Exhibit No.:

Issues: Revenues

Witness: Eric L. Watkins

Sponsoring Party: Aquila Networks-MPS

& L&P

Case No.: ER-

Before the Public Service Commission of the State of Missouri

Direct Testimony

of

Eric L. Watkins

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI DIRECT TESTIMONY OF ERIC L. WATKINS ON BEHALF OF AQUILA, INC. D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P CASE NO. ER-_____

1	Q.	Please state your name and business address.
2	A.	My name is Eric L. Watkins and my business address is 20 West 9 th Street, Kansas
3		City, MO, 64105 USA.
4	Q.	By whom are you employed and in what capacity?
5	A.	I am employed by Aquila Inc. ("Aquila" or "Company") as the Vice President-Risk
6		Management reporting to the Chief Financial Officer of Aquila.
7	Q.	Please describe your responsibilities in that position.
8	A.	I am responsible for directing Aquila's risk pricing and structuring activities, middle
9		office controls implementation and monitoring, fundamental analysis, and
10		development of models and databases to weather normalize historical electric and gas
11		sales, revenue and system loads for regulatory cases; forecast electric and natural gas
12		sales, system loads, revenues, and customers; service area economic/demographic
13		forecasts; market forecasts; and energy resource plans for Aquila's regulated electric
14		and gas utility operations in the United States.
15	Q.	Please describe your educational background.
16	A.	I hold a Bachelor of Science degree in Mathematics from the University of Arkansas,
17		and a Master of Business Administration degree in Finance from the University of
18		Missouri-Kansas City.
19	Q.	Please describe your professional work experience.

- I have been employed by Aquila Inc. since June 1991. My experiences since that
 time have included regulatory analysis including weather normalization and
 forecasting duties for resource planning and budgeting, competitive and industry
 analysis for merger and acquisition candidates and new business ventures, structure
 desk analysis, and accounting and financial management. Before coming to Aquila
 Inc., I was employed by Burns and McDonnell Engineers-Architects-Consultants
 from February 1988 to May 1991.
- 8 Q. What is the purpose of your direct testimony in this proceeding?
- 9 A. The purpose of my direct testimony in this proceeding is to sponsor and recommend 10 that the Commission adopt the weather normalization adjustment to class sales and revenue for Aquila Networks-MPS ("MPS") and Aquila Networks-L&P ("L&P) 11 shown on Schedules ELW-1 and ELW-2, the customer annualization adjustment 12 shown on Schedules ELW-3 and ELW-4, and the weather normalized system hourly 13 14 loads shown on Schedules ELW-5 and ELW-6. Aguila witness Jerry Boehm uses these weather normalized system hourly loads in estimating normalized fuel and 15 16 purchase power costs.
- 17 Q. Do you have a recommendation for the Commission regarding weather normalization 18 of MPS sales and revenue, customer annualization adjustment, and system hourly 19 loads?
- A. I recommend that the Commission adopt the weather normalization adjustments to

 MPS and L&P sales and revenue, customer annualization adjustment, and the weather

 normalized system hourly loads that I am sponsoring in this case.

1		WEATHER NORMALIZATION OF CLASS SALES AND REVENUE
2	Q.	Please provide a description of the methods and models used to calculate the weather
3		normalization adjustments to class kWh sales for MPS.
4	A.	Weather normalization adjusts the test year sales and revenue for the impact of
5		weather. Normal weather is based on daily temperatures over a 30-year historical
6		period (1971-2000). A set of statistical models were developed to calculate the
7		weather adjustments to weather sensitive rate class kWh sales for the test year ending
8		December 31, 2002.
9		The weather sensitive rate classes that were weather normalized are listed below.
10		For MPS:
11 12 13 14 15		Residential (60-General Service, 70-Space Heat) Small General Service (310-No Demand Meter, 311-Secondary, 316-Primary) Large General Service (320-Secondary, 325-Primary) Large Power (330-Secondary, 335-Primary) Schools & Churches (340-Secondary)
16 17		For L&P:
18 19 20 21 22 23		Residential (910,911,913,914,915,920,921,922) Small General Service (930,931,932,933,941) Large General Service (940) Large Power (944) Schools & Churches (934)
24 25		A statistical model was developed for each of the rate classes listed above. The
26		objective was to construct models that would yield an appropriate weather response
27		function, which could be used to estimate kWh sales under normal weather conditions
28		for the test year. The starting point for each of these models was to disaggregate
29		monthly billed sales data into daily kWh sales. This was done using load research
30		data for each of the rate classes for the test year ending December 31, 2002. This

