

CALCULATION OF POST-GAS ACQUISITION A&G ALLOCATION FACTORS

- 1) Empire Allocation Factors June 2006, per Massachusetts Formula
(per 8/9/06 e-mail from Kelly Walters, Empire)

Electric/Water	89.10%
Gas	9.37%
Non-Regulated	1.53%

- 2) Eliminate Non-Regulated Operations from Allocation Factors

Electric/Water/Gas Total	98.47%
Electric/Water (89.1/98.47)	90.48%
Gas (9.37/98.47)	9.52%

- 3) Break Out Water Allocation from Electric Allocation*

Electric Revenues	\$375,019,825	99.57%
Water Revenues	\$1,616,594	.43%
Electric Plant	\$1,274,613,917	99.22%
Water Plant	\$9,988,725	.78%
Average Electric Percentage		99.395%

90.48%
X .99395

Total Company Electric Allocation (post-gas acquisition.) **89.93%**

* Electric and water revenues and plant totals taken from 8/9/06 e-mail from Kelly Walters

A&G Expense Allocator

Total Company Electric Allocator	89.93%
Mo. Electric Only A&G Allocator	X <u>.8289</u>
Missouri Juris A&G Expense Allocator	74.54%

General Plant Allocator

Total Company Electric Allocator	89.93%
Mo. Electric Only Genl. Plant Allocator	X <u>.8526</u>
Missouri Juris Genl. Plan Allocator	76.67%

General Plant Depreciation Reserve Allocator

Total Company Electric Allocator	89.93%
Mo. Electric Only Genl. Plant Depr. Res. Allocator	X <u>.8537</u>
Missouri Juris Genl. Plant Depr. Res. Allocator	76.77%

**STAFF ALTERNATIVE REVENUE REQUIREMENT CALCULATION
IEC CONTINUATION SCENARIO
DIFFERENCES FROM FILED TRUE-UP ACCOUNTING SCHEDULES**

Accounting Schedule 10, Adjustments to Income Statement

REVENUES

Accounting Schedules Adjustment S-1.3: "Eliminate test year Interim Energy Charge Revenues" **(\$6,305,092)**

Alternative Revenue Requirement Calculation: Substitute New Adjustment S-1.3: "To adjust test year revenues to reflect Staff's annualization of the IEC rate implemented on 3/27/05"

+\$2,504,558

EXPENSES

Accounting Schedules Adjustment S-7.3: "To adjust test year variable production fuel cost to reflect Staff's annualized level"

+\$797,442

Adjustment S-28.2: "To adjust test year variable production fuel cost to reflect Staff's annualized level"

+\$1,903,425

Adjustment S-36.2: "To adjust test year expense to reflect Staff's annualization of purchased power for energy charges (variable production)"

+\$4,459,465

Alternative Revenue Requirement Calculation: New adjustment S-7.3: Substitute for three adjustments listed above "To adjust test year fuel and purchased power expense to reflect levels included in rates in Empire's last rate case"

(\$19,821,311)

Adjustments S-28.2 and S-36.2 taken to zero.

1	Calculation of Amortization to meet Financial Ratio Targets			9/27/2006
2	IEC Termination Scenario			
3			Total	Juris
4			Company	Alloc
5	Additional Net Balance Sheet Investment			61,935,326
6	Rate Base	Staff Acct. Schedule 2 *		619,012,465
7	Jurisdictional Allocation for Capital			0.82
8				
9	Total Capital	L5+L6		680,947,791
10	Equity	Murray True-up Workpapers	0.5080	345,921,478
11	Trust Preferred	Murray True-up Workpapers	0.0539	36,703,086
12	Long-term Debt	Murray True-up Workpapers	0.4381	298,323,227
13	Cost of Debt	Murray True-up Workpapers		7.03%
14	Interest Expense	L12 * L13 (+\$4,250,000 (TOPRs))		25,222,123
15				
16	Electric Sales Revenue	Staff Acct. Schedule 9, L.1-3, + Rate Increase		315,233,481
17	Other Electric Operating Revenue	Staff Acct. Schedule 9, L.4-6		4,518,143
18	Water Revenue			
19	Operating Revenue	L16 + L17		319,751,624
20				
21	Operating and Maintenance Expense	Staff Acct. Schedule 9, L.95 (less cust. deposits)		205,737,911
22	Depreciation	Staff Acct. Schedule 9, L.96 + L100		32,584,603
23	Amortization			
24	Interest on Customer Deposits	Staff Acct. Schedule 10, Adj. S-70.3		542,569
25	Taxes Other than Income Taxes	Staff Acct. Schedule 9, L.101		11,240,091
26	Federal and State Income Taxes	Staff Acct. Schedule 9, L.112 (plus rate incr. impact)		17,587,502
27	Gains on Disposition of Plant			
28	Total Water Operating Expenses			
29	Total Electric/Water Operating Exp	Sum of L. 21-28		267,692,676
30				
31	Operating Income - Electric	L19 - L29		52,058,948
32	Operating Income - Water			
33	less: Interest Expense	L14		-25,222,123
34	Depreciation	L22		32,584,603
35	Amortization			
36	Deferred Taxes	Staff Acct. Schedule 9, L111		2,305,505
37	Funds from Operations (FFO)	Sum of L31-36		61,726,933
38				
39				
40				
41				
42				
43	Additional Financial Information Needed for Calculation of Ratios			
44	Capitalized Lease Obligations	EDE Accounts 227 + 243	692,938	568,209
45	Short-term Debt Balance	EDE Form 10-Q, p. 8	35,000,000	28,700,000
46	Short-term Debt Interest	EDE Accounts 417.891 + 431.400	1,418,588	1,163,242
47	Cash Interest Paid	Information Supplied by EDE	27,701,256	22,715,030
48	AFUDC Debt (capitalized interest)	EDE Form 10-Q, p. 4	86,841	71,210
49				
50	Adjustments Made by Rating Agencies for Off-Balance Sheet Obligations			
51	Debt Adj for Off-Balance Sheet Obligs			
52	Operating Lease Debt Equivalent	Information Supplied by EDE/S&P	48,323,160	39,624,991
53	Purchase Power Debt Equivalent	Information Supplied by EDE	23,676,840	19,415,009
54	Total OSB Debt Adjustment	L52 + L53	72,000,000	59,040,000
55				
56	Operating Lease Deprec Adjustment	Information Supplied by EDE/S&P	1,517,000	1,243,940
57				
58	Interest Adjustments for Off-Balance Sheet Obligations			
59	Present Value of Operating Leases	L52 * 10%	4,832,316	3,962,499
60	Purchase Power Debt Equivalent	L53 * 10%	2,367,684	1,941,501
61	Total OSB Interest Adjustment	L59 + L60	7,200,000	5,904,000

