Exhibit No.:
Issues: Substation and Transmission
Witness: Carl A. Huslig
Sponsoring Party: Aquila Networks-MPS
Case No.: EA-

Before the Public Service Commission
of the State of Missouri

Direct Testimony

of

Carl A. Huslig

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
DIRECT TESTIMONY OF CARL A. HUSLIG
ON BEHALF OF AQUILA, INC.
D/B/A AQUILA NETWORKS-MPS
CASE NO. EA-_____

Q. Please state your name and business address.

A. My name is Carl A. Huslig and my business address is 750 N.W. Missouri Road, Lee's Summit, Missouri 64086.

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

A. I am employed by Aquila, Inc. ("Aquila" or "Company") as the Vice President Transmission. My responsibilities are the day-to-day transmission functions that include transmission system operations, budgeting, transmission system planning, and regional/national transmission activities such as Southwest Power Pool ("SPP") committee participation, Edison Electric Institute ("EEI") committee participation, Federal Energy Regulatory Commission ("FERC") activities, North American Electric Reliability Council ("NERC") activities, and legislative issues of importance for Aquila's Missouri, Kansas, and Colorado electric transmission facilities.

Q. Briefly describe your educational history and employment history.

A. I received my B.S. in Electrical Engineering in 1991 from Kansas State University. My employment began at WestPlains Energy – Kansas, a division of UtiliCorp United, in June of 1991 as an Engineer 1. In June of 1994, I transferred to WestPlains Energy – Colorado, a division of UtiliCorp United, to become the distribution engineer for Pueblo, Colorado. Before leaving WestPlains Energy – Colorado in June of 2001, I served as Team Leader Engineering, System Planner for WestPlains Energy, and Director of

Transmission Operations. In June of 2001, I accepted the Director of Transmission Business Operations for UtiliCorp in Kansas City, Missouri. In June 2004, I assumed my current position.

Q. What is the purpose of your testimony in this case involving Aquila's request to receive a specific Certificate of Needs and Convenience for the South Harper Peaking Facility ("SHPF") and the Peculiar 345/161 kV Substation in Cass County, Missouri.

A. My testimony will address the corresponding transmission facilities that were necessary to interconnect the SHPF to the existing transmission system and to detail the transmission analysis that was performed comparing options.

Q. What was the process for analyzing the alternatives?

A. Aquila's generation services department requested that the Aquila transmission system planning department perform interconnect studies on several proposed sites. The transmission planning department modeled a 315 MW generation facility at each proposed location and determined the necessary transmission upgrades to interconnect the corresponding facility. The transmission planning department then solicited budgetary cost estimates for each location from the engineering department. Finally, each proposed site was ranked according to transmission upgrade costs.

Q. What sites were studied?

A. The sites studied were Camp Branch, Richards-Gebaur, Ralph Green Plant, Turner Road, Aries and Section 33.

Q. What sites were preferred?

A. From an electric transmission perspective, the Camp Branch site north of Harrisonville and Aries were preferred.

Q. What site was chosen?

A. The Camp Branch site due to overall economic reasons.

Q. Was the SHPF part of that original analysis?

A. No.

Q. Why not?

A. Aquila witness Terry Hedrick explains that a second round of review was initiated, which included a number of other sites, including SHPF.

Q. What were those sites?

A. The sites were Greenwood, Belton, Peculiar ("SHPF"), Raymore and the Harrisonville City Lake site.

Q. What was the preferred site from that study?

A. From an electric transmission perspective, the Raymore site was preferred since it was located directly beneath the Sibley to Stillwell 345 kV transmission line. Thus, only a 345/161 kV substation would have had to be constructed with very minimal additional transmission lines. The SHPF site required a similar 345/161 kV substation, 5 new miles of 161 kV transmission line from this substation to the SHPF, and 161/69 kV substation at SHPF.

Q. What site was finally chosen by the generation services group?

A. The SHPF site.

Q. Why was SHPF chosen over the Raymore site?

A. SHPF had better overall economic reasons than did Raymore.

Q. What were the required transmission upgrades for SHPF?

A. The following is a list of required transmission upgrades for SHPF. Construct a new South Harper 161 kV bus, construct a new South Harper 161/69 kV Substation, construct a new Peculiar 345/161 kV Substation ("Peculiar") construct a double circuit 161 kV transmission line from the South Harper Substation to the Peculiar Substation, construct a double circuit 161 kV transmission line from the Peculiar Substation to the Belton South Substation, and replace circuit switchers at Longview Substation and Lake Winnebago Substation.

Q. Would any of these transmission upgrades have been required even if the SHPF facility had not been constructed?

A. Yes. Aquila's transmission system planning department completes a 10 Year transmission planning study every three years. The purpose of these studies are to assess the high voltage transmission system and identify required transmission system improvements in order to adequately serve the expected customer load into the future i.e. 8 or 10 years. The 2002 study analyzed the Grandview – Belton – Harrisonville – Pleasant Hill area ("West Area"). The critical issue in the West Area was the amount of load on the 69 kV system and the ability to adequately serve it. This system is quite old and was installed when this West Area was largely rural. A number of options were analyzed, all of which were costly and would have taken several years to complete. By upgrading the local transmission system in conjunction with construction of the SHPF,

Aquila was able to advance the necessary transmission improvements and improve the transmission system reliability to the growing western area of Aquila Networks – MPS ("MPS") service territory.

