

*Exhibit No.:*

*Issues: Combustion Turbines  
Evaluation; Construction Costs  
and In-Service; Interim Energy  
Charge; Capacity Planning/  
Peaking Turbines*

*Witness: Cary G. Featherstone*

*Sponsoring Party: MoPSC Staff*

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*Case No.: ER-2005-0436*

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**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DIVISION**

**SURREBUTTAL TESTIMONY**

**OF**

**CARY G. FEATHERSTONE**

**AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric)**

**AQUILA NETWORKS-L&P (Electric)**

**CASE NO. ER-2005-0436**

*Jefferson City, Missouri  
December 2005*

**\*\*Denotes Highly Confidential Information\*\***

**NP**

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Notary Public - State of Missouri  
My Commission Expires December 28, 2008  
Cole County  
Commission #04474301

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**CARY G. FEATHERSTONE**

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2. Dennis R. Williams, Vice President – Electric Regulatory Services, relating to the area of fuel cost recovery mechanism and interim energy charge (IEC).

3. Mr. Williams, Andrew N. Korte, Vice President Energy Resources and Jerry G. Boehm, Manager Resource Planning relating to the CW Mining coal supply agreement.

4. Mr. Korte relating to the area of capacity planning and peaking turbines.

## **EXECUTIVE SUMMARY**

The commercial in-service date of the South Harper Generating Facility should be July 12, 2005 for Unit 1, July 1 for Unit 2 and June 30 for Unit 3. The commercial in-service date is a date that is used by Aquila's site management and one that represents when the units are available for public utility service and are capable of meeting the electric system load requirements of the Company's customers. The importance of the commercial in-service date from a regulatory perspective is that the units are placed in plant in service, depreciation of the units start on the Company's financial statements and the allowance for funds used during construction is discontinued.

Staff continues to support the use of an interim energy charge (IEC) for Aquila's fuel recovery. The rules and procedures for a fuel recovery mechanism under Section 386.266, commonly referred to as Senate Bill 179, will not be completed and finalized for Commission approval in time to be implemented in this case. As such, this mechanism will not be available to Aquila in this case.

Staff is proposing to include in the interim energy charge the costs of a replacement coal supply from an existing fuel contract whose supplier refused to comply with the terms of the agreement, resulting in a suit by Aquila for damages. Staff is proposing to include in base rates the original coal supply costs and in the IEC forecast rates the replacement coal costs.

1 Staff is proposing to include two additional combustion turbines to meet Aquila's  
2 electric load in place of a short term (one year) capacity agreement that the Company has  
3 entered into with Calpine Corporation from the Aries Generating Facility. This position is  
4 addressed in the direct and surrebuttal testimonies of Staff witness Robert E. Schallenberg. My  
5 surrebuttal testimony supports the position that Aquila should be building its own generation to  
6 meet its growing electric needs.

7 **COMMERCIAL IN-SERVICE DATE OF SOUTH HARPER**  
8 **GENERATING FACILITY**

9 Q. Aquila witness H. Davis Rooney states at page 24 of his rebuttal testimony that  
10 the Staff is using "two different methodologies to determine the one in-service date of  
11 combustion turbines." Does Staff agree with this assertion?

12 A. No. The Staff has a set of in-service criteria that it uses for purposes of  
13 evaluating, from an engineering perspective, whether a generating unit is operationally capable  
14 of reliably supplying electricity to serve utility customers. Not meeting the Staff's in-service  
15 criteria does not mean that the generating unit is incapable of supplying electricity to serve  
16 utility customers. As indicated in my direct testimony (page 53), the commercial in-service date  
17 is the date when a unit is capable of meeting system load requirements. When the construction  
18 work is completed for all the critical components of a power plant, the utility will declare the  
19 unit commercially operational and the unit will be turned over to the dispatchers operating the  
20 electrical system. The unit will be dispatched on a daily and an hourly basis to meet the day-to-  
21 day system load requirements of customers. The commercial in-service date of each generating  
22 unit at the South Harper Station is the date the Staff used for purposes of determining when each  
23 unit should be included in plant in service and when allowance for funds used during

1 construction (AFDC) of each unit should stop. The commercial date is the date that utilities turn  
2 newly constructed generating plants over to dispatch, who schedules the units to meet the  
3 system load requirements using a economic loading principles. Each increasing generation  
4 levels are met with the next least cost generating units and purchased power that may be  
5 available. Once the units have been declared commercial they are controlled by dispatch who  
6 make decisions regarding when, and if, the units are needed for customers electrical needs.

7 Q. Has Staff established in-service criteria for electrical generating units?

8 A. Yes. Staff witness Leon C. Bender addresses the in-service criteria Staff used to  
9 evaluate the South Harper Generating Facility in his direct testimony. Mr. Bender, at page 9 of  
10 his direct testimony, makes clear that meeting the Staff's in-service criteria, established from an  
11 engineering perspective, does not mean that the South Harper station was unable to supply  
12 power to meet part of Aquila's system load demands *before* the date the Staff's in-service  
13 criteria were met. Mr. Bender indicated that each combustion turbine was declared available by  
14 Aquila to assist in meeting system load demands at a date earlier than the date when the unit met  
15 Staff's in-service criteria. Mr. Bender further indicated that Aquila said the South Harper Unit 1  
16 was available for dispatch on July 11, 2005; Unit 2 was available for dispatch on July 1, 2005;  
17 and Unit 3 was available for dispatch on June 30, 2005.

18 Q. Has Aquila revised any of the dates it declared the South Harper units  
19 commercially in-service?

20 A. Yes. As an update to Data Request No. 367, Aquila provided a revised response  
21 on November 11, 2005, which identified the commercial in-service date of Unit 1 as July 12, not  
22 July 11. Aquila provided the July 12 date for Unit 1 in response to Data Request No. 242.

1 However, Mr. Rooney uses the July 11 date for Unit 1 in his rebuttal, so it is unclear which date,  
2 if either, is correct for this unit.

3 Q. Is the Staff aware of anything else indicating the South Harper Generating  
4 Facilities were generating electricity used to meet system load before the Staff determined they  
5 met the Staff's in-service criteria?

6 A. Yes. In a newsletter entitled *South Harper-Peaking Facility Update*, in a section  
7 called "Operational Notes," Aquila identified that "the peaking facility became fully  
8 operational" in June 2005. This newsletter is attached as Schedule 1. The newsletter indicates  
9 unfinished work remained at the construction facility respecting landscaping, completion of the  
10 security fencing and removal of construction materials. Work also continued with respect to  
11 noise issues brought up by residents living near the power plant facility.

12 Further, a Standard & Poor's (S&P) research update dated November 27, 2005, (attached  
13 as Schedule 2), indicates the South Harper facility was operational in June 2005. The S&P  
14 research paper states:

15 Regarding the South Harper facility (operational since June 2005),  
16 pending litigation, may require Aquila to dismantle the plant.  
17 Dismantling of the plant would prevent Aquila from recouping in rate  
18 base, its previous investment until the plant is successfully relocated  
19 within Missouri.

20 Clearly, Aquila has identified to the public that the plant was fully operational and  
21 providing public utility service to its customers.

22 Q. How much electricity are the South Harper Units providing to customers?

23 A. Since the three units became commercially operational in late June 2005 they  
24 provided a total of 28,727 megawatt hours of electricity to Aquila's customers for July 2005.  
25 On a per unit basis, Unit 1 supplied 9,364 megawatt hours representing a capacity factor of



1 12%, Unit 2 supplied 8,483 megawatt hours with capacity factor of 10.9% and Unit 3 supplied  
2 9,958 megawatt hours with a capacity factor of 12.7% [Data Request No. 243].

3 According to the MPS operations, monthly production statistics, South Harper generated  
4 28,727 megawatt hours for July, 36,095 megawatt hours for August and 6,782 megawatt hours  
5 for September 2005 (Data Request No. 74).

6 Q. Were the South Harper units in operation when the MPS system had to meet its  
7 highest demand for electricity during 2005?

8 A. Yes. The units were in operation when MPS attained its hourly system peak of  
9 1,422 megawatts on July 22, 2005. On July 22<sup>nd</sup>, South Harper 1 supplied 870 megawatts, Unit  
10 2 supplied 1,202 megawatts and Unit 3 supplied 1,127 megawatts for a station total of 3,199  
11 megawatts on the peak day. At the time of actual hourly peak, sometime early evening, all three  
12 combustion turbines were operating at almost full capacity.

13 Q. At page 25 of Mr. Rooney's rebuttal testimony, he indicates Staff is advocating  
14 using criteria for AFDC that "declare each unit in-service from virtually the first date it  
15 generates electricity." Is Aquila witness Mr. Rooney correct?

16 A. No. Mr. Rooney poses on page 25 of his rebuttal testimony the following  
17 question and answer, "Q. What day did South Harper Unit #1 first deliver power onto the grid?  
18 A. July 11, 2005 at 12:00 noon." The first delivery of power to the electrical system is referred  
19 to as "first synchronization to the grid" which for Unit 1 was July 11<sup>th</sup>. Unit 1, the last unit to be  
20 built, had one day of testing (test power) on July 11<sup>th</sup> before it was declared commercial—a  
21 term that South Harper site management uses—on July 12<sup>th</sup>. As indicated previously, Aquila  
22 provided response to Data Request No. 367 stating July 12, 2005 was the date that South Harper  
23 Unit 1 was available to meet the Company's system load requirements, i.e., the commercial in-

1 service date was July 12, 2005. Unit 1 generated 785 megawatts of electricity on July 11, 2005,  
2 the day before its commercial in-service date, which would be considered test power. On July  
3 12<sup>th</sup>, the day Aquila states is the commercial in-service date when the Unit 1 was turned over to  
4 dispatch, the unit generated 319 megawatts of electricity.

5 Units 2 and 3 also generated electricity prior to those units' commercial in-service dates.  
6 South Harper Unit 2, with a commercial in-service date of July 1, 2005, generated  
7 967 megawatt hours between June 24 and June 25, 2005, and South Harper Unit 3, with a  
8 commercial in-service date of June 30, 2005, generated 1,738 megawatt hours between June 20  
9 and June 23, 2005. If the Staff was declaring each unit in-service from "virtually the first day it  
10 generates electricity" for purposes of placing the units in plant in service as Mr. Rooney alleges  
11 at page 25 of his rebuttal testimony, the Staff would have chosen the first date each unit  
12 supplied test power. In the case of Unit 2 the first day it supplied power was June 24 and Unit 3  
13 supplied power on June 20. However, Staff is not proposing to use either of these dates as the  
14 date after which Aquila no longer receives AFDC treatment for Units 2 and 3.

15 Q. At page 27 of Mr. Rooney's rebuttal testimony, he states his understanding of the  
16 purpose of Staff's in-service criteria is "to ensure that all appropriate performance criteria have  
17 been met and that no further significant construction or testing remains that could interfere with  
18 the plant's ability to be dedicated to and used for reliable utility service. This is necessary to  
19 comply with state statute." Do you have a response to Mr. Rooney's understanding?

20 A. It is my understanding that the necessity for Staff's in-service criteria largely  
21 started as a result of issues that occurred in the late 1970's with Aquila's predecessor company,  
22 Missouri Public Service Company, primarily relating to the Jeffrey Energy Center (Jeffrey).  
23 Aquila has an 8% ownership interest in Jeffrey. In a rate case where one of the Jeffrey Units

1 would first be included in rate base for Aquila, the construction of the unit was completed and  
2 the unit was declared commercially in-service. Aquila sought to have its share of the unit  
3 included in its rate base. Staff discovered that Aquila's upgrade to its transmission facility from  
4 Jeffrey was not complete and so Aquila was unable to obtain electricity from the new unit even  
5 though the Company indicated that the unit was in-service. Aquila's customers could receive no  
6 benefit from the new unit until the transmission facilities were completed. It is my  
7 understanding that as a result of this controversy, Staff began developing in-service criteria to  
8 ensure that when a power plant was deemed to be fully operational meeting the used and useful  
9 standard, that the construction of the unit was not only complete, but also that electricity from  
10 the unit could actually be provided to customers.

11 Q. Has the Staff only applied its in-service criteria to Aquila's generating units?

12 A. No. Staff used in-service criteria for Empire District Electric Company's State  
13 Line Unit 1, which is a peaking facility similar to the South Harper turbines that was completed  
14 in 1995. Staff used its in-service criteria for Empire's State Line Unit 2, completed in 1997 and  
15 later converted to State Line Combined Cycle in 2001. The Staff used its in-service criteria for  
16 Empire's recently completed Energy Center 3 and 4, which are smaller 50 MWh peaking  
17 facilities installed in 2003. Empire did not rely upon Staff's in-service criteria as the date that  
18 the units were declared commercial and ready for service. In the case of State Line Combined  
19 Cycle that was completed in 2001, Empire used the date of June 26, 2001, to declare the unit  
20 commercial. Empire transferred State Line Combined Cycle from construction work in progress  
21 (CWIP) (Account 107) to electric plant in-service (Account 101) at the time it declared the unit  
22 to be commercial in June 2001. However, Staff continued to review records and do inspection

1 of the State Line Combined Cycle Unit through all of July 2001 to ensure that the unit would  
2 meet the design and construction requirements set out by Empire and its contractors.

3 Q. When did the State Line Combined Cycle Unit meet Staff's in-service criteria?

4 A. Sometime late July 2001.

5 Q. Has any other utility treated on its books generating facilities built in the last  
6 several years as being in-service without a determination the facilities meet the Staff's in-service  
7 criteria?

8 A. Yes. Kansas City Power & Light (KCPL) has not had a rate case since 1985.  
9 However, KCPL has built several combustion turbines over the past several years. In late  
10 1990's, KCPL installed Hawthorn 6, which is a 132 megawatt natural gas-fired peaking unit,  
11 which was later converted into a combined cycle unit with the installation of Hawthorn 9 in the  
12 year 2000. KCPL also installed in 2000 Hawthorn 7 and 8, which are 77 megawatt natural gas-  
13 fired peaking units, and in 2003, West Gardner 1, 2, 3 and 4 and Osawatomie 1, all 77 megawatt  
14 natural gas-fired peaking units, were installed. In the summer of 2000, KCPL completed its  
15 reconstruction of Hawthorn 5, a base load coal-fired generating unit. This unit experienced a  
16 massive explosion in early 1999, causing a complete rebuild of the boiler and upgrades to the  
17 steam turbine generator.

18 Q. Has Staff examined each of the KCPL units to see if they meet its in-service  
19 criteria?

20 A. No. KCPL has not had a rate case since 1985. As part of the KCPL Regulatory  
21 Plan approved by this Commission in Case No. EO-2005-0329, KCPL is scheduled to file a rate  
22 case February 1, 2006. Staff intends to perform in-service criteria testing and review on each of  
23 the generating facilities KCPL has identified a commercial in-service date for the generating

1 facilities and removed those units from CWIP to plant in service for accounting purposes.  
2 While the Staff has yet to complete its in-service criteria analysis for those units, they have been  
3 included in KCPL's plant-in-service since completion of the construction.

4 Under Aquila's standard of declaring a generating facility in-service only when the  
5 Staff's in-service criteria are met, KCPL could still be accruing allowance for funds used during  
6 construction (AFDC) for Hawthorn 6 even though that unit has been providing public utility  
7 service to KCPL's customers for many years. Further, Aquila's standard could also mean that  
8 KCPL would not be depreciating any of its generating facilities until the Staff performed its in-  
9 service criteria analysis. From that perspective, Aquila's in-service criteria standard does not  
10 make any sense. There is no connection between when Staff actually is able to inspect the  
11 records of tests that are performed on a generating unit as well as physically doing inspections  
12 on-site and when a unit is capable of meeting the system load requirements. This is certainly  
13 the case with the Empire and KCPL generating units.

14 Q. What are Staff's specific in-service criteria?

15 A. For a discussion of each specific in-service criterion, see Schedule 1 of Staff  
16 witness Bender's direct testimony filed in this proceeding.

17 Q. Mr. Rooney indicates at page 27 of his rebuttal testimony that failure to meet  
18 Staff's in-service criteria could mean that a plant would not be considered in-service for rate  
19 base treatment. Is that true?

20 A. Yes. If an applicable criterion is not met, such as the previously mentioned issue  
21 where the transmission facilities are not in place to transport the power to its customers, then a  
22 generating unit would not be included in rate base. However, meeting all of the Staff's in-

1 service criteria does not control when the unit should be declared commercial and transferred  
2 from CWIP to plant-in-service.

3 The engineering in-service criteria would be used to determine that there would be a  
4 failure in the generating facility being able to meet its public utility service and, thus, not be  
5 allowed to be recovered in rates.

6 Q. Mr. Rooney indicates at page 29 that final acceptance of the South Harper  
7 Facility occurred on August 12 after a series of tests. Should the August 12 date be the date that  
8 Aquila uses for its commercial operational date of South Harper Generating Facility?

9 A. No. As indicated by Mr. Rooney throughout page 29 of his rebuttal testimony,  
10 work continues to be performed on the South Harper Facility and tests continue to be made, in  
11 particular with respect to the noise requirements. As is the case with most generating power  
12 plants, there continues to be work performed throughout its life, and testing and evaluating the  
13 power plant's performance is an on-going process. The key date that should be used for  
14 declaring a generating facility commercial, thus completing its construction, is the date that it is  
15 taken over for control by the operators of the electrical system—the dispatchers. That is the  
16 date that the generating facility is meeting the system operating needs of its customers. At this  
17 date, the unit is capable of meeting the system load requirements and is depended upon by the  
18 operators to be able to be dispatched on an as-needed basis. That is not the case during the  
19 construction phase, where the unit is being readied for service and tested to see that its systems  
20 and equipment are functioning and performing to their design and construction standards. Once  
21 the unit is turned over to the dispatchers, they have control of when the unit will be used to meet  
22 system load requirements.

