						
58	Interest Adjustments for Off-Balance Sheet Obligations					
59	Present Value of Operating Leasess	Line 52 * 10%	180,000	147,600	-	147,600
60	Purchase Power Debt Equivalent	Line 53 * 10%	4,509,148	3,697,501	-	3,697,501
61	Total OBS Interest Adjustment	Line 59 + Line 60	4,689,148	3,845,101	-	3,845,101
		Ratio Calculations				
64	Adjusted Interest Expense	Line 14 + Line 46 + Line 61	29,716,863	24,367,828	-	24,367,828
65	Adjusted Total Debt--2003	Line 12 + Line 44 + Line 45 + Line 54	396,891,299	325,450,865	-	325,450,865
66	Adjusted Total Debt--2002	Same methodology as 2003 Adjusted Total Debt	420,442,200	344,762,604	-	344,762,604
67	Adjusted Total Capital	Line 9 + Line 44 + Line 45 + Line 54	827,119,405	678,237,912	-	678,237,912
68						
69	Adj. FFO Interest Coverage	(Line 37 + Line 47 + Line 48 + Line 61) / (Line 14 + Line 48 + Line 61)	3.47	3.66	0.27	3.92
70	Adj. FFO as a % of Average Total Debt	(Line 37 + Line 56) /(average of Line 65 and Line 66)	16.22%	17.59%	1.91%	19.50%
71	Adj. Total Debt to Total Capital	Line 65 / Line 67	47.98%	47.98%	0.00%	47.98%
		Changes required to meet ratio targets				
74	Adj. FFO Interest Coverage Target		3.2	3.2	0.0	3.2
75	FFO adjustment to meet target	(Line 74 - Line 69) * Line 64	(7,909,240)	(11,117,621)	(6,399,213)	(17,516,835)
76	Interest adjustment to meet target	Line 37 * (1 / (Line 74 - 1) - 1 / (Line 69 - 1))	3,232,059	4,575,411	499,610	5,075,021
77						
78	Adj. FFO as a % of Average Total debt Target		19.5%	19.5%	0%	19.5%
79	FFO adjustment to meet target	(Line 78 - Line 70) * (Average(Line 65:Line 66))	13,386,329	6,399,213	(6,399,213)	-
80	Debt adjustment to meet target	Line 37 * (1 / Line 78 - 1 / Line 70)	(68,214,931)	(32,625,602)	32,625,602	-
81						
82	Adj. Total Debt to Total Capital Target		56.5%	56.5%	0%	56.5%
83	Debt adjustment to meet target	(Line 82 - Line 71) * Line 67	70,431,165	57,753,555	-	57,753,555
84	Total Capital adjustment to meet target	Line 65 / Line 82 - Line 67	(124,656,929)	(102,218,682)	-	(102,218,682)
		Amortization and Revenue needed to meet targeted ratios				
87	FFO adjustment needed to meet target ratios	Maximum of Line 75, Line 79, or zero	13,386,329	6,399,213	(6,399,213)	-
88	Effective income tax rate	Schedule G-3, Page 1, Effective Income Tax	38.39%	38.39%	38.39%	38.39%
89	Income tax effect *	- Line 87 * Line 88 / (1 - Line 88)	(8,340,844)	(3,987,265)	3,987,265	-
90	Total amortization required for the FFO adjustment	Line 87 - Line 89	21,727,173	10,386,479	(10,386,479)	-
91						
92	Retail Sales Revenue Adjustment	Adjustment =Sum(Line 21:Line 25)+Line 27-Line 17-Line 33+(Line 10*Line40)/(1-Line 88)		248,074,357	6,399,213	254,473,570
93	Percent increase in retail sales revenue	Line 92 Jurisdictional Adjustments / Line 92 Jurisdictional			2.58%	

* Adjusted for known and measurable changes including changes related to new plant-in-service

Appendix E

Class Cost of Service Data Requirements

The Empire District Electric Company shall provide the data listed below for a 12-month historical time period defined as the Study Period for the Class Cost of Service Study (study period). The study period may differ from the 12-month historical time period (test year) used in the Rate Case to allow for data collection and processing time. The study period may be up to twelve months prior to the test year. Budgeted data will not be acceptable for the purposes of satisfying the data requirements outlined in this document.

1. Annual costs and revenues by FERC account (including all plant accounts, depreciation expense, depreciation reserve, and all expenses)

2. Hourly load data by rate class

3. Hourly system load data

4. Monthly load characteristics (by rate class and by voltage category)
   Data to be provided in three versions:
   a. monthly actuals
   b. monthly weather-normalized
   c. monthly weather-normalized with losses
      The information to be provided for each version includes:
      (i) coincident peak demands
      (ii) class peak (non-coincident) demands
      (iii) customer maximum (customer non-coincident) demands

5. Monthly kWh sales, rate revenues and billing units (by rate schedule, by voltage category, and by billing month)
   Data to be provided in two versions:
   a. monthly actuals
   b. monthly weather-normalized

6. Special cost studies to be provided:
   a. Primary/secondary split of distribution investment in FERC Accounts 364-367
   b. Customer/demand split of distribution investment in FERC Accounts 364-368
   c. Meter cost study
   d. Service drop cost study
   e. Meter reading cost study
   f. Loss study plus the loss factors to apply to adjust demand and energy units from one voltage level to another
   g. Excess facilities by customer and by FERC Account

7. Monthly billing data for each Large Power and Special Contract account will be provided.

8. Work papers showing input data and computations will be made available to all parties to this agreement for the above items. These work papers should be available in electronic format, with all formulas intact, to the extent possible.

Appendix G

Missouri Department of Natural Resources' Proposed Targets for Energy Efficiency Programs

In order to achieve energy efficiency that will reduce supply-side costs and provide a hedge against volatile natural gas prices and uncertain future emission regulation, the Missouri Department of Natural Resources (MDNR) proposes that The Empire District Electric Company (EDE) and the Customer Programs Collaborative (CPC) use their best efforts to achieve the following targets from the implementation of cost effective energy efficiency programs.

These targets are for energy efficiency programs and do not include demand response programs (such as curtailment and peak shaving) and energy affordability programs.

I. Annual investments in energy efficiency programs of one percent of Empire's 2003 Missouri jurisdictional revenues = $2,400,000 each year

II. EDE expects growth in consumption of 445,737 MWh from 2005-2009.
Target: Savings by 2009 of 45,825 MWh, representing approximately 10% of growth in consumption over this period

III. Similarly, EDE expects net peak demand to grow by 100 MW from 2005-2009.
Target: Avoided capacity of 10 MW during this period (2.5 MW per year)

The appropriate mix of energy efficiency programs across market sectors and geography, as well as appropriate program design, will reveal itself during the program planning process and during program implementation as the CPC focuses on pursuing the most cost-effective mix of energy efficiency programs.

	Projected Annual Net Peaks MW *	
2005	1,070	
2006	1,094	2.24%
2007	1,119	2.29%
2008	1,144	2.23%
2009	1,170	2.27%

	Projected Annual NSI Energy MWh *	
2005	5,166,647	
2006	5,275,265	2.10%
2007	5,385,738	2.09%
2008	5,498,104	2.09%
2009	5,612,384	2.08%

* Source: The Empire District Electric Company projections as of July, 2005