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Capacity Planning/ Peaking
Turbines
Witness: Cary G. Featherstone
Sponsoring Party: MoPSC Staff
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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)
and AQUILA NETWORKS-L&P (Electric)**

CASE NO. ER-2007-0004

*Jefferson City, Missouri
March 2007*

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

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BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

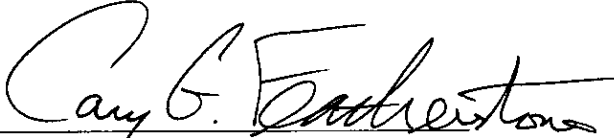
In the matter of Aquila, Inc. d/b/a Aquila)
Networks-MPS and Aquila Networks-L&P, for)
authority to file tariffs increasing electric rates)
for the service provided to customers in the)
Aquila Networks-MPS and Aquila Networks-)
L&P service area.)

Case No. ER-2007-0004

AFFIDAVIT OF CARY G. FEATHERSTONE

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

Cary G. Featherstone, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, consisting of _____ pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.


Cary G. Featherstone

Subscribed and sworn to before me this 13th day of March, 2007.



ASHLEY M. HARRISON
My Commission Expires
August 31, 2010
Cole County
Commission #06899878

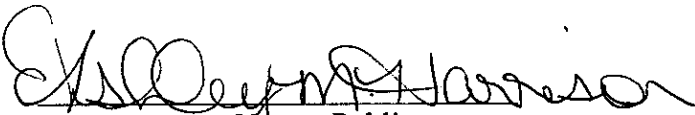

Notary Public

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CARY G. FEATHERSTONE

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1 I have also submitted surrebuttal testimony and schedules in a separate binder relating
2 the issue of fuel cost recovery mechanism and a coal supply agreement.

3 Q. How do you refer to Aquila, its divisions and affiliates in your testimony?

4 A. When referring to Aquila as a whole, I use the name Aquila—the corporate name
5 Aquila, Inc. Aquila, Inc. was formerly UtiliCorp United, Inc. (UtiliCorp), changing its name
6 early 2002. I refer to the operating divisions of Aquila this Commission regulates as follows:
7 Aquila Networks-MPS as MPS, and Aquila Networks-L&P as Light & Power or L&P.

8 **EXECUTIVE SUMMARY**

9 Q. Please summarize your surrebuttal testimony on the area of capacity planning
10 and the costs of combustion turbines?

11 A. The following summarizes my testimony on this topic.

12 **Capacity Planning**

13 In lieu of Aquila's 315 megawatt South Harper facility and two short-term purchased
14 power agreements, Staff is proposing to include what it has described as the MPS facility.
15 The MPS facility is a 525 megawatt facility based on the costs Aquila prudently incurred in
16 building its South Harper facility plus the costs of two additional 105 megawatt combustion
17 turbines. This position is addressed in the direct and surrebuttal testimonies of Staff witnesses
18 Lena M. Mantle and Charles R. Hyneman. This testimony supports that Aquila should be
19 building its own generation to meet its growing electric needs and should have been doing so
20 since at least the late 1990s. The South Harper facility is the first Commission-regulated
21 generating capacity Aquila has built since 1983. Between 1983 and 2005 MPS relied on
22 purchased power agreements to meet the growing demand for electricity in its service

1 territory. Staff was put into the position of imputing the MPS facility to Aquila because
2 Aquila did not build generating assets for MPS, or L&P, for a substantial period of years.

3 Staff had to include a hypothetical value for two additional turbines referred to as
4 Turbines 4 and 5 in this case (as well as the last rate case) because Aquila has not adequately
5 planned and pursued building generating assets to meet its system load requirements. Aquila
6 did, with Calpine, build the Aries Combined Cycle Generating Station (Aries), a 585-
7 megawatt power plant. That station went into service in early 2002. At that time, Aquila,
8 then known as UtiliCorp United Inc. (UtiliCorp), had a corporate policy not to build
9 generating assets for its regulated utility operations. This station was conceived, planned,
10 designed, engineered and costs determined by MPS, but Aquila turned the project over to its
11 unregulated subsidiary Aquila Merchant to build. Aquila signed a five year purchased power
12 agreement with Aquila Merchant for MPS' operations that ended May 31, 2005, (Aries
13 Agreement). Before it began imputing generating assets, Staff took the position in Aquila's
14 prior rate cases that the Aries Agreement was not an arms length transaction and made
15 adjustments in each of those cases to exclude the full value of the capacity agreements
16 between MPS and its affiliate, Aquila Merchant.

17 Planning for the expiration of the May 31, 2005, Aries Agreement, MPS' least cost
18 plan in 2004 to meet capacity needs supported building five (5) turbines having capacity of
19 525 megawatts, but Aquila only installed three turbines totaling 315 megawatts at South
20 Harper following what it referred to as its preferred plan. The remaining capacity to replace
21 Aries was to be met with a long-term capacity agreement. As the Commission is well aware,
22 whether that station remains is the subject of current litigation. Originally, the three turbines
23 Aquila installed at South Harper were held in storage after Aquila no longer planned for them

1 to be used by Aquila's non-regulated subsidiary, Aquila Merchant. Aquila attempted to sell
2 these turbines, but was unsuccessful. Rather than building additional capacity, Aquila
3 subjected itself to the volatile market conditions of the energy power markets. It continues to
4 do so and, as a result, Aquila is not assured where and at what price it will get capacity to
5 meet its system load requirements year after year.

6 Up until January 2004, Aquila's IRP analysis only considered capacity agreements.
7 Since January 2004, Aquila performed IRP analyses year after year, identifying a need to
8 build generating units to make up for the Aries capacity, but the Company, other than South
9 Harper, never built these units. Even though Aquila has indicated in the past several years its
10 intent of building generating facilities, it has failed to do so. Aquila currently has no plans in
11 place to build future generating plant, other than the Iatan 2 project.

12 This testimony also supports the costs of the two combustion turbines (Turbines 4
13 and 5) that are, in part, based on actual South Harper costs for what Staff is referring to as the
14 MPS facility.

15 **MPS FACILITY-TURBINES 1 THROUGH 5 GENERATING FACILITY**

16 Q. Aquila witness H. Davis Rooney states at page 2, of his rebuttal testimony that
17 Aquila has replaced a 600 megawatt (MW) capacity agreement included in its direct filing
18 "with two actual capacity contracts totaling 300 MW of firm capacity..." Do you know why
19 Aquila included the 600 megawatt capacity agreement in its direct filing?

20 A. When Aquila made its tariff filing on July 3, 2006, it reflected a level of
21 revenue requirement for the potential purchase of Aries.

22 Q. Did Aquila purchase Aries?

1 A. No. Aquila bid for this generating facility on December 4, 2006, but was not
2 the successful bidder.

3 Since Aries is a 585 megawatt combined cycle facility, it would have more than met
4 MPS' system load requirements for 2007 and beyond, possibly through 2010 when Aquila's
5 share of Iatan 2 Generating facility is expected to go into service. Iatan 2 is a coal-fired
6 generating plant which is currently being built by Kansas City Power & Light Company
7 (KCPL) and, in which Aquila has an 18 percent ownership share.

8 Q. Since Aquila did not acquire the Aries Unit has it modified its direct position
9 of using a hypothetical 600 MW purchased power agreement?

10 A. Yes. Mr. Rooney identifies two agreements in his rebuttal testimony, starting
11 at page 2, as a

12 ** _____
13 _____
14 _____
15 _____
16 _____ **

17 These two agreements were signed on December 21, 2006, after Aquila was
18 unsuccessful in bidding for Aries.

19 Q. Has Staff included these two capacity agreements in its case?

20 A. No. As Staff witnesses Mantle and Hyneman present in their direct
21 testimonies, Staff's imputation of the MPS facility addresses Aquila's capacity shortfall it is
22 meeting with these two purchased power agreements. Because the costs of the site and three
23 of the combustion turbines of the Staff's MPS facility are the same as Aquila's costs for South
24 Harper, one could view it that Staff is meeting the shortfall of capacity Aquila is meeting with
25 purchased power agreements by the use of the two combustion turbines referred to as
26 Turbines 4 and 5 totaling 210 megawatts. These generating units, in addition to three other

1 similar generating units installed at South Harper replaces the 500 megawatt capacity
2 agreement from the Aries that expired May 31, 2005.

3 Q. Did Aquila include these two agreements in its direct case?

4 A. No. Aquila did not enter into these agreements until well after it filed its direct
5 case, and it has not filed an update to its direct case with the Commission to include them.
6 Although Aquila indicated in its direct filing it needed capacity for the summer of 2007, it did
7 not specifically identify how it intended to obtain that capacity. Aquila included a
8 hypothetical 600 megawatt capacity agreement in its direct filing as a "placeholder" for how it
9 would actually meet its capacity shortfall, hoping to re-acquire Aries.

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

12 A. No. In lieu of placing the South Harper Generating Facility in rate base, the
13 Staff, in its direct filing, used the three combustion turbines installed at the South Harper
14 Facility as a proxy for combustion turbines Aquila actually built. The Commission made it
15 clear in Aquila's last general rate case that the South Harper units were not included in rate
16 base. In the Order in Case No. ER-2005-0436, the Commission stated:

17 Aquila has built a new generation facility known as South Harper
18 Generating Station. The legal status of that facility has been called into
19 question and Aquila may be required to dismantle that facility in the
20 near future. The stipulation and agreement establishes an amount that
21 Aquila will be allowed to carry on its books as an expense for the
22 construction of that plant. However, **it does not authorize Aquila to**
23 **recover those costs in this case, and it does not place the South**
24 **Harper Generating Station into the company's rate base.** It also
25 does not authorize Aquila to recover any costs associated with
26 dismantling that facility, if that becomes necessary. [Commission
27 Order Case ER-2005-0436, page 4; emphasis added]

1 Q. Aquila witness, Mr. Rooney, at page 7, of his rebuttal testimony, states, "Staff
2 does not accept that the three existing and operating turbines at South Harper should be
3 considered in rate base." Does Staff have a response?

4 A. Yes. As was the situation during Aquila's last rate case, the legal status of
5 Aquila's South Harper facility is still in limbo. Aquila could be required to dismantle the
6 facility at any time. Given this continuing uncertainty, Staff has not included the combustion
7 turbines in rate base in this case. Staff used the costs Aquila incurred in acquiring and
8 building South Harper as the basis for the costs of its five combustion turbine MPS facility
9 with three combustion turbines installed; Staff used a portion of South Harper costs as the
10 basis along with other information for the costs of the two other combustion turbines.

11 The costs to construct the three unit South Harper facility were included as a
12 surrogate, or proxy, for Turbines 1 through 3 in the last case. It was clear that Aquila needed
13 the capacity from the three turbines to meet its load requirements. However, because of the
14 uncertainty surrounding these units regarding the legal issues, Staff took the position in the
15 last case that the South Harper costs should be used as a proxy instead eliminating the needed
16 capacity until the court cases were resolved.

17 In this case, Staff has had the benefit of the Commission's Order in Case No.
18 ER-2005-0436 in which the Commission made the decision not to include the South Harper in
19 rate base. Therefore, based on all the foregoing, Staff did not include South Harper in rate
20 base in this case.

21 Q. Did Aquila include South Harper in its rate base in this case?

1 A. Yes, despite the continuation of Aquila's legal troubles regarding South Harper
2 with no solution soon in sight. In my direct testimony I identify the court cases that surround
3 the South Harper plant facility.

4 Q. How did Staff determine which South Harper costs to use in developing costs
5 for the MPS facility?

6 A. Staff reviewed Aquila's construction costs for South Harper, which was
7 completed in late June 2005. Staff refers to the three combustion turbines it costed based on
8 Aquila's prudent South Harper costs as Turbines 1 through 3. Staff witness Phillip K.
9 Williams made a series of adjustments to remove all South Harper combustion turbine costs
10 from the revenue requirement calculation and re-instated the prudently incurred costs as
11 Turbines 1 through 3. These adjustments can be seen on Accounting Schedule 3- Total Plant
12 in Service and Accounting Schedule 6- Depreciation Reserve.

13 In addition, Staff included in its direct case costs for two turbines based in part, on
14 South Harper costs that are referred to as Turbines 4 and 5. Mr. Rooney refers to these as
15 "phantom (non-existent) turbines" at page 7 of his rebuttal testimony.

16 Q. Mr. Rooney indicates at page 8, of his rebuttal testimony that "the two turbines
17 proposed by Staff simply do not exist." Does Staff have a response?

18 A. They have at least as much basis in fact as the 600 megawatt purchased power
19 agreement Aquila included in its direct case, which it has not updated with the Commission.
20 Further, based on the Commission's Order in Case ER-2005-0436, from a ratemaking
21 perspective the three turbines Aquila actually built at South Harper do not exist for
22 ratemaking purposes, since the Commission explicitly did not include them in rate base in the
23 Aquila's last general electric rate case.

1 Q. Mr. Rooney indicates at pages 11 and 14, of his rebuttal testimony, that the
2 Stipulation and Agreement (Stipulation) reached in Case No. ER-2005-0436 only related to
3 three turbines totaling 315 megawatts. Does Staff agree that the Stipulation only addressed
4 three turbines?

5 A. No. It also included the costs of acquiring and preparing a site where six 105
6 megawatt combustion turbines could be placed. The Stipulation only identified agreements
7 reached by the Parties regarding the construction costs and commercial in service dates of the
8 three combustion turbines Aquila installed at South Harper. The Parties to the Stipulation did
9 not agree to cost values for any aspect of the settlement, except for those so identified in the
10 body of the agreement. However, Mr. Rooney goes well beyond the Stipulation and implies
11 at pages 11, 12 and 14, of his rebuttal testimony that this Stipulation specifically included
12 only costs relating to the three South Harper turbines (315 megawatts) and did not include any
13 costs for Turbines 4 and 5. Such was not the case. Staff's overall revenue requirement
14 included costs for Turbines 1 through 3 (in the last case identified as South Harper costs used
15 as proxy) and Turbines 4 and 5, identified as an adjustment in the income statement. Staff
16 witness Hyneman identifies in his surrebuttal the specific adjustments included in the Case
17 No. ER-2005-0436.

18 Q. Was Aquila's last case settled through a stipulation and agreement approved by
19 the Commission?

20 A. Yes. Case ER-2005-0436 resulted in what is referred to as a "black box"
21 settlement. All issues, unless specifically identified in the Stipulation were settled with no
22 specific ratemaking determination or value agreed to by the parties to that agreement.
23 Mr. Rooney's reliance on the Stipulation beyond that specifically and explicitly stated in the

1 Stipulation is misplaced. His attempt to suggest that the costs for Turbines 4 and 5 were not
2 included in the last case is simply not based in reality.

3 Q. Did that stipulation and agreement have any provisions that limit the purposes
4 for which the stipulation may be used?

5 A. Yes. It included the following:

6 This Nonunanimous Stipulation and Agreement is being entered into
7 solely for the purpose of settling all issues in this case and Case No.
8 EO-2002-384 as among the Signatory Parties. None of the signatories
9 to this Nonunanimous Stipulation and Agreement shall be deemed to
10 have approved or acquiesced in any ratemaking or procedural principle,
11 including, without limitation, **any method of cost determination or**
12 **cost allocation or revenue related methodology, and none shall be**
13 **prejudiced or bound in any manner by the terms of this**
14 **Nonunanimous Stipulation and Agreement** in this or any other
15 proceeding, whether this Nonunanimous Stipulation and Agreement is
16 approved or not, **except as otherwise expressly specified herein.**
17 Additionally, this Nonunanimous Stipulation and Agreement shall not
18 bind or prejudice the rights of the Company or any other person
19 or entity in any other proceeding concerning the South Harper
20 Generating Station and any related electric substation(s), except as
21 otherwise expressly specified herein. [page 11 of Stipulation in Case
22 ER-2005-0436; emphasis added]

23 Therefore, it is inappropriate for Aquila witness Rooney to rely on the Stipulation in
24 this case in the way he attempts to rely upon it. There are no values included in the last case
25 since the Parties to the settlement did not reach agreement as to how they arrived at the terms
26 of the settlement. Given the different treatment by Aquila and Staff for the capacity
27 replacement of the Aries Agreement it is understandable they did not.

28 Q. Why, in Staff's view, did the Stipulation address South Harper costs?

29 A. Staff had performed what is referred to as a "construction audit" of South
30 Harper while it was being built. Staff also reviewed information regarding a series of tests to
31 meet in-service criteria performed by the Commission's Energy Department. Two sections in
32 the Stipulation address both these topics. Section 6- Generating Facility Value stated:

1 The rates agreed to herein support a rate base value for a 315 MW
2 generating facility of approximately \$140 million for Aquila. This
3 amount is subject to adjustment as a result of the true-up of Aquila's
4 South Harper Generating Station.

5

6 In any future rate case, Aquila will not request an allowance greater
7 than the depreciated value (including deferred taxes) of that asset at the
8 time of the request except for capital additions booked to the South
9 Harper Generating Station for expenses and liabilities that occur on or
10 after November 1, 2005. The non-Aquila Signatory Parties reserve
11 their rights to challenge such requests in any future rate case.
12 [Stipulation page 5 in Case ER-2005-0436]

13 The only purpose for this language regarding South Harper was to preserve the work
14 relating to the construction audit and to protect the non-Aquila Parties rights to challenge
15 additional costs in a future rate case. This language did not specifically address the costs that
16 were included in the revenue increase agreed to as part of the Stipulation agreed to in the last
17 case, as Mr. Rooney infers.

