Exhibit No.: Issues: PP Capacity Contracts Witness: Michael R. Apprill Sponsoring Party: Aquila Networks-MPS & L&P Case No.: ER-

Before the Public Service Commission of the State of Missouri

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**FILED**<sup>2</sup>

# FEB 2 4 2006

Missouri Public Service Commission

Direct Testimony

of

Michael R. Apprill

Case No(s). <u>► R-ac</u> Date <u>\-09-06</u> Ri M31 Rptr

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#### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI DIRECT TESTIMONY OF MIKE APPRILL ON BEHALF OF AQUILA, INC. D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P CASE NO. ER-\_\_\_\_

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1	Q.	Please state your name and business address.
2	А.	My name is Mike Apprill. My business address is 10750 East 350 Highway, Kansas
3		City, Missouri, 64138.
4	Q.	By whom are you employed and in what capacity?
5	A.	I am employed by Aquila, Inc., ("Aquila or Company") as Vice President Resource
6		Management, in its regulated electric utility operations.
7	Q.	Please describe your responsibilities in that position.
8	А.	Within its regulated electric utility operations, Aquila has functionally separated the
9		supply of electric energy from the transmission and distribution of energy. I am
10		employed within the energy supply operation. My major responsibility is managing the
11		electric supply resource contracts we have in our Colorado, Kansas and Missouri electric
12		utility operations.
13	Q.	What are your educational qualifications, training, and experience?
14	А.	I hold a Bachelor of Science Degree in Electrical Engineering from the University of
15		Missouri-Rolla and a Masters in Electrical Engineering from the University of Missouri-
16		Columbia. I am a licensed Professional Engineer in the state of Missouri. I have thirty-
17		three years of experience in regulated utility operations beginning in 1971 with Aquila's,
18		Missouri Public Service Company (later changed to UtiliCorp United Inc.). I held

1		various positions in engineering and system operations and became Vice President of
2		Engineering in 1986. In 1995, I was responsible for combining Aquila's three separate
3		transmission systems into one operation including the development and filing of
4		transmission open access tariffs and the development and pricing of ancillary services.
5		Since 1997, have been in similar capacities to my present position, with respect to
6		Aquila's regulated operations in Missouri, Kansas and Colorado.
7	Q.	Have you previously filed testimony before any state or federal agencies?
8	А.	Yes. I have filed testimony before the Colorado Public Utility Commission and before the
9		Kansas Corporation Commission. I have also filed testimony at FERC in Docket Nos.
10		EL03-33-000, EC96-17-000, ER95-203-000, ER96-360-000 and I have submitted
11		testimony in various cases before the Missouri Public Service Commission
12		("Commission").
13	Q.	What is the purpose of your direct testimony?
14	А.	The purpose of this testimony is to present and support Aquila's position in this case
15		regarding the purchased power agreements for the Aquila Networks-MPS ("MPS") and
16		Aquila Networks-L&P ("L&P") operating divisions of Aquila.
17		MPS AND L&P PURCHASE POWER CONTRACTS
18	Q.	Please describe the MPS purchased power contracts of one year or longer.
19	A.	MPS has long-term purchases sourced from the Cooper Nuclear Station owned by
20		Nebraska Public Power District and the Gray County Wind Farm in western Kansas.
21	Q.	Please Describe the L&P purchased power contracts of one year or longer.

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1	А.	L&P has long-term purchases sourced from Gerald Gentleman Station owned by Nebraska
2		Public Power District ("NPPD") and the Gray County Wind Farm in western Kansas.
3	Q.	Are there any proposed long-term purchase resources included in the MPS/L&P system for
4		this rate case proceeding?
5	A.	Yes. A new purchase power contract for 200 MWs beginning September 2005 is included
6		in this case and is identified as Project X. This purchase, along with the NPPD Cooper
7		purchase and new South Harper generating facility, will replace the MEP Pleasant Hill LLC
8		- Aries 500 MW purchase that expired May 31, 2005 and provide for anticipated load
9		growth. Project X is also intended to mitigate the need for additional short-term summer
10		season purchases, specifically, replacing the two short-term purchase power contracts that
11		were entered into for the months of June through September 2005.
12	Q.	Why did MPS/L&P enter into the 2005 short-term purchases while it was building the
13		South Harper generating facility?
14	A.	For two reasons. First, the 2005 short-term purchase capacity is needed to meet the
15		MPS/L&P 2005 summer peak in the event one or more of the three South Harper
16		generators, presently under construction, are not completed or are otherwise unavailable for
17		operation during summer peak load conditions. Second, the purchases are necessary to
18		replace the 150 MW firm capacity (with reserves) and system participation energy Aquila
19		believed it had secured when the Company executed the June 22, 2004 Memorandum of
20		Understanding with Southwest Public Service ("SPS"). SPS, citing regulatory concerns,
21		subsequently chose not to consummate the transaction. The two short term purchased
22		power contracts totaling 325 MWs end September 2005 (the 225 MW purchase effecting

