

Exhibit No.:

Issues: Turbine Valuation

Witness: Terry S. Hedrick

Sponsoring Party: Aquila Networks-MPS
And L&P

Case No.: ER-2005-0436

Before the Public Service Commission
of the State of Missouri

Surrebuttal Testimony

of

Terry S. Hedrick

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
SURREBUTTAL TESTIMONY OF TERRY S. HEDRICK
ON BEHALF OF AQUILA, INC.
D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P
CASE NO. ER-2005-0436**

1 Q. Please state your name and business address.

2 A. Terry S. Hedrick, 10700 East 350 Highway, Kansas City, Missouri 64138.

3 Q. By whom are you employed and in what capacity?

4 A. I am employed by Aquila, Inc. ("Aquila") as Generation Services Manager

5 Q. Briefly describe your education and work experience.

6 A. In 1985 I received a Bachelor of Science degree in Mechanical Engineering from the
7 University of Missouri – Columbia. After receiving my degree, I joined the Missouri
8 Public Service Company, which later became UtiliCorp and recently Aquila, as Staff
9 Engineer at the Sibley Generating Station. From that time until 1998 I held positions of
10 Maintenance Engineer and Assistant Station Superintendent – Maintenance. In 1998 I
11 began working at the Raytown office in the capacity of Senior Production Engineer.
12 From that time until present I have held the positions of Director of Generation, and my
13 current position, Generation Services Manager.

14 **EXECUTIVE SUMMARY**

15 Q. What is the purpose of the surrebuttal testimony you now are submitting?

16 A. The purpose of my surrebuttal testimony is to address specific issues in the rebuttal
17 testimony filed by Staff witness Cary G. Featherstone regarding the price valuation of gas
18 turbines.

19 **TURBINE VALUATION**

20 Q. What issues do you question the merit of in this testimony?

1 A. Mr. Featherstone provides a statement that "Aquila has not considered several options
2 that other utilities have pursued, such as: 1) seeking offers of new turbines from turbine
3 manufacturers; 2) requesting offers of new equipment that has been released before
4 delivery that turbine manufacturers discount; 3) pursuing the gray market for turbines
5 from non-turbine manufacturers; and 4) examining access to existing facilities Aquila
6 owns and that it is attempting to sell to third party non-affiliates."

7 Q. What is your response to these statements?

8 A. In response to item 1) it should be noted that firm price offers from turbine manufacturers
9 were not necessary for the development of the self-build options which were done in
10 conjunction with Consulting Engineering Firm Segal, Inc., which utilized industry
11 standard information from sources such as ThermoFlow and Gas Turbine World
12 ("GTW"). In response to item 2) Aquila maintains contact with turbine manufacturers
13 General Electric and Siemens, thus is in a position to gain information on any equipment
14 being offered at discount. In response to item 3) Aquila is aware of the Gray Market
15 which would include viewing internet sources and via phone contacts. Aquila considers
16 much of the Gray Market to be of high risk due to inability to be confident in the
17 condition of the equipment, details of the equipment, and viability of the equipment.
18 Concerns could include such things as not including options such as: evaporative cooling
19 or sound packages. Equipment originally intended for non-domestic use may not be
20 designed with the correct Generator frequency. There is also concern that many of the
21 brokers that participate in the Gray Market do not have control of the equipment that they
22 claim to be able to supply. In response to item 4) Aquila Networks does not control
23 equipment at the described sites. In addition, consideration of relocation could involve

1 high removal costs and other relocation factors as compared to new units delivered from
2 the factory.

3 Q. Are there other issues pertaining to the rebuttal testimony that need to be addressed?

4 A. Yes. Within the South Harper Generating Facility section of Mr. Featherstone's rebuttal
5 testimony he indicates that turbine values from the publication, GTW, are realistic and
6 could be used to value turbine prices. In response it should be noted that the turbine
7 equipment market fluctuates as can be seen in the GTW publications. It should be noted
8 that Gas Turbine World published pricing is a general guideline for estimating purposes
9 and is not establishing value of existing equipment. In fact, GTW states the following
10 disclaimer, "Budgetary \$ per kw prices in the GTW Handbook are intended for
11 preliminary project assessment and evaluation of simple cycle electric power generating
12 equipment only. Installation and complete turnkey plant services can conservatively add
13 between 60 and 100 percent to those equipment-only prices. Actual prices will depend
14 on the changing situations in which competitive suppliers find themselves." When
15 turbine equipment is procured the associated Engineering Supply Agreement is specific
16 for each purchase and contains detailed specifications including selected options that
17 could make significant impacts to pricing and may not be part of the general guideline
18 provided in the publication.

19 Q. Mr. Featherstone also states that "Aquila could have acquired two additional Siemens
20 turbines for less than the value agreed to for the South Harper turbines to meet MPS'
21 system capacity needs." Do you agree?

22 A. No. Gas turbine pricing as listed in GTW publications is, at best, a guide and can not be
23 relied upon to determine actual turbine pricing or the condition of available equipment.

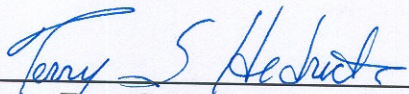
- 1 Ultimately, if a self build option is selected, execution of an Engineering Supply
2 Agreement with the Original Equipment Manufacturer (OEM) would be required in order
3 to determine the actual delivered cost.
- 4 Q. Does this conclude your surrebuttal testimony?
- 5 A. Yes it does.

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

County of Jackson)
)
State of Missouri) ss

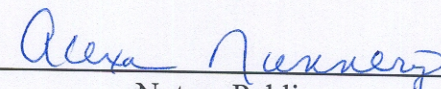
AFFIDAVIT OF TERRY S. HEDRICK

Terry S. Hedrick, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of Terry S. Hedrick;" 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.



Terry S. Hedrick

Subscribed and sworn to before me this 9th day of December, 2005.



Notary Public

My Commission expires:

May 4, 2008