18 Q. Why did the Stipulation address the commercial in-service date?

19 A. There was an issue between Aquila and Staff as to when the construction
20 accounting should end. This dispute was resolved and the Parties agreed to commercial in-
21 service dates for each of the turbines which were identified in the Stipulation. In addition, the
22 Stipulation identified the distinction between the commercial date and the date a unit meets
23 the fully operational and used for service standard for Proposition 1 purposes. Therefore, the
24 Stipulation addressed these three points in Section 13- South Harper And Prospective
25 Generating Units:

26 The South Harper Generating Station commercial operation dates are as
27 follow: Unit 1- July 12, 2005; Unit 2- July 1, 2005 and Unit 3-
28 June 30, 2005. For of this case and future Aquila rate cases, test power,
29 depreciation and allowance for funds used during construction will be
30 calculated based on the commercial operation dates for South Harper
31 Units 1, 2 and 3.

1 The commercial operation date for prospective generating units will be
2 the date the unit is first available for dispatch by the system operator.
3 The actual commercial operation date for prospective generating units
4 will be subject to review at the time the units are first sought to be
5 included in rates. The actual commercial operation date for prospective
6 generating units will be brought to the Commission for resolution in the
7 event of an unresolved dispute.

8 The commercial operation date of a generating unit is not necessarily
9 the date a unit meets the fully operational and used for service
10 requirement of Section 393.135 RSMo (Proposition 1). The
11 commercial operation date for a prospective generating unit can occur
12 before the date a unit meets the fully operational and used for service
13 requirement of Proposition 1. The commercial operation date for a
14 prospective generating unit will be no later than the date the unit meets
15 the fully operational and used for service requirement of Proposition 1.
16 [Stipulation page 8 in Case ER-2005-0436]

17 The above language in the Stipulation did not address the costs that were included in
18 the actual revenue increase in the last case for either the three turbines at South Harper used as
19 a proxy or the Turbines 4 and 5. Mr. Rooney attempts to infer in his rebuttal, though, that this
20 Stipulation language had some connection to the costs included in the agreed to revenue
21 requirement in Case ER-2005-0436. This inference is erroneous.

22 Q. Did Staff include costs for 525 megawatts of peaking generating capacity in
23 Aquila's last rate case?

24 A. Yes. While we can debate the appropriate level of costs for 525 megawatts of
25 capacity, there can be no debate that Staff included in Aquila's last rate case costs for the
26 525 megawatts of capacity addressed in Mr. Rooney's rebuttal. The 525 megawatts are made
27 using the three turbines (315 megawatts) installed at South Harper as a proxy and two more
28 turbines (210 megawatts) identified by Staff as Turbines 4 and 5.

29 The level of costs for these 525 megawatts is addressed later in this surrebuttal
30 testimony.

AQUILA'S CAPACITY PLANNING AND ADDITIONAL PEAKING TURBINES

Q. On page 8, of his rebuttal testimony, Mr. Rooney states it was his "understanding that in January or February of 2004 Staff questioned the analysis that led to the Preferred Plan." Did you attend meetings between Aquila and Staff regarding Aquila's preferred plan?

A. Yes. On January 27, 2004, Staff met with several Aquila personnel, including Mr. Richard C. Green, Aquila's Chairman, Chief Executive Officer and President. During that meeting Aquila, based on its 2004 Integrated Resource Plan, committed to install three combustion turbines by June 2005. Aquila had these units in storage at its Ralph Green plant located at Pleasant Hill, Missouri. Within the next couple of weeks, in early February 9, 2004, Aquila held a second meeting with Staff and Public Counsel at Aquila's 6-month Integrated Resource Planning (IRP) presentation to provide the results of Aquila's review of its capacity needs. At this meeting Aquila provided its analyses of its least cost and preferred plans. Staff did no more than question Aquila about Aquila's analysis of the Preferred Plan, but Staff did express its concerns with Aquila's capacity planning effort and Staff took strong exception with Aquila as to why Aquila was not pursuing the building of more generating assets, particularly if that was Aquila's "least cost" plan. Attached to this testimony Highly Confidential Schedule 1 contains summary pages of the February 9, 2004, IRP presentation made by Aquila.

Q. Mr. Rooney indicates at page 8, of his rebuttal testimony, that Aquila's preferred plan in January 2004 was to build three combustion turbines. Did Aquila only evaluate its preferred plan?

A. No. When Aquila developed its capacity plan and presented it to Staff in January 2004, Aquila determined that its least cost plan was to install five combustion

1 turbines, not three. The February 9, 2004, IRP meeting, Aquila's lowest cost plan on a net
2 present value revenue requirements over a 20-year period identified replacing the Aries
3 Agreement by constructing five combustion turbines instead of the three that they installed at
4 the South Harper facility.

5 Staff asked Aquila why it was not pursuing its least cost plan instead of installing three
6 turbines. Aquila indicated that it only had three combustion turbines in storage at the time
7 and planned to use them in its preferred plan. With its preferred plan, Aquila would make up
8 the capacity shortfall resulting from the expiration of the Aries Agreement with purchased
9 power agreements. As indicated by Mr. Rooney, one of the entities bidding on the purchased
10 power agreements was unable to secure regulatory approval. Aquila entered into other
11 agreements to make up the needed capacity requirements.

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

14 A. Power from the Aries Agreement ended May 31, 2005. So Aquila needed to
15 have replacement capacity by that date. Aquila started planning to replace the Aries
16 agreement by issuing Request for Proposals (RFPs) as early as the spring of 2001. In
17 response to Data Request No. 166 (Case ER-2005-0436) concerning the Aries replacement
18 power (attached as Highly Confidential Schedule 2) Aquila provided a history of its capacity
19 planning process, with much emphasis on replacing the Aries agreement in 2005.

20 From the time Aquila signed the Aries agreement in February 1999, Aquila started
21 considering replacing the Aries capacity, but only with purchased power agreements. Even
22 though the combustion turbines that are presently installed at the South Harper facility had

1 been in storage since beginning August 2002, it was not until the January 2004 meeting that
2 Aquila committed to building a generating plant.

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

5 A. Yes. Based on the January 2004 timeframe and the need for capacity by
6 June 1, 2005, there was ample time for Aquila to get the necessary siting, permitting and
7 zoning requirements it needed to build a generating plant. Since Aquila had a known date by
8 which the Aries capacity had to be replaced, Aquila could have started much earlier than even
9 January 2004. Aquila had the three combustion turbines in storage since late 2002 a short
10 distance from where it eventually installed them. There was no reason Aquila could not have
11 committed to building South Harper sooner than January 2004 or started the planning process
12 earlier than it did. Many of Aquila's legal problems regarding South Harper result primarily
13 from Aquila's poor timing for planning the installation of these combustion turbines and
14 Aquila's reluctance to build generating facilities.

15 Q. Was the South Harper site the first location Aquila chose for these three
16 combustion turbines?

17 A. No. Initially, in the spring of 2004, Aquila started planning to install the
18 combustion turbine in a location south of Peculiar, Missouri, called Camp Branch. When
19 Aquila began facing local opposition to the Camp Branch site, it, in late summer and early fall
20 of 2004, discussed with officials of Peculiar, moving the site from Camp Branch to what is
21 now the South Harper site. To build at the South Harper site Aquila acquired the land, and
22 began its preliminary ground work such as surveying and site preparation well into the fall of

1 2004. As a result, Aquila had no margin for delay if it was to meet the June 1, 2005, date it
2 would no longer have capacity through the Aries Agreement.

3 Q. Did Aquila seek from Cass County a special use permit or rezoning for the
4 South Harper facility?

5 A. No. Aquila anticipated Peculiar would annex the site and, therefore, would not
6 need such approval from the County.

7 Q. Did anyone oppose the South Harper facility?

8 A. Yes. Neighbors immediately adjacent to the plant site, as well as some that
9 live around the South Belton substation, organized and opposed the facility, resorting to the
10 courts for relief. Further, after Peculiar did not annex the site, Cass County sought and
11 obtained an injunction prohibiting construction without a Cass County special use permit or
12 rezoning. Had it begun its plans for the South Harper Facility sooner, Aquila would have
13 been in a better position to plan contingencies, such as alternative sites and for working with
14 the community to develop better relationships with those who would be living near the South
15 Harper Facility.

16 Because it rushed to build the plant by June 1, 2005, Aquila left itself few options but
17 to proceed forward with the project on a very aggressive time table or enter into purchased
18 power agreement(s).

19 Q. Mr. Rooney states at page 8, of his rebuttal testimony, that Aquila had to
20 acquire "short term capacity contracts for 2005." Why did Aquila need additional capacity in
21 2005?

22 A. South Harper only supplies 315 megawatts of capacity. Aquila needed in
23 excess of 500 megawatts to replace the expiring Aries Agreement. Mr. Rooney identifies in

1 his rebuttal testimony that Aquila's preferred plan was to install the three combustion turbines
2 and rely on "an additional 150 MW purchased power agreement..." When that agreement
3 was not executed, and the June 1, 2005, in-service date for South Harper was not met, Aquila
4 entered into a smaller long-term agreement and other short-term agreements for capacity.
5 Because of the uncertainty surrounding the completion of South Harper, Aquila obtained
6 capacity through a short-term agreement from its non-regulated peaking facilities located in
7 Mississippi called the Crossroads Generating Facility for the summer of 2005.

8 Q. Is 2005 the only time that Aquila had to use short-term capacity agreements?

9 A. No. Because Aquila did not build its least cost plan of five combustion
10 turbines, it relied on short term agreements in 2006 also. Since Aquila still has not built the
11 generation it needs to meet its system load requirements, Aquila, in 2007, will have to rely on
12 the short-term agreements Mr. Rooney identifies on page two of his rebuttal testimony. Since
13 Aquila has not presented any plans to build new capacity, other than its participation in
14 Iatan 2, it will have to continue to rely on short-term capacity agreements in ** _____
15 _____ **.

16 Aquila continually studies building capacity but since it does not commit to actually
17 build generating capacity to meet its projected system load requirements, it continues to
18 subject itself to the energy power market year after year.

19 Q. How did Aquila meet its 2006 capacity requirements?

20 A. To make up its capacity shortfall in 2006, in the fall of 2005 Aquila secured
21 additional capacity on a short-term basis—Aquila entered into a ** _____
22 _____ ** for MPS for summer of
23 2006.

1 Q. What capacity plans does Aquila have for 2007?

2 A. Until December 2006, Aquila had no actual plans in place to meet its
3 2007 peak capacity needs. Largely this was due to Aquila's pursuit of re-acquiring Aries.
4 Aquila has exposed itself, and ultimately its customers, to the energy marketplace without
5 adequate consideration of the option to build or acquire generating capacity. In fact, up
6 through 2005, it was evident that Aquila had no intention of building, or even seriously
7 examining adding more peaking turbines beyond the South Harper units.

8 Q. What was the long-term capacity agreement Aquila entered into for 2005?

9 A. In addition to the 315 megawatts of its South Harper units, in early 2005,
10 Aquila entered into a long-term purchased power agreement with Nebraska Public Power
11 District (NPPD) for 75 megawatts of capacity from Cooper Nuclear Station for the MPS
12 division. The NPPD agreement extends through January 2014. Aquila also entered into a
13 100 megawatt unit participation purchased power agreement from two coal-fired units
14 (50 megawatts each) with NPPD Gerald Gentlemen Station through May 2011 for L & P.

15 In the late 1990s, Aquila secured a purchased power agreement from Gray County
16 Wind Energy in Gray County, Kansas. A small portion of that wind-based generation
17 capacity can be accredited and is specifically assigned to MPS, L&P, and an affiliate, West
18 Plains Energy Kansas.

19 Q. Did Aquila consider building generating capacity to meet its summer of 2006
20 capacity needs?

21 A. No. Aquila received responses from its request for proposals issued in
22 July 2005 from several different sources. None of these responses included a self-build
23 option.

1 Q. Why do you believe Aquila built South Harper?

2 A. Aquila had the three combustion turbines in storage. While Aquila's MPS
3 regulated operations needed the capacity, Aquila attempted unsuccessfully to sell these
4 combustion turbines to unaffiliated entities. Aquila finally committed to installing these units
5 for MPS in January 2004.

6 Absent having the three combustion turbines left over from Aquila's merchant
7 business, Staff believes Aquila would not have built any peaking capacity. Staff has seen no
8 evidence that indicates Aquila had any intention of using the combustion three turbines for
9 MPS' operations. To the contrary, the documentation indicates just the opposite-- that Aquila
10 made every attempt to sell the combustion turbines.

11 Q. When did MPS learn of the three combustion turbines it installed at South
12 Harper?

13 A. At the summer 2002 IRP meeting, MPS identified the need for capacity to
14 replace the Aries agreement that was expiring May 31, 2005. Staff indicated to MPS'
15 Resource Planning Group that three combustion turbines existed within Aquila's organization;
16 and inquired if they would be considered to replace the Aries capacity. The Aquila personnel
17 attending the meeting stated they were unaware of the existence of these combustion turbines.
18 At the summer of 2003 IRP meeting MPS' Resource Planning Group personnel indicated that
19 they were still unaware of the existence of these combustion turbines and, therefore, could not
20 model them. At that time, Aquila was considering only purchased power agreements for
21 replacing the Aries capacity. At this 2003 meeting, Staff made it clear that it knew Aquila
22 had the combustion turbines in storage, and inquired why Aquila's Resource Planning Group
23 was not considering those combustion turbines to meet MPS' capacity requirements in lieu of

1 purchased power agreements. MPS responded that it could only consider what it knew was
2 available, and those combustion turbines were not available for MPS' capacity requirements.

3 Q. Did Aquila ever consider the three combustion turbines for meeting MPS'
4 capacity requirements?

5 A. Yes. When Aquila Merchant planned on installing these combustion turbines
6 at the Aries facility as a non-regulated merchant plant, Aquila was negotiating with itself (its
7 affiliated company), Aquila Merchant, to enter into a 15-year purchased power agreement
8 with MPS. Highly Confidential Schedule 3 is a presentation made by Aquila's Capital
9 Deployment Group entitled "Aries II - Peaking Power Facility" dated March 5, 2002,
10 identifies that these combustion turbines were to provide capacity to MPS through 2020.

11 After Aquila's merchant business collapsed in mid-2002, Aquila decided in July 2002
12 not to deploy the three combustion turbines at the Aries site. At this point, these three
13 combustion turbines were no longer considered for meeting MPS' capacity needs. Aquila
14 finally decided in January 2004 to use this capacity for MPS, after no other home was found
15 for the three combustion turbines.

16 Q. When did Aquila last consider a self-build option to meet its capacity
17 requirements?

18 A. Aquila's Generation Group submitted on February 20, 2006, a response to
19 Aquila's January 17, 2006, request for proposal. This proposal included several different
20 options for different combustion turbines at a variety of locations. One of the proposed
21 options was ** _____

22 _____ **. This proposal was not pursued by Aquila. Instead

1 Aquila is planning to rely on purchased power agreements to meet that peak summer's
2 requirement.

3 Prior to this response, Aquila's Generation Group, on November 22, 2004, submitted a
4 response to Aquila's October 15, 2004, request for proposal for capacity year 2007 [Data
5 Request No. 166, in Case No. ER-2005-436]. However, Aquila made no attempt to consider
6 meeting MPS' capacity needs by purchasing any combustion turbines. Aquila did not contact
7 combustion turbine manufactures for bids nor did it attempt to negotiate a contract with any
8 combustion turbine supplier. Consequently, Aquila was not in any position to seriously
9 consider installing more generating assets. Aquila did not consider meeting its system load
10 requirements by any means other than purchasing the capacity.

11 Prior to early 2006, Aquila did not consider several options that other utilities have
12 pursued, options such as: 1) seeking from combustion turbine manufactures new combustion
13 turbine sale offers; 2) requesting offers from combustion turbine manufacturers for new
14 equipment that has been released by the original buyer before delivery, which vendors
15 manufacturers discount; 3) pursuing the gray market for combustion turbines from non-
16 turbine manufactures; and 4) examining access to existing facilities Aquila owned and
17 ultimately sold to third party non-affiliates, such as AmerenUE.

18 Q. Does Aquila have any current plans to build any additional generating
19 capacity?

20 A. Yes. As indicated above, Aquila has an 18% ownership share, or
21 153 megawatts of capacity in Iatan 2, currently planned to be in-service in the summer of
22 2010. Except for this new capacity, Aquila has not provided any plans to build future
23 generation.

1 However, as late as December 2006, Aquila indicated in a meeting with Staff a desire
2 to add generation in ** ____ **. But by January 2007, Aquila indicated that it may not be
3 able to meet this time frame, instead moving this date back to ** ____ ** which would mean
4 having to once again going back into the energy market in ** ____ **.

5 Aquila is reviewing the option of building generation. Aquila recently filed its 2007
6 IRP in Case No. EO-2007-0298 where it modeled adding new generation, but, with the
7 exception of Iatan 2, Aquila has made no decision to actually build any new generating plants.
8 Through the beginning of 2006, it was typical for Aquila to identify the need for new
9 capacity, but Aquila has shown reluctance to actually pursue the build option.

