Exhibit No.:

Issues:

Monitoring and

Accounting Schedules

Witness: MoPSC Accountant
Sponsoring Party: MoPSC Staff
Case No.: E0-96-14

MISSOURI PUBLIC SERVICE COMMISSION **UTILITY SERVICES DIVISION**

UNION ELECTRIC COMPANY CASE NO. EO-96-14

STAFF MONITORING AND ACCOUNTING SCHEDULES

Jefferson City, Missouri February 1999

Staff Calculation of Average Capital Structure and Embedded Cost of Debt and Preferred Year Ending June 30, 1998 (000)

	Camital S	4 44	Embedded	Weighted
	Capital S Dollars	Percent	Cost	Cost
Beginning of Sharing Period (June 30, 1997)	Dollars			
Common Stock Equity	\$2,364,384	54.360%	N/A	N/A
Preferred Stock	155,197	3.568%	5,775%	0.206%
	1,829,911	42.072%	7.013%	2.950%
Long Term Debt		100.000%	7.01370	2.930%
Total Capitalization	\$4,349,492	100.000%		
Return portion related to debt and preferred			,	3.157%
End of Sharing Period (June 30, 1998)				
Common Stock Equity	\$2,415,631	55.334%	N/A	N/A
Preferred Stock	155,197	3.555%	5.775%	0.205%
Long Term Debt	1,794,739	41.111%	6.978%	2.869%
Total Capitalization	\$4,365,567	100.000%		
Return portion related to debt and preferred				3.074%
Average for sharing period				
Common Stock Equity	\$2,390,008	54.848%	N/A	N/A
Preferred Stock	155,197	3.562%	5.775%	0.206%
Long Term Debt	1,812,325	41.591%	6.996%	2.910%
Total Capitalization	\$4,357,529	100.000%		
Return portion related to debt and preferred				3.115%
Return portion related to common equity				54.848%

Monitoring Schedule 1 Page 1 of 5

Monitoring Schedule 1 Page 2 of 5

Union Electric Company Incentive Regulation Monitoring Case No. EO-96-14

Staff Calculation of Achieved Cost of Common Equity Year Ending June 30, 1998 (000)

		Missouri
	Total Electric	Jurisdictional
Plant in Service	\$ 8,247,689	\$ 7,386,184
Reserve for Depreciation	3,162,410	2,815,161
Net Plant	\$ 5,085,279	\$ 4,571,023
Add:		
Fuel and Materials & Supplies	197,523	170,633
Cash Working Capital	(27,466)	(24,000)
Prepayments	12,479	10,904
Less:		
Income Tax Offset (Staff Method)	57,971	59,401
Interest Expense Offset (Staff Method)	16,160	14,533
Customer Advances	8,113	8,065
Customer Deposits	10,435	10,435
Accumulated Deferred Income Taxes	836,061	733,777
(A) Total Rate Base	\$ 4,339,075	\$ 3,902,348
(B) Net Operating Income	\$ 457,077	\$ 431,361
(C) Return on Rate Base ((B) / (A))	10.534%	11.054%
(D) Return Portion Related to Debt & Preferre	ed 3.115%	3.115%
(E) Return Portion Related to Common Equity ((C) - (D))	7.419%	7.939%
(F) Equity Percentage of Capital Structure	54.848%	54.848%
(G) Achieved Cost of Common Equity ((E) / (F))	13.526%	14.474%

Monitoring Schedule 1 Page 2 of 5

Monitoring Schedule 1 Page 3 of 5

Union Electric Company Incentive Regulation Monitoring Case No. EO-96-14

Staff Calculation Income Statement Year Ending June 30, 1998 (000)