62				
63		Ratio Calculations		
64	Adjusted Interest Expense	$L14 + L46 + L61$		32,289,365
65	Adjusted Total Debt 6/30/06	$L11 + L12 + L44 + L45 + L54$		423,334,522
66	Adjusted Total Debt 6/30/05	Same as L65, but for prior year	431,231,000	353,609,420
67	Adjusted Total Capital	$L9 + L44 + L45 + L54$		769,256,000
68				
69	Adj. FFO Interest Coverage	$(L37 + L47 + L48 + L61)/(L14 + L48 + L61)$		2.90
70	Adj. FFO as a % of Average Total Debt	$(L37 + L56)/(\text{avg. of } L65 + L66)$		0.1621
71	Adj. Total Debt to Total Capital	$L65/L67$		0.5503
72				
73		Changes Required to Meet Ratio Targets		
74	Adj. FFO Interest Coverage Target			3.20
75	FFO Adjustment to Meet Target	$(L74 - L69) * L64$		9,743,830
76	Interest Adjustment to Meet Target	$L37 * (1/L74 - 1) - 1/L69 - 1)$		-4,460,386
77				
78	Adj. FFO as a % of Average Total Debt			0.195
79	FFO Adjustment to Meet Target	$(L78 - L70) * (\text{Avg of } L65 + L66)$		12,781,161
80	Debt Adjustment to Meet Target	$L37 * (1/L78 - 1/L70)$		-64,249,638
81				
82	Adj. Total Debt to Total Capital Target			56.50%
83	Debt Adjustment to Meet Target	$(L82 - L71) * L67$		11,295,118
84	Total Capital Adjustment to Meet Target	$L65/L82 - L67$		-19,991,359
85				
86		Amortization and Revenue Needed to Meet Targeted Ratios		
87	FFO Adj Needed to Meet Target Ratios	Maximum of L75, L79 or zero		12,781,161
88	Effective Income Tax Rate			0.3839
89	Deferred Income Taxes	$L87 * L88/(1 - L88)$		-7,964,109
90	Total Amortization Req for FFO Adj	$L87 - L89$		20,745,271
91				
92	* All references to Staff Acct. Schedules tie to schedules supporting amounts reflected in the			
93	True-up Accounting Schedules filed 9/27/06			