10 Q. How short on capacity is Aquila?

11 A. Since the South Harper facility only supplies 315 megawatts of the
12 500 megawatts Aquila needed through 2005, Aquila must make up the difference, plus
13 capacity for load growth in the system. Aquila witness Rooney identifies in his direct
14 testimony (page 3) that Aquila's load is growing approximately ** __ ** megawatts every
15 year. For the summer of 2007, Aquila added ** ____ ** megawatts of capacity by purchased
16 power agreements. Staff used the 525 megawatts capacity of the MPS Facility to meet the
17 summer peak loads for 2005 and 2006. For discussion on Aquila's capacity planning and the
18 level of capacity needed to meet system load requirements see Staff witness Mantle's direct
19 and surrebuttal testimonies.

20 Q. Did Calpine's sale of Aries in 2006 influence Aquila's decision to build new
21 capacity?

22 A. Yes. Because Aquila did not need peaking capacity in addition to the
23 585-megawatt Aries combined cycle facility, it would not commit to building combustion

1 turbines before Calpine sold Aries. Since Aquila did not acquire Aries, it now must meet this
2 capacity with short term agreements for ** _____ **.

3 Staff believes that Aquila's decision to build Aries as merchant plant has caused much
4 of the problems with its capacity planning. Aries was previously owned by Aquila as a non-
5 regulated unit. Aquila sold a 50% share of Aries in late 1999 to Calpine. If Aquila had built
6 this plant as a regulated facility, there would not be the capacity issues that have plagued
7 Aquila over the past several years. With ownership and control of the Aries capacity, Aquila
8 would not be subjected to the capacity market year after year. Aquila has made up its
9 capacity shortfall with short-term agreements since 2005. Aquila is telling Staff that it will
10 not likely be able to get new peaking generation in place before ** _____
11 _____ **.

12 **AQUILA'S 2005 EXPANDED INTEGRATED RESOURCE PLAN**

13 Q. At page 8, of Mr. Rooney's rebuttal testimony, he discusses "an expanded
14 integrated resource plan" that was the result of an agreement in Case No. ER-2004-0034.
15 From Staff's perspective what was the purpose of this agreement for the 2005 IRP Plan?

16 A. Staff participated in several IRP meetings with Aquila over several years. In
17 the 2004 rate case, as well as the 2001 rate case (ER-2001-672), Staff criticized Aquila's
18 capacity planning process and its corporate policy of not building generating assets for its
19 regulated operations. While Aquila did commit to build regulated facilities using the three
20 stored combustion turbines for its South Harper facility, Staff believed Aquila needed a more
21 extensive analysis for its long-term capacity planning. The "expanded IRP" Aquila agreed to
22 in the 2004 rate case Mr. Rooney refers to in his rebuttal was for Aquila to determine its

1 capacity needs beyond replacing the Aries Agreement, expiring in May 31, 2005. In other
2 words, the "expanded IRP" was to look to capacity years 2006 and beyond, not 2005.

3 Q. What Aquila IRP plan related to Aquila's capacity needs for 2005?

4 A. The IRP Plan Aquila presented in early 2004. Aquila identified in that IRP its
5 least cost plan was to build five turbines to meet its capacity needs for 2005. Since it takes a
6 minimum of about one and half years to plan for and install combustion turbines on a new
7 site, this IRP Plan was the last one in which Aquila could plan for replacing the 500 megawatt
8 of capacity from the Aries Agreement Aquila was losing in 2005. Staff believed that Aquila
9 should have pursued its least cost plan of installing five turbines to replace this capacity
10 agreement and included that level of generation in this case as well as its last general electric
11 rate case in 2005.

12 Q. Mr. Rooney states at page 9, of his rebuttal testimony, "Staff continues to
13 assert that an alternative plan in the pre-stipulation analysis of January 2004 should be the
14 yard-stick of prudence for Aquila." Does Staff have a response?

15 A. Yes. Aquila is confusing the purpose of the stipulated "expanded IRP." As
16 indicated, this IRP did not have any thing to do with the 2005 capacity year and the
17 replacement of the Aries agreement. The "expanded IRP" analysis presented in early 2005
18 could not have addressed the summer peaking season of 2005. This "expanded IRP" referred
19 to by Mr. Rooney dealt with the need to construct base load capacity. This plan was the basis
20 of support for the Company's participation in the Iatan 2 project, not scheduled for in-service
21 until 2010. This IRP plan also addressed the 2006 capacity needs which Aquila was intending
22 to address with purchased power agreements. It is clear, however, that the prudence standard
23 alluded to by Mr. Rooney in his rebuttal must be the 2004 IRP least cost plan presented in

1 January 2004. Staff's use of five turbines is for the Aries replacement which occurred in 2005
2 could not possibly have been addressed in the "expanded IRP".

3 Q. Mr. Rooney indicates that Staff's alternate plan (page 10, line 12 of his rebuttal
4 testimony) did not include any purchased power agreements. Is he correct?

5 A. No. Staff included, in addition to the five combustion turbines, the capacity
6 agreements Aquila entered into with NPPD for 75 megawatts from the Cooper plant and the
7 100 megawatt NPPD Gentlemen Agreement. Staff also included in this case, as it did in
8 Aquila's last three electric rate cases, the Gray County Wind Farm purchased power
9 agreement.

10 Q. Mr. Rooney indicates that the Commission's rules require that purchased
11 power opportunities be considered. Does Staff agree?

12 A. Yes. However, consideration does not mean that purchased power agreements
13 must be used at the expense of following least cost planning and the installation of owned-
14 generation. As Mr. Rooney indicates in his rebuttal testimony, not only did Aquila consider
15 purchased power in its 2004 capacity plan, but both Aquila and Staff included in Aquila's last
16 two electric rate cases, the long-term agreements identified as part of that plan. However,
17 Staff met the replacement of the 500 megawatt Aries agreement in the last rate case and this
18 one with a six combustion site with five 105 installed megawatt combustion turbines. The
19 difference in costs between Aquila and Staff on this point is that in lieu of the two additional
20 turbines Aquila uses short-term one year agreements. Staff believes this subjects Aquila
21 unnecessarily to the volatile energy markets. Relying on built and owned generation assets
22 provides more stability, control of the system and ultimately lower costs. Mr. Rooney's own
23 rebuttal testimony alludes to the declining nature of the revenue requirements over time by

1 ownership compared to purchased power agreements at pages 12 to 14, of his rebuttal
2 testimony, where he discusses his view of the "penalty" that Staff is imposing on Aquila.
3 Aquila is very much aware of the value of ownership when it did its 2004 IRP analysis that
4 determined that five turbines, not three turbines, was the least cost plan.

5 Q. Mr. Rooney states at page 11, of his rebuttal testimony, "it is both prudent and
6 required by past stipulations and by the Commission's rules" to pursue purchased power
7 agreements. Does Staff agree?

8 A. Yes. However, Mr. Rooney seems to imply that pursuing purchased power
9 agreements instead of building least cost generation as the Company's own 2004 IRP analysis
10 determined is not only prudent, but "past stipulations" and "Commission's rules" require this
11 action. Staff certainly does not agree with this notion. While the "past stipulations" aren't
12 identified by Mr. Rooney, Staff would not enter into an agreement to ignore an analysis that
13 indicates the least cost approach is to build generation. Staff has indicated to Aquila many
14 times in testimony and in numerous IRP and other meetings, Staff's position that utilities the
15 Commission regulates should build and own generating assets rather than subjecting
16 themselves to the volatile energy market. In this rate case, as well as in Aquila's last rate
17 case, Staff has shown its commitment to utilities' owning their generation by including higher
18 costs for those assets than the costs of the capacity agreements Aquila has included in its case.

19 Q. Aquila witness Williams states at page 5, of his rebuttal testimony, that he
20 concludes "that any perception of poor resource planning on the part of Aquila is unfounded,
21 and that both prior and current resource planning and decision making processes are
22 appropriate and effective." Does Staff agree with this conclusion?

1 A. No. Mr. Williams has been involved in Aquila's regulatory process a number
2 of years and he has attended many of the same IRP meetings that I have been in attendance.
3 To conclude, as he has done, that Aquila's decision making and IRP process regarding its
4 capacity planning is appropriate, much less effective leaves one wondering what it would take
5 to be thought of as bad decision making. Examples of Aquila's decision making:

- 6 • Having a corporate policy not to build regulated generation evidenced by not
7 having built generation since 1983, except for South Harper in 2005 which
8 effects the regulated operations to this day.
- 9 • In 1997 attempted to move all generating assets to an Exempt Wholesale
10 Generator (EWG) reference case EM-97-395.
- 11 • MPS Resource planning in 1992 determined need for combined cycle unit by
12 2000 for MPS yet Aquila's corporate decision made to build unit as a non-
13 regulated merchant plant (Aries) after regulated operations did much of the
14 preliminary work for the development of the project.
- 15 • MPS, as a captive customer, forced to have purchased power agreement from
16 2001 to 2005 from a non-regulated Aquila affiliate (Aries Agreement).
- 17 • Aquila sold its 50% share of Aries giving its partner ** _____
18 _____ ** to take unit over.
- 19 • Aquila attempts unsuccessfully to re-acquire Aries in 2006.
- 20 • Despite having a known certain date to replace the Aries Agreement by June
21 2005, Aquila did not timely plan for the replacement of this capacity. Until
22 January 2004, did not seriously consider building generation instead looking
23 at another purchased power agreement from an affiliate (Aries II).
- 24 • Aquila attempts to sell at steep discounts three turbines which were to be
25 installed at Aries as Aries II in 2002. Units were placed in storage. While
26 units were for sell, at no time were the units ever considered or offered to
27 MPS to meet its growing capacity needs. Units were eventually installed at
28 the South Harper facility.
- 29 • Aquila had many combustion turbines, three of which were new units, in its
30 asset portfolio that it sold at distressed values resulting in hundreds of
31 millions of dollars of impairment charge losses that the Company did not
32 consider to use for its regulated operations despite MPS' need to for capacity.
33 (Raccoon Creek, Goose Creek and General Electric 7 EAs combustion
34 turbines).

- In January 2004 Aquila made decision to replace Aries Agreement with three combustion turbines it had left over from its merchant business. These units had been in storage since 2002 during which the units' warranty expired.
- South Harper legal issues caused by having to move forward on project to get units in service by June 2005 to replace Aries Agreement. Since Aquila already had possession of units since 2002, appropriate planning could have taken place much earlier than it did providing ample time to get necessary community support. The units continue to be in jeopardy awaiting the courts decision as to their future including the possibility of being disassembled and moved.
- In 2000 Aquila re-acquired MPS' four combustion turbines at Greenwood which it had built starting in 1975 and sold under a sale lease back which had a provision where the Company could acquire the units at the end of the lease at the existing market value. Aquila re-acquired the units at greater than the original purchase price even though the units were 25 years old. The units were reacquired by a Aquila non-regulated MPS affiliate with a corporate decision that MPS entered into a 15 year purchased power agreement. This agreement was ultimately terminated and the units were moved back in the regulated operations of MPS. The 25 year old units are now in rate base at a greater amount than what they were originally purchased for. Customers will have in essence paid for these units twice-once through the lease and now in rate base.

The foregoing refutes his conclusion and demonstrates that Aquila has not had "appropriate and effective" decision making regarding its resource plan or its process. These events and circumstances are not the actions of a typical utility this Commission regulations.

ARIES COMBINED CYCLE GENERATING STATION

Q. Is Aries a symptom of the problems with Aquila's approach to obtaining capacity to serve its loads?

A. Yes. Staff believes there is a very real and direct relationship between Aquila's construction of Aries and Aquila's capacity planning since Aquila decided in 1998 to build Aries as a non-regulated generating facility.

Q. What is Aries?

1 A. Aries is a natural gas-fired 585 megawatt combined cycle generating unit. Its
2 commercial operation date was February 2002. This facility is made up of two combustion
3 turbines and a 265-megawatt steam turbine generator that operates as part of the combined
4 cycle unit, using heated exhaust generated by the two combustion turbines which would
5 otherwise be vented to atmosphere and wasted. The heat recovery system for each
6 combustion turbine-generator is known as the heat recovery steam generator (HRSG). There
7 is a separate HRSG unit for each of the two combustion turbine-generators. To obtain the
8 optimal operating performance, the combined cycle unit will utilize the capacity from the two
9 160-megawatt combustion turbines and the steam flow to power the 265-megawatt
10 steam turbine, giving the Aries Combined Cycle Unit a total operating capacity at full load of
11 585-megawatts.

12 Q. What capacity did Aquila obtain under the Aries Purchased Power Agreement?

13 A. The power agreement provided MPS with 200 megawatts of capacity for
14 12 months of the year (January 1 through December 31) and an additional 300 megawatts of
15 capacity for six months (April through September) of each year starting January 1, 2002,
16 through May 31, 2005, the date the agreement terminated. In addition, the power agreement
17 provided 320 megawatts of summer peaking capacity during the summer of 2001. The Aries
18 agreement started to supply combined cycle capacity to MPS in January 2002 from another
19 source until Aries became fully operational.

20 Q. What was Aquila's interest in Aries?

21 A. Through the wholly owned Aquila Merchant subsidiary, Aquila effectively
22 owned 50% of this facility. Calpine owned the other 50% of the unit and was the operating
23 partner. On January 12, 2000, Aquila, as UtiliCorp, entered into two agreements with

1 Calpine, a Partnership Agreement and an Operating Agreement for the construction,
2 ownership and operation of Aries.

3 Aquila sold its 50% share of Aries in spring 2004. Aquila agreed to ** _____
4 _____ ** for Calpine to take over the entire
5 ownership of the Aries facility.

6 Q. Why did Aquila sell its share of Aries?

7 A. Aries was structured by the partners under a tolling agreement. Both Aquila
8 and Calpine were ultimately responsible for its ownership share of the financing of the unit.
9 The partners let the construction loan go into default in July 2003 which resulted in the banks
10 seeking additional financing. Aquila made a corporate decision not to put any more money
11 into the Aries facility and negotiated terms to sell its share to Calpine in the fall of 2003.

12 Q. What are tolling agreements?

13 A. Tolling agreements are very similar to capacity agreements. Tolling
14 agreements are made by owners of generation, known as independent power producers (IPP)
15 who sell power to utilities like MPS. The utility pays the IPP capacity charges to cover fixed
16 costs of the plant facilities and generally an operation and maintenance (O&M) amount,
17 typically on a cost-per-megawatt-hour basis. It is common in this type of arrangement for the
18 buyer (MPS) to supply the natural gas to fuel the unit. The capacity costs paid to the owners
19 of the plant facility will go toward the payment of the financing costs. Since the capacity
20 agreements are for a finite term, the merchant plants carry a much higher risk to the owners
21 who have to make payments to the financial institutions, even though the units may be idle
22 when there is no contract for power. Lenders to merchant facilities required financial backing
23 to secure the capital to build the plants. When the power markets collapsed in 2002, IPPs

1 found themselves with idle merchant plants because these units could not generate sufficient
2 revenues to cover the fixed and variable costs of the units.

3 Q. Did Aquila experience problems selling power from its merchant plants?

4 A. Yes. Aquila had several plants where it had tolling agreements in place
5 requiring where Aquila made payments to support the fixed costs of the plant, including the
6 financing costs of the units, without having the necessary revenue sources to cover those
7 costs. The Aries plant also had a portion of its capacity that was not covered by the purchased
8 power agreement with MPS under a toll. The Aries financial lenders were to receive
9 payments by the owners (Aquila and Calpine) even if Aries did not generate sufficient
10 revenues to meet those obligations.

11 Q. Did Aquila incur losses for the tolling agreements?

12 A. Yes. Aquila incurred substantial losses from these tolling agreements.
13 Aquila's non-regulated operations had several power plants it owned, including Aries, where
14 it was obligated to pay financing costs through these tolling agreements, regardless of whether
15 the units generated revenues. At the time of the Aries agreement with MPS Aquila identified
16 a \$2.1 billion obligation for the period of 2003 to 2007 and thereafter. This amount was to be
17 paid regardless of any expected revenues produced by these power plants. In the 2002 SEC
18 Form 10-K, Aquila identified its tolling obligations:

19 Our scheduled capacity payments for power generation in our Capacity
20 Services business during 2003 aggregate approximately \$101.3 million.
21 Because it is generally expected that the fuel and start-up costs of
22 operating merchant power plants will exceed the revenues that would
23 be generated from the power sales, we believe that our capacity to
24 generate power will largely be unutilized. If our tolling agreements
25 that comprise a substantial portion of our capacity payments are not
26 terminated or restructured on terms acceptable to our counterparties and
27 us, our earnings and liquidity will be severely impacted. We have

1 communicated to certain counterparties the necessity that these
2 agreements be terminated or restructured.

3 [source: SEC Form 10-K, December 31, 2002, pages 59-60]

4 Aries, along with two other merchant plants were included in the \$2.1 billion amount
5 Aquila expected to lose over the remaining lives of the tolling agreements. Another
6 generating facility where Aquila was incurring losses was the 604 megawatt Elwood Energy,
7 LLC unit located at an Illinois site. Aquila eventually bought out this agreement for over
8 \$100 million.

9 On May 13, 2003, Aquila terminated a 20-year tolling agreement for the Acadia
10 Power Partners, LLC, a joint venture with Calpine and Cleco Corporation for \$105.5 million.
11 This was 580 megawatt power plant Aquila originally entered into a contract in 2000. Under
12 the toll, Aquila supplied the natural gas to a combined cycle unit in Eunice, Louisiana, paying
13 fixed capacity payments for the right to sell into the wholesale market.