	To	tal Electric		Missouri risdictional
Operating Revenues	\$	2,133,116	-\$	1,916,228
Operation & Maintenance Expenses: Production:				
Fixed Allocation	\$	90,644	\$	79,025
Varible Allocation		548,552		468,299
Directly Assigned		(2,436)		(2,048)
Total Production Expenses	\$	636,761	\$_	545,276
Transmission Expenses (Fixed)	\$	14,593	\$	12,715
Distribution Expenses (Direct)		84,837		79,345
Customer Accounting, Customer Service				
and Sales Expenses (Direct)		59,428		55,659
Administrative & General Expense:				
Directly Assigned	\$	3,132	\$	2,763
Labor Allocation		195,437		171,066
Total Administrative & General Expense	\$	198,569	\$_	173,829
Total Operation & Maintenance Expenses	\$	994,188	\$	866,825
Depreciation & Amortization Expense:				
Fixed Allocation	\$	66,965	\$	58,346
Labor Allocation		9,724		8,594
Directly Assigned		171,632	_	156,477
Total Depreciation & Amortization Expense	\$	248,321	\$_	223,417
Taxes Other Than Income Taxes:				
Fixed Allocation	\$	52,194	\$	45,477
Varible Allocation		1,848		1,578
Labor Allocation		3,502		3,095
Directly Assigned		145,747		134,524
Total Taxes Other Than Income Taxes	\$	203,291	\$]	184,673
Income Taxes				
Federal Income Tax	\$	198,112	\$	178,251
Enviornmental Tax		(445)		(400)
Misssouri State Income Tax		29,435		32,100
Other States Income Tax		3,137		0
Total Income Taxes	\$	230,240	\$ _	209,952
Net Operating Income	\$	457,077	\$ _	431,361

Monitoring Schedule 1 Page 3 of 5

Monitoring Schedule 1 Page 4 of 5

Union Electric Company Incentive Regulation Monitoring Case No. EO-96-14

Staff Calculation of Customers Sharing Credit Year Ending June 30, 1998 (000)

Missouri Rate Base	\$3,902,348
Total Return on Rate Base	11.054%
Earned Return on Common Equity	14.474%
50% Sharing for Earned Return > 12.61% but < 14.00%	
[(14% - 12.61%) x 50% x Rate Base x Common Equity %]	\$14,875
[(1 // 12.01/0) // DO/ON TALLO BASSON COMMON Equity /0]	Ψ1,075
Total 50% Sharing Including Income Taxes **	\$24,144
100% Sharing for Earned Return > 14%	
[(Achieved Return on Equity - 14%) x 100% x Rate Base x Common Equity %]	\$10,144
Total 100% Sharing Including Income Taxes **	\$16,465.21
Total Customers Sharing Credit for the Current Period Including Income Taxes	\$40,609
Under (Over) Credit of Actual 1997 Customers Sharing Credit	\$41
Total Customers Sharing Credit	\$40,650

** Gross-up factor for income taxes - 1.6231

Monitoring Schedule 1 Page 4 of 5

Monitoring Schedule 1 Page 5 of 5

Union Electric Company Incentive Regulation Monitoring Case No. EO-96-14

Allocations 12 Months Ending June 30, 1998

	Total	Missouri
	Electric	Jurisdictional
Fixed	100.00%	87.13%
Varible	100.00%	85.37%
KWH sales	100.00%	83.56%
Nuclear	100.00%	86.99%
Distribution	100.00%	94.30%
Missouri Distribution	100.00%	99.35%
Labor	100.00%	88.38%
Net Plant	100.00%	89.89%
Operating Revenues	100.00%	89.82%
Operating Expenses	100.00%	87.38%

Monitoring Schedule 1 Page 5 of 5

Average Rate Base Year Ending June 30, 1998

Revenue (Refund) Requirement

	E	12.61% ; Quity Return		14,00% quity Return
(A)	£irib	(B)	- Commenter	(C)
Net Original Cost Rate Base (From Acctg. Sch. 2)	\$	3,902,348	\$	3,902,348
Rate of Return		10.03%		10.79%
Net Operating Income Requirement	\$	391,465	\$	421,216
Net Income Available (From Acctg. Sch 8)		431,361		431,361
Additional Net Operating Income	-			·
Needed Before Income Taxes	\$	(39,895)	\$	(10,144)
Income Tax Requirement: (From Acctg. Sch. 10)				, , ,
Required Current Income Tax	\$	211,118	\$	229,655
Test Year Current Income Tax		235,975		235,975
Additional Current Income Tax Required	\$	(24,858)	\$	(6,321)
Revenue Requirement	1, 5	48,288	j. [\$	16,465
	9.0 57.00	**************************************	ay na 2020 <u>, </u>	
Revenue Refund	M		\$. .	40,609
	eres Akopus	energeren betretten fan en en sjoken.	Personal de la company	

