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Valuation; Construction
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Charge (IEC)

Witness: Cary G. Featherstone

Sponsoring Party: MoPSC Staff

Type of Exhibit: Direct Testimony

Case No.: ER-2007-0004

Date Testimony Prepared: January 18, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT 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
January 2007

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

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Staff Exhibit No. 206
Case No(s). ER-2007-0004
Date 4-12-07 Rptr. KF

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

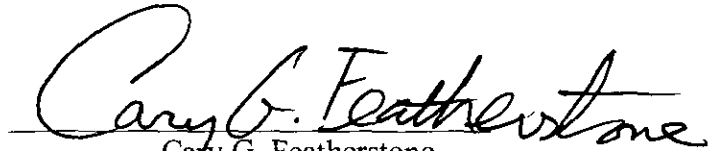
In the Matter of Aquila, Inc. d/b/a Aquila)
Networks-MPS and Aquila Networks-L&P, for)
authority to file tariffs increasing electric rates for)
the service provided to customers in the Aquila)
Networks-MPS and Aquila Networks-L&P service)
area.)

Case No. ER-2007-0004

AFFIDAVIT OF CARY G. FEATHERSTONE

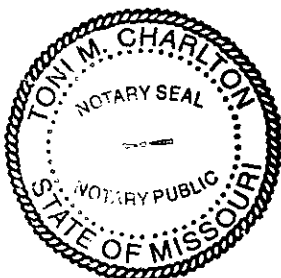
STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Cary G. Featherstone, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 61 pages to be presented in the above case; that the answers in the foregoing Direct 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 18th day of January 2007.


Notary Public



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

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DIRECT 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

Q. Please state your name and business address.

A. Cary G. Featherstone, Fletcher Daniels State Office Building, 615 East 13th Street, Kansas City, Missouri.

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

A. I am a Regulatory Auditor with the Missouri Public Service Commission (Commission).

CREDENTIALS

Q. Please describe your educational background.

A. I graduated from the University of Missouri at Kansas City in December 1978 with a Bachelor of Arts degree in Economics. My course work included study in the field of Accounting and Auditing.

Q. What job duties have you had with the Commission?

A. I have assisted, conducted and supervised audits and examinations of the books and records of public utility companies operating within the state of Missouri. I have participated in examinations of electric, industrial steam, natural gas, water, sewer and telecommunication companies. I have been involved in cases concerning proposed rate

1 increases, earnings investigations and complaint cases as well as cases relating to mergers
2 and acquisitions and certification cases.

3 Q. Have you previously testified before this Commission?

4 A. Yes. Schedule 1 to this testimony is a list of rate cases in which I have
5 submitted testimony. In addition, I also identify in Schedule 1 other cases where I directly
6 supervised and assisted Commission Staff in audits of public utilities, but where I did not
7 testify.

8 Q. With reference to Case No. ER-2007-0004, have you examined and studied
9 the books and records of Aquila, Inc. regarding the electric operations of its Aquila
10 Networks—MPS division (MPS) and Aquila Networks – L&P division (L&P)?

11 A. Yes, with the assistance other members of the Commission Staff (Staff).

12 Q. What knowledge, skill, experience, training and education do you have with
13 regard to Aquila's general rate increase tariff filing that is the subject of Case
14 No. ER-2007-0004?

15 A. I have acquired knowledge of the ratemaking and regulatory process through
16 my employment with the Commission, including experience and analyses in prior rate cases,
17 complaint cases, merger cases and certificate cases before the Commission. I have
18 participated in several Aquila rate cases, complaint cases, merger cases and certificate cases,
19 and filed testimony on a variety of topics. I have also acquired knowledge of these topics
20 through review of Staff work papers from prior rate cases brought before this Commission
21 relating to Aquila. Specifically, as it relates to topics surrounding this case, I have previously
22 examined generation and generation-related topics; conducted and participated in several
23 construction audits, specifically the costs of construction projects relating to power plants. I

1 have also been involved in the fuel and fuel-related areas for power plant production on
2 numerous occasions. I have been involved in many rate cases including the last several rate
3 cases filed by Aquila, both under its current name Aquila, Inc. and its former name,
4 UtiliCorp United, Inc. (UtiliCorp). I have reviewed the testimony, work papers and
5 responses to data requests from Aquila that support its general electric tariff filing for its
6 MPS and L&P divisions.

7 I participated in Staff's review and examination of Aquila's prior ownership of a
8 natural gas-fired combined cycle generating unit called Aries. I conducted and participated
9 in interviews of Company personnel and consultants relating to the Aries issue and
10 performed extensive discovery concerning aspects of the construction and operation of this
11 generating facility and the purchased power contract between the owners of Aries and the
12 regulated operations of MPS.

13 I have also been involved in construction audits of several generating units installed
14 by Missouri utilities:

15 Aquila - South Harper Generating Facility 1, 2 and 3 combustion turbines

16 Kansas City Power & Light Company - Wolf Creek Nuclear Generating Station;
17 Hawthorn 6 and 9 combined cycle unit; Hawthorn 7 and 8, West Garner 1, 2, 3 and 4, and
18 Osawatomie 1 combustion turbines.

19 AmerenUE - Callaway Nuclear Generating Station

20 Empire District Electric Company - State Line Units 1 and 2, and State Line
21 Combined Cycle Unit.

22 In addition, my college coursework primarily included accounting, auditing and
23 economics classes.

OVERVIEW OF AQUILA FILING

Q. What is the purpose of your direct testimony?

A. I support the Staff's recommendation to the Commission of the use an Interim Energy Charge (IEC) mechanism for Aquila's fuel and purchased power expenses for MPS and L&P. I describe Aquila's South Harper combustion turbine generating facility and the actual costs Aquila incurred in building that facility the Staff is using as part of the five 105 megawatt combustion turbine generating facility (initially planned for a total of six combustion turbines) the Staff is including in this case so MPS can fulfill its capacity needs. Staff witness Lena M. Mantle describes those capacity needs and together with Staff witness Charles R. Hyneman explains why Staff is including these combustion turbines in the MPS rate base.

In particular, I am addressing the valuation of the South Harper turbines as it was determined as part of the Stipulation and Agreement reached in Case No. EO-2005-0156. Staff witnesses Leon C. Bender and Philip K. Williams are testifying on various aspects regarding the South Harper facility.

I am also sponsoring the adjustments for demand-side resource costs that Staff witness Lena Mantle, Manager of the Commission's Energy Department, developed.

Q. What adjustments are you sponsoring in Case No. ER-2007-0004?

A. I am sponsoring MPS adjustment S 89.5 and L&P adjustment S 81.4 to the Income Statement- Accounting Schedule 9, relating the annualized demand-side resource costs based on actual expenditures made by Aquila through September 30, 2006.

Q. Why did Staff audit Aquila in this case?

A. On July 3, 2006, Aquila filed a general rate increase case for its Missouri electric operations, *i.e.*, its MPS and L&P divisions. The Commission assigned the filing

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1 Case No. ER-2007-0004. Aquila filed tariffs it designed to implement an increase in its
2 Missouri electric retail rates for its MPS division customers, exclusive of franchise and
3 occupational taxes, corresponding to a revenue increase to Aquila of \$94.5 million. This
4 represents an overall 22% increase to existing MPS rates. Aquila also filed tariffs it designed
5 to implement an increase in electric rates for its L&P division customers corresponding to an
6 increase in revenues of \$24.4 million. This proposed increase represents a 22.1% overall
7 increase to existing L&P rates.

8 Q. Did Aquila file for a general rate increase for its steam operations?

9 A. No. Only Aquila's L&P division provides steam utility service and Aquila
10 did not file an application to increase those steam rates.

11 Q Does Aquila have any other cases pending before the Commission that the
12 Staff believes implicate any of the same issues that this case raises?

13 A. Yes. On December 3, 2004 Aquila filed an application seeking authorization
14 to enter into a Chapter 100 financing arrangement with the City of Peculiar, Missouri, and a
15 determination of the value of the three Siemens Westinghouse combustion turbines it later
16 installed near Peculiar, Missouri, at Aquila's new South Harper facility. The Commission
17 established Case No. EO-2005-0156 for that application. As to the combustion turbines,
18 Aquila requested the Commission value them for purposes of compliance with the
19 Commission's rule on how assets acquired from an affiliate of a regulated utility are to be
20 valued. The three combustion turbines were originally acquired by Aquila Merchant, a
21 wholly owned non-regulated subsidiary of Aquila and ultimately were transferred to MPS.
22 Aquila originally recorded their value on MPS books for regulatory purposes based on a
23 written down value from Aquila Merchant's original purchase price. MPS took a write-down

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1 to the valuation it obtained from its consultant R.W. Beck. Without Commission
2 authorization, in December 2004 Aquila executed documents to transfer ownership of the site
3 and combustion turbines to the City of Peculiar. The Commission issued an Order
4 disclaiming jurisdiction over the transaction because the site and combustion turbines were
5 not being used to provide service to MPS customers when the documents were executed.
6 The Office of the Public Counsel filed a motion for rehearing of the Commission's Order.
7 The Commission has not ruled on the motion for rehearing.

8 Q. Has Aquila recently sold some of its regulated utility properties?

9 A. Yes. In the spring of 2005, Aquila put several of its utility properties,
10 including its entire L&P division, up for sale. On the advice of its consultant, the Blackstone
11 Group, and with the approval of the Board of Directors Aquila employed a bidding process.
12 After receiving final bids in August 2005, Aquila decided to retain its entire L&P division.
13 In September 2005, Aquila announced sales of several of its utility properties. The only
14 Missouri properties it announced it was selling are the natural gas operations of Aquila
15 Networks MPS (the North and South systems) and the natural gas operations of the former
16 St. Joseph Light & Power Company, acquired by Aquila December 31, 2000, and now
17 referred to as Aquila Networks L& P. The Empire District Electric Company (Empire) was
18 the successful bidder of all of Aquila's Missouri natural gas operations. Aquila filed an
19 application with the Commission, Case No. GO-2006-0205, for authority to transfer these
20 natural gas operations. The Commission granted the authority and the sale closed in June
21 2006.

22 Q. How did Staff conduct its audit of Aquila?

1 A. Staff interviewed Aquila personnel. Staff reviewed Aquila's responses to data
2 requests issued in this case and other cases. Staff reviewed the minutes of meetings of
3 Aquila's Board of Directors, Annual Reports to Shareholders and filed SEC Forms 10-K and
4 10-Qs. In Aquila's last case, Staff toured plant facilities including the South Harper facility
5 site where Aquila installed three combustion turbines. Staff has participated in the Integrated
6 Resource Planning (IRP) meetings held twice a year and reviewed documents relating to
7 Aquila's capacity planning process. In particular, Staff attended several IRP meetings where
8 the South Harper facility and the three combustion turbines located there were topics of
9 discussion as well as other combustion turbines Aquila needed to meet the growing demand
10 of its customers for electricity.

11 **EXECUTIVE SUMMARY**

12 Q. Please summarize your testimony.

13 A. Staff recommends the Commission order Aquila to use a fuel mechanism for
14 recovery of fuel and purchased power expense. This mechanism is known as an Interim
15 Energy Charge (IEC) and has been used, in one form or another, in prior cases involving
16 coal, natural gas expenses or, as it is currently being used by Aquila as determined in its last
17 rate case, a total fuel and purchased power cost approach.

18 I am recommending that the valuation agreed to in Aquila's application to transfer
19 assets designated as Case No. EO-2005-0156 for three combustion turbines that were
20 originally purchased for Aquila's non-regulated affiliate and installed at Aquila's South
21 Harper generating facility be used for costs in this case. The Parties to that case entered into
22 a Stipulation and Agreement (Stipulation) agreeing to an amount for the turbines and related

1 equipment. As of the date of the preparation of this testimony, the Commission has not
2 approved the Stipulation and Agreement in Case No. EO-2005-0156.

3 Staff has not included all of the costs Aquila has incurred for its South Harper facility
4 in determining the costs the Staff has arrived at for the MPS facility. The Staff made
5 adjustments for costs Aquila incurred as result of the transfer of the turbine assets from a
6 non-regulated affiliate of MPS, Aquila Merchant Services. These costs included costs for
7 storage of the turbines and related equipment for over two-and-one-half years; litigation
8 regarding the legality of the South Harper facility; for filing and prosecuting two cases before
9 the Commission relating to the construction certificate and the valuation of the turbines and
10 related equipment; and consultant fees for a valuation appraisal by R.W.Beck of the turbines
11 and related equipment. Aquila has agreed these adjustments are appropriate for its South
12 Harper facility as of its last case through October 31, 2005, and removed those costs from its
13 books. Staff has reviewed additional costs that the Company incurred after October 31,
14 2005, and is proposing further adjustments.

15 **ALLOWANCE TO THE REVENUE REQUIREMENT**

16 Q. What is the allowance for known and measurable changes that appears on the
17 Staff Accounting Schedule 1 (Revenue Requirement)?