14 Q. Was the Aries tolling arrangement one of the reasons Aquila sold its interest in
15 Aries?

16 A. Yes. Absent a long-term capacity agreement, Aquila would have had to pay
17 any shortfalls in revenues to cover the financing obligations for Aries.

18 Q. Does Calpine still own Aries?

19 A. No. As indicated above, Calpine auctioned Aries. Aquila bid, but was not the
20 successful bidder. Calpine sold the production facility to Kelson Energy in January 2007.

21 Q. What effect did Calpine's sale of Aries have on Aquila?

22 A. Aquila did not pursue installing combustion turbines. As a result, Aquila will
23 once again be subjected to the energy markets. Other than the South Harper units, which
24 Aquila did not have any other use for since they were in storage and unable to sell them to

1 non-Aquila entities, the Company had not constructed generating facilities since 1983.
2 Aquila needed capacity since third party base load purchased power agreements expired the
3 end of the 1990s. The Aries agreement replaced this capacity through May 31, 2005. Until
4 the collapse of the merchant power market in early 2002, Aquila planned to replace the Aries
5 agreement with the non-regulated Aries II for a period of 15 years, using the three turbines
6 ultimately installed at South Harper.

7 By not owning Aries, Aquila continues to struggle to meet its capacity requirements
8 every year with short-term purchased power agreements. Aries could have supplied MPS
9 since 2001 as a regulated owned unit. Instead, Aries is no longer available to Aquila as a
10 regulated unit and Aquila is still attempting on replacing a portion of this capacity since 2005.
11 The earliest the entire Aries capacity will be replaced with owned generation is ** _____

12 _____ **.

13 Q. Does Aquila support the need for intermediate capacity such as a combined
14 cycle generating facility?

15 A. It certainly has in the past. MPS planned as early as 1992 to include
16 intermediate capacity on its system. More recently, Aquila attempted to re-acquire Aries from
17 Calpine which certainly indicates desire for the Company to have more of a base load mix
18 away from peaking capacity.

19 In addition, Aquila has requested a consulting firm. R. W. Beck to examine the
20 Company's generation mix between the various types of production facilities. Aquila witness
21 Robert Davis presented rebuttal testimony on behalf of the Company concerning its optimal
22 generation needs. Mr. Davis states:

23 The analysis shows that if Aquila had perfect foresight and could have
24 installed all new resources to satisfy its entire supply portfolio in 2005

1 that more base-load and intermediate capacity and less peaking
2 capacity would be desired as compared to the existing supply portfolio.

3 [Davis rebuttal, page 6, lines 15-18]

4 Clearly, Aries would have fulfilled the need to have "more base-load and intermediate
5 capacity..." Aquila's IRP plans over the years that supported the need to develop and
6 construct a combined cycle unit as part of the Company's portfolio of generating assets was in
7 line with what its own consultant has concluded and what Staff has encouraged over the
8 years. Unfortunately Aquila will not have the benefit of owning this generating facility it
9 developed and constructed on land adjacent to its substation. It should have never built this
10 unit as a non-regulated asset, and certainly the Company should have never had a corporate
11 policy not to build regulated assets. Had Aquila built Aries and included it in the regulated
12 rate base of MPS, the Company would not find itself in the mess it is presently in and its
13 customers would have had the benefit of this generating asset over the past several years and
14 well into the future.

15 Q. Would Aries have value to Aquila beyond its capacity?

16 A. Absolutely. The Aries facility had far greater value to Aquila than just a
17 generating asset, as important as that is. This site was sized to accommodate additional
18 peaking generating units. This aspect alone, is of great importance, as Aquila has seen with
19 its difficulty in placing generating and substation facilities at South Harper. Remember, the
20 three turbines presently at South Harper were going to be installed at Aries until the merchant
21 energy market collapsed in early 2002. Placing generating units at existing facilities is far
22 easier than placing them at "greenfield" sites.

23 Q. Why is it important to own generation?

1 A. Fully integrated utilities will produce the electricity it transports and distributes
2 to consumers. Utilities typically prefer to own, operate and maintain the production facilities
3 having full and complete control over every aspect of the units' operations.

4 Ownership, in the long-term is considered least cost and should be pursued by utilities.
5 Largely, Missouri utilities except Aquila have followed this path. Generating assets included
6 in rate base result in higher revenue requirements in the front end of the unit's lives and
7 generally decline as the unit depreciates. The declining revenue requirements over the life of
8 the assets cause the ownership to be less costly. Mr. Rooney addresses this concept in his
9 rebuttal testimony when he discusses what he alleges to be a "built in penalty" at pages 12 –
10 14, of his rebuttal testimony. Had Aquila rate based Aries when it was completed in early
11 2002, as the Empire District Electric Company (Empire) did with its combined cycle unit, the
12 unit would be well on its way to the declining revenue requirements associated with
13 ownership.

14 Also, asset ownership mitigates costs due to increases of the volatile energy markets
15 by locking in the costs of the owned assets in rate base. Utilities relying on the power markets
16 subject themselves to the whims of the volatile nature of these markets.

17 Q. Is Mr. Rooney correct in his discussion of the concept he advances at page 12,
18 of his rebuttal testimony, regarding the "built in penalty" of ownership?

19 A. No. It is not at all typical that a generating asset creates a "wind fall" to the
20 utility as is the case with Aquila's position of including purchased power agreements in rates
21 opposed to Staff's position for the five turbines at the MPS Facility. Generally, when a
22 company installs generating assets, the higher revenue requirements associated with these
23 plant investments are reflected in rates and the company collects the actual costs it incurs to

1 own and operate the plant-- the company collects the actual costs to run the facility. These
2 costs include the depreciation and carrying costs to own the assets. The utility is entitled to an
3 opportunity to earn a fair return on its investment (a return "on" the asset) and recovery of the
4 investment (a return "of" the asset). The early years of the result in higher costs because of
5 the need to collect higher amounts for returns "of" and "on" the assets. As the asset
6 depreciates over its life, the collection of revenues in rates decrease with declining rate base.

7 But in the situation with Aquila where it did not invest in its future, Staff's inclusion
8 of the assets in the revenue requirements provides Aquila with a revenue stream it is not
9 actually paying out in costs. Mr. Rooney suggests that companies take these "excess" funds
10 collected and invest those dollars for a return. In reality, when including assets in rate base
11 and collecting revenues from customers to cover costs of owning assets, excess funds do not
12 exist. Theoretically, the customers pay in rates, costs of ownership to the utility to receive
13 revenues to cover return "of" and "on" investment. I will address the value of ownership later
14 in this testimony.

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

17 A. Yes, many times. During the last several years, especially during the IRP
18 meetings, Staff has been very upfront and direct in its view of have self generation to meet
19 system load requirements. Staff has consistently encouraged not only Aquila but other
20 utilities operating in the state, its preference is for the utilities to own and operate their
21 generating assets.

22 Q. Has Staff consistently taken this position?

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

7 **CAPACITY COSTS**

8 Q. Why has Staff attempted to quantify the costs of installing two additional
9 turbines in this case?

10 A. Because of Aquila's approach and decision making to its capacity planning
11 process, and its one-time corporate policy not to build regulated generating assets, Staff has
12 asserted over several years that the Company was not pursuing the "build option" like other
13 utilities. Consequently, Staff took the position in the last Aquila rate case that it would
14 impute two turbines consistent with a 2004 IRP analysis performed by the Company's
15 Resource Planning Group. Aquila's 2004 IRP concluded that the least costs approach in
16 meeting its capacity needs for the expiring Aries agreement was a facility consisting of five
17 peaking turbines, each having 105 megawatts of capacity, with a total capacity of
18 525 megawatts. This analysis was the basis for the decision by the Company to construct the
19 three turbine South Harper facility. However, as indicated earlier in this testimony, Aquila
20 only installed the three turbines and pursued a policy of making up the short fall in capacity
21 needs in the volatile purchased power market. Aquila effectively ignored its own analysis by
22 not following least costs planning to meet its system load requirements. Staff has made an

1 attempt to correct this deficiency through the imputation of the additional two turbines,
2 referred to as Turbines 4 and 5 in this case.

3 Q. Were costs for these two turbines included in the last case?

4 A. Yes. Staff witness Hyneman is addressing this in his surrebuttal.

5 Q. Mr. Rooney states at page 15, of his rebuttal testimony, that the South Harper
6 costs to construct the facility were \$140 million. What are the current installed costs of this
7 facility?

8 A. As of December 31, 2006, which is the update period used in this case used for
9 the supplemental direct testimony filed on January 27, 2007, the total completed South Harper
10 costs were \$117.0 million plus transmission costs of approximately \$26 million, totaling
11 \$143 million having an installed cost of \$454 per kilowatt.

12 The above installation costs include the Total Company South Harper turbines,
13 construction costs, transmission and substation costs agreed to in the Stipulation in the last
14 case as well as any additions and retirements, to the extent existed, through December 31,
15 2006.

16 The \$140 million amount used in the Stipulation in the last case was based on actual
17 costs as of October 31, 2005, resulting in an installed cost of \$444 per kilowatt. The actual
18 incurred costs for this period were adjusted for costs relating to the disallowances agreed to by
19 Aquila for the legal costs regarding the court cases, storage costs for the turbines, and the
20 write-down of the turbine amounts themselves. These adjustments have been permanently
21 reflected in Aquila's books so that the December 31, 2006, balances have already had them
22 removed. Staff made additional adjustments to the December 31, 2006, amounts for
23 additional legal costs relating the Cass County court cases.

1 Q. What are the total costs of Turbines 4 and 5 at December 31, 2006?

2 A. The costs Staff has included in this case for Turbines 4 and 5 is addressed in
3 Staff witness Hyneman's direct and surrebuttal testimonies. Staff has identified plant costs
4 including transmission costs associated with these two combustion turbines as \$63.9 million
5 resulting in an installed cost of \$304 per kilowatt (\$63.9 million divided by 210,000
6 kilowatts).

7 **TRANSMISSION COSTS FOR TURBINES 4 AND 5**

8 Q. Mr. Rooney states at page 17, line 14, of his rebuttal testimony, that Staff used
9 "an incremental estimate of ** _____ ** for transmission upgrades." Is this correct?

10 A. Mr. Rooney indicates in his rebuttal that this amount, from when the turbines
11 were planned to be installed as the Aries II project, "was one of potential site for the turbines
12 to be installed in 2003" [Rooney rebuttal, page 17, line 17]. That was not the case. The three
13 turbines presently installed at South Harper were originally acquired by Aquila Merchant to
14 be completed in 2003. Highly Confidential Schedule 3 is a presentation made by Aquila's
15 Capital Deployment Group entitled "Aries II - Peaking Power Facility" dated March 5, 2002,
16 that identifies this costs. The estimated costs for the transmission upgrade at Aries that forms
17 the basis for the transmission upgrades included in the last case and again in this case relate to
18 three Aries II turbines. Staff is using this estimate as the basis for the transmission upgrades
19 for only two imputed turbines referenced as Turbines 4 and 5. Since this estimate is for three
20 units, the transmission costs included in this case for Turbines 4 and 5 represent a
21 conservative amount.

22 Q. Is there additional support for the transmission upgrades for Turbines 4 and 5?

1 A. Yes. Aquila's Resource Planning Group, which Mr. Rooney is Director,
2 received a bid proposal from Aquila Networks- Missouri (Regulated Generation) on
3 November 24, 2004, identifying several options of constructed plant for an installation date of
4 June 2007. Aquila estimated that transmission upgrades for a brownfield (existing) site for
5 either four General Electric 7 EA's turbines or three Siemens 5015A's turbines would be
6 ** _____ **. This estimate is for three or four turbines installed in 2007 compared to
7 the installation date of July 2005 for Turbines 4 and 5.

8 The South Harper facility was sized and designed for six units. Adding Turbines 4
9 and 5 would not result in a complete remaking, in its entirety, of all of the existing
10 transmission facilities. In particular, the substation at the site would not need to be duplicated
11 to add three more turbines to the site, and the Belton South Substation would not be
12 completely re-built. Aquila sized the transmission facilities for six combustion turbines.
13 While there would be some transmission construction to interconnect two additional turbines,
14 it would not require a complete duplication of cost.

15 The costs that Staff included in the current case for transmission upgrades is more than
16 sufficient for Turbines 4 and 5.

17 **COMBUSTION TURBINE COSTS FOR TURBINES 4 AND 5**

18 Q. Mr. Rooney implies at page 17, line 5. in his rebuttal testimony, that the
19 estimate for the three turbines installed at South Harper is understated. Do you agree?

20 A. No. The \$66.76 million amount referenced in Mr. Rooney's rebuttal is an
21 amount Aquila and Staff agreed to value South Harper's three turbines in Case Nos.
22 EO-2005-0156 and ER-2005-0436. This amount is reflected on Aquila's books and was used
23 by both the Company and Staff in this case as well as the last case. It is unclear what point

1 Mr. Rooney is attempting to make regarding the \$66.76 million amount, or \$22.25 million per
2 unit, where he states that the values are "also less than the value established by Aquila's
3 professional appraiser." If Mr. Rooney wants to leave the impression that the \$22.25 million
4 per unit agreed upon value is some how understated because its "professional appraiser"
5 determined a greater amount then this, it is without merit. Aquila did use an appraisal
6 performed by R.W. Beck but the results of this appraisal was ultimately rejected by the parties
7 in Case No. EO-2005-0156. In an effort to comply with the Commission's affiliate
8 transaction rules, Aquila wrote down those assets in November 2004 by over \$10 million on
9 the recommendation of R.W. Beck.

10 The \$66.76 million amount agreed to by Aquila in that case was based on an actual
11 offer for sale to KCPL by Aquila Merchant who originally acquired the three Siemens
12 501DA's for the Aries II project. The offer price included the turbines and all
13 related equipment including generator auxiliaries, transformers and generator breakers. The
14 per unit cost of \$22.25 million was considered conservative at the time of the Case No.
15 EO-2005-0156. A further discussion on this turbine value will be addressed later in this
16 testimony.

17 Q. Mr. Rooney indicates at page 16, of his rebuttal testimony, that Staff used a per
18 unit amount of \$18.7 million for Turbines 4 and 5. Was this amount considered to be an
19 estimate for the turbines and related equipment?

20 A. Yes. What Aquila fails to consider is the rest of my surrebuttal in Case No.
21 ER-2005-0436, where I identify several sources for turbine pricing during the "buyers
22 market" for this equipment. Aquila itself had many turbines to choose from its own portfolio
23 of owned equipment. Aquila sold numerous turbine equipment to outside third parties at the

1 same time that MPS needed to replace the Aries capacity agreement June 1, 2005. During
2 this time Aquila had numerous opportunities to control equipment for its regulated operations
3 and chose not to by either selling outright turbines or releasing rights it had from turbine
4 manufactures. Further, Aquila did not actively engage in the after-market to pursue
5 equipment at steep discounts.

6 Comparing the totality of the opportunities Aquila had to install equipment to replace
7 the Aries agreement in 2005, Staff determined that the \$18.7 million per unit costs for
8 Turbines 4 and 5, inclusive of all related equipment and vendor technical services was more
9 than sufficient. Staff considered this per unit amount conservative in relation to the then
10 existing turbine market.

11 Q. Was the basis of the turbine values used in Turbines 4 and 5 the *Gas Turbine*
12 *World* publication?

13 A. No. It is true that this publication had values the same as used in the
14 construction costs of Turbines 4 and 5 but the use of the \$18.7 million per unit value related to
15 many sources as noted above. This amount was considered a conservative estimate for the
16 price considering that Aquila had possession of turbines that it sold at substantial losses to
17 Aquila at the time MPS was needing to replace the Aries capacity June 2005. Aquila had
18 possession of turbines that would have had an actual turbine costs much less than the values
19 used for Turbines 4 and 5 that really results in an overstatement of costs for these units, not an
20 under-estimate as Mr. Rooney alleges.

21 Q. What is the basis for the belief that the turbine amounts used for Turbines 4
22 and 5 are actually overstated?

1 A. The per unit turbine values used for Turbines 4 and 5 could have been
2 substantially reduced if Aquila would have retained three General Electric 7EA turbines it
3 sold at extremely distressed values. It was outrageous that Aquila did not give one
4 consideration to use this equipment for its regulated operations. Aquila made the decision to
5 sell this equipment to non-Aquila third parties at great loss to the Company rather than use
6 these General Electric turbines to replace the capacity it knew it needed when the Aries
7 agreement expired in 2005. This showed a complete indifference and callous disregard for
8 Aquila's regulated operations that denied MPS the opportunity to benefit from these distressed
9 turbines that resulted in an imprudent decision on the part of Aquila management.

10 Q. How does Aquila criticize the Turbines 4 and 5 values?

11 A. At pages 17 through 19, of his rebuttal testimony, Mr. Rooney attempts to
12 include costs that he believes should be added to the per unit turbine price that Aquila
13 believes were not included in the turbine costs. These are identified as breakers and
14 transformers, transportation, technical field assistance and training and dry low NOx
15 combustors. With the exception of the NOx emissions amount estimated by Mr. Rooney of
16 ** _____ ** the estimates for the other items were considered to be included in the
17 turbine prices used in the last case for Turbines 4 and 5.

18 The \$18.7 million per unit amount, or total of \$37.4 million for two turbines, was
19 supported by the sale of turbines by the Company to non-Aquila third parties. The section of
20 this surrebuttal testimony "General Electric 7EAs" provides the basis for the conservative
21
22 have and should have used to meet MPS capacity needs. Instead, the Company chose to

1 provide the benefits of a distressed turbine market to non-Aquila entities in Colorado and
2 Nebraska. It is inexcusable for MPS not to have those turbines in its fleet.

