Exhibit No.: Issues:

Resource Planning

Witness: Sponsoring Party: Type of Exhibit: Case No.: Date Testimony Prepared: Lena M. Mantle MO PSC Staff Direct Testimony ER-2005-0436 October 14, 2005

MISSOURI PUBLIC SERVICE COMMISSION

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UTILITY OPERATIONS DIVISION

DIRECT TESTIMONY

OF

LENA M. MANTLE

AQUILA, INC.

D/B/A AQUILA NETWORKS – MPS And AQUILA NETWOIRKS – L&P

CASE NO. ER-2005-0436

Jefferson City, Missouri October 2005

** Denotes Highly Confidential Information **



Missouri Public Service Commission



| | Exhibit No. <u>55 MP</u> |
|-------|--------------------------|
| Case | No(s) FR-2005-0126 |
| Date_ | 1-09-06 Aptr X4 |

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 Increasing) Electric Rates For the Service Provided to) Customers in the Aquila Networks-MPS and Aquila Networks-L&P Area.

Case No. ER-2005-0436

AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI)) ss COUNTY OF COLE)

Lena M. Mantle, of lawful age, on her oath states: that she has participated in the preparation of the following Direct Testimony in question and answer form, consisting of $\underline{17}$ pages of Direct Testimony to be presented in the above case, that the answers in the following Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true to the best of her knowledge and belief.

and sworn to before me this $\frac{13^{7}}{2}$ day of October, 2005 OTARY SE Notary Public 2009 ission expires me

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| 1 | DIRECT TESTIMONY | | | |
|------------------------|---|--|--|--|
| 2 3 4 5 | OF | | | |
| 5 | · LENA M. MANTLE | | | |
| 6 7 8 9 10 | AQUILA, INC. D/B/A AQUILA NETWORKS – MPS AND AQUILA NETWORKS – L&P | | | |
| 11 12 13 | CASE NO. ER-2005-0436 | | | |
| 14 15 | Q. Please state your name and business address. | | | |
| 16 | A. My name is Lena M. Mantle and my business address is Missouri Public | | | |
| 17 | Service Commission, P. O. Box 360, Jefferson City, Missouri 65102. | | | |
| 18 | Q. What is your present position with the Missouri Public Service | | | |
| 19 | Commission (Commission)? | | | |
| 20 | A. I am the Manager of the Energy Department, Utility Operations Division. | | | |
| 21 | Q. Would you please review your educational background and work | | | |
| 22 | experience? | | | |
| 23 | A. I received a Bachelor of Science Degree in Industrial Engineering from | | | |
| 24 | the University of Missouri, at Columbia, in May 1983. I joined the Commission Staff | | | |
| 25 | (Staff) in August 1983. I became the Supervisor of the Engineering Section of the | | | |
| 26 | Energy Department in August, 2001. In July 2005, I was named the Manager of the | | | |
| 27 | Energy Department. I am a registered Professional Engineer in the State of Missouri. | | | |
| 28 | My work here at the Commission has included the review of resource plans of | | | |
| 29 | investor owned electric utilities since 1984. I was actively involved in the writing of the | | | |
| 30 | Commission's Chapter 22, Electric Resource Planning rules. I participated in the review | | | |