1           Q.     Mr. Rooney indicates at page 30 of his rebuttal testimony that FERC has its “own  
2 rules which do not use commercial as the criteria for in-service.” Did you rely on the FERC  
3 definition for in-service?

4           A.     Yes. The Federal Energy Regulatory Commission’s (FERC) Uniform System of  
5 Accounts (USOA) has been adopted by this Commission and is used throughout the utility  
6 industry operating in the state of Missouri, as the standard chart of accounts. As indicated at  
7 page 30 of Mr. Rooney’s rebuttal, he cites the definition found in the instruction for Account  
8 106-Completed Construction Not Classified, stating: “this account shall include ... electric plant  
9 which has been completed and placed in service ...”. This definition is the exact one that Staff  
10 relies on with respect to the commercial in-service dates identified by Aquila for each of the  
11 three combustion turbines as June 30, July 1 and July 12, 2005. In each instance, the South  
12 Harper turbines have each been fully “completed and placed in service by the company.” The  
13 date each of these units have been “completed and placed in service” is June 30, 2005 for Unit  
14 3, July 1 for Unit 2 and July 12 for Unit 1. Each of these dates is significant because once the  
15 units have met the provisional acceptance date they start supplying much needed capacity to  
16 Aquila’s electric system and providing energy to its customers when called upon by the  
17 dispatchers operating the electrical network.

18           This is consistent with how other utilities, with which I am familiar, have identified  
19 when a generating facility is completed and placed in service for regulatory accounting  
20 purposes. Both Empire and KCPL have followed this standard as set out in Mr. Rooney’s  
21 rebuttal testimony. In particular, as noted in the examples above, with respect to Empire’s State  
22 Line Combined Cycle Unit and KCPL’s Hawthorn 6, these units operated prior to Staff’s

1 completion of its in-service criteria analysis, yet both companies declared the units  
2 commercially operational.

3 Q. What does the term “fully operational and used for service” as used in Section  
4 393.135 RSMo, as identified by Mr. Rooney, in his rebuttal at page 30 mean to Staff?

5 A. Fully operational and used for service with regard to generating facilities, means  
6 that the plant is fully capable of meeting the system load requirements of its customers, the  
7 major components and primary equipment (such as boilers, turbines and generators, motors and  
8 pumps, piping, all electrical components and transmission facilities) under construction are  
9 complete and the unit can provide electric service for which it was designed and constructed.  
10 Used means that the generating unit not only has the capability to provide electricity and the  
11 customers can use or needs the generation from the plant. In contrast, once construction of a  
12 unit is completed, the costs are transferred to plant in service, depreciation commences, AFDC  
13 treatment stops and it is placed in service as plant and included in the utility’s rate base.

14 Q. Mr. Rooney uses the term “fully operational and used for service” in his rebuttal.  
15 Please comment.

16 A. Mr. Rooney identifies in his rebuttal, page 30, the term “fully operational and  
17 used for service” as used in Section 393.135 of the Missouri Revised Statutes. In this portion of  
18 his rebuttal, he attempting to link the FERC rules regarding when a plant is in-service with  
19 “fully operational and used for service” of Section 393.135.

20 Q. Has Aquila declared the South Harper units “fully operational?”

21 A. Yes. In the aforementioned newsletter entitled *South Harper-Peaking Facility*  
22 *Update*, in a section called “Operational Notes,” Aquila used that very term “the peaking facility  
23 became **fully operational**” in June 2005 (attached as Schedule 1). The South Harper newsletter



1 did not say that the units became “fully operational” August 12<sup>th</sup>, as Mr. Rooney is attempting to  
2 have the Commission adopt. Two of three turbines representing the majority of the South  
3 Harper capacity were “fully operational and used for service” as that term is used in the  
4 Missouri statute and as FERC uses the term “completed and placed in service” as of June 2005.  
5 The third unit (Unit 1) met that criteria on July 12<sup>th</sup>. These are the dates that Staff has used in  
6 this case to develop the costs for South Harper that should be included in rates.

7 Q. At page 30 of his rebuttal testimony, Mr. Rooney seems to be attempting to  
8 somehow discredit the term “commercial in-service” as Staff used that term in its direct  
9 testimony. Does Aquila use the term “commercial” as used when the units are in-service?

10 A. Yes. South Harper’s construction site management uses this term to declare the  
11 unit in-service. In a handout prepared by the South Harper Site Manager, Tom Miller, specific  
12 milestone dates achieved by the construction project management team is identified. This  
13 handout on the South Harper construction project is attached as Schedule 3. The following key  
14 dates for each South Harper unit is shown below:

<u>Unit</u>	<u>First Fire</u>	<u>First Synchronization</u>	<u>Declared Commercial</u>
Unit #3	June 17, 2005	June 20	June 30
Unit #2	June 23	June 24	July 1
Unit #1	July 8	July 11	July 12

19 While Mr. Rooney seems to be unable to find reference to the term “commercial” in the FERC  
20 USOA chart of accounts or plant instructions, the South Harper construction site management  
21 team is clearly familiar with the term.

22 Q. Has Staff included the South Harper Generating Facility in the rate base of  
23 Aquila Networks-MPS?

1           A.     No. In lieu of placing the South Harper Generating Facility in rate base, the  
2 Staff, in its direct filing, used the three combustion turbines installed at the South Harper  
3 Facility as a proxy for combustion turbines Aquila should have built and, in the proxy, included  
4 them in plant in service, thus according them rate base treatment. As such, this treatment allows  
5 Aquila to include the cost of the equivalent of completed South Harper Units in rate base, thus  
6 providing a return of the investment and giving the company depreciation treatment providing  
7 for a recovery of the investment in this case, regardless of whether the South Harper Generating  
8 Facility continues to operate or is closed.

9           Q.     Why has Aquila made an issue respecting the in-service date of the South Harper  
10 facility?

11          A.     Utilities typically want to declare a generating facility in-service as soon as  
12 possible so that the benefits of the plant can start to flow. Aquila had to file this case by  
13 May 24, 2005 to get new rates into effect by the expiration of the existing IEC. Also Aquila had  
14 to match the expiration of its Aries purchased power agreement on May 31, 2005 with  
15 replacement power. Since the South Harper units replace a significant portion of the Aries  
16 capacity agreement, Aquila planned to get the units in-service by June 1, 2005. Since Aquila  
17 was unable to complete the South Harper units by this date, Aquila contracted short-term  
18 peaking power with an affiliated company to meet the system load requirements throughout the  
19 summer of 2005.

20          With the tight time-lines for getting the construction complete and the rate case  
21 procedural schedule in place, completion of the South Harper units became less critical. As a  
22 result, Aquila had an opportunity to delay meeting the Staff's in-service criteria for these units.

1 Q. How could Aquila gain an advantage by delaying the date it meets the Staff's in-  
2 service criteria for the South Harper units?

3 A. Delaying the in-service date allows Aquila to continue to accrue construction  
4 accounting costs on the units. That accounting includes a delay in the start of depreciation, thus  
5 protecting earnings, and continuing the accrual of AFDC. The closer Aquila delays the in-  
6 service date to the true-up date of October 31, 2005, the better it is from a financial perspective.

7 Q. What amount of AFDC does the South Harper project generate?

8 A. For July Aquila charged \$743,398 and for August it charged \$383,785 for a total  
9 of \$1,127,183 [Data Request No. 498] to AFDC. Under Staff's commercial in-service dates, no  
10 AFDC would be calculated on South Harper Units 2 or 3 (commercial in-service dates of July 1  
11 and June 30) for either July or August and only 12 days of AFDC for Unit 1 (commercial in-  
12 service date of July 12) would be added to the final completed plant amounts.

13 Q. Has Staff made the necessary adjustments to reflect this position?

14 A. No, not yet. Since Staff's direct case cut off construction essentially at June 30,  
15 2005, the adjustments for AFDC and test power amounts are not included in the South Harper  
16 plant amounts. The test power was not booked to the South Harper work order until October  
17 2005. The test power amounts, when the cut-off for test power tied to the commercial in-service  
18 dates, other additional construction costs that occurred after June 30 cut-off and any amounts for  
19 retention will be reviewed and consider in the true-up phase of this case.

## 20 **FUEL COST RECOVERY MECHANISM**

21 Q. At page 9 of Aquila witness Dennis R. Williams' rebuttal testimony, he states  
22 that Aquila's opinion is "that the Commission may authorize Aquila to implement a fuel  
23 adjustment mechanism in this case. Does Staff agree?"

1           A.     No. As previously stated in both my direct and rebuttal testimonies, Staff is of  
2 the view that much work is left to be completed on the nature and scope of any fuel cost  
3 recovery mechanism that would result from the Senate Bill 179 Roundtable discussions. These  
4 discussions have been taking place since August 2005. As recent as December 6, there was a  
5 SB 179 Roundtable meeting where all of the stakeholders had an opportunity to present  
6 different points of view with respect to the implementation of Section 386.266, which is the  
7 interim energy charge/fuel clause mechanism signed into law July 14, 2005. That law does not  
8 become effective until January 1, 2006, and at such time, the Commission will have to issue  
9 proposed rules for publication allowing a period of time for public comment. It is anticipated  
10 that hearings will take place to allow all concerned parties the opportunity to have input into the  
11 development and implementation of the fuel cost recovery mechanism. I outline at pages 3 and  
12 4 of my rebuttal testimony the process that Staff envisions will take place with respect to this  
13 legislation.

14           Q.     When is that last date for testimony schedule in this case?

15           A.     A true-up hearing is currently scheduled for February 23 and 24, 2006, and the  
16 Staff anticipates there will be testimony filed for that hearing. With Aquila's May 24, 2005,  
17 filing of tariffs in this case, the operation of law date is April 23, 2006. In light of the timing of  
18 Aquila's rate case and the implementation of the statutory fuel cost recovery mechanism, it is  
19 very unlikely that there will have been sufficient progress made on the development and  
20 implementation of the statutory fuel cost recovery mechanism before the February 2006 true-up  
21 hearing dates. The true-up hearing will be the last scheduled opportunity for testimony and  
22 cross-examination of the witnesses in this case.

1           Q.     At page 9 of Mr. Williams' rebuttal testimony, he identifies his understanding of  
2 an interim energy charge. Mr. Williams' states "over-collections are generally refunded to  
3 customers with interest. Under-collections are absorbed by the utility." Do you agree with  
4 him?

5           A.     No. An interim energy charge or an IEC has a band of fuel prices that have been  
6 predetermined and set as part of a permanent rate, or base rate, and an outer band that is  
7 commonly referred to as a ceiling or forecasted rate. At the conclusion of the IEC period, a  
8 prudence review and audit of the actual fuel costs incurred determines if there is to be any  
9 refund to the customers. Any amounts that were over-collected are to be refunded to the  
10 customers (with interest) down to the base amount. Actual amounts for fuel and purchased  
11 power costs that are collected by the company within the band that are prudently incurred are  
12 retained by the company. Only those over-collections that occur within the range of the base  
13 and forecast are refunded back to the customers. Any over-collections below the base are  
14 retained by the utility. Any under-collections above the forecasted level are absorbed by the  
15 utility.

16          Q.     Mr. Williams states at page 10 of his rebuttal that "a properly designed fuel  
17 adjustment mechanism, on the other hand, sends more current price signals and avoids a good  
18 deal of the potential for large correction adjustments. It also avoids the inequity of the utility  
19 not being able to recover all of its prudently incurred fuel costs." Do you agree?

20          A.     No. Either an IEC or a fuel adjustment mechanism can address increased fuel  
21 cost using current pricing. There is an inherent inequity in fuel cost mechanisms designed as a  
22 total pass-through mechanism in that the burden is upon the prudence review to catch any costs

1 that should not be flowed through the fuel adjustment mechanism. There is a greater potential  
2 in a fuel adjustment mechanism to pass costs on to customers that should not be borne by them.

3 Q. Can you provide an example to illustrate your point?

4 A. Yes. In earlier testimony (page 34-39 of my direct testimony) I described an  
5 issue arising from the termination of a coal supply contract with CW Mining. Briefly, CW  
6 Mining contracted with Aquila to supply high btu coal for use at MPS' Sibley Generating  
7 Station and a L&P's Lake Road Generating Station; however, CW Mining has attempted to  
8 terminate the contract and Aquila is asserting the termination was wrongful and a breach of the  
9 contract. Typically, the higher replacement cost of the coal obtained to replace that which was  
10 to be delivered under the breached CW Mining contract would be passed on to Aquila's electric  
11 customers. In order to evaluate the prudence of such costs, those responsible for reviewing the  
12 fuel adjustment mechanism would have to discover that the CW Mining contract was breached  
13 and that there was a substantially higher cost for replacement coal. The prudence review would  
14 be done in an after-the-fact fashion, unlike how it was treated in this case. With an IEC, the  
15 Staff is proposing to treat the CW Mining original contract price as a base amount for fuel and  
16 the replacement coal as a part of the forecasted range of the IEC. The burden would be on the  
17 reviewers of the fuel adjustment mechanism to discover and to make a determination as to the  
18 prudence of the CW Mining issue. Using the IEC mechanism, the Staff is able to implement a  
19 process that encourages Aquila to fully pursue its legal recourse in the courts concerning the  
20 breached coal supply contract and would reduce the possibility that a breaching coal supplier  
21 could argue that the utility would double recover its damages from the breach—once from  
22 ratepayers and again from the supplier.

1           Q.     On page 11 of his rebuttal Mr. Williams states that Aquila has filed a tariff sheet  
2 as a placeholder for the fuel adjustment mechanism. Do you have a response?

3           A.     As indicated by Mr. Williams, Aquila's direct testimony was filed prior to the  
4 fuel adjustment mechanism legislation being signed into law in Missouri, and Aquila filed tariff  
5 sheet 124 (Fuel Adjustment Rider Electric) as a placeholder. This tariff sheet has no specifics as  
6 to how a fuel adjustment mechanism would be implemented or even how it would be developed.

7           Mr. Williams further states at page 11 of his rebuttal testimony that "Aquila will utilize  
8 the form of the fuel adjustment mechanism as contained in the rules proposed by the  
9 Commission Staff in connection with SB 179. Once the new rules are in place Aquila will  
10 update its Tariff Sheet 124 to match the approved rule and will follow all filing requirements set  
11 out in the final rules. The base fuel cost, as determined by the Commission in this rate case, will  
12 be utilized in setting the fuel adjustment mechanism starting point." As indicated earlier, and  
13 detailed in my rebuttal testimony, those rules have not been fully established and will be subject  
14 to a public comment period and likely, a Commission hearing, so that any such rules regarding  
15 the fuel cost recovery mechanism likely will not be promulgated in time to be in effect before  
16 the end of this rate proceeding. In addition, as of the filing of this surrebuttal testimony, Staff is  
17 unaware as to what the Company's base fuel position would be in implementing the fuel  
18 adjustment mechanism as outlined in Mr. Williams' rebuttal testimony. As an example, the  
19 Company's direct case has used a \$6.57 per MMBtu natural gas price to develop its fuel costs  
20 and has used various purchased power prices that it has indicated will be updated that have, as  
21 yet, not been provided to the parties. Aquila has indicated that those updates will be provided in  
22 the true-up portion of this case. The point here relating to the fuel adjustment mechanism is that

1 the Company has not identified what the base fuel costs are that it is proposing to be used to set  
2 permanent rates, even at this late date of the rate proceeding.

3 Q. Mr. Williams states at page 12 of his rebuttal that there have been problems with  
4 the current IEC. Does Staff agree?

5 A. Yes. Staff addressed the need for modifications to the existing IEC at pages 31  
6 through 42 of my direct testimony.

7 Q. Mr. Williams states the problem with the IEC was “due to extreme price  
8 volatility and unexpected fuel price increases, the price of fuel has far exceeded the established  
9 surcharge. With no prescribed method within the existing IEC for the utility to be made whole,  
10 Aquila has borne tens of millions of dollars of negative earnings impact during the term of the  
11 existing IEC.” Do you agree?

12 A. While Staff agrees that the Company is currently under-recovered by tens of  
13 millions of dollars, much of the impact has little to do with the price volatility issue identified in  
14 Mr. Williams’ rebuttal testimony. In my direct testimony, I identify that the CW Mining issue  
15 was worth upwards of approximately \$8 million (page 14, line 10 of Aquila witness Williams  
16 rebuttal). Moreover, the Sibley outage that extended beyond the original estimate of four weeks  
17 to almost eight weeks, caused significant increases in fuel costs that contributed to the under  
18 recovery of the IEC. Since Sibley is one of Aquila’s lowest cost generating units, any  
19 replacement power needed during the time that unit was out of service, was more costly.

20 Neither the CW Mining contract nor the Sibley outage had anything to do with the price  
21 volatility of increasing fuel costs. As discussed at page 6 of my rebuttal testimony, the  
22 Company initially had requested a \$5.64 per MMBtu amount for natural gas in its last rate case.  
23 Yet, as stated by Aquila witness Empson in his direct testimony, the IEC was determined using



1 a \$5.14 amount or a .50 difference. Had the \$5.64 amount originally requested by Aquila in its  
2 direct filing in Case No. ER-2004-0034 been used in the IEC forecast range, there would have  
3 been an approximate \$6 million of additional recovery in the IEC mechanism [Data Request No.  
4 358].

