Exhibit No.: Issues: Class Cost of Service Witness: James A. Busch Sponsoring Party: MO PSC Staff Type of Exhibit: **Rebuttal Testimony** Case No.: EO-2002-384 Date Testimony Prepared: October 14, 2005 **MISSOURI PUBLIC SERVICE COMMISSION** UTILITY OPERATIONS DIVISION **REBUTTAL TESTIMONY** Son Ariso Curris OF **JAMES A. BUSCH** AQUILA, INC CASE NO. EO-2002-384 Jefferson City, Missouri October 2005 _Exhibit No._ Case No(s). EO-2002-32 Date<u>\\-07-05</u> Rptr_XF

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of an Examination of the) Class Cost of Service and Rate Design in) the Missouri Jurisdictional Electric) Service Operations of Aquila, Inc.,) formerly known as UtiliCorp United, Inc.

Case No. EO-2002-0384

AFFIDAVIT OF JAMES A. BUSCH

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STATE OF MISSOURI)) ss **COUNTY OF COLE**)

James A. Busch, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 5 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

James A. Busch day of October, 2005. scribed and sworn to before me this $\angle 3$ Dani2 IOTARY SEA Notary Public ion expires

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3	I.	Differences among the Parties' Class Cost of Service Studies
4	II.	Class Cost of Service Updates

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1	REBUTTAL TESTIMONY
2 3 4 5 6	OF
5	JAMES A. BUSCH
7 8	AQUILA, INC
9 10	CASE NO. EO-2002-384
11 12	Q. Please state your name and business address.
13 14	A. My name is James A. Busch and my business address is P. O. Box 360,
15	Jefferson City, Missouri 65102.
16	Q. Are you the same James A. Busch that filed direct testimony in this
17	proceeding?
18	A. Yes I am.
19	Q. What is the purpose of your rebuttal testimony?
20	A. The purpose of my rebuttal testimony is to respond to the direct testimony
21	of Aquila witness David Stowe, SIEUA/Ag Processing/FEA (Intervenors) witness
22	Maurice Brubaker, and Office of the Public Counsel (Public Counsel) witness Barbara
23	Meisenheimer. Further, as a result of discussions among the Parties during the
24	prehearing/settlement conference, I have updated the Staff's Class Cost of Service
25	(CCOS) Studies for Aquila Networks-L&P (L&P) and Aquila Networks-MPS (MPS).
26	I. Differences among the Parties' Class Cost of Service Studies
27	Q. What are the major differences in the various studies that you identified in
28	your review of the studies prepared by the other parties?
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Rebuttal Testimony of James A. Busch

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1	A. The single major difference among the studies is in the allocation of
2	production and transmission costs. Staff witness James Watkins will address the
3	appropriate basis for allocating production and transmission costs.
4	Q. Did you identify other differences between the Parties' CCOS studies?
5	A. Yes; however, the other differences are for the most part not very
6	significant in determining that Party's recommended revenue shifts.
7	Q. Other than the allocation of production and transmission cost, what is the
8	main difference between the Staff's studies and the studies provided by Mr. Brubaker?
9	A. The main difference between the Staff and Mr. Brubaker is the
10	determination of what the classes are for certain allocation purposes. This affects
11	primarily the residential class in the allocation of costs based on class peak. Class peak is
12	defined as the highest load of the class no matter when it occurs. Mr. Brubaker treats each
13	of the residential sub-classes as if they were classes in and of themselves. Thus, Mr.
14	Brubaker in essence sums the "class" peaks of each sub-class to derive the residential
15	class peak. For example, the residential class on the MPS system is made up of
16	residential-general customers and residential-space heating customers. Mr. Brubaker
17	treated each of these sub-classes as separate classes. He added the residential-general's
18	"class" peak in August to the residential-space heating's peak in January to come up with
19	the residential class peak. The same is true of the small general service class. This has
20	the effect of reducing the diversity benefits within the residential and small general
21	service classes and, thereby, increasing the amount of costs allocated to those classes and
22	reducing the amount of costs allocated to his clients. A "diversity benefit" is that plant
23	doesn't have to be installed to meet the residential general peak in August, plus the

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Rebuttal Testimony of James A. Busch

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residential space heating peak in January. Only enough plant has to be installed to meet
 the combined peak, whenever that occurs.

