

# STATEMENTS

## INTRODUCTION

This section provides a comparative summary of depreciation rates, annual depreciation accruals, recorded and computed depreciation reserves, and present and proposed service life statistics recommended for Corporate Assets – MPS and Corporate Assets - SJLP. The content of these statements is briefly described below.

- Statement A provides a comparative summary of present and proposed annual depreciation rates using the vintage group procedure, whole-life technique with amortization of reserve imbalances.
- Statement B provides a comparison of the present and proposed 2003 annualized depreciation accruals based upon the rates developed in Statement A.
- Statement C provides a comparison of the recorded, computed and re-distributed reserves for each rate category at December 31, 2002.
- Statement D provides a summary of the components used to obtain a weighted average net salvage rate for each plant account.
- Statement E provides a comparative summary of present and proposed parameters including projection life, projection curve and future net salvage rates. The statement also contains present and proposed statistics including average service life, average remaining life, and average net salvage rates.
- Statement F provides plant and reserve allocation factors and the derivation of plant and reserves allocated to Missouri operations.

Present depreciation accruals shown on Statement B are the product of the plant investment (Column B) and the present depreciation rates (Column D) shown on Statement A. These are the current Missouri rates used by the Company for the mix of investments estimated at December 31, 2002. Similarly, proposed depreciation accruals shown on Statement B are the product of the plant investment and the proposed depreciation rates (Column I) shown on Statement A. Proposed accrual rates shown on Statement A are given by:

$$\text{Accrual Rate} = \frac{1.0 - \text{Average Net Salvage}}{\text{Average Life}} + \frac{\text{Computed Reserve} - \text{Recorded Reserve}}{\text{Remaining Life}}$$

where *Average Net Salvage*, *Computed Reserve* and *Recorded Reserve* are expressed in percent. This formulation of the accrual rate is equivalent to

$$\text{Accrual Rate} = \frac{1.0 - \text{Reserve Ratio} - \text{Future Net Salvage Rate}}{\text{Remaining Life}}$$

*Statements A through F*

**Aquila Corporate Assets - MPS**

Statement A

Comparison of Present and Proposed Accrual Rates

Present: BG Procedure / WL Technique

Proposed: VG Procedure / RL Technique

Account Description A	Present			Proposed				
	Avg. Life B	Net Salvage C	Accrual Rate D	Avg. Life E	Avg. Net Salvage F	W/L Rate G	Amortization H	R/L Rate I=G+H
<b>GENERAL PLANT</b>								
390001 Structures and Improvements			2.22%	44.97	2.9%	2.16%	0.28%	2.44%
391001 Office Furniture and Equipment			7.69%	19.95		5.01%	0.77%	5.78%
391003 Computers - Hardware				4.95		20.20%	12.96%	33.16%
391004 Computer Software				9.85		10.15%	3.59%	13.74%
391005 Computer Systems Development				9.37		10.67%	9.20%	19.87%
392004 Trans. Equip. - Medium Trucks			11.11%	11.27		8.87%	39.46%	48.33%
394000 Tools, Shop & Garage Equipment				20.39		4.90%	2.80%	7.70%
395000 Laboratory Equipment				15.11		6.62%	8.63%	15.25%
397000 Communication Equipment			5.00%	9.97		10.03%	5.98%	16.01%
398000 Miscellaneous Equipment			5.56%	10.07		9.93%	6.65%	16.58%
<b>Total General Plant</b>			<b>1.39%</b>	<b>12.27</b>	<b>0.7%</b>	<b>8.09%</b>	<b>3.77%</b>	<b>11.86%</b>

**Aquila Corporate Assets - MPS**

Statement B

Comparison of Present and Proposed Accruals

Present: BG Procedure / WL Technique

Proposed: VG Procedure / RL Technique

Account Description	12/31/02 Plant Investment	2003 Annualized Accrual				Difference
		Present	Whole-Life	Amortization	Total	
A	B	C	D	E	F=D+E	G=F-C
<b>GENERAL PLANT</b>						
390001 Structures and Improvements	\$16,586,756	\$368,226	\$358,274	\$46,443	\$404,717	\$36,491
391001 Office Furniture and Equipment	3,283,822	252,526	164,519	25,286	189,805	(62,721)
391003 Computers - Hardware	3,847,681		777,232	498,659	1,275,891	1,275,891
391004 Computer Software	21,104,602		2,142,117	757,655	2,899,772	2,899,772
391005 Computer Systems Development	5,636,230		601,386	518,533	1,119,919	1,119,919
392004 Trans. Equip. - Medium Trucks	5,688	632	505	2,244	2,749	2,117
394000 Tools, Shop & Garage Equipment	83,065		4,070	2,326	6,396	6,396
395000 Laboratory Equipment	16,201		1,073	1,398	2,471	2,471
397000 Communication Equipment	2,065,696	103,285	207,189	123,529	330,718	227,433
398000 Miscellaneous Equipment	146,187	8,128	14,516	9,722	24,238	16,110
<b>Total General Plant</b>	<b>\$52,775,928</b>	<b>\$732,797</b>	<b>\$4,270,881</b>	<b>\$1,985,795</b>	<b>\$6,256,676</b>	<b>\$5,523,879</b>