5 Q. What factors have caused MPS not to recover its actual fuel costs?

6 A. The coal dispute with CW Mining has contributed at least \$8 million, of under  
7 recovery identified by Mr. Williams on page 14 of his rebuttal. The extended Sibley outage had  
8 a significant impact to the shortfall of collections of the IEC since the Sibley unit is one of the  
9 lowest cost generation facilities on Aquila's Missouri system. The exact impact of the Sibley  
10 outage has not been quantified at this time. In early October of this year Staff requested  
11 information from Aquila in Data Request No. 358.3 on this issue, and Aquila has not yet  
12 provided the information.

13 If the full forecasted natural gas price of \$5.64 per mmbtu amount had been used for the  
14 IEC mechanism, there would have been another \$6 million of recovery that Aquila would have  
15 minimized some of the price volatility of the increasing energy markets. In other words, if the  
16 IEC had used a ceiling price for natural gas of \$5.64 per mmbtu instead of the \$5.14 per mmbtu,  
17 Aquila would have recovered more of its fuel costs and been in a less under recovery position.  
18 The total of CW Mining and the 50 cents natural gas forecast amounts represents upward of \$14  
19 million that have impacted the current IEC. The effects of the Sibley outage would increase this  
20 figure even higher so that Aquila would be in less under-recovery position had these events not  
21 occurred. The point here is that it is too easy to simply blame the high energy markets for  
22 Aquila's significant under-recovery of the IEC. There have been many factors for the under-  
23 recovery, some of which have been in Aquila's control.

1           Q.     Aquila describes the type of IEC it would have the Commission authorize at page  
2 13 of Mr. Williams' rebuttal testimony. Would you please respond to Aquila's proposal?

3           A.     Aquila indicates that it would propose a two-year IEC which is something that  
4 Staff would agree to. Aquila also indicates that it would include variable costs of fuel and  
5 purchased power energy recorded in FERC Account Nos. 501, 547 and 555. Staff would agree  
6 also with this position. Aquila further states that it would also include other fuel-related costs  
7 such as SO<sub>2</sub> and net gains/losses from hedging that are recorded in FERC Accounts 509, 421  
8 and 426.5 in the IEC. Staff would agree that the results of the Aquila's hedging program should  
9 be included in the IEC mechanism and generally agrees that the SO<sub>2</sub> emission allowances  
10 should also be part of that mechanism, with some reservation.

11          Q.     What reservation does the Staff have about including SO<sub>2</sub> emission credits in an  
12 IEC?

13          A.     Aquila is the only electric utility operating in this state that is currently having to  
14 buy SO<sub>2</sub> emission allowance credits. Neither AmerenUE, KCPL nor Empire must buy  
15 allowance credits. It is my understanding that AmerenUE, to the extent it is buying SO<sub>2</sub> credits,  
16 is doing so for speculation, not because these allowance credits are needed for it to operate its  
17 generators. KCPL is selling credits it does not need, and Empire has sold some of its excess  
18 credits and retained most for the future. In Missouri, only Aquila is short of SO<sub>2</sub> emission  
19 credits and must rely on the emission credit markets, which has been very high priced recently,  
20 in order to have sufficient allowances to operate its generating fleet. Staff is concerned about  
21 including Aquila's emission allowance credits either through an IEC or fuel adjustment  
22 mechanism. Aquila has put itself in the position of having to rely on an extremely high and  
23 volatile SO<sub>2</sub> emission allowance market. Despite its concerns, Staff would consider, as part of

1 an overall IEC package, the inclusion of SO<sub>2</sub> emission allowance credits if other parties believe  
2 this would be appropriate.

3 Q. Do you agree with Aquila's proposed IEC range provided in Mr. Williams'  
4 rebuttal testimony?

5 A. No. Staff believes the range Aquila proposes is too narrow for natural gas and too  
6 high for purchased power. A properly developed range of energy prices for an IEC must have  
7 sufficient opportunity for the company to recover prudently incurred fuel costs at the high end  
8 while ensuring that a reasonable incentive is built into the low end (base) to enable the company to  
9 push energy prices down.

10 Q. Does Staff have a proposed level of base and forecast (ceiling) for an IEC in this  
11 case?

12 A. Yes. A base for natural gas of something in the \$5 per mmbtu range and  
13 \$35 per megawatt hour for purchased power would be a starting point. A ceiling price for natural  
14 gas could be set in the order of \$10 per mmbtu and upwards of \$65 per megawatt hour for  
15 purchased power. In addition, Staff has proposed that a dispute with one of Aquila's coal suppliers  
16 be treated as part of the IEC mechanism. This would result in a base price of almost \$20 per ton  
17 for the original contract amount for the high btu blend coal used at the MPS Sibley facility and the  
18 Light & Power Lake Road facility. The forecast amount would be upwards of approximately \$38  
19 per ton.

20 It is estimated that the IEC using the above base and forecast prices would roughly equal an  
21 approximate \$35 to \$39 million interim increase rates, subject to a true-up audit and a provision for  
22 refund.

1           Q.     At page 14 of Mr. Williams' rebuttal testimony, he indicates Aquila is opposed to  
2 including the CW Mining contract cost of coal in the base rate of the IEC. Does Staff continue  
3 to believe that including the CW Mining contract cost of coal in the base rate of the IEC is the  
4 most appropriate way of handling the CW Mining issue?

5           A.     Yes. Aquila needs to have every incentive to pursue damages from CW Mining  
6 for its complete failure to comply with and perform under terms of the coal supply contract. If  
7 Aquila were to get the full replacement coal, at over double the costs, in permanent rates, Aquila  
8 would have little incentive to pursue through the courts its legal rights for breach of contract  
9 damages. Aquila could take the view that it already has recovery in rates the much higher  
10 replacement coal and, therefore not aggressively pursue its legal recourse. It is expensive to  
11 proceed with lawsuits and the outcome uncertain. Waiting for a court decision could be time  
12 consuming. Aquila is taking the position that the risks of the CW Mining lawsuit should be  
13 placed on its customers. Consumers had no role in Aquila's decision to enter into a contract  
14 with this coal company; have no standing in court to pursue a lawsuit; and have no say on how  
15 Aquila prosecutes the case. The customers had nothing to do with getting Aquila in its current  
16 position. Only Aquila can pursue damages from the breached coal contract and, therefore, all  
17 the litigation risk should be solely on Aquila.

18          Q.     Does Staff believe including the costs relating to the dispute with the CW Mining  
19 coal contract in the IEC is a reasonable solution to this dilemma?

20          A.     Yes. Staff could have taken the position, and some may suggest should have  
21 taken the position, that all the replacement coal costs should be absorbed by the Company.  
22 There is a question as to the quality of Aquila's decision to select CW Mining as a supplier in  
23 the first place. This matter will be further discussed later in this testimony.

1           Q.     Mr. Williams proposes a change to the existing IEC mechanism. Please describe  
2 this change.

3           A.     At page 15, Mr. Williams identifies a significant change to the IEC that Aquila  
4 believes is necessary. Mr. Williams states that “for protection against extreme volatility in the  
5 market for natural gas, purchased power and SO<sub>2</sub> allowances, Aquila proposes that all prudently  
6 incurred fuel costs that are unrecovered at the end of the IEC term (fuel costs above the ceiling)  
7 be recorded in a deferred account and be allowed for rate recovery in the Company’s next  
8 general rate case using a two-year amortization period.”

9           Q.     Does Staff agree?

10          A.     No. In the past, the IEC was designed so that the Company would keep any  
11 amounts of actual fuel costs below the base levels. The IEC was structured so that actual costs  
12 above the forecast (ceiling) level were the sole responsibility of the Company. Perhaps  
13 consideration could be given to deferring actual prudently incurred costs above a certain level  
14 that exceeded the forecast (ceiling) level with an opportunity for the Company to be able to  
15 request recovery over a certain period. Other parties could oppose such treatment if  
16 circumstances warranted. Recovery of any deferral amounts should not be a certainty as  
17 suggested by Aquila. This type of proposal would have a level above the forecast (ceiling)  
18 amount where the Company would be responsible for the costs.

19               Interestingly, Aquila says nothing about the potential for an over-recovery of fuel and  
20 purchased power costs. What would happen if the Company collected more than the actual  
21 costs below the base prices? Aquila would keep that money, but no mention of that opportunity  
22 is in Aquila’s proposal. Aquila has not presented a symmetrically fair proposal in that it wants  
23 full recovery when actual costs are higher than the forecasted level but apparently does not want

1 to return any monies over-collected from customers when actual costs are lower than the base  
2 amount. Staff would not be in favor of such a one-sided recovery mechanism as proposed by  
3 Aquila in Mr. Williams' rebuttal testimony. What Aquila is proposing is an IEC that, in  
4 essence, is nothing more than a total pass-through of fuel costs, much the same as a total pass-  
5 through fuel clause, except making no provision for any over-collections below the base  
6 amounts. This concept of fuel recovery is much different than what the IEC mechanism was  
7 developed to accomplish.

8 Q. Please summarize the Staff's position concerning a fuel cost recovery mechanism.

9 A. Staff continues to believe that a properly designed IEC is preferable to a statutory  
10 fuel mechanism that has yet to be fully developed and currently does not have Commission rules  
11 in place to implement. Staff has proposed the use of IECs in the past, as recently as the Empire  
12 District Electric rate case, Case No. ER-2004-0570. Aquila has an IEC in place that is not  
13 scheduled to expire until the operation of law date in this case, late April 2006. Staff believes  
14 that, with modifications discussed in my direct testimony (and later in this testimony), an IEC  
15 could be used to deal with the extreme volatility of the energy markets currently affecting the  
16 utility industry.

## 17 **CW MINING COAL AGREEMENT DISPUTE**

18 Q. Aquila witnesses Andrew N. Korte and Jerry G. Boehm, address the CW Mining  
19 dispute in their respective rebuttal testimonies. What is Aquila's position on this issue?

20 A. Like Mr. Williams, the other Aquila witnesses take the approach that there was  
21 nothing wrong with the Company losing a coal supply agreement that had very attractive fuel  
22 prices. Their rebuttal is presented from the perspective that CW Mining is not a current coal  
23 contract (Korte rebuttal, page 6) because CW Mining simply terminated the agreement. At page

1 4 of Mr. Boehm's rebuttal, he goes even further by stating that the CW Mining contract  
2 "represents a scenario which no longer exists." Mr. Korte states at page 5 of his rebuttal that  
3 "the majority of Aquila's high-Btu bituminous coal is under contract from Consolidated Coal  
4 Company's (Consol Energy) Emery mine in Utah. A smaller quantity has been recently  
5 purchased from Andalex's Aberdeen mine also in Utah." At page 6 of his rebuttal, Mr. Korte  
6 further identifies that there are two agreements with Consolidated Coal Company  
7 (Consolidated), one that is a spot contract for 62,000 tons at \$38.00 per ton and a second one  
8 that is a long-term agreement of 100,000 tons for the remainder of 2005 and 300,000 tons  
9 annually thereafter for 2006 and 2007 at \$38.0643 per ton. Finally, Mr. Korte identifies that  
10 Aquila and Andalex have agreed to a spot contract for 24,000 tons at \$42.00 per ton.

11 All of these prices are substantially above the \$19.99 per ton price that CW Mining  
12 agreed to supply Aquila in late 2003. The total additional cost to Aquila is between \$8 and  
13 \$10 million dollars per year to replace the CW Mining coal. There were also substantial  
14 increases for SO<sub>2</sub> emission allowance credits that Aquila had to purchase in 2004 and 2005 as  
15 the result of using high sulfur Illinois coal to replace the CW Mining coal. This was at a time  
16 when the SO<sub>2</sub> emission credits market saw tremendous price increases. This caused Aquila to  
17 pay several million dollars more in fuel costs.

18 Q. What is CW Mining?

19 A. This is a Utah based coal company that operates as a d/b/a under the name of Co-  
20 op Mining Company (Co-op). CW Mining supplied coal to Aquila before the 2003 contract it  
21 terminated. CW Mining agreed to supply high btu bituminous coal needed as a blend that is  
22 mixed with low btu coal for Aquila's Sibley and Lake Road generating facilities.

23 Q. Why is coal blended?

1           A.     These power plants were originally designed, in the case of Sibley in 1969 when  
2     Unit 3 went into service, to use high btu coal. With emission issues in the 1980s, Aquila  
3     converted Sibley to use low-sulfur western coal in 1993. Since the original boiler was designed  
4     to use high btu coal, a blending of high btu coal had to be used with the lower btu coal for  
5     operating and safety reasons. The Company has used a variety of blending ratios at Sibley from  
6     75% low btu/ 25% high btu to the current 80% low btu/ 20% high btu. Since the high btu coal  
7     is more expensive, Aquila attempts to use the lowest amount of this coal as possible, giving full  
8     consideration to the reliability and safety concerns of operating the power plants.

9           Q.     When did Aquila and CW Mining enter into the coal agreement?

10          A.     Aquila's senior vice president and chief operating officer, Keith Stamm signed  
11     the contract on behalf of Aquila on September 10, 2003. The contract went into effect January  
12     1, 2004. CW Mining signed the agreement on August 27, 2003.

13          Q.     What were the terms of the contract?

14          A.     The initial term of the agreement commenced on January 1, 2004 and expires on  
15     December 31, 2006. The contract provided for an extension, if agreed to by Aquila, for an  
16     additional two years through December 31, 2008 [Source: Data Request No. 87].

17                 Starting on January 1, 2004, CW Mining was to supply total tons of coal for:

18                     Initial Period

19                     2004	450,000 tons
20                     2005	550,000 tons
21                     2006	550,000 tons

22  
23                     Extension period

24                     2007	550,000 tons
25                     2008	550,000 tons



[Source: Data Request No. 303-- Aquila press release concerning CW Mining coal contract]

Q. What is the dispute between CW Mining and Aquila?

A. Shortly before the contract was to go into effect, CW Mining notified Aquila that “a labor dispute would affect [CW Mining’s] performance under the contract and that reduced shipments could be expected. Since that time the labor dispute has continued, resulting in similar mining impairment notices, and Aquila has received less than 30% of the contracted volumes of coal” [Data Request No. 87].

Q. When was Aquila notified that CW Mining no longer intended to meet the terms of the contract?

A. Aquila received a letter from CW Mining on April 18, 2005. This letter, along with other correspondence concerning this dispute, is attached as highly confidential Schedule 4.

CW Mining notified Aquila that it was terminating the coal agreement stating the following:

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[Source: Data Request No. 303]

Q. Did Aquila respond to CW Mining's attempt to terminate the coal agreement?

A. Yes. On April 25, 2005 Aquila's attorney Shook, Hardy & Bacon sent CW Mining a letter disputing the coal company's ability to terminate the agreement. This letter, is attached as highly confidential Schedule 4. Aquila stated:

[illegible]

[Source: Data Request No. 303—Highly Confidential Schedule 4]

Q. Did CW Mining resume shipment of coal under terms of the agreement?

A. No. On July 1, 2005, Aquila's legal counsel sent CW Mining a letter (highly confidential Schedule 4) stating that CW Mining \*\* \_\_\_\_\_

**\*\* The letter goes on to say:**

1                   \*\* \_\_\_\_\_  
2                   \_\_\_\_\_  
3                   \_\_\_\_\_  
4                   \_\_\_\_\_  
5                   \_\_\_\_\_  
6                   \_\_\_\_\_  
7                   \_\_\_\_\_\*\*

8                   [Source: Data Request No. 303—Highly Confidential Schedule 4]  
9

10           Q.     Is Aquila pursuing legal action with CW Mining?

11           A.     Yes. Aquila has filed suit in Utah courts seeking damages for the breached coal  
12 supply agreement. Attached as Schedule 5 is the court filing concerning this suit.

13           Q.     Mr. Boehm states at page 4 of his rebuttal that the disputed contract with CW  
14 Mining “may take considerable time and has no guaranteed or measurable outcome” and as  
15 such, since “the outcome of this process is not now measurable there is currently nothing to be  
16 included in proposed rates.” Do you agree with this assessment?

17           A.     No. The CW Mining contract agreed to by Aquila in 2003 that became effective  
18 January 1, 2004 is a known and measurable event that occurred. There is a contract that Aquila  
19 is pursuing in the courts that has specific terms of tons of coal to be delivered with known  
20 certain per ton prices. Staff used the price that is identified in the contract for its 2005 price for  
21 the high btu coal. This is an actual contracted price that Aquila would be paying absent the  
22 breach by CW Mining to comply with the terms of the coal supply agreement.

23           Q.     Mr. Korte addresses Staff’s concern about the pending litigation between Aquila  
24 and CW Mining at page 6 of his rebuttal. Is Staff concerned about this litigation?

25           A.     Absolutely. As noted by Aquila, the additional costs for replacement of the CW  
26 Mining coal is in the tens of millions of dollars between the coal and SO<sub>2</sub> emission credits costs.  
27 Staff is concerned about Aquila’s ability to collect damages from this litigation, and how these  
28 damages ultimately will be flowed to customers. Aquila’s solution is to pass the replacement

1 coal costs on to its customers—a very simple solution for Aquila. Staff believes that a better  
2 approach is to include the original “known and measurable” amount of CW Mining contracted  
3 coal for 2005 as the base of any Commission approved IEC. The forecast (ceiling) amount  
4 would be the much more expensive replacement coal. This was discussed earlier in the section  
5 of my rebuttal concerning the IEC.