18 A. In each of the two revenue requirement runs for MPS –electric, and L&P –
19 electric, Staff has made an allowance based on a rough estimate designed to cover an
20 expected or anticipated increase to the overall revenue requirements being recommended in
21 Aquila's cases. The allowance is commonly used when true-ups or additional updates are
22 authorized for the rate case. If higher costs are expected beyond the update period, in this
23 case September 30, 2006, then an allowance can approximate the impact on the case for

1 those higher costs. For purposes of this case, Commission has authorized the use of updating
2 the revenue requirement through the end of December 31, 2006, primarily to address Aquila's
3 capacity needs.

4 Q. What higher costs does Staff believe may exist when the update period of
5 December 31, 2006 is completed?

6 A. For both MPS and L&P, Staff anticipates higher fuel and purchased power
7 costs as result of an Interim Energy Charge (IEC) proposal that Staff is recommending in this
8 case. The forecast amount for the IEC would increase the overall revenue requirement.
9 Further, for both divisions, Staff anticipates additional costs for payroll, payroll related
10 benefits, and other costs through the end of the December 31, 2006, update period. In
11 addition, Staff is still looking at some areas in the case that may result in higher costs than is
12 currently reflected in the revenue requirement runs being submitted in this direct filing.

13 **BRIEF HISTORY OF AQUILA**

14 Q. Please provide a brief history of Aquila's utility operations in Missouri.

15 A. What is now Aquila, began as a Missouri corporation that in 1917 provided
16 utility service only within what is now the service area of Aquila Networks—MPS. In 1985
17 that entity became UtiliCorp United, Inc. (UtiliCorp) and reorganized itself as a Delaware
18 corporation. In March 2002, UtiliCorp was renamed Aquila, Inc. The Commission approved
19 this name change early in 2002. Previous to UtiliCorp, the Company was called Missouri
20 Public Service Company. In December, 2000, UtiliCorp acquired St. Joseph Light & Power
21 Company thereby expanding its service area to include St. Joseph, Missouri and a
22 surrounding area.

23 Q. What are Aquila's current operations within the state of Missouri?

1 A. Aquila is an investor-owned electric, steam and natural gas utility engaged in
2 the generation, purchase, transmission, distribution and sale of electricity on a regulated basis
3 to 391,406 customers in Missouri and Colorado and to 68,920 customers in Aquila's
4 discontinued operations in Kansas (page 6 of Aquila 2005 Annual Report). At the end of
5 2005, the Company served 508,543 natural gas customers on a regulated basis in four states:
6 Kansas, Colorado, Iowa, Nebraska and 414,556 customers in Aquila's discontinued
7 operations in Michigan, Minnesota and Missouri. Aquila also provides steam service to a
8 limited number of customers in St. Joseph, Missouri. Aquila's Missouri operations represent
9 approximately 59% of the Company's total utility operations based on regulated assets. The
10 Company continues to provide trading and marketing of wholesale services on a limited basis
11 as it winds down its non-regulated operations for natural gas and electricity.

12 Aquila provides retail electric utility service to electric customers in the western and
13 central part of the state of Missouri through its operating divisions, Aquila Networks-MPS
14 and Aquila Networks-L&P, from its electric generation, transmission and distribution
15 facilities. MPS provides electricity on a wholesale basis through tariffs approved by the
16 Federal Energy Regulatory Commission (FERC). MPS and L&P also provided natural gas
17 utility service to customers in Missouri until June 2006 when those operations were sold to
18 Empire. In addition, L&P provides industrial steam to six customers in St. Joseph, Missouri,
19 from its Lake Road generating facility. Between MPS and L&P, Aquila serves almost
20 298,000 electric customers in Missouri which represents approximately 65% of the
21 Company's total electric customers at the end of 2005. Aquila serves almost 900,000
22 customers through its regulated domestic electric and natural gas utility operations in the
23 states of Kansas, Colorado, Iowa, Nebraska and Missouri at the end of 2005.

1 Finally, in 2006 Aquila sold its controlling interest in Everest Connections. Everest
2 provides local and long-distance telephone, cable television, high-speed internet and data
3 services to areas of Greater Kansas City. Everest started operating in 2001.

4 Q. When did Aquila acquire the assets operated by its L&P division?

5 A. On December 31, 2000, when Aquila merged with the St. Joseph Light &
6 Power Company. Essentially the operations of St. Joseph Light & Power Company became
7 Aquila's L&P division. The Commission approved this merger in Case No. EM-2000-292.

8 Q. In general terms, what areas of Missouri are served by MPS and by L&P?

9 A. MPS serves customers in and about Kansas City, Missouri. L&P serves
10 customers in and about St. Joseph, Missouri. All Aquila's natural gas operations were sold to
11 Empire in June 2006. These included those natural gas operations of MPS and Light &
12 Power.

13 **INTERIM ENERGY CHARGE**

14 Q. What is Staff proposing for recovery of fuel and purchased power costs in this
15 case?

16 A. Staff is proposing a mechanism to allow Aquila to recover fuel and purchased
17 power costs its MPS and L&P division prudently incur. This fuel and purchased power
18 mechanism (fuel mechanism) would be used to determine the base and forecast levels for
19 fuel and purchased power expense that Aquila would be permitted to charge its customers
20 during a specified period of time, typically two or three years. This proposal includes a
21 refund provision for any over-collection of costs from customers and provides Aquila the
22 opportunity to keep revenues equal to prudently incurred costs over a predetermined base
23 amount up to a ceiling, or forecasted amount. If actual costs come in under the base amount,

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1 Aquila would retain the difference between the actual and the base amount, and costs above
2 the forecast level would be absorbed by Aquila.

3 Q. Please describe in more detail about the fuel mechanism Staff is proposing?

4 A. The fuel mechanism is an approach that allows higher fuel and purchased
5 power prices to be used in determining interim rates in this case that would be subject to
6 refund with interest. The amount of the fuel and purchased power costs that are in interim
7 rates and subject to the true-up process is called the Interim Energy Charge (IEC).
8 Specifically, the IEC envisions that a base amount of fuel and purchased power costs is
9 established in permanent rates, with an additional amount of fuel and purchased power costs
10 set above the base levels in interim rates.

11 Q. Has the Commission ordered any utility to use this type of fuel mechanism
12 before?

13 A. Yes. This approach was used in Aquila's 2004 rate case, Case No.
14 ER-2004-0034 for both the MPS and L&P divisions. In a Unanimous Stipulation and
15 Agreement (Stipulation) approved by the Commission in that case, the IEC was used during a
16 time of high natural gas and purchased power costs.

17 The volatility of energy costs in 2004 was high but not like those that were experienced
18 in 2005 energy markets. Natural gas has declined significantly during much of 2006 compared
19 to the 2005 energy markets. High natural gas and purchased power prices have inflicted
20 tremendous cost increases during much of 2003, 2004 and all of 2005, declining in 2006.

21 The IEC mechanism was first used in Empire's 2001 general rate case, Case No.
22 ER-2001-299 and again in ER-2004-0570. All monies subject to refund were given back to
23 Empire's customers in the IEC created from Case No. ER-2001-299. The Commission's recent

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1 Report and Order in Case No. ER-2006-0315 terminated Empire's IEC that was in place as the
2 result of Case No. ER-2004-0570.

3 Q. What was the term of the IEC agreement reached as part of the settlement of
4 Aquila's Case No. ER-2004-0034?

5 A. The IEC was for a two-year period from April 22, 2004 through April 21, 2006.
6 A true-up audit was contemplated originally to determine if any portion of the revenues
7 collected exceeded Aquila's actual and prudently incurred cost for fuel and purchased power
8 during the interim period.

9 Q. Is Aquila's IEC still in place?

10 A. No. As the result of negotiations in Case No. ER-2005-0436, the parties agreed
11 to terminate the IEC created in Case No. ER-2004-0034.

12 Q. Did the parties in that case agree to a true-up process?

13 A. Yes. The true-up process was critical to a well-defined fuel mechanism because
14 that feature is what makes the IEC work. The difference between the base amount and the
15 forecast amount is the level of the IEC that is subject to refund. The fuel and purchased power
16 component to utility cost structure is difficult to determine, with a host of variables to consider.
17 Such variables include plant outages, heat rates, fuel and purchased power prices, the
18 complexities of operating power plants, the dynamic of the market place for selling and
19 purchasing power, and many other items. A true-up of the IEC amount is essential to determine
20 what amount, if any, should be refunded back to customers and what level the utility should
21 retain.

22 Paragraph 4 of Appendix A, attached to the Stipulation and Agreement in Case No.
23 ER-2004-0034, identified the true up process as follows:

1 Subsequent to the expiration of the Interim Energy Charge, an IEC Audit
2 will commence in which the Parties will have opportunity to audit
3 Aquila's actual variable fuel and purchased power costs of serving native
4 load, which will exclude fixed costs and the costs of fuel and purchased
5 power from interchange (off-system) sales. The IEC Audit will be
6 conducted under the same terms and conditions that apply to audits in
7 general rate cases before the Commission. If the IEC Audit determines
8 that all or a portion of the revenue collected by Aquila pursuant to the
9 IEC mechanism exceeds Aquila's actual and prudently incurred variable
10 costs for fuel and purchased power (as recorded in the FERC accounts
11 501, 547 and 555) for each operation on a Missouri retail basis during
12 the period the IEC was in effect, Aquila will refund any excess up to the
13 IEC Amount.

14 For the true-up, Aquila's true-up variable fuel and purchased power
15 costs will be based on actual delivered coal costs, oil costs and natural
16 gas costs, excluding fixed natural gas reservation charges, and actual
17 purchased power costs, excluding demand charges relation to capacity
18 purchases. The true-up will further exclude fixed costs charged to
19 Accounts 501, 547 and 555 relating to fixed fuel components included in
20 the permanent rates and to fuel and purchased power for interchange
21 (off-system) sales.

22 Q. How are disputes concerning the IEC Audit to be resolved?

23 A. The Staff proposes that any disputes in the IEC Audit which cannot be resolved
24 by the parties be presented to the Commission for resolution. Paragraph 5 of the IEC
25 Stipulation in ER-2004-0034 identifies the dispute process the Staff is proposing in this case.

26 Q. Does the IEC procedure include refunds?

27 A. Yes. Another essential element of an IEC is that it contains a refund mechanism
28 to handle over-collections by the utility for prudently incurred actual costs between the base
29 amount and the forecast, or ceiling amount. The true-up of the IEC would determine actual fuel
30 and purchased power costs. Any amount collected in excess of those actual costs is to be
31 refunded back to the customers of MPS and L&P, up to the forecast levels. Amounts refunded
32 to customers would include interest so that customers are protected from any over-collection.

1 Q. If IEC refunds are to be made to both MPS and L&P customers, will MPS
2 customers get the same refund amount as L&P customers?

3 A. It is highly unlikely MPS customers would get the same IEC refund amount as
4 L&P customers. Since these two operating divisions of Aquila are separated for regulatory
5 purposes, each having its own tariff rates and cost structure, there will be two different IEC
6 Audits, even though they likely will be conducted at the same time. The IEC Audits would be
7 separate for MPS and L&P, with each audit being performed to determine "actual and prudently
8 incurred variable costs for fuel and purchased power" costs identified on the books of MPS and
9 L&P (paragraph 4 of Appendix A to the Stipulation and Agreement in Case No.
10 ER-2004-0034).

11 Q. Did the Commission approve an IEC in Aquila's 2004 electric rate case, Case
12 No. ER-2004-0034?

13 A. Yes. In an Order issued on April 13, 2004 the Commission authorized the use of
14 an IEC. The rates in Case No. ER-2004-0034 went into effect April 22, 2004. The IEC for both
15 MPS and L&P started the same time as the effective date of the tariffs—April 22, 2004.

16 Q. Were you involved in negotiating the IEC in Aquila's 2004 rate case, Case No.
17 ER-2004-0034?

18 A. Yes. Another Staff member and I sponsored the IEC mechanism in that Aquila
19 rate case.

20 Q. How did that IEC agreement work?

21 A. As noted above, that agreement (attached as Schedule 2) provided for recovery
22 by Aquila from its customers of a base amount of fuel and purchased power plus an interim
23 amount that is subject to refund with interest. The base amount was determined using actual

1 natural gas and purchased power costs. The interim amount was determined using Aquila's
2 forecasted natural gas and purchased power costs. Since there was a refund provision, the IEC
3 agreement was intended to provide a "safety net" for both Aquila and its customers.

4 Paragraph 1 of the Aquila Stipulation states the following:

5 The Parties agree that resolution of the fuel and purchased power
6 expense issues in Case Nos. ER-2004-0034 and HR-2004-0024 has
7 been achieved as among themselves by an Interim Energy Charge
8 ("IEC") mechanism of setting rates to include a specific amount of the
9 Missouri jurisdictional electric cost of fuel and purchased power on a
10 permanent (i.e., not subject to refund) basis and to include another
11 additional amount of variable fuel and purchased power cost on an
12 interim basis, subject to true-up and refund

13 a. The specific amount to be included in the Missouri retail rates on a
14 permanent basis for the Aquila Networks—MPS ("MPS") electric
15 operations is \$87,700,206 (1.6654 cent/kWh) and the additional
16 amount to be included in Missouri retail rates on an interim basis,
17 subject to refund, for the Aquila Networks---MPS electric operations is
18 \$16,100,000 (0.3057 cents/kWh) for an overall total of \$103,800,206
19 (1.9712 cent/kWh). The actual agreed upon cents per kilowatt hour
20 IEC for each customer class is shown in Appendix B.

