

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

FILED

APR 28 2004

Missouri Public
Service Commission

Direct Testimony

of

Eric L. Watkins

Exhibit No. 23
Case No(s). ER-2004-0034
Date 2/23/04 Rptr FF

**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 9th 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.

1 A. I have been employed by Aquila Inc. since June 1991. My experiences since that time
2 have included regulatory analysis including weather normalization and forecasting
3 duties for resource planning and budgeting, competitive and industry analysis for
4 merger and acquisition candidates and new business ventures, structure desk analysis,
5 and accounting and financial management. Before coming to Aquila Inc., I was
6 employed by Burns and McDonnell Engineers-Architects-Consultants from February
7 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
11 revenue for Aquila Networks-MPS ("MPS") and Aquila Networks-L&P ("L&P")
12 shown on Schedules ELW-1 and ELW-2, the customer annualization adjustment
13 shown on Schedules ELW-3 and ELW-4, and the weather normalized system hourly
14 loads shown on Schedules ELW-5 and ELW-6. Aquila witness Jerry Boehm uses
15 these weather normalized system hourly loads in estimating normalized fuel and
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?

20 A. I recommend that the Commission adopt the weather normalization adjustments to
21 MPS and L&P sales and revenue, customer annualization adjustment, and the weather
22 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 Residential (60-General Service, 70-Space Heat)
12 Small General Service (310-No Demand Meter, 311-Secondary, 316-Primary)
13 Large General Service (320-Secondary, 325-Primary)
14 Large Power (330-Secondary, 335-Primary)
15 Schools & Churches (340-Secondary)

16
17 For L&P:

18
19 Residential (910,911,913,914,915,920,921,922)
20 Small General Service (930,931,932,933,941)
21 Large General Service (940)
22 Large Power (944)
23 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

1 hourly/daily information was used to determine appropriate ratios for allocating
2 monthly billing cycle data into daily usage data. Daily weather response functions
3 were then derived using MetrixND software for each rate class. Normal weather
4 variables based on 1971-2000 average daily temperature (2-day rolling average) data
5 for Kansas City, Missouri (MCI Airport) were used in each rate class model to
6 estimate kWh sales under normal weather conditions and predicted actual weather
7 conditions. In order to compute the 2-day rolling average daily temperatures, average
8 daily normal temperatures for 1971-2000 were computed from daily maximum and
9 minimum temperatures. The average daily temperatures were ranked in descending
10 order by calendar month, averaged by rank order for each day during 1971-2000. The
11 resulting normal average daily temperatures were then sorted into the same
12 descending rank order as actual average daily temperatures for the test year. The
13 weather adjustment to kWh sales is calculated as the difference between predicted
14 normal minus predicted actual daily kWh sales. Daily weather adjustments were
15 reallocated to billing months based on appropriate billing cycles for each rate class.

16 Q. Please describe the results of the weather normalization adjustment to kWh sales for
17 the test year ending December 31, 2002.

18 A. Schedules ELW-1 and ELW-2 provide the weather normalization adjustment to kWh
19 sales for MPS and L&P, respectively. The total weather normalization adjustment for
20 weather sensitive retail rate classes is (96,680,000) kWh for MPS and (21,438,000)
21 kWh for L&P for the test year ending December 31, 2002.

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

1 smoothing models based on trends over the past 5 years in these historical monthly
2 customers by rate class. The customer annualization adjustment is the difference
3 between the test year weather normalized revenues and the customer annualized
4 revenues projected at September 30, 2003 customer levels.

5 Q. Please describe the results of the customer annualization adjustment to revenue at
6 September 30, 2003.

7 A. Schedules ELW-3 and ELW-4 provide the customer annualization adjustment to
8 revenue for MPS and L&P, respectively. The total customer annualization adjustment
9 to revenue for weather sensitive retail rate classes is \$6,455,699 for MPS and
10 \$775,231 for L&P based on projected customer levels at September 30, 2003 as
11 reflected in Adjustment R-10.

12 **WEATHER NORMALIZATION OF SYSTEM HOURLY LOAD**

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

15 A. System hourly load in kW represents the hourly electric supply requirements for the
16 energy demands of MPS and L&P electric customers and internal needs. Actual
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
20 2001 and 2002 excludes two large MPS wholesale municipal customers
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
23 function was derived using daily weather variables (2-day average daily temperature)

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

9 Q. Please describe the results of the weather normalization adjustment to revenue for the
10 test year ending December 31, 2002.