6 Q. Why is Staff concerned about the collection of any damages for the CW Mining  
7 dispute?

8 A. As noted above, from a practical perspective, Staff does not believe that Aquila  
9 will vigorously pursue its asserted rights through a court process—a process that will be very  
10 costly, with an uncertain outcome. This will especially be the case if Aquila is permitted to, in  
11 essence, collect those “damages” in advance from its customers. Aquila’s customers had  
12 nothing to do with any aspect of the dispute between Aquila and CW Mining. Yet, Aquila  
13 believes it is proper that those customers bear the risk of Aquila’s inability to force the coal  
14 company to comply with the original terms of the coal agreement signed September 10, 2003.

15 Q. At page 7 of Mr. Korte’s rebuttal testimony, he indicates that it is Aquila’s  
16 practice not to review labor issues with perspective fuel suppliers. Is this prudent in reviewing  
17 long-term supply agreements?

18 A. No. Aquila’s position on this point seems to be that it is not its responsibility to  
19 know if one of its critical fuel suppliers has any labor issues because the federal and state  
20 governmental authorities will enforce labor laws. Mr. Korte states at page 7 that “any company  
21 registered in the United States would be expected to follow State and Federal labor laws as  
22 required and as enforced by their respective agencies.”

1           The issue here is that Aquila did not fully evaluate all critical aspects of the CW Mining  
2 operations. Labor is essential in any business, the coal industry is no exception. Mr. Korte  
3 states that a reasonable standard of review when determining the suitability of a supplier would  
4 be “determining the credit worthiness / financial stability of the supplier” and “availability of  
5 the product being purchased, in this case coal” (Korte, rebuttal page 7). While credit worthiness  
6 and availability of coal is essential, equal to that is the “availability” of an adequate labor force  
7 to mine the coal. Having the coal is one thing, but being able to get the coal mined, transported,  
8 loaded and prepared for shipment back to Aquila’s power plants is just as important as knowing  
9 there is plenty of coal in the ground.

10           Q.     Mr. Korte states at page 7 that he is “not aware of any policy, requirement, or  
11 expectation that would prompt even a cursory review of labor relations/practices for a supplier.”  
12 Please comment.

13           A.     Any proper due diligence would make an assessment of the Company’s  
14 operations and its ability to perform. At least some minimal review of a supplier’s work force  
15 capabilities would be included. A “policy, requirement, or expectation” would not have to be in  
16 place to make this review—just plain old good business practice would require the  
17 substantiation that the company under consideration for the contract can fulfill all the terms of  
18 the agreement. I am sure Aquila wishes it had a policy to inquire about the labor relations of  
19 CW Mining before it entered into an agreement that the coal company could not or would not  
20 meet. Not to investigate as part of the due diligence process does not give much confidence in  
21 Aquila’s ability to secure adequate supply of fuel for its generators if the only review is credit  
22 worthiness and availability of coal.

1 Not having the coal supplier provide coal for Sibley and Lake Road is not the same issue  
2 of having the local office supply company not being able to supply paper-clips. If the office  
3 supply company can not provide the product, then you get your supplies from someone else  
4 down the street. Coal for generating units is a unique product and absolutely essential to the  
5 operations of the units. Without an adequate fuel source of the right kind of coal, a generating  
6 unit cannot produce one kilowatt of electricity. There needs to be a proper fuel supply for safety  
7 and reliability reasons. Just to check the coal company's credit and see if it has coal in the  
8 ground doesn't seem to be sufficient, certainly not when it comes to a supplier that doesn't want  
9 to perform.

10 Q. Did Aquila do any review of CW Mining's labor force?

11 A. No. The Company did not perform even the most minimum review or make any  
12 inquiry into the labor practices of CW Mining. In response to Data Request No. 386 the  
13 Company provided the following response to a series of questions.

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## Surrebuttal Testimony of Cary G. Featherstone

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[Attached as Highly Confidential Schedule 6]

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\*\* The resulting failure

by CW Mining to perform under terms of the coal agreement cost Aquila tens of millions of

dollars it now expects its regulated customers to absorb in rates.

1 Q. What did Aquila review in making its evaluation of the fuel supply for its power  
2 plant?

3 A. Aquila supplied material in response to Data Request No. 290 that referenced  
4 response to Data Request No. 289. Both of these responses are attached as Highly Confidential  
5 Schedule 7. A review of these responses indicate that no mention of CW Mining labor  
6 problems.

7 Q. Was there another fuel source for Aquila to consider besides CW Mining?

8 A. Yes. Aquila evaluated more than one fuel source in its consideration of replacing  
9 the previous contract that expire on December 31, 2003. In fact, the lowest bid at the time of  
10 the evaluation was a known supplier who was the parent company of GenWal, the previous coal  
11 supplier for the high blend btu coal. Aquila, citing sulfur emission concerns, made the decision  
12 to go with CW Mining instead. Attached as Schedule 8 is the response to Data Request No.  
13 289.1 that identifies Aquila's concerns with the West Ridge coal and the related emission issues.

14 Q. What is Staff proposing with respect to the CW Mining problem?

15 A. Staff continues to support including the CW Mining coal price in base rates as  
16 part of the IEC. The much higher replacement coal would be included in a forecasted amount,  
17 subject to the terms and conditions outlined in my direct testimony, page 38. Aquila would  
18 have to pursue all its legal remedies to recover damages from CW Mining for breaching the coal  
19 agreement. Aquila must make every effort to pursue full restitution and reimbursement of the  
20 costs for the contracted coal. The reimbursement costs would include:

- 21 1. the difference between the original CW Mining contract coal cost  
22 and the replacement cost of coal for the new contract going forward
- 23 2. the difference between the original CW Mining contract coal and  
24 the cost of replacement coal from first month of the contract (January  
25 2004) until the new replacement contract becomes effective sometime fall  
26 2005)



3. any additional freight costs incurred as a result of the breached contract

4. additional emission costs relating to the breach of CW Mining, primarily as a result of burning Illinois coal that contains much higher sulfur, causing Aquila to have to purchase expensive emission allowances

5. all legal, litigation and court costs relating to Aquila's exercising its legal remedies for breach by CW Mining for terminating the coal supply agreement.

Q. Mr. Korte states at page 8 of his rebuttal testimony "to now penalize the company by reflecting hypothetical coal cost is an obvious example of hindsight regulation." Does Staff view its proposal to treat the CW Mining contract price and the replacement coal in the IEC to be a penalty?

A. No. Staff believes, in spite of significant concerns it has regarding Aquila's decision making on the CW Mining coal contract, that handling this matter in the IEC mechanism is a very reasonable approach. It is hoped that Aquila will receive full damages regarding its pending litigation with CW Mining. Treating the uncertainty surrounding this issue in the IEC protects Aquila and its customers equally. To include the much higher replacement coal in the permanent rates as Aquila suggests, places no risk on the Company and all the risk on its customers—customers who had nothing to do with this dispute. Aquila would have far less incentive to aggressively pursue all its legal remedies in the courts—a costly and time consuming process—if its customers were already reimbursing them for the higher replacement coal.

Q. Mr. Korte states at page 8 of his rebuttal testimony "delivery under contract is no longer available and Aquila has again moved prudently to enter into a new contract at the lowest available cost." Please comment.

1           A.       What Mr. Korte fails to mention with this statement is that when Aquila replaced  
2 the CW Mining coal the coal market had increased dramatically. Aquila recognized that coal  
3 prices were increasing in its analysis of the industry in 2003 (attached as Schedule 9). What  
4 Aquila loses in the end with CW Mining refusal to comply with the coal supply agreement is  
5 that the market is now even higher than Aquila believed it was in 2003. Aquila's whole  
6 approach as presented in testimony from its various witnesses is a sort of "oh well" attitude—we  
7 had a contract; now we don't and we had to replace the contract at twice the price; let the  
8 customers pay.

9           The replacement coal is more than double the cost of the CW Mining coal. This  
10 replacement coal will cost tens of millions of dollars to Aquila and its customers if the Company  
11 is not successful in the courts.

12          Q.       Mr. Korte states at page 8 of his rebuttal testimony that "denial of the recovery of  
13 these prudently incurred, known and measurable coal costs is inappropriate." Do you agree?

14          A.       No. Aquila is not being denied recovery of what could be considered imprudent  
15 costs. The IEC amount would reflect the higher replacement coal costs subject to the conditions  
16 identified above and in my direct testimony, page 38.

17 **AQUILA'S CAPACITY PLANNING AND ADDITIONAL PEAKING**  
18 **TURBINES**

19          Q.       At page 4 of Aquila witness Korte's rebuttal testimony, he states "Aquila  
20 believes the purchase of capacity, at least in the short term, is a very reasonable response to the  
21 present uncertain environment for building generation in Missouri." What is your  
22 understanding of what Mr. Korte referring to?

23          A.       Mr. Korte explains further in his rebuttal testimony that:

1                   ... based on Aquila's experiences at South Harper, there are unresolved  
2                   legal issues confronting any utility wishing to building [sic] generation in  
3                   Missouri. That issue, as I understand it, deals with which governmental  
4                   entity in Missouri has authority over approval to build a power plant, the  
5                   Commission, through the utility certificate of convenience or necessity or  
6                   through local zoning and permitting laws.

7                   From Mr. Korte's statements in his rebuttal, Aquila is concerned about uncertainties in what  
8                   governmental authorizations are needed to build power plants in the state of Missouri. Many of  
9                   the problems that Aquila has faced with respect to the South Harper facility have been of its  
10                  own making. The Company put itself on a compressed schedule to get the South Harper Units  
11                  on-line by June 1, 2005, to replace the 1999 Aries Purchased Power Agreement (Aries  
12                  Agreement or PPA) with Calpine that expired May 31, 2005.

13                Q.       When did Aquila begin planning to replace the power it was taking under the  
14                  Aries Agreement?

15                A.       Aquila knew well in advance of the expiration of the Aries Agreement that it had  
16                  to replace this capacity. In fact, Aquila started planning for the replacement by issuing a  
17                  Request for Proposals (RFPs) as early as the spring of 2001. In response to Data Request No.  
18                  166 concerning the Aries replacement power (attached as Highly Confidential Schedule 10)  
19                  Aquila provided a history of the capacity planning process undertaken by the Company, with  
20                  much of the emphasis focused on replacing the Aries agreement in 2005.

21                Throughout the four-year period when Aquila started considering replacing the Aries  
22                  capacity agreement, the Company was primarily only considering purchase power agreements.  
23                  Even though the turbines, presently installed at the South Harper facility, had been in storage  
24                  since beginning August 2002, it was not until January 2004 in an Integration Resource Planning  
25                  (IRP) meeting, that the Company committed to building a generating plant.

1           Q.     Did Aquila have sufficient time to plan and have the South Harper facility in  
2 operation on or before when the Aries Agreement expired—May 31, 2005?

3           A.     Yes. Based upon the January 2004 timeframe and the need for capacity by June  
4 1, 2005, there should have been ample time for Aquila to get the necessary siting, permitting  
5 and zoning requirements it needed to build generating plant. But since the Aries plant had a  
6 known certain date that the capacity had to be replaced, the Company could have started earlier  
7 than even January 2004. It had the generating facilities stored in Kansas City a short distance  
8 from where the Company eventually installed them. There was no reason Aquila could not have  
9 committed to building these units sooner than January 2004 and started the planning process  
10 sooner than it did. Many of the problems that Aquila now finds itself facing result primarily  
11 from the poor timing of the installation of the units and Aquila's reluctance to building  
12 generating units.

13          Q.     Was the South Harper the first location Aquila chose to install these turbines?

14          A.     No. Initially, in the spring of 2004, Aquila started planning to install the units in  
15 a location south of Peculiar, called Camp Branch. When Aquila began facing opposition to the  
16 Camp Branch site, it, in late summer and early fall of 2004, discussed with Peculiar city officials  
17 moving the site from Camp Branch to what is now the South Harper site. To build at the South  
18 Harper site Aquila acquired the land, and began its preliminary ground work such as surveying  
19 and site preparation well into the fall of 2004. As a result, Aquila had no margin for delay if it  
20 was to meet the June 1, 2005 date needed for the units to be up and running and available to  
21 replace the capacity lost with the expiration of the Aries Agreement.

22          Q.     Did Aquila seek any zoning or permitting authorizations from the County of Cass  
23 to construct the South Harper facility?

1           A.     No. Aquila did not believe it needed such approval from the County.

2           Q.     Has anyone opposed construction of the South Harper facility?

3           A.     Yes. Neighbors immediately adjacent to the plant site, as well as some that live  
4 around the South Belton substation have organized and opposed the facility, resorting to the  
5 courts for relief. While more time before initiating construction would not guarantee successful  
6 results, with sufficient longer-term planning, Aquila could have managed the situation much  
7 better than it has. Had it begun its plans for the South Harper Facility earlier, Aquila would  
8 have been in a better position to plan for contingencies such as alternative sites and for working  
9 with the community to develop better relationships with those who would be living near the  
10 South Harper Facility.

11                Because it was rushed to build the plant by June 1, 2005, Aquila had few options but to  
12 proceed forward with the project on a very aggressive time table.

13           Q.     Have other utilities this Commission regulates committed to building power  
14 plants in the state of Missouri that are they own?

15           A.     Yes. While Aquila has not built any generating capacity since 1983, the rest of  
16 the electric utilities operating in the state have not followed this path. KCPL has installed  
17 numerous peaking power plants, a combined cycle unit and substantially re-built one its coal-  
18 fired generating units as result of an explosion. Empire has also committed to building several  
19 peaking generating and a large 500 megawatt unit it operates and owns a 60% share (Empire's  
20 share totals 300 megawatts). AmerenUE has also committed to building peaking units to meet  
21 its regulated system load requirements in Missouri and, as recently as 2002 with Commission  
22 approval in Case No. EO-2003-0035, built a regulated unit under a Chapter 100 financing  
23 arrangement with the City of Bowling Green, Missouri.

1 Q. Have any of these utilities announced plans for building generating plants in the  
2 state of Missouri?

3 A. Yes. KCPL announced its intention to build a coal-fired base load generating  
4 facility at its existing Iatan plant, which will be called Iatan 2. Aquila and Empire, who are  
5 existing partners with Iatan 1, are also partners in the Iatan 2 project.

6 Empire is currently building a Siemens-V 84 natural gas-fired combustion turbine with a  
7 projected in-service date of 2006 at its existing Riverton Generating Facility.

8 And, AmerenUE, recently announced its intention to study over the next two years  
9 whether building a second nuclear plant at the Callaway Nuclear Generating Station, located  
10 near Fulton, Missouri is feasible.

11 Clearly, other utilities have built generating facilities in this region and they continue to  
12 plan to build facilities in this state. Of course, one expects that those utilities will seek all  
13 necessary zoning, permitting and certificates required to construct those generating plants.

14 **CAPACITY COSTS**

15 Q. Mr. Korte states at page 3 of his rebuttal testimony, that the best information  
16 available for accessing capacity cost is the known and measurable installed cost of the 315 MW  
17 South Harper Project which is \*\* \_\_\_\_\_ \*\*. Do you know how Aquila  
18 developed this estimate?

19 A. Yes. This estimate was determined by Mr. Korte using the projected installation  
20 costs at the existing South Harper site. He used the South Harper turbine construction costs,  
21 including transmission facilities to develop his estimates.

22 Q. What is Aquila's estimate of the installed cost of the transmission system that  
23 Aquila constructed for South Harper?

1           A.     Mr. Korte identifies an estimate of \*\* \_\_\_\_\_ \*\* for the transmission investment  
2 (Korte rebuttal, page 3). Mr. Korte further states that the total construction cost for South  
3 Harper is estimated to be \*\* \_\_\_\_\_ \*\* which includes the turbine generator equipment,  
4 installation costs of the three turbines and the transmission facilities, both at the plant site and a  
5 substation upgrade that was built in Belton, which is located south of Peculiar.

6           Q.     Does Staff agree with Aquila's estimate for combustion turbines installed at an  
7 existing site?

8           A.     No. Aquila's estimate is overstated. The estimate is overstated for four reasons:  
9 First, the estimate is for the total cost of the South Harper Generating Station, which includes  
10 the installation cost of the three turbines and all the transmission facilities. Aquila built South  
11 Harper to accommodate up to six combustion turbines which would result in the final plant  
12 capacity up 600 megawatts; therefore, up to three additional combustion turbines may be added  
13 to that site in the future. Aquila's estimate includes all common facilities which have been sized  
14 to accommodate six combustion turbines. These common facilities would not have to be  
15 duplicated in installing the additional units at South Harper or another existing site. Aquila  
16 sized the natural gas pipeline serving the three installed combustion turbines to serve six  
17 combustion turbines. Adding three combustion turbines would not require duplication, in its  
18 entirety, all of the existing transmission facilities. In particular, the substation at the site would  
19 not need to be duplicated to add three more turbines to the site, and the Belton South Substation  
20 would not be completely re-built. Aquila sized the transmission facilities for six combustion  
21 turbines. While there would be some transmission construction to interconnect each of up to  
22 three additional turbines, it would not require a complete duplication of cost, as suggested by  
23 Mr. Korte.

1 Land costs would not be included in an estimate to add turbines at South Harper site  
2 since land was purchased to accommodate a total of six turbines. Aquila's estimate includes  
3 land costs for both turbines and transmission equipment, which is completely unnecessary if the  
4 existing site is used.

5 Second, Aquila has not used in its estimate the written down the value for the three  
6 Siemens-Westinghouse combustion turbines installed at South Harper. Aquila has written these  
7 combustion turbine values down to \$66.7 million, Aquila, the Office of the Public Counsel and  
8 Staff agreed in a Stipulation And Agreement entered into in Case No. EO-2005-0156 [page 3 of  
9 the Stipulation]. There is an overstatement of approximately \$4 million that Aquila has used in  
10 its estimate that should be removed for the combustion turbine values.

