FILED
November 13, 2025
Data Center
Missouri Public
Service Commission

Exhibit No. 505

MECG – Exhibit 505 Testimony of Greg Meyer Direct File No. ER-2024-0189

Exhibit No.:

Issues: Crossroads
Witness: Greg R. Meyer
Type of Exhibit: Direct Testimony

Type of Exhibit: Direct Testimony
Sponsoring Party: Midwest Energy Consumers Group

Case No.: ER-2024-0189

Date Testimony Prepared: September 15, 2025

# BEFORE THE PUBLIC SERVICE COMMISSION FOR THE STATE OF MISSOURI

IN THE MATTER OF EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST'S REQUEST FOR AUTHORITY TO IMPLEMENT A GENERAL RATE INCREASE FOR ELECTRIC SERVICE

**CASE NO. ER-2024-0189** 

Direct Testimony and Schedules of

Greg R. Meyer

On behalf of

**Midwest Energy Consumers Group** 

**PUBLIC VERSION** 

September 15, 2025



Project 11912

# BEFORE THE PUBLIC SERVICE COMMISSION FOR THE STATE OF MISSOURI

IN THE MATTER OF EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST'S REQUEST FOR AUTHORITY TO IMPLEMENT A GENERAL RATE INCREASE FOR ELECTRIC SERVICE	) ) ) ) CASE NO. ER-2024-0189 ) )
ATE OF MISSOURI	,

STATE OF MISSOURI ) SS COUNTY OF ST. LOUIS )

# Affidavit of Greg R. Meyer

Greg R. Meyer, being first duly sworn, on his oath states:

- 1. My name is Greg R. Meyer. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Midwest Energy Consumers Group in this proceeding on their behalf.
- 2. Attached hereto and made a part hereof for all purposes is my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2024-0189.
- 3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

Greg R. Meyer

Subscribed and sworn to before me this 15th day of September, 2025.

TAMMY S. KLOSSNER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Charles County
My Commission Expires: Mar. 18, 2027
Commission # 15024862

Notary Public

# BEFORE THE PUBLIC SERVICE COMMISSION FOR THE STATE OF MISSOURI

IN THE MATTER OF EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST'S REQUEST FOR AUTHORITY TO IMPLEMENT A GENERAL RATE INCREASE FOR ELECTRIC SERVICE

CASE NO. ER-2024-0189

# **Direct Testimony of Greg R. Meyer**

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.					
2	Α	Greg R. Meyer. My business address is 16690 Swingley Ridge Road, Suite 140,					
3		Chesterfield, MO 63017.					
4	Q	WHAT IS YOUR OCCUPATION?					
5	Α	I am a consultant in the field of public utility regulation and a Senior Principal with the					
6		firm of Brubaker & Associates, Inc., energy, economic and regulatory consultants.					
7	Q	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.					
8	Α	This information is included in Appendix A to my testimony.					
9	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?					
10	Α	I am appearing on behalf of Midwest Energy Consumers Group ("MECG").					
11	Q	DID YOU PARTICIPATE IN THE LAST EVERGY MISSOURI WEST ("EMW") RATE					
12		CASE, CASE NO. ER-2024-0189?					
13	Α	Yes, I did. I submitted Direct and Surrebuttal Testimonies in that rate case					
14		representing MECG.					

1 Q WERE MANY ASPECTS OF THAT CASE SETTLED VIA A STIPL	J	) WERE MANY ASPECTS (	JE IHAI	CASE S	SELLED	VIA A	STIPULATION	I ANL
--	---	-----------------------	---------	--------	--------	-------	-------------	-------

- 2 AGREEMENT ("S&A")?
- 3 A Yes, many aspects of that case were settled via a S&A.