hourly/daily information was used to determine appropriate ratios for allocating monthly billing cycle data into daily usage data. Daily weather response functions were then derived using MetrixND software for each rate class. Normal weather variables based on 1971-2000 average daily temperature (2-day rolling average) data for Kansas City, Missouri (MCI Airport) were used in each rate class model to estimate kWh sales under normal weather conditions and predicted actual weather conditions. In order to compute the 2-day rolling average daily temperatures, average daily normal temperatures for 1971-2000 were computed from daily maximum and minimum temperatures. The average daily temperatures were ranked in descending order by calendar month, averaged by rank order for each day during 1971-2000. The resulting normal average daily temperatures were then sorted into the same descending rank order as actual average daily temperatures for the test year. The weather adjustment to kWh sales is calculated as the difference between predicted normal minus predicted actual daily kWh sales. Daily weather adjustments were reallocated to billing months based on appropriate billing cycles for each rate class. Q. Please describe the results of the weather normalization adjustment to kWh sales for the test year ending December 31,2002. A. Schedules ELW-1 and ELW-2 provide the weather normalization adjustment to kWh sales for MPS and L&P, respectively. The total weather normalization adjustment for weather sensitive retail rate classes is (96,680,000) kWh for MPS and (21,438,000) kWh for L&P for the test year ending December 31, 2002. Please describe the method for calculating the weather normalization adjustment to Q. revenue for weather sensitive rate classes.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

1 A. The method used for calculating the weather normalization adjustment for revenue for the test year ending December 31, 2002 for each weather sensitive rate class, is 2 based on actual observed average rates by billing cycle for the test year. Actual 3 average rates were multiplied by weather normalization adjustments (normal – actual) 4 5 kWh sales by billing cycle for each rate class that was weather normalized to compute weather adjustments to revenue. This method assumes that weather 6 7 normalization affects only the weather sensitive rate class sales, with no effect from 8 customer charges or other fixed charges paid by customers O. 9 Please describe the results of the weather normalization adjustment to revenue for the 10 test year ending December 31,2002. Schedules ELW-1 and ELW-2 provide the weather normalization adjustment to 11 A.

CUSTOMER ANNUALIZATION ADJUSTMENT

adjustment to revenue for weather sensitive retail rate classes is (\$6,778,862) for

Q. Please describe the method for calculating the customer normalization adjustment to revenue for weather sensitive rate classes.

MPS and (\$1,412,197) for L&P as reflected in Adjustment R-10.

revenue for MPS and L&P, respectively. The total weather normalization

12

13

14

15

A. A customer annualization adjustment to the test year revenue is made to reflect
additional sales and revenue that will occur in the future because of projected growth
in the number of customers. This method is simple and requires dividing the weather
normalized test year rate class revenues by average customers, and then multiplying
the result by the projected customers as of September 30, 2003 to obtain customer
annualized revenues. Customers were projected using MetrixND exponential

- smoothing models based on trends over the past 5 years in these historical monthly customers by rate class. The customer annualization adjustment is the difference between the test year weather normalized revenues and the customer annualized revenues projected at September 30, 2003 customer levels.
- Please describe the results of the customer annualization adjustment to revenue at September 30, 2003.
- A. Schedules ELW-3 and ELW-4 provide the customer annualization adjustment to revenue for MPS and L&P, respectively. The total customer annualization adjustment to revenue for weather sensitive retail rate classes is \$6,455,699 for MPS and \$775,231 for L&P based on projected customer levels at September 30, 2003 as reflected in Adjustment R-10.