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| 1 | of all of the utility filings under that rule. Since the Commission issued a waiver to the |
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| 2 | electric utilities from filing under that rule in 1999, I have been present at all but one of |
| 3 | the utilities' semi-annual resource plan update meetings with Staff and Office of Public |
| 4 | Counsel. |
| 5 | Q. Have you previously filed testimony before this Commission? |
| 6 | A. Yes, I have. Please see Schedule I attached to this testimony for a list of |
| 7 | cases in which I have previously filed testimony. |
| 8 | Q. What is the purpose of your direct testimony? |
| 9 | A. The purpose of my testimony is to provide to the Commission a summary |
| 10 | of the resource planning review process and the feedback that the Staff has supplied |
| 11 | Aquila in the last three years. I am also presenting Staff's position regarding how Aquila |
| 12 | should have replaced the power it was receiving from the Aries capacity contract. |
| 12 | |
| 13 | Executive Summary |
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| 13 | Executive Summary |
| 13 14 | Executive Summary Q. Would you please summarize your testimony? |
| 13 14 15 | Executive Summary Q. Would you please summarize your testimony? A. It is my testimony that, given the information from the resource planning |
| 13 14 15 16 | Executive Summary Q. Would you please summarize your testimony? A. It is my testimony that, given the information from the resource planning process that was available at the time Aquila made its decision regarding the replacement |
| 13 14 15 16 17 | Executive Summary Q. Would you please summarize your testimony? A. It is my testimony that, given the information from the resource planning process that was available at the time Aquila made its decision regarding the replacement of power it was obtaining through the Aries capacity contract, it is the position of the |
| 13 14 15 16 17 18 | Executive Summary Q. Would you please summarize your testimony? A. It is my testimony that, given the information from the resource planning process that was available at the time Aquila made its decision regarding the replacement of power it was obtaining through the Aries capacity contract, it is the position of the Staff that Aquila should have built five combustion turbines (CTs). Therefore, the Staff |
| 13 14 15 16 17 18 19 | Executive Summary Q. Would you please summarize your testimony? A. It is my testimony that, given the information from the resource planning process that was available at the time Aquila made its decision regarding the replacement of power it was obtaining through the Aries capacity contract, it is the position of the Staff that Aquila should have built five combustion turbines (CTs). Therefore, the Staff included five CTs to satisfy Aquila's capacity needs in this rate case to approximate a |
| 13 14 15 16 17 18 19 20 | Executive Summary Q. Would you please summarize your testimony? A. It is my testimony that, given the information from the resource planning process that was available at the time Aquila made its decision regarding the replacement of power it was obtaining through the Aries capacity contract, it is the position of the Staff that Aquila should have built five combustion turbines (CTs). Therefore, the Staff included five CTs to satisfy Aquila's capacity needs in this rate case to approximate a self-build option for Aquila Networks – MPS (MPS). Staff witness David W. Elliott is |

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Testimony

2 Q. What capacity does Aquila currently have instead of the five generic CTs
3 in Staff's case?

A. Aquila has included the three combustion turbines at the South Harper
site. Due to legal issues, it is not clear that these CTs will remain at this site. Aquila is
currently searching for purchase power contracts, long or short-term, to fulfill the rest of
its capacity and energy needs.

8 Q. What was the resource planning review process when Aquila made its 9 decision to build the only three CTs and rely on purchase power contracts for the rest of 10 its capacity and energy needs?

A. At the time, Aquila was meeting with the Staff and Office of Public Counsel twice a year to update us on its resource needs. The only information given to Staff at these meetings was the presentation material. Staff would provide feedback based on the presentation materials and statements made during the presentations. The Staff did not do a formal or informal review of the resource plan updates presented at the meetings. Sometimes, if the Staff felt that it was warranted, it would respond after the meeting with a letter expressing concerns.

18 This process is changing as the waiver is ending in December of this year. Aquila 19 submitted a resource plan to Staff in April 2005 and is scheduled to file its resource plan 20 in February 2007. It has made a verbal commitment to Staff to continue the semi-annual 21 meetings until that time.

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Q. Why does Aquila need capacity?