**Aquila Corporate Assets - MPS**

Depreciation Reserve Summary  
 Vintage Group Procedure  
 December 31, 2002

Statement C

Account Description	Plant Investment	Recorded Reserve				Computed Reserve		Redistributed Reserve	
		Allocated	Adjustment	Total	Ratio	Amount	Ratio	Amount	Ratio
A	B	C	D	E=C+D	F=E/B	G	H=G/B	I	J=I/B
<b>GENERAL PLANT</b>									
390001 Structures and Improvements	\$16,586,756	\$1,126,697	(\$28,659)	\$1,098,038	6.62%	\$2,175,038	13.11%	\$312,417	1.88%
391001 Office Furniture and Equipment	3,283,822	289,291	3,928	293,219	8.93%	500,392	15.24%	71,875	2.19%
391003 Computers - Hardware	3,847,681	(465,078)	(372,863)	(837,941)	-21.78%	1,647,896	42.83%	236,700	6.15%
391004 Computer Software	21,104,602	2,608,430	(2,106,578)	501,852	2.38%	6,170,686	29.24%	886,342	4.20%
391005 Computer Systems Development	5,636,230	1,249,231	(598,233)	650,998	11.55%	2,827,138	50.16%	406,083	7.20%
392004 Trans. Equip. - Medium Trucks	5,688	(2,813)	(144)	(2,957)	-51.98%	4,769	83.85%	685	12.04%
394000 Tools, Shop & Garage Equipment	83,065	66,090	(4,743)	61,347	73.85%	33,161	39.92%	4,763	5.73%
395000 Laboratory Equipment	16,201	1,867	(614)	1,253	7.74%	9,778	60.36%	1,405	8.67%
397000 Communication Equipment	2,065,696	220,960	(10,003)	210,957	10.21%	847,412	41.02%	121,720	5.89%
398000 Miscellaneous Equipment	146,187	74,307	133	74,440	50.92%	64,165	43.89%	9,217	6.30%
<b>Total General Plant</b>	<b>\$52,775,928</b>	<b>\$5,168,982</b>	<b>(\$3,117,776)</b>	<b>\$2,051,206</b>	<b>3.89%</b>	<b>\$14,280,435</b>	<b>27.06%</b>	<b>\$2,051,206</b>	<b>3.89%</b>

**Aquila Corporate Assets - MPS**

Average Net Salvage

Statement D

Account Description	Plant Investment			Salvage Rate		Net Salvage			Average Rate
	Additions	Retirements	Survivors	Realized	Future	Realized	Future	Total	
A	B	C	D=B-C	E	F	G=E*C	H=F*D	I=G+H	J=I/B
<b>GENERAL PLANT</b>									
390001 Structures and Improvements	\$17,730,438	\$1,143,682	\$16,586,756	44.3%		\$506,651		\$506,651	2.9%
391001 Office Furniture and Equipment	4,973,263	1,689,441	3,283,822						
391003 Computers - Hardware	15,924,258	12,076,577	3,847,681						
391004 Computer Software	26,128,438	5,023,836	21,104,602						
391005 Computer Systems Development	8,018,639	2,382,409	5,636,230						
392004 Trans. Equip. - Medium Trucks	11,159	5,471	5,688						
394000 Tools, Shop & Garage Equipment	112,696	29,631	83,065						
395000 Laboratory Equipment	29,654	13,453	16,201						
397000 Communication Equipment	2,534,514	468,818	2,065,696						
398000 Miscellaneous Equipment	214,264	68,077	146,187						
<b>Total General Plant</b>	<b>\$75,677,324</b>	<b>\$22,901,396</b>	<b>\$52,775,928</b>	<b>2.2%</b>		<b>\$506,651</b>		<b>\$506,651</b>	<b>0.7%</b>

**Aquila Corporate Assets - MPS**

Proposed Parameters  
Vintage Group Procedure

Statement E

Account Description	Present Parameters						Proposed Parameters					
	P-Life/ AYFR	Curve Shape	BG ASL	Rem. Life	Average Salvage	Future Salvage	P-Life/ AYFR	Curve Shape	VG ASL	Rem. Life	Average Salvage	Future Salvage
A	B	C	D	E	F	G	H	I	J	K	L	M
<b>GENERAL PLANT</b>												
390001 Structures and Improvements							45.00	R5	44.97	40.24		2.9
391001 Office Furniture and Equipment							20.00	L1.5	19.95	16.91		
391003 Computers - Hardware							5.00	R4	4.95	2.83		
391004 Computer Software							10.00	R4	9.85	6.97		
391005 Computer Systems Development							10.00	R4	9.37	4.67		
392004 Trans. Equip. - Medium Trucks							10.00	S3	11.27	1.82		
394000 Tools, Shop & Garage Equipment							20.00	L1.5	20.39	12.25		
395000 Laboratory Equipment							15.00	R4	15.11	5.99		
397000 Communication Equipment							10.00	S2	9.97	5.88		
398000 Miscellaneous Equipment							10.00	S2	10.07	5.65		
<b>Total General Plant</b>									12.27	8.11		0.7

**Aquila Corporate Assets - MPS**  
Jurisdictional Allocations

Statement F

Account Description	Plant Investment			Depreciation Reserve		
	Corporate	Factor	Allocated	Corporate	Factor	Allocated
A	B	C	D=B-C	B	C	D=B-C
<b>GENERAL PLANT</b>						
390001 Structures and Improvements	\$65,250,810	25.42%	\$16,586,756	\$4,634,704	24.31%	\$1,126,697
391001 Office Furniture and Equipment	12,933,525	25.39%	3,283,822	1,137,150	25.44%	289,291
391003 Computers - Hardware	15,795,080	24.36%	3,847,681	(2,091,178)	22.24%	(465,078)
391004 Computer Software	98,850,597	21.35%	21,104,602	12,805,254	20.37%	2,608,430
391005 Computer Systems Development	29,022,811	19.42%	5,636,230	6,432,704	19.42%	1,249,231
392004 Trans. Equip. - Medium Trucks	22,305	25.50%	5,688	(11,030)	25.50%	(2,813)
394000 Tools, Shop & Garage Equipment	326,258	25.46%	83,065	259,176	25.50%	66,090
395000 Laboratory Equipment	63,534	25.50%	16,201	7,321	25.50%	1,867
397000 Communication Equipment	4,972,787	41.54%	2,065,696	523,850	42.18%	220,960
398000 Miscellaneous Equipment	594,983	24.57%	146,187	304,289	24.42%	74,307
<b>Total General Plant</b>	<b>\$227,832,690</b>	<b>23.16%</b>	<b>\$52,775,928</b>	<b>\$24,002,240</b>	<b>21.54%</b>	<b>\$5,168,982</b>



*Statements A through F*

**Aquila Corporate Assets - SJLP**

Statement A

Comparison of Present and Proposed Accrual Rates

Present: BG Procedure / WL Technique

Proposed: VG Procedure / RL Technique

Account Description A	Present			Proposed				
	Avg. Life B	Net Salvage C	Accrual Rate D	Avg. Life E	Avg. Net Salvage F	W/L Rate G	Amortization H	R/L Rate I=G+H
<b>GENERAL PLANT</b>								
390001 Structures and Improvements			2.22%	44.97	2.9%	2.16%	0.28%	2.44%
391001 Office Furniture and Equipment			7.69%	19.95		5.01%	0.77%	5.78%
391003 Computers - Hardware				4.95		20.20%	12.90%	33.10%
391004 Computer Software				9.85		10.15%	3.58%	13.73%
391005 Computer Systems Development				9.37		10.67%	9.15%	19.82%
392004 Trans. Equip. - Medium Trucks			11.11%	11.27		8.87%	39.26%	48.13%
394000 Tools, Shop & Garage Equipment				20.39		4.90%	2.78%	7.68%
395000 Laboratory Equipment				15.11		6.62%	8.58%	15.20%
397000 Communication Equipment			5.00%	9.97		10.03%	5.94%	15.97%
398000 Miscellaneous Equipment			5.56%	10.07		9.93%	6.62%	16.55%
<b>Total General Plant</b>			<b>1.41%</b>	<b>12.28</b>	<b>0.7%</b>	<b>8.09%</b>	<b>3.88%</b>	<b>11.97%</b>

**Aquila Corporate Assets - SJLP**

Statement B

Comparison of Present and Proposed Accruals

Present: BG Procedure / WL Technique

Proposed: VG Procedure / RL Technique

Account Description	12/31/02 Plant Investment	2003 Annualized Accrual				Total	Difference
		Present	Whole-Life	Amortization	Proposed		
A	B	C	D	E	F=D+E	G=F-C	
<b>GENERAL PLANT</b>							
390001 Structures and Improvements	\$5,376,667	\$119,362	\$116,136	\$15,055	\$131,191	\$11,829	
391001 Office Furniture and Equipment	1,064,429	81,855	53,328	8,196	61,524	(20,331)	
391003 Computers - Hardware	1,222,539		246,953	157,707	404,660	404,660	
391004 Computer Software	6,356,093		645,143	227,549	872,692	872,692	
391005 Computer Systems Development	2,249,268		239,997	205,808	445,805	445,805	
392004 Trans. Equip. - Medium Trucks	1,851	206	164	727	891	685	
394000 Tools, Shop & Garage Equipment	27,014		1,324	751	2,075	2,075	
395000 Laboratory Equipment	5,273		349	452	801	801	
397000 Communication Equipment	742,934	37,147	74,516	44,131	118,647	81,500	
398000 Miscellaneous Equipment	47,361	2,633	4,703	3,135	7,838	5,205	
<b>Total General Plant</b>	<b>\$17,093,429</b>	<b>\$241,203</b>	<b>\$1,382,613</b>	<b>\$663,511</b>	<b>\$2,046,124</b>	<b>\$1,804,921</b>	

**Aquila Corporate Assets - SJLP**

Depreciation Reserve Summary

Vintage Group Procedure

December 31, 2002

Statement C

Account Description	Plant Investment	Recorded Reserve				Computed Reserve		Redistributed Reserve	
		Allocated	Adjustment	Total	Ratio	Amount	Ratio	Amount	Ratio
A	B	C	D	E=C+D	F=E/B	G	H=G/B	I	J=I/B
<b>GENERAL PLANT</b>									
390001 Structures and Improvements	\$5,376,667	\$364,751	(\$9,414)	\$355,337	6.61%	\$705,048	13.11%	\$104,292	1.94%
391001 Office Furniture and Equipment	1,064,429	93,701	1,205	94,906	8.92%	162,199	15.24%	23,993	2.25%
391003 Computers - Hardware	1,222,539	(149,101)	(120,570)	(269,671)	-22.06%	523,592	42.83%	77,451	6.34%
391004 Computer Software	6,356,093	795,206	(654,649)	140,557	2.21%	1,858,431	29.24%	274,904	4.33%
391005 Computer Systems Development	2,249,268	498,535	(241,384)	257,151	11.43%	1,128,235	50.16%	166,891	7.42%
392004 Trans. Equip. - Medium Trucks	1,851	(915)	(48)	(963)	-52.02%	1,552	83.85%	230	12.40%
394000 Tools, Shop & Garage Equipment	27,014	21,512	(1,550)	19,962	73.90%	10,784	39.92%	1,595	5.91%
395000 Laboratory Equipment	5,273	608	(201)	407	7.72%	3,183	60.36%	471	8.93%
397000 Communication Equipment	742,934	79,625	(3,439)	76,186	10.25%	304,774	41.02%	45,083	6.07%
398000 Miscellaneous Equipment	47,361	24,069	43	24,112	50.91%	20,788	43.89%	3,075	6.49%
<b>Total General Plant</b>	<b>\$17,093,429</b>	<b>\$1,727,991</b>	<b>(\$1,030,006)</b>	<b>\$697,985</b>	<b>4.08%</b>	<b>\$4,718,586</b>	<b>27.60%</b>	<b>\$697,985</b>	<b>4.08%</b>

**Aquila Corporate Assets - SJLP**  
Average Net Salvage

Statement D

Account Description	Plant Investment			Salvage Rate		Net Salvage			Average Rate
	Additions	Retirements	Survivors	Realized	Future	Realized	Future	Total	
A	B	C	D=B-C	E	F	G=E*C	H=F*D	I=G+H	J=I/B
<b>GENERAL PLANT</b>									
390001 Structures and Improvements	\$5,747,396	\$370,729	\$5,376,667	44.3%		\$164,233		\$164,233	2.9%
391001 Office Furniture and Equipment	1,612,050	547,621	1,064,429						
391003 Computers - Hardware	5,059,678	3,837,139	1,222,539						
391004 Computer Software	7,869,127	1,513,034	6,356,093						
391005 Computer Systems Development	3,200,023	950,755	2,249,268						
392004 Trans. Equip. - Medium Trucks	3,632	1,781	1,851						
394000 Tools, Shop & Garage Equipment	36,651	9,637	27,014						
395000 Laboratory Equipment	9,652	4,379	5,273						
397000 Communication Equipment	911,547	168,613	742,934						
398000 Miscellaneous Equipment	69,416	22,055	47,361						
<b>Total General Plant</b>	<b>\$24,519,172</b>	<b>\$7,425,743</b>	<b>\$17,093,429</b>	<b>2.2%</b>		<b>\$164,233</b>		<b>\$164,233</b>	<b>0.7%</b>

**Aquila Corporate Assets - SJLP**

Proposed Parameters  
Vintage Group Procedure

Statement E

Account Description	Present Parameters						Proposed Parameters					
	P-Life/ AYFR	Curve Shape	BG ASL	Rem. Life	Average Salvage	Future Salvage	P-Life/ AYFR	Curve Shape	VG ASL	Rem. Life	Average Salvage	Future Salvage
A	B	C	D	E	F	G	H	I	J	K	L	M
<b>GENERAL PLANT</b>												
390001 Structures and Improvements							45.00	R5	44.97	40.24		2.9
391001 Office Furniture and Equipment							20.00	L1.5	19.95	16.91		
391003 Computers - Hardware							5.00	R4	4.95	2.83		
391004 Computer Software							10.00	R4	9.85	6.97		
391005 Computer Systems Development							10.00	R4	9.37	4.67		
392004 Trans. Equip. - Medium Trucks							10.00	S3	11.27	1.82		
394000 Tools, Shop & Garage Equipment							20.00	L1.5	20.39	12.25		
395000 Laboratory Equipment							15.00	R4	15.11	5.99		
397000 Communication Equipment							10.00	S2	9.97	5.88		
398000 Miscellaneous Equipment							10.00	S2	10.07	5.65		
<b>Total General Plant</b>									12.28	8.01		0.7

**Aquila Corporate Assets - SJLP**  
Jurisdictional Allocations

Statement F

Account Description	Plant Investment			Depreciation Reserve		
	Corporate	Factor	Allocated	Corporate	Factor	Allocated
A	B	C	D=B-C	B	C	D=B-C
<b>GENERAL PLANT</b>						
390001 Structures and Improvements	\$65,250,810	8.24%	\$5,376,667	\$4,634,704	7.87%	\$364,751
391001 Office Furniture and Equipment	12,933,525	8.23%	1,064,429	1,137,150	8.24%	93,701
391003 Computers - Hardware	15,795,080	7.74%	1,222,539	(2,091,178)	7.13%	(149,101)
391004 Computer Software	98,850,597	6.43%	6,356,093	12,805,254	6.21%	795,206
391005 Computer Systems Development	29,022,811	7.75%	2,249,268	6,432,704	7.75%	498,535
392004 Trans. Equip. - Medium Trucks	22,305	8.30%	1,851	(11,030)	8.30%	(915)
394000 Tools, Shop & Garage Equipment	326,258	8.28%	27,014	259,176	8.30%	21,512
395000 Laboratory Equipment	63,534	8.30%	5,273	7,321	8.30%	608
397000 Communication Equipment	4,972,787	14.94%	742,934	523,850	15.20%	79,625
398000 Miscellaneous Equipment	594,983	7.96%	47,361	304,289	7.91%	24,069
<b>Total General Plant</b>	<b>\$227,832,690</b>	<b>7.50%</b>	<b>\$17,093,429</b>	<b>\$24,002,240</b>	<b>7.20%</b>	<b>\$1,727,991</b>

# ANALYSIS

## INTRODUCTION

This section provides an explanation of the supporting schedules developed in the Corporate Assets depreciation study to estimate appropriate projection curves, projection lives and statistics for each rate category. The form and content of the schedules developed for an account depend upon the method of analysis adopted for the category.

This section also includes an example of the supporting schedules developed for Account 390001 – Structures and Improvements as an illustration. Documentation for all other plant accounts is contained in the study work papers. The supporting schedules developed in the Corporate Assets study include:

- Schedule A – Generation Arrangement;
- Schedule B – Age Distribution;
- Schedule C – Unadjusted Plant History;
- Schedule D – Adjusted Plant History;
- Schedule E – Actuarial Life Analysis;
- Schedule F – Graphics Analysis; and
- Schedule G – Historical Net Salvage Analysis.

The format and content of these schedules are briefly described below.

## SCHEDULE A – GENERATION ARRANGEMENT

The purpose of this schedule is to obtain appropriate weighted-average life statistics for a rate category. The weighted-average remaining-life is the sum of Column H divided by the sum of Column I. The weighted average life is the sum of Column C divided by the sum of Column I.

It should be noted that the generation arrangement does not include parameters for net salvage. Computed Net Plant (Column C) and Accruals (Column I) must be adjusted for net salvage to obtain a correct measurement of theoretical reserves and annualized depreciation accruals.

The following table provides a description of each column in the generation arrangement.



*Generation Arrangement*

Column	Title	Description
A	Vintage	Vintage or placement year of surviving plant.
B	Age	Age of surviving plant at beginning of study year.
C	Surviving Plant	Actual dollar amount of surviving plant.
D	Average Life	Estimated average life of each vintage. This statistic is the sum of the realized life and the unrealized life, which is the product of the remaining life (Column E) and the theoretical proportion surviving.
E	Remaining Life	Estimated remaining life of each vintage.
F	Net Plant Ratio	Theoretical net plant ratio of each vintage.
G	Allocation Factor	A pivotal ratio which determines the amortization period of the difference between the recorded and computed reserve.
H	Computed Net Plant	Plant in service less theoretical reserve for each vintage.
I	Accrual	Ratio of computed net plant (Column H) and remaining life (Column E).

TABLE 3. GENERATION ARRANGEMENT

**SCHEDULE B – AGE DISTRIBUTION**

This schedule provides the age distribution and realized life of surviving plant shown in Column C of the Generation Arrangement (Schedule A). The format of the schedule depends upon the availability of either aged or unaged data. Derived additions for vintage years older than the earliest activity year in an account for unaged data are obtained from the age distribution of surviving plant at the beginning of the earliest activity year. The amount surviving from these vintages is shown in Column D. The realized life (Column G) is derived from the dollar years of service provided by a vintage over the period of years the vintage has been in service. Plant additions for vintages older than the earliest activity year in an account are represented by the opening balances shown in Column D.

The computed proportion surviving (Column D) for unaged is derived from a computed mortality analysis. The average service life displayed in the title block is the life statistic derived for the most recent activity year, given the derived age distribution at the start of the year and the specified retirement dispersion. The realized life (Column F) is obtained by finding the slope of an SC retirement dispersion, which connects the computed survivors of a vintage (Column E) to the recorded vintage addition (Column B). The realized life is the area bounded by the SC dispersion, the computed proportion surviving and the age of the vintage.

### **SCHEDULE C – UNADJUSTED PLANT HISTORY**

This schedule provides a summary of recorded plant data extracted from the continuing property records maintained by Company. Activity year total amounts shown on this schedule for aged data are obtained from a historical arrangement of the data base in which all plant accounting transactions are identified by vintage and activity year. Activity year totals for unaged data are obtained from a transaction file without vintage identification. Information displayed in the unadjusted plant history is consistent with regulated investments reported internally by the Company.

### **SCHEDULE D – ADJUSTED PLANT HISTORY**

This schedule provides a summary of recorded plant data extracted from the continuing property records maintained by the Company with sales, transfers, and adjustments appropriately aged for depreciation study purposes. Activity year total amounts shown on this schedule for aged data are obtained from a historical arrangement of the data base in which all plant accounting transactions are identified by vintage and activity year. Ageing of adjusting transactions is achieved using transaction codes that identify an adjusting year associated with the dollar amount of a transaction. Adjusting transactions processed in the adjusted plant history are not aged in the Company's records nor in the unadjusted plant history.

### **SCHEDULE E – ACTUARIAL LIFE ANALYSIS**

These schedules provide a summary of the dispersion and life indications obtained from an actuarial life analysis for a specified placement band. The observation band (Column A) is specified to produce either a rolling-band or a shrinking-band analysis depending upon the movement of the end points of the band. The degree of censoring (or point of truncation) of the observed life table is shown in Column B for each observation band. The estimated average service life, best fitting Iowa dispersion, and a statistical measure of the goodness of fit are shown for each degree polynomial (First, Second, and Third) fitted to the estimated hazard rates. Options available in the analysis include the width and location of both the placement and observation bands; the interval of years included in a selected rolling or shrinking band analysis; the estimator of the hazard rate (actuarial, conditional proportion retired, or maximum likelihood); the elements to include on the diagonal of a weight matrix (exposures, inverse of age, inverse of variance, or unweighted); and the age at which an observed life table is truncated.

The estimated average service lives (Columns C, F, and I) are flagged with an asterisk if negative hazard rates are indicated by the fitted polynomial. All negative hazard rates are set equal to zero in the calculation of the graduated survivor curve. The Conformance Index (Columns E, H, and K) is the square root of the mean sum-of-squared differences between the graduated survivor curve and

the best fitting Iowa curve. A Conformance Index of zero would indicate a perfect fit.

**SCHEDULE F – GRAPHICS ANALYSIS**

This schedule provides a graphics plot of a) the observed proportion surviving for a selected placement and observation band; b) the statistically best fitting Iowa dispersion and derived average service life; and c) the projection curve and projection life selected to describe future forces of mortality.

**SCHEDULE G – HISTORICAL NET SALVAGE ANALYSIS**

This schedule provides a moving analysis of the ratio of realized net salvage (Column I) to the associated retirements (Column B). This schedule also provides a moving average analysis of the components of net salvage related to retirements. The ratio of gross salvage to retirements is shown in Column D and the ratio of cost of removal to retirements is shown in Column G.

**AQUILA CORPORATE ASSETS**

Schedule A  
Page 1 of 1

General Plant

Depreciable General Plant

Account: 390001 Structures and Improvements

Dispersion: 45 - R5

Procedure: Vintage Group

**Generation Arrangement**

Vintage	December 31, 2002		Avg. Life	Rem. Life	Net Plant Ratio	Alloc. Factor	Computed Net Plant	Accrual
	Age	Surviving Plant						
A	B	C	D	E	F	G	H=C*F*G	I=H/E
2002	0.5	4,764,788	44.93	44.50	0.9904	1.0000	4,718,943	106,044
2001	1.5	11,441,163	45.00	43.50	0.9667	1.0000	11,059,792	254,248
2000	2.5	269,189	44.03	42.50	0.9652	1.0000	259,811	6,113
1999	3.5	454,812	44.96	41.50	0.9230	1.0000	419,810	10,116
1998	4.5	470,277	44.99	40.50	0.9002	1.0000	423,335	10,453
1997	5.5	44,703,387	45.00	39.50	0.8778	1.0000	39,239,705	993,410
1996	6.5	42,261	44.29	38.50	0.8693	1.0000	36,736	954
1995	7.5	60,988	44.41	37.50	0.8445	1.0000	51,504	1,373
1994	8.5	174,587	44.15	36.50	0.8268	1.0000	144,350	3,955
1993	9.5	960,384	44.75	35.50	0.7934	1.0000	761,948	21,463
1992	10.5	213,692	43.88	34.50	0.7862	1.0000	168,010	4,870
1991	11.5	331,302	44.36	33.50	0.7552	1.0000	250,195	7,468
1990	12.5	63,200	45.00	32.50	0.7222	1.0000	45,645	1,404
1989	13.5	21,086	44.12	31.50	0.7140	1.0000	15,055	478
1988	14.5	12,272	43.88	30.50	0.6951	1.0000	8,530	280
1987	15.5	364,145	44.70	29.50	0.6599	1.0000	240,312	8,146
1986	16.5	140,712	44.91	28.50	0.6346	1.0000	89,294	3,133
1985	17.5	81,206	44.11	27.50	0.6235	1.0000	50,633	1,841
1984	18.5	642,823	44.31	26.50	0.5981	1.0000	384,463	14,508
1983	19.5	38,537	43.66	25.50	0.5841	1.0000	22,508	883
Total	4.8	\$65,250,810	44.97	40.24	0.8949	1.0000	\$58,390,577	\$1,451,140

**AQUILA CORPORATE ASSETS**

Schedule B

General Plant

Page 1 of 1

Depreciable General Plant

Account: 390001 Structures and Improvements

**Age Distribution**

Vintage	Age as of 12/31/2002	Derived Additions	1999 Opening Balance	Experience to 12/31/2002		
				Amount Surviving	Proportion Surviving	Realized Life
A	B	C	D	E	F=E/(C+D)	G
2002	0.5	5,510,775		4,764,788	0.8646	0.4323
2001	1.5	11,441,163		11,441,163	1.0000	1.5000
2000	2.5	756,033		269,189	0.3561	1.5341
1999	3.5	467,241		454,812	0.9734	3.4601
1998	4.5		473,143	470,277	0.9939	4.4909
1997	5.5		44,705,584	44,703,387	1.0000	5.4999
1996	6.5		53,527	42,261	0.7895	5.7906
1995	7.5		100,987	60,988	0.6039	6.9059
1994	8.5		405,706	174,587	0.4303	7.6455
1993	9.5		1,156,784	960,384	0.8302	9.2453
1992	10.5		842,056	213,692	0.2538	9.3807
1991	11.5		577,917	331,302	0.5733	10.8599
1990	12.5		63,200	63,200	1.0000	12.5000
1989	13.5		51,047	21,086	0.4131	12.6196
1988	14.5		48,310	12,272	0.2540	13.3810
1987	15.5		454,659	364,145	0.8009	15.2014
1986	16.5		149,572	140,712	0.9408	16.4111
1985	17.5		201,245	81,206	0.4035	16.6053
1984	18.5		1,175,737	642,823	0.5467	17.8086
1983	19.5		183,079	38,537	0.2105	18.1614
1978	24.5		40,187		0.0000	21.0000
1977	25.5		19,827		0.0000	22.0000
1976	26.5		938		0.0000	23.0000
1975	27.5		14,345		0.0000	24.0000
1973	29.5		959		0.0000	26.0000
1971	31.5		1,765		0.0000	28.0000
1969	33.5		2,940		0.0000	30.0000
1968	34.5		353		0.0000	31.0000
1967	35.5		1,464		0.0000	32.0000
1966	36.5		1,832		0.0000	33.0000
1965	37.5		284		0.0000	34.0000
1962	40.5		291		0.0000	37.0000
1961	41.5		397		0.0000	38.0000
1960	42.5		616		0.0000	39.0000
1959	43.5		9,131		0.0000	40.0000
1958	44.5		33,889		0.0000	41.0000
1957	45.5		802,970		0.0000	42.0295
Total		\$18,175,213	\$51,574,740	\$65,250,810	0.9355	

**AQUILA CORPORATE ASSETS**

Schedule C

General Plant

Page 1 of 1

Depreciable General Plant

Account: 390001 Structures and Improvements

**Unadjusted Plant History**

Year	Beginning Balance	Additions	Retirements	Sales, Transfers & Adjustments	Ending Balance
A	B	C	D	E	F=B+C-D+E
1999	45,144,336	874,914	930,896	7,639,934	52,728,289
2000	52,728,289	1,478,779	41,831	(341,431)	53,823,805
2001	53,823,805	10,032,260	2,780,428	(2,073,442)	59,002,195
2002	59,002,195	6,994,602	745,987		65,250,810

**AQUILA CORPORATE ASSETS**

General Plant

Depreciable General Plant

Account: 390001 Structures and Improvements

Schedule D

Page 1 of 1

**Adjusted Plant History**

Year	Beginning Balance	Additions	Retirements	Sales, Transfers & Adjustments	Ending Balance
A	B	C	D	E	F=B+C-D+E
1999	45,687,028	606,983	930,896	7,639,934	53,003,048
2000	53,003,048	1,179,195	41,831	(341,431)	53,798,981
2001	53,798,981	11,540,912	2,780,428	(2,073,442)	60,486,023
2002	60,486,023	5,510,775	745,987		65,250,810

**AQUILA CORPORATE ASSETS**

General Plant

Depreciable General Plant

Account: 390001 Structures and Improvements

Schedule E

Page 1 of 1

T-Cut: None

Placement Band: 1957-2002

Hazard Function: Proportion Retired

**Rolling Band Life Analysis**

Weighting: Exposures

Observation Band	Censoring	First Degree			Second Degree			Third Degree		
		Average Life	Disper- sion	Conf. Index	Average Life	Disper- sion	Conf. Index	Average Life	Disper- sion	Conf. Index
A	B	C	D	E	F	G	H	I	J	K
1999-2002	0.0	13.3	L2 *	1.39	16.1	S1.5	0.45	16.2	S1.5 *	0.43



**AQUILA CORPORATE ASSETS**

General Plant

Depreciable General Plant

Account: 390001 Structures and Improvements

Schedule F  
Page 1 of 1

T-Cut: None

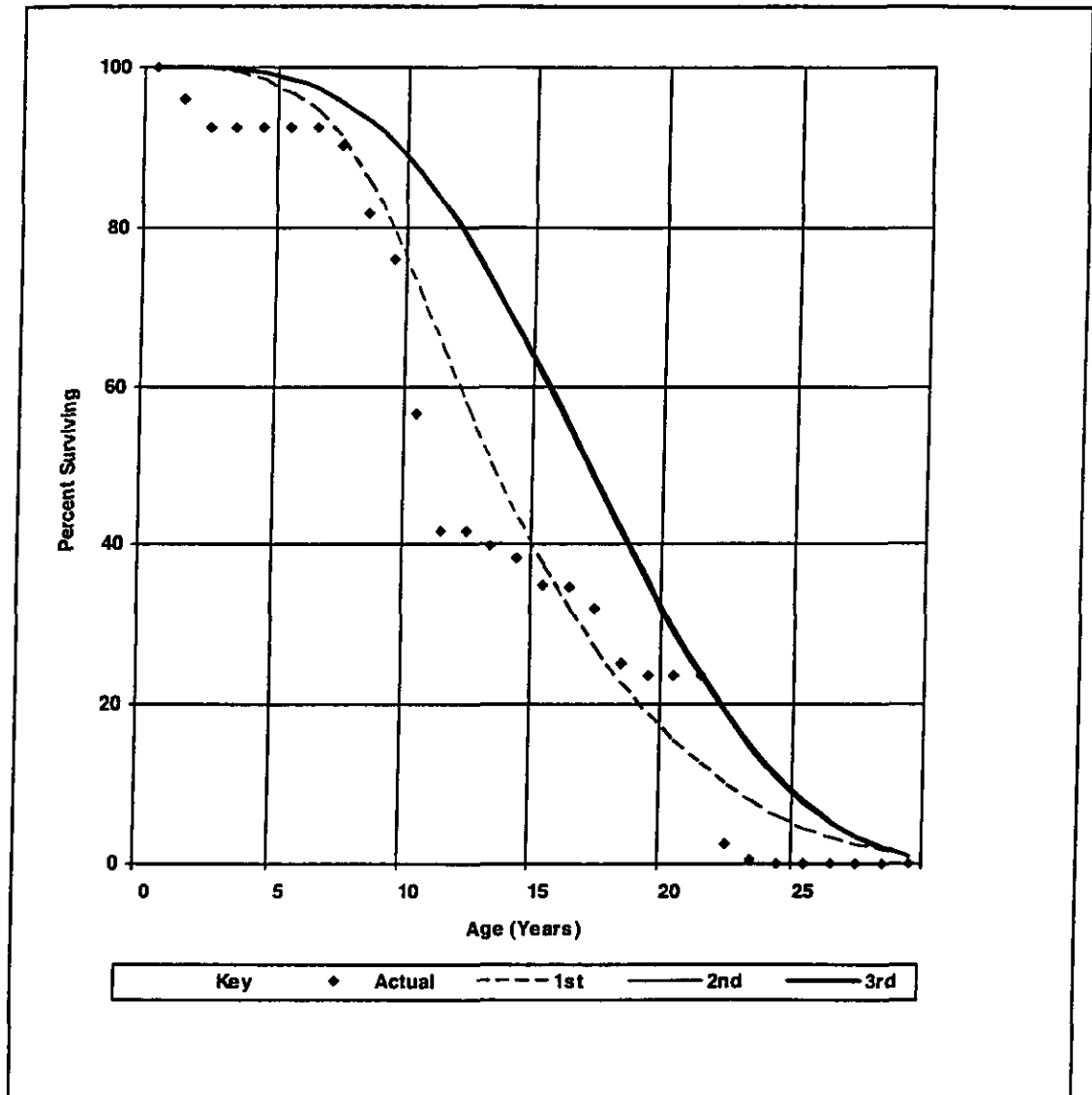
Placement Band: 1957-2002 Observation Band: 1999-2002

Hazard Function: Proportion Retired

Weighting: Exposures

**Graphics Analysis**

1st: 13.3-L2 2nd: 16.1-S1.5 3rd: 16.2-S1.5

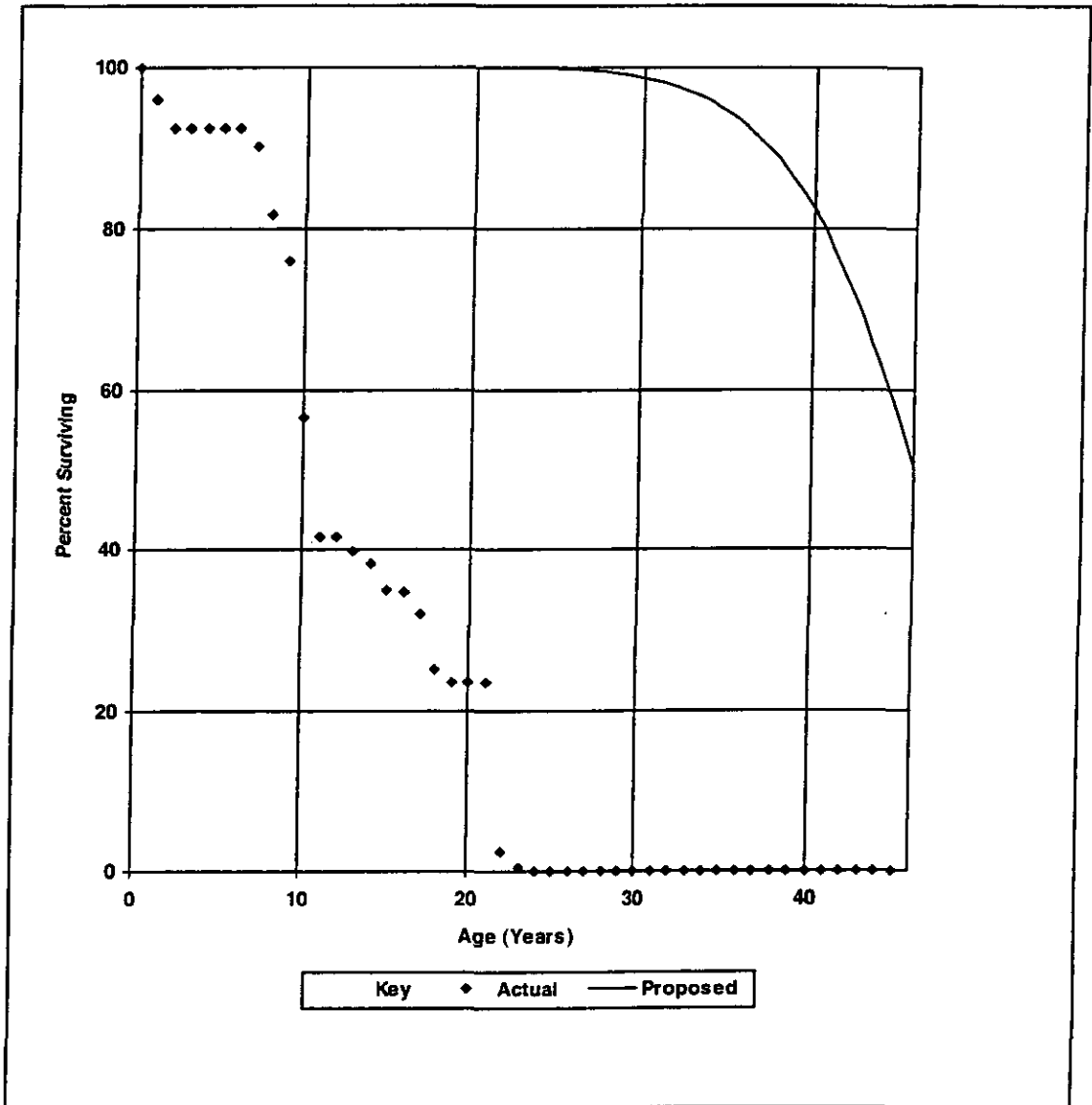


**AQUILA CORPORATE ASSETS**  
General Plant  
Depreciable General Plant  
Account: 390001 Structures and Improvements

Schedule F  
Page 1 of 1

T-Cut: None  
Placement Band: 1957-2002  
Observation Band: 1999-2002  
45.0-R5

Proposed Projection Life Curve



**AQUILA CORPORATE ASSETS**

Schedule G

General Plant

Page 1 of 1

Depreciable General Plant

Account: 390001 Structures and Improvements - Owned

**Unadjusted Net Salvage History**

Year	Retirements	Gross Salvage			Cost of Retiring			Net Salvage		
		Amount	Pct.	1-Yr Avg.	Amount	Pct.	1-Yr Avg.	Amount	Pct.	1-Yr Avg.
A	B	C	D=C/B	E	F	G=F/B	H	I=C-F	J=I/B	K
1999	930,896	155	0.0	0.0		0.0	0.0	155	0.0	0.0
2000	41,831		0.0	0.0		0.0	0.0		0.0	0.0
2001	2,780,428	1,145,739	41.2	41.2		0.0	0.0	1,145,739	41.2	41.2
2002	745,987	847,000	113.5	113.5		0.0	0.0	847,000	113.5	113.5
Total	4,499,143	1,992,894	44.3			0.0		1,992,894	44.3	

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the matter of Aquila, Inc. d/b/a Aquila            )  
Networks-L&P, for authority to file tariffs        )  
Increasing steam rates for the service provided    )  
To customers in the Aquila Networks-L&P area    )

Case No. HR-\_\_\_\_\_

County of Lee            )  
                                  )        ss  
State of Florida         )

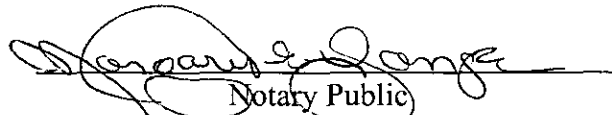
**AFFIDAVIT OF RONALD E. WHITE**

Ronald E. White, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Direct Testimony of Ronald E. White;" that said testimony was prepared by him and under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge, information, and belief.



Ronald E. White, Ph.D.

Subscribed and sworn to before me this 11<sup>th</sup> day of June, 2003.



Notary Public

Margaret E. Lange

My Commission expires:

OFFICIAL NOTARY SEAL  
MARGARET E LANGE  
NOTARY PUBLIC STATE OF FLORIDA  
COMMISSION NO. DD060266  
MY COMMISSION EXP. OCT. 19 2005