11 Third, Aquila appears to have used in its estimate the original purchase price at which  
12 Aquila Merchant acquired the three combustion turbines in February 2000. In an effort to  
13 comply with the Commission's affiliate transaction rules Aquila wrote down those assets in  
14 November 2004 by over \$10 million.

15 Fourth, Aquila uses too high of an estimate for the cost of combustion turbines. The  
16 combustion turbine market has been a buyers' market the last several years, especially with the  
17 collapse of the merchant market.

18 Q. Has the Staff estimated the cost of adding combustion turbines capable of  
19 generating about 200 MW to a generating site already owned by Aquila, a site such as the South  
20 Harper Facility?

21 A. Yes. Staff witness Robert E. Schallenberg, Utility Services Director, has updated  
22 the estimate he developed in his direct testimony. Staff believes this estimate is more in line



1 with what it would cost to add two combustion turbines capable of generating a total of about  
2 200 MW at an existing site.

3 **SOUTH HARPER TURBINE VALUES**

4 Q. You earlier indicated that Aquila's estimate for the value of the South Harper  
5 Facility is overstated because he failed to consider Aquila's write-down of the value of the  
6 combustion turbines Aquila installed there. What value does the Staff propose for the  
7 combustion turbines Aquila has installed at its South Harper Facility?

8 A. As noted earlier, in Case No. EO-2005-0156, Aquila, Office of Public Counsel  
9 and Staff agreed to a value of \$66.7 million for the combustion turbines. They entered into a  
10 Stipulation And Agreement that included their agreement on the combustion turbine valuation,  
11 both for purposes of the Commission's affiliate transactions rules and this rate case, in that case  
12 and filed it with the Commission on September 21, 2005. Aquila's estimate in Mr. Korte's  
13 rebuttal is overstated because it does not reflect either the original write-down made by Aquila  
14 or the additional write-down necessary to reflect the value Aquila agreed to in Case No. EO-  
15 2005-0156. At this time the Commission has not approved the Stipulation and Agreement  
16 presented to it in Case No. EO-2005-0156 and, if it does not do so, the parties will not be bound  
17 by that agreement.

18 Q. Was the amount for the turbines agreed to in Case No. EO-2005-0156 the level  
19 supported by Staff?

20 A. Staff filed extensive testimony in this case supporting the amount that was finally  
21 agreed to by Aquila, the Office of Public Counsel and Staff.

22 Q. Would you please quantify each of these write-downs?

1           A.     Aquila made a write-down of over \$10 million in November 2004 to reflect,  
2 what it believed was a fair value for the three turbines installed at South Harper. Additionally,  
3 Aquila agreed to an almost \$4 million additional write-down when it agreed to value the  
4 turbines at the \$66.7 million, if the Commission approves the agreement. Aquila has used the  
5 pre-write-down amounts for the turbines in its estimate for the installed costs of additional  
6 peaking units, thus inflating the overall dollar per kilowatt amount.

7           Q.     What information does the Staff have for the market value of the South Harper  
8 combustion turbines?

9           A.     Staff filed testimony in Case No. EO-2005-0156 to support a valuation of  
10 \$66.7 million for the three South Harper combustion turbines. At one time Aquila offered to  
11 sell the turbines for \$69 million including a warranty, to Kansas City Power and Light (KCPL).  
12 That offer formed the basis for the Staff's valuation. Attached as Highly Confidential Schedule  
13 11 are documents relating to Aquila's offer to KCPL provided in Data Request No. 38 in Case  
14 No. EO-2005-0156. Also, Schedule 12 is a table identifying the various values Staff considered  
15 for these units.

16          Q.     How did the Staff arrive at a valuation of \$66.7 million amount?

17          A.     Because the warranty for the combustion turbines expired while they were in  
18 storage, the Staff adjusted the \$69 million downward by \$2.240 million to reflect the estimated  
19 cost of the warranty. This estimate of \$2.240 million originated from Aquila and was the result  
20 of discussions it had with the turbine manufacturer and a consultant it hired to assist it in  
21 developing a fair value of the units.

22          Q.     Who manufactured the three combustion turbines?

1           A.     These combustion turbines were manufactured by Siemens Westinghouse and are  
2 identified as 501D5A with a capacity rating of 105 megawatts each, resulting in 315 megawatts  
3 of total station capacity.

4           Q.     Did Aquila purchase these units for its MPS system?

5           A.     No. The units were originally purchased by an Aquila affiliate, Aquila Merchant  
6 in 2002 under an agreement signed in September 2001. Originally, the units were to be installed  
7 at the Aries Generating Facility and called Aries II. Those plans were cancelled in July 2002  
8 during the period of the collapse of the merchant business that affected Aquila Merchant  
9 especially hard. The units were taken delivery starting in August 2002 and stored at Aquila's  
10 regulated plant, Ralph Green Generating Facility until they were moved March 2005 to South  
11 Harper.

12          Q.     Were the three turbines originally planned for Aries going to provide power to  
13 MPS?

14          A.     Yes. It was expected that once Aries II went into service, a purchased power  
15 agreement was planned between an Aquila affiliate, Aquila Merchant and MPS.

16          Q.     When did Aquila decide to use the turbines for its regulated operations?

17          A.     Staff was informed of this decision on January 27, 2004, in a meeting with  
18 Aquila's Chief Executive Officer, Richard Green. At this meeting, Mr. Green committed that  
19 the three turbines in storage would be deployed for the regulated electric operations in Missouri.

20                These units were installed at South Harper and were declared commercial by Aquila on  
21 June 30, July 1 and July 14, 2005.

**COMBUSTION TURBINE COSTS**

Q. What information, other than the \$69 million offer to KCPL, is the Staff aware of bearing on the valuation of the three combustion turbines Aquila installed at the South Harper Facility?

A. Aquila has made offers to sell turbines to third parties and has sold or given up rights to several turbines over the past several years. Staff has reviewed documents relating to these offers and sale transactions which identified the pricing of turbines during from 2002 to present.

1) Aquila had four General Electric model 7EA natural gas-fired 75 megawatt turbines that it disposed of in 2003.

2) Aquila currently is negotiating with \*\* \_\_\_\_\_ \*\* to dispose of its Goose Creek and Raccoon Creek Generating Facilities.

3) Aquila had an offer from Rolls-Royce Power Company to sell two Siemens 501 D5A natural gas-fired combustion turbines.

4) In Calpine's direct testimony filed in this proceeding, it identifies an \$18.7 million combustion turbine price referenced in *Gas Turbine World*.

5) Staff has seen offers made by turbine manufacturers to another Missouri utility in the range identified in the *Gas Turbine World*.

Q. Would Aquila's estimate for the cost of adding additional generation at the South Harper Facility change if different turbine prices are substituted for those Aquila used?

A. Yes. If the turbine value in Aquila's estimate was replaced using an amount of approximately \$18.7 million instead of the \$25.3 million in Aquila's estimate, this would change Mr. Korte's estimate used in his rebuttal testimony. The \$25.3 million represents the actual per turbine amount paid by Aquila Merchant in 2001 for units planned for Aries II (\$76.1 million actual total for three turbines; source: Data Request No. 5 in Case No. EO-2005-0156).

1           Aquila's estimate does not reflect the economies of using the existing South Harper site  
2 for generation and transmission. As an example, there would not be the need for land cost to be  
3 included in this estimate because those costs have already been included in the South Harper  
4 construction cost for the three existing turbines. Another example would be that the cost  
5 estimates would not have full transmission cost but rather incremental cost to add an additional  
6 two turbines at an existing site. As an example, when the South Harper turbines were planned  
7 to be installed at the Aries Generating Facility, there was an incremental estimate of  
8 \$2.1 million for transmission upgrades [Data Request No. 58 in Case No. EO-2005-0156].

9           **GENERAL ELECTRIC 7 EAS**

10           Q.     At what price did Aquila's affiliate sell its General Electric combustion turbines?

11           A.     Aquila Merchant sold three turbines with rated capacity of 75 megawatts each, to  
12 two non-Aquila entities in 2003. Two were sold for \*\* \_\_\_\_ \*\* million or \*\* \_\_\_\_ \*\* million  
13 each and a third turbine was sold for \*\* \_\_\_\_ \*\*. All three turbines were sold substantially  
14 below the original purchase price of \*\* \_\_\_\_ \*\* million [Data Request No. 77 in Case No.  
15 EO-2005-0156]. The average price that Aquila Merchant sold these three units was  
16 \*\* \_\_\_\_ \*\* million [\*\* \_\_\_\_ \*\* million plus \*\* \_\_\_\_ \*\* million divided by three]. Using this  
17 average price, Aquila would have had a far better price to deploy these three General Electric  
18 turbines to meet its regulated system requirements and providing additional capacity above the  
19 level that Aquila is receiving from a \*\* \_\_\_\_\_  
20 \_\_\_\_\_ \*\* [Data Request No. 166].

21           The total costs for these three turbines would be \*\* \_\_\_\_ \*\* million with a capacity of  
22 225 megawatts, well below the amount used in Aquila's estimate found in Mr. Korte's rebuttal.  
23 Mr. Korte's implied estimate uses an approximate \$50.6 million (Aquila Merchant's original

1 price of \$25.3 million each times two turbines-- this is the per unit value of the South Harper  
2 turbines before all write-downs) equivalent for two turbine values. However, two 501D5A  
3 turbines—the type installed at South Harper that forms the basis for Aquila’s estimate-- is only  
4 210 megawatts of capacity compared the 225 megawatts of capacity if three General Electric  
5 7EA turbines would have been retained by Aquila and installed at South Harper, or another  
6 existing site.

7 Q. Where were the purchasers of these combustion turbines located?

8 A. Two turbines were sold to a utility in Beatrice, Nebraska and the third turbine  
9 was sold to a utility in Colorado (Data Request No. 43 in Case No. EO-2005-0156).

10 Q. Did Aquila Merchant have any other General Electric combustion turbines?

11 A. Yes. Aquila Merchant originally purchased 18 General Electric 7 EAs, taking  
12 delivery and deploying 10 turbines at two different site locations in Illinois (these turbines will  
13 be discussed later). Four other turbines were deployed at other locations in Mississippi.

14 As noted above, three of the General Electric turbines were sold to Colorado and  
15 Nebraska entities and a fourth turbine was release back to the manufacture, with Aquila losing  
16 the reservation (option) payments it had made to General Electric.

17 Q. Were there any offers made regarding the four General Electric combustion  
18 turbines before the contracts under which they were sold?

19 A. Yes. Like the Siemens turbines installed at South Harper, Aquila offered the  
20 General Electric turbines to other entities including KCPL.

21 Q. Did Aquila’s MPS or L&P divisions have an opportunity to acquire any of these  
22 four General Electric 7 EAs combustion turbines?

1           A.     No. Aquila indicated that these turbines were sold in 2003, well in advance of  
2 the decision to install turbines at the Camp Branch and, ultimately at South Harper. The  
3 General Electric turbines were no longer available (Data Request No. 43, Case No.  
4 EO-2005-0156).

5     **SALE OF NATURAL GAS-FIRED COMBUSTION TURBINES AT**  
6     **RACCOON CREEK AND GOOSE CREEK**

7           Q.     At page 5 of Mr. Korte's rebuttal testimony, he indicates there are facilities "not  
8 located within the MPS/L&P system." Do you know what facilities Mr. Korte is referring to?

9           A.     Mr. Korte is referring to Aquila Merchant's Raccoon Creek and Goose Creek  
10 generating facilities located in Illinois.

11          Q.     What do you know about the history of these facilities?

12          A.     Aquila Merchant installed ten General Electric 7EA, 75 megawatt turbines at two  
13 locations in Illinois. Six 7EAs were installed at Goose Creek Energy Center having a combined  
14 capacity of 450 megawatts. Four 7EAs were installed at Raccoon Creek Energy Center having  
15 a combined capacity of 300 megawatts. Aquila responded to an RFP to supply turbine capacity  
16 issued by \*\* \_\_\_\_\_ \*\* in the summer of 2005. Aquila disclosed to the Staff it had offered  
17 in August 2005 to sell them to \*\* \_\_\_\_\_ \*\* in response to Data Request No. 464 (attached  
18 as Highly Confidential Schedule 13).

19          Q.     What were the terms of the offer?

20          A.     Aquila offered to sell both facilities (ten installed turbines) to \*\* \_\_\_\_\_ \*\*  
21 on the following terms.

22                 \*\* \_\_\_\_\_  
23                 \_\_\_\_\_  
24                 \_\_\_\_\_  
25                 \_\_\_\_\_

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_  
4 \_\_\_\_\_ \*\*

5 [Data Request No. 464; Highly Confidential Schedule 13-4]

6 Q. Has the sale been completed?

7 A. Not to my knowledge. A follow-up request has been made for this information  
8 but has not been provided (follow-up to Data Request No. 464.1).

9 Q. Do you know if negotiations between the two parties changed the initial terms of  
10 the offer?

11 A. It is my understanding that the purchase price in the initial offer by Aquila will  
12 be \*\* \_\_\_\_\_ \*\* because of the negotiations. Staff had a meeting with Aquila's Chief  
13 Operating Officer Keith Stamm on November 18, 2005 concerning the Company's position on  
14 building future generating units. During this meeting Mr. Stamm indicated that the Goose  
15 Creek and Raccoon Creek facilities would be \*\* \_\_\_\_\_ \*\* and likely be \*\* \_\_\_\_ \*\*  
16 than the offered price.

17 Q. Based on the original offer, what would the price be on a installed kilowatt basis?

18 A. The installed kilowatt for Aquila's initial offer would be between \*\* \_\_\_\_\_  
19 \_\_\_\_\_ \*\*.

20 If the price for both facilities is \*\* \_\_\_\_\_ \*\* as an example to \*\* \_\_\_\_\_ \* then the  
21 installed kilowatt would be \*\* \_\_\_\_\_  
22 \_\_\_\_\_ \*\*.

23 Q. Are the Raccoon Creek and Goose Creek facilities both fully operational  
24 generating plants?



1           A.     Yes. Both of these facilities are fully operating generating stations. They were  
2 installed in 2003.

3           Q.     Did Aquila's MPS or L&P divisions have an opportunity to acquire these  
4 facilities?

5           A.     No. Aquila's position is that the units are located in Illinois and there is not  
6 sufficient transmission path to get the power from those units to the MPS and L&P systems.

7           Q.     Could the combustion turbine units at these facilities be moved?

8           A.     Yes. The turbines presently at South Harper were moved from the Ralph Green  
9 Generating Facility where they were in storage. While these units were not installed at Ralph  
10 Greene, the units, with considerable effort, were moved to the South Harper facility. Turbines,  
11 generators and related equipment are heavy pieces of machinery requiring special transportation  
12 and hauling, but they are moved from the manufacturer and from different locations. Moving  
13 such equipment in the electric utility industry is not particularly unique. Indeed the Greenwood  
14 Generating Facility, which has four combustion turbines, initially had a lease agreement that  
15 required Aquila to move, at its expense, the generating units at the end of the lease to a  
16 destination designated by the Greenwood owners. Since the Greenwood Units were reacquired  
17 by Aquila in 2000, the units were not moved.

18          Q.     Would sale of the Raccoon Creek or Goose Creek facilities have any impact on  
19 the Staff's estimate of the cost to Aquila of additional combustion turbines capable of  
20 generating about 200 MW?

21          A.     Staff's estimate, as described in Staff witness Schallenberg's surrebuttal  
22 testimony, would not change as result of this sale transaction. But the sale price on a cost per

1 kilowatt identified above supports the conservative nature of Staff's installed kilowatt costs  
2 identified in Mr. Schallenberg's surrebuttal testimony.

3 **ROLLS-ROYCE POWER VENTURES OFFER**

4 Q. Is the Staff aware of any other offers for sale of combustion turbines involving  
5 Aquila?

6 A. Yes. During the audit in Case No. EO-2005-0156, Aquila provided supporting  
7 information on the appraisals per the South Harper valuation issue (Data Request No. 5 in Case  
8 No. EO-2005-0156). In material supplied by Aquila, the Staff learned that on September 23,  
9 2004, Rolls-Royce Power Ventures (Rolls-Royce) offered to sell Aquila two new Siemens  
10 501D5A natural gas-fired turbines that were manufactured in 2001 and placed in storage in  
11 Houston and Germany (Schedule 14). Both units were offered for \$43 million, or \$21.5 million  
12 each. This initial price was less than the South Harper turbines but, for comparison purposes,  
13 several adjustments to the price needed to be added, such as transportation costs and Siemens  
14 Technical Field Assistance. Also, the warranty had expired similar to the South Harper turbines  
15 and was estimated that would increase both unit costs by total of \$2.240 million, the same as the  
16 warranty estimate for the South Harper turbines—Aquila ultimately opted not to re-purchase the  
17 warranty from Siemens for the South Harper turbines. Another major expense would be  
18 converting the combustion system for approximating \$5 million. Adding all the costs to the  
19 initial offer of \$43 million did not make these units attractive to Aquila.

20 But it is noteworthy that while the Rolls-Royce offer was high in relation to the other  
21 turbine information Staff reviewed, it does represent the only tangible evidence that Aquila had  
22 regarding its review of the actual turbine market for its regulated operations. No other  
23 information has been brought to Staff's attention that would indicate that Aquila actually

1 pursued the acquisition of turbines for either of its MPS or L&P divisions with the exception of  
2 South Harper.

