A. Table 1 provides a summary of the difference in annual depreciation rates and accruals requested by the Company and those advocated by Staff. With the exception of Corporate Assets, this comparison is based on December 31, 2001 plant and reserves reported in the 2002 Depreciation Rate Studies.[1]

Business Unit	Accrual Rate			2002 Annualized Accrual		
	Company	Staff	Difference	Company	Staff	Difference
A	B	C	D=C-B	E	F	G=F-E
MPS						
Electric	3.41%	2.38%	-1.03%	$36,855,198	$25,662,385	$-11,192,813
Corporate	11.86%	9.42%	-2.44%	6,256,676	4,970,471	-1,286,205
Total MPS	3.81%	2.70%	-1.11%	$43,111,874	$30,632,856	$-12,479,018
L&P						
Electric	3.31%	2.68%	-0.63%	$11,261,577	$9,135,395	$-2,126,182
Steam	6.16%	2.46%	-3.70%	194,924	77,754	-117,170
Corporate	11.97%	9.37%	-2.60%	2,046,124	1,601,228	-444,896
Total L&P	3.75%	3.00%	-0.75%	$13,502,625	$10,814,377	$-2,688,248
Total	3.79%	2.78%	-1.01%	$56,614,499	$41,447,233	$-15,167,266

TABLE 1. COMPANY VS STAFF RATES AND ACCRUALS

It can be observed from Table 1 that Staff is advocating a composite depreciation rate reduction of 1.01 percentage points from that requested by the Company. The reduction in depreciation rates advocated by Staff reduces the Company's requested 2002 annualized depreciation expense by $15,167,266, or more than 26 percent.

The currently prescribed composite accrual rate of 2.92 percent provides an annualized accrual of $43,663,996. The reduction in depreciation rates advocated by Staff reduces currently approved annualized depreciation expense by $2,216,763 ($43,663,996 – $41,447,233), or more than five percent.

Q. What is the difference in the annual depreciation rates and accruals requested by the Company and those advocated by Staff for MPS operations?

[1] The comparison for Corporate Assets is based on forecasted December 31, 2003 plant and reserves reported in the 2003 Depreciation Rate Study.

pany. The reduction in depreciation rates advocated by Staff reduces the Company's requested 2002 annualized depreciation expense by $2,687,248, or nearly 20 percent. The currently prescribed composite accrual rate of 3.60 percent provides an annualized accrual of $12,966,238. The reduction in depreciation rates advocated by Staff reduces currently approved annualized depreciation expense by $2,151,861 ($12,966,238 – $10,814,377), or more than 16 percent.

	Accrual Rate			2002 Annualized Accrual		
Function	Company	Staff	Difference	Company	Staff	Difference
A	B	C	D=C–B	E	F	G=F–E
Steam Production	4.56%	2.34%	-2.22%	$6,069,973	$3,109,137	$-2,960,836
Other Production	1.37%	3.13%	1.76%	222,546	507,974	285,428
Transmission	1.59%	1.81%	0.22%	396,668	451,942	55,274
Distribution	2.72%	2.28%	-0.44%	3,716,828	3,114,354	-602,474
General Plant	2.26%	4.85%	2.59%	17,891	38,424	20,533
Common Plant	2.95%	6.73%	3.78%	837,671	1,913,564	1,075,893
Industrial Steam	6.16%	2.46%	-3.70%	194,924	77,754	-117,170
Corporate	11.97%	9.37%	-2.60%	2,046,124	1,601,228	-444,896
Total	3.75%	3.00%	-0.75%	$13,502,625	$10,814,377	$-2,688,248

TABLE 3. COMPANY VS STAFF RATES AND ACCRUALS – L&P OPERATIONS

Q. Why are the depreciation rates and accruals advocated by Staff significantly different from those requested by Aquila?

A. The differences in depreciation rates and accruals advocated by Staff and those requested by Aquila are largely attributable to:

a) The depreciation *procedure* used to develop accrual rates;
b) The depreciation *technique* used to develop accrual rates;
c) Modification of service life statistics; and
d) Elimination of net salvage accruals.

DEPRECIATION PROCEDURE

Q. What is a depreciation procedure?

A. As discussed in my direct testimony, a depreciation procedure identifies the level of

therefore, to request that Missouri also approve depreciation rates derived from a vintage–group procedure to more nearly achieve to goals of depreciation accounting and to maintain consistency in the procedure used by Aquila in all jurisdictions.

Q. What is the difference in depreciation rates and accruals for MPS and L&P resulting from a use of the vintage–group procedure rather than the broad–group procedure?

A. Table 4 provides a comparison of depreciation rates and accruals using the vintage–group procedure, remaining–life technique and the broad–group procedure, remaining–life technique combined with the parameters and redistribution of reserves requested by Aquila.