#### 4 Q DID THE S&A CONTAIN ANY PROVISIONS ADDRESSING THE CROSSROADS

- 5 **ENERGY CENTER ("CROSSROADS")?**
- 6 A Yes. I have included the relevant part of the S&A from Case No. ER-2024-0189 that
- 7 addresses Crossroads.
  - a. For purposes of this rate case, the Signatories agree to an extension of Issue 5.C. from the Commission's List of Issues regarding the renewal of the firm point-to-point transmission service agreement between EMW and Entergy Corp. that will permit a Demobilization Study ("Study") related to the Crossroads Energy Center ("Crossroads" or "plant") to be performed by a qualified independent engineering firm (e.g., Burns & McDonnell or Black & Veatch) to evaluate the cost, procedures, and schedule of relocating Crossroads to a site in the Southwest Power Pool ("SPP") footprint.
    - b. Staff and OPC will be directly involved in the Request for Proposal ("RFP") process to determine the scope of the Study such that the results of the RFP an impartial analysis from the can be viewed as prospective bidders/evaluators who respond to the RFP which covers the issues and information that Staff, OPC, and Company require to be studied. The Study of sites in SPP will include consideration of the sites being presently considered by Evergy for future capacity additions fueled by natural gas in SPP. The Study will also evaluate estimated costs based on the scope of work described within the RFP.
- c. The Signatories agree to the following timeline for the Study:

272829

30

8

9

10

11 12

13 14

15

16

17

18

19

20

21

22

23

24

- July 15, 2025: Study to be completed. If the Study is completed before this date, all subsequent deadlines will be moved relative to the completion date of the Study.
- August 15, 2025 (30 days): Negotiation deadline for settlement.
- September 15, 2025 (60 days): Direct testimony (filed by all Signatories if no settlement)
- October 15, 2025 (90 days): Rebuttal testimony (filed by all Signatories)
- November 3-7, 2025 (105 days): Evidentiary hearing.

December 31, 2025 (160 days): Recommended decision date by the
 Commission

3

4

5

6

7

8

9 10

11

12

13

14

15 16

17

18

19

20

21

22 23

24

25

26

27

28

29

30

- d. Discovery with a 20 calendar-day response time related to the Crossroads studies is available during the pendency of this docket.
- e. Once the Study is received by the Company, it will provide copies of the Study to all Signatories. The Signatories will promptly meet to determine if a workable solution regarding Issue 5.C. and any other issues related to the relocation or sale of Crossroads can be reached with a Stipulation and Agreement ("Stipulation"). Such a Stipulation will be filed with the Commission by August 15, 2025.
- f. If a Stipulation cannot be reached, Issue 5.C. and any other issues related to the relocation or sale of Crossroads will be heard at a separate hearing in this docket no later than November 3, 2025. The hearing will be completed by November 7, 2025. The Signatories request that the Commission issue its decision by December 31, 2025. At the time of such hearing the Signatories will not be limited in presenting their arguments on the Crossroads issues.
- g. If the Signatories agree by Stipulation that Crossroads should be moved, such agreement shall contain a provision that it is decisionally prudent for EMW to procure replacement capacity, as necessary to meet EMW's SPP capacity requirements and energy demand requirements while Crossroads is offline. While the procurement of additional capacity shall be agreed to by the Signatories, the cost of such capacity and energy would still be subject to a subsequent prudence review.
- h. The cost of Study shall be recovered from customers with a cap of \$500,000.
  - i. Signatories agree that EMW will perform a market valuation study to evaluate the indicative value of the Crossroads assets. The market valuation study would include both indicative third-party asset sale bids as well as indicative MISO capacity sale valuation. Market valuation study to be completed by December 1, 2024.<sup>1</sup>

#### Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

31 A My direct testimony will discuss the different options regarding the future operations of Crossroads.

<sup>&</sup>lt;sup>1</sup>Unanimous Stipulation and Agreement, Case No. ER-2024-0189, *In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement A General Rate Increase for Electric Service*, Filed October 2, 2024, paragraph 5, pages 2-4.

# 1 Q WHY IS IT NECESSARY TO DISCUSS THE FUTURE OPERATIONS OF

#### 2 CROSSROADS?

- 3 A Currently, generation from Crossroads is delivered to EMW via a firm point-to-point
- 4 transmission contract. This firm point-to-point transmission contract is set to expire in
- 5 2029. Thus, it is necessary to determine the future operations of Crossroads to
- 6 determine if the transmission contract should be subject to future contract extension.