3 Q. Did the sale of the General Electric combustion turbines include the breakers
4 and transformers?

5 A. Yes, it did. Staff reviewed the sales agreements for those units and the
6 amounts included all related equipment.

7 Q. Where did the General Electric combustion turbines come from?

8 A. Aquila had purchased over 20 turbines, including the three Siemens turbines
9 installed at South Harper for the Company's non-regulated merchant business. Most of the
10 General Electric turbines were installed at Aquila's Raccoon Creek and Goose Creek
11 merchant generating stations. However, three turbines were sold to Colorado and Nebraska
12 utilities. I will identify the dollar amounts of the sale later in the surrebuttal testimony.

13 Q. Mr. Rooney identifies a \$25.3 million amount at page 16, of his rebuttal
14 testimony. What was this amount?

15 A. This amount represented a per unit value that Aquila Merchant paid for the
16 three Siemens 501DA's in 2001. This amount was written down by the "professional
17 appraiser" referenced in Mr. Rooney's rebuttal. To Aquila's credit it never attempted to pass
18 the original purchase price of the turbines acquired by its merchant business during a time
19 described by Aquila as a "brutal sellers market."

20 Q. Did Aquila also attempt to inflate the costs of the turbines in defense of this
21 issue in the last rate case?

22 A. Yes. While Mr. Rooney criticizes the costs of Turbines 4 and 5 in this case, he
23 took a different approach in this case to oppose these units than Aquila took in its last electric

1 rate case. Aquila's witness on this issue in Case No. ER-2005-0436 was Andrew N. Korte,
2 Vice President Energy Resources. Like Mr. Rooney, Mr. Korte had a high installed value of
3 Turbines 4 and 5. In that case Aquila used the original purchase price paid by Aquila
4 Merchant. Mr. Korte refused to recognize the written down values for the three Siemens
5 turbines installed at South Harper. The total value of the \$25.3 million per unit costs for the
6 three turbines equals \$75.9 million. The difference between this amount and the written-
7 down value of \$66.76 million is \$9.1 million.

8 Q. How did Mr. Korte use the \$25.3 million amount in Aquila's analysis in the
9 last case?

10 A. Aquila took the position in the last case that the two turbines would cost \$50.6
11 million that was added as part of costs identified with a new site, furthering the difference
12 between Company's and Staff's proposals. Mr. Korte's approach was to develop costs for
13 Turbines 4 and 5 as a stand-alone site not placing them with Turbines 1 through 3. The
14 facility Staff advocates is a facility capable of six units. The South Harper facility was
15 designed to accommodate up to six units with a total plant capacity of 630 megawatts
16 depending on the size and type of units installed.

17 Aquila uses too high of an estimate for the cost of combustion turbines. The
18 combustion turbine market was a buyers' market during the time these units would have been
19 installed by Aquila to replace the Aries Agreement.

20 Q. Has the Staff estimated the cost of adding combustion turbines capable of
21 generating about 210 megawatts to a generating site already owned by Aquila, a site such as
22 the South Harper Facility?

1 A. Yes. Staff witness Hyneman, has included an estimate developed in his direct
2 testimony. Staff believes this estimate is more in line with what it would cost to add two
3 combustion turbines capable of generating a total of about 210 megawatts at an existing site.

4 **SOUTH HARPER COMBUSTION TURBINE VALUES**

5 Q. Staff is using South Harper costs for the site and three of the combustion
6 turbines of its MPS facility. What cost is Staff using for the combustion turbines Aquila has
7 installed at its South Harper Facility, which is referred to as Turbines 1 through 3 of the MPS
8 facility?

9 A. As noted earlier, in Case No. EO-2005-0156, Aquila, Office of Public Counsel
10 and Staff agreed to a value of \$66.76 million for the combustion turbines, or \$22.25 million
11 per turbine. The cost for these turbines is \$211.9 per kilowatt (\$66.76 million divided by
12 315,000 kilowatts). Aquila has written down the turbines to the agreed upon amount and has
13 reflected that amount on its books and records. Both Aquila and Staff have included the
14 written down value of \$66.76 million for the three turbines in this case.

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

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

19 Q. Would you quantify each of the write-downs?

20 A. Aquila made a write-down of over \$10 million in November 2004 to reflect,
21 what it believed was a fair value for the three turbines installed at South Harper.
22 Additionally, Aquila agreed to an almost \$4 million additional write-down when it agreed to
23 value the turbines at the \$66.76 million.

1 Q. Does Staff have market value information for valuing the South Harper
2 combustion turbines?

3 A. Staff filed testimony in Case No. EO-2005-0156 to support a valuation of
4 \$66.76 million for the three South Harper turbines, including related equipment. At one time
5 Aquila offered to sell the turbines for \$69 million including a warranty, to KCPL. That offer
6 formed the basis for the Staff's valuation. Attached as Highly Confidential Schedule 4
7 are documents relating to Aquila's offer to KCPL provided in Data Request No. 38 in Case
8 No. EO-2005-0156. Also, Schedule 5 is a table identifying the various values Staff
9 considered for these units (Data Request No. 5 in Case No. EO-2005-0156).

10 Q. How did the Staff arrive at a valuation of \$66.76 million?

11 A. Because the warranty for the combustion turbines expired while they were in
12 storage, the \$69 million was adjusted downward by \$2.240 million to reflect the estimated
13 cost of the warranty. This estimate of \$2.240 million originated from Aquila and was the
14 result of discussions it had with the turbine manufacturer and a consultant (R.W. Beck) hired
15 to assist in developing a fair value of the units.

16 Q. Who manufactured the three combustion turbines?

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

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

21 A. No. The units were originally purchased by an Aquila affiliate, Aquila
22 Merchant in 2002 under an agreement signed in September 2001. Originally, the units were
23 to be installed at the Aries Generating Facility and called Aries II. Those plans were

1 cancelled in July 2002 during the period of the collapse of the merchant business that effected
2 Aquila Merchant especially hard. The Company started taking delivery of the units starting in
3 August 2002 and stored them at Aquila's regulated plant, Ralph Green Generating Facility
4 until they were moved in March 2005 to South Harper.

5 Q. How did Aquila originally intend to use these three combustion turbines?

6 A. Aquila intended to install them at its Aries site and sell power from them to
7 MPS. It was expected that once Aries II went into service, a purchased power agreement was
8 planned between an Aquila affiliate, Aquila Merchant and MPS. The term for the agreement
9 was to be for 15 years starting June 1, 2005, to coincide with the expiration of the Aries
10 agreement May 31, 2005. The expected return on investment for this Aquila Merchant
11 project was between ** _____ ** [source: Data Request No. 58 in Case No.
12 EO-2005-0156, Highly Confidential Schedule 3-5].

13 Q. When did Aquila decide to use the combustion turbines for its regulated
14 operations and to include their costs in rate base?

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

19 These units were installed at South Harper and were declared commercial by Aquila
20 on 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 sold to AmerenUE its Goose Creek and Raccoon Creek Generating Facilities in 2006.

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*.

GENERAL ELECTRIC 7 EAS

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

A. Aquila Merchant sold three turbines with rated capacity of 75 megawatts each, to two non-Aquila entities in 2003. Two were sold for ** ____ ** million or ** ____ ** million each and a third turbine was sold for ** ____ **. All three turbines were sold substantially below the original purchase price of ** ____ ** million [Data

1 Request No. 77 in Case No. EO-2005-0156]. The average price that Aquila Merchant sold
2 these three units was ** _____ ** million [** _____ ** million plus ** _____ ** million
3 divided by three]. Using this average price, Aquila would have had a far better price to
4 deploy these three General Electric turbines to meet its regulated system requirements and had
5 greater megawatt capacity.

6 The total costs for the three General Electric turbines would be ** _____ ** million
7 with a total capacity of 225 megawatts, or ** _____ ** per kilowatts, far below the three
8 Siemens turbines costs used at South Harper. Two 501D5A turbines are 210 megawatts of
9 capacity compared to the 225 megawatts of capacity if three General Electric 7EA turbines
10 would have been retained by Aquila and installed at South Harper, or another existing site. It
11 would have been more cost effective to install the three General Electric 7EAs having greater
12 capacity than the two Siemens units. But Staff chose to include the higher costs of the
13 Siemens turbines to be conservative in its costing of Turbines 4 and 5.

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

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

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

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

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

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

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

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

7 A. No. Aquila never considered using these turbines for its regulated operations.
8 even though MPS needed to replace the Aries agreement by June 2005. Aquila indicated that
9 these turbines were sold in 2003, in advance of decision to install turbines at South Harper.
10 (Data Request No. 43, Case No. EO-2005-0156).

11 **SALE OF NATURAL GAS-FIRED COMBUSTION TURBINES AT RACCOON**
12 **CREEK AND GOOSE CREEK**

13 Q. Did Aquila have generating facilities located outside of its service territories?

14 A. Yes. Aquila Merchant built Raccoon Creek and Goose Creek generating
15 facilities located in Illinois.

16 Q. What are these facilities?

17 A. Aquila Merchant installed ten General Electric 7EAs, 75 megawatt turbines at
18 two locations in Illinois. Six 7EAs were installed at Goose Creek Energy Center having a
19 combined capacity of 510 megawatts. Four 7EAs were installed at Raccoon Creek Energy
20 Center having a combined capacity of 340 megawatts. Aquila responded to an RFP to supply
21 turbine capacity issued by AmerenUE in the summer of 2005. Aquila disclosed to the Staff it
22 had offered in August 2005 to sell them to AmerenUE in response to Data Request No. 464.

23 Q. What were the terms of Aquila's original offer?

1 A. Aquila offered to sell both facilities (ten installed turbines) to AmerenUE on
2 the following terms.

3 ** _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 **

12 [Data Request No. 464 in ER-2005-0436; Highly Confidential
13 Schedule 13-4]

14 Q. Has the sale been completed?

15 A. Yes. On December 16, 2005, Aquila entered into an asset purchase and sale
16 agreement with the final sale transaction completed in early 2006.

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

19 A. Yes, it did. The final sell price for both Raccoon Creek and Goose Creek was
20 \$175 million for all the generating equipment, substation and transmission costs. The total
21 capacity of these two generating stations equal 850 megawatts resulting in an installed
22 capacity of \$205.88 per kilowatt (\$175 million divided by 850,000 kilowatts) [source:
23 Aquila's SEC Form 8-K filed December 16, 2006].

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

26 A. The installed kilowatt for Aquila's initial offer would be between ** _____
27 _____

28 ** . The final price paid for both facilities of \$175 million resulted in the installed

1 kilowatt would be \$233 per kilowatt [\$175 million dividend by 750,000 kilowatts of installed
2 capacity].

3 Q. Did Aquila lose money on the sale of these units?

4 A. Yes. Because of the distressed nature of the merchant business, Aquila
5 incurred a pre-tax non-cash impairment charge of approximately \$93.6 million for Goose
6 Creek and \$65.9 million for Raccoon Creek, or a total after-tax loss of \$99.7 million
7 (\$58.5 million and \$41.2 million) [source: Aquila's SEC Form 8-K filed December 16, 2006].

8 Q. Are the Raccoon Creek and Goose Creek facilities both fully operational
9 generating plants?

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

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

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

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

17 A. Yes. The turbines presently at South Harper were moved from the Ralph
18 Green Generating Facility where they were in storage. While these units were not installed at
19 Ralph Green, the units, with considerable effort, were moved to the South Harper facility.
20 Turbines, generators and related equipment are heavy pieces of machinery requiring special
21 transportation and hauling, but they are moved from the manufacturer and from different
22 locations. Moving such equipment in the electric utility industry is not particularly unique.
23 Indeed the Greenwood Generating Facility, which has four combustion turbines, initially had

1 a lease agreement that required Aquila to move, at its expense, the generating units at the end
2 of the lease to a destination designated by the Greenwood owners. Since the Greenwood
3 Units were reacquired by Aquila in 2000, the units were not moved.

4 Q. Would the sale of the Raccoon Creek or Goose Creek facilities have any
5 impact on the Staff's estimate of the cost to Aquila of additional combustion turbines capable
6 of generating about 210 megawatts?

7 A. Staff's estimate, as described in Staff witness Hyneman's surrebuttal
8 testimony, would not change as result of this sale transaction. But the sale price on a cost per
9 kilowatt identified above supports the conservative nature of Staff's installed kilowatt costs
10 identified in Mr. Hyneman's direct testimony. The installed cost for Turbines 4 and 5 of
11 \$304 per kilowatt is significantly higher than the final selling price of \$205.88 per kilowatt
12 costs for Raccoon Creek and Goose Creek facilities.

13 Initially, in the last case, Staff relied on the Aquila offer made to AmerenUE for
14 Raccoon Creek and Goose Creek facilities as a conservative estimate for Turbine 4 and 5
15 costs. Since the final price for these units were not finalized at the time of the direct filing in
16 the 2005 case, Staff used a \$275 kilowatt amount for 210,000 kilowatts compared to the
17 ** _____ ** per kw offer price. Since added additional conservative nature to the
18 costs for Turbines 4 and 5 by taking another approach identifying the costs of the turbines and
19 construction costs resulting in even higher costs of \$304 per kilowatt. At the same time the
20 final costs to for the Raccoon Creek and Goose Creek facilities decreased to \$205.88 per
21 kilowatt resulting in almost a \$100 per kilowatt higher amount for the two additional
22 combustion turbines referred to as Turbines 4 and 5.

23 Q. Have there other generating facilities sold recently?

1 A. Yes. On January 10, 2007, it was announced that Public Service Enterprise
2 Group sold to American Electric Power, a relatively new natural gas-fired 1,096 megawatt
3 combined cycle power plant located in Lawrenceburg, Indiana. The selling price was
4 \$325 million resulting in a \$296.53 per kilowatt value, lower than the South Harper installed
5 costs of \$454.17 per kilowatt and the Turbines 4 and 5 installed costs of \$304.12 per kilowatt.

6 On January 16, 2007, it was announced by independent generator Mirant Corporation
7 that it was selling to LS Power six natural gas-fired plants, with total capacity of
8 3,619 megawatts for \$1.407 billion resulting in a cost of \$388.78 per kilowatt. These plants,
9 the 903 megawatt Zeeland plant in Michigan, the 613 megawatt West Georgia plant in
10 Georgia, the 469 megawatt Shady Hills plant in Florida, the 561 megawatt Sugar Creek and
11 the 546 megawatt Bosque plants in Indiana and the 527 megawatt Apex plant in Nevada, all
12 were included in the \$1.407 price paid to Mirant.

13 **ROLLS-ROYCE POWER VENTURES OFFER**

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

16 A. Yes. During the audit in Case No. EO-2005-0156, Aquila provided supporting
17 information on the appraisals per the South Harper valuation issue (Data Request No. 5 in
18 Case No. EO-2005-0156). In material supplied by Aquila, the Staff learned that on
19 September 23, 2004, Rolls-Royce Power Ventures (Rolls-Royce) offered to sell Aquila two
20 new Siemens 501D5A natural gas-fired turbines that were manufactured in 2001 and placed
21 in storage in Houston and Germany (Schedule 14). Both units were offered for \$43 million,
22 or \$21.5 million each. This initial price was less than the South Harper turbines but, for
23 comparison purposes, several adjustments to the price needed to be added, such as

1 transportation costs and Siemens Technical Field Assistance. Also, the warranty had expired
2 similar to the South Harper turbines and was estimated that would increase both unit costs by
3 total of \$2.240 million, the same as the warranty estimate for the South Harper turbines—
4 Aquila ultimately opted not to re-purchase the warranty from Siemens for the South Harper
5 turbines. Another major expense would be converting the combustion system for
6 approximating \$5 million. Adding all the costs to the initial offer of \$43 million did not make
7 these units attractive to Aquila.

8 But it is noteworthy that while the Rolls-Royce offer was high in relation to the other
9 turbine information Staff reviewed, it does represent the only tangible evidence that Aquila
10 had regarding its review of the actual turbine market for its regulated operations. No other
11 information has been brought to Staff's attention that would indicate that Aquila actually
12 pursued the acquisition of turbines for either of its MPS or L&P divisions with the exception
13 of South Harper during the 2003 and 2005 time frame.

14 **GAS TURBINE WORLD ESTIMATE FOR NATURAL GAS-FIRED TURBINES**

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

16 A. Yes. Staff reviewed a publication entitled *Gas Turbine World* supplied by
17 Aquila during the audit of Case No. EO-2005-0156. In the "2004-05 GTW Handout,
18 published by *Gas Turbine World*, the price of Siemens 501D5A was quoted at \$18.7 million.
19 In the 2003 Handbook, the value was \$19.9 million and the 2000-2001 Handbook had
20 5015DA priced out at \$25.5 million. Based on the information, the market cost of these units
21 has been trending downward during the time Aquila would have been needed the five turbines
22 to replace the Aries Agreement.

1 However, recently the 2006 Handbook identified a significant price increase for the
2 Siemens 501D5A (new model SGT6-3000E) to \$22.8 million per unit.

3 Q. Is the \$18.7 million amount solely for the cost of the turbines or does it include
4 related costs?

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

11 Q. Mr. Rooney indicates that there are other costs that would have to be added to
12 these *Gas Turbine World* prices. Do you agree?