21 b. The specific amount to be included in the Missouri retail rates on a
22 permanent basis for the Aquila Networks—L&P ("L&P") electric
23 operations is \$22,705,656 (1.2641 cent/kWh) and the additional
24 amount to be included in Missouri retail rates on an interim basis,
25 subject to refund, for the L&P electric operations is \$2,400,000
26 (0.1336 cents/kWh) for an overall total of \$25,105,656 (1.3977
27 cent/kWh). The actual agreed upon cents per kilowatt hour IEC for
28 each customer class is shown in Appendix B.

29 c. The specific annual amount to be included in Missouri retail rates
30 on a permanent basis for the L&P industrial steam operations is
31 \$4,374,480 with no additional amount to be included in Missouri retail
32 rates on an interim basis, subject to refund.

33 d. These amounts are meant to include only the Missouri retail
34 variable costs accumulated in the FERC account numbers 501, 547
35 and 555 and will be updated in the true-up portion of the case specified
36 hereafter in this Agreement. The fixed costs in FERC account 501,
37 547 and 555 will be recovered in permanent rates and will not be
38 updated in the true-up portion of the case. The portion subject to true-
39 up and refund, referred to herein as the "IEC Amount," is explained in

1 more detail herein and generally is designed to address the potential
2 volatility in natural gas and wholesale electricity prices. This IEC
3 Amount will be the basis of the IEC to be approved by the
4 Commission. The IEC will be reflected separately on all MPS and
5 L&P electric rate schedules expressed in cents/kWh. The agreed to
6 IECs are shown in Appendix B. The IEC will be collected on an
7 interim basis and will be subject to true-up and refund under the terms
8 of this Agreement...

9 [Schedule 2]

10
11 The specific terms of the IEC were set out in the "Interim Energy Charge Rider Electric"
12 tariff sheet 109 of the Company's tariff sheets filed as result of the Commission's decision in
13 Case No. ER-2004-0034.

14 Q. Has any other utility in Missouri used an IEC?

15 A. Yes. Empire has used the IEC mechanism twice, once in 2001 and again in
16 2005. The IEC was used during a time when natural gas and purchased power prices were high.
17 The energy markets were very volatile in the fall of 2000 and early 2001. Utilities experienced
18 high natural gas and purchased power prices during this time period. In fact, some of the natural
19 gas prices in early 2001 were not unlike those in today's energy markets. High natural gas and
20 purchased power prices have inflicted tremendous cost increases during much of 2003, 2004,
21 2005 while natural gas costs have declined in 2006.

22 Q. What amount of the IEC revenues were incorporated in Empire's rates in
23 2001?

24 A. In Case No. ER-2001-299, Empire received an amount in excess of
25 \$19 million for the IEC. This first IEC included all fuel and purchased power costs, both
26 variable and fixed. Aquila's IEC included only variable fuel and purchased power costs, as
27 did the Empire's second IEC used in Case No. ER-2004-0570.

28 Q. Has Empire had to return any monies through an IEC refund mechanism?

1 A. Yes. In Case No. ER-2002-424, Empire refunded, with interest, all of the
2 monies collected under its first IEC, after having reduced the amount collected under the IEC
3 by some \$7 million annually in Case No. ER-2002-1074.

4 Q. Was Empire allowed to keep any money collected as part of the IEC amount?

5 A. Empire did not retain any of the IEC amount. It returned the entire
6 \$19 million with interest to its customers. Empire was able to retain any IEC revenues in
7 excess of fuel and purchased power costs below the base amount of the IEC. Once an IEC
8 concludes the amount of fuel costs built into permanent rates, the base amount of the IEC, is
9 the level that the utility collects in rates. To the extent utility companies can keep their fuel
10 and purchased power costs below the base, or permanent level, they will retain those
11 collected revenues for its shareholders. Thus, in Empire's 2001 IEC, it was able to "beat" the
12 base IEC amounts, to the benefit of its shareholders.

13 Q. Was Staff concerned about allowing Empire retain monies collected in rates
14 from its customers, even though the fuel costs were under the base (permanent) amount?

15 A. No. A primary feature of the IEC is that utilities get the potential to keep
16 monies collected in excess of actual fuel and purchased power costs. If the base IEC amount
17 is developed properly, this provides utility companies using an IEC an economic incentive to
18 drive fuel costs down sufficiently to keep some of the collected revenues. It is equally
19 important to set the IEC forecast amount at an appropriate level. If the forecast amount is too
20 low, in a rising energy market the company will not have a reasonable opportunity to collect
21 sufficient revenues to cover its fuel and purchased power costs. If the forecast is set too high,
22 the utility company may not have necessary incentives to keep fuel and purchased power
23 costs low. An IEC forecast amount set too high is nothing more than a pass-through of fuel

1 and purchased power costs. Thus, it is very important to establish the proper base and
2 forecast amounts in the IEC mechanism.

3 Q. What amount did the IEC contribute to Empire's revenue requirement upon
4 which its rates were set in Case No. ER-2004-0570?

5 A. In Case No. ER-2004-0570, Empire received an IEC amount of \$8,249,000
6 (Missouri jurisdictional amount) for variable fuel and purchased power costs that went into
7 effect March 27, 2005. The 2005 IEC was originally for three years for the period March 27,
8 2005 through March 26, 2008. The Commission's Report and Order in Case ER-2006-0315
9 terminated the 2005 IEC early. Empire's fuel costs exceeded the IEC amount and Empire
10 was not required to refund any amount of the 2005 IEC. The Commission established
11 Empire's fuel and purchased power costs in Case No. ER-2006-0315 using a traditional
12 approach of determining those costs by setting base rates.

13 Q. How has Staff determined fuel and purchased power costs in prior Aquila rate
14 cases?

15 A. Staff has traditionally used actual fuel and purchased power prices to
16 determine the level of fuel and purchased power expenses included in the development of the
17 revenue requirement. Fuel costs include the cost of coal, oil and natural gas. Staff witness
18 Charles R. Hyneman identifies the use of the actual prices for coal, freight, natural gas and
19 oil in his direct testimony filed in this proceeding. Fuel costs also include the amounts for
20 purchased power. Staff witness David Elliott determined the amounts of purchased power
21 costs and discusses them in his direct testimony filed in this case.

22 The development of the fuel and purchased power costs typically has substantially
23 relied on the actual historical information on the generating facilities and their operational

1 costs. Because of the volatility in prices, it is very difficult to predict the prices for fuels
2 burned in the Company's generating facilities and the cost of energy purchased through the
3 interchange markets, either through a capacity agreement or spot purchase.

4 Q. Is it difficult to forecast the cost of natural gas?

5 A. Yes. Along with purchased power costs, the volatility in natural gas costs is
6 probably the most difficult to predict with any certainty. Natural gas markets have
7 historically been quite volatile, but in the recent past they have been even more volatile. No
8 one can predict with a reasonable degree of certainty, the natural gas prices that utilities will
9 pay in the future to fuel their power generating facilities.

10 Q. Is it difficult to satisfactorily predict a single point for fuel and purchased
11 power prices?

12 A. Yes. It is extremely difficult to make predictions in the current volatile energy
13 market, using either actual historical prices or some type of forecast levels. An IEC avoids
14 the need to develop a single price or 12 monthly prices because, while you still have to
15 determine a base amount to set permanent rates, the forecast amount that is subject to refund
16 allows flexibility in pricing the natural gas and purchased power prices.

17 Q. Does Staff still support the use of actual costs to develop fuel and purchased
18 power expense levels to include in rates?

19 A. Although Staff still believes that the use of historical costs is generally the
20 most reliable approach to determining fuel prices, it is extremely difficult in the current
21 energy market to predict the future with any degree of certainty. Therefore, total reliance on
22 historical averages to determine fuel prices is not the method that Staff recommends the
23 Commission use for setting rates for Aquila in this case. Because of the extreme volatility in

1 the natural gas and purchased power markets during the past almost four years starting in
2 early 2003, Staff has had to develop its prices by reflecting the higher prices of today's
3 market. The greater the volatility of the energy market, the less confident one can be about
4 fuel price determinations. Using historical levels to develop prices for natural gas costs may
5 lead to under-collection of fuel costs by the Company, while use of forecasts may result in
6 over-collection, if there is no mechanism in place to true-up to actual and prudent costs.

7 Q. How did the Staff determine the natural gas and purchased power prices it is
8 using in this case?

9 A. Staff used recent actual natural gas and purchased power prices Aquila
10 incurred through September 30, 2006, for developing the natural gas and purchased power
11 prices it is using in this case. Using the latest prices gives effect to the most recent market
12 (lower) prices through the September 30, 2006 update period. Staff will further update fuel
13 and purchased power costs for Aquila through the end of the update period December 31,
14 2006. In effect, Staff's proposal is to ensure that Aquila's natural gas and purchased power
15 costs would be indicative of the lower price market conditions. Equally important, however,
16 is the concern that Aquila will incur even higher fuel and purchased power price levels and
17 not return to the lower more normal historical levels of 2002; thus the reason for the need to
18 develop a fuel mechanism like the IEC. The IEC, in effect, offers protection from over- and
19 under-recovery of fuel costs when the proper safeguards are implemented.

20 Q. How does the IEC provide protection from over- and under-recovery of fuel
21 costs?

22 A. Because a base using more conservative prices for natural gas and purchased
23 power is determined and a ceiling, or cap, using higher forecasted prices for these

1 commodities is determined, the IEC allows for the return of monies if the forecast amounts
2 do not materialize. In reality, the IEC ensures that the customers get benefit of any lower
3 fuel costs if the energy market declines and the Company is protected from the upside of
4 higher fuel costs if the energy market rises to recent historical highs.

5 If the IEC is not implemented, and a single point is used for both fuel and purchased
6 costs, in energy markets that are rising, generally, the Company will under-recover the actual
7 higher fuel and purchased power costs having, in some cases, a tremendously adverse effect
8 on its earnings. As an example, if rates support a \$5 per mmBtu amount for natural gas and
9 the actual amount is \$7 per mmBtu, and rates support \$35 per mWh amount purchased power
10 price, and the actual costs turns out to be \$40 per mWh, the company will not recover its
11 costs, unless there are costs reductions in other parts of its operations. Increases in revenues
12 can offset or at least mitigate the under-recovery. Conversely, if the energy costs are set too
13 high in rates, without some sort of refund mechanism, the Company will reap a windfall if
14 these prices fall. As an example, if the price for natural gas is set at \$7 per mmBtu, and the
15 price for purchased power is set at \$45 per mWh, the Company would over-collect if the
16 energy prices fell below these levels. Without any opportunity for a refund of this over-
17 collection, the Company would benefit substantially.

18 Q. Have there been other times when energy costs were difficult to determine in
19 the course of setting rates?

20 A. Yes. Developing fuel prices is always difficult, but there have been several
21 times, including the most current time frame, where the task has become even more difficult.
22 During the 2000/2001 winter, natural gas prices hit unprecedented levels. In some cases,

1 natural gas prices hit upwards of \$12 mmBtu. The IEC was developed to address this
2 extremely volatile market.

3 In the early 1980s, the Commission authorized the use of a forecasted fuel mechanism
4 for several electric utilities that had been exposed to escalating fuel costs. This mechanism
5 was used to address extraordinary circumstances and Staff believed that a similar approach
6 could be used to address the unprecedented, volatile and extremely high costs of natural gas.

7 Q. Does the Staff believe that a solution to the difficulty of developing natural
8 gas and purchased power pricing in this case is an IEC-styled fuel mechanism?

9 A. Yes. Aquila filed its case assuming there would be a fuel clause mechanism
10 in place with a true-up mechanism in the Company's direct filing. I will discuss the fuel
11 clause later in this testimony.

12 Q. Why did the Interim Energy Charge mechanism come about?

13 A. Just as fuel prices were uncertain in the 1980s, they have become even more
14 volatile and less predictable in the recent past. Years ago, Staff was interested in developing
15 a forecasted fuel process that identified natural gas as the only fuel source that would form
16 the basis for the forecasted fuel mechanism. After extensive discussions in the 2001 Empire
17 case, it became apparent that a broader forecasted fuel mechanism would be necessary
18 because of the interrelationship between gas prices and wholesale electricity prices for
19 purchased power. With the unprecedented and extraordinary high natural gas prices that had
20 been experienced during much of the latter part of year 2000 and the early part of 2001, it
21 became apparent that a modification of the traditional and historical approach to determining
22 fuel prices was necessary. A major contributing factor to the decision to depart from using
23 historical costs only to determine the basis of the fuel prices used for fuel expense was

1 Empire's generating plant addition of State Line Combined Cycle Unit. The State Line
2 Combined Cycle Unit went into service in June 2001. This generating facility burned only
3 natural gas and therefore represented a significant increase to Empire's fuel burn using
4 natural gas. Empire's exposure to the increase in natural gas fuel burn came at a time when
5 natural gas prices had been steadily rising. When the unit did go into service, natural gas
6 prices were retreating but still higher than in previous periods. This placed significantly
7 more risk on Empire than most of the other electric utilities operating in the state of Missouri.

