Exhibit No.:

1,115

Issues:

Purchased Power

Witness:

Leon C. Bender

Sponsoring Party:

MO PSC Staff

Type of Exhibit:

Surrebuttal Testimony

Case Nos.:

ER-2004-0034

Date Testimony Prepared: February 13, 2004 as modified February 27, 2004

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

FILED

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SURREBUTTAL TESTIMONY

Service Controllic

OF

LEON C. BENDER

AQUILA, INC. D/B/A AQUILA NETWORKS--MPS

CASE NO. ER-2004-0034

Jefferson City, Missouri February 2004

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In The Matter Of Aquila, Inc. I Networks L&P And Aquila No To Implement A General Rate Electricity	etworks MPS) Come No. ED 2004 0034	
AFFIDAVIT OF LEON C. BENDER		
STATE OF MISSOURI COUNTY OF COLE)) ss)	
preparation of the following consisting of pages of te attached written testimony we	awful age, on his oath states: that he has participated in the written testimony, as modified, in question and answer form, stimony to be presented in the above case, that the answers in the re given by him; that he has knowledge of the matters set forth in natters are true to the best of his knowledge and belief.	
	Leon C. Bender	
Subscribed and sworn to before me this day of February, 2004.		
My commission expires	DAWN L. HAKE Notary Public Notary Public County of Cole Commission Expires Jan 9, 2005	
My Collitingues		

1		SURREBUTTAL TESTIMONY
2		OF
3		LEON C. BENDER
4		AQUILA, INC.
5		D/B/A AQUILA NETWORKS-MPS
6		
7		CASE NO. ER-2004-0034
8		
9	Q.	Please state your name and business address.
10	A.	Leon C. Bender, P.O. Box 360, Jefferson City, Missouri, 65102.
11	Q.	Are you the same Leon C. Bender who filed direct and rebuttal testimony in
12	this case?	
13	Α.	Yes, I am.
14	Q.	What is the purpose of your surrebuttal testimony in this case, Aquila, Inc.
1.5	(Aquila) d/b/a Aquila Networks-MPS (MPS) and Aquila Networks-L&P (L&P) Case	
16	No. ER-2004-0034?	
17	A.	The purpose of my surrebuttal testimony is to respond to statements in the
18	rebuttal tes	timony of James W. Okenfuss, of Aquila concerning Staff's determination of
19	purchased power prices. In particular, I wish to respond to Mr. Okenfuss' suggestion that	
20	purchased power prices in the production cost model should be correlated with th	
21	predicted natural gas prices (page 6) as well as his statement that Staff has confused cost	
22	with prices (page 4).	

Q. Do you agree that the Staff should change its purchased power prices based on natural gas prices?

A. No. Purchased power prices are influenced by many factors.

Q. What are some of the factors that could have an influence on purchased power prices in general?

A. Schedule 1 lists some of the factors that influence purchased power prices such as plant specific characteristics, the economy, electrical system congestion and a sellers intent.

Q. With all these variables affecting purchased power can one assume only one variable controls the outcome?

A. No. A change in any one of these variables can influence the final choices a supplier makes to minimize its costs. Some factors have a greater influence than others but all the variables influence the outcome in some way. For example, a suppliers low cost unit being forced out during peak periods probably would cause a rise in local market prices. As another example, load could decrease due to a sudden reduction in demand from a large industrial customer's closing. The supplier would have excess generation available thus lowering the price at which energy could be purchased. Or, for instance, a marketer may be anticipating an increase in demand and may be holding back his unit to save on maintenance cost as he expects prices to go even higher in the near future. In the last example, marginal cost at the hub has little to do with his decision but the effect might be increased prices.

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- Please discuss how Staff's method satisfactorily addresses the interdependence of the various inputs.
- Since Staff is using actual prices, this by definition accounts for all the variables that affected the market price curve during the test year. Thus, Staff's method avoids the need to speculate as to the effect of any one variable or combination of variables upon the purchase power price.
- Q. Has Staff confused cost with prices as Mr. Okenfuss states at the bottom of page 4 of his rebuttal testimony?
- No. Mr. Okenfuss's testimony is confusing when he refers to Staff's use of cost and prices. Staff develops prices for input into the production cost model. To do so, Staff uses Aquila's actual purchased power cost in dollars (\$) divided by the amount purchased in mega-watts (MW) to determine the actual price paid (\$/MW) in each hour of the test year.
- Does the Staff's method used to develop purchased power prices determine a cost curve or a market price curve?
- In effect, it develops a market price curve, based on the market conditions in Α. the test year as represented by Aquila's expenditures for power and the amount received. This so-called market price curve is then input into the production cost model.
 - Please briefly discuss the Staff's method. Q.
- A. The Staff's method is described in my direct testimony in this case. The method employs actual data submitted by Aquila during the test year through August 2003. The data includes actual cost and amounts for energy sales and energy purchases for every

hour. As stated earlier, the total cost (\$) for each hour is divided by the total amount (MW) for each hour to obtain the price (\$/MW) for each hour. This price represents the power market price (\$/MW) for Aquila during that hour. In hours for which no energy was purchased, a statistical calculation is used to estimate a price for that hour. The calculation is based upon actual prices in other hours around it and is not a forecasted price. The prices are then aligned with the weather-normalized load to ensure that the highest price is paid during the period of highest demand and vice versa. This forms a market price curve for use in the estimation of fuel and purchased power expense that is consistent with the prices from the time period ordered by the Commission.

Q. Why doesn't Staff use a forecasted market price curve in its production cost model, as does Aquila?

A. Staff has traditionally used inputs to its production cost model that are from the same period for which revenues are calculated in a rate case. Staff witness, Dana E. Eaves, discusses why it is appropriate to use matching revenue and cost data to set rates in his rebuttal testimony on page 8, starting at line 9 of his testimony.

Q. Have you made any changes to Staff's purchased power inputs that you filed direct testimony on as a result of discussions with the other parties in prehearing?

A. No, I have not.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

FACTORS WHICH AFFECT THE COST OF PURCHASE POWER

1. Incremental cost of each generating unit in the model

Plant specific items:

Minimum and maximum capacity

Normal operating capacity

Availability and maintenance schedules

Operation & Maintenance cost

Unit Ramp rates

Unit Net Heat Rate curve

Plant minimum up times and down times

Startup cost

Length of time it takes to startup up

Cost of primary and supplemental fuels for startup, and operation

2. Load at which generation is dispatched

Weather

Economy

Transmission availability

Demand side management

Customer turnover

3. Transmission availability

Outages

Maintenance

New construction

System congestion

4. Position of company and sellers

Ability and willingness of company and sellers to take risks-this could change frequently

Companies and sellers expectations of the future prices

5. Purchase power contracts in effect at time