Exhibit No.:

Issues: Resource Planning

Witness: Lena M. Mantle

Sponsoring Party: MO PSC Staff
Type of Exhibit: Direct Testimony

Case No.: ER-2005-0436

Date Testimony Prepared: October 14, 2005

# MISSOURI PUBLIC SERVICE COMMISSION 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 \*\*



## 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	Case No. ER-2005-0436
Electric Rates For the Service Provided to	) Case No. ER-2003-0430
Customers in the Aquila Networks-MPS	
and Aquila Networks-L&P Area.	

#### AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI	)
	) ss
COUNTY OF COLE	)

Subscribed and sworn to before me this 13 day of October, 2005.

Notary Public

LIC STATE OF THE COMMITTEE COMMITTE

2009

TABLE OF CONTENTS			
Executive Summary. Testimony	•••••••••••••••••••••••••••••••••••••••		

1	DIRECT TESTIMONY		
2 3	OF		
4 5	LENA M. MANTLE		
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7 8	AQUILA, INC.		
9	D/B/A AQUILA NETWORKS – MPS AND AQUILA NETWORKS – L&P		
10			
11	CACE NO. ED 2007 0424		
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		

- of all of the utility filings under that rule. Since the Commission issued a waiver to the electric utilities from filing under that rule in 1999, I have been present at all but one of the utilities' semi-annual resource plan update meetings with Staff and Office of Public Counsel.
  - Q. Have you previously filed testimony before this Commission?
- A. Yes, I have. Please see Schedule 1 attached to this testimony for a list of cases in which I have previously filed testimony.
  - Q. What is the purpose of your direct testimony?
- A. The purpose of my testimony is to provide to the Commission a summary of the resource planning review process and the feedback that the Staff has supplied Aquila in the last three years. I am also presenting Staff's position regarding how Aquila should have replaced the power it was receiving from the Aries capacity contract.

## **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 using five generic CTs in addition to MPS's current capacity in rate base in the production cost model to estimate variable fuel and purchase power costs and Staff witness Robert Schallenberg is sponsoring adjustments to the capacity costs to this effect.

## **Testimony**

Q. What capacity does Aquila currently have instead of the five generic CTs 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

7 lits capacity and energy needs.

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

currently searching for purchase power contracts, long or short-term, to fulfill the rest of

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.

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

Q. Why does Aquila need capacity?

A. Aquila needs capacity to replace the purchase power agreement (PPA) that it had for the Aries power plant to supply up to 500 megawatts (MW) of capacity in the summer and 320 MW of capacity in the winter. This PPA expired May 31, 2005. MPS satisfied this deficit in 2005 with the three CTs at South Harper and a short-term capacity purchase of 325 MW from a facility owned by another Aquila division in Mississippi called Crossroads. This agreement has also already expired.

In addition to the need to replace power it was obtaining through the Aries PPA, Aquila also needs capacity to meet growth in its customers' electrical needs.

- Q. What process did Aquila use to determine how to replace the Aries PPA capacity and energy?
- A. Aquila issued a Request for Proposals (RFP) in 2001 to get bids for capacity to replace the Aries contract. While it was analyzing the bids the market changed drastically. After discussions with the Staff, Aquila reissued the RFP in 2003. Reissuing the RFP reduced the time available to Aquila to pursue different options but, given the market changes, both Aquila and Staff felt that doing so was appropriate to get the most reliable and least cost power for Aquila's customers.
  - A. What was the result of the analysis of this RFP?
- Q. The first time Staff was shown any results from this RFP was in the Aquila semi-annual resource plan meeting with Staff on June 26, 2003. Aquila told us that an "undisclosed" bidder had offered it an excellent bid for 600 MW but it could not tell us much about the bid at that time. Because this would be more than enough to cover its needs, Aquila felt that no other capacity was needed. Staff later learned from Aquila that this bid fell through.

Director Testimony of Lena M. Mantle

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On January 27, 2004, Aquila again met with Staff, this time not in a resource planning meeting, but in a meeting to let Staff know about its power supply acquisition process for the next five years. In this meeting, Aquila's preferred/proposed resource plan over the short term was to build three combustion turbines and to enter into three-tofive year PPAs based off of the bids to the 2003 RFP. Q. How did Staff respond to this? Three days later on January 30, 2004, Staff responded with a letter to Mr. A. Dennis Williams of Aquila, expressing concern regarding Aquila's short-sightedness (three-to-five year plan), the Staff's belief that Aquila needed to be looking at base-load generation and the Staff's concern that Aquila should not become overly dependent upon PPAs. Q. When did Aquila disclose its long range plan to Staff after it received the Staff's letter? A. Aguila met with Staff on February 9, 2004, for its semi-annual resource update. This update, which took into consideration events over a twenty year time horizon, showed that \*\*



	Director Testimony of Lena M. Mantle		
1	At the next semi-annual update on July 9, 2004, Aquila still showed that the		
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. **		
20			
21			
22			
23			



	Director Testimony of Lena M. Mantle			
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.			



1 2	PREVIOUS TESTIMONY OF LENA M. MANTLE		
3 4 5	CASE NUMBER	TYPE OF TESTIMONY	ISSUES
6 7 8	ER-84-105	Direct	Demand-Side Update
9 10	ER-85-20	Direct	Demand-Side Update
11 12	ER-85-128, et. al	Direct	PURPA Standards
13 14	EC-87-114, et. al.	Surrebuttal	Annualization & Normalization of Sales
15 16 17 18	EO-90-101	Direct, Rebuttal, and Surrebuttal	Weather Normalization of Sales Normalization of Net System
19 20	ER-90-138	Direct	Normalization of Net System
21 22	EO-90-251	Rebuttal	Promotional Practice Variance
23 24 25	EO-91-74, et. al.	Direct	Weather Normalization of Class Sales Normalization of Net System
26 27 28	ER-93-37	Direct	Weather Normalization of Class Loads Normalization of Net System
29 30	ER-94-163	Direct	Normalization of Net System
31 32 33	ER-94-174	DirectWeather Normaliza	ntion of Class Sales Normalization Net System
34 35	EO-94-199	Direct	Weather Normalization of Sales
36 37 38	ET-95-209	Rebuttal and Surrebuttal	New Construction Pilot
39 40	ER-95-279	Direct	Normalization of Net System
41 42 43	ER-97-81	Direct	Weather Normalization of Class Hourly Loads, TES Tariff, Normalization of Net System

1 2	PREVIOUS TESTIMONY		
3	OF LENA M. MANTLE (cont.)		
4 5			,
6	CASE NUMBER	TYPE OF	ISSUES
7		<b>TESTIMONY</b>	
8 9	EO-97-144	Dimant	Weather Normalization of Class Loads
10	EU-9/-144	Direct	Normalization of Net System
11			Normanization 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	T	<b></b>	27 11 11 22 23 2
18	EM-2000-292	Direct	Normalization of Net System
19			Load Research
20 21	ER-2001-299	Direct	Weather Normalization of Class Loads
22	ER-2001-277	Direct	Normalization of Net System
23			1 tornianzation of 1 tot System
24	EM-2000-369	Direct	Load Research
25			
26	ER-2002-1	Direct	Weather Normalization of Class Loads
27			Normalization of Net System
28	TD 2004 (72	<b></b>	*** 1 3 1 1 1 0 0 1 7 1
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	EC-2002-1	Rebuttal	Normalization of Net System
34		Robuttai	romanzation of ret bystem
35	ER-2002-424	Direct	Calculation of Normal Weather
36			
37	EF-2003-0465	Rebuttal	Resource Plans
38			
	II		