8 Q. Has Aquila experienced a similar increase in its natural gas consumption?

9 A. Yes. Aquila, like Empire, has seen a significant increase in natural gas use to
10 fuel its generators and indirectly through the purchased power agreements. In Aquila's 2004
11 rate case, one of the contributing factors for recommending an IEC was the exposure that
12 Aquila had with the purchased power agreement for power from the Aries Combined Cycle
13 Unit. Aquila executed a purchased power agreement to take power from that unit through
14 May 31, 2005. In that purchased power agreement, MPS supplied the natural gas to fuel the
15 energy it received from the Aries unit. In partial replacement of the electricity it was
16 receiving through Aries contract, Aquila installed 315 megawatts of its own capacity at its
17 South Harper facility. In much the same way as Empire, Aquila has increased its dependence
18 on natural gas, which in turn increases the Company's exposure to the fluctuations of that
19 very volatile energy market.

20 Q. You suggested earlier that the natural gas market affects purchased power
21 prices. Please explain.

22 A. Equally important to the cost of fuel electric utilities burn to generate
23 electricity are the effects high natural gas prices have on price of purchased power. With

1 escalating natural gas prices, purchased power costs have also escalated. While certainly not
2 the only factor, there is a relationship between natural gas prices and the cost of purchased
3 power. To some degree purchased power prices track natural gas prices. Moreover, if a
4 forecasted fuel mechanism was used that did not include purchased power costs, the utility
5 could potentially benefit from forecasting natural gas costs only. Forecasted natural gas
6 prices may make the purchased power prices more economical, giving the utility an incentive
7 to purchase power and not generate power from natural gas. If the purchased power costs
8 were not included in the IEC, the company could "keep" the lower purchased power costs but
9 reflect higher natural gas costs in its fuel that would be subject to the IEC mechanism. In
10 other words, the utility could "game" or benefit from such a situation. The inclusion of
11 purchased power costs along with the other fuel cost components in the forecasted fuel
12 process will significantly reduce the risk of a utility "gaming" or taking advantage of the
13 process. It is not Staff's intent that either the utility or its customers unduly benefit from the
14 forecast fuel process. Utilities cannot be allowed to use this fuel and purchased power
15 mechanism to reap windfall profits, nor can customers be allowed to unduly benefit from
16 being totally insulated from rising fuel and purchased power costs.

17 Q. How has the volatile energy market exposed Aquila to greater risk?

18 A. In Aquila's 2004 rate case, Case No. ER-2004-0034, its policy witness Keith
19 Stamm, Aquila's Senior Vice President and Chief Operating Officer, in his direct testimony
20 at page 18, line 15, stated that "for each \$1 increase in natural gas commodity prices, the
21 annualized cost of fuel to serve our intermediate and peaking loads increases by
22 approximately \$10.5 million." As indicated above, with the Company dependent on natural

1 gas to fuel its electric generators, the increased costs of the natural gas commodity exposes
2 Aquila to much the same risk as Empire with respect to its use of natural gas as a fuel source.

3 The increased risk to Aquila is illustrated by using the above-noted numbers
4 presented by Mr. Stamm. If the estimates for natural gas price are missed by just \$1, the
5 potential for Aquila either to receive a windfall or to incur shortfall in costs are substantial.
6 If Aquila over-collects its fuel cost by this estimate, customers would be paying significantly
7 greater rates than they should. On the other hand, if the forecasted fuel cost was understated,
8 then Aquila would under-collect its fuel cost in rates resulting in a significant shortfall. If
9 these shortfalls were on the order of the \$10.5 million, then, based on the amounts in Staff's
10 direct filing (Staff Accounting Schedule 9-4, line 111), they would equate to approximately
11 one-sixth of the net operating income of Aquila's MPS electric operations. Greater reliance
12 on natural gas coupled with the high cost of that fuel places Aquila in a difficult situation.

13 Q. What is Staff's recommendation regarding the IEC?

14 A. Despite the recent declines in the natural gas markets, Staff still believes that
15 some type of forecasted mechanism is necessary to protect both Aquila and its customers
16 during this period of continued high natural gas costs. If a base can be determined and a
17 forecast, then an interim amount can be computed that would be subject to a true-up process
18 to actual costs, with a refund provision that will accrue interest.

19 Q. How would the Interim Energy Charge the Staff proposes work?

20 A. The mechanism would be similar to the one that was in existence in the 2004
21 rate case. The Interim Energy Charge requires the establishment of a base amount for fuel
22 and purchased power cost that would be set as part of permanent rates. The Interim Energy
23 Charge then identifies an amount of fuel and purchased power cost above the base cost and

1 up to a "forecasted" price that would be subject to refund. This interim charge would be in
2 effect for a period of up to 24 or 36 months from the effective date of the rates determined in
3 this case. At the conclusion of this period, a true-up audit would be performed to identify
4 prudently incurred actual cost for fuel and purchased power in order to determine if Aquila
5 over- or under-collected amounts during this period. If the Company over-collected its actual
6 cost for fuel and purchased power up to the interim amount, then it would refund to its
7 customers with interest down to the base amount. Of course, if Aquila under-collected costs
8 associated with fuel and purchased power, the Company would not have to refund any
9 amounts.

10 Q. How could a base be determined?

11 A. Staff's has examined the historical costs based on actual prices paid for
12 natural gas and purchased power over several years. While energy prices are still high in
13 relation to historical levels, the base, or floor could be something less than the amount
14 recommended in this case by either Aquila or the level recommended by Staff witness
15 Hyneman. To provide an additional incentive to the Company to seek out low cost energy,
16 for both natural gas and purchased power, a base below Staff's amount being recommended
17 by Staff witness Hyneman could be used.

18 Q. How could the forecast or ceiling be determined?

19 A. As long as a refund mechanism with interest is in place, a significantly higher
20 level than those the Company or Staff is recommending could be developed for the
21 forecasted levels for the ceiling.

22 Q. What base and forecast levels does Staff recommend?

1 A. Staff recommends the Parties develop a range of prices that could be used for
2 the IEC. Therefore, Staff is not, at present, recommending specific base or forecast levels.
3 All IEC mechanisms that have been used, two for Empire and one for Aquila, were
4 developed by getting a consensus from the parties in the respective cases for the use of an
5 IEC approach, in general, and then, specifically agreeing to the IEC base and forecast levels.

6 The use of the IEC mechanism in the past has been a collaborative process with the
7 parties exchanging ideas, each bringing their own perspective and interests to the discussions.
8 The IEC base and forecast levels have been the subject of much discussion and, ultimately,
9 were negotiated among the parties. In fact, the Aquila IEC for the 2004 rate case reflected
10 not only the negotiations specifically concerning the IEC base and forecast prices, but also
11 the negotiations were affected by the overall settlement negotiations for the total revenue
12 increase. Thus, it is important for all the parties to have an opportunity to express viewpoints
13 on the IEC mechanism and the base and forecast levels. Consequently, Staff is not proposing
14 IEC base and forecast levels at this time.

15 Q. Why should an Interim Energy Charge be adopted?

16 A. It is advantageous. The Interim Energy Charge alleviates the need to pinpoint
17 fuel prices used to develop fuel and purchased power costs. Because any amounts over-
18 collected are subject to refund with interest, the pressure to predict price increases for the fuel
19 components is significantly reduced. A good deal of the risk of missing the forecast is
20 neither on the Company nor on its customers. Staff believes that it is a distinct advantage to
21 be able to have a mechanism that allows recovery of any over-collection of costs back to
22 Aquila's customers. In essence, this approach provides a "safety net" for both Aquila and its
23 customers if the cost levels are missed. Staff does not believe this mechanism is appropriate

1 for normal economic circumstances and still supports the use of actual historical information.
2 But when we see dramatic cost volatility, such as those seen recently in the natural gas
3 industry, and the potential impact is so great on a company like Aquila which has such a
4 significant dependence on natural gas, this type of approach can be used effectively.

5 Q. Have forecasted fuel mechanisms been used in past cases?

6 A. Yes. Forecasted fuel with a true-up provision was used in several electric
7 cases in the early 1980s. The early forecast fuel process was developed as a result of high
8 fuel prices caused by two oil embargoes in the 1970s. The forecasted fuel mechanism was
9 developed and used as a means of addressing the rising fuel prices that the electric utility
10 industry was experiencing, just as the IEC mechanism was developed couple of years ago.
11 While these early forecasted fuel provisions were significantly different than the IEC
12 mechanism, the processes have some similarities. There were two significant features that
13 enabled the forecasted fuel mechanism to work: 1) the forecasted fuel prices and resulting
14 fuel burns were developed in the context of a rate case; and 2) there was a true-up audit of
15 the forecasted fuel prices only, with a refund provision.

16 Several forecasted fuel true-up cases were used in the 1980s. Kansas City Power and
17 Light Company (KCPL) was the first utility to use this process. In each of KCPL's rate cases
18 in 1981, 1982 and 1983, the forecasted fuel process was used. The following table identifies
19 the rate cases where forecasted fuel was used along with the associated forecasted fuel true-
20 up case number:

1		Forecasted Fuel	
2		<u>Rate Case</u>	<u>True-up Case</u>
3	Kansas City Power and Light	ER-81-42	----
4		ER-82-66	EO-83-9
5		ER-83-49	EO-84-4

6 In fact, Empire used this process in one of its rate cases in the early 1980s. Several other
7 utilities used this process during the high inflationary period of the early part that decade, as
8 well.

9 Q. How did the forecasted fuel process work?

10 A. A forecasted level of fuel prices for coal and, on occasion, natural gas was
11 determined in the rate case. The period of the forecast fuel prices was six months after the
12 operation of law date of the rate case. When actual fuel prices became known, the Staff did a
13 true-up audit to determine if the utility over- or under-collected in the forecasted fuel
14 mechanism. The forecasted fuel prices were subject to refund with an interest provision for
15 any amounts over-collected by the company. The tariffs filed by the Company in the rate
16 case were identified with a "subject-to-refund" provision. If the company over-collected any
17 dollar amount of the base amount (floor) up to the forecasted fuel price level (ceiling), the
18 customers received a credit to their bills. Between the base and forecasted levels, the
19 company would be able to retain any amounts of actual and reasonably incurred costs above
20 the projected levels. Any amount that the company under-collected over the forecast level
21 was absorbed by the company. The forecasted fuel price set a maximum and minimum fuel
22 price in rates. The base or permanent rates contained the base fuel price and the amount that
23 was subject to refund was set at the forecasted fuel price. Fuel prices were set at the base
24 level and the true-up could not go below that level once these fuel prices were set in the rate
25 case.

1 Q. Previous forecasted fuel true-ups appear to only have included forecasts for
2 coal and natural gas costs. How does Staff envision the IEC mechanism be used in this case?

3 A. While the early forecasted fuel was previously developed to include only coal
4 and natural gas prices, the stipulations reached between the signatory parties in the Empire
5 and Aquila rate cases include all components of fuel and purchased power costs. Just as the
6 forecasted fuel mechanism in the 1980s relied on inputs and assumptions developed during
7 the course of the respective rate cases, the fuel components in the interim energy provision
8 have been established during the course of the audit in current Aquila rate case. The
9 Company and Staff typically develop two different fuel models with two different sets of
10 assumptions. The results may be vastly different depending on the overall assumptions used
11 to calculate the levels of expense determined by the fuel runs. The fuel models, with the
12 proper prices, can be used to establish the basis for the base rate and the forecast rate. The
13 fuel run using the base prices could be used to develop the base IEC amount and another run
14 using forecasted prices could be used to determine the forecasted IEC amount.

15 Q. Are there other costs added to the amounts developed in the fuel run?

16 A. Yes. In addition to the fuel and purchased power costs determined by the fuel
17 run, demand charge costs for Aquila's capacity agreements have to be included. Costs
18 relating to the non-variable component of fuel have to be included in the total fuel and
19 purchased power costs included in this case. These amounts include rail car maintenance,
20 rail maintenance, fuel handling and a variety of other costs. These amounts would be
21 included in the base, or permanent part to the IEC. However, the non-variable components to
22 fuel and purchased power should not be included in the forecast levels or part of the overall

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Cary G. Featherstone

1 IEC. Since these are fixed costs, they are included in the permanent rates but not part of the
2 IEC mechanism.

3 Q. How would the IEC true-up process the Staff proposes work?

4 A. The true-up process would begin after the expiration of the Interim Energy
5 Charge, which would occur at the conclusion of the 24 months, for a two-year IEC, or 36
6 months for a three-year IEC, from the original effective dates of the appropriate tariff sheets.
7 All the variable components of fuel cost and purchased energy would be examined during
8 this true-up. The price of fuel and the operations of the generating units would be reviewed,
9 along with purchased power cost, to identify an actual level of prudently incurred fuel cost to
10 be used to compare to the forecasted level to determine any over- or under-collection. To the
11 extent that the Company over-collects in any amount above the base level up to the
12 forecasted interim level, those dollars will be refunded to Aquila's customers with interest.
13 No amount of over-collection below the base amount would be refunded. If the true-up
14 results in an under-collection, then Aquila would not obligated to return any amount of
15 money to its customers.

16 The interest rate would be the prime interest rate identified in the Wall Street Journal
17 as of the last month of the forecasted fuel process, which is the same approach used in the
18 2004 rate case.