WEATHER NORMALIZATION OF SYSTEM HOURLY LOAD

Q. Please describe the method and data sources used for weather normalizing system hourly load.

12

13

14

A. System hourly load in kW represents the hourly electric supply requirements for the 15 energy demands of MPS and L&P electric customers and internal needs. Actual 16 17 system hourly loads for 2001 and 2002 were weather normalized using the MetrixND 18 software with methods and data sources consistent with the weather normalization of 19 class sales, as previously described in my testimony. System hourly load data for 2001 and 2002 excludes two large MPS wholesale municipal customers 20 21 (Harrisonville and Odessa), since it was assumed these customers would not be 22 receiving service from MPS after their existing contracts expire. A weather response function was derived using daily weather variables (2-day average daily temperature) 23

- 1 in a cubic model specification along with other explanatory variables that affect system loads such as days of the week, holidays, and monthly intercepts. The 2 weather normal results of the daily model were allocated to the hourly profile using 3 4 the ratio of actual hourly loads to the total load for a given day, with the hourly ratios 5 averaged for similar day types. MPS system hourly loads for 2003 were projected 6 assuming an overall MPS system energy growth rate of 2.18% multiplied by 2002 7 weather normalized hourly loads. Similarly, L&P system hourly loads for 2003 were 8 projected assuming an overall L&P system energy growth rate of 1.43% multiplied 9 by 2002 weather normalized hourly loads.
- Q. Please describe the results of the MPS and L&P weather normalized system hourly loads for 2002 and projection for 2003.
- 12 A. Schedules ELW-5 and ELW-6 provide a summary of the MPS and L&P weather 13 normalized system hourly loads for 2002 and 2003, respectively.
- The MPS weather normalized net energy for load is 5,440,192 MWH, and 5,558,852 14 MWH for 2002 and 2003, respectively, which results in annual energy growth of 15 16 118,660 MWH, or 2.18%. The adjustment from 2002 actual to 2003 normal system 17 hourly loads is an increase of 2,259 MWH net energy for load. Weather normalized 18 system hourly loads are used by Aquila witness Jerry Boehm for normalizing MPS 19 fuel and purchased energy costs for the 2002 test year and 2003 projected year. The L&P weather normalized net energy for load is 1,911,765 MWH, and 1,939,156 20 21 MWH for 2002 and 2003, respectively, which results in annual energy growth of

22

23

27,391 MWH, or 1.43%. The adjustment from 2002 actual to 2003 normal system

hourly loads is an increase of 2,206 MWH net energy for load. Weather normalized

1		system hourly loads are used by Aquila witness Jerry Boehm for normalizing L&P
2		fuel and purchased energy costs for the 2002 test year and 2003 projected year.
3		RECOMMENDATION
4	Q.	What is your recommendation to the Commission?
5	A.	My recommendation to the Commission is that it adopt the MPS and L&P weather
6		normalization adjustment and customer annualization adjustment to rate class sales
7		and revenue, and the weather normalized system hourly loads, which I am sponsoring
8		in my testimony.
9	Q.	Does this conclude your direct testimony?
0	A.	Yes, it does.

ELECTRIC

Aquila Networks, Missouri Public Service Division Weather Normalization Adjustment Test Year Ending 12/31/02

	MWh Sales	s Adjustme	ent (Normal -	Actual)									
Rate Class	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Annual
60	316	2,160	611	(2,076)	(1,674)	(5,124)	(15,450)	(16,513)	(16,446)	(10,046)	(1,479)	375	(65,348)
70	4,277	5,528	608	(1,257)	243	(1,538)	(3,867)	(4,726)	(3,887)	(2,773)	(4,139)	1,207	(10,323)
310	227	236	25	(75)	(53)	(106)	(410)	(424)	(422)	(242)	(41)	82	(1,203)
311	121	343	83	(345)	(331)	(687)	(2,431)	(2,543)	(2,477)	(1,403)	(124)	81	(9,711)
316	(1)	(0)	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	(0)	(2)
320	250	(23)	(29)	(305)	(456)	(372)	(1,920)	(1,727)	(2,139)	(900)	1,336	235	(6,049)
325	(72)	(49)	(1)	2	(6)	(14)	(38)	(39)	(37)	(17)	12	(17)	(278)
330	(119)	(64)	24	(87)	30	(166)	(262)	(215)	(351)	(121)	113	(61)	(1,280)
335	(128)	(71)	39	(72)	41	(150)	(203)	(141)	(208)	17	11	(55)	(921)
340	81	44	(113)	(190)	251	335	(57)	(718)	(1,009)	(422)	51	183	(1,564)
Total Retail	4,953	8,105	1,246	(4,404)	(1,956)	(7,822)	(24,639)	(27,046)	(26,977)	(15,908)	(4,261)	2,030	(96,680)
% Actual	1.2%	2.4%	0.3%	-1.2%	-0.6%	-2.0%	-4.7%	-4.7%	-5.2%	-4.0%	-1.2%	0.5%	-1.9%