# 7 Q HAVE YOU PREVIOUSLY TESTIFIED ON THE CROSSROADS OPERATIONS?

- 8 A Yes. I previously filed testimony on matters involving Crossroads in the following
- 9 cases:
- 10 > Case No. ER-2010-0356
- 11 > Case No. ER-2012-0175
- 12 > Case No. ER-2018-0146
- 13 > Case No. ER-2022-0130
- 14 > Case No. ER-2024-0189

### 15 Q PLEASE DESCRIBE CROSSROADS.

- 16 A Crossroads is a generating station located in Clarksdale, Mississippi, over 500 miles
- 17 away from the EMW service territory. Crossroads is a peaking unit consisting of four
- 18 (75 MW) combustion turbines. Crossroads is located in the Midcontinent
- 19 Independent System Operator ("MISO") footprint while the EMW service territory is
- 20 located in the SPP footprint. Thus, the Crossroads generating unit is located in a
- 21 completely different RTO than the EMW service territory. To transport energy from
- 22 MISO to SPP, EMW needs to secure a firm transmission path to assure the delivery
- of energy. Thus, the need for firm point-to-point transmission service from MISO to
- the SPP footprint.

1	Q	HAS THE RECOVERY OF TRANSMISSION EXPENSES BEEN AN ISSUE IN					
2		PRIOR EMW RATE CASES?					
3	Α	Yes, it has been a recurring issue in many of EMW's past rate cases including Case					
4		No. ER-2024-0189.					
5	Q	HAS THE COMMISSION PREVIOUSLY RULED ON RECOVERY OF					
6		TRANSMISSION EXPENSE FOR CROSSROADS?					
7	Α	Yes, several times. I will provide a chronological order of the Commission decisions					
8		on this issue.					
9		> Case No. ER-2010-0356. This is the first rate case EMW [known at the time as					
10		Kansas City Power & Light Greater Missouri Operations ("GMO")] sought to					
11		include transmission expense recovery for Crossroads. In Case No.					
12		ER-2010-0356, the Commission addressed both the valuation of Crossroads for					
13		purposes of its rate base value as well as recovery of Crossroads' transmission					
14		costs. EMW sought to include a valuation of Crossroads that totaled \$104 million.					
15		In its Report and Order, the Commission ordered a valuation that was consistent					
16		with the sale of identical turbines and comparable age to Ameren (Raccoon Creek					
17		and Goose Creek). In that case, the Commission stated the following:					
18 19 20 21 22 23 24		Considering the depressed market as exhibited by the sale of similar turbines to Ameren, and the valuation of these assets reported to the SEC by GPE, the Commission finds that \$61.8 million is an accurate reflection of the fair market value of Crossroads as required by the affiliate transaction rule as of July 14, 2008. (Report and Order, Case No. ER-2010-0356, page 96)					
25		In addition, the Commission disallowed all transmission costs related to the					
26		Crossroads facility. In that same case, the Commission held that:					
27 28 29		The cost of transmission to move energy from Crossroads to customers served by MPS is a very significant cost that is far greater than the transmission costs for power plants located in the					