Q. What is the main difference between Staff's CCOS studies and Public
4 Counsel's studies?

A. For the distribution accounts (FERC accounts 364 – 367), Staff, as well as the Company and the Intervenors, functionalized the costs as primary or secondary costs and demand-related or customer-related costs. This recognizes that the capacity of the distribution system is determined by the size of the load, but the length of the distribution system is determined by the number of customers and their density. Public Counsel witness Barbara Meisenheimer, allocated all of the primary costs as if they were demandrelated. This is not a reasonable assumption.

12 **II**.

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Class Cost of Service Study – Updates

Q. What changes has the Staff made to update its CCOS Studies?

A. I have listed the changes below with an explanation of the change:

Allocated to the lighting class a portion of the costs recorded in
 certain distribution accounts based on Aquila's representation of how distribution
 facilities serving lighting customers were recorded in its accounting system.

Functionalized certain costs recorded in a sub-account of Account
 368 as "Distribution Transformers-Primary" based on Aquila's representation that the
 cost of capacitors had been recorded in this sub-account.

3. Corrected a data entry error in the customer weights that were
input into the L&P study for allocating Accounts 364 and 365.

Rebuttal Testimony of James A. Busch

1	4. Corrected a data entry error in the functionalization of certain production	n
2	payroll expenses to follow plant.	

- - Q. Please describe the results of Staff's updated CCOS studies.
- 4 A. The results for MPS are provided in Schedule 1 and for L&P in

5 Schedule 2. Table 1 and Table 2 below summarize those results.

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Table 1 – MPS CCOS Class Revenues

	TOTAL	Residential	SGS	LGS	LPS	Other
Revenue Deficiency	\$0	\$4,533,994	(\$2,245,612)	(\$3,738,907)	\$1,103,191	\$69,555
%	0.00%	2.67%	-4.17%	-8.46%	2.16%	12.33%

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Table 2 – L&P CCOS Class Revenues

	TOTAL	Residential	SGS	LGS	LPS
Revenue Deficiency	\$0	\$2,066,124	(\$989,163)	(\$1,704,135)	\$569,029
%	0.00%	5.03%	-13.06%	-9.61%	2.48%

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For comparison, Table 3 and Table 4 below show the results from Staff's previous

10 CCOS studies.

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Table 3 – MPS CCOS Class Revenues

	TOTAL	Residential	SGS	LGS	LPS	Other
Revenue Deficiency	\$0	\$5,382,207	(\$1,880,429)	(\$3,463,580)	\$1,418,776	\$74,534
%	0.00%	3.16%	-3.49%	-7.84%	2.78%	13.21%

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Table 4 – L&P CCOS Class RevenuesTOTALResidentialSGSLGSLPSRevenue
Deficiency\$0\$3,167,745(\$1,206,592)(\$1,753,980)\$839,838

-15.93%

-9.89%

2.76%

2

%

Q. Are there also corrections that you want to make to your direct testimony
4 at this time?

7.71%

A. Yes. On page 6, lines 10 and 11, I made reference to a schedule 2 that was
not attached to my testimony and therefore that reference should be stricken.

On page 15, lines 6 – 13, in my discussion of how I allocated services and meters,
I indicated that the costs were allocated based on a service-weighted allocator. It should
have stated that it was a meter-weighted allocator.

Q. What is your recommendation to the Commission?

0.00%

11 A. I recommend that the Commission adopt the Staff's updated CCOS studies

12 for MPS and L&P as the most reasonable studies upon which to base its determination of

- 13 the cost of serving each customer class.
 - Q. Does this conclude your direct testimony?
- 15

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A. Yes.