	Accrual Rate			2002 Annualized Accrual		
Business Unit	VG	BG	Difference	VG	BG	Difference
A	B	C	D=C–B	E	F	G=F–E
MPS						
Electric	3.41%	3.41%	0.00%	$36,855,198	$36,865,997	$10,799
Corporate	11.86%	11.85%	-0.01%	6,256,676	6,253,148	-3,528
Total MPS	3.81%	3.81%	0.00%	$43,111,874	$43,119,145	$7,271
L&P						
Electric	3.31%	3.33%	0.02%	$11,261,577	$11,336,653	$75,076
Steam	6.16%	6.17%	0.01%	194,924	194,959	35
Corporate	11.97%	11.96%	-0.01%	2,046,124	2,044,281	-1,843
Total L&P	3.75%	3.77%	0.02%	$13,502,625	$13,575,893	$73,268
Total	3.79%	3.80%	0.01%	$56,614,499	$56,695,038	$80,539

TABLE 4. VINTAGE–GROUP VS BROAD–GROUP RATES AND ACCRUALS

It can be observed from Table 4 that marginally higher depreciation rates and accruals result from an application of the broad–group procedure. By comparison, depreciation accruals derived from an application of the parameters and whole–life technique advocated by Staff would be reduced by $209,173 ($41,447,601–$41,238,428) by adoption of the vintage–group procedure. Clearly, the procedure requested by Aquila and approved for the Company in other jurisdictions was not selected to maximize depreciation expense. It was selected to more nearly achieve the goals and objectives of depreciation accounting.

Business Unit	Accrual Rate R/L	Accrual Rate W/L	Accrual Rate Difference	2002 Annualized Accrual R/L	2002 Annualized Accrual W/L	2002 Annualized Accrual Difference
A	B	C	D=C–B	E	F	G=F–E
MPS						
Electric	3.41%	3.59%	0.18%	$36,855,198	$38,784,074	$1,928,876
Corporate	11.86%	8.09%	-3.77%	6,256,676	4,270,881	-1,985,795
Total MPS	3.81%	3.80%	-0.01%	$43,111,874	$43,054,955	$-56,919
L&P						
Electric	3.31%	3.70%	0.39%	$11,261,577	$12,589,065	$1,327,488
Steam	6.16%	4.27%	-1.89%	194,924	135,145	-59,779
Corporate	11.97%	8.09%	-3.88%	2,046,124	1,382,613	-663,511
Total L&P	3.75%	3.91%	0.16%	$13,502,625	$14,106,823	$604,198
Total	3.79%	3.83%	0.04%	$56,614,499	$57,161,778	$547,279

TABLE 5. REMAINING–LIFE VS WHOLE–LIFE RATES AND ACCRUALS

It can be observed from Table 5 that marginally higher depreciation rates and accruals result from an application of the whole–life technique. By comparison, depreciation accruals derived from an application of the parameters and broad–group procedure advocated by Staff would be reduced by $5,695,765 ($41,447,233–$35,751,468) by adoption of the remaining–life technique. Clearly, the technique requested by Aquila and approved for the Company in other jurisdictions was not selected to maximize depreciation expense. It was selected to more nearly achieve the goals and objectives of depreciation accounting.

Q. Why is the difference between remaining–life accruals and whole–life accruals based on parameters advocated by Staff significantly larger than the difference obtained from parameters requested by Aquila?

A. Apart from a relatively small difference attributable to the broad–group procedure, the reserve imbalance derived from Staff parameters (*i.e.*, service life and net salvage statistics) is significantly larger than the imbalance derived from parameters estimated by Foster Associates. It can be observed from Table 6 that the reserve imbalance derived from Staff parameters is $227,135,660 compared with an imbalance of $45,313,716 derived from parameters requested by Aquila.

		Company		Staff	
Business Unit	Recorded	Computed	Imbalance	Computed	Imbalance
A	B	C	D=B–C	E	F=B–E
MPS					
Electric	$464,379,209	$427,919,935	$36,459,274	$295,974,496	$168,404,713
Corporate	2,051,206	14,280,435	-12,229,229	15,510,562	-13,459,356
Total MPS	$466,430,415	$442,200,370	$24,230,045	$311,485,058	$154,945,357
L&P					
Electric	$190,145,285	$164,429,414	$25,715,871	$113,697,372	$76,447,913
Steam	1,359,211	1,970,810	-611,599	1,207,167	152,044
Corporate	697,985	4,718,586	-4,020,601	5,111,857	-4,413,872
Total L&P	$192,202,481	$171,118,810	$21,083,671	$120,016,396	$72,186,085
Total	$658,632,896	$613,319,180	$45,313,716	$431,501,454	$227,131,442

TABLE 6. COMPANY VS STAFF RESERVE IMBALANCES

As noted earlier, the difference between a remaining–life accrual and a whole–life accrual is the amortization of a reserve imbalance. The amortization derived from Staff parameters would be $5,695,765 compared with an amortization of $547,279 derived from the parameters requested by Aquila. It is understandable, therefore, why Staff recommended that "... the net over–recovery not be reduced at this time."[2] The drastic reduction in depreciation expense advocated by Staff would be even further reduced by adoption of the remaining–life technique.