1 MPS district. The annual energy transmission cost was estimated 2 as \$406,000 per month. This is also substantially higher on an annual basis than the transmission plant costs for the Aries site 3 4 where the three South Harper Turbines were originally planned to 5 be installed. 6 This higher transmission cost is an ongoing cost that will be paid 7 every year that Crossroads is operating to provide electricity to customers located in and about Kansas City, Missouri. GMO does 8 9 not incur any transmission costs for its other production facilities 10 that are located in its MPS district that are used to serve its native load customers in that district. This ongoing transmission cost 11 12 GMO incurs for Crossroads is a cost that it does not incur for South 13 Harper, and is the cause of one of the biggest differences in the 14 on-going operating costs between the two facilities. 15 It is not just and reasonable to require ratepayers to pay for the added transmission costs of electricity generated so far away in a 16 17 transmission constricted location. Thus, the Commission will 18 exclude the excessive transmission costs from recovery in rates. 19 (Report and Order, Case No. ER-2010-0356, pages 86-87, 20 Footnotes omitted) 21 It should be noted that at the time of the disallowance of Crossroads' transmission 22 expenses, those transmission expenses totaled approximately \$4.9 million. 23 Case No. ER-2012-0175. In this case, EMW (known at the time as Kansas City 24 Power & Light GMO) also sought recovery of the transmission expenses from 25 Crossroads. In its Report and Order, the Commission stated the following: 26 Crossroads is a relic of the failed utility Aquila. A full recital of Aquila's tortured history is unnecessary to the Commission rulings, 27 because it only raises the issue of how long the Commission will 28 visit the sins of the predecessor on the successor. It is true that 29 30 GMO is the same legal entity as Aquila, but it is also true that 31 management is different. \* \* \* 32 33 **Transmission Costs.** GMO asks the Commission to depart from 34 the previous rulings and include in MPS rates the costs of 35 transmitting power from Crossroads to MPS territory but it has not carried its burden of proof on that claim. 36 37 38 Therefore, the Commission concludes that including 39 Crossroads transmission costs does not support safe and

1 2 3		adequate service at just and reasonable rates, and the Commission will deny those costs. (Report and Order, Case No. ER-2012-0175, pages 57-59, Footnotes omitted)
4		The Commission now had ruled on two different occasions that transmission cost
5		recovery would not be allowed. The Commission also conveyed that the actions
6		of Aquila were not supported by the Commission, and recognized that GMO was
7		an entity with new management. However, new management should not shift
8		cost recovery onto customers from the decisions of Aquila. Crossroads was still a
9		problem and the Commission rectified that problem by addressing its rate base
10		value and declining to allow recovery of transmission costs.
11	>	Case No. ER-2016-0156. EMW (known at the time as Kansas City Power & Light
12		GMO) once again sought recovery of Crossroads' transmission expenses. In this
13		case though, EMW entered into a Stipulation and Agreement that explicitly
14		disallowed all transmission costs associated with Crossroads.
15 16 17 18		<ul> <li>GMO will reflect the per book transmission expenses with adjustments to this per book amount to reflect the removal of all MISO transmission expenses related to the Crossroads Energy Center.</li> </ul>
19 20 21 22 23 24		The costs and revenues in GMO's FAC will not include transmission costs associated with Crossroads Energy Center and will be consistent with those in Kansas City Power & Light Company's current FAC, with two exceptions: (Non-Unanimous Stipulation and Agreement dated September 20, 2016, Case No. ER-2016-0156, page 13)
25	>	Case No. ER-2018-0146. EMW tried for the fourth time to include recovery of
26		Crossroads' transmission expenses in its cost of service. Similar to Case No.
27		ER-2016-0156, EMW entered into a Stipulation and Agreement that disallowed all
28		transmission costs associated with Crossroads.
29 30 31 32		<ul> <li>GMO will reflect the per book transmission expenses with adjustments to this per book amount to reflect the removal of all MISO transmission expenses related to the Crossroads Energy Center.</li> </ul>

1 2		<ul> <li>The costs and revenues in GMO's FAC will not include transmission costs associated with Crossroads Energy Center.</li> </ul>
3 4 5 6 7 8 9		■ The Signatories agree that the revenue requirement treatment of the Crossroads Energy Center will continue as the issue was resolved in GMO's last rate case (Case No. ER-2016-0156) which continued the treatment ordered by the Commission in Case No. ER-2010-0356: (Non-Unanimous Stipulation and Agreement dated September 19, 2018, Case No. ER-2018-0146, pages 4 and 5)
10		Case No. ER-2022-0130. In this rate case, EMW did not seek recovery of
11		Crossroads' transmission expenses in cost of service. This marked the first rate
12		case dating back to Case No. ER-2010-0356 that EMW did not seek recovery of
13		Crossroads' transmission expenses; three rate cases since Case No.
14		ER-2010-0356.
15		I would note that at the time of filing this rate case (January 2022) EMW
16		was incurring approximately \$14.8 million on Crossroads' transmission expenses,
17		yet decided to forgo requesting collection of this expense.
18	Q	FROM YOUR PREVIOUS ANSWER IT APPEARS CROSSROADS TRANSMISSION
19		EXPENSE HAS BEEN AN ISSUE FOR AN EXTENDED PERIOD.
20	Α	Yes, it has.
21	Q	DO YOU HAVE A RECOMMENDATION FOR ANYONE WANTING TO LEARN THE
22		HISTORY OF THE CROSSROADS AND HOW THE ISSUE OF TRANSMISSION
23		EXPENSE RECOVERY AROSE?
24	Α	Yes. I would highly recommend that anyone wanting to gain a better understanding
25		of the Crossroads situation to review the Staff's Cost of Service Report, the
26		testimonies prepared by Staff member Cary Featherstone and the Commission
27		Report and Order in Case No. ER-2010-0356 (attached as Schedules GRM-1