Average Rate Base Year Ending June 30, 1998

		-	Missouri Jurisdiction
Total Average Plant In Service (From A	Accounting Schedule 3)	\$	7,386,184
Average Depreciation Reserve (From A	Accounting Schedule 5)		2,815,161
Net Average Plant In Service		\$	4,571,023
Add:		_	
Stipulated Cash Working Capital		\$	(24,000)
Unspent nuclear fuel in reactor	(From Accounting Schedule 7)		35,245
Coal Inventory	(From Accounting Schedule 7)		50,265
Other fuel and General M&S	(From Accounting Schedule 7)		85,124
Average prepayments	(From Accounting Schedule 7)		10,904
Total Additions		\$	157,537
Less:		•	
Income tax offset @ 25.13%		\$	59,401
Interest offset @ 12.80%			14,533
Customer Advances			8,065
Accumulated deferred income tax			733,777
Customer Deposits			10,435
Total Deductions		\$	826,211
Total Rate Base	(To Accounting Schedule 1)	\$_	3,902,348

Average Plant In Service Year Ending June 30, 1998

		m . 1		Total Compan	Accounting Schedule 4 Total Company Adjustments		Adjusted				
Description		Total Company		Amount	Adjust. No.		Total Electric	Allocation Factor		Missouri Jurisdictional	
Intangible Plant						•					
Account 301											
System General	\$	138	\$			\$	138	88.38%	\$	122	
Heating and Gas	_	5	_	(5)	P-1	_	0				
Total Account 301	\$_	143	\$	(5)		\$_	138		\$	122	
Account 302											
Power Pool	\$	16					16	87.13%		14	
System General		3					3	88.38%		3	
Heating and Gas	_	0	_	(0)	P-2	_	0				
Total Account 302	\$_	19	\$_	(0)		\$_	19		\$ _	17	
Total Intangible Plant	\$ _	162	\$ _	(5)		\$ _	157		\$_	138	
Production Plant											
Nuclear	\$	2,874,945	\$			\$	2,874,945	87.13%	\$	2,504,939	
Callaway Disallowances		(268,862)					(268,862)	Direct		(229,235)	
Steam		1,950,682					1,950,682	87.13%		1,699,629	
Hydraulic		145,190					145,190	87.13%		126,504	
Other		41,193					41,193	87.13%		35,891	
Total Production	\$ _	4,743,147	\$.	0		\$_	4,743,147		\$	4,137,728	
Transmission Plant	\$ _	428,577	\$			\$_	428,577	87.13%	\$	373,419	
Distribution Plant											
Missouri	\$	2,507,159	\$	1,285	P-4	\$	2,508,444	Direct	\$	2,492,072	
Illinois		134,206					134,206	0.00%		0	
Iowa		0					0	0.00%		0	
Total Distribution	\$ _	2,641,365	\$	1,285		\$_	2,642,650		\$	2,492,072	
General Plant	\$_	437,150	\$	(3,991)	P-3	\$ _	433,159	88.38%	\$	382,826	
Plant Held For Future Use	\$ _	0	\$			\$ =	0		\$	0	
Total Plant In Service	\$	8,250,400	\$	(2,711)		\$	8,247,689		\$	7,386,184	

Adjustments to Plant In Service Year Ending June 30, 1998

	\$	(5)
\$ (5)		
	\$	(0)
		· /
\$ (0)		
	\$	(3,991)
\$ (6,024)		
2,033		
	\$	1,285
\$ 1,285		
\$	\$ (0) \$ (6,024) 2,033	\$ (5) \$ (0) \$ (6,024) 2,033