13 A. Yes. Mr. Rooney identified the disclaimer that *Gas Turbine World* identifies
14 in its publication concerning additional costs that may be added to the price of the units.
15 These include transportation costs, related costs for auxiliary equipment such as breakers and
16 transformers, etc.

17 Q. Has the cost of General Electric 7 EA model combustion turbines also
18 declined?

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

1 However, the most recent price for the General Electric 7 EA (new model
2 PG7121(EA)) has gone up to \$19.2 million according to the 2006 Handbook.

3 **OTHER UTILITY OFFERS**

4 Q. Does Staff have experience with equipment supply agreements in the course of
5 performing its duties for the Commission?

6 A. Yes. Over the course of many years Staff has seen numerous contracts for
7 actual purchases of equipment. Staff has seen numerous bids or quotes for proposed
8 purchases of equipment. While not detailing the specifics, turbine costs have generally
9 declined over the last several years. However, prices do appear to be increasing as the turbine
10 market stabilizes from the fallout of the collapse of the merchant market.

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

12 A. Yes. At various times, in rate cases, construction audits, development of
13 regulatory plans or as part of the Commission's integrated resource planning process, Staff
14 has had opportunities to review request for proposals, offers and bids for generating
15 equipment, including turbine offers.

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

22 Q. Has Staff seen offers to buy or sell combustion turbines in the range of the
23 \$18.7 million amount identified in *Gas Turbine World*?

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

3 **COMBUSTION TURBINES HAVE EXPERIENCED A SIGNIFICANT DECLINE IN**
4 **VALUES**

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

7 A. In late 2000 through out summer 2001. The turbine contract between Siemens
8 and Aquila Merchant was signed September 2001 for an in service date of June 2003. Aquila
9 Merchant planned to have a purchased power agreement with MPS for 15 years starting in
10 June 2005.

11 Q. Was the combustion turbine market different in 2000 and 2001 than in 2003
12 and 2004 when Aquila should have been planning for replacement of the power it was taking
13 under the Aries capacity agreement?

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

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

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

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

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

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

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

1 A. Combustion turbine prices declined after the 2001-2002 timeframe ending the
2 sellers' market in this country. The power equipment market was substantially impacted as
3 result of the collapse of the merchant power market and the utility industry's building of
4 natural gas-fired generation.

5 **UTILITIES BUILD GENERATING ASSETS**

6 Q. Have other Missouri utilities this Commission regulates committed to building
7 power plants?

8 A. Yes. While Aquila had not built any generating capacity since 1983 with the
9 exception of South Harper, the rest of the electric utilities operating in the state have not
10 followed this path. KCPL installed eight peaking power plants at three different locations in
11 Missouri and Kansas, a combined cycle unit and substantially re-built one its coal-fired
12 generating units as result of an explosion. Empire constructed several peaking generating
13 units and a large 500 megawatt combined cycle unit it operates and owns a 60% share
14 (Empire's share totals 300 megawatts). AmerenUE (Union Electric) also committed to
15 building peaking units to meet its regulated system load requirements in Missouri and, as
16 recently as 2002 with Commission approval in Case No. EO-2003-0035, built a regulated unit
17 under a Chapter 100 financing arrangement with the City of Bowling Green, Missouri. In
18 addition, in early 2006 AmerenUE purchased from Aquila several combustion turbines at two
19 different generating stations located in Illinois called Raccoon Creek and Goose Creek.

20 Q. Do utilities typically own their generating assets?

21 A. Unlike Aquila, most utilities operating in the mid-west region have a policy of
22 owning their generating assets. While utilities supplement some of their capacity needs with

purchase power agreements, they substantially meet their system load requirements by owned and operated assets.

For example KCPL 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>
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

KCPL also rebuilt the entire boiler and upgraded the steam turbine of its Hawthorn 5 coal-fired base load unit in 2002 to repair damage when the unit experienced an explosion in 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	150 mw	1997
		(converted to combined cycle in 2001 with State Line 3)	
State Line	Siemens F-model	300 mw	2001
	Combined Cycle		
		(Empire 60% ownership of 500 mw plant)	
Energy Center 3 & 4	Pratt Whitney	50 mw each total 100 mw	2003

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

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

5 A. Yes. KCPL is in the process of building a coal-fired base load generating
6 facility at its existing Iatan plant, which will be called Iatan 2. Aquila and Empire, who are
7 existing partners with Iatan 1, are also partners in the Iatan 2 project, along with a Missouri
8 and a Kansas cooperative. Aquila will have an 18% share and Empire will have a 12% share
9 of this plant consistent with their current ownership share in Iatan 1.

10 Empire is currently building a Siemens-V 84 160-megawatt natural gas-fired
11 combustion turbine with a projected in-service date of spring 2007 at its existing Riverton
12 Generating Facility.

13 And, AmerenUE, announced in late 2005 its intention to study over the next two years
14 whether building a second nuclear plant at the Callaway Nuclear Generating Station, located
15 near Fulton, Missouri is feasible.

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

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

23 Q. Is building generating facilities risky?

1 A. Yes. Aquila Merchant built several generating facilities that ultimately proved
2 very risky to the Company. The first generating asset that Aquila Merchant built was the
3 Aries unit. In 2004, Aquila sold its 50% ownership interest in Aries at a substantial loss.
4 Aquila Merchant also acquired four General Electric 7 EA turbines that ultimately they had to
5 sell at a substantial loss before the units had been delivered. Aquila Merchant also
6 constructed General Electric turbines at Goose Creek and Raccoon Creek generating facilities
7 in Illinois that it sold to AmerenUE in early 2006. Clearly, the non-regulated business of
8 Aquila found that it was extremely risky to own generating facilities.

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

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

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

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

1 power. Utilities that don't rely on the power market as much as Aquila, do not have the
2 problems this Company has.

3 During the IRP Meetings over the past several years Aquila has presented numerous
4 purchase power agreements. Some of these proposals have resulted in agreements while
5 others have failed to close. Aquila signed a Memorandum of Understanding on June 22,
6 2004, which contemplated that an agreement would be negotiated by December 31, 2004. On
7 December 13, 2004, Aquila had terms finalized with Southwest Public Service (SPS), an
8 Oklahoma utility, to provide Aquila with system participation power. SPS changed its
9 position to complete the agreement within days of completion and Aquila no longer is
10 planning on this capacity being available. Aquila was notified by SPS that it had regulatory
11 concerns and could not complete the agreement. [Aquila witness Michael R. Apprill, page 3,
12 of his direct testimony, in Case ER-2005-0436]

13 NPPD is providing 75 megawatts from its Cooper Nuclear Station starting January 1,
14 2005. Others proposals have been considered but ultimately were never completed. Aquila
15 relied on getting these agreements signed for planning purposes which clearly had a risk
16 since, ultimately, they failed to consummate the agreement. Relying on the purchase power
17 market is also very risky because of the volatility of the energy market. When you rely
18 heavily on purchased power to meet your capacity needs, the company is subject to market-
19 based rates.

20 **PURCHASED POWER ENERGY MARKETS**

21 Q. Do increasing power market prices increase risks to the utility that relies on
22 purchased power agreements?

23 A. Yes, especially if the power market prices are dramatically increasing.

1 Q. Have purchased power market prices increased over the past several years?

2 A. Yes. In the past Aquila forecasted that the market price of purchased power
3 was going to increase over time. An analysis performed by the Company to evaluate the 2001
4 RFP responses submitted to supply capacity and energy needs when the Aries agreement was
5 going to end in May 2005 identified the forecast of the purchased power costs that was used
6 to assess the various proposals. The Company's forecast for purchased power costs covered
7 the period from 2001 to 2022 and showed a steady and significant increase in these costs
8 during this time frame.

9 In Case Nos. ER-2004-0034 and ER-2005-0436, it provided a different format of the
10 forecasts which Aquila relied on to evaluate the existing responses to the issued RFP, and that
11 forecast showed similar view that the purchased power costs for the period 2002-2019 was
12 going to see significant increases for the purchased power market.

13 In this case, Aquila again uses an update to its purchased power forecast, and again it
14 shows significant increases over the period 2007 to 2026. Because of the number pages the
15 attached schedule only contains power market prices from 2007 through 2011. [Highly
16 Confidential Schedule 6; source: Burns & McDonnell RFP Evaluation, Data Request No. 475
17 and 475.1 in Case No. ER-2001-672; Data Request No. 372 in Case ER-2004-0034; Data
18 Request No. 39.1 in Case No. EO-2005-0156; Data Request No. 356 in Case No.
19 ER-2007-0004]

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

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

[illegible]

[Highly Confidential Schedule 7 Source: Data Request No. 550 in Case No. ER-2004-0034; emphasis added]

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

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

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

ADVANTAGES OF UTILITY OWNING GENERATING ASSETS

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

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

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

A. The control of generating facilities by utilities is considered very important. Companies believe they can better manage costs for maintenance and reliability of units if they own them. In essence, by controlling the generating unit, the Company is much more in charge of their own destiny. In an interview with Staff on November 14, 2003, Mr. Terry Hedrick, Aquila's Generation Services Manager and the Project Manager of South Harper he indicated that he believed there were "significant advantages in both owning and operating the generation equipment in developing maintenance expertise. If you control / own the equipment, he believes that there are advantages in the areas of costs, manpower and staffing and dispatch flexibility." (Highly Confidential Surrebuttal Schedule 8; Data Request No. 616.1 in Case No. ER-2004-0034)

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

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

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

10 A. No. Aquila, by deciding not to build regulated generation for a period of over
11 20 years since 1983 put its customers at risk because there is a substantial amount of capacity
12 that it is having to replace—at least 500 megawatts—since the Aries purchased power agreement
13 expired in May 2005. Aquila made no commitment to build regulated generation for over 20
14 years, unlike every other major electric utility that operates in this state, and now faces the
15 challenge of replacing the Aries capacity in large block of power, at least 500 megawatts. It has
16 met part a good part of this capacity with South Harper, but that facility has an uncertain future.

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

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

1 A. Yes. Aquila Merchant acquired several generating assets during the 2000 and
2 2001 time frame including Aries. Aquila believed that the forecast for power costs would be
3 increasing over time, made decisions to “lock in” the cost of owning its own generation, so it
4 could take advantage of the increasing market for power costs. In an October 29, 2003,
5 interview Mr. Max Sherman, a former Aquila Merchant employee and Project Manager
6 during the early development and construction phase of the Aries plant, he discussed the need
7 for generating units:

8 Aquila Merchant committed to purchase 12 or more combustion
9 turbines during this period (starting in 2000) to build unregulated
10 peakers to take advantage of the wholesale marketplace (this was after
11 the Aries construction decision had been made and the plant was under
12 construction). The reason for Aquila Merchant’s acquisition of the
13 combustion turbines was its belief that, **given expected future power**
14 **market conditions, it would be less expensive to produce power**
15 **from generating units you control than to have to buy power in the**
16 **marketplace.** Mr. Sherman indicated that the last place a merchant
17 company wanted to be was to have to supply power through long-term
18 contracts and be at the mercy of a volatile power market and have to
19 buy power to supply those contracts....

20 [Highly Confidential Surrebuttal Schedule 9, Data Request No. 549 in Case No.
21 ER-2004-0034; emphasis added]

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

25 If the regulated entity that did not build and operate its own generating units believed
26 that power costs were going to increase, it would have to enter into purchased power
27 agreements priced at market-based rates. The non-regulated merchant company who
28 negotiated to deliver power to the regulated entity at the escalating market-based contracts
29 benefit if they own and operate their generation assets. In some cases the non-regulated

1 merchant may supply power by either generating or acquiring power through a purchase from
2 another party. The profitability of the non-regulated merchant will depend on the ability to
3 acquire or generate the power at a cost that would be below that which it would receive in
4 revenues. Since Aquila believed there was going to be a significant rise in the power market
5 costs, the non-regulated subsidiary built and acquired generating assets to engage in the open
6 market for power.

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

9 A. Yes. The approach that Aquila Merchant pursued could also have been
10 followed by the regulated MPS division. For the exact reasons that Aquila Merchant believed
11 it was necessary to own the generating assets, MPS should have built and operated its own
12 generation. This was especially important when you take into consideration that the
13 Company believed that the power market costs were going to rise significantly over time.
14 The decision by Aquila to allow the Aquila Merchant organization to build and acquire
15 generating assets and sell that power through the open market through purchased power
16 agreements like those entered into between the Aries partners and MPS resulted in the
17 situation where Aquila's regulated operations now are subjected to the volatility of the market
18 for power costs. It is clear that Aquila Merchant believed that it could not enter into long-
19 term agreements and be subjected to the whims of the market place in supplying that power,
20 thus causing them to reach a decision to own the generating assets in order to supply those
21 power needs to their non-regulated customers. It should be just as clear that the regulated
22 entity, MPS, would also want to own generating assets in this same situation.

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

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

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

9 A. Yes. Regulated assets are typically put in rate base which, when the units are
10 completed and declared in service, are included in rates allowing the utility a reasonable
11 return on the investment and a recovery over the life of the generating asset through
12 depreciation expense. Thus, a utility is provided some reasonable assurance that the
13 investment in the regulated asset will be fully recovered from its retail electric customers.
14 This provides some reasonable assurance to investors that their asset will be protected through
15 the regulatory process by rate basing the asset. Utility customers benefit by being insulated
16 from rising costs for power during a time when those costs are expected to significantly
17 increase. The customers and the utility owners gain substantial advantages when a company
18 builds and places in service, generating facilities in its regulated operations.

19 Q. Are there also disadvantages in placing generating assets in the regulated
20 operations?

21 A. Yes. If there are rising power market costs, a company owning both regulated
22 and non-regulated entities would be at a relative disadvantage if it put the generating facilities
23 in its regulated operations, because it would not be able to shield the profits obtained from the

1 regulated entity. While the regulated entity would have an opportunity to sell the generating
2 capacity in the open market during the period of expected rising power costs, the profits from
3 these transactions are typically included in the ratemaking process. For as long as the
4 regulated entity can stay out of a rate case, the company will benefit from the increased sales.
5 However, when the regulated entity files for rate relief, the power sales would be considered
6 in the rate process. The decision to put generating assets in a regulated entity of a company
7 would cause the non-regulated entity to miss opportunities for profit making in the increased
8 power cost market. Assets that are in the regulated operations would be held to a typical
9 regulated return which would likely be less than those that would be received by non-
10 regulated entities engaging in profit taking from a rising power market. Aquila believed that
11 it could receive greater returns on its investment dollars by having a non-regulated entity,
12 Aquila Merchant, own the generating facilities and selling the power through purchased
13 power agreements to entities like MPS in the open market through market-based pricing. As
14 the market reflected the increased power costs, the non-regulated entity would also receive the
15 increased revenues resulting in greater-than-regulated returns.

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

18 A. Yes. In the 1970s, Aquila, then operating as Missouri Public Service
19 Company, built four combustion turbines at its Greenwood Generating Station. Upon
20 completion, the Company sold at book value to financial institutions, all four of the
21 combustion turbines, and received the capacity power through a 25-year lease for each of the
22 generating units. The lease did not allow for any residual value to be passed to the utility
23 entity that originally owned the generating units. Upon expiration of the lease, Aquila

1 reacquired those four combustion turbines at an existing market-based price. In essence, the
2 Company has purchased the same asset twice. The cost to reacquire the assets at the current
3 market is very close to the original purchase price paid for the assets when they were new.
4 Thus, Aquila bought 25-year-old generators and paid close to what the original investment
5 was back in the mid-1970s. Customers paid for 25 years lease payments which in large part
6 covered the fixed costs of the units with MPS having the responsibility for all operating and
7 maintenance costs along with any capital additions. MPS customers are now paying in rates
8 for the units which have a greater value than when they were new-- in essence paying a
9 second time for the units.

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

12 Q. Did Aquila ever consider building Aries as part of its regulated operations?

13 A. Yes. In 1998, prior to the decision to build Aries by the non-regulated side of
14 Aquila, the regulated operations of MPS considered building a 500-megawatt combined cycle
15 unit on the same land that Aries is now on. Because of Aquila's (UtiliCorp)'s, then corporate
16 policy to not build regulated generating units, Aquila decided this unit would be a non-
17 regulated non-rate based EWG operating within MPSs service area, with MPS regulated
18 operations bidding on the capacity.

19 In the summer of 1998, at the time of the initial evaluations of the request for
20 proposals (RFP) for capacity for MPS, which were issued on May 22, 1998, the regulated
21 operations of Aquila responded to its own RFP with a "build" proposal. This build option to
22 supply capacity and energy to MPS from a combined cycle unit operated by the EWG was the
23 low cost option at the time of the initial review phase of the RFP.

1 Q. Why didn't the regulated side of Aquila (MPS) build the combined cycle unit
2 as an EWG?

3 A. The MPS regulated operations of Aquila (then UtiliCorp) presented its
4 proposal to Robert K. Green, then UtiliCorp President, who made the decision that the
5 regulated side of UtiliCorp's operations would not build Aries. The material covered
6 two different dates: 1) October 8, 1998, - Financial Analysis of Supply Options, and 2)
7 October 28, 1998, - Updated Analysis of Supply Options. The presentation material was
8 provided to Staff in response to Data Request No. 301 (Case No. ER-2004-0034) and is
9 attached to this testimony as Highly Confidential Surrebuttal Schedules 10 and 11.