Q. How do the transmission improvements support more reliable service?

A. MPS is better suited to serve the load growth in the West Area. The Peculiar 345/161 kV Substation provides an additional source to the Belton and Raymore areas to provide greater reliability. Absent this additional source, a single contingency could remove 161 kV service from the West Area. The transmission system planning department projects that load growth will cause this situation to result in unacceptable system performance. The Peculiar 345 kV Substation also provides a means to upgrade the existing Raymore and/or Peculiar Substations to 161 kV service which is inevitable due to load growth. Finally, the Peculiar 345/161 kV Substation provides a preferred source for addressing load growth in northeastern Cass County. On a regional basis, the Peculiar 345/161kV Substation and the accompanying line up to Belton South provide relief for KCPL's Stilwell transformers and Stilwell to Martin City 161 kV line. Thus, the transmission system in the West Area is more reliable and better suited to serve future load growth now that the SHPF transmission upgrades have been completed. The transmission upgrades required for Camp Branch did not provide any of these regional or local benefits.

Q. Did this conclude the analysis performed by Aquila?

A. No.

Q. What other alternatives were investigated?

A. Aquila reviewed the regional transmission system to explore the possibility of importing 315 MW's instead of constructing a 315 MW generating facility.

Q. What did this review show?

A. MPS has transmission constraints from almost every direction. These regional transmission constraints or flow gates are used by transmission providers and tariff administrators to evaluate the availability for firm transmission service. To the north, the Cooper South interface is fully subscribed and has no available firm transmission capacity during the summer months. To the east, the interconnection with AmerenUE is very limited and constrained. The transmission system planning department had previously reviewed the capability of delivering the output from Raccoon Creek and Goose Creek generating facilities in western Illinois owned by Aquila Merchant Services to MPS. The results from that review showed no firm available transmission capacity from eastern Missouri to western Missouri. To the south, the interconnection with Empire or Associated Electric Cooperative has very little available firm transmission capacity. To the west, the interconnection with the Kansas utilities is strong but the Stillwell to West Gardner flowgate limits the available firm transmission capacity during the summer months. Thus, the conclusion was that firm transmission service was not available due to constraints or limitations in the regional transmission system. Without additional regional transmission transfer capability, access to outside generating facilities is very limited. In order to build additional transmission transfer capability, new interconnects and high voltage transmission lines would have to be constructed with impacts to many landowners. In short, MPS's access to external energy resources is limited to mostly non-firm products.

Q. Is the MPS system unique in this way?

A. No. The MPS system, similar to many other utilities, was built to serve our native load from our generating plants rather than for regional needs and efficiencies. The regional transmission system needs upgraded and can only be upgraded by a regional process such as the one that SPP or MISO is implementing.

Q. What is the process to request additional transmission service?

A. A transmission study request is made to the appropriate transmission provider. For MPS, that transmission provider was MPS acting on its own behalf until July 1, 2005. On July 1, SPP became the transmission provider for MPS transmission facilities. A system impact study is then performed to determine the necessary transmission upgrades for the requested service. The MPS open access transmission tariff defines the process and procedures that must be followed to analyze transmission service requests. One key procedure is that MPS must analyze the requests on a first come, first served basis. After the system impact study is completed, the requesting customer has to decide within a period of time to request a facility study. Facility studies detail the engineering costs and all upgrades. At that point, the requesting customer has to determine whether or not to enter into a service agreement which details the necessary transmission upgrades and costs responsibilities.

Q. How long does this process take?

A. The process can take as long as nine to twelve months.

Q. Did Aquila generation services make any transmission service requests for 315 MW in 2004 instead of constructing a 315 MW generation facility?

A. No. Based on extensive experience and knowledge of the regional transmission system, Aquila believed that the transmission service request would be denied or require upgrades that could not be constructed by July 2005 and would be costly and impact numerous landowners. Also, as part of the 2001 Request for Proposal process for 500 MW, the transmission service department analyzed all the proposals. These proposals included internal and external generation facilities. The analysis showed that internal generation facilities were preferred and could be more economically delivered to the MPS load.

Q. Do you have any final statements?

A. Yes. MPS has been active in the transmission arena trying to construct local and regional transmission system upgrades to better serve the Missouri customer. Although only local upgrades have been constructed, it has not been for the lack of effort. MPS has plans for local upgrades that will improve our reliability for the next 10 years. However, Aquila looks to SPP or MISO to identify the necessary transmission upgrades to facilitate regional transmission service.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of the Application of Aquila, Inc. for Permission and Approval and a Certificate of Public Convenience and Necessity authorizing it to acquire, construct, Install, own, operate, maintain, and otherwise Control and manage electrical production and Related facilities in unincorporated areas of Cass County, Missouri near the town of Peculiar.	)	Case No. EA-_____

County of Jackson)
) ss
State of Missouri)

AFFIDAVIT OF CARL A. HUSLIG

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

Carl A. Huslig

Subscribed and sworn to before me this 25th day of January, 2006.

Notary Public

My Commission expires:

8-20-2008

Notary Public Notary Seal State of Missouri

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