ELECTRIC

Aquila Networks, Missouri Public Service Division Weather Normalization Adjustment Test Year Ending 12/31/02

	Revenue Adjustment (Normal - Actual)												
Rate Class	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Annual
60	19,560	134,550	39,078	(131,489)	(106,877)	(350,824)	(1,111,287)	(1,191,957)	(1,182,468)	(602,082)	(92,513)	22,250	(4,554,060)
70	185,649	248,192	26,340	(59,180)	12,590	(109,329)	(277,962)	(341,039)	(279,466)	(146,703)	(207,168)	53,722	(894,354)
310		12,275	1,394	(4,073)	(3,053)	(8,000)	(33,974)	(35,149)	(34,945)	(13,426)	(2,332)	4,401	(105,100)
311		17,778	4,369	(16,243)	(17,239)	(65,447)	(166,697)	(170,654)	(168,319)	(69,843)	(6,468)	4,062	(648,505)
316	(41)	(13)	4	(3)	(1)	(11)	(20)	(16)	(16)	(2)	2	(9)	(125)
320	10,994	(956)	(1,197)	(13,164)	(19,601)	(20,718)	(114,626)	(100,958)	(126,498)	(35,851)	58,121	10,191	(354,263)
325	(3,001)	(2,020)	(39)	63	(235)	(715)	(2,105)	(2,329)	(2,003)	(656)	448	(616)	(13,208)
330	(4,458)	(2,278)	906	(3,010)	1,055	(8,516)	(6,606)	(10,654)	(18,138)	(4,266)	4,322	(2,205)	(53,849)
335	(4,608)	(2,498)	1,403	(3,080)	1,239	(7,076)	(10,160)	(6,519)	(10,039)	599	367	(1,930)	(42,302)
340	4,099	2,314	(5,358)	(10,362)	13,600	23,565	(4,139)	(52,684)	(74,073)	(22,455)	2,834	9,564	(113,095)
Total Retail	226,171	407,342	66,899	(240,541)	(118,522)	(547,070)	(1,727,576)	(1,911,958)	(1,895,965)	(894,686)	(242,386)	99,430	(6,778,862)
Avg \$/kWh	\$ 0.0457	\$ 0.0503	\$ 0.0537	\$ 0.0546	\$ 0.0606	\$ 0.0699	\$ 0.0701	\$ 0.0707	\$ 0.0703	\$ 0.0562	\$ 0.0569	\$ 0.0490	\$ 0.0701
% Actual	1.0%	2.2%	0.3%	-1.2%	-0.7%	-2.0%	-4.8%	-4.8%	-5.3%	-4.2%	-1.3%	0.5%	-2.3%

Aquila Networks, St. Joseph Light & Power Division Weather Normalization Adjustment Test Year Ending 12/31/02