				Revenue Neutral R AQUILA NETWORK CASE NO. EO-200	S - MPS					
	FUNCTIONAL CATEGORY		RES	SGS	LGS	LPS	Other	Lighting	TOTAL	% OF TOTAL
PRODUCTION	CAPACITY		\$52,578.063	\$16,618,423	\$15,318,103	\$20,752,525	\$241,481	\$432,674	\$105,941,269	30.82
PRODUCTION	ENERGY		\$47,510,360	\$15,789,899	\$15,880,523	\$22,900,632	\$258,781	\$762,800	\$103,102,997	30.00
RANSMISSION	CAPACITY		\$13,397,158	\$4,403,860	\$4,400,488	\$8,218,959	\$70,495	\$197,193	\$28,688,150 \$10,751,813	8.35 3.13
DISTRIBUTION	SUBSTATIONS	DEMAND	\$5,942,571	\$1,738,603	\$1,361,226	\$1,605,774	\$24,039	\$79,599	\$10,751,013	3.13
DISTRIBUTION	POLES AND CONDUCTORS	PRI, FEEDER - DEMAND	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00
DISTRIBUTION	POLES AND CONDUCTORS	PRI TAP -CUSTOMER	\$6,681,107	\$2,891,270	\$232,601	\$48,130	\$0	\$467,837	\$10,318,945	3.00
DISTRIBUTION	POLES AND CONDUCTORS	SEC. CUSTOMER	\$5,699,911	\$2,466,007	\$194,191	\$29,932	\$308	\$0	\$8,390,350	2.44
DISTRIBUTION	POLES AND CONDUCTORS	PRI, TAP - DÉMAND	\$10,351,575	\$3,028,535	\$2,371,168	\$2,797,155	\$41,874	\$138,656	\$18,728,984	5.45
DISTRIBUTION	POLES AND CONDUCTORS	SEC. DEMAND	\$4,794,269	\$1,400,745	\$1,057,921	\$628,088	\$19,394	50	\$7,900,415	2.30
DISTRIBUTION	TRANSFORMERS	SEC. CUSTOMER	\$11,342,584	\$2,150,908	\$909,554	\$479,938	\$13,833	\$0	\$14,896,817	4.33
DISTRIBUTION	TRANSFORMERS	DEMAND	\$504,849	\$134,304	\$94,654	\$51,219	\$1,554	\$0	\$786,681	0.23
	CUSTOMER INSTALLATIONS		\$1,508,470	\$217.541	\$8.565	\$880	\$16	\$0	\$1,735,474	0.50
DISTRIBUTION	SERVICES		\$5,860,242	\$845,346	\$116,973	\$39,923	\$324	\$410,357	\$7,273,165	2.12
DISTRIBUTION	METERS		\$3,974,738	\$573,380	\$79,338	\$27,078	\$220	\$278,326	\$4,933,058	1.44
			(\$256,936)	(\$37.063)	(\$1,491)	(\$197)	(\$3)	(\$17,992)	(\$313,682)	-0.09
	CUSTOMER DEPOSITS		(a250,930) \$1,165,033	\$504,172	\$40,560	\$8,044	\$63	\$81,580	\$1,799,452	0.5
	METER READING BILLING, SALES, SERVICE		\$5,623,677	\$811,221	\$32,631	\$4,314	\$61	\$383,792	\$6,865,896	2.04
	ASSIGNED LGS/LPS/SC ASSIGNED RES/SGS		\$0 \$7,349,251	\$0 \$1,060,137	\$1,035,337 \$0	\$136,888 \$D	\$1,928 \$0	\$0 \$0	\$1,174,153 \$8,409,388	0.3/ 2.4!
	Assigned Lighting		\$0	\$0	\$ 0	\$0	\$0	\$2,342,925	\$2,342,925	D.6
	TOTAL		\$184.027.021	\$54,597,268	\$43,132,340	\$55,727,282	\$674,369	\$5,567,748	\$343,726,028	100.00
	Allocate Cost of Service for Others		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
			\$184,027,021	\$54,597,268	\$43,132,340	\$55,727,282	\$674.369	\$5,567,748	\$343,726,028	
	TOTAL COST OF SERVICE		53.54%	404,097,200	12.55%	16.21%	0.20%	1.62%	100%	
	RATE REVENUE		\$170.064.667	\$53,861,537	\$44,188,703	\$51,095,135	\$564,116	\$5,167,156	\$324,941,314	
,	Mocate Rate Revenues for Others		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	NON RATE REVENUE		\$2,034,732	\$844,424	\$528,694	\$611,326	\$6,749	\$61,822	\$3,887,748	1
	nterruptible Credit		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DifSystem Revenue		\$7,386,948	\$2,334,803	\$2,152,115	\$2,915,623	\$33,927	\$60,768	\$14,884,205	
	Excess Fecility Revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	nterdepartmental Sales		\$6,679	\$2,115	\$1,735	\$2,007	\$22	\$203 \$3	\$12,761 \$0	
	Allocate Non Rate Revenues for Othera		\$0	\$0	\$0.	\$0	\$0	\$0	16	1
			\$179,493,026	\$56,842,880	\$46,871,247	\$54,624,091	\$604,814	\$5,289,970	\$343,726,028	1
,			52.22%	16.54%	13.64%	15.89%	0.18%	1.54%	100%	1
	REVENUE DEFICIENCY		\$4,533,994	(\$2,245,612)	(\$3,738,907)	\$1,103,191	\$69,555	\$277,779	\$0	
	· · · · · · · · · · · · · · · · · · ·									4
	% CHANGE		2.67%	-4.17%	-8.46%	2.16%	12.33%	5.38%	0.00%	