19 Q. Should the Commission adopt an Interim Energy Charge?

20 A. Yes. Staff recommends the Commission adopt the Interim Energy Charge for
21 the purpose of setting variable fuel and purchased power expense levels in this rate case.

1 **MODIFICATIONS TO EXISTING IEC MECHANISM**

2 Q. Would there need to be modifications to the IEC mechanism developed in the
3 2004 rate case?

4 A. Yes. Several areas of concern exist with the 2004 IEC mechanism developed
5 in Case No. ER-2004-0034. When the IEC mechanism was developed for Aquila in the last
6 case, the Company did not have a significant hedging program in place and, therefore, no
7 provision was made to include the results and costs for hedging. Any IEC mechanism
8 developed in this case would have to address the impact for hedging in the true-up IEC
9 Audit. Any proposed IEC mechanism that may result from the Commission's decision in
10 this case, should include the results from a well thought out, managed and prudently executed
11 hedging program.

12 Q. Is a utility company's hedging for natural gas done to mitigate energy costs
13 and reduce the risk of volatility in the energy markets?

14 A. Yes. Generally, utility companies, both electric and natural gas local
15 distribution companies (LDC's), use some type of hedging program to purchase natural gas.
16 This is especially important in the markets that exist today and over the past several years.
17 Utilities use the hedging of natural gas to minimize the cost affects and volatility of expected
18 raising markets. Hedging is done to mitigate natural gas and energy costs and should be
19 reflected in the IEC mechanism to reduce the substantial risk of high energy markets. Staff
20 believes that a well thought out, managed and prudently executed hedging program should be
21 used to reduce the risk of volatility and minimize fuel costs.

22 In particular, in energy markets like the heating season in 2000 (September through
23 December) and 2001 (January through March), the energy markets of late 2003 and 2004 and

1 the late 2005 energy market may benefit by a hedging programs implemented by electric and
2 natural gas companies.

3 Q. Does Aquila treat the gains, losses and costs to implement its hedging
4 program differently today than it did during the 2004 IEC mechanism?

5 A. Yes. The 2004 did not reflect the results of Aquila's hedging program.
6 Aquila originally accounted for the results of the hedging program and related costs to a
7 FERC (Federal Energy Regulatory Commission) below-the-line account. Aquila booked
8 these hedging costs to Account 430.17. None of the hedging costs or the results of the
9 hedging program were booked to FERC accounts 501, 547 or 555, which are the accounts
10 identified in the Stipulation in Case No. ER-2004-0034 for those accounts that were going to
11 be used for the true-up in the IEC audit. By contrast, it is my understanding that Empire
12 booked hedging costs to one of these three accounts and included the results (and costs) in its
13 IEC mechanism, giving full credit to any reduction in natural gas pricing. In other words, the
14 benefits of Empire's hedging program would be used in the IEC mechanism to reduce the
15 cost impact from the higher energy markets.

16 In the Stipulation and Agreement reached in Aquila's 2005 rate case, the Company
17 agreed to reflect the costs and benefits of its hedging program in FERC accounts 501, 547
18 and 555.

19 In order to accurately determine the amount of any refund owed the customers, the
20 results of the hedging program and prudently incurred costs to implement such program
21 should be included in the true-up IEC Audit.

22 Q. Did Aquila have a hedging program in place prior to the implementation of
23 the 2004 IEC mechanism?

1 A. Yes. Aquila had a limited hedging program that was expiring in at the end of
2 2003. After the 2004 IEC mechanism went into effect on April 22, 2004, Aquila started a
3 different, more intense effort to hedge energy costs in July 2004. For most of the remainder
4 of 2004, the hedging program lost money; thus, this would have added costs to the IEC
5 mechanism if it had been included in the calculations. In late 2005, Aquila had significant
6 gains in its hedging program which would have reduced costs if reflected in an IEC
7 mechanism. In 2006, the hedging policy has losses again which would increase the overall
8 cost to fuel.

9 Q. What other areas of concern exist with respect to the current IEC mechanism
10 that need to be addressed in any proposed second IEC that would result from a Commission
11 decision in this case?

12 Any new IEC should be developed so as to be able to identify unusual events that
13 occur infrequently. Aquila experienced two such events in 2004. The first one was a
14 breached contract by one of Aquila's coal suppliers, C.W. Mining. The other unusual event
15 was a scheduled outage at Sibley Generating Station. Both of these unusual events
16 significantly impacted the actual fuel and purchased power costs for 2004 that were the basis
17 of the 2004 IEC mechanism. The 2004 IEC mechanism started in April 2004, when rates
18 from Case No. ER-2004-0034 went into effect. From the very beginning of the current IEC
19 period, both of these unusual events caused increased fuel and purchased power costs over
20 and above those contemplated when the IEC was negotiated by the Parties in Aquila's last
21 rate case. Thus, the 2004 IEC mechanism resulted in an under-recovery from its inception,
22 due in large part from these two unusual events.

1 Q. Does Staff believe that these two events should not be included as part of the
2 IEC mechanism?

3 A. The C.W. Mining coal contract breach is currently being litigated in a Utah
4 court regarding a lawsuit filed by Aquila to collect damages from the coal supplier. Staff is
5 proposing to condition recovery for the use of the higher priced replacement coal on Aquila's
6 pursuit of the legal remedies in the courts for damages.

7 As to the Sibley outage, Staff believes the amount of increased costs for additional
8 fuel and purchased power occurring from the outage needs to be separately identified. Staff
9 is not proposing any disallowance, nor had it planned to remove these additional costs in the
10 2004 IEC true-up should one have been performed. It is important, however, to clearly
11 identify the amounts for the outage to fully assess the impacts of any suggested under-
12 recovery relating to high natural gas costs. While natural gas prices may have been high
13 during the period of the 2004 IEC, they did not contribute to the majority of the under-
14 recovery of costs to date—the coal contract and Sibley outage caused the majority of under-
15 recovery.

16 Q. If the effects of the under-recovery would have been part of any true-up of the
17 2004 IEC Audit, why is it necessary to address this matter in context of this rate case?

18 A. In developing an IEC mechanism in this current rate case, it is important to
19 learn from any problems that may have occurred in the previous 2004 IEC. The hedging
20 program, the coal contract problem and the Sibley outage all caused the significant under-
21 recovery of the 2004 IEC mechanism. Future IEC mechanisms should identify unusual
22 events so determination can be made for the prudence of recovery and to quantify the effects
23 of the unusual events in relation to other causes such as high natural gas costs.

1 Q. What is the C.W. Mining coal issue?

2 A. C.W. Mining submitted a bid to provide high Btu coal to Aquila's Sibley and
3 Lake Road generating facilities. Aquila entered into a contract in September 2003 with C.W.
4 Mining to supply coal commencing in January 2004. Before the contract took effect, C.W.
5 Mining notified Aquila that it was having labor disputes. At no time during the contract did
6 C.W. Mining supply coal in the quality and quantity it agreed to provide Aquila. C.W.
7 Mining only provided about one-third the required coal tonnages in any given month.

8 C.W. Mining indicated to Aquila that it thought it would be able to fulfill the terms of
9 the contract. Aquila was forced to replace the contract amounts not being supplied by C.W.
10 Mining with much higher (twice the price) coal from spot market and a new contract. This
11 could not come at worse time for Aquila because the price for coal has been rising so there
12 were significantly greater costs to the Company.

13 C.W. Mining issued a letter to Aquila in late 2003 citing labor interruptions that
14 would not allow the mining company to fulfill the terms of the contract that was to start in
15 January 1, 2004. During various times in 2004, C.W. Mining notified Aquila, citing
16 Section 13 of the contract of a "force majeure" that its labor problems were continuing that
17 precluded the contracted supply of coal from being delivered. In spring 2005, C.W. Mining
18 notified Aquila that it was terminating the contract. In the termination notice, C.W. Mining
19 did allude to a willingness to supply coal to Aquila on re-negotiated terms. This would seem
20 difficult for a coal supplier who was unable to ever supply the contracted amounts and
21 quality of coal. This had the appearance of a coal supplier that did not like the price that it
22 negotiated and was attempting to negotiate better terms in an increasing energy market, with
23 rising coal prices. Unfortunately, the breached coal contract significantly impacted the 2004

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1 IEC mechanism causing a significant under-recovery to the Aquila's MPS and L&P
2 divisions.

3 Q. If C.W. Mining notified Aquila in December 2003 before the contract terms
4 even went into effect that it was having labor problems that did not permit the delivery of the
5 agreed upon quantity of coal, why did Aquila continue with the agreement?

6 A. **

7
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11
12 ** [Highly Confidential Data Request Nos. 289, 290 and 386 in Case No. ER-2005-0436].

13 For more detailed discussion on C.W. Mining problem, please refer to the direct
14 testimony of Staff witness Vesely.

15 Q. What is the approximate value to replace the coal that Aquila had to purchase
16 for the C.W. Mining coal supply problem?

17 A. The problem with the C.W. Mining cost Aquila at least \$6 million (Data
18 Request No. 358 in Case No. ER-2005-0436). However, in a meeting in the 2005 rate case,
19 Aquila indicated that the cost was much greater than this figure. This amount will be subject
20 to further review in this case. Regardless of the exact amount, this increased cost
21 significantly impacted the 2004 IEC mechanism and contributed to at least \$6 million of
22 under-recovery in the IEC amount.

1 Included in the coal supply issue are any additional amounts incurred for emission
2 allowances that had to be purchased when Aquila purchased high sulfur Illinois coal to
3 replace C.W. Mining coal. However, the resultant additional costs for the emission
4 allowances were not part of the 2004 IEC mechanism, so there was no impact on the under-
5 recovery calculation of the IEC amount. Any new IEC mechanism would likely consider
6 SO2 emission allowances which would result in an impact for the replacement coal for C.W.
7 Mining.

8 Q. What were the terms of the C.W. Mining coal agreement?

9 A. This contract is for a period of ** _____

10 _____
11 ** [Section 1 of contract provided in Data Request No. 86 in Case No.
12 ER-2005-0436].

13 Q. How have the additional costs for the replacement coal been treated in this
14 case?

15 A. Staff is proposing to treat the C.W. Mining coal issue as part of any future
16 IEC mechanism. Staff has used ** _____ **
17 of the original C.W. Mining contract to incorporate in the base of any IEC amount. Staff
18 proposes to include the replacement coal prices, which are approximately twice the amount
19 of the C.W. Mining price, in the forecast ceiling amount. This forecast amount would be
20 subject to refund if certain conditions are not met by Aquila. Among those conditions would
21 be a good faith showing that Aquila exhausted all its legal remedies to hold C.W. Mining
22 responsible for breaching the contract to supply coal to the Company's Sibley and Lake Road
23 generating facilities. Aquila would have to show that it made every effort to pursue full

1 restitution and reimbursement of the costs for the contracted coal supply for the two
2 generating units. These reimbursement costs would include:

- 3 1. the difference between the original C.W. Mining contract coal cost
4 and the replacement cost of coal for the new contract going forward
- 5 2. any additional freight costs incurred as a result of the breached
6 contract
- 7 3. additional emission costs relating to the breach of C.W. Mining,
8 primarily as a result of burning Illinois coal that contains much higher
9 sulfur, causing Aquila to have to purchase expensive emission
10 allowances
- 11 4. all legal, litigation and court costs relating to Aquila's exercising its
12 legal remedies for breach by C.W. Mining for terminating the coal
13 supply agreement.

14 Q. Are there any additional concerns that have occurred since the development of
15 the 2004 IEC mechanism in Case No. ER-2005-0436?

16 A. Yes. There is a difference concerning how the fuel and purchased power costs
17 of MPS and L&P are actually booked on each of the divisions' records. For the 2004 IEC
18 mechanism, Aquila produced two different views of the monthly monitoring report with two
19 significantly different results. While it is likely that these two methods would have
20 continued to be in conflict with one another had the 2004 IEC continued and may well have
21 resulted in an issue before the Commission, it is important to address this matter with the
22 parties in this current rate case, if an IEC mechanism is going to be developed to avoid any
23 repeat of the problems caused by these two very different approaches.

24 Q. What are the two different methods used by Aquila in calculating the monthly
25 IEC amounts for the 2004 IEC mechanism?

26 A. One method was based on the collection of revenues using the allocation
27 factors for MPS and L&P identified in the Stipulation in Case No. ER-2004-0034, and the

1 other method was based on how fuel and purchased power costs are actually charged on the
2 books of each operating divisions. The results are significantly different.

3 Any future use of the IEC mechanism will have to be clearer on how the true-up
4 process will identify costs between MPS and L&P.

5 Q. Would the issues discussed above dealing with the IEC mechanism go away if
6 a fuel clause mechanism were in use?

7 A. No. All the issues cited above would be just as much of a problem in a fuel
8 clause recovery mechanism as they have been in the IEC mechanism. While many advocate
9 a total pass-through recovery mechanism, all fuel clause mechanisms being considered
10 contain a provision for some type of true-up mechanism, as is required by the new law that
11 allows IEC and fuel clause mechanisms. The fuel clause true-up would include only those
12 prudently incurred costs for recovery. A pass-through type fuel clause would still have to
13 address the hedging issue; the C.W. Mining coal contract issue; the Sibley outage effects; the
14 booking of fuel and purchased power costs between MPS and L&P, which is caused from the
15 allocation of costs for these two operating divisions of Aquila.