1	MWh Sales	Adjustme	nt (Normal -	Actual)									
Rate Class	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Annual
MO910	203	645	182	(395)	(355)	(1,004)	(3,007)	(3,427)	(3,189)	(2,050)	(725)	69	(13,052)
MO911	4	6	1	(3)	(2)	(7)	(20)	(22)	(21)	(15)	(4)	1	(83)
MO913	27	134	50	(74)	(35)	(180)	(583)	(681)	(612)	(371)	(208)	6	(2,527)
MO914	0	0	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	(1)
MO915	1	6	2	(4)	(1)	(9)	(27)	(32)	(29)	(17)	(11)	0	(120)
MO920	2,711	3,162	294	(647)	279	(521)	(1,123)	(1,469)	(1,126)	(886)	(2,016)	749	(594)
MO921	67	76	6	(15)	6	(11)	(23)	(30)	(23)	(18)	(45)	19	9
MO922	5	6	1	(1)	1	(1)	(2)	(3)	(2)	(2)	(4)	1	(2)
MO930	60	87	19	(32)	(17)	(52)	(252)	(299)	(201)	(102)	(69)	14	(844)
MO931	52	54	7	(17)	(17)	(27)	(110)	(115)	(111)	(63)	(4)	18	(334)
MO932	56	57	(1)	(11)	(0)	(5)	(15)	(17)	(15)	(12)	(19)	17	35
MO933	128	138	15	(27)	(1)	(20)	(63)	(73)	(63)	(43)	(60)	37	(31)
MO934	2	9	3	(6)	(6)	(18)	(51)	(59)	(54)	(36)	(9)	1	(225)
MO940	428	394	40	(94)	(117)	(68)	(488)	(481)	(514)	(324)	111	142	(971)
MO941	5	5	1	(1)	0	(1)	(3)	(3)	(2)	(1)	(4)	1	(4)
MO944	(476)	(410)	(27)	(22)	(49)	(125)	(464)	(448)	(475)	(226)	153	(126)	(2,696)
Total Retail	3,274	4,369	593	(1,349)	(315)	(2,049)	(6,231)	(7,159)	(6,439)	(4,166)	(2,913)	949	(21,438)
% Actual	2.2%	2.9%	0.4%	-1.0%	-0.2%	-1.5%	-3.4%	-3.9%	-4.0%	-3.1%	-2.2%	0.7%	-1.2%

ELECTRIC

Aquila Networks, St. Joseph Light & Power Division Weather Normalization Adjustment Test Year Ending 12/31/02

	Revenue A	Adjustment	(Normal - A	Actual)									
Rate Class	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Annual
MO910	10,616	34,077	9,705	(21,256)	(19,226)	(64,211)	(192,371)	(219,105)	(203,895)	(107,070)	(38,784)	3,569	(807,951)
MO911	235	420	73	(207)	(158)	(513)	(1,426)	(1,590)	(1,532)	(1,192)	(306)	86	(6,112)
MO913	1,215	6,012	2,239	(3,415)	(1,618)	(11,514)	(37,298)	(43,542)	(39,170)	(17,032)	(9,642)	226	(153,540)
MO914	2	4	1	(1)	(1)	(3)	(11)	(13)	(11)	(6)	(3)	0	(43)
MO915	68	450	175	(251)	(97)	(840)	(2,607)	(3,072)	(2,736)	(1,201)	(775)	7	(10,879)
MO920	92,880	109,528	9,985	(22,907)	10,534	(33,278)	(71,802)	(93,908)	(72,008)	(34,519)	(74,483)	26,254	(153,723)
MO921	2,874	3,328	239	(677)	317	(793)	(1,620)	(2,145)	(1,649)	(948)	(2,180)	835	(2,420)
MO922	134	155	13	(32)	14	(36)	(101)	(160)	(90)	(23)	(83)	36	(172)
MO930	3,690	5,374	1,174	(1,989)	(1,044)	(4,485)	(21,627)	(25,688)	(17,293)	(6,355)	(4,230)	934	(71,538)
MO931	2,711	2,841	356	(915)	(940)	(1,784)	(7,493)	(7,912)	(7,702)	(3,323)	(218)	937	(23,443)
MO932	3,498	3,494	(76)	(679)	(12)	(426)	(1,302)	(1,466)	(1,292)	(721)	(1,163)	1,047	903
MO933	5,527	6,099	697	(1,240)	(28)	(1,396)	(4,252)	(4,894)	(4,305)	(2,059)	(2,894)	1,647	(7,099)
MO934	138	545	175	(398)	(347)	(1,550)	(4,393)	(5,040)	(4,682)	(2,253)	(570)	71	(18,303)
MO940	16,584	15,280	1,612	(3,774)	(4,692)	(3,452)	(25,343)	(25,225)	(27,143)	(12,672)	4,478	5,485	(58,861)
MO941	166	193	26	(37)	13	(114)	(226)	(281)	(204)	(46)	(151)	33	(628)
MO944	(14,707)	(12,716)	(747)	(733)	(1,472)	(5,084)	(19,134)	(18,286)	(19,758)	(6,659)	4,850	(3,941)	(98,388)
Total Retail	125,631	175,080	25,648	(58,509)	(18,757)	(129,479)	(391,006)	(452,327)	(403,471)	(196,079)	(126,154)	37,225	(1,412,197)
Avg \$/kWh	\$ 0.0384	\$ 0.0401	\$ 0.0433	\$ 0.0434	\$ 0.0595	\$ 0.0632	\$ 0.0627	\$ 0.0632	\$ 0.0627	\$ 0.0471	\$ 0.0433	\$ 0.0392	\$ 0.0659
% Actual	2.3%	3.3%	0.5%	-1.3%	-0.4%	-2.0%	-4.4%	-5.0%	-5.2%	-4.2%	-2.8%	0.7%	-2.0%