Average Depreciation Reserve Year Ending June 30, 1998

		Total		Total Compan	g Schedule 4 ny Adjustments		Adjusted Total	Allocation		Missouri	
Description		Company		Amount	Adjust. No.		Electric	Factor		Jurisdictional	
Intangible Plant	-					-					
Account 301											
System General	\$	0	\$			\$	0		\$	0	
Heating and Gas		0					0				
Total Account 301	\$	0	\$	0		\$	0		\$	0	
Account 302	_		•						-		
Power Pool	\$	0					0			0	
System General		0					0			0	
Heating and Gas		0					0				
Total Account 302	\$	0	\$	0		\$	0		\$	0	
Total Intangible Plant	\$_	0	\$]	0		\$	0		\$	0	
						_			•		
Production Plant							•				
Nuclear	\$	741,691	\$			\$	741,691	86.99%	\$	645,197	
Callaway Post Operational		17,784					17,784	94.34%		16,777	
Steam		921,707					921,707	87.13%		803,083	
Hydraulic		59,936					59,936	87.13%		52,222	
Other		36,099					36,099	87.13%		31,453	
Total Production	\$	1,777,217	\$	0		\$_	1,777,217		\$	1,548,733	
Transmission Plant	\$_	177,952	\$.			\$_	177,952	87.13%	\$	155,050	
Distribution Plant											
Missouri	S	1,037,622	ç	17	R-2	S	1,037,638	99.35%	s	1,030,894	
Illinois	Ψ.	78,536	φ.	1,	K L	•	78,536	0.00%	•	0	
Iowa		,0,550					70,550	0.00%		0	
10 11 11	_	·						0.0074			
Total Distribution	\$ =	1,116,158	. \$	17		\$ _	1,116,174		\$	1,030,894	
General Plant	\$ =	92,365	\$	(1,298)	R-1	\$_	91,067	88.38%	\$	80,485	
Total Plant In Service	\$	3,163,691	\$	(1,281)		\$	3,162,410	· · · · · · · · · · · · · · · · · · ·	\$	2,815,161	

Adjustments to Depreciation Reserve Year Ending June 30, 1998

R-1

General Plant Reserve \$ (1,298)

1 To adjust plant in service to exclude steam heating and gas operations. \$ (1,298)

R-2 \$ 17

Distribution Plant

1 To include the depreciation reserve on territorial aggreement plant additions. 17

Average Fuels, Material & Supplies and Prepayments Year Ending June 30, 1998

Unspent Nuclear Fuel in Reactor Missouri

Jurisdictional

Міззоцгі

Total Company		Jurisdictional Percentage		Missouri Jurisdictional
Total Company \$41,284	_	85.37%		\$35,245
341,204		65.3770		\$33,243
		Coal		
Total Year Burn		75 Day Supply	Current Cost/Ton	Adjusted Coal Inventory (\$) Level
7,681	Labadie	1,578	\$17.335	27,360
2,698	Sioux	554	19.508	10,816
1,289	Meremac	265	26.004	6,886
4,088	Rush Island	840	16.449	13,817
				58,879
		Missouri Jurisdic	tional Percent	85.37%
		Missouri Jurisdic	tion	\$50,265
Total Company	- Oil	Missouri Jurisdictional Percentage 85.37%		Missouri Jurisdictional \$1,559
	Shredded Tires	85.37%		31,557
	Propane/Elec	85.37%		32
	Propane/Gas	65.7770		0
	Power Pool M&S	85.37%		63,802
	Direct M&S - Elec			19,728
	Direct M&S - Gas	NA		0
\$99,388				\$85,124
		Prepayments		
		Missouri Jurisdictional		Missouri
Total Company	_	Percentage		Jurisdictional
\$12,711 233	Gas & steam heati	ng		
	Can be brown field	~=		
\$12 479	Electric	87.38%		\$10,904