3		its Report and Order in the 2010 rate case.						
4	Q	CAN YOU PROVIDE A SYNOPSIS OF THE KEY TAKEAWAYS FROM MR.						
5		FEATHERSTONE'S AND THE STAFF'S TESTIMONY ADDRESSING						
6		CROSSROADS?						
7	Α	Yes. I have listed below the bullet points that I summarized from the Commission						
8		Order in Case No. ER-2010-0356:						
9 10 11		<ul> <li>Aquila had a corporate policy not to build regulated generating units that it followed until South Harper in 2005. Instead, Aquila Inc. relied on purchased power to meet its retail load requirements.</li> </ul>						
12 13 14 15		<ul> <li>The Crossroads issues stem from Aquila Inc.'s belief in the 1990's and early 2000's that the electric market would be deregulated and the decoupling of generation in Missouri and other states. Aquila created a non-regulated subsidiary known as Aquila Merchant Services, Inc.</li> </ul>						
16 17 18		The collapse of Enron resulted in the dissolution of Aquila Merchant Services Inc.     As a result, Aquila Merchant Services Inc. sold many of its non-regulated generation units at substantially below net book value.						
19 20 21 22		<ul> <li>Despite numerous attempts to sell the Crossroads unit after the Enron collapse, no sales materialized. Then GMO acquired the Crossroads units for its regulated operations. The Crossroads units are located 500 miles from the EMW service territory.</li> </ul>						
23 24		The issues that arose from the acquisition of Crossroads have been previously discussed in this testimony.						
25	Q	TURNING YOUR ATTENTION TO THE CURRENT RATE CASE (CASE NO.						
26		ER-2024-0189), WHAT DO YOU BELIEVE IS REQUIRED?						
27	Α	As described in the S&A language, the Parties are to present their respective						
28		positions on the future operations of Crossroads. The current point-to-point						
29		transmission contract is set to expire in 2029. Therefore, EMW needs to determine						
		Greg R. Meyer						

through GRM-5) to gain a full appreciation of the Crossroads issues. The Staff's

analysis is extremely thorough and was cited in many instances by the Commission in

1

2

how to proc	eed with	the operation	ons of	Crossr	roads. As	s outlined	in the S	S&A, the
Parties have	request	ed that EMW	evalu	ate the	cost of re	elocating	Crossroad	ds within
the SPP fo	otprint.	In addition,	EMW	has p	presented	the cost	to build	l a new
combustion	turbine	generating	unit	located	d within	EMW's	service	territory
*****	**							

# 6 Q DID EMW HAVE A STUDY PREPARED IN COMPLIANCE WITH THE S&A?

Q

Α

7 A Yes. EMW hired Black and Veatch to perform a Crossroads Relocation Study 8 (July 15, 2025).

# 9 Q WHAT ARE THE FINDINGS FROM THE BLACK AND VEATCH STUDY?

# DID ANY PARTY TO THE PRIOR CASES ASK EVERGY TO EVALUATE RELOCATING THE PLANT BETWEEN WHEN TRANSMISSION COSTS WERE FIRST DISALLOWED AND EVERGY'S MOST RECENT RATE CASE?