ELECTRIC

Aquila Networks, Missouri Public Service Division Customer Annualization Adjustment Test Year Ending 12/31/02

Rate Class	Test Year Forecast 12/31/2002 09/30/2003 Customers Customers		Test Year 12/31/2002 Revenue/Cust	Forecast 09/30/2003 Revenue	Test Year 12/31/2002 WN Revenue	Forecast 09/30/2003 Cust Adj.
60 70	146,730 40,341	147,338 45,911	793.83 1,008.26	116,960,500 46,290,188	116,532,335 40,614,561	428,165 5,675,626
310 311	12,017	11,835 13,627	738.46 2,960.76	8,739,965 36,768,462	9,710,963 35,541,991	(970,999) 1,226,470
316 320 325	1,011	6 1,041 21	10,406.49 36,523.26 73,156.97	58,894 38,010,638 1,558,094	61,195 37,110,303 1,597,692	(2,301) 900,335 (39,598)
330 335 340	31	100 30 960	227,354.16 706,638.86	22,656,025 21,011,799	22,327,667 22,038,833 3,358,555	328,358 (1,027,035)
Total		220,868	3,430.96 1,337.22	3,295,231 295,349,795	288,894,096	(63,324) 6,455,699

ELECTRIC

Aquila Networks, St. Joseph Light & Power Division Customer Annualization Adjustment Test Year Ending 12/31/02

	Test Year	Forecast	Test Year	Forecast	Test Year	Forecast
	12/31/2002	09/30/2003	12/31/2002	09/30/2003	12/31/2002	09/30/2003
Rate Class	Customers	Customers	Revenue/Cust	Revenue	WN Revenue	Cust Adj.
MO910	33,283	32,932	537.18	17,690,462	17,880,101	(189,640)
MO911	85	82	1,797.92	146,556	152,857	(6,301)
MO913	7,144	7,069	646.04	4,566,684	4,615,165.04	(48,481)
MO914	5	5	1,126.18	5,631	5,718	(87)
MO915	1,506	1,580	235.57	372,101	355,580	16,522
MO920	13,810	14,516	861.22	12,501,508	11,876,221	625,286
MO921	59	58	5,706.28	329,715	334,368	(4,653)
MO922	103	99	213.40	21,069	21,903	(834)
MO930	3,212	3,122	490.00	1,529,806	1,575,193	(45,387)
MO931	1,405	1,414	1,649.98	2,332,999	2,319,159	13,840
MO932	278	280	1,035.55	289,672	287,382	2,290
MO933	599	600	1,655.07	993,840	991,187	2,654
MO934	312	315	1,181.18	371,998	368,988	3,010
MO940	1,083	1,089	11,917.83	12,976,634	12,915,979	60,655
MO941	110	106	1,201.15	127,776	132,092	(4,316)
MO944	56	58	277,677.86	16,021,532	15,670,858	350,674
Total	63,049	63,324	1,109.82	70,277,983	69,502,752	775,231