3 **GAS TURBINE WORLD ESTIMATE FOR NATURAL GAS-FIRED**  
4 **TURBINES**

5 Q. Is Staff aware of any other information of combustion turbine values?

6 A. Yes. Staff reviewed a publication entitled *Gas Turbine World* supplied by  
7 Aquila during the audit of Case No. EO-2005-0156. In the "2004-05 GTW Handout, published  
8 by *Gas Turbine World*, the price of Siemens 501D5A was quoted at \$18.7 million. In the 2003  
9 Handbook, the value was \$19.9 million and the 2000-2001 Handbook had 5015DA priced out at  
10 \$25.5 million. Based on this information, the market cost of these units has been trending  
11 downward.

12 Q. Is any witness in this proceeding sponsoring a similar value?

13 A. Yes. Calpine Central, L.P. (Calpine) witness Michael C. Blaha cites this same  
14 \$18.7 million amount for the Siemens turbines in his direct testimony, page 3. Mr. Blaha used  
15 the *Gas Turbine World* publication for his source.

16 Q. Is this amount solely for the cost of the combustion turbines or does it include  
17 related costs?

18 A. Gas Turbine World does surveys of the industry and contacts turbine  
19 manufactures to determine its pricing information. Some of its data is for actual purchases  
20 made by companies-- regulated utilities and merchant companies alike. While there may be  
21 added costs for to these turbine prices because a utility may want specific features based on  
22 individual needs like dual fuel source burning capability and fast-start capability, typically these  
23 are prices what the industry relies on to trend costs of turbine equipment.

1 Q. Has the cost of General Electric 7 EA model combustion turbines also declined  
2 in value?

3 A. Yes. The General Electric 7EA models have experienced similar declines. *Gas*  
4 *Turbine World* reported in its 2004-2005 Handbook that these units were selling for  
5 \$14.8 million. The 2003 price was \$16.6 million and the 2000-2001 price was \$21 million. The  
6 volatility of the natural gas market has contributed to a decline in sales of gas-fired generation  
7 on top of a market decline caused by the implosion of the nascent North American merchant  
8 energy market.

9 **OTHER UTILITY OFFERS**

10 Q. Does Staff have experience with equipment supply agreements in the course of  
11 performing its duties?

12 A. Yes. Over the course of many years Staff has seen numerous contracts of actual  
13 purchases of equipment. While not detailing the specifics, turbine costs have generally declined  
14 over the last several years.

15 Q. Has Staff reviewed bids and offers for generating equipment?

16 A. Yes. At various times, in rate cases, development of regulatory plans or as part  
17 of the Commission's integrated resource planning (IRP) process, Staff has opportunities to  
18 review request for proposals, offers and bids for generating equipment, including turbine offers.

19 While this information on other utilities is confidential, the offers we have seen recently  
20 substantiate the general decline in the turbine market much of this decade. Specifically, during  
21 the time frame of 2003 and 2004, when Aquila would have been planning in earnest to replace  
22 the Aries capacity agreement by May 31, 2005, there has been very attractive pricing for turbine  
23 equipment. Other companies have been benefiting from this "buyers" market, but not Aquila.

1 Q. Has Staff seen offers to buy or sell combustion turbines in the range of the  
2 \$18.7 million amount identified in *Gas Turbine World*?

3 A. Yes. There has been pricing consistent with this amount in offers I have seen for  
4 this type of turbine.

5 **COMBUSTION TURBINES HAVE EXPERIENCED A SIGNIFICANT**  
6 **DECLINE IN VALUES**

7 Q. When did Aquila Merchant and Siemens negotiate for the three combustion  
8 turbines that Aquila installed at the South Harper Facility?

9 A. In 2000 and 2001.

10 Q. Was the combustion turbine market different then than in 2003 and 2004 when  
11 Aquila should have been planning for replacement of the power it was taking under Aries  
12 capacity agreement?

13 A. Yes. In 2000 and 2001, when Aquila Merchant negotiated for the South Harper  
14 turbines, the power equipment industry was experiencing a sellers' market. Purchasers were  
15 paying premiums to reserve manufacturer's slots to place orders and negotiate contract terms.  
16 During an interview David Kreimer, Aquila Network's former Director of Engineering,  
17 indicated "that during the time Aquila Merchant was negotiating with Siemens for the three  
18 combustion turbines it was a brutal sellers market for all forms of generation." He stated "that it  
19 was the most brutal sellers [market] that he experienced in the 30 years that he had been  
20 working in the industry at the time of the negotiations and when Aquila Merchant entered into  
21 the agreement to purchase these combustion turbines." Mr. Kreimer stated that "the sellers'  
22 market peaked around August 2002 and pricing for the large F frame machines began to decline  
23 quickly....the sellers' market for the larger [Siemens] F model combustion turbines started

1 losing value first before the values for the smaller Siemens 501D5a's and General Electric 7EA  
2 combustion turbine[s] started to decline—the smaller combustion turbine's market value lasted  
3 longer” [Source: Data Request No. 56.1 in Case No. EO-2005-0156, April 29, 2005 Kreimer  
4 interview].

5 Q. What is the size of the larger F frame combustion turbines that Mr. Kreimer  
6 referred to in his interview?

7 A. The F frame units are Siemens 501FD combustion turbines and are the range of  
8 150 to 160 megawatts in size. The Aries Combined Cycle Unit has two F frame combustion  
9 turbines. The Siemens 501D5A combustion turbines Aquila is installing at the South Harper  
10 Facility are 105 megawatts and the smaller General Electric 7EA combustion turbines discussed  
11 earlier are nominally rated at 75 to 80 megawatts. [Source: Data Request No. 56.1, April 29,  
12 2005 Kreimer interview]

13 Q. Was Mr. Kreimer involved in Aquila Merchant's purchase of the three Siemens  
14 turbines from Siemens Westinghouse?

15 A. Yes. When Aquila negotiated for and bought these units, Mr. Kreimer was  
16 employed by Aquila Merchant. He was directly involved in the discussions between Siemens  
17 Westinghouse and Aquila regarding these combustion turbines. Mr. Kreimer also was involved  
18 in the negotiations of a 1999 contract to purchase two Siemens 501F EconoPacs installed at the  
19 Aries facility near Mount Pleasant, Missouri to create the combined-cycle unit.

20 Q. Why is the nature of the combustion turbine market that was occurring in 2000  
21 and 2001, described as a brutal sellers' market, important now?

22 A. Combustion turbine prices declined after the 2001-2002 timeframe ending the  
23 sellers' market in this country. The power equipment market was substantially impacted as

1 result of the collapse of the merchant power market and the utility industry's building of natural  
2 gas-fired generation.

3 **UTILITIES BUILD GENERATING ASSETS**

4 Q. Do utilities typically own their generating assets?

5 A. Unlike Aquila, most utilities operating in the mid-west region have a policy of  
6 owning their generating assets. While utilities supplement some of their capacity needs with  
7 purchase power agreements, they substantially meet their system load requirements by owned  
8 and operated assets.

9 For example KCPL has installed the following generating units over the past several  
10 years:

<u>Unit</u>	<u>Model</u>	<u>Unit Size</u>	<u>Date Installed</u>
Hawthorn 6	Siemens V-84	132 mw (converted to combined cycle with Hawthorn 9)	1997 2000
Hawthorn 7	GE 7EA	77 mw	2000
Hawthorn 8	GE 7EA	77 mw	2000
Hawthorn 9	GE 7EA	(combined cycle with Hawthorn 6)	2000
West Gardner 1-4	GE 7EA	77 mw (each totaling 308 megawatts)	
Osawatomie 1	GE 7EA	77 mw	2003

22 KCPL also rebuilt the entire boiler and upgraded the steam turbine of its Hawthorn 5  
23 coal-fired base load unit in 2002 to repair damage when the unit experienced an explosion in  
24 February 1999.

Similarly, Empire has installed the following generating units over the past several years:

<u>Unit</u>	<u>Model</u>	<u>Unit Size</u>	<u>Date Installed</u>
State Line 1	Siemens 501D	105 mw	1995
State Line 2	Siemens F-model (converted to combined cycle in 2001 with State Line 3)	150 mw	1997
State Line	Siemens F-model Combined Cycle (Empire 60% ownership of 500 mw plant)	300 mw	2001
Energy Center 3 & 4	Pratt Whitney	50 mw each total 100 mw	2003

AmerenUE has also installed units at its Venice plant with installation date of 2002. It also installed in May 2002, 240 megawatts combustion turbines at Peno Creek.

Q. Is there a risk of relying on purchase power agreements?

A. Yes. Aquila has, over the past several years, relied on purchased power agreements to meet its capacity needs. As indicated earlier, it has not built any new generation besides the recently constructed South Harper facilities since 1983. Aquila has an 8% interest in the Jeffrey Energy Center that was constructed by Westar Energy. Jeffrey 3 was completed in the spring of 1983 and that was the last generating facility that Aquila owned since the installation of South Harper.

Q. Is building generating facilities risky?

A. Yes. Aquila Merchant built several generating facilities that ultimately proved very risky to the Company. The first generating asset that Aquila Merchant built was the Aries Combined Cycle Unit that was in joint partnership with Calpine Corporation [Calpine]. In 2004, Aquila sold its 50% ownership interest in Aries at a substantial loss. Aquila Merchant also acquired four General Electric 7 EA turbines that ultimately they had to sell at a substantial



1 loss before the units had been delivered. Aquila Merchant also constructed General Electric  
2 turbines at Goose Creek and Raccoon Creek generating facilities in Illinois that they are in the  
3 processing of negotiating terms of sale to \*\* \_\_\_\_\_ \*\*. Clearly, the non-regulated business  
4 of Aquila found that it was extremely risky to own generating facilities.

5 Q. Is ownership of generating assets as risky for regulated utilities as they are for  
6 energy merchants?

7 A. No. While Aquila Merchant lost hundreds of millions of dollars with respect to  
8 its non-regulated operations, the regulated entities owning and operating generating assets do  
9 not have the same history of loss and are not as risky as the merchant companies.

10 Q. Has Aquila increased its risk by primarily focusing on purchased power  
11 agreements to supply the growing energy needs of its customers?

12 A. Yes. During the last three Aquila rate cases, numerous meetings with the  
13 Company including discussions Staff had during Regulatory Plan, Case No. EO-2005-0293 and  
14 during several years of participating in Aquila's IRP process, Aquila has had numerous leads to  
15 attractively priced power agreements that eventually didn't work out. Sometimes the  
16 agreements did not materialize due to transmission constraints while other times it was because  
17 the seller of the power withdrew offers or couldn't finalize agreements. Inherent in this process,  
18 Aquila has experienced difficulty in acquiring adequate and reasonably priced power. Utilities  
19 that don't rely on the power market as much as Aquila, do not have the problems this Company  
20 has.

21 During the IRP Meetings over the past several years Aquila has presented numerous  
22 purchase power agreements. Some of these proposals have resulted in agreements while others  
23 have failed to close. Aquila signed a Memorandum of Understanding on June 22, 2004 which

1 contemplated that an agreement would be negotiated by December 31, 2004. On December 13,  
2 2004, Aquila had terms finalized with Southwest Public Service (SPS), an Oklahoma utility, to  
3 provide Aquila with system participation power. SPS changed its position to complete the  
4 agreement within days of completion and Aquila no longer is planning on this capacity being  
5 available. Aquila was notified by SPS that it had regulatory concerns and could not complete  
6 the agreement. [Apprill, direct page 3]

7 Nebraska Public Power District (NPPD) is providing 75 megawatts from its Cooper  
8 Nuclear Station starting January 1, 2005. [Boehm, direct page 4]

9 Others proposals have been considered but ultimately were never completed. Aquila  
10 relied on getting these agreements signed for planning purposes which clearly had a risk since,  
11 ultimately, they failed to consummate the agreement. Relying on the purchase power market is  
12 also very risky because of the volatility of the energy market. When you rely heavily on  
13 purchased power to meet your capacity needs, the company is subject to market-based rates.

#### 14 **PURCHASED POWER ENERGY MARKETS**

15 Q. Do increasing power markets increase risks to the utility that relies on purchased  
16 power agreements?

17 A. Yes, especially if the power markets are dramatically increasing.

18 Q. Has purchase power markets increased over the past several years?

19 A. Yes. In the past Aquila forecasted that the market price of purchased power was  
20 going to increase over time. An analysis performed by the Company to evaluate the 2001 RFP  
21 responses submitted to supply capacity and energy needs when the Aries agreement was going  
22 to end in May 2005 identified the forecast of the purchased power costs that was used to assess  
23 the various proposals. The Company's forecast for purchased power costs covered the period

1 from 2001 to 2022 and showed a steady and significant increase in these costs during this time  
2 frame.

3 In Aquila's last rate case, Case No. ER-2004-0034, it provided a different forecast upon  
4 which it relied on to evaluate the existing responses to the issued RFP, and that forecast showed  
5 similar view that the purchased power costs for the period 2002-2019 was going to see  
6 significant increases for the purchased power market.

7 In this case, Aquila again uses an update to its purchased power forecast, and again it  
8 shows significant increases over the period 2005 to 2024. [Highly Confidential Schedule 15;  
9 source: Burns & McDonnell RFP Evaluation Case No. ER-2001-672; Data Request No. 372 in  
10 Case ER-2004-0034; Data Request No. 39.1 in Case No. EO-2005-0156]

11 Q. Do you have any other support that Aquila believed the market for power costs  
12 was expected to increase over time?

13 A. Yes. In an interview with Mr. Keith Stamm on September 12, 2003, Aquila  
14 indicated a belief on the direction of power costs:

15 \*\* \_\_\_\_\_  
16 \_\_\_\_\_  
17 \_\_\_\_\_  
18 \_\_\_\_\_  
19 \_\_\_\_\_  
20 \_\_\_\_\_  
21 \_\_\_\_\_  
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26 \_\_\_\_\_  
27 \_\_\_\_\_  
28 \_\_\_\_\_ \*\*

29 [Source: Data Request No. 550 in Case No. ER-2004-0034; emphasis added]

1 Q. Would it be prudent to rely on market-based pricing for power costs if there is an  
2 expectation that costs are going to increase significantly in the future?

3 A. No. If there is an expectation that market-based pricing would reflect a  
4 significant increase in costs, it would be more prudent to build your own generating capacity to  
5 “lock in” the costs so that you would not be subjected to the ever-increasing costs of the  
6 purchased power market.

7 When energy prices become too high it is less expensive to run your own generating  
8 assets, assuming you properly planned for, and built them. When Aquila was purchasing power  
9 this summer in August for \$90 and \$100 per megawatt hour, it was less costly to run its own  
10 combustion turbines, even at high natural gas prices, than to purchase power on the open  
11 market. With the levels of purchased power prices recently experienced by utilities, companies  
12 that didn’t prepare for these cost increases will have great difficulty in securing adequate long-  
13 term capacity if they don’t own their own generation.

14 **ADVANTAGES OF UTILITY OWNING GENERATING ASSETS**

15 Q. What are the advantages of regulated utilities building, owning and operating  
16 their own generating facilities?

17 A. Utilities are able to control the operations of the generating facilities if they own  
18 and operate those assets. Utilities will not be subjected to the volatility of the market place with  
19 cost increases related to purchased power if they operate their own generating assets. Also,  
20 utilities are able to provide a much more reliable source of energy when the regulated company  
21 has its generation under its authority. The regulated entity can operate the unit in a prudent and  
22 economic manner and can maintain and make capital improvements to prolong the life of this  
23 valuable asset.

1           Q.     Are there advantages for regulated utilities to own generating facilities?

2           A.     The control of generating facilities by utilities is considered very important.  
3 Companies believe they can better manage costs for maintenance and reliability of units if they  
4 own them. In essence, by controlling the generating unit, the Company is much more in charge of  
5 their own destiny. In an interview with Staff on November 14, 2003, Mr. Terry Hedrick, the  
6 Project Manager of South Harper he indicated that he believed there were “significant advantages  
7 in both owning and operating the generation equipment in developing maintenance expertise. If  
8 you control / own the equipment, he believes that there are advantages in the areas of costs,  
9 manpower and staffing and dispatch flexibility.” (Data Request No. 616 in Case No.  
10 ER-2004-0034)

11          Q.     Are there advantages to customers if regulated utilities own their generating assets?

12          A.     Yes. Generally, the costs (revenue requirements) are higher in the early years of  
13 ownership. The capital costs of the plant investment require a return (return on investment) and the  
14 utility is entitled to a recovery of the investment (return of investment). As the plant investment is  
15 recovered through depreciation—the return of investment—, the rate base return required—return  
16 on the investment—decreases. At some point in the future, especially if the plant lives are longer  
17 than expected, such as in the case of Aquila’s Sibley generating units, the customers will have the  
18 benefit of the plant while the rate base investment is very low. The return on investment declines  
19 which causes the revenue requirements to decline dramatically.

20          Q.     Is Aquila in a position to reap these advantages?

21          A.     No. Aquila, by deciding not to build regulated generation for a period of over  
22 20 years since 1983 put its customers at risk because there is a substantial amount of capacity that it  
23 is having to replace—at least 500 megawatts—since the Aries purchased power agreement expired

1 in May 2005. Aquila made no commitment to build regulated generation for over 20 years, unlike  
2 every other major electric utility that operates in this state, and now faces the challenge of replacing  
3 the Aries capacity in large block of power, at least 500 megawatts. It has met part a good part of  
4 this capacity with South Harper, but that facility has an uncertain future.