16 **FUEL MECHANISM—SENATE BILL 179**

17 Q. Have there been changes recently on how the Commission can determine fuel
18 and purchased power costs in a rate case?

19 A. During the 2005 legislative session, the General Assembly passed a bill that
20 was signed into law on July 14, 2005, which allowed the Commission more flexibility for
21 determining fuel and purchased power costs in setting rates (Section 386.266 RSMo). The
22 fuel mechanism commonly became known as Senate Bill 179 (SB 179). This bill allows the

1 Commission to consider an interim energy charge or fuel clause mechanism that electric
2 utilities could use for cost recovery of fuel and purchased power costs.

3 Q. Is the Senate Bill 179 fuel mechanism currently in place?

4 A. The Commission's procedural rules are in place to implement Senate Bill 179.

5 Q. What is your understanding of the process being used to implement this bill?

6 A. The first part of the implementation process was a series of meetings among
7 stakeholders that will be affected by Senate Bill 179. In section 386.266.13 of the law, it is
8 stated that "the public service commission shall appoint a task force, consisting of all
9 interested parties, to study and make recommendations on the cost recovery and
10 implementation of conservation and weatherization programs for electric and gas
11 corporations."

12 On August 17, 2005, the first of several meetings regarding the Rulemaking
13 Roundtable meetings occurred among utility industry members, utility customer groups,
14 Department of Natural Resources, the Office of Public Counsel and Commission Staff.
15 Numerous meetings were held throughout the end of 2005. Draft rules were circulated
16 among the stakeholders were comments, but no consensus was reached on how to implement
17 this law. Since no agreement among the parties in this process could be reached, differing
18 proposals were put before the Commission for its decision in early 2006. Evidentiary
19 hearings were scheduled for January 9 through February 10, 2006.

20 The Commission issued its Order on the Rulemaking and has sent those to the
21 Secretary of State. Implementing rules have been published and are scheduled to go into
22 effect in early 2007.

23 Q. Did Senate Bill 179 contemplate a rulemaking procedure?

1 A. Yes. In section 386.266.9 of the law, it is stated that:

2 prior to the effective date of this section, the commission shall have
3 the authority to promulgate rules under the provisions of chapter 536,
4 RSMo, as it deems necessary, to govern the structure, content and
5 operation of such rate adjustments, and the procedure for the
6 submission, frequency, examination, hearing and approval of such rate
7 adjustments. Such rules shall be promulgated no later than one
8 hundred fifty days after the initiation of such rulemaking proceeding.
9 Any electric, gas, or water corporation may apply for any adjustment
10 mechanism under this section whether or not the commission has
11 promulgated any such rules.

12 Q. Does Senate Bill 179 require a rate case before an IEC or fuel clause
13 mechanism is put in place?

14 A. Yes. In section 386.266.4 of the law, it is stated that "the commission shall
15 have the power to approve, modify, or reject adjustment mechanisms submitted under
16 subsections 1 to 3 of this section only after providing the opportunity for a full hearing in a
17 general rate proceeding..."

18 **SOUTH HARPER GENERATING FACILITY**

19 Q. What is South Harper Generating facility?

20 A. South Harper Generating facility (South Harper) is Aquila's newest
21 generating facility. This generating station is comprised of three natural gas fired Siemens
22 Westinghouse (Siemens) 501D5A combustion turbines (Siemens turbines) each rated capable
23 of generating 105 megawatts of electricity for a total station capacity of 315 megawatts.

24 The generating facility is located in MPS' service territory South of Kansas City on
25 land close to the city of Peculiar, Missouri in Cass County. Construction started in late 2004,
26 continuing through out the first half of 2005, with construction substantially completed by
27 July 11, 2005, when the last turbine met system load requirements.

1 Q. Before building the South Harper facility, when was the last time MPS built
2 its own generation?

3 A. MPS participated in the Jeffrey Energy Center 1, 2 and 3, coal-fired
4 generating units, as a partner with Westar Energy. Jeffrey Unit 1 became operational in
5 1978, Unit 2 in 1980 and Unit 3 in 1983. South Harper represents the first generating facility
6 that Aquila has constructed since 1983.

7 Q. What value has Staff arrived at for the three Siemens turbines Aquila installed
8 at South Harper?

9 A. Staff has used an amount of \$66,760,000 for the three turbines and related
10 generator auxiliaries, transformers and generator breakers [page 3 of the September 1, 2005
11 Stipulation in Case EO-2005-0156].

12 Q. How did Staff arrive at that valuation?

13 A. The amount was determined in Case No. EO-2005-0156. In that Staff did an
14 extensive review of the values of these turbines as well as other turbines that Aquila was
15 attempting to sell to non-affiliated entities. Information obtained in this case formed the
16 basis for the amounts of the three Siemens turbines. A Stipulation was reached and presented
17 to the Commission on September 1, 2005 regarding the value that should be used for the
18 three combustion turbines and related equipment that have been installed at the South Harper
19 generating facility. The basis of the turbine values was the amount supported by Staff in
20 Case No. EO-2005-0156. The Commission has not approved the Stipulation as of the date of
21 this filing.

1 Q. If the Commission has not approved the Stipulation reached in Case No.
2 EO-2005-0156, then why has Staff used the amount from that agreement to value the
3 Siemens turbines at South Harper?

4 A. Even though the Commission has yet to approve the Stipulation reached in
5 Case No. EO-2005-0156, the amount agreed to by the Parties to the Stipulation of
6 \$66,760,000 was the amount recommended by Staff [page 3 of the September 1, 2005
7 Stipulation in Case EO-2005-0156]. Staff continues to believe that the value of the three
8 Siemens turbines and related equipment should be \$66,760,000. This was an amount at
9 which Aquila Merchant, who owned this equipment previously, had offered to sell the
10 turbines and related equipment to Kansas City Power & Light (KCPL). It is Staff's position
11 here, as it was in Case No. EO-2005-0156, that the value of the Siemens turbines should be
12 no greater than the price at which Aquila Merchant offered to sell them to KCPL, a non-
13 Aquila entity.

14 Q. Has did Aquila value the Siemens turbines in this case?

15 A. Aquila has reflected the Stipulated amount from Case No. EO-2005-0156 for
16 the three Siemens turbines. At the end of 2005, Aquila made an additional write-off to bring
17 the turbine values to the amount agreed to in Case No. EO-2005-0156. Aquila's books reflect
18 the South Harper turbines at the \$66,760,000 value.

19 Q. Were the three Siemens turbines originally purchased from the manufacturer
20 for the regulated MPS division?

21 A. No. These units were originally purchased from Siemens Westinghouse
22 Power Corporation in September 2001 by Aquila Merchant Services (Aquila Merchant), a
23 wholly owned non-regulated affiliate of MPS. These units were to be installed at the Aries

1 Generating Facility, located in Pleasant Hill, Missouri where the Aries Combined Cycle Unit
2 (Aries) was built. The three Siemens turbines were initially designated as Aries II and were
3 to be operated as a merchant plant. The land for the Aries site was previously owned by
4 MPS and is adjacent to MPS' existing substation where it has operated for many years.

5 The three Siemens turbines were initially planned to supply power to the MPS
6 division or to other entities through a purchase power agreement. Aquila Merchant
7 developed the Aries II project relying on successfully getting a purchased power agreement
8 with MPS.

9 Q. Did Aquila Merchant ever enter into a purchase power agreement with MPS
10 for the three Siemens turbines?

11 A. No. The plans to install the Siemens turbines at Aries were terminated in July
12 2002, a month before the first turbine was delivered to Aquila in Kansas City. Aquila
13 decided to cancel the Aries II project when the energy market, primarily the merchant energy
14 market, collapsed. During the summer of 2002 Aquila decided to exit the merchant trading
15 market and canceled plans on developing further merchant generating sites.

16 Q. Were the turbines ever delivered to the Aries site?

17 A. No. After the decision to not employ the turbines at the Aries facility Aquila
18 attempted to sell the turbines and related equipment to non-Aquila third party entities,
19 including Kansas City Power & Light (KCPL). When Aquila was unable to reach an
20 agreement to sell the Siemens turbines to KCPL, the units were placed in storage facilities at
21 two locations in the Kansas City area. The Siemens turbines and generators were stored at
22 MPS' Ralph Green generating facility, a regulated combustion turbine operated by MPS.

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1 The balance of the Siemens turbines, transformers and breakers were stored in two airplane
2 hangers at the old Richards-Gebaur Air Station in Kansas City.

3 Aquila started taking physical delivery of the turbines in August 2002 during
4 negotiations with KCPL. The last of the turbine equipment was delivered in late 2002. The
5 units remained in storage over two and half years while they awaited use.

6 Q. Where did Aquila plan to locate the Siemens turbines after it decided not to
7 install them at the Aries site?

8 A. In January 2004, Aquila decided to build the units at a Higginsville location
9 called Camp Branch in MPS' service area. When it appeared there would be community
10 opposition to this location, Aquila made the decision to move the project to a location outside
11 the city of Peculiar, Missouri sometime in the late summer 2004—the South Harper site.

12 Q. Has anyone opposed locating the combustion turbines at the South Harper
13 site?

14 A. Yes. A citizens-based group called StopAquila.Org and the County of Cass
15 filed a lawsuit seeking to stop construction of the South Harper facility. As part of its
16 response, Aquila sought from the Commission a certificate authorizing it to build the
17 generating units incorporating the turbines at the South Harper site or clarification of its
18 existing authority. The Commission opened Case No. EA-2005-0248 for that application.
19 The Commission determined that under its existing certificate, Aquila had specific authority
20 to build the South Harper facility:

21 The Commission recognizes, however, that Aquila is under order by
22 the Circuit Court of Cass County to obtain "specific authorization" for
23 construction of the South Harper Facility and the Peculiar Substation
24 pursuant to the language in Section 64.235, RSMo. Therefore, the
25 Commission finds under the broad authority for oversight of electric
26 utilities found in Chapters 386 and 393, RSMo, and pursuant to the

1 ruling by the Cass County Circuit Court under Section 64.235, RSMo,
2 that Aquila has specific authority under its existing certificates to
3 construct and operate the South Harper Facility and Peculiar
4 Substation, both of which are fully contained within Aquila's
5 certificated area.

6 IT IS THEREFORE ORDERED:

7 That the Commission confirms that the Commission has already
8 granted Aquila, Inc., under its existing certificates of convenience and
9 necessity, specific authorization to construct plant anywhere in its
10 service territory, specifically including, but not limited to, the specific
11 authorization to install, acquire, build, construct, own, operate, control,
12 manage and maintain an electric power generation station comprised
13 of three 105-MW, natural gas-fired combustion turbines and an
14 associated transmission substation, transformers and breakers together
15 with any and all other installations, facilities, structures, fixtures and
16 equipment related thereto for the production and transmission of
17 electric power and energy....

18 Another case was opened to address the South Harper facility in early 2006. This case was
19 designated as Case No. EA-2006-0309. The Commission authorized Aquila to construct the
20 South Harper facility and operate the three Siemens turbines after the facility was already
21 built. That decision is before the Missouri courts. The Circuit Court of Cass County has
22 already decreed that the Commission does not have authority to authorize construction and
23 operation of a generating facility when such authorization came after the facility was built
24 and a court had enjoined construction of the facility as unlawful.

25 Q. When were the turbines to start supplying capacity to MPS?

26 A. Aquila planned on having the units operational to serve MPS electric load by
27 the date its purchased power agreement from the Aries Combined Cycle Unit ended, May 31,
28 2005.

29 Q. Why did Aquila build the South Harper facility?

30 A. Aquila needs to replace capacity that was being supplied from the Aries unit
31 through a purchased power agreement that expired May 31, 2005.

1 Q. Who was supplying power under the purchased power agreement and how
2 much power was Aquila entitled to under the agreement?

3 A. MPS entered into a purchased power agreement (PPA) with Aquila Merchant,
4 a wholly-owned subsidiary of Aquila (then called UtiliCorp United, Inc.), on February 22,
5 1999. Aquila Merchant created a company known as Merchant Energy Partners Pleasant
6 Hill, LLC (MEPPH) to supply power to MPS. Aquila Merchant and subsequent operating
7 partner, Calpine Corporation (Calpine), completed construction of a 585-megawatt combined
8 cycle unit at Aries Pleasant Hill site with an in-service date of March 2002.

9 The partners identified that Aries was completed and ready to generate electricity as a
10 combined cycle unit by March 2002. Initially, under contract, the Aries PPA allowed for the
11 partners to supply power from other sources if Aries was not complete when the combined
12 cycle portion of the contract started in January 2002. Under the expired Aries capacity
13 contract, the combined cycle plant provided to MPS 200 megawatts during October through
14 March and 500 megawatts during April through September starting in 2002 through May 31,
15 2005. Prior to Aries being able to operate as a combined cycle unit (primarily awaiting the
16 completion of the heat recovery steam generator system) Aries provided 320 megawatts of
17 peaking capacity service to MPS during the summer of 2001 under the same capacity
18 contract.