			A	Sys	ilssouri Public stem Load Sur ar Ending 12/31	,					
	Net En	ergy for Load (M'	√Vh)		Monthly Peaks (MW)						
Month	Actual 2002	Normal 2002	Adj.	% Adj.	Actual 2002	Normal 2002	Adj.	-			
an	436,770	466,117	29,347	6.7%	821	832	11				
eb	383,695	398,538	14,843	3.9%	821	852	31				
	440.000	405 101	/D 4743	2.00/	705	704	7F 45				

	Net En	ergy for Load (M	IWh)			Load	Load Factor			
Month	Actual 2002	Normal 2002	Adj.	% Adj.	Actual 2002	Normal 2002	Adj.	% Adj.	Actual 2002	Normal 2002
Jan	436,770	466,117	29,347	6.7%	821	832	11	1.3%	0.72	0.75
Feb	383,695	398,538	14,843	3.9%	821	852	31	3.8%	0.70	0.06
Mar	413,362	405,191	(8,171)	-2.0%	785	731	(54)	-6.9%	0.71	0.75
Apr	377,429	366,809	(10,620)	-2.8%	776	678	(98)	-12.6%	0.68	0.75
May	398,805	405,932	7,127	1.8%	1,046	874	(172)	-16.4%	0.51	0.62
Jun	542,294	506,252	(36,042)	-6.6%	1,181	1,088	(93)	-7.9%	0.62	0.65
Jul	635,964	585,930	(50,034)	-7.9%	1,288	1,204	(84)	-6.5%	0.66	0.68
Aug	604,123	571,248	(32,875)	-5.4%	1,301	1,228	(73)	-5.6%	0.62	0.63
Sep	499,480	455,062	(44,418)	-8.9%	1,226	1,074	(152)	-12.4%	0.57	0.59
Oct	407,579	401,247	(6,332)	-1.6%	1,021	776	(245)	-24.0%	0.54	0.69
Nov	404,789	403,181	(1,608)	-0.4%	756	775	19	2.5%	0.07	0.72
Dec	452,303	474,685	22,382	4.9%	830	869	39	4.7%	0.73	0.73
Annual	5,556,593	5,440,192	(116,401)	-2.1%	1,301	1,228	(871)	-5.6%	0.49	0.51

			А			Service Division							
				-	stem Load Sur								
				Yea	ar Ending 12/3	1/2003							
	Net Energy for Load (MWh) Monthly Peaks (MW) Load Factor												
Month	Actual 2002	Normal 2003	Adj.	% Adj.	Actual 2002	Normal 2003	Adj.	% Adj.	Actual 2002	Normal 2003			
Jan	436,770	476,291	39,521	9.0%	821	850	29	3.5%	0.72	0.75			
Feb	383,695	407,227	23,532	6.1%	821	871	50	6.1%	0.70	0.06			
Mar	413,362	414,036	674	0.2%	785	747	(38)	-4.8%	0.71	0.74			
Apr	377,429	374,826	(2,603)	-0.7%	776	693	(83)	-10.7%	0.68	0.75			
May	398,805	414,785	15,980	4.0%	1,046	893	(153)	-14.6%	0.51	0.62			
Jun	542,294	517,284	(25,010)	-4.6%	1,181	1112	(69)	-5.8%	0.62	0.65			
Jul	635,964	598,703	(37,261)	-5.9%	1,288	1230	(58)	-4.5%	0.66	0.68			
Aug	604,123	583,700	(20,423)	-3.4%	1,301	1255	(46)	-3.5%	0.62	0.63			
Sep	499,480	464,990	(34,490)	-6.9%	1,226	1097	(129)	-10.5%	0.57	0.59			
Oct	407,579	409,994	2,415	0.6%	1,021	793	(228)	-22.3%	0.54	0.69			
Nov	404,789	411,977	7,188	1.8%	756	792	36	4.8%	0.07	0.72			
Dec	452,303	485,039	32,736	7.2%	830	888	58	7.0%	0.73	0.73			
Annual	E EEE E03	5 558 850	2.250	0.0%	1 301	1.255	(46)	3.5%	n //a	0.51			