11 A. Schedules ELW-1 and ELW-2 provide the weather normalization adjustment to
12 revenue for MPS and L&P, respectively. The total weather normalization adjustment
13 to revenue for weather sensitive retail rate classes is (\$6,778,862) for MPS and
14 (\$1,412,197) for L&P as reflected in Adjustment R-10.

15 **CUSTOMER ANNUALIZATION ADJUSTMENT**

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

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

1 in a cubic model specification along with other explanatory variables that affect
2 system loads such as days of the week, holidays, and monthly intercepts. The weather
3 normal results of the daily model were allocated to the hourly profile using the ratio
4 of actual hourly loads to the total load for a given day, with the hourly ratios averaged
5 for similar day types. MPS system hourly loads for 2003 were projected assuming an
6 overall MPS system energy growth rate of 2.18% multiplied by 2002 weather
7 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 by
9 2002 weather normalized hourly loads.

10 Q. Please describe the results of the MPS and L&P weather normalized system hourly
11 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.

14 The MPS weather normalized net energy for load is 5,440,192 MWH, and 5,558,852
15 MWH for 2002 and 2003, respectively, which results in annual energy growth of
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.

20 The L&P weather normalized net energy for load is 1,911,765 MWH, and 1,939,156
21 MWH for 2002 and 2003, respectively, which results in annual energy growth of
22 27,391 MWH, or 1.43%. The adjustment from 2002 actual to 2003 normal system
23 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?

10 A. Yes, it does.

ELECTRIC

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

Rate Class	MWh Sales Adjustment (Normal - Actual)												
	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	2,180	611	(2,076)	(1,674)	(5,124)	(15,450)	(16,513)	(16,446)	(10,846)	(1,479)	375	(65,348)
70	4,277	5,526	608	(1,257)	243	(1,536)	(9,887)	(4,726)	(9,887)	(2,773)	(4,199)	1,207	(10,323)
310	227	226	25	(76)	(53)	(106)	(410)	(424)	(422)	(242)	(41)	82	(1,203)
311	121	343	83	(945)	(321)	(697)	(2,431)	(2,543)	(2,477)	(1,462)	(124)	81	(9,711)
320	250	(23)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	9	(9)	(9)
325	(72)	(48)	(29)	(305)	(456)	(372)	(1,920)	(1,727)	(2,190)	(600)	1,306	235	(6,049)
330	(119)	(64)	(1)	2	(6)	(14)	(38)	(39)	(37)	(17)	12	(17)	(278)
335	(128)	(71)	39	(87)	30	(166)	(282)	(215)	(351)	(121)	113	(67)	(1,280)
340	81	44	(113)	(190)	251	(180)	(268)	(141)	(208)	17	11	(55)	(921)
Total Retail	4,853	9,105	1,245	(4,404)	(1,956)	(7,822)	(24,639)	(27,046)	(28,977)	(15,208)	(4,261)	2,630	(66,880)
% Actual	1.2%	2.4%	0.3%	-1.2%	-0.6%	-2.8%	-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

Rate Class	Revenue Adjustment (Normal - Actual)												
	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	19,580	134,650	39,078	(131,489)	(106,877)	(350,624)	(1,111,287)	(1,191,857)	(1,182,468)	(632,082)	(82,513)	22,256	(4,554,983)
70	185,649	248,182	26,340	(59,180)	12,590	(109,359)	(277,952)	(341,036)	(278,466)	(146,703)	(207,168)	53,722	(894,354)
310	11,781	12,275	1,284	(4,072)	(2,053)	(6,000)	(23,574)	(35,149)	(34,946)	(13,426)	(2,332)	4,401	(106,100)
311	6,187	17,778	4,368	(16,243)	(17,238)	(65,447)	(166,807)	(170,654)	(166,318)	(69,843)	(6,465)	4,082	(648,505)
320	10,284	(958)	(39)	(9)	(1)	(11)	(20)	(16)	(16)	(2)	2	(9)	(125)
325	(3,001)	(2,020)	(39)	63	(285)	(715)	(2,105)	(2,339)	(2,003)	(656)	448	(616)	(13,208)
330	(4,456)	(2,276)	1,403	(3,010)	1,055	(6,516)	(6,606)	(10,654)	(18,136)	(4,266)	4,322	(2,205)	(53,849)
335	(4,669)	(2,496)	1,403	(3,010)	1,239	(7,076)	(10,180)	(6,519)	(10,039)	599	367	(1,830)	(42,302)
340	4,099	2,314	(5,853)	(10,952)	13,900	23,585	(4,139)	(52,634)	(74,073)	(22,455)	2,834	9,554	(113,095)
Total Retail	225,171	407,242	65,695	(240,541)	(118,522)	(547,079)	(1,727,878)	(1,971,952)	(1,859,565)	(834,691)	(242,396)	99,430	(6,778,887)
Avg \$/MWh	\$ 0.0467	\$ 0.0503	\$ 0.0637	\$ 0.0546	\$ 0.0606	\$ 0.0689	\$ 0.0701	\$ 0.0707	\$ 0.0703	\$ 0.0662	\$ 0.0569	\$ 0.0490	\$ 0.0701
% Actual	1.0%	2.2%	0.3%	-1.2%	-0.7%	-2.0%	-4.8%	-4.9%	-5.3%	-4.2%	-1.3%	0.5%	-2.3%