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				ionue Neutra	I ROR 8.58%)					
				Venue Neutra		,				
				ASE NO. EO-				4 1 - 1 - 41	TOTAL	
	FUNCTIONAL CATEGORY		RES	SGS	LGS	LPS		Lighting	TOTAL	% OF TOTAL
PRODUCTION	CAPACITY		\$13,950,182	\$1,977,238	\$6,667,427	\$10,539,030	\$ 0	\$280,615	\$33,414,490	34.49 26.31
PRODUCTION	ENERGY		\$9,996,674	\$1,445,844	\$5,134,745	\$8,610,374	\$0	\$301,949 \$62,749	\$25,489,586 \$7,471,900	7.71
TRANSMISSION	CAPACITY		\$3,119,436	\$442,135	\$1,490,920 \$930,131	\$2,356,660 \$1,207,822	\$0 \$0	\$60,506	\$4,774,537	4.93
DISTRIBUTION	SUBSTATIONS	DEMAND	\$2,253,555	\$322,524	\$930,131	\$1,207,622	30	400,500	4411141001	
DISTRIBUTION	POLES AND CONDUCTORS	PRI. FEEDER - DEMAND	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00
DISTRIBUTION	POLES AND CONDUCTORS	PRI TAP CUSTOMER	\$1,121,743	\$358,564	\$130,169	\$10,287	\$0	\$138,394	\$1,759,136	1.82
DISTRIBUTION	POLES AND CONDUCTORS	SEC. CUSTOMER	\$1,203,193	\$384,599	\$138,976	\$10,240	\$ 0	\$0	\$1,737,008	
DISTRIBUTION	POLES AND CONDUCTORS	PRI, TAP - DEMAND	\$2,795,642	\$400,106	\$1,153,872	\$1,498,360	\$ 0	\$75,060	\$5,923,041	6.11
DISTRIBUTION	POLES AND CONDUCTORS	SEC. DEMAND	\$679,928	\$97,310	\$279,113	\$309,054	\$ 0	\$0	\$1,365.404	1.41
DISTRIBUTION	TRANSFORMERS	SEC, CUSTOMER	\$2,166,549	\$365,091	\$395,139	\$296,729	\$0	S 0	\$3,223,509	3.33
DISTRIBUTION	TRANSFORMERS	DEMAND	\$95,440	\$13,869	\$33,751	\$40,937	\$0	\$0	\$183,997	0.19
			\$79,136	\$51,083	\$123,805	\$126,867	\$0	S 0	\$380,890	0.39
DISTRIBUTION	CUSTOMER INSTALLATIONS SERVICES		\$1,201,251	\$218.668	\$99,203	\$6,255	\$0	\$148,203	\$1,673,780	1.73
DISTRIBUTION DISTRIBUTION	METERS		\$962,065	\$178,932	\$81,102	\$5,113	\$0	\$121,161	\$1,368,373	1.41
				(62,400)	(\$563)	(\$30)	\$0	(\$3,593)	(\$36,413)	-0.04