19 **COURT CASES INVOLVING SOUTH HARPER**

20 Q. Is there current litigation relating to the South Harper Facility?

21 A. Yes. Cass County and a consumer group called STOPAQUILA.ORG both
22 filed in the Circuit Court of Cass County, Missouri lawsuits to stop construction of the South
23 Harper facility. The STOPAQUILA.ORG case was designated as Case No.CV104-1380CC

1 and consolidated with the Cass County case that was designated as Case No.
2 CV104-1443CC.

3 The Circuit Court found that Aquila did not obtain the proper zoning permits and said
4 it could not construct the turbines at the South Harper site. Aquila appealed to the Missouri
5 Court of Appeals in the Western District. This case was designated as WD64985. The
6 Western District Court issued its decision in December 2005 upholding the Circuit Court's
7 decision; however, it indicated Aquila could be exempt from Cass County's zoning if it
8 obtained authorization for the facility from the County or the Commission. In response,
9 Aquila sought a certificate of convenience and necessity and authorization to operate the
10 South Harper facility from the Commission, Case No. EA-2006-0309. The Commission
11 issued its Report and Order granting that relief; however, Cass County, StopAquila.org and
12 others sought and obtained a writ of review from the Cass County Circuit Court
13 (06CA-CV01698) which held the Commission could not grant the relief Aquila requested,
14 Case No. EA-2006-0309 Aquila and the Commission have appealed that judgment to the
15 Missouri Western District Court of Appeals where it is pending as Case No. WD 67739.

16 Q. Will all this litigation affect the South Harper facility?

17 A. These court cases may have a significant impact on the future of the South
18 Harper facility. It may be that Aquila will have to remove the turbine units and all related
19 equipment from the South Harper site. Obviously, there would be tremendous costs, in the
20 tens of millions of dollars, to disassemble and relocate these three turbines and related
21 equipment. This would have an adverse affect on Aquila's already troubled financial
22 condition and could have an impact on Aquila's customers concerning adequate and
23 economic generation of electricity.

1 Staff continues to monitor the progress of this court case and awaits the outcome of
2 the decisions.

3 Q. What impact do these court cases have on Aquila's current rate case?

4 A. Until a final decision is made by the courts no impact can be ascertained. The
5 Staff is relying on costs Aquila incurred in constructing the South Harper facility and the
6 three 105 megawatt combustion turbines as part of the basis for the cost of the 525 megawatt
7 of combustion turbine generating capacity Aquila should have built as the MPS facility to
8 replace the capacity Aquila lost with the end of the Aries capacity PPA. Therefore, what the
9 Staff has included in rate base for this 525 MW of capacity will not change due to the
10 outcome of the review by the courts of the Commission's Report and Order in Case No.
11 EA-2006-0309. Staff witness Lena M. Mantle addresses Aquila's capacity need in her direct
12 testimony.

13 **SOUTH HARPER IN-SERVICE DATE**

14 Q. Has Staff determined if South Harper is in service?

15 A. Yes and no. While Staff witness Leon Bender has determined that South
16 Harper combustion turbines have performed all the tests to demonstrate that the units meet
17 the in-service criteria the Staff has established, because of the pending litigation that could
18 result in removal of the South Harper facility, the Staff does not conclude that the units
19 satisfy the statutory used and useful standard.

20 Q. When did Aquila declare the South Harper generating units in-service?

21 A. The South Harper facility went into service generating electricity and Aquila
22 accepted provisional acceptance of the three combustion turbines on the following schedule:

1 South Harper Unit 1 July 12, 2005

2 South Harper Unit 2 July 1, 2005

3 South Harper Unit 3 June 30, 2005

4 South Harper Unit 3 started being dispatched and meeting system load requirements
5 June 30, 2005; Unit 2 begin meeting system load requirements on July 1, 2005 and Unit 1
6 began its commercial operation on July 12, 2005 [Data Request 367 in Case No.
7 ER-2005-0436]. The South Harper facility became capable of meeting Aquila's customers'
8 load requirements on the dates identified above.

9 Q. Is there agreement on the when the three Siemens turbines started commercial
10 operation?

11 A. Yes. In the Stipulation and Agreement reached in Case No. ER-2005-0436,
12 Aquila agreed that the above dates for each generating unit would be used as their
13 commercial operations date. In section 13 of the Stipulation the following appears regarding
14 the South Harper commercial date:

15 The South Harper Generating Station commercial operation dates are
16 as follows: Unit 1 - July 12, 2005; Unit 2 - July 1, 2005 and Unit 3 -
17 June 30, 2005. For purposes of this case and future Aquila rate cases,
18 test power, depreciation and allowance for funds used during
19 construction will be calculated based on the commercial operation
20 dates for South Harper Units 1, 2 and 3.

21 Q. Does meeting Staff's in-service criteria mean that the unit is capable of being
22 placed in rate base?

23 A. While the generating units must meet the in-service criteria to be considered
24 to meet the "fully operational" test as to if the unit is actually needed and is capable of
25 providing electricity to its customers, for rate base determination, the in-service criteria do
26 not determine when the generating units should be declared commercially in-service for

1 meeting system load requirements. Meeting the in-service criteria from a testing
2 perspective does not determine when the generating units should be placed in plant in
3 service, the start of depreciation and the discontinuance of allowance for funds used during
4 construction (AFDC).

5 Q. When should power plants be declared in-service?

6 A. From the perspective of when the construction phase is over and the units are
7 transferred to plant in service that takes place when the units are available to meet system
8 load requirements. When construction on the units is complete, they will be declared
9 commercially in-service and their use will be transferred from control of the construction
10 site management to the control of the dispatchers operating Aquila's electrical system.
11 Once the units are deemed ready to be dispatched to meet system load requirements, the
12 units are declared commercial and they are considered in-service. At that time, the units
13 should be placed in plant-in-service.

14 Q. What is the significance of placing an asset in plant-in-service?

15 A. Once an asset is transferred from construction work in progress to plant-in-
16 service, the AFDC stops and the asset starts being depreciated.

17 Q. When should Aquila place the South Harper turbines in plant-in-service?

18 A. Assuming successful completion of the legal issues, the South Harper Unit 1
19 should be placed in plant-in-service July 12, 2005; Unit 2 should be placed in plant-in-
20 service July 1, and Unit 3 should be placed plant-in-service as of June 30, 2005.

21 **SOUTH HARPER CONSTRUCTION AUDIT**

22 Q. Did Staff perform a construction audit of South Harper construction costs?

1 A. Yes. Several Staff members were involved in reviewing the construction
2 costs of the South Harper turbines. Staff witnesses Leon Bender, Phillip Williams and I were
3 primarily responsible for participating in the review of costs to install the turbines at South
4 Harper.

5 Q. What is a construction audit?

6 A. A construction audit is typically conducted just prior to and during the course
7 of a rate increase application filed by the utility, where costs relating to the construction
8 project are being requested for rate recovery. The construction audit is designed to examine
9 the expenditures of large capital additions, generally relating to power plants.

10 Staff has examined costs of power plants numerous times, most notably when Kansas
11 City Power & Light (KCPL) and AmerenUE (Union Electric) built the Wolf Creek and
12 Callaway nuclear generating facilities in the mid-1980s. Staff performed construction audits
13 for KCPL's LaCygne 2 and Iatan 1 coal-fired generating stations. Staff has also examined
14 costs relating to combustion turbines installed by The Empire District Electric Company
15 (Empire) at its State Line 1 and 2 facilities. When State Line 2 was converted to a combined
16 cycle unit in 2001, Staff conducted a construction audit for those expenditures. More
17 recently, in Empire's last rate case, Case No. ER-2004-0570, Staff examined costs relating to
18 Energy Center 3 and 4, which are simple-cycle combustion turbines.

19 All of the construction audits have been conducted in the context of rate increase
20 cases initiated by the utilities.

21 Q. What electric generation facility costs are appropriate to consider for
22 determining the final costs to be used for rate recovery purposes?

1 A. All of the costs to design and construct the facility should be considered in
2 total to make a final determination of the actual cost to install combustion turbines. The
3 significant costs of a combustion turbine electric generating facility are the combustion
4 turbines, with other costs including installation costs.

5 In addition to the installation costs for the combustion turbines, consideration must be
6 given to transmission facilities, and any upgrades to the substation and transmission network
7 must be analyzed.

8 Q. Has Staff proposed adjustments to the South Harper construction costs to
9 arrive at the amounts it used as part of its cost basis for the five 105 megawatt combustion
10 turbine generation facility—the MPS facility—it imputed to MPS in this case?

11 A. Yes. Staff witness Williams has identified several adjustments Staff believes
12 should be made to the final costs to construct the South Harper facility. The Staff's approach
13 to these adjustments was to place the South Harper turbines and related equipment costs and
14 the construction costs on the same basis as if MPS would have purchased and constructed
15 these facilities without any impacts from the non-regulated affiliate involvement, and without
16 consideration of any litigation regarding the legality of Aquila building on the site. If MPS
17 would have purchased the turbines, it would not have started negotiating with the turbine
18 equipment manufacturer in fall of 1999, contracted with Siemens in September 2001, taken
19 delivery in fall 2002 for in-service date of June 1, 2005, the time of the expiration of the
20 Aries PPA. Staff has attempted to remove all costs that relate in any way to the problems
21 these turbines have had because they were originally purchased as non-regulated merchant
22 plant assets.

1 Q. What are the adjustments that Staff believes should be made to the final
2 construction costs of South Harper for including them as part of the cost basis for the 525
3 megawatt MPS facility?

4 A. First, South Harper's combustion turbines and related equipment should be re-
5 valued to \$66,760,000 as discussed earlier in my testimony.

6 Second, all storage costs should be removed from the construction costs.

7 Third, consultant costs should be removed from the construction costs.

8 Fourth, legal costs should be removed from the South Harper cost.

9 Q. Why were storage costs removed?

10 A. These costs relate to the purchase of the turbines by Aquila Merchant when
11 the units were going to be used as Aries II. The storage costs relate to the delivery of the
12 equipment in fall of 2002. MPS did need the capacity associated with South Harper until the
13 completion of the Aries PPA in May 31, 2005. The units were not actually delivered to the
14 South Harper site until March 2005. Thus, the turbines were stored in excess of two-and-
15 one-half years. If MPS were planning to meet an in-service date of May 31, 2005, the units
16 would not have had to be purchased in September 2001, when turbine costs were being
17 purchased in a brutal sellers market. MPS could have planned for when the units were
18 needed at the site for installation and scheduled delivery dates accordingly.

19 Staff adjusted all costs for storage of these units that were solely as result of the
20 turbines being transferred from one of Aquila's non-regulated subsidiaries.

21 Q. Why were the consultant fees removed?

22 A. Aquila hired a consultant to perform an appraisal to value the three turbines to
23 transfer the units from one of the Company's non regulated subsidiaries. The only reason

1 that the appraisal had to be done was because of this transfer. If MPS would have purchased
2 the turbine equipment like any other public utility, (acquiring the South Harper equipment on
3 its own) there would have been no need for the appraisal. These costs should not be included
4 in the final construction costs of the facility.

5 All costs associated with the transfer of this equipment from the non-regulated should
6 not be charged to the construction costs. Staff has attempted to remove all costs impacts
7 related to the transfer of the units by the non-regulated affiliate to put the installation costs on
8 the same basis as though MPS had acquired the units themselves on a stand-alone basis.

9 Q. Why were the legal costs removed from the construction costs?

10 A. Staff also removed all legal and consultant costs for South Harper that were
11 incurred in the Cass County Court cases. These costs were for defense of the Court decision
12 where Aquila did not meet the County's building zoning permits. The legal costs that need
13 to be removed are those for litigation costs for the court cases in Cass County and Western
14 District court. Aquila made a decision to not seek zoning permitting and construction
15 permits. That decision has had a devastating effect on the South Harper project and may
16 result in the requirement that the facility be dismantled and moved. Clearly, this was a
17 conscious decision on Aquila's part and its customers should not bear any responsibility for
18 reimbursement of those costs that resulted from deliberate actions. Staff proposes that those
19 costs relating to the legal costs in defense of the South Harper facility in the courts should not
20 be permitted in the construction costs.

21 Q. Were there other legal costs that Staff believes need to be removed from
22 South Harper's construction costs?

1 A. Aquila has also charged legal costs for two cases filed with the Commission.
2 Other legal costs were removed for two cases before the Commission – Case Nos.
3 EA-2005-0248 and EO-2005-0156. Case No. EA-2005-0248 directly related to a case begun
4 before the Cass County Court where the Court held Aquila needed site specific authorization
5 from the Commission or Cass County approval to build a generating facility in Cass County.
6 In Case No. EA-2005-0248 Aquila sought such construction authorization for site specific
7 approval from the Commission.

8 Case No. EO-2005-0156 was an application both for authority to engage in a
9 Chapter 100 financing arrangement with the City of Peculiar and for the valuation of the
10 three combustion turbines and ancillary equipment. That valuation would not have been
11 necessary if MPS had acquired the turbines from outside entities instead of a non-regulated
12 affiliate. If this equipment had been purchased from a turbine manufacturer directly instead
13 of MPS receiving the assets from a non-regulated affiliated it would not have need to file an
14 application with the Commission seeking authority to value the turbines.

15 Staff also removed the consultant fees for an R.W. Beck appraisal conducted to assist
16 Aquila in determining the value of the transferred equipment. This appraisal would not have
17 been necessary if the equipment had not have been transferred from a non-regulated affiliate.