ELECTRIC

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

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	(388)	(365)	(1,004)	(3,007)	(3,427)	(3,189)	(2,060)	(725)	66	(19,052)
MO911	4	6	1	(3)	(2)	(7)	(20)	(22)	(21)	(115)	(4)	1	(83)
MO913	27	134	50	(74)	(95)	(180)	(593)	(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)	(1,323)	(1,469)	(1,126)	(886)	(2,016)	749	(594)
MO921	87	76	6	(15)	6	(11)	(23)	(30)	(23)	(18)	(45)	19	0
MO922	6	6	1	(1)	1	(1)	(2)	(3)	(2)	(2)	(4)	1	(2)
MO930	80	87	19	(32)	(17)	(52)	(252)	(269)	(201)	(102)	(89)	14	(844)
MO931	52	54	7	(17)	(17)	(27)	(110)	(115)	(111)	(63)	(4)	16	(334)
MO932	66	57	(1)	(11)	(9)	(6)	(16)	(17)	(15)	(12)	(18)	17	35
MO933	128	138	15	(27)	(1)	(20)	(63)	(79)	(63)	(45)	(60)	37	(31)
MO934	2	9	3	(6)	(6)	(16)	(51)	(50)	(64)	(36)	(6)	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	(478)	(410)	(27)	(22)	(49)	(125)	(464)	(448)	(475)	(228)	153	(128)	(2,898)
Total Retail	3,274	4,389	593	(1,349)	(313)	(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

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)	(182,371)	(218,105)	(203,895)	(107,070)	(58,784)	3,569	(807,851)
MO911	235	420	73	(207)	(159)	(513)	(1,428)	(1,590)	(1,532)	(1,162)	(606)	66	(6,112)
MO913	1,215	6,012	2,239	(3,415)	(1,618)	(11,514)	(37,288)	(43,542)	(38,170)	(17,032)	(9,842)	226	(153,540)
MO914	2	4	1	(1)	(1)	(3)	(11)	(13)	(11)	(6)	(3)	0	(43)
MO915	68	450	175	(251)	(97)	(640)	(2,807)	(3,072)	(2,798)	(1,201)	(775)	7	(10,879)
MO920	92,680	109,528	9,985	(22,907)	10,534	(83,278)	(71,802)	(93,908)	(72,008)	(34,519)	(74,483)	26,254	(153,723)
MO921	2,874	3,328	239	(677)	317	(792)	(1,820)	(2,145)	(1,849)	(949)	(2,180)	835	(2,429)
MO922	134	155	13	(32)	14	(36)	(101)	(160)	(90)	(23)	(83)	36	(172)
MO930	3,680	5,374	1,174	(1,899)	(1,044)	(4,485)	(21,827)	(25,888)	(17,280)	(6,355)	(4,230)	934	(71,536)
MO931	2,711	2,841	356	(815)	(940)	(1,784)	(7,485)	(7,812)	(7,025)	(3,323)	(2,16)	927	(23,443)
MO932	3,498	3,494	(76)	(679)	(12)	(426)	(1,302)	(1,486)	(1,292)	(721)	(1,163)	1,047	903
MO933	5,527	9,099	687	(1,240)	(28)	(1,395)	(4,253)	(5,040)	(4,305)	(2,050)	(2,864)	1,647	(7,099)
MO934	138	545	175	(396)	(347)	(1,550)	(4,383)	(5,040)	(4,882)	(2,253)	(570)	71	(10,303)
MO940	18,684	15,280	1,612	(3,774)	(4,892)	(3,452)	(25,345)	(25,225)	(27,143)	(12,672)	4,478	5,485	(58,861)
MO941	186	193	28	(37)	15	(114)	(225)	(281)	(204)	(46)	(151)	33	(829)
MO944	(14,707)	(12,216)	(747)	(733)	(1,472)	(5,084)	(19,134)	(18,285)	(19,758)	(6,659)	4,850	(3,941)	(96,389)
Total Retail	125,631	175,980	25,648	(58,598)	(18,757)	(129,478)	(391,008)	(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	\$ 0.0382	\$ 0.0656
% Actual	2.3%	3.3%	0.6%	-1.5%	-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 12/31/2002 Customers	Forecast 09/30/2003 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	146,730	147,338		793.83	116,960,500		116,532,335	428,165
70	40,341	45,911		1,008.26	46,290,188		40,614,561	5,675,626
310	13,163	11,835		738.46	8,739,965		9,710,963	(970,999)
311	12,017	13,627		2,960.76	36,768,462		35,541,991	1,226,470
316	6	6		10,406.49	58,894		61,195	(2,301)
320	1,011	1,041		36,523.26	38,010,638		37,110,303	900,335
325	22	21		73,156.97	1,558,094		1,597,692	(39,598)
330	98	100		227,354.16	22,656,025		22,327,667	328,358
335	31	30		706,638.86	21,011,799		22,038,833	(1,027,035)
340	977	960		3,430.96	3,295,231		3,358,555	(63,324)
Total	214,395	220,868		1,337.22	295,349,795		288,894,096	6,455,699