A Since at least 2016, the Commission Staff have argued that Evergy should consider moving Crossroads into Evergy Missouri West's service territory. I too raised this issue in my direct testimony in Case No. ER-2018-0145.<sup>3</sup> However, Evergy chose to

<sup>&</sup>lt;sup>2</sup>See Staff witness Keith Major's Surrebuttal Testimony, page 19.

<sup>&</sup>lt;sup>3</sup>See Direct Testimony of Greg R. Meyer in Case No. ER-2018-0145 at page 18, lines 8-10.

	do nothing for over 15 years since the Commission initially rejected recovery of
2	transmission costs. Now, the cost study shows that the current cost estimate to
3	relocate the plant has grown so much that moving the plant is no longer a reasonable
1	solution.

### 5 Q WHAT IS THE CURRENT NET BOOK VALUE FOR CROSSROADS?

6 A The current net book value for Crossroads is approximately \$29 million.4

10

11

12

13

14

# 7 Q WHAT DOES THE CURRENT NET BOOK VALUE FOR CROSSROADS SUGGEST 8 WITH REGARD TO THE RELOCATION AND BUILD NEW GENERATION 9 OPTIONS DISCUSSED ABOVE?

A The net book value of \$29 million is significantly less than the relocation and new build options such that a discussion should commence on solutions wherein Crossroads remains in Mississippi. Given what we know about the cost of relocating the plant and the estimated cost to build a new replacement plant in EMW service territory, it would be imprudent not to keep Crossroads where it is.

15 Q TO BE CLEAR, IF YOU ARE ADVOCATING FOR CROSSROADS TO REMAIN IN
16 MISSISSIPPI, THEN ARE YOU ADVOCATING FOR EMW TO NEGOTIATE A NEW
17 POINT-TO-POINT TRANSMISSION CONTRACT?

18 A Yes, I am. I believe EMW should negotiate a new 20-year point-to-point transmission contract.

 $^4$ From the Staff's True-Up Accounting Schedules, prepared as of September 10, 2024 in Case No. ER-2024-0189.

1	Q	DOES THIS MEAN THAT EVERGY SHOULD BE ABLE TO RECOVER THESE
2		TRANSMISSION COSTS FROM CUSTOMERS?
3	Α	No, it does not. On multiple occasions the Commission has said these costs should
4		not be recovered from customers due to imprudent management decisions by
5		Evergy's predecessor companies. In the intervening decade and a half, Evergy has
6		compounded its mistakes by doing nothing.
7	Q	WHAT IS YOUR POSITION ON WHO SHOULD BE RESPONSIBLE FOR COST
8		RECOVERY OF THE TRANSMISSION EXPENSES, RATEPAYERS OR
9		SHAREHOLDERS?
10	Α	I believe, based on my previous testimonies which I referenced at the beginning of
11		this testimony, that shareholders should be fully responsible for the recovery of
12		transmission expenses to deliver Crossroads generation to the EMW service territory.
13		I would again recommend a review of former Staff member Cary Featherstone's
14		testimony, which provides a comprehensive review of the Crossroads history and the
15		management decisions that led to transmission costs being excluded every time the
16		company has requested recovery. Finally, prior Commission decisions have
17		supported the assignment of all transmission expenses to EMW shareholders.
18	Q	IF THE COMMISSION DECIDES TO ASSIGN 100% OF TRANSMISSION COST
19		RECOVERY TO EMW SHAREHOLDERS, ARE YOU AS CONCERNED ABOUT
20		THE TERM OF THE TRANSMISSION CONTRACT?
21	Α	No. I used the 20-year contract period as an estimate of what would be an
22		appropriate timeframe for such a contract given the estimated remaining useful life of

the plant projected to be through 2047.

23

# IF THE COMMISSION IS UNWILLING TO ASSIGN 100% OF THE TRANSMISSION EXPENSES TO EMW SHAREHOLDERS, DO YOU HAVE AN ALTERNATIVE

#### POSITION?

Q

Α

At this time, I do not have an alternative position; however, MECG remains willing to sit down with EMW and other parties to discuss possible transmission expense recovery. In at least two rate cases, Evergy has acknowledged that it should not be able to recover 100% of transmission costs but sought some contribution from customers as this expense escalated over time. Importantly, in those cases the possibility of relocating the plant was a plausible approach Evergy could have taken to avoid paying the transmission costs. Parties, including MECG, opposed any customer responsibility for transmission expenses.