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1		delivery of the "Crossroads" facility can be terminated, all or in part, prior to September
2		2005 if South Harper achieves prescribed operational status), at which time Aquila will
3		replace them with a multi-year agreement from Project X. MPS/L&P is not seeking cost
4		recovery for any of the short-term capacity in this rate case proceeding.
5	Q,	Describe in more detail the Project X purchase.
6	A.	Presently Aquila is in discussions with several suppliers for 200-250 MWs of capacity and
7		energy for five or more years. These discussions were a result of the January 2003 Request
8		for Proposal ("RFP") that was issued and explained in more detail in Aquila witness
9		Boehm's direct testimony. Two proposals were selected, the 75 MW Cooper purchase from
10		NPPD and the 150 MW firm capacity (with reserves) and system participation energy
11		purchase from SPS. The NPPD purchase power agreement was executed on December 30,
12		2004. A Memorandum of Understanding ("MOU") was signed with SPS on June 22,
13		2004, which contemplated that Aquila would negotiate a definitive agreement before the
14		end of the year. On December 13, 2004 Aquila had the commercial terms finalized with
15		SPS, but four days later SPS changed it's mind and to date we have not been able to reach
16		an agreement. Presently Aquila is in conversations with at least six suppliers including SPS
17		to obtain a least cost alternative to the SPS offer.
18	Q.	When does Aquila expect to have a contract in place for Project X?
19	А.	Aquila is expecting a contract effective date of September 2005 for 200-250 MWs of
20		capacity.
21	Q.	What rate treatment is Aquila asking in this case for Project X?

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1	А.	As an initial placeholder, Aquila is requesting a demand charge, including transmission,
2		of \$6.50/KW-MO for a total of \$15.6 million per year (assumes a contract quantity of
3		200 MW per year). Energy cost is based on the price of gas at an assumed heat rate of
4		approximately 8,000 MMBTU/KWh (assuming normal starting sequence, typical output
5		and run-times). The fixed charges are included in Aquila witness Susan Braun's direct
6		testimony and the Project X energy costs are included in Aquila witness Tim Nelson's
7		direct testimony.
8	Q.	What is the basis for including these costs for rate treatment?
9	A.	These costs are in line with what has been proposed in the RFP process and are similar to
10		what would be needed for project financing for a 10-year agreement with a new combined
11		cycle merchant plant. For example, Aquila received a five-year proposal in June 2004
12		from Calpine with a 2009 contract year demand charge of \$6.25/KW-MO.
13	Q.	How does Aquila propose the Commission handle the uncertainty of pricing as this rate
14		case proceeding progresses?
15	A.	Aquila is suggesting that the \$6.50 demand charge and the associated energy price
16		modeling be used as an initial placeholder and then trued up for any known and
17		measurable changes subject to the final contracts that are expected to be in place no later
18		than November 2005.
1 <b>9</b>		<b>Cooper Nuclear Station Unit Participation Agreement</b>
20	Q.	Please describe the Cooper Nuclear Station unit participation purchase.
21	A.	Aquila executed an agreement with NPPD to purchase 75 MW of capacity and energy
22		from the Cooper Nuclear Station located near Brownsville, Nebraska. The capacity and

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1		energy charges are fixed for the term of the agreement through January 18, 2014, which
2		coincides with the expiration of the Nuclear Regulatory Commission operating license.
3		These costs are also included in Ms. Braun's Testimony.
4		GCWE Unit Participation Purchase
5	Q.	Please describe the Gray County Wind Energy, LLP ("GCWE") unit participation
6		purchase.
7	A.	Aquila entered into an agreement with GCWE to purchase a nominal 110 MW of the
8		output of a new wind generation farm in Gray County, Kansas. 40 MW of the purchase is
9		delivered to MPS, 20 MW to L&P and 40 MW to WestPlains Energy Kansas. The
10		remainder is sold to wholesale customers. Under the terms of the contract, energy is sold
11		to Aquila at a fixed energy rate. There is no demand charge. Aquila is responsible for
12		providing transmission service from the project, located in southwest Kansas, to MPS and
13		L&P.
14	Q.	Are the 40 MW (MPS) and 20 MW (L&P) capacities allowed as accredited capacity
15		within SPP?
16	A.	Due to the random nature of wind generation and the inability to schedule wind
17		generation on demand, we cannot claim full capacity for the wind generation. SPP has
18		allowed a 33% accreditation through 2007, pending a study of the performance of the
19		plant over time. For the purposes of this case we are assuming 13MW of capacity to
20		MPS and 7 MW of capacity to L&P. For purposes of production cost modeling, the
21		simulation model will dispatch the wind farm contract based on the full output capability
22		of 40 MW and 20 MW.

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1		Gentlemen Unit Participation Purchase
2	Q.	Please Describe the Nebraska Public Power District ("NPPD") Gerald Gentlemen Station
3		Purchase.
4	A.	L&P entered into an agreement for capacity and energy via a unit participation contract
5		from the two NPPD Gentleman coal fueled plants. L&P receives 50 MW of capacity and
6		energy from each plant for a total of 100 MW until the contract expires in May 2011. The
7		capacity charge has annual adjustments that are fixed for the remaining months of the
8		contract term. The energy is priced at the actual average production cost including
9		maintenance, losses and environmental costs. The quantity of energy available from this
10		agreement at contract prices is limited to 85% annual capacity factor. These cost are also
11		included in Ms. Braun's and Mr. Nelson's testimonies.
12	Q.	Does this conclude your testimony at this time?
13	A.	Yes.

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

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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

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Case No. ER-\_\_\_\_

County of Jackson ) State of Missouri )

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#### AFFIDAVIT OF MICHAEL R. APPRILL

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

Michael R. Apprill

Subscribed and sworn to before me this 2 Hill day of \_

2005. Notary Public

Terry D. Lutes

My Commission expires:

8-20-2008



TERRY D. LUTES Jackson County My Commission Expires August 20, 2008