1	Calculation of Amortization to meet Financial Ratio Targets		9/27/2006
2	IEC Continuation Scenario		
3		Total	Juris
4		Company	Alloc
5	Additional Net Balance Sheet Investment		61,935,326
6	Rate Base	Staff Acct. Schedule 2 *	618,110,364
7	Jurisdictional Allocation for Capital		0.82
8			
9	Total Capital	L5+L6	680,045,690
10	Equity	Murray True-up Workpapers	0.5080 345,463,211
11	Trust Preferred	Murray True-up Workpapers	0.0539 36,654,463
12	Long-term Debt	Murray True-up Workpapers	0.4381 297,928,017
13	Cost of Debt	Murray True-up Workpapers	7.03%
14	Interest Expense	L12 * L13 (+\$4,250,000 (TOPRs))	25,194,340
15			
16	Electric Sales Revenue	Staff Acct. Schedule 9, L.1-3, + Rate Increase	292,854,336
17	Other Electric Operating Revenue	Staff Acct. Schedule 9, L.4-6	4,518,143
18	Water Revenue		
19	Operating Revenue	L16 + L17	297,372,479
20			
21	Operating and Maintenance Expense	Staff Acct. Schedule 9, L.95 (less cust. deposits)	205,737,911
22	Depreciation	Staff Acct. Schedule 9, L.96 + L100	32,584,603
23	Amortization		
24	Interest on Customer Deposits	Staff Acct. Schedule 10, Adj. S-70.3	542,569
25	Taxes Other than Income Taxes	Staff Acct. Schedule 9, L.101	11,240,091
26	Federal and State Income Taxes	Staff Acct. Schedule 9, L.112 (plus rate incr. impact)	8,996,577
27	Gains on Disposition of Plant		
28	Total Water Operating Expenses		
29	Total Electric/Water Operating Exp	Sum of L. 21-28	259,101,751
30			
31	Operating Income - Electric	L19 - L29	38,270,728
32	Operating Income - Water		
33	less: Interest Expense	L14	-25,194,340
34	Depreciation	L22	32,584,603
35	Amortization		
36	Deferred Taxes	Staff Acct. Schedule 9, L111	2,305,506
37	Funds from Operations (FFO)	Sum of L31-36	47,966,497
38			
39			
40			
41			
42			
43	Additional Financial Information Needed for Calculation of Ratios		
44	Capitalized Lease Obligations	EDE Accounts 227 + 243	692,938 568,209
45	Short-term Debt Balance	EDE Form 10-Q, p. 8	35,000,000 28,700,000
46	Short-term Debt Interest	EDE Accounts 417.891 + 431.400	1,418,588 1,163,242
47	Cash Interest Paid	Information Supplied by EDE	27,701,256 22,715,030
48	AFUDC Debt (capitalized interest)	EDE Form 10-Q, p. 4	86,841 71,210
49			
50	Adjustments Made by Rating Agencies for Off-Balance Sheet Obligations		
51	Debt Adj for Off-Balance Sheet Obligs		
52	Operating Lease Debt Equivalent	Information Supplied by EDE/S&P	48,323,160 39,624,991
53	Purchase Power Debt Equivalent	Information Supplied by EDE	23,676,840 19,415,009
54	Total OSB Debt Adjustment	L52 + I53	72,000,000 59,040,000
55			
56	Operating Lease Deprec Adjustment	Information Supplied by EDE/S&P	1,517,000 1,243,940
57			
58	Interest Adjustments for Off-Balance Sheet Obligations		
59	Present Value of Operating Leases	L52 * 10%	4,832,316 3,962,499
60	Purchase Power Debt Equivalent	L53 * 10%	2,367,684 1,941,501
61	Total OSB Interest Adjustment	L59 + L60	7,200,000 5,904,000

62				
63		Ratio Calculations		
64	Adjusted Interest Expense	$L14 + L46 + L61$		32,261,582
65	Adjusted Total Debt 6/30/06	$L11 + L12 + L44 + L45 + L54$		422,890,689
66	Adjusted Total Debt 6/30/05	Same as L65, but for prior year	431,231,000	353,609,420
67	Adjusted Total Capital	$L9 + L44 + L45 + L54$		768,353,899
68				
69	Adj. FFO Interest Coverage	$(L37 + L47 + L48 + L61)/(L14 + L48 + L61)$		2.46
70	Adj. FFO as a % of Average Total Debt	$(L37 + L56)/(\text{avg. of } L65 + L66)$		0.1267
71	Adj. Total Debt to Total Capital	$L65/L67$		0.5504
72				
73		Changes Required to Meet Ratio Targets		
74	Adj. FFO Interest Coverage Target			3.20
75	FFO Adjustment to Meet Target	$(L74 - L69) * L64$		23,894,638
76	Interest Adjustment to Meet Target	$L37 * (1/L74 - 1) - 1/L69 - 1)$		-11,065,513
77				
78	Adj. FFO as a % of Average Total Debt			0.195
79	FFO Adjustment to Meet Target	$(L78 - L70) * (\text{Avg of } L65 + L66)$		26,498,323
80	Debt Adjustment to Meet Target	$L37 * (1/L78 - 1/L70)$		-132,453,843
81				
82	Adj. Total Debt to Total Capital Target			56.50%
83	Debt Adjustment to Meet Target	$(L82 - L71) * L67$		11,229,264
84	Total Capital Adjustment to Meet Target	$L65/L82 - L67$		-19,874,804
85				
86		Amortization and Revenue Needed to Meet Targeted Ratios		
87	FFO Adj Needed to Meet Target Ratios	Maximum of L75, L79 or zero		26,498,323
88	Effective Income Tax Rate			0.3839
89	Deferred Income Taxes	$L87 * L88/(1 - L88)$		-16,511,453
90	Total Amortization Req for FFO Adj	$L87 - L89$		43,009,776
91				
92	* All references to Staff Acct. Schedules tie to schedules supporting amounts reflected in the			
93	True-up Accounting Schedules filed 9/27/06			