SERVICE LIFE STATISTICS

Q. What is the difference in depreciation rates and accruals for MPS and L&P resulting from the modification of service life statistics advocated by Staff?

A. Table 7 provides a comparison of depreciation rates and accruals using service life statistics (*i.e.*, projection life and projection curve) requested by Aquila and service life statistics advocated by Staff. The procedure, technique and net salvage rates and redistribution reserves requested by Aquila were retained in the comparison to isolate differences solely attributable to the changes in service life statistics advocated by Staff.

[2] Schad Direct Testimony, Page 16, Lines 7–8.

Business Unit	Accrual Rate			2002 Annualized Accrual		
	Company	Staff	Difference	Company	Staff	Difference
A	B	C	D=C-B	E	F	G=F-E
MPS						
Electric	3.41%	2.53%	-0.88%	$36,855,198	$27,307,004	$-9,548,194
Corporate	11.86%	15.67%	3.81%	6,256,676	8,269,416	2,012,740
Total MPS	3.81%	3.14%	-0.67%	$43,111,874	$35,576,420	$-7,535,454
L&P						
Electric	3.31%	2.11%	-1.20%	$11,261,577	$7,180,417	$-4,081,160
Steam	6.16%	2.47%	-3.69%	194,924	78,262	-116,662
Corporate	11.97%	15.91%	3.94%	2,046,124	2,720,248	674,124
Total L&P	3.75%	2.77%	-0.98%	$13,502,625	$9,978,927	$-3,523,698
Total	3.79%	3.05%	-0.74%	$56,614,499	$45,555,347	$-11,059,152

TABLE 7. COMPANY VS STAFF SERVICE LIFE STATISTICS

It can be observed from Table 7 that service life statistics advocated by Staff produce a composite depreciation rate reduction of 0.74 percentage points from that requested by the Company. The reduction in depreciation rates reduces the Company's requested 2002 annualized depreciation expense by $11,056,564, or more than 19 percent.

1. STAFF DATA CONCERNS

Q. According to Witness Schad, Staff recommends that service life statistics advocated for the MPS Sibley production station should be applied to all L&P steam production facilities because of "... Staff's concerns with L&P Electric data."[3] What is your understanding of these data concerns?

A. According to Witness Schad, "... Staff's concerns with L&P Electric data are: 1) Placements of vintages prior to 1979, in the data file, are not recorded until 1979; and 2) There are no retirements, from those vintages, recorded until 1979. This results in some plant being almost 80 years with no retirements occurring."[4]

Q. Is this an accurate description of the L&P steam production database?

[3] Schad Direct Testimony, Page 9.
[4] Schad Direct Testimony, Page 9. Lines 7–10.

is reported. All plant accounts classified in the steam, industrial steam and other production functions were identified by location and treated as life-span categories in both the MPS and L&P depreciation studies.

Q. How did Staff estimate service lives for plant classified in the production functions?

A. Staff treated production functions as open–ended plant categories in which additions and retirements are envisioned to be recorded in perpetuity. Service lives for production plant were estimated in the same manner as, for example, poles or line transformers in which life indications were derived from a statistical analysis of recorded retirements. The same average service life was assigned to each vintage of a plant account. No consideration was given to the expectation that each vintage will be retired at a coterminous date, irrespective of age, and therefore will exhibit a unique average service life.

Q. How do the service lives requested by Aquila for production plant compare with those advocated by Staff?

A. Table 8 provides a comparison of composite average and remaining services lives requested by Aquila using the vintage–group procedure with those advocated by Staff using the broad–group procedure.

	Company			Staff	
Plant	AYFR	ASL	R/L	ASL	R/L
A	B	C	D	E	F
MPS					
Jeffery	2020–2024	36.53	19.97	44.38	29.44
Sibley	2012–2015	23.04	12.45	44.42	31.78
Other Production	2010–2024	21.15	15.57	32.21	25.58
L&P					
Lake Road	2012	20.95	10.39	42.08	27.11
Iatan	2015	31.73	13.29	43.68	26.48
Industrial Steam	2012	25.08	10.23	40.67	24.15
Other Production	2017	29.89	14.81	31.93	18.41

Table 8. Company vs Staff Production Plant Statistics