ELECTRIC

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

Rate Class	Test Year 12/31/2002 Customers	Forecast 09/30/2003 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.
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

Aquila, Inc. Missouri Public Service Division System Load Summary Year Ending 12/31/2002											
Month	Net Energy for Load (MWh)				Monthly Peaks (MW)				Load Factor		
	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	(73)	-5.6%	0.49	0.51	

Aquila, Inc. Missouri Public Service Division System Load Summary Year Ending 12/31/2003											
Month	Net Energy for Load (MWh)				Monthly Peaks (MW)				Load Factor		
	Actual 2002	Normal 2003	Adj.	% Adj.	Actual 2002	Normal 2003	Adj.	% Adj.	Actual 2002	Normal 2003	
Jan	436,770	476,281	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	414,038	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	1,112	(69)	-5.8%	0.62	0.65	
Jul	635,964	588,703	(47,261)	-6.9%	1,288	1,230	(58)	-4.5%	0.66	0.68	
Aug	604,123	583,700	(20,423)	-3.4%	1,301	1,255	(46)	-3.5%	0.52	0.63	
Sep	499,480	464,980	(34,500)	-6.9%	1,226	1,087	(139)	-10.5%	0.57	0.59	
Oct	407,579	408,994	2,415	0.6%	1,021	793	(228)	-22.3%	0.54	0.69	
Nov	404,789	411,877	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	5,556,593	5,558,852	2,259	0.0%	1,301	1,255	(46)	-3.5%	0.49	0.51	

Aquila, Inc. St. Joseph Light & Power										
System Load Summary										
Year Ending 12/31/2002										
Month	Net Energy for Load (MWh)				Monthly Peaks (MW)				Load Factor	
	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	147,660	(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	0.69

Aquila, Inc. St. Joseph Light & Power										
System Load Summary										
Year Ending 12/31/2003										
Month	Net Energy for Load (MWh)				Monthly Peaks (MW)				Load Factor	
	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	155,853	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	168,135	(7,048)	-4.0%	373	340	(33)	-8.8%	0.63	0.69
Jul	205,120	184,338	(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	148,818	(9,093)	-5.7%	366	322	(44)	-12.0%	0.60	0.65
Oct	145,250	143,118	(2,134)	-1.5%	299	239	(60)	-20.1%	0.65	0.80
Nov	148,476	148,773	1,297	0.9%	284	290	6	2.1%	0.07	0.72
Dec	163,059	174,588	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	0.69

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

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

Case No. ER-_____

County of Jackson)
) ss
 State of Missouri)

AFFIDAVIT OF ERIC L. WATKINS

Eric L. Watkins, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Direct Testimony of Eric L. Watkins;" 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.

Eric L. Watkins

 Eric L. Watkins

Subscribed and sworn to before me this 20th day of June, 2003.

Shelly R. Loulos

 Shelly R. Loulos
 Notary Public

My Commission expires:

SHELLY R. LOULOS
 Notary Public - Notary Seal

 STATE OF MISSOURI
 Lafayette County
 My Commission Expires: February 24, 2006