5 It continues to rely on purchased power agreements that are short-term in nature so it has a  
6 never ending battle of constantly replacing its energy needs. The approach that Aquila has taken  
7 with meeting its 2006 summer peaking commitments is a good example. Aquila will have to  
8 continue its search for power. In a raising market that is risky. It cites that the market is a buyers'  
9 market now, but what happens when that market turns—its customers bear the risk, especially if an  
10 automatic fuel recovery mechanism is put in place.

11 Q. Did Aquila Merchant recognize the advantages of owning generating facilities?

12 A. Yes. Aquila Merchant acquired several generating assets during the 2000 and  
13 2001 time frame including Aries. Aquila believed that the forecast for power costs would be  
14 increasing over time, made decisions to “lock in” the cost of owning its own generation, so it  
15 could take advantage of the increasing market for power costs. In an October 29, 2003  
16 interview Mr. Max Sherman, a former Aquila Merchant employee and Project Manager during  
17 the early development and construction phase of the Aries plant, he discussed the need for  
18 generating units:

19 Aquila Merchant committed to purchase 12 or more combustion turbines  
20 during this period (starting in 2000) to build unregulated peakers to take  
21 advantage of the wholesale marketplace (this was after the Aries  
22 construction decision had been made and the plant was under  
23 construction). The reason for Aquila Merchant's acquisition of the  
24 combustion turbines was its belief that, given expected future power  
25 market conditions, it would be less expensive to produce power from  
26 generating units you control than to have to buy power in the  
27 marketplace. Mr. Sherman indicated that the last place a merchant  
28 company wanted to be was to have to supply power through long-term

1 contracts and be at the mercy of a volatile power market and have to buy  
2 power to supply those contracts....

3 [Data Request No. 549 in Case No. ER-2004-0034]

4 Non-regulated merchant companies would want their own generation so they would not  
5 be at the mercy of power pricing “spikes.” This was especially important if power had to be  
6 delivered through contracts to third parties.

7 If the regulated entity that did not build and operate its own generating units believed  
8 that power costs were going to increase, it would have to enter into purchased power agreements  
9 priced at market-based rates. The non-regulated merchant company who negotiated to deliver  
10 power to the regulated entity at the escalating market-based contracts benefit if they own and  
11 operate their generation assets. In some cases the non-regulated merchant may supply power by  
12 either generating or acquiring power through a purchase from another party. The profitability of  
13 the non-regulated merchant will depend on the ability to acquire or generate the power at a cost  
14 that would be below that which it would receive in revenues. Since Aquila believed there was  
15 going to be a significant rise in the power market costs, the non-regulated subsidiary built and  
16 acquired generating assets to engage in the open market for power.

17 Q. Would the same concern in a rising energy cost market favor regulated entities  
18 owning generating assets?

19 A. Yes. The approach that Aquila Merchant pursued could also have been followed  
20 by the regulated MPS division. For the exact reasons that Aquila Merchant believed it was  
21 necessary to own the generating assets, MPS should have built and operated its own generation.  
22 This was especially important when you take into consideration that the Company believed that  
23 the power market costs were going to rise significantly over time. The decision by Aquila to  
24 allow the Aquila Merchant organization to build and acquire generating assets and sell that

1 power through the open market through purchased power agreements like those entered into  
2 between the Aries partners and MPS resulted in the situation where Aquila's regulated  
3 operations now are subjected to the volatility of the market for power costs. It is clear that  
4 Aquila Merchant believed that it could not enter into long-term agreements and be subjected to  
5 the whims of the market place in supplying that power, thus causing them to reach a decision to  
6 own the generating assets in order to supply those power needs to their non-regulated customers.  
7 It should be just as clear that the regulated entity, MPS, would also want to own generating  
8 assets in this same situation.

9 Q. Do know of any non-regulated merchant company that builds it own generating  
10 facilities?

11 A. Yes. In a meeting with Calpine in the spring 2005, Staff asked Calpine if it  
12 supplied electricity to its customers on a long-term basis using purchased power agreements.  
13 Calpine indicated that it was in the business of owning and operating its generating facilities and  
14 would not meet long-term power commitments to customers by purchasing the power.

15 Q. Are there advantages to the utility in owning and operating generating facilities  
16 as regulated assets?

17 A. Yes. Regulated assets are typically put in rate base which, when the units are  
18 completed and declared in service, are included in rates allowing the utility a reasonable return  
19 on the investment and a recovery over the life of the generating asset through depreciation  
20 expense. Thus, a utility is provided some reasonable assurance that the investment in the  
21 regulated asset will be fully recovered from its retail electric customers. This provides some  
22 reasonable assurance to investors that their asset will be protected through the regulatory  
23 process by rate basing the asset. Utility customers benefit by being insulated from rising costs



1 for power during a time when those costs are expected to significantly increase. The customers  
2 and the utility owners gain substantial advantages when a company builds and places in service,  
3 generating facilities in its regulated operations.

4 Q. Are there also disadvantages in placing generating assets in the regulated  
5 operations?

6 A. Yes. If there are rising power market costs, a company owning both regulated  
7 and non-regulated entities would be at a relative disadvantage if it put the generating facilities in  
8 its regulated operations, because it would not be able to shield the profits obtained from the  
9 regulated entity. While the regulated entity would have an opportunity to sell the generating  
10 capacity in the open market during the period of expected rising power costs, the profits from  
11 these transactions are typically included in the ratemaking process. For as long as the regulated  
12 entity can stay out of a rate case, the company will benefit from the increased sales. However,  
13 when the regulated entity files for rate relief, the power sales would be considered in the rate  
14 process. The decision to put generating assets in a regulated entity of a company would cause  
15 the non-regulated entity to miss opportunities for profit making in the increased power cost  
16 market. Assets that are in the regulated operations would be held to a typical regulated return  
17 which would likely be less than those that would be received by non-regulated entities engaging  
18 in profit taking from a rising power market. Aquila believed that it could receive greater returns  
19 on its investment dollars by having a non-regulated entity, Aquila Merchant, own the generating  
20 facilities and selling the power through purchased power agreements to entities like MPS in the  
21 open market through market-based pricing. As the market reflected the increased power costs,  
22 the non-regulated entity would also receive the increased revenues resulting in greater-than-  
23 regulated returns.

1 Q. Do you know of an example where Aquila has been subjected to increasing costs  
2 through market-based pricing?

3 A. Yes. In the 1970s, Aquila, then operating as Missouri Public Service Company,  
4 built four combustion turbines at its Greenwood Generating Station. Upon completion, the  
5 Company sold at book value to financial institutions, all four of the combustion turbines, and  
6 received the capacity power through a 25-year lease for each of the generating units. The lease  
7 did not allow for any residual value to be passed to the utility entity that originally owned the  
8 generating units. Upon expiration of the lease, Aquila reacquired those four combustion  
9 turbines at an existing market-based price. In essence, the Company has purchased the same  
10 asset twice. The cost to reacquire the assets at the current market is very close to the original  
11 cost of the assets when they were new. Thus, Aquila bought 25-year-old generators and paid  
12 close to what the original investment was back in the mid-1970s.

13 **EFFECTS OF AQUILA'S DECISION NOT TO TREAT ARIES AS A**  
14 **REGULATED GENERATING FACILITY**

15 Q. Has Aquila examined building a 500 MW unit as a regulated asset in the past?

16 A. Yes, in its 1992 Integrated Resource Plan dated February 1992, Aquila identified  
17 that its recommendation was to build \*\* \_\_\_\_\_

18 \_\_\_\_\_ \*\*.

19 Q. Did Aquila build this unit?

20 A. Yes. Aquila built the 585 MW capacity combined-cycle unit at Aries as a non-  
21 regulated merchant plant in joint ownership with Calpine. While its 1992 IRP plan indicated the  
22 need to \*\* \_\_\_\_\_ \*\* the regulated MPS was not permitted to do so.

23 [February 3, 1992 Integrated Resource Plan-Executive Summary, Item 6.]

1 Q. Did the regulated MPS develop the Aries project?

2 A. Yes. MPS throughout the 1990s developed the 500 MW combined-cycle unit  
3 that ultimately became the Aries Combined Cycle Generating Facility. The site for Aries was  
4 land that was previously owned by Missouri Public Service Company, the predecessor to  
5 UtiliCorp which later changed its name to Aquila.

6 Q. Did MPS incur costs to develop the Aries site?

7 A. During the early and mid-1990's, the regulated MPS expended funds to continue  
8 to study and develop the preliminary work that was necessary to prepare for construction of this  
9 project. Ultimately, Aquila corporate management determined that the regulated MPS would  
10 not be permitted to build the Aries facility but rather its non-regulated Aquila Merchant would  
11 develop this project. Aquila Merchant took over the Aries project in the summer of 1998.

12 Q. When was the Aries capacity agreement signed with MPS?

13 A. MPS entered into this purchased power agreement with its affiliate, Aquila  
14 Merchant, in February 1999.

15 Q. Did MPS prepare cost estimates for the Aries project?

16 A. Yes. In an interview with David Kreimer, he indicated that he spent a substantial  
17 amount of his time during the winter and spring months of 1998 developing preliminary cost  
18 data and studying the estimates for the 500 MW combined cycle unit that ultimately became  
19 Aries.

20 Q. Were these cost estimates and studies provided to Aquila Merchant assisting in  
21 building the Aries facility?

22 A. Yes. The regulated MPS did much of the preliminary work to get Aries project to  
23 the construction stage.

1 Q. How did the Aries purchased power agreement come about?

2 A. In the spring of 1998, MPS issued a request for proposal (RFP) for its power needs  
3 in the early years of this decade. It received responses in July 1998 offering to provide MPS power  
4 needs through a variety of options from several different entities. As part of this evaluation by  
5 MPS, it also examined the option of building and owning itself a 500 megawatt combined cycle  
6 unit with a projected in-service date in 2001.

7 In August 1998, through MPS analysis as well as the independent analysis of Burns &  
8 McDonnell, an engineering consulting firm, MPS determined that the least cost option for it was to  
9 build the 500 megawatt combined cycle unit.

10 Q. Did MPS pursue building the 500 megawatt combined cycle unit?

11 A. Yes. However, Aquila, at some point, assigned the construction project away from  
12 Aquila's regulated MPS operations and transferred it to Aquila Power Corporation, Aquila's  
13 (UtiliCorp) non-regulated operations later known as Aquila Merchant.

14 Initially, the regulated operations of MPS pursued building the Aries Combined Cycle Unit  
15 as an unregulated Exempt Whole Generator (EWG). The studies and analyses performed by  
16 personnel of the regulated operations ultimately led to the conclusion that the 500 megawatt  
17 combined cycle unit was the least cost option to meet the capacity needs of MPS starting in 2001.  
18 This was confirmed by the independent engineering firm, Burns & McDonnell in an August 1998  
19 report to the Company.

20 In an August 24, 1998 study entitled "UtiliCorp United Inc. Missouri Public Service 1998-  
21 2003 Preliminary Energy Supply Plan," the Company independently determined that the  
22 construction of a 500 megawatt combined cycle unit was the least cost plan for MPS. Under the  
23 Executive Summary Section 1, "Conclusions," the following appears:

Conclusions

Based on the 1998-2003 supply-side analysis, the least cost plan for MPS consists of executing short term purchase contacts to meet MPS capacity needs through the year 2000, and the construction of a gas-fired 500 MW combined cycle unit to meet all of MPS' capacity needs in 2001-2003 time frame and a majority of its needs thereafter.

The above supply provides the least cost means to meet the MPS capacity and energy needs even though MPS' has a low annual load factor of <50% and an abundant supply of low-cost energy supplied by its existing resource base which is 64% coal-fired base load generating capacity.

The ability of combined cycle units to compete in the regional energy market place enables these resources to provide sufficient revenue to offset their higher capital cost.

1.5 Recommended Action Plan

As a result of the analysis outlined in this report, it is recommended that UCU [(Aquila/UtiliCorp)]:

Negotiate extension of the existing lease agreements on the Greenwood combustion turbines.

Secure short term capacity to meet MPS' capacity needs thru 2000.

Pursue the construction of a 500 MW combined cycle unit proposed with an in service date of June 1, 2001.

[Source: Data Request No. 607 in ER-2004-0034—1998-2003 Preliminary Energy Supply Plan]

Q. Did Aquila, then operating as UtiliCorp, ever examine the option of MPS building and owning the Aries Combined Cycle Unit as part of its regulated operations?

A. No. At no time during the 1998 time period, did Aquila or MPS ever consider this as an option. Staff is aware of numerous examples, in the last two MPS electric cases (Case Nos. ER-2001-672 and ER-2004-0034) where Aquila readily admitted that at no time did it consider allowing the regulated operations of MPS to own or control generating units as regulated plant. While the EWG option was pursued by MPS regulated operations, the combined cycle unit was

1 never planned to be part of the traditional regulated operations of MPS, and Aquila never planned  
2 for the unit to be included in rate base.

3 Q. Does Staff consider this a fatal flaw in the Company's analysis to meet the capacity  
4 needs of its Missouri retail electric customers?

5 A. Yes. To not have even considered the option of building regulated generating  
6 assets held by MPS to meet the capacity needs of Aquila's Missouri regulated operations is a  
7 failure on the Aquila's (UtiliCorp) part and constitutes imprudence. This decision by Aquila  
8 (UtiliCorp) resulted in Aquila's regulated Missouri operations being at the mercy of purchased  
9 power agreements priced at market-based rates through May 31, 2005, when the Aries agreement  
10 terminated. While the Company no longer appears to have a corporate policy not to build regulated  
11 assets, as evidenced by the South Harper facility and its commitment to the Iatan 2 project, Aquila  
12 continues to be subjected to market-based rates for the power used by its Missouri regulated  
13 operations for the foreseeable future.

14 Q. What was the effect of Aquila's strategy to not build regulated generating assets  
15 until recently?

16 A. Aquila has subjected its MPS and now, L&P operations, to purchased power  
17 agreements priced at market-based rates. The current market rates for purchased power has  
18 increased to the levels it was in the last case, which had seen a decline from previous high levels of  
19 the late 1990s when Aquila entered into the Aries purchased power agreement. Aquila still has not  
20 made the commitment one would expect to its regulated operations building or owning their own  
21 generation as regulated plant considering what the Company experienced in the non-regulated  
22 energy world. If regulated divisions built their own generation, it would allow them more control  
23 over the price of power in the relatively near future and for many years to come.

1           Q.     What is the basis for the Staff's belief that Aquila did not consider building  
2 regulated generation to meet its capacity needs in Missouri and, instead, committed to building  
3 unregulated generation?

4           A.     Aquila has freely admitted that it never considered building regulated generating  
5 facilities to meet the capacity needs of its regulated utility operations in the state of Missouri. Mr.  
6 DeBacker (page 9, line 9 DeBacker rebuttal) and Mr. Stamm (page 12, line 18 Stamm rebuttal)  
7 both admit in their rebuttal testimonies filed in Case No. ER-2004-0034, that this option was never  
8 considered by Aquila's regulated operations. In Case No. ER-2001-672, Aquila provided response  
9 to Data Request No. 365 where it stated that "the Company believes that the current regulatory  
10 climate does not warrant the business risks associated with constructing and owning ratebased  
11 generating plants."

12           Also, in an interview with Mr. DeBacker and Mr. Robert Holzwarth (Vice-President and  
13 General Manager of UtiliCorp Power Services (UPS)) held on October 28, 2003, Mr. DeBacker  
14 stated that it was Aquila's corporate policy not to consider building regulated generating assets.  
15 Mr. DeBacker indicated in the interview that "MPS did not intend to build and include in rate base  
16 generating units to supply its power needs. Thus, Aquila (UtiliCorp) through its regulated MPS  
17 division never considered building generating capacity as a regulated unit" [Data Request No. 548  
18 in Case No. ER-2004-0034).

19           Q.     Did Aquila have a corporate policy not to build regulated generating assets?

20           A.     Yes.

21           Q.     Did Aquila provide a reason for why it never entertained the option of building a  
22 regulated power plant?

1           A.       Yes. During the aforementioned interview with Mr. DeBacker and Mr. Holzwarth,  
2 they indicated there was a corporate policy at Aquila that no new generation would be built as a  
3 regulated unit subject to rate basing. The following accurately characterizes the information  
4 provided at the October 28, 2003 interviews on this topic of corporate policy:

5           The philosophy of “buy/not build” in regard to power supply, taken in  
6 response to perceived electric industry uncertainty, was an Aquila  
7 (UtiliCorp) corporate strategy in place by 1998; it wasn’t just Mr.  
8 DeBacker’s and Mr. Holzwarth’s belief at that time. The Aquila  
9 (UtiliCorp) philosophy was consistent with MPS’ strategy in 1998. MPS  
10 took the position to depend on purchased power for short-term power  
11 needs, no construction of regulated power plants. The Aquila (UtiliCorp)  
12 divisions in Colorado and Kansas followed this same approach. Bob  
13 Green, Jim Miller and Harvey Padawer communicated the “buy/not  
14 build” strategy for the regulated entities. This strategy is not set down in  
15 writing, to DeBacker’s and Holzwarth’s knowledge, but was no secret  
16 within Aquila. Mr. Holzwarth was present at one meeting where Bob  
17 Green expressed the “buy/not build” philosophy. Among senior officers  
18 still with Aquila, Rick Green, currently Chairman, President and Chief  
19 Executive Officer could address this philosophy if necessary.