Income Statement Year Ending June 30, 1998

		Total Electric As Recorded		Total Company Adjustment	Adjustmen t Number	Allocation Factor		Missouri urisdicational	1	urisdictiona Adjustment	Adjustment Number		Adjusted Jurisdictiona
Operating Revenue	\$	2,131,069	\$	0	S-1	NA	\$	1,914,181	\$	2,047	S-1	\$	1,916,228
Operating & Maintenance Expense	es												
Production													
Variable	\$	557,794	\$	(9,242)	S-2	85.37%	\$	468,299	\$	0	S-2	\$	468,299
Direct		(2,436)		0	S-3	NA		(2,048)		0	S-3		(2,048)
Power Pool		90,285		0	S-4	87.13%		78,666		359	S-4		79,025
Tranmission		14,593		0	S-5	87.13%		12,715		0	S-5		12,715
Distribution		50.140			0.6	00.250/		5 0.005		410			50.045
Missouri		79,443		0	S-6	99.35%		78,927		419	S-6		79,345
Other direct		4,975				0.00%		0					0
Customer Accounting Missouri direct		54,551		0	S-7	NA		54,540		1,119	S-7		55,659
Other direct		3,758		v	D-1	0.00%		0		1,119	3-7		0 ,039
Administrative and General		3,736				0.0070		v					U
Direct		4,441		0	S-8	NA		4,072		(1,309)	S-8		2,763
System General		210,062		(328)	S-9	88.38%		185,363		(14,297)	S-9		171,066
- J												-	
Total Operation & Maintenance	\$	1,017,467	\$	(9,570)			\$	880,535	\$	(13,709)		\$	866,825
Other Expenses													
Depreciation and Amortization	1												
Power Pool		66,965		0	S-10	87.13%		58,346		0	S-10		58,346
Direct		171,412		0	S-11	NA		156,257		220	S-11		156,477
System General		9,724		0	S-12	88.38%		8,594		0	S-12		8,594
Taxes Other										_			
Varible		1,848		0	S-13	85.37%		1,578		0	S-13		1,578
Power Pool		52,194		0	S-14	87.13%		45,477		0	S-14		45,477
Direct		145,271		0	S-15	NA		134,048		476	S-15		134,524
System General		3,502	_	0	S-16	88.38%		3,095		0	S-16	_	3,095
Other Expenses	\$	450,915	\$	0			\$	407,394	\$	696		\$	408,091
Net Operating Inc.Before Inc. Tax	\$	662,686	\$	9,570			\$	626,252	\$	15,060		\$	641,312
Income Taxes													
Current	\$	230,240	\$	0	S-17	Various	\$	212,120	\$	23,855	S-17	\$	235,975
Deferred		(48,488)		0	S-18	Various		(37,406)		11,382	S-18		(26,024)
Total Income Taxes	\$	181,752	\$	0			\$	174,715	\$	35,237		\$	209,952
Net Operating Income	\$	480,934	\$_	9,570			\$_	451,537	\$	(20,177)		\$_	431,361

Adjustments To Income Statement Year Ending June 30, 1998

Adj.			
No.	Description	Total Company	Missouri Jurisdictional
Reven			5 2.047
1	To normalize revenues for weather.		\$ 0
•			
2	To restore lost revenue resulting from territorial aggreements.		2,047
	uggi oomund.		2,047
li-more makemaker	ction - Variable	明	
1	To normalize Callaway refueling.	\$ (9,242)	\$
Produ	ction - Direct \$.3		5-1-1-2
1	To adjust fuel consistent with normalized	S	S O
	weather.		
Produ	ction - Power Pool	enter de la companya	359
1	No adjustment.	S	State of the state
2	To include fuel cost for territorial aggreement		
	lost revenue		359
l rans	mission S-512 Page 1871 No adjustment.	\$	\$
•	1 to displacement.	•	•
homoreigness.	bution S-6	s de la companya de	419
1	To restore maintenance expense savings for territorial aggreement plant.	\$	\$ 419
	terneria aggresient plant.	y.	Ψ - 1,7
w20092492102392302304A	Acctg, Svc and Sales S-7	\$	1119 2 - 1119
1	To include interest on customer deposits at	\$	\$ 991
2	To include residential insulation program		5
3	To adjust uncollectible accounts for actual write- offs.		123
	ons.		123
A&G	- Direct \$28		\$ (1,309)
1	To eliminate goodwill advertising.	\$	\$ (250)
2	To eliminate advertising for corporate name		(1,059)
	, ,	Magnifesty in the secretary of the State of	
A 0.7	- System General S-9	ドラスター (328)。	[13] - S. (14,297)
AQU			full-bid of Land Distriction of the second o