10 Q. How did Staff learn of the process Aquila used to determine who would build
11 Aries?

12 A. This was discussed with former Aquila personnel who were involved in not
13 only the issuance and review of the RFP, but also as one of the bidders to the RFP to supply
14 capacity to MPS through the EWG. Staff conducted an interview with the individuals who
15 were directly involved in the issuance and review of the RFP and also in making the decision
16 to submit a bid to build a combined cycle unit to supply power to MPS as an EWG.

17 Q. How did the interview with the former Aquila personnel come about?

18 A. Staff indicated to Aquila that it wanted to discuss the RFP process and aspects
19 of how MPS came to agree to purchase power from the Aries partners. Aquila contacted two
20 individuals who were directly involved in these decisions and provided them for an interview
21 with Staff.

22 Q. Is it Staff's view that Aquila should have given more consideration to building
23 Aries as a regulated unit?

1 A. Yes. Staff believes that had Aquila built Aries as a regulated generating
2 station and rate based it in the traditional manner, Aquila's likely would not have the capacity
3 problems it has today. Staff has had issues with Aquila's decision making regarding building
4 generating units since Aquila's 2001 rate case, Case No. ER-2001-672. In each case since,
5 Case Nos. ER-2004-0034 and ER-2005-0436, Staff expressed its concerns on Aquila's
6 decision not to build generation units and proposed adjustments relating Aquila's purchase
7 power agreements.

8 Q. Had Aquila examined building a combined cycle unit as a regulated asset in
9 the past?

10 A. Yes. In its 1992 Integrated Resource Plan dated February 1992, Aquila
11 (UtiliCorp) identified that its recommendation was to build ** _____

12 _____ ** for MPS.

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

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

15 A. Yes. MPS throughout the late 1990s developed the 500 MW combined-cycle
16 unit that ultimately became the Aries Combined Cycle Generating Facility. The site for Aries
17 was land that was previously owned by Missouri Public Service Company, the predecessor to
18 UtiliCorp.

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

20 A. During the early and mid-1990's, the regulated MPS expended funds to
21 continue to study and develop the preliminary work that was necessary to prepare for
22 construction of this project. Ultimately, Aquila corporate management determined that the
23 regulated MPS would not be permitted to build the Aries facility but rather its non-regulated

1 Aquila Merchant would develop this project. Aquila Merchant took over the Aries project in
2 the summer of 1998.

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

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

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

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

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

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

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

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

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

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

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

5 Initially, the regulated operations of MPS pursued building the Aries Combined Cycle
6 Unit as an unregulated EWG. The studies and analyses performed by personnel of the regulated
7 operations ultimately led to the conclusion that the 500 megawatt combined cycle unit was the
8 least cost option to meet the capacity needs of MPS starting in 2001. This was confirmed by the
9 independent engineering firm, Burns & McDonnell in an August 1998 report to the Company.

10 In an August 24, 1998 study entitled "UtiliCorp United Inc. Missouri Public Service
11 1998-2003 Preliminary Energy Supply Plan," the Company independently determined that the
12 construction of a 500 megawatt combined cycle unit was the least cost plan for MPS. Under the
13 Executive Summary Section 1, "Conclusions," the following appears:

14 Conclusions

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

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

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

28 1.5 Recommended Action Plan

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

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

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

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

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

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

12 A. No. At no time during the 1998 time period, did Aquila or MPS ever consider
13 this as an option. Staff is aware of numerous examples, in the last two MPS electric cases (Case
14 Nos. ER-2001-672 and ER-2004-0034) where Aquila readily admitted that at no time did it
15 consider allowing the regulated operations of MPS to own or control generating units as
16 regulated plant. While the EWG option was pursued by MPS regulated operations, the
17 combined cycle unit was never planned to be part of the traditional regulated operations of MPS,
18 and Aquila never planned for the unit to be included in rate base.

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

21 A. Yes. To not have even considered the option of building regulated generating
22 assets held by MPS to meet the capacity needs of Aquila's Missouri regulated operations is a
23 failure on the Aquila's (UtiliCorp) part and constitutes imprudence. This decision by Aquila
24 (UtiliCorp) resulted in Aquila's regulated Missouri operations being at the mercy of purchased
25 power agreements priced at market-based rates through May 31, 2005, when the Aries
26 agreement terminated. While the Company no longer appears to have a corporate policy not to

1 build regulated assets, as evidenced by the South Harper facility and its commitment to the
2 Iatan 2 project, Aquila continues to be subjected to market-based rates for the power used by its
3 Missouri regulated operations for the foreseeable future.

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

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

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

17 A. Aquila (when it was called UtiliCorp United Inc.) has freely admitted that it
18 never considered building regulated generating facilities to meet the capacity needs of its
19 regulated utility operations in the state of Missouri. Mr. DeBacker (page 9, line 9 DeBacker
20 rebuttal) and Mr. Stamm (page 12, line 18 Stamm rebuttal) both admit in their rebuttal
21 testimonies filed in Case No. ER-2004-0034, that this option was never considered by Aquila's
22 regulated operations. In Case No. ER-2001-672, Aquila provided response to Data Request No.

1 365 where it stated that “the Company believes that the current regulatory climate does not
2 warrant the business risks associated with constructing and owning ratebased generating plants.”

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

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

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

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

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

[Surrebuttal Schedule 12 October 28, 2003 interview with DeBacker and Holzwarth, Data Request No. 548 in Case No. ER-2004-0034]

The least cost option that MPS developed for meeting the capacity needs of Aquila’s Missouri regulated utility operations was to build the Combined Cycle Unit as an EWG as part of the regulated operations of the Company (Mr. DeBacker’s rebuttal testimony in Case No. ER-2004-0034).

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

It is interesting to note that the regulated operations of the Company continued to examine the EWG option as late as October 1998. A presentation made on October 8, 1998, entitled “Financial Analysis of Supply Options” and another presentation made on October 28,

1 1998, entitled “Updated Analysis of Supply Options.” both of presentations were made by
2 Aquila’s regulated operations presented the EWG option of building and owning the
3 500 megawatt combined cycle unit. As late as the end of October 1998, the regulated operations
4 of UtiliCorp were still pursuing the generation option that would later become the Aries Project.

5 However, the option of the regulated operations building the 500 megawatt combined
6 cycle unit was rejected by Aquila’s upper management. Other than the statements made in the
7 interview with Mr. DeBacker and Mr. Holzwarth that the Company believed it would be difficult
8 to have the regulated operations build and own the Aries Combined Cycle Unit, the Staff has not
9 seen nor been provided any documentation that would identify the specific reasons why this
10 option was not agreed to by the Company’s upper management. In the October 28, 2003,
11 interview, Mr. Holzwarth indicated that upper management decided that it would be too difficult
12 to have the regulated operations create the non-regulated function of building and owning the
13 Aries Unit. The following interview notes, reviewed by the interviewees, accurately describe
14 this:

15 In 1998, the only economic analysis performed to assess MPS’ power
16 options for the first years of the next century were for a three-to-five
17 year period only. Building plants for MPS’ rate base was not
18 considered as an option, but Holzwarth’s group did consider building a
19 generating plant as an unregulated Exempt Wholesale Generator
20 (EWG) within MPS. Building a unit as part of an EWG was viewed as
21 superior to including a regulated unit in rate base because there was
22 less risk to Aquila of stranded costs if retail access was allowed in
23 Missouri. Plus, the EWG proposal allowed MPS to better control costs
24 and to “control its own destiny” in regard to power supply, and also
25 allowed MPS the opportunity to profit on a non-regulated basis in the
26 wholesale marketplace through the sale of energy as off-system sales.
27 The analysis performed by UtiliCorp for the EWG never assumed MPS
28 to be a customer of the MPS EWG unit beyond the original five-year
29 power supply proposal in the RFP. Mr. Holzwarth stated that the MPS
30 EWG option was presented at a meeting attended by Bob Green, then
31 UtiliCorp President, and Harvey Padawer (maybe Jim Miller as well).
32 The MPS EWG option was rejected because of questions raised at the

1 meeting the risk of a massive EWG operating failure when taking into
2 consideration MPS' relatively small size; how to obtain generating
3 economies of scale, since a separate organization within MPS would
4 have to be responsible for the EWG unit; MPS' lack of familiarity with
5 the combined-cycle technology; and regulatory scrutiny of possible
6 cross-subsidies between MPS' regulated and non-regulated sides. Mr.
7 Holzwarth said some of the questions posed at this meeting where he
8 recommended that MPS (through UPS) build non-regulated EWG
9 generating unit were: How can MPS operating people manage the
10 EWG also? What would be the "risk" to cash? Where would you get
11 economies of scale from a regulated operation running a non-regulated
12 EWG operation? Mr. Holzwarth stated he did not have answers to
13 these questions.

14 [Source: October 28, 2003 interview with Mr. DeBacker and
15 Mr. Holzwarth]

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

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

26 [Source: October 28, 2003 interview with Mr. DeBacker and
27 Mr. Holzwarth,]

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

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

30 1. Why was the decision made by Aquila (formerly UtiliCorp
31 United) not to build and operate Aries Combined Cycle Unit as a
32 "regulated" power plant to be included in rate base? Include in your
33 response all reasons and rationales why this decision was made.

34 Response: Uncertainty surrounding the deregulation of the electric
35 power industry and the possibility of incurring unrecoverable "stranded
36 costs". Avoiding long term power supply commitments was viewed as

1 a means to effectively mitigate potential “stranded costs” arising from
2 potential retail generation choice.

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

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

9 Secondary Concern

10 1. Inexperience in operating large F-frame combustion turbine
11 generating units and uncertainty surrounding the actual maintenance
12 costs of these machines.

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

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

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

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

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

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

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

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

1 Were Bob Green, Harvey Padawer and Jim Miller involved in meetings
2 dealing with Aquila Merchant matters? DeBacker and Holzwarth said
3 Padawer would have been; he was head of Aquila Merchant at the time
4 and reported to Mr. [Bob] Green. They supposed Bob Green would
5 have met with Aquila Merchant people; Bob Green as President of
6 Aquila (UtiliCorp) was over Aquila Merchant as well as the regulated
7 utility operations. Mr. DeBacker and Mr. Holzwarth were not sure
8 about Mr. Miller, Senior Vice President of UtiliCorp Energy Delivery
9 (UED) which was responsible for the transmission and distributions
10 system (pipes and wires) of the regulated utilities.

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

12 Q. Who was Mr. Bob Green?

13 A. Until October 2002, Mr. Green was the President and Chief Executive Officer of
14 Aquila and President of Aquila Merchant.

15 Q. Who is Mr. Harvey Padawer?

16 A. Mr. Padawer was head of Aquila Merchant at the time of the decision to build the
17 Aries Project. Aquila Merchant was engaged in the marketing of natural gas and electricity to
18 industrial and wholesale customers. During the time Mr. Padewar was in charge, Aquila
19 Merchant was starting its merchant energy function, of which the Aries unit was intended to play
20 a major part of that strategy.

21 Q. Who is Jim Miller?

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

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

27 A. Yes. As noted earlier, utilities such as Empire , KCPL and AmerenUE have all
28 embarked on building generating assets, and owning and controlling those generating assets as

1 part of their regulated operations. Staff supports this and has encouraged this practice by utilities
2 through the IRP process, as well as various applications that have appeared before the
3 Commission concerning restructuring and reorganizations of the various corporate entities.

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

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

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

1 in passing the increase in costs to its regulated customers through purchased power
2 agreements similar to the one that Aquila entered into with the Aries partners.

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

5 A. While Aquila does not have an affiliate selling it power, the aftermath of the
6 Aries decision still affects the Company's decision making. Aries originally was owned by
7 Aquila exclusively until it sold 50% of its ownership interests to Calpine. In 2004, Aquila
8 sold its entire interest in Aries to Calpine. Not only did Aquila lose a 585 megawatt
9 combined cycle unit—a subject this Commission is still having to deal with in finding a
10 replacement to this power—but it lost very valuable land rights. This facility was sized for
11 additional generating units. In fact, the three turbines installed at South Harper were
12 originally planned to be installed at Aries as Aries II. When Aquila gave up its ownership
13 interest in Aries, and going back even further when it decided to get a partner for Aries, has
14 caused the Company great hardship in its capacity planning and meeting the energy needs of
15 its customers.

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

18 Q. Did Cass County provide zoning and permitting authority to Aquila to build
19 Aries?

20 A. Yes. Aquila sought all the necessary zoning and permitting requirements in
21 building Aries.

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

1 A. In every instance, the Staff knows about with regard to other Missouri utilities,
2 the companies have pursued meeting their customers' long-term capacity needs through
3 building and owning generating assets unless utilities get obtain very favorable base load
4 generation pricing such as the two NPPD capacity agreements like Aquila has. Empire has a
5 very favorable long-term base load agreement with a Kansas utility Westar Energy. But other
6 utilities for the most part want to own and control their generating assets. Aquila stands alone
7 when they make year after year decisions to pursue purchase power agreements with market-
8 based rates. The decision by Aquila's management to embark on a non-regulated path to
9 meet its capacity needs put the regulated operations "behind the curve" in the sense of
10 ownership of power production facilities. Empire as a company, and Empire's customers,
11 have enjoyed the benefits of the State Line Combined Cycle since it went into production of
12 electricity in June 2001. Empire and its customers will have the benefit of that unit for many
13 years to come. Aquila's customers, however, will not have the same opportunities for those
14 benefits and will pay more in the long-run by not building generation since 1983 with the
15 exception of the South Harper facility.

16 Q. Will prudent ownership of generating assets produce the lowest overall cost?

17 A. Very likely. Aquila produced a study for the January 2004 IRP analysis that
18 concluded that building and owning five combustion turbines was the least cost scenario for
19 replacing the Aries capacity agreement in June 2005.

20 **CONCLUSIONS FOR CAPACITY PLANNING AND PEAKING TURBINES**

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

1 A. Aquila made the decision to not build regulated generating assets as a
2 corporate policy. During the IRP process, Aquila never looked at building regulated assets in
3 a meaningful way except South Harper. Aquila appears not to be looking at building future
4 capacity with the exception of its base load coal-fired Iatan 2 commitment. Aquila did not
5 submit any RFPs to turbine manufacturers to get turbine pricing so that it can do complete and
6 thorough studies concerning the build vs. purchasing options until late 2005, well after the
7 time for decision concerning the replacement of the Aries Agreement. Aquila has not
8 presented any plans to build capacity for ** _____ ** , even though it
9 has indicated that its system needs capacity during this timeframe. There is no evidence that
10 Aquila is moving to build generating assets because it is not looking at what the actual cost
11 estimates would be to build this capacity. Aquila has identified in its April 2005 Integrated
12 Resource Plan ** _____ ** but did not do
13 so. With the lead times of getting generating assets built, it may already be too late to get
14 capacity sited and constructed by even the June 2009 timeframe.

15 Staff has proposed what it believes is a conservative amount for the two additional
16 turbines identified as Turbines 4 and 5. The turbines prices declined during the period that
17 Aquila would have needed to place orders for the units with an in-service date by June 2005.
18 There would have been economies of scale to building the five combustion turbines instead of
19 three. Aquila's IRP Plan presented in January 2004 concluded that the least costs plan for the
20 2005 replacement of the Aries Agreement was the building of five combustion turbines
21 instead of three combustion turbines.

22 Q. Does conclude your surrebuttal testimony?

23 A. Yes.

**INDEX OF SCHEDULES TO
SURREBUTTAL TESTIMONY OF
CARY G. FEATHERSTONE**

Schedule 1	Aquila Presentation regarding Resource Planning – February 9, 2004 (Highly Confidential)
Schedule 2	Response to Data Request No. MPSC-0166 in Case No. ER-2006-0436 (Highly Confidential)
Schedule 3	Response to Data Request No. MSPC-58 in Case No. E0-2005-0156 (Highly Confidential)
Schedule 4	Response to Data Request No. MSPC-38 in Case No. E0-2005-0156 (Highly Confidential)
Schedule 5	Response to Data Request No. MSPC-5 in Case No. E0-2005-0156
Schedule 6	Aguila's Energy market Forecasts (Highly Confidential)
Schedule 7	Interview of Aquila, Inc. – Corporate Personnel, Keith Stamm, Tom Fleener, Neil Shumway – Dated: September 12, 2003 (Highly Confidential)
Schedule 8	Interview of Aquila, Inc. – Regulated Operations Personnel, Terry Hedrick – Dated: November 14, 2003 (Highly Confidential)
Schedule 9	Interview of Aquila Merchant – Nonregulated Operations Personnel, Max Sherman – Dated: October 29, 2003 (Highly Confidential)
Schedule 10	Presentation regarding Missouri Combined Cycle – October 8, 1998 – Financial Analysis of Supply Options (Highly Confidential)
Schedule 11	Presentation regarding Missouri Combined Cycle – October 28, 1998 – Updated Analysis of Supply Options (Highly Confidential)
Schedule 12	Interview of UtiliCorp – Regulated Utility Operations Personnel, Frank DeBacker, Robert Holzwarth – Dated: October 28, 2003

SCHEDULES 1 through 4

HAVE BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

AQUILA, INC.
AQUILA NETWORKS-MPS-INVESTOR (ELECTRIC)
CASE NO. EO-2005-0156
MISSOURI PUBLIC SERVICE COMMISSION
DATA REQUEST NO. MPSC-5

DATE OF REQUEST: December 10, 2004
DATE RECEIVED: December 10, 2004
DATE DUE: December 29, 2004
REQUESTOR: Phil Williams
BRIEF DISCRIPTION: Please provide all appraisals of the plant site and the value of the combustion turbines.