18 Q. Does Staff believe that all consultant and legal costs associated with the
19 construction of South Harper should be disallowed?

20 A. No. Clearly, there are some consultant and legal costs needed to construct the
21 South Harper facility. There needs to be a breakdown of these costs to determine those that
22 relate to the appraisal of the turbines and those legal costs that relate to the Court cases and
23 cases before the Commission. Staff submitted data requests for these breakdowns in

1 consultant and legal costs and reviewed billing invoices to determine if costs should be
2 included in South Harper's construction costs.

3 As an example, Staff believes the costs to file application before the Commission for
4 Chapter 100 financing is necessary and required under Commission rules. There is a clear
5 benefit to having the Chapter 100 financing, so those costs that relate to that part of Aquila's
6 application in Case No. EO-2005-0156 should be identified and included in South Harper
7 construction costs.

8 There are also legal costs and consultant costs that should be included in South
9 Harper's construction. Costs for surveying, negotiating vendor and equipment contracts,
10 engineering services necessary to the installation of South Harper construction should be
11 identified and included in the final construction costs.

12 Q. Did Aquila make these adjustments to the construction costs for South
13 Harper?

14 A. Yes. Aquila reflected the adjustments made in Case No. ER-2005-0436 in its
15 South Harper books. Using September 30, 2006 costs reflect these adjustments. However,
16 the adjustments made in the last case only went through October 31, 2005. Staff has
17 examined costs that Aquila has incurred since October 31, 2005, and has made additional
18 adjustments on same basis as those made in the last rate case. Staff witness Williams has
19 made these adjustments and discusses them in his direct testimony.

20 Q. Did the Staff make any other adjustments to Aquila's plant-in-service
21 accounts?

22 A. Yes. An adjustment was made regarding the storage of the Siemens turbines.
23 Aquila constructed six concrete foundations to specifically place the three turbines and three

1 generators during the two and half years of storage. Aquila purchased six tent houses that
2 fully enclosed each of this equipment. Aquila has not removed the costs of the concrete
3 foundations and tent houses. These costs are charged to Aquila's Ralph Green Generating
4 Facility, where the turbines were stored.

5 **DEMAND-SIDE RESOURCE COSTS**

6 Q. Please describe the demand-side resource costs.

7 A. This item represents deferred costs relating to demand-side resource costs.
8 The costs included in this category of costs expended as of September 30, 2006 for these
9 programs. The deferred costs are identified in the FERC Account 930.2 for MPS and
10 Account 923 for L&P. These costs are being amortized over a ten year period of time.

11 Q. What is the period these costs are being proposed to be amortized?

12 A. Staff is proposing that the actual prudently incurred and reasonable amounts
13 for demand-side resource costs be accumulated in a regulatory asset account and amortized
14 over a ten year period of time. These costs should also be allowed by the Commission to
15 earn a return not greater than Aquila's Allowance for Funds Used During Construction
16 (AFUDC) rate. Staff witness Lena Mantle, Manager of the Commission's Energy
17 Department addresses the need for this treatment in her direct testimony.

18 The 10-year amortization period for these costs is consistent with the way these same
19 types of costs are being amortized at other utility companies. MPS Adjustment S 89.5 and
20 L&P Adjustment S 81.4 the 10-year amortization of the annualized level for demand-side
21 resource costs. Ms. Mantle addresses what demand-side resource costs are in her direct
22 testimony and provides the level of actual expenditures incurred by both Aquila's Missouri
23 electric divisions.

Direct Testimony of
Cary G. Featherstone

1 Ms. Mantle attends the meetings and is in direct contact with Aquila personnel who
2 are responsible for the development and implementation of the demand-side resource costs.
3 Ms. Mantle received information regarding actual costs expended on these programs through
4 the test year. I used the amount provided by Ms. Mantle for the test year for the amortization
5 amount used in Staff's revenue requirement. This amount will be updated through
6 December 30, 2006.

7 Q. Does conclude your direct testimony?

8 A. Yes, it does.

CARY G. FEATHERSTONE

SUMMARY OF RATE CASE INVOLVEMENT

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case</u>
1980	Case No. ER-80-53	St. Joseph Light & Power Company (electric)	Direct	Stipulated
1980	Case No. OR-80-54	St. Joseph Light & Power Company (transit)	Direct	Stipulated
1980	Case No. HR-80-55	St. Joseph Light & Power Company (industrial steam)	Direct	Stipulated
1980	Case No. GR-80-173	The Gas Service Company (natural gas)	Direct	Stipulated
1980	Case No. GR-80-249	Rich Hill-Hume Gas Company (natural gas)	No Testimony filed	Stipulated
1980	Case No. TR-80-235	United Telephone Company of Missouri (telephone)	Direct Rebuttal	Contested
1981	Case No. ER-81-42	Kansas City Power & Light Company (electric)	Direct Rebuttal	Contested
1981	Case No. TR-81-208	Southwestern Bell Telephone Company (telephone)	Direct Rebuttal Surrebuttal	Contested
1981	Case No. TR-81-302	United Telephone Company of Missouri (telephone)	Direct	Stipulated
1981	Case No. TO-82-3	Investigation of Equal Life Group and Remaining Life Depreciation Rates (telephone-- depreciation case)	Direct	Contested
1982	Case Nos. ER-82-66 and HR-82-67	Kansas City Power & Light Company (electric & district steam heating)	Direct Rebuttal Surrebuttal	Contested

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case</u>
1982	Case No. TR-82-199	Southwestern Bell Telephone Company (telephone)	Direct	Contested
1983	Case No. EO-83-9	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric-- forecasted fuel true-up)	Direct	Contested
1983	Case No. ER-83-49	Kansas City Power & Light Company (electric)	Direct Rebuttal Surrebuttal	Contested
1983	Case No. TR-83-253	Southwestern Bell Telephone Company (telephone)	Direct	Contested
1984	Case No. EO-84-4	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric-- forecasted fuel true-up)	Direct	Contested
1985	Case Nos. ER-85-128 and EO-85-185	Kansas City Power & Light Company (electric)	Direct	Contested
1987	Case No. HO-86-139	Kansas City Power & Light Company (district steam heating-- discontinuance of public utility)	Direct Rebuttal Surrebuttal	Contested
1988	Case No. TC-89-14	Southwestern Bell Telephone Company (telephone-- complaint case)	Direct Surrebuttal	Contested
1989	Case No. TR-89-182	GTE North, Incorporated (telephone)	Direct Rebuttal Surrebuttal	Contested

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case</u>
1990	Case No. GR-90-50	Kansas Power & Light - Gas Service Division (natural gas)	Direct	Stipulated
1990	Case No. ER-90-101	UtiliCorp United Inc., Missouri Public Service Division (electric)	Direct Surrebuttal	Contested
1990	Case No. GR-90-198	UtiliCorp United, Inc., Missouri Public Service Division (natural gas)	Direct	Stipulated
1990	Case No. GR-90-152	Associated Natural Gas Company (natural gas)	Rebuttal	Stipulated
1991	Case No. EM-91-213	Kansas Power & Light - Gas Service Division (natural gas-- acquisition/merger case)	Rebuttal	Contested
1991	Case Nos. EO-91-358 and EO-91-360	UtiliCorp United Inc., Missouri Public Service Division (electric-- accounting authority orders)	Rebuttal	Contested
1991	Case No. GO-91-359	UtiliCorp United Inc., Missouri Public Service Division (natural gas)	Memorandum Recommendation	Stipulated
1993	Case Nos. TC-93-224 and TO-93-192	Southwestern Bell Telephone Company (telephone-- complaint case)	Direct Rebuttal Surrebuttal	Contested
1993	Case No. TR-93-181	United Telephone Company of Missouri (telephone)	Direct Surrebuttal	Contested
1993	Case No. GM-94-40	Western Resources, Inc. and Southern Union Company (natural gas-- sale of Missouri property)	Rebuttal	Stipulated
1994	Case No. GM-94-252	UtiliCorp United Inc., acquisition of Missouri Gas Company and Missouri Pipeline Company (natural gas--acquisition case)	Rebuttal	Contested

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case</u>
1994	Case No. GA-94-325	UtiliCorp United Inc., expansion of natural gas to City of Rolla, MO (natural gas-- certificate case)	Rebuttal	Contested
1995	Case No. GR-95-160	United Cities Gas Company (natural gas)	Direct	Contested
1995	Case No. ER-95-279	Empire District Electric Company (electric)	Direct	Stipulated
1996	Case No. GA-96-130	UtiliCorp United, Inc./Missouri Pipeline Company (natural gas-- certificate case)	Rebuttal	Contested
1996	Case No. EM-96-149	Union Electric Company merger with CIPSCO Incorporated (electric and natural gas-- acquisition/merger case)	Rebuttal	Stipulated -
1996	Case No. GR-96-285	Missouri Gas Energy Division of Southern Union Company (natural gas)	Direct Rebuttal Surrebuttal	Contested
1996	Case No. ER-97-82	Empire District Electric Company (electric-- interim rate case)	Rebuttal	Contested
1997	Case No. GA-97-132	UtiliCorp United Inc./Missouri Public Service Company (natural gas—certificate case)	Rebuttal	Contested
1997	Case No. GA-97-133	Missouri Gas Company (natural gas—certificate case)	Rebuttal	Contested
1997	Case Nos. EC-97-362 and EO-97-144	UtiliCorp United Inc./Missouri Public Service (electric complaint case)	Direct Verified Statement	Contested Commission Denied Motion
1997	Case Nos. ER-97-394 and EC-98-126	UtiliCorp United Inc./Missouri Public Service (electric)	Direct Rebuttal Surrebuttal	Contested
1997	Case No. EM-97-395	UtiliCorp United Inc./Missouri Public Service (electric application to spin-off generating assets to EWG subsidiary)	Rebuttal	Withdrawn

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case</u>
1998	Case No. GR-98-140	Missouri Gas Energy Division of Southern Union Company (natural gas)	Testimony in Support of Stipulation And Agreement	Contested
1999	Case No. EM-97-515	Kansas City Power & Light Company merger with Western Resources, Inc. (electric acquisition/ merger case)	Rebuttal	Stipulated (Merger eventually terminated)
2000	Case No. EM-2000-292	UtiliCorp United Inc. merger with St. Joseph Light & Power Company (electric, natural gas and industrial steam acquisition/ merger case)	Rebuttal	Contested (Merger closed)
2000	Case No. EM-2000-369	UtiliCorp United Inc. merger with Empire District Electric Company (electric acquisition/ merger case)	Rebuttal	Contested (Merger eventually terminated)
2001	Case No. ER-2001-299	Empire District Electric Company (electric)	Direct Surrebuttal True-Up Direct	Contested
2001	Case Nos. ER-2001-672 and EC-2002-265	UtiliCorp United Inc./Missouri Public Service Company (electric)	Verified Statement Direct Rebuttal Surrebuttal	Stipulated
2002	Case No. ER-2002-424	Empire District Electric Company (electric)	Direct Surrebuttal	Stipulated
2003	Case Nos. ER-2004-0034 and HR-2004-0024 (Consolidated)	Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P (electric & industrial steam)	Direct Rebuttal Surrebuttal	Stipulated

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case</u>
2004	Case No. GR-2004-0072	Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P (natural gas)	Direct Rebuttal	Stipulated
2005	Case No. EO-2005-0156	Aquila, Inc., d/b/a Aquila Networks- MPS (electric)	Rebuttal Surrebuttal	Stipulation pending
2005	Case No. ER-2005- 0436	Aquila, Inc., d/b/a Aquila Networks- MPS (electric)	Direct Rebuttal Surrebuttal	Stipulated
2006	Case No. ER-2006- 0314	Kansas City Power & Light Company	Direct Rebuttal Surrebuttal	Contested
2006	Case No. WR-2006- 0425	Algonquin Water Resources	Rebuttal Surrebuttal	Contested

AUDITS WHICH WERE SUPERVISED AND ASSISTED:

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Case Disposition</u>
1986	Case No. TR-86-14 (telephone)	ALLTEL Missouri, Inc.		Stipulated
1986	Case No. TR-86-55 (telephone)	Continental Telephone Company of Missouri		Stipulated
1986	Case No. TR-86-63 (telephone)	Webster County Telephone Company		Stipulated
1986	Case No. GR-86-76 (natural gas)	KPL-Gas Service Company		Withdrawn
1986	Case No. TR-86-117 (telephone)	United Telephone Company of Missouri		Withdrawn
1988	Case No. GR-88-115 (natural gas)	St. Joseph Light & Power Company	Deposition	Stipulated
1988	Case No. GR-88-116 (industrial steam)	St. Joseph Light & Power Company	Deposition	Stipulated
2004	Case No. HM-2004- 0618 (industrial steam)	Trigen- Kansas City Energy purchase by Thermal North America		Stipulated
2005	Case No. GM-2005- 0136 (natural gas)	Partnership interest of DTE Enterprises, Inc. and DTE Ozark, Inc in Southern Gas Company purchase by Sendero SMGC LP	Recommendation Memo	Stipulated
2006	Case No. WR-2006- 0250	Hickory Hills Water & Sewer		Contested
2006	Case No. HA-2006- 0294	Trigen Kansas City Energy		Contested