Based on the new study, it is clear relocation is no longer a reasonable approach Evergy can pursue to limit its own exposure to increasing transmission costs. Some balance between customers and the company may be an appropriate path forward, but customers should not bear 100% of these previously rejected costs as Evergy proposed in this docket during its most recent rate case.

### 17 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

18 A Yes, it does.

# **Qualifications of Greg R. Meyer**

ı	Q	PLEASE STATE TOUR NAME AND BUSINESS ADDRESS.					
2	Α	Greg R. Meyer. My business address is 16690 Swingley Ridge Road, Suite 140,					
3		Chesterfield, MO 63017.					
4	Q	PLEASE STATE YOUR OCCUPATION.					
5	Α	I am a consultant in the field of public utility regulation and a Senior Principal with the					
6		firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory					
7		consultants.					
8	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND					
9		EXPERIENCE.					
10	Α	I graduated from the University of Missouri in 1979 with a Bachelor of Science Degree					
11		in Business Administration, with a major in Accounting. Subsequent to graduation I					
12		was employed by the Missouri Public Service Commission. I was employed with the					
13		Commission from July 1, 1979 until May 31, 2008.					
14		I began my employment at the Missouri Public Service Commission as a					
15		Junior Auditor. During my employment at the Commission, I was promoted to higher					
16		auditing classifications. My final position at the Commission was an Auditor V, which I					
17		held for approximately ten years.					
18		As an Auditor V, I conducted audits and examinations of the accounts, books,					
19		records and reports of jurisdictional utilities. I also aided in the planning of audits and					
20		investigations, including staffing decisions, and in the development of staff positions in					
21		which the Auditing Department was assigned. I served as Lead Auditor and/or Case					

Supervisor as assigned. I assisted in the technical training of other auditors, which included the preparation of auditors' workpapers, oral and written testimony.

During my career at the Missouri Public Service Commission, I presented testimony in numerous electric, gas, telephone and water and sewer rate cases. In addition, I was involved in cases regarding service territory transfers. In the context of those cases listed above, I presented testimony on all conventional ratemaking principles related to a utility's revenue requirement. During the last three years of my employment with the Commission, I was involved in developing transmission policy for the Southwest Power Pool as a member of the Cost Allocation Working Group.

In June of 2008, I joined the firm of Brubaker & Associates, Inc. as a Consultant. Since joining the firm, I have presented testimony and/or testified in the state jurisdictions of Arkansas, Florida, Idaho, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, Montana, New Mexico, Ohio, Pennsylvania, Utah, Washington, Wisconsin and Wyoming. I have also appeared and presented testimony in Alberta and Nova Scotia, Canada. In addition, I have filed testimony at the Federal Energy Regulatory Commission ("FERC"). These cases involved addressing conventional ratemaking principles focusing on the utility's revenue requirement. The firm Brubaker & Associates, Inc. provides consulting services in the field of energy procurement and public utility regulation to many clients including industrial and institutional customers, some utilities and, on occasion, state regulatory agencies.

More specifically, we provide analysis of energy procurement options based on consideration of prices and reliability as related to the needs of the client; prepare rate, feasibility, economic, and cost of service studies relating to energy and utility services; prepare depreciation and feasibility studies relating to utility service; assist in contract negotiations for utility services, and provide technical support to legislative activities.

- 1 In addition to our main office in St. Louis, the firm also has branch offices in
- 2 Corpus Christi, Texas; Louisville, Kentucky and Phoenix, Arizona.

# MISSOURI PUBLIC SERVICE COMMISSION

# STAFF REPORT

# REVENUE REQUIREMENT COST OF SERVICE



# KCP&L GREATER MISSOURI OPERATIONS COMPANY FILE NO. ER-2010-0356

Jefferson City, Missouri November 17, 2010

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

Staff Exhibit No. GMO-ZIO Date 1/18/4 Reporter LmB File No. EE-2010-