QUESTION:

Please provide all workpapers that support the appraisals of the plant site and the value of the combustion turbines to be sold and then be leased back for the proposed plant at Peculiar, Missouri.

RESPONSE: See files on attached CD

ATTACHMENT: CD with 17 files

ANSWERED BY: Robert Brune

SIGNATURE OF RESPONDENT

DATE: _____

Aquila CT Appraisal - Pricing Summary

Client No. 010144
W/O No. 02-01362-01000
Date 11/19/2004

	Original Cost	Replacement Cost	Aquila offer to sell to KCPL	Rolls Royce offer to sell to Aquila	SWPC offer to sell grey unit to Aquila	Penn Energy internet offer 1	Penn Energy internet offer 2	Utility Warehouse internet offer
CT								
qty	3	1	3	2	1	1	1	1
Cost	\$76,137,869	\$24,500,000	\$69,000,000	\$43,000,000	\$19,000,000	\$26,000,000	\$33,000,000	\$15,000,000
Adjustments								
Option Payment	(\$3,712,500)							
CO No. 1 (Exhaust Stacks)		(\$1,849,200)		(\$1,849,200)	(\$1,849,200)	(\$1,849,200)	(\$1,849,200)	
CO No. 1 (Other)								
Warranty	(\$2,240,000)	(\$2,240,000)	(\$2,240,000)		(\$2,240,000)			
Guarantees								
Prod Mods	(\$300,000)							
Rehabilitation	(\$600,000)							
TFA				\$2,350,000	\$2,350,000			\$2,350,000
Mult Unit Purchase		(\$1,000,000)						
Change to DLN				\$5,000,000	\$5,000,000			\$5,000,000
Transportation				\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000
Internal Labor	(\$39,399)							
Total Adjustments	(\$6,891,899)	(\$5,089,200)	(\$2,240,000)	\$6,700,800	\$4,460,800	(\$649,200)	(\$649,200)	\$8,550,000
CT Subtotal*	\$69,245,970	\$68,410,800	\$66,760,000	\$71,200,800	\$61,460,800	\$77,350,800	\$98,350,800	\$53,550,000
* adjusted for three units								
Transformers & Breakers								
Transformers								
qty	6	6		6	6	6	6	6
Cost	\$1,686,150	\$1,686,150		\$1,686,150	\$1,686,150	\$1,686,150	\$1,686,150	\$1,686,150
Adjustments								
Storage	(\$15,500)	(\$15,500)		(\$15,500)	(\$15,500)	(\$15,500)	(\$15,500)	(\$15,500)
Relisting	(\$28,305)	(\$28,305)		(\$28,305)	(\$28,305)	(\$28,305)	(\$28,305)	(\$28,305)
Additional Retainage	(\$1,045)	(\$1,045)		(\$1,045)	(\$1,045)	(\$1,045)	(\$1,045)	(\$1,045)
Transformer Subtotal	\$1,641,300	\$1,641,300		\$1,641,300	\$1,641,300	\$1,641,300	\$1,641,300	\$1,641,300
Breakers								
qty	3	3		3	3	3	3	3
Cost	\$765,570	\$765,570		\$765,570	\$765,570	\$765,570	\$765,570	\$765,570
Adjustments								
Bond	(\$7,500)	(\$7,500)		(\$7,500)	(\$7,500)	(\$7,500)	(\$7,500)	(\$7,500)
Storage	(\$13,320)	(\$13,320)		(\$13,320)	(\$13,320)	(\$13,320)	(\$13,320)	(\$13,320)
Breakers Subtotal	\$744,750	\$744,750		\$744,750	\$744,750	\$744,750	\$744,750	\$744,750
Procurement								
Cost	\$126,644	\$126,644		\$126,644	\$126,644	\$126,644	\$126,644	\$126,644
Adjustment								
B&M Services	(\$126,644)	(\$126,644)		(\$126,644)	(\$126,644)	(\$126,644)	(\$126,644)	(\$126,644)
Procurement Subtotal	\$0	\$0		\$0	\$0	\$0	\$0	\$0
Transformers & Breakers Subtotal	\$2,386,050	\$2,386,050		\$2,386,050	\$2,386,050	\$2,386,050	\$2,386,050	\$2,386,050
Total	\$71,632,020	\$70,796,850	\$66,760,000	\$73,586,850	\$63,946,850	\$79,736,850	\$100,736,850	\$55,936,050

SCHEDULES 6 through 11

HAVE BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

Interview of UtiliCorp

Regulated Utility Operations
Personnel

Frank DeBacker

Robert Holzwarth

Dated: October 28, 2003

AQUILA, INC.
CASE NO. ER-2004-0034
MISSOURI PUBLIC SERVICE COMMISSION
DATA REQUEST NO. MPSC-548

DATE OF REQUEST: November 17, 2003

DATE RECEIVED: November 17, 2003

DATE DUE: December 7, 2003

REQUESTOR: Mark Oligschlaeger

BRIEF DESCRIPTION: Aries Power Plant

QUESTION:

Please review the attached set of notes taken by Staff of Aquila representations made at the meeting between Staff and Aquila representatives on Oct. 28, 2003, concerning the Aries power plant. Please make any revisions or additions necessary to accurately convey what Mr. DeBacker and Mr. Holzwarth stated during this meeting.

RESPONSE:

Attached is a revised set of notes.

ATTACHMENT:

MEETING NOTES of interview of Missouri Public Service personnel – revised Nov. 20, 2003.

ANSWERED BY: Frank DeBacker

SIGNATURE OF RESPONDENT

AQUILA INC
Case No. ER-2004-0034
HIGHLY CONFIDENTIAL

MEETING NOTES of interview of Missouri Public Service personnel

Attending from Missouri Commission Staff: Cary Featherstone, Mark Oligschlaeger
Attending from Aquila: Frank DeBacker, Robert Holzwarth, Denny Williams

Location: Aquila Headquarters—200 West 9th, downtown Kansas City, Mo.

Date: October 28, 2003

Time: 9:45 am to 1:30 pm

(Note: References to "Aquila" generically refer to both the current organization and the organization known as "UtiliCorp United" prior to the name change to Aquila in 2002. References to the merchant operations of Aquila will be specifically referred to as "Aquila Merchant.")

Frank DeBacker retired from Aquila on June 30, 2001. Since then, he has worked part-time with Burns & McDonnell. He is currently working part-time for Aquila as a consultant in relation to the current Missouri rate case (Case No. ER-2004-0034). He was brought back as a contractor to specifically respond to the Staff's inquiry into the purchased power capacity contract with the Aries Partners. In 1998-99, Mr. DeBacker held the position of Vice-President – Fuel and Purchased Power on Aquila's regulated side. He reported then to Robert Holzwarth. Mr. DeBacker had coal, freight and purchased power under his authority. He did not have natural gas, which was done in Omaha, NE. Phil Rogers worked with Mr. DeBacker on the acquisition of coal supply for the regulated generating units.

Mr. DeBacker originally came to Aquila (Utilicorp) when the Company acquired the electric properties of Centel in early 1990s. He came from Colorado to Missouri in mid-1990s (to Kansas City in June 1995). He was in charge of power supply resources for Missouri, Kansas and Colorado from 1996 through June 2001.

The electric regulated operations of Aquila consist of Missouri Public Service (MPS) (and as of January 2002, St. Joseph Light & Power) operating in state of Missouri, West Plains of Kansas (WPK) operating in state of Kansas and West Plains of Colorado (WPC) operating in eastern side of Colorado.

Mr. Holzwarth is still employed full-time with Aquila, and is currently between assignments; he recently returned from Australia as where he was CEO of United Energy. In 1998-99, Mr. Holzwarth was Vice-President/General Manager – Power Services (UPS) on Aquila's regulated side. He reported to Harvey Padawer, who was a Senior Vice-President with Aquila (UtiliCorp). Mr. Padawer reported to Bob Green, UtiliCorp President. Mr. Padawer is no longer with Aquila or any its affiliates. Mr. Featherstone stated that Mr. Green is still on the Aquila payroll. Mr.

Holzwarth left Missouri in 2000 to take a position with Aquila's Canadian operation in Calgary. He left Canada for Australia in 2000-2002 and became the Chief Executive Officer of United Energy. The Australian operation company was sold by Aquila and closed as of July 24, 2003.

As Vice President of UPS, Mr. Holzwarth was over all three of Aquila's states that had electric operations and had four direct reports:

- Mike Appril- Wholesale
- John Browning—Dispatch and off-system sales
- Glenn Keefe—Generation (operations of power plants)
- Frank DeBacker—Fuel & Purchased Power

Mr. Keith Stamm, currently Aquila's Chief Operating Officer, was head of Aquila's (UtiliCorp) Australia operations but left to head up Aquila Merchant. Mr. Stamm started out at Missouri Public Service Company as an engineer, the predecessor company to Aquila (UtiliCorp). Mr. Stamm left for Australia from MPS in 1997.

As VP-Fuel, Mr. DeBacker was responsible for issuing Request For Proposals (RFPs) for purchased power, and negotiating with the bidders. MPS' need for power starting in 2001 led to the issuing of an RFP in 1998, which was largely caused by the expiration of major long-term capacity power contracts MPS had with Union Electric (UE) and Associated Electric Cooperative (AEC) for 150/180 megawatts, as well as the expiration of a smaller three-year contract with Kansas City Power & Light (KCPL). Load growth also contributed to MPS' need for power in the 2001-2005 timeframe UtiliCorp had problems with UE on this power contract and UE ultimately terminated the agreement. They are not sure why UE was not interested in renewing its contract. With the AEC contract, there were generation and transmission difficulties in receiving the power from that company — consequently Aquila did not want to renew that contract. The AEC agreement provided energy at market price the marginal cost of AEC's system energy plus 10% which was trending towards the regional market price due to the above mentioned difficulties. Both of these capacity agreements ended in 2000/2001 time period.

The KCPL capacity agreement was for summer peaking (3 months or 6 months) contract for 3 years. Had marginal costs increase.

Neither UE, AEC nor KCPL submitted bids in response to the 1998 RFP.

There was a significant power price "spike" in summer of 1998. The price of power was well known when the media reported power costs as high as \$5,000 per megawatt hour. After summer of 1998, every one had "big interest" in building generation. The market price of power for 1999 looking to 2000 was very volatile. MPS did not want to rely on the wholesale spot market for power — they wanted to have a fixed price contract with a specific resource(s). Mr. DeBacker said they "needed resource that you could count on what the price would be." The 1998 RFP called for bids related to specific generating resources, as MPS did not want to rely upon a "system energy" purchase.

In 1998, and for some time before that, Aquila was concerned with the uncertainty of the future direction of the electric industry: the possibility of restructuring, retail access, etc. The possibility of these events occurring were demonstrated by the March 1998 Missouri Commission-sponsored Electric Restructuring Task Force Report. In recognition of this environment, Aquila (UtiliCorp), the Commission Staff and the Office of Public Counsel entered into a Joint Agreement that was approved by the Missouri Commission in an Order dated June 1998. The Joint Agreement provided for modifications to the Commission's Integrated Resource Planning process as it applied to Aquila, and also laid out Aquila's strategy to meet its immediate power needs through an RFP for purchased power, due to the current electric industry environment. MPS did not intend to build and include in rate base generating units to supply its power needs. Thus, Aquila (UtiliCorp) through its regulated MPS division never considered building generating capacity as a "regulated" unit. The five-year period covered by this RFP was chosen because any longer period might have exposed Aquila to the risk of losing customers through retail access; some at Aquila thought five years was too long for a power solicitation. The 5-year period would serve the regulated needs through May 31, 2005.

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

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

In 1998, the only economic analysis performed to assess MPS' power options for the first years of the next century were for a three-to-five year period only. Building plants for MPS' rate base was not considered as an option, but Holzwarth's group did consider building a generating plant as an unregulated Exempt Wholesale Generator (EWG) within MPS. Building a unit as part of an EWG was viewed as superior to including a regulated unit in rate base because there was less risk to Aquila of stranded costs if retail access was allowed in Missouri. Plus, the EWG proposal

allowed MPS to better control costs and to "control its own destiny" in regard to power supply, and also allowed MPS the opportunity to profit on a non-regulated basis in the wholesale marketplace through the sale of energy as off-system sales. The analysis performed by UtiliCorp for the EWG never assumed MPS to be a customer of the MPS EWG unit beyond the original five-year power supply proposal in the RFP. Mr. Holzwarth stated that the MPS EWG option was presented at a meeting attended by Bob Green, then UtiliCorp President, and Harvey Padawer (maybe Jim Miller as well). The MPS EWG option was rejected because of questions raised at the meeting the risk of a massive EWG operating failure when taking into consideration MPS' relatively small size; how to obtain generating economies of scale, since a separate organization within MPS would have to be responsible for the EWG unit; MPS' lack of familiarity with the combined-cycle technology; and regulatory scrutiny of possible cross-subsidies between MPS' regulated and non-regulated sides. Mr. Holzwarth said some of the questions posed at this meeting where he recommended that MPS (through UPS) build non-regulated EWG generating unit were: How can MPS operating people manage the EWG also? What would be the "risk" to cash? Where would you get economies of scale from a regulated operation running a non-regulated EWG operations? Mr. Holzwarth stated he did not have answers to these questions.

So, the decision was made to obtain power from other sources. They are not aware of any records documenting the reasons for the MPS EWG option rejection by Aquila senior management. ~~Mr. Holzwarth stated Bob Green made the decision not to build regulated generating units and maybe Mr. Padawer was also involved.~~ Mr Holzwarth stated that the ultimate decision would have been made by Bob Green and/or Harvey Padawer; however, the consensus opinion of senior management was that a regulated power plant with its potential stranded cost issues was not desirable. Mr. Holzwarth indicated he did not make the decision, he only made the presentation recommending that his group UtiliCorp Power Supply build a generating unit as a non-regulated EWG.

If the MPS EWG option had been picked to supply power for MPS' regulated customers, MPS would still have only entered into a 3 to 5 year capacity purchased power contract with the EWG, in accord with the Aquila "buy/not build" corporate philosophy in effect at that time.

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

Mr. DeBacker and Mr. Holzwarth did not know how purchased price forecasts would affect the generating resource planning process for MPS. They did have access to forecasts of fuel prices for coal, natural gas prices, "market-clearing prices" (purchased power prices), etc, as produced by various models. RDI and Hill & Associates were involved in this forecasting process.

The RFP for MPS power in 1998 was only issued once, but all of the bidders were asked to re-bid after the MPS EWG option was rejected. In the initial round of bidding, the MPS EWG was the low-cost option. Aquila Merchant's bid was second lowest, and at that time was based on supplying MPS power from its Batesville, Mississippi unit. All bidders were expected to supply firm transmission service to get the power to MPS. The bid price was expected to include getting the power to MPS service territory. Once the RFP was re-bid, the new bids came in with lower prices. MEPPH was formed in September 1998. Aquila Merchant/MEPPH's new bid was now based on the Aries unit proposal, a two on one combined cycle unit (two combustion turbines on one steam turbine generator with two heat recovery steam generators). Aquila Merchant/MEPPH and NorAm/Houston Industries (now Reliant) were the two finalists from the re-bid process. Houston Industries bid was for three simple cycle combustion turbines. After the re-bids came in, MPS negotiated with both parties to obtain lower prices and more favorable contract conditions. Aquila Merchant/MEPPH ultimately was selected after Houston refused to lower its bid price in order to remain competitive with the most recent meet-Aquila Merchant/MEPPH's bid price. Once Aquila Merchant/MEPPH was selected from the RFP process, a contract was negotiated, it was submitted to the Missouri Commission for approval, and was filed with and accepted by FERC.

The present site of the Aries unit in Pleasant Hill would have been the site of the new unit whether Aquila Merchant/MEPPH or Houston had built it. MPS had already selected that site for the new unit, based upon analysis of a number of injection (interconnection) points into the MPS system. That site adjoined the location of an already existing MPS substation. The land was previously owned by MPS many years ago but had been sold to a couple for farmland. MPS inquired through their search for land to build the EWG option that the couple would sell the land. MPS told Aquila Merchant, the bidders of capacity to MPS, that they thought the owners of the land would sell the property because of a divorce situation. MPS would not get the land from the owners, Aquila Merchant had to do all the negotiations on their own. With this land adjacent to MPS' substation, there were no interconnection problems in transporting large amount of electricity to MPS system.

Burns & McDonnell were hired to analyze the first set of RFP responses in 1998. MPS did its own in-house analysis for the "re-bids," but Burns & McDonnell also reviewed MPS' work in that regard. In reference to materials Mr. DeBacker has on the 1998 RFP process, he has the materials included in the response to Staff Data Request No. 302 in this case, the 1998 Missouri Commission Order accepting the Joint Recommendation, and the FERC orders on Aries matters. Holzwarth has nothing. There is a policy at Aquila to "wipe out" your data from the system three months after you walk out the door. The underlying support for the analysis and the actual models can not be located by either of them. They contacted Aquila's current Information Systems group to retrieve electronic files and were told they no longer existed. Mr. DeBacker attempted to locate his files but he believes they no longer exist.

Regarding the Greenwood unit, Holzwarth's group was involved with the negotiations with the former owner as the lease was expiring. Neither Holzwarth nor DeBacker was involved in the decision to create a separate subsidiary for the Greenwood unit after Aquila became the owner; Glenn Keefe would be the person to ask about that.