Adjustments To Income Statement Year Ending June 30, 1998

Adj. No.	Description		Total Company	_	Missouri Jurisdictional
1	To adjust the amortization of merger costs.	\$	0	\$	(232)
2	To eliminate EEI dues.		(745)		
3	To "annualize" FAS 87 & 106		417		
4	To adjust injuries and damages expense		0		(2,250)
5	To eliminate the computer cost associated with Y2K, CSS, EMPRV and AMRAPS				(11,529)
6	To include interest for late decommissioning fund payments.				(287)
Depre-	ciation - Power Pool S-10 S-10 No adjustment.	S	\$ 50	\$	Summer of
Depre	ciation - Direct				\$ 220
1	To adjust depreciation expense associated with capitalization of EMPRV and AMRAPS.	\$		\$	203
2	To include depreciation expense on territorial aggreement plant				17
Depre 1	ciation - System General - S-12 No adjustment.	\$ S	\$	\$	\$ 1 Property 1 P
in the same of the same	Other - Variable S-18				\$ 0
1	To eliminate property taxes associated with plant held for future use.	\$	0	\$	
Taxes	Other - Power Pool 4 S-14 S-14 S-15 S-16 S-16 S-16 S-16 S-16 S-16 S-16 S-16		ERDENESES ESTERNISTO		0.50
	plant held for future use.	\$	0	\$	
Taxes	Other - Direct S-15 S-15 S-15 S-15 S-15 S-15 S-15 S-15	S		\$	\$ 476

Adjustments To Income Statement Year Ending June 30, 1998

Adj. No.	Description		Total Company		Missouri Jurisdictional	
2	To "equalize" GRT in revenue and expense.				476	
Taxes (Other - System General - S-16 No adjustment.	\$	5 0	\$		0
Curren 1	t Income Tax S-17 To adjust current income tax expense.	\$	0	5	\$ 23, 855	835
Deferre 1	To eliminate deferred taxes associated with disallowed accellerated depreciation.	\$	S — 1 1 1 1 0 0 0	\$	16,064	382
2	To eliminate the other deferred tax provision	ns			(8,479)	
3	To eliminate deferred tax provision for ITC				3,797	

Union Electric Company Incentive Regulation Monitoring Case No. EO-96-14 Test Year Ending June 30, 1998

Income Tax

Description		Fest Year		12.61% Return		14.00% Return	
(A) Net Operating Income (Acctg. Sch. 1)	\$	(B) 431,361	\$	(C) 391,465	\$	(D) 421,216	
(_		•	,	_	,, 	
Add:							
Current Income Tax		235,975		211,118		229,655	
Deferred Income Taxes	_	(26,024)		(26,024)		(26,024)	
Net Income Before Taxes (Acctg. Sch. 8)	\$	641,312	\$	576,559	\$	624,847	
Timing diffferences							
Net excluding interest		87,972		87,972		87,972	
Interest Expense (2.91%		(113,541)		(113,541)		(113,541)	
Net Taxable Income	\$	615,743	\$	550,990	\$	599,278	
Provision For Federal Income Tax				<u>=</u>			
Net Taxable Income	\$	615,743	\$	550,990	\$	599,278	
Deduct:							
Missouri Income Tax 100%		32,100		28,725		31,242	
Federal Taxable Income	\$	583,643	\$	522,266	\$	568,036	
Federal Income Tax @ 35%	\$	204,275	\$	182,793	\$	198,813	
Provision For Missouri Income Tax							
Net Taxable Income	\$	615,743	\$	550,990	\$	599,278	
Deduct:							
Federal Income Tax 50%	_	102,138		91,396		99,406	
Missouri Taxable Income	\$	513,606	\$	459,594	\$	499,872	
Missouri Income Tax @ 6.25%	\$	32,100	\$	28,725	\$	31,242	
Summary of Provision For Income Tax							
Federal Income Tax	\$	204,275	\$	182,793	\$	198,813	
Federal Enviornmental Tax		(400)		(400)		(400)	
Missouri Income Tax		32,100		28,725		31,242	
F. S. Proposition (F. S. Proposition)	: this (10)	· · · · · · · · · · · · · · · · · · ·	885 St. 0355 T	AMPZĄ PROWERDNIKO ŚCERO POWER	90 i 32 - 1		
Total Income Tax	IIS)	235,975	(a S *1)	ii: 201,018 (S	229,655	
	No Selected Section	orsn <u>i v</u> alika ospesi Kili	M. Sylvayada	eres ver "kojeca sa a se al	Conscional feet		