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| 1 | A. Aquila needs capacity to replace the purchase power agreement (PPA) that | | | |
|----|---|--|--|--|
| 2 | it had for the Aries power plant to supply up to 500 megawatts (MW) of capacity in the | | | |
| 3 | summer and 320 MW of capacity in the winter. This PPA expired May 31, 2005. MPS | | | |
| 4 | satisfied this deficit in 2005 with the three CTs at South Harper and a short-term capacity | | | |
| 5 | purchase of 325 MW from a facility owned by another Aquila division in Mississippi | | | |
| 6 | called Crossroads. This agreement has also already expired. | | | |
| 7 | In addition to the need to replace power it was obtaining through the Aries PPA, | | | |
| 8 | Aquila also needs capacity to meet growth in its customers' electrical needs. | | | |
| 9 | Q. What process did Aquila use to determine how to replace the Aries PPA | | | |
| 10 | capacity and energy? | | | |
| 11 | A. Aquila issued a Request for Proposals (RFP) in 2001 to get bids for | | | |
| 12 | capacity to replace the Aries contract. While it was analyzing the bids the market | | | |
| 13 | changed drastically. After discussions with the Staff, Aquila reissued the RFP in 2003. | | | |
| 14 | Reissuing the RFP reduced the time available to Aquila to pursue different options but, | | | |
| 15 | given the market changes, both Aquila and Staff felt that doing so was appropriate to get | | | |
| 16 | the most reliable and least cost power for Aquila's customers. | | | |
| 17 | A. What was the result of the analysis of this RFP? | | | |
| 18 | Q. The first time Staff was shown any results from this RFP was in the | | | |
| 19 | Aquila semi-annual resource plan meeting with Staff on June 26, 2003. Aquila told us | | | |
| 20 | that an "undisclosed" bidder had offered it an excellent bid for 600 MW but it could not | | | |
| 21 | tell us much about the bid at that time. Because this would be more than enough to cover | | | |
| 22 | its needs, Aquila felt that no other capacity was needed. Staff later learned from Aquila | | | |
| 23 | that this bid fell through. | | | |
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| 1 | On January 27, 2004, Aquila again met with Staff, this time not in a resource | | |
|----|---|--|--|
| 2 | planning meeting, but in a meeting to let Staff know about its power supply acquisition | | |
| 3 | process for the next five years. In this meeting, Aquila's preferred/proposed resource | | |
| 4 | plan over the short term was to build three combustion turbines and to enter into three-to- | | |
| 5 | five year PPAs based off of the bids to the 2003 RFP. | | |
| 6 | Q. How did Staff respond to this? | | |
| 7 | A. Three days later on January 30, 2004, Staff responded with a letter to Mr. | | |
| 8 | Dennis Williams of Aquila, expressing concern regarding Aquila's short-sightedness | | |
| 9 | (three-to-five year plan), the Staff's belief that Aquila needed to be looking at base-load | | |
| 10 | generation and the Staff's concern that Aquila should not become overly dependent upon | | |
| 11 | PPAs. | | |
| 12 | Q. When did Aquila disclose its long range plan to Staff after it received the | | |
| 13 | Staff's letter? | | |
| 14 | A. Aquila met with Staff on February 9, 2004, for its semi-annual resource | | |
| 15 | update. This update, which took into consideration events over a twenty year time | | |
| 16 | horizon, showed that ** | | |
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| 1 | At the next semi-annual update on July 9, 2004, Aquila still showed that the |
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| 2 | ** |
| 3 | ** Aquila had found a very good 75 MW PPA with Nebraska Public Power |
| 4 | District (NPPD), but it was still pursuing the other PPAs upon which it had received bids. |
| 5 | At subsequent resource planning update meetings Aquila has provided updates on |
| 6 | the ** |
| 7 | ** |
| 8 | Q. Does the Staff believe that Aquila should have chosen five CTs as its |
| 9 | preferred plan because it is the least cost alternative? |
| 10 | A. No, it does not. While cost should be a primary decision criterion, it |
| 11 | should not be the only criteria that a utility should look at when choosing its preferred |
| 12 | plan. While the electric utilities currently have a waiver from the Commission's resource |
| 13 | planning rules in Chapter 22, the Staff still believes that the utilities should carefully do |
| 14 | risk and contingency analysis of their resource plans and choose a resource plan that is |
| 15 | robust across many scenarios involving possible future events. The Staff believes that |
| 16 | prudently building and owning generation, whether it is baseload, intermediate or |