20           Both Mr. DeBacker and Mr. Holzwarth indicated that UtiliCorp was  
21 concerned about the future of retail competition / retail access and was  
22 concerned about the “stranded costs” relating to loss of customers to  
23 completion from “customer choice”. The Company wanted to “stay short  
24 in the market” (stay in market 3 to 5 years only). The decision to “stay  
25 short” in the market was made by UtiliCorp in 1996/1997 time frame.  
26 Mr. Holzwarth said, “what would happen if you build big units  
27 (generating units) and half your customers went away?” When asked if  
28 either of them knew of any system (electric system) where half the  
29 customers “went away” neither Mr. DeBacker nor Mr. Holzwarth knew  
30 where this had occurred. Mr. Holzwarth cited the competition that was  
31 occurring in other states such as Pennsylvania, New Jersey, New York  
32 and Illinois.

33           [October 28, 2003 interview with DeBacker and Holzwarth, Data Request  
34 No. 548 in Case No. ER-2004-0034]

35           The least cost option that MPS developed for meeting the capacity needs of Aquila’s Missouri  
36 regulated utility operations was to build the Combined Cycle Unit as an EWG as part of the



1 regulated operations of the Company (Mr. DeBacker's rebuttal testimony in Case No.  
2 ER-2004-0034).

3 Mr. DeBacker indicated in the fall of 1998, the Company decided to create another  
4 unregulated corporate entity under its Aquila Merchant subsidiary to build and own generating  
5 assets such as the Aries Combined Cycle Unit (page 19 of DeBacker Rebuttal Testimony filed in  
6 Case No. ER-2004-0034). While MPS, a regulated division of Aquila, had performed the work  
7 required to determine the size and scope of the generating asset needed for the capacity needs of  
8 Aquila's Missouri regulated operations, (October 28, 2003 DeBacker interview Data Request No.  
9 548 in ER-2004-0034), Aquila's upper management transferred that function to the non-regulated  
10 operations of Aquila Merchant.

11 It is interesting to note that the regulated operations of the Company continued to examine  
12 the EWG option as late as October 1998. A presentation made on October 8, 1998 entitled  
13 "Financial Analysis of Supply Options" and another presentation made on October 28, 1998  
14 entitled "Updated Analysis of Supply Options." both of presentations were made by Aquila's  
15 regulated operations presented the EWG option of building and owning the 500 megawatt  
16 combined cycle unit. As late as the end of October 1998, the regulated operations of UtiliCorp  
17 were still pursuing the generation option that would later become the Aries Project.

18 However, the option of the regulated operations building the 500 megawatt combined cycle  
19 unit was rejected by Aquila's upper management. Other than the statements made in the interview  
20 with Mr. DeBacker and Mr. Holzwarth that the Company believed it would be difficult to have the  
21 regulated operations build and own the Aries Combined Cycle Unit, the Staff has not seen nor been  
22 provided any documentation that would identify the specific reasons why this option was not  
23 agreed to by the Company's upper management. In the October 28, 2003, interview,

1 Mr. Holzwarth indicated that upper management decided that it would be too difficult to have the  
2 regulated operations create the non-regulated function of building and owning the Aries Unit. The  
3 following interview notes, reviewed by the interviewees, accurately describe this:

4 In 1998, the only economic analysis performed to assess MPS' power  
5 options for the first years of the next century were for a three-to-five year  
6 period only. Building plants for MPS' rate base was not considered as an  
7 option, but Holzwarth's group did consider building a generating plant as  
8 an unregulated Exempt Wholesale Generator (EWG) within MPS.  
9 Building a unit as part of an EWG was viewed as superior to including a  
10 regulated unit in rate base because there was less risk to Aquila of  
11 stranded costs if retail access was allowed in Missouri. Plus, the EWG  
12 proposal allowed MPS to better control costs and to "control its own  
13 destiny" in regard to power supply, and also allowed MPS the  
14 opportunity to profit on a non-regulated basis in the wholesale  
15 marketplace through the sale of energy as off-system sales. The analysis  
16 performed by UtiliCorp for the EWG never assumed MPS to be a  
17 customer of the MPS EWG unit beyond the original five-year power  
18 supply proposal in the RFP. Mr. Holzwarth stated that the MPS EWG  
19 option was presented at a meeting attended by Bob Green, then UtiliCorp  
20 President, and Harvey Padawer (maybe Jim Miller as well). The MPS  
21 EWG option was rejected because of questions raised at the meeting the  
22 risk of a massive EWG operating failure when taking into consideration  
23 MPS' relatively small size; how to obtain generating economies of scale,  
24 since a separate organization within MPS would have to be responsible  
25 for the EWG unit; MPS' lack of familiarity with the combined-cycle  
26 technology; and regulatory scrutiny of possible cross-subsidies between  
27 MPS' regulated and non-regulated sides. Mr. Holzwarth said some of the  
28 questions posed at this meeting where he recommended that MPS  
29 (through UPS) build non-regulated EWG generating unit were: How can  
30 MPS operating people manage the EWG also? What would be the "risk"  
31 to cash? Where would you get economies of scale from a regulated  
32 operation running a non-regulated EWG operation? Mr. Holzwarth stated  
33 he did not have answers to these questions.

34 [Source: October 28, 2003 interview with Mr. DeBacker and  
35 Mr. Holzwarth]

36 The decision was made to obtain power from other sources. Mr. DeBacker and  
37 Mr. Holzwarth indicated that they were not aware of any records documenting the reasons for the  
38 MPS EWG option rejection by Aquila's upper management.

1 Mr. Holzwarth stated that the ultimate decision would have been made by  
2 Bob Green and/or Harvey Padawer; however, the consensus opinion of  
3 senior management was that a regulated power plant with its potential  
4 stranded cost issues was not desirable. Mr. Holzwarth indicated he did  
5 not make the decision; he only made the presentation recommending that  
6 his group UtiliCorp Power Supply build a generating unit as a non-  
7 regulated EWG.

8 [Source: October 28, 2003 interview with Mr. DeBacker and  
9 Mr. Holzwarth,]

10 Q. Did Staff ask who made the decision not to build regulated generating units?

11 A. Yes. Staff submitted a data request asking the following:

12 1. Why was the decision made by Aquila (formerly UtiliCorp  
13 United) not to build and operate Aries Combined Cycle Unit as a  
14 “regulated” power plant to be included in rate base? Include in your  
15 response all reasons and rationales why this decision was made.

16 Response: Uncertainty surrounding the deregulation of the electric power  
17 industry and the possibility of incurring unrecoverable “stranded costs”.  
18 Avoiding long term power supply commitments was viewed as a means  
19 to effectively mitigate potential “stranded costs” arising from potential  
20 retail generation choice.

21 2. Provide all supporting documentation relating to and relied on  
22 upon in making this decision, including but not limited to reports,  
23 analyses, studies, etc.

24 Response: Compliance with MPS Joint Agreement with MPSC [Missouri  
25 Public Service Commission] and Office of Pubic Counsel—approved by  
26 PSC in Case No. EO-98-316 on 6/25/98.

27 Secondary Concern

28 1. Inexperience in operating large F-frame combustion turbine  
29 generating units and uncertainty surrounding the actual maintenance costs  
30 of these machines.

31 [Data Request No. 302 in Case No. ER-2004-0034]

32 This project then became assigned to Aquila Merchant and the Aries project was developed  
33 as part of the merchant energy partners segment of that operation.

1 Q. Who at Aquila made the decision to not to build regulated generating assets to meet  
2 MPS capacity requirements?

3 A. As indicated above cited in the October 28, 2003 interview, Mr. Holzwarth said  
4 Mr. Bob Green and Harvey Padawer made the decision not to build regulated generating assets. In  
5 response to the Data Request No. 302 in Case No. ER-2004-0034 the Company identified the  
6 following decision makers on that issue:

7 Bob Green-- Chief Operating Officer supervised by Rick Green

8 Jim Miller – Leader Business Segment UED (UtiliCorp Energy Delivery)

9 Harvey Padewar—Leader Business Segment UEG (UtiliCorp Energy Group)

10 In the October 28, 2003, Staff interview with Mr. DeBacker and Mr. Holzwarth, when  
11 asked about who made the decision to build Aries as a nonregulated plant, according to Staff notes  
12 of the interview reviewed by the interviewees, they stated:

13 Were Bob Green, Harvey Padawer and Jim Miller involved in meetings  
14 dealing with Aquila Merchant matters? DeBacker and Holzwarth said  
15 Padawer would have been; he was head of Aquila Merchant at the time  
16 and reported to Mr. [Bob] Green. They supposed Bob Green would have  
17 met with Aquila Merchant people; Bob Green as President of Aquila  
18 (UtiliCorp) was over Aquila Merchant as well as the regulated utility  
19 operations. Mr. DeBacker and Mr. Holzwarth were not sure about Mr.  
20 Miller, Senior Vice President of UtiliCorp Energy Delivery (UED) which  
21 was responsible for the transmission and distributions system (pipes and  
22 wires) of the regulated utilities.

23 [Data Request No. 548 in Case No. ER-2004-0034]

24 Q. Who is Mr. Bob Green?

25 A. Mr. Green was the President and Chief Executive Officer of Aquila and President  
26 of Aquila Merchant.

27 Q. Who is Mr. Harvey Padawer?

1           A.     Mr. Padawer was head of Aquila Merchant at the time of the decision relating to  
2 what UtiliCorp entity was going to build the Aries Project. Aquila Merchant was engaged in the  
3 marketing of natural gas and electricity to industrial and wholesale customers. During the time  
4 Mr. Padewar was in charge, Aquila Merchant was starting its merchant energy function, of which  
5 the Aries unit was intended to play a major part of that strategy.

6           Q.     Who is Jim Miller?

7           A.     Mr. Miller was head of Aquila's regulated operations, known as the "pipes and  
8 wires" part of the business. He was in charge of UtiliCorp Energy Delivery, or the regulated  
9 transmission and distribution operations of the Company.

10          Q.     Have other utilities followed a different course than Aquila to meet their power  
11 capacity needs since the mid to late 1990s?

12          A.     Yes. Utilities such as The Empire District Electric Company (Empire), Kansas City  
13 Power & Light Company (KCPL) and AmerenUE (Union Electric) have all embarked on building  
14 generating assets, and owning and controlling those generating assets as part of their regulated  
15 operations. Staff supports this and has encouraged this practice by utilities through the IRP  
16 process, as well as various applications that have appeared before the Commission concerning  
17 restructuring and reorganizations of the various corporate entities.

18                 In KCPL's application to restructure its corporate operations in Case No. EM-2001-464, a  
19 critical element of Staff's concern and, ultimately, the resolution of that application filed with the  
20 Commission, was the commitment for KCPL to continue to build and keep regulated generating  
21 assets as part of its regulated operations.

22                 Empire has built several generating assets during the 1990's, including a 500 megawatt  
23 combined cycle unit that began commercial operation June 2001, just shortly before the Aries

1 unit began its commercial operations in February 2002. All of the generating units at Empire  
2 are part of its regulated operations.

3 Q. Would there ever be an advantage to a utility not building its own generating  
4 units and relying on purchased power market pricing to serve its regulated customers?

5 A. Yes, to the extent that a company had both regulated and non-regulated entities  
6 and the non-regulated entity owned and operated generating facilities that could sell power to  
7 the regulated affiliated company. If the utility believed that the market pricing of power costs  
8 was going to rise over time, the utility could build and own non-regulated generating facilities  
9 and enter into purchased power agreements with regulated affiliated companies. There would  
10 be a direct benefit to the company if the costs could be passed on to regulated customers through  
11 rates. The increased power costs would benefit the owner of the generation because they could  
12 raise the costs to the regulated entity through market-based rate contracts. This arrangement  
13 would benefit the parent company that owned both the regulated utility and the non-regulated  
14 generating affiliate because earnings to the parent company would increase. In essence, the  
15 forecast of increasing power costs justified the building of the generating facility by the non-  
16 regulated entity with the expectation that the increased pricing would be reflected in newly  
17 negotiated power contracts. This, of course, assumes that the Company is successful in passing  
18 the increase in costs to its regulated customers through purchased power agreements similar to  
19 the one that Aquila entered into with the Aries partners.

20 Q. Why is this important since Aquila no longer has an affiliate company that is  
21 attempting to sell power to Aquila's regulated companies?

22 A. While Aquila does not have an affiliate selling it power, the aftermath of the  
23 Aries decision still affects the Company's decision making. Aries originally was owned by

1   Aquila exclusively until it sold 50% of its ownership interests to Calpine. In 2004, Aquila sold  
2   its entire interest in Aries to Calpine. Not only did Aquila lose a 585 megawatt combined cycle  
3   unit—a subject this Commission is still having to deal with in finding a replacement to this  
4   power—but it lost very valuable land rights. This facility was sized for additional generating  
5   units. In fact, the three turbines installed at South Harper were originally planned to be installed  
6   at Aries as Aries II. When Aquila gave up its ownership interest in Aries, and going back even  
7   further when it decided to get a partner for Aries, has caused the Company great hardship in its  
8   capacity planning and meeting the energy needs of its customers.

9       As the Company has struggled with zoning and permitting issues at South Harper it is  
10   easy to understand the value of existing sites that already had zoning approvals.

11       Q.     Did Cass County provide zoning and permitting authority to Aquila to build  
12   Aries?

13       A.     Yes. Aquila sought all the necessary zoning and permitting requirements in  
14   building Aries.

15       Q.     How has the Company's inattention to the Missouri-regulated operations of the  
16   Company impacted those operations and its customers?

17       A.     In every instance, the Staff knows about with regard to other Missouri electric  
18   operations, the companies have pursued meeting their customers' capacity needs through  
19   building and owning generating assets. Aquila alone made the decision to pursue purchase  
20   power agreements with market-based rates. The decision by Aquila's management to embark  
21   on a non-regulated path to meet its capacity needs put the regulated operations "behind the  
22   curve" in the sense of ownership of power production facilities. Empire as a company, and  
23   Empire's customers, have enjoyed the benefits of the State Line Combined Cycle since it went

1 into production of electricity in June 2001. Empire and its customers will have the benefit of  
2 that unit for many years to come.

3 **AQUILA'S LEAST COST PLAN**

4 Q. At page 3 of Mr. Korte's rebuttal testimony, he states that "Aquila disagrees with  
5 [Mr. Schallenberg's] first assertion that prudent ownership will produce the lowest overall cost."  
6 Please comment.

7 A. While Aquila produces no support for this statement, it did produce studies in the  
8 January 2004 IRP meeting that building and owning five combustion turbines was the least cost  
9 scenario for replacing the Aries capacity agreement.

10 Q. If Aquila determined that owning five turbines was its least cost option, then why  
11 did they build only three units at South Harper?

12 A. During discussions with the Company, Aquila indicated that it would use the  
13 three turbines that were in storage at the Ralph Greene Generating Facility owned by MPS.  
14 Further, Aquila stated that it would pursue 200 MW of purchase power to make up for the  
15 shortfall in replacing the 500 MW capacity agreement with Aries. Aquila identified two sources  
16 that it was considering. One agreement is with Nebraska Public Power District (NPPD) in  
17 Nebraska relating to the Cooper Nuclear Station for 75 megawatts that was ultimately signed  
18 (and has been included in this case) beginning January 1, 2005 and the other was an agreement  
19 that the Company was unable to complete. [Boehm, direct page 4]

20 Q. During the discussions with the Company, did Staff indicate to Aquila its  
21 preference to have capacity met by owned generating facilities?

22 A. Yes. Staff has consistently encouraged not only Aquila but other utilities  
23 operating in the state, its preference is for the utilities to own and operate their generating assets.



1 Q. Has Staff consistently taken this position?

2 A. Yes. KCPL attempted to move its regulated generating assets to a non-regulated  
3 exempt wholesale generator (EWG) in early 2001. Staff opposed this attempt and KCPL  
4 withdrew its proposal. In 1997, Aquila itself attempted to move its regulated generating assets  
5 to a EWG in a filing before the Commission in Case No. EM-97-395. Again, Staff opposed this  
6 position and filed substantial rebuttal testimony against this proposal. Aquila ultimately  
7 withdrew the case.

8 Q. Did Aquila originally study having more than three turbines at the existing site?

9 A. Yes. In the February 9, 2004 IRP meeting, Aquila's lowest cost plan on a net  
10 present value revenue requirements for a 20-year basis was replacing the Aries capacity was  
11 constructing five combustion turbines instead of the three that they installed at the South Harper  
12 facility.

13 **CONCLUSIONS FOR CAPACITY PLANNING AND PEAKING**  
14 **TURBINES**

15 Q. What are the conclusions that Staff has regarding the Company's building  
16 generation?

17 A. Aquila made the decision to not build regulated generating assets as a corporate  
18 policy. During the IRP process, Aquila never looked at building regulated assets in a  
19 meaningful way except South Harper. Aquila appears not to be looking at building future  
20 capacity with the exception of its base load coal-fired Iatan 2 commitment. Aquila has not  
21 submitted any RFPs to turbine manufacturers to get turbine pricing so that it can do complete  
22 and thorough studies concerning the build vs. purchasing options. Aquila has not looked at  
23 building capacity at 2007 and beyond, even though it has indicated that its system needs

1 capacity during this timeframe. There is no evidence that Aquila is moving to build generating  
2 assets because it is not looking at what the actual cost estimates would be to build this capacity.  
3 Aquila has identified in its April 2005 Integrated Resource Plan \*\* \_\_\_\_\_  
4 \_\_\_\_\_ \*\* To date, no work has been done by Aquila to meet \*\* \_\_\_\_  
5 \_\_\_\_\_ \*\* With the lead times of getting generating  
6 assets built, it may already be too late to get capacity sited and constructed by the June 2007  
7 timeframe.

8 Q. Does this conclude your surrebuttal testimony?

9 A. Yes.