Aquila, Inc, St. Joseph Light & Power System Load Summary Year Ending 12/31/2002										
	Net En	ergy for Load (M		Monthly Peaks (MW)				Load Factor		
Month	Actual 2002	Normal 2002	Adj.	% Adj.	Actual 2002	Normal 2002	Adj.	% Adj.	Actual 2002	Normal 2002
Jan	168,867	180,913	12,046	7.1%	309	318	9	2.9%	0.73	0.76
Feb	147,391	153,442	6,051	4.1%	311	328	17	5.5%	0.71	0.06
Mar	156,905	153,217	(3,688)	-2.4%	314	279	(35)	-11.1%	0.67	0.74
Apr	138,057	136,024	(2,033)	-1.5%	265	250	(15)	-5.7%	0.72	0.76
May	138,764	140,100	1,336	1.0%	341	297	(44)	-12.9%	0.55	0.63
Jun	176,183	166,722	(9,461)	-5.4%	373	335	(38)	-10.2%	0.63	0.69
Jul	205,120	191,576	(13,544)	-6.6%	397	368	(29)	-7.3%	0.69	0.72
Aug	189,866	181,045	(8,821)	-4.6%	399	365	(34)	-8.5%	0.64	0.67
Sep	159,012	147,800	(11,212)	-7.1%	366	317	(49)	-13.4%	0.60	0.65
Oct	145,250	141,157	(4,093)	-2.8%	299	236	(63)	-21.1%	0.65	0.80
Nov	148,476	147,650	(826)	-0.6%	284	286	2	0.7%	0.07	0.72
Dec	163,059	172,119	9,060	5.6%	294	310	16	5.4%	0.75	0.75
Annual	1,936,950	1,911,765	(25,185)	-1.3%	399	368	(263)	-7.8%	0.55	0.59

Aquila, Inc, St. Joseph Light & Power System Load Summary Year Ending 12/31/2003										
	Net En	ergy for Load (M		Monthly Peaks (MW)				Load Factor		
Month	Actual 2002	Normal 2003	Adj.	% Adj.	Actual 2002	Normal 2003	Adj.	% Adj.	Actual 2002	Normal 2003
Jan	168,867	183,514	14,647	8.7%	309	323	14	4.5%	0.73	0.76
Feb	147,391	155,653	8,262	5.6%	311	333	22	7.1%	0.71	0.06
Mar	156,905	155,423	(1,482)	-0.9%	314	283	(31)	-9.9%	0.67	0.74
Apr	138,057	137,958	(99)	-0.1%	265	254	(11)	-4.2%	0.72	0.75
May	138,764	142,081	3,317	2.4%	341	301	(40)	-11.7%	0.55	0.63
Jun	176,183	169,135	(7,048)	-4.0%	373	340	(33)	-8.8%	0.63	0.69
Jul	205,120	194,338	(10,782)	-5.3%	397	373	(24)	-6.0%	0.69	0.72
Aug	189,866	183,648	(6,218)	-3.3%	399	370	(29)	-7.3%	0.64	0.67
Sep	159,012	149,919	(9,093)	-5.7%	366	322	(44)	-12.0%	0.60	0.65
Oct	145,250	143,116	(2,134)	-1.5%	299	239	(60)	-20.1%	0.65	0.80
Nov	148,476	149,773	1,297	0.9%	284	290	6	2.1%	0.07	0.72
Dec	163,059	174,598	11,539	7.1%	294	314	20	6.8%	0.75	0.75
Annual	1,936,950	1,939,156	2,206	0.1%	399	373	(26)	-6.5%	0.55	0.59

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the matter of Aquila, Networks-MPS and Aquifor authority to file tariforates for the service prothe Aquila Networks-M Networks-L&P area	uila Networks-L&P, Is increasing electric vided to customers in))))	Case No. ER
County of Jackson) State of Missouri)	SS		
	AFFIDAVIT OF	ERIC L. WA	ATKINS
sponsors the accompany testimony was prepared made as to the facts in	ying testimony entitled I by him and under his said testimony and scho mony and schedules ar	"Direct Test s direction ar edules, he wo	and says that he is the witness who timony of Eric L. Watkins;" that said and supervision; that if inquiries were ould respond as therein set forth; and correct to the best of his knowledge,
			Eric L. Watkins
Subscribed and sworn to	o before me this	_day of	, 2003.
			Notary Public
My Commission expires	s:		