| 17 | peaking, provides stability for Missouri consumers. PPAs are useful tools, but in the |
| 18 | current environment they should not be relied upon as long-term solutions to capacity |
| 19 | needs in the planning process without a firm long-term contract in hand. ** |
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| 1 | ** Instead of relying on short-term PPAs, Aquila could have had five CTs | | | | |
|----|--|--|--|--|--|
| 2 | built by 2005 and available to serve its customers for the next thirty years. | | | | |
| 3 | Q. In light of current natural gas prices, are you concerned about | | | | |
| 4 | recommending Aquila install more gas-fired generation capacity? | | | | |
| 5 | A. A prudence review entails looking at the factors relevant to a decision as | | | | |
| 6 | they were at the time the decision was made. Therefore, I must go back to the time when | | | | |
| 7 | Aquila made the recommendation and consider the gas prices and gas price projections | | | | |
| 8 | that existed at that point in time, not the current time and current gas prices. Given the | | | | |
| 9 | gas prices in 2003 and the information that Aquila has supplied the Staff, the appropriate | | | | |
| 10 | decision would have been to build five CTs or the equivalent of 500 MW of capacity. To | | | | |
| 11 | answer this question with today's gas prices and purchase power market, a new MIDAS | | | | |
| 12 | model analysis would have to be run. Staff does not have the capability to run a MIDAS | | | | |
| 13 | analysis independent of the utility. | | | | |
| 14 | Q. Does this conclude your direct testimony? | | | | |
| 15 | A. Yes, it does. | | | | |
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| 1 2 | PREVIOUS TESTIMONY OF LENA M. MANTLE | | |
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| 3 4 5 6 7 8 9 | CASE NUMBER | TYPE OF TESTIMONY | ISSUES |
| | ER-84-105 | Direct | Demand-Side Update |
| | ER-85-20 | Direct | Demand-Side Update |
| 10 11 | ER-85-128, et. al | Direct | PURPA Standards |
| 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 | EC-87-114, et. al. | Surrebuttal | Annualization & Normalization of Sales |
| | EO-90-101 | Direct, Rebuttal, and Surrebuttal | Weather Normalization of Sales Normalization of Net System |
| | ER-90-138 | Direct | Normalization of Net System |
| | EO-90-251 | Rebuttal | Promotional Practice Variance |
| | EO-91-74, et. al. | Direct | Weather Normalization of Class Sales Normalization of Net System |
| | ER-93-37 | Direct | Weather Normalization of Class Loads Normalization of Net System |
| 28 29 20 | ER-94-163 | Direct | Normalization of Net System |
| 30 31 32 | ER-94-174 | DirectWeather Normaliz | cation of Class Sales Normalization Net System |
| 33 34 25 | EO-94-199 | Direct | Weather Normalization of Sales |
| 35 36 37 38 39 40 41 42 43 | ET-95-209 | Rebuttal and Surrebuttal | New Construction Pilot |
| | ER-95-279 | Direct | Normalization of Net System |
| | ER-97-81 | Direct | Weather Normalization of Class Hourly Loads, TES Tariff, Normalization of Net System |
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| 2 | PREVIOUS TESTIMONY | | |
| 3 | | OF LENA M. M | LANTLE (cont.) |
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| 5 | | | |
| 6 | CASE NUMBER | TYPE OF | ISSUES |
| 7 | | TESTIMONY | |
| 8 9 | EO-97-144 | Direct | Weather Normalization of Class Loads |
| 10 | EO-97-144 | Direct | Normalization of Net System |
| 11 | | | Normanzation of Net System |
| 12 | ER-97-394, et. al. | Direct, | Weather Normalization of Class Loads |
| 13 | | Rebuttal and | Normalization of Net System |
| 14 | | Surrebuttal | Energy Audit Tariff |
| 15 | | | |
| 16 | EM-97-575 | Direct | Normalization of Net System |
| 17 | | | |
| 18 | EM-2000-292 | Direct | Normalization of Net System |
| 19 | | | Load Research |
| 20 | | | |
| 21 22 | ER-2001-299 | Direct | Weather Normalization of Class Loads |
| 22 23 | | | Normalization of Net System |
| 23 24 | EM-2000-369 | Direct | Load Research |
| 2 4 25 | EWI-2000-303 | Direct | Loau Research |
| 26 | ER-2002-1 | Direct | Weather Normalization of Class Loads |
| 27 | 2 | | Normalization of Net System |
| 28 | | | |
| 29 | ER-2001-672 | Direct and | Weather Normalization of Class Loads |
| 30 | | Rebuttal | Normalization of Net System |
| 31 | | | |
| 32 | EC-2002-1 | Direct | Weather Normalization of Class Loads |
| 33 | | Rebuttal | Normalization of Net System |
| 34 | | | |
| 35 | ER-2002-424 | Direct | Calculation of Normal Weather |
| 36 | EE 2002 0465 | D ak | Resource Plans |
| 37 38 | EF-2003-0465 | Rebuttal | Resource Plans |
| 20 | 1 | | |

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