	CUSTOMER DEPOSITS		(\$29,124)	(\$3,103) \$97,706	\$35,470	\$2,798	\$0	\$37,711	\$479,353	0.49
	METER READING		\$305,668 \$2,737,730	\$291,704	\$52,940	\$2,784	\$0	\$337,765	\$3,422,931	3.53
	BILLING, SALES, SERVICE		\$2,151,150	\$231,1Q4						
	ASSIGNED LGS/LPS/SC		\$0	\$0	\$373,081	\$19,618	\$0	\$0	\$392,698	
	ASSIGNED RES/SGS		\$2,759,041	\$293,975	\$0	\$0	\$0	\$0	\$3,053,016	3.15
	Assigned Lighting		\$0	\$0	\$0	\$0	\$0	\$807,417	\$807,417	0.83
	TOTAL		\$45,418,108	\$6,936,442	\$17,119,288	\$25,042,878	\$0	\$2,367,938	\$96,884,654	100.00
	Nocate Cost of Service for Others		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
-	TOTAL COST OF SERVICE		\$45,418,108	\$6,936,442	\$17,119,288	\$25,042,878	\$0	\$2,367,938	\$96,884,654	
	%		48.68%	7.16%	17.67%	25.85%	0.00%	2.44%	100%	4
			0111100.000	AT 575 504	\$17,728,841	\$22,910,401	\$0	\$2,238,976	\$91,559,859	ł
	RATE REVENUE		\$41,106,120 \$0	\$7, <u>575,521</u> \$0	<u></u>	\$22,910,401	\$0 \$0	\$0 \$0		1
,	Allocate Rate Revenues for Others		•-	••			*-			
1	ION RATE REVENUE		\$746,413	\$137,558	\$382,853	\$442,966	\$0	\$40,656	\$1,750,448	J
li li	nterruptible Credit		\$0	\$ 0	(\$4,927)	(\$12,317)	\$0	\$0	(\$17,244)	
	OffSystem Revenue		\$1,499,451	\$212,525	\$716,656	\$1,132,799 \$0	\$0 \$0	\$30,162 \$0	\$3,591,593 \$0	
	Excess Facility Revenue		\$0 50	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	50 50	
	Sale of Emission		SO	\$0 \$0	\$0 \$0	sõ	sõ	\$0	so	
	Allocate Non Rate Revenues for Others		0 ¢	~	~~]
	TOTAL REVENUE		\$43,351,984	\$7,925,604	\$18,823,423	\$24,473,849	\$0	\$2,309,794	\$96,884,654	1
	%		44.75%	8.18%	19,43%	25.26%	0.00%	2.38%	100%	1
			\$2,066,124	(\$989,163)	(\$1,704,135)	\$569,029	\$0	\$58,144	\$0	
	REVENUE DEFICIENCY					+0				1
	% CHANGE		5.03%	-13.06%	-9.61%	2.48%	T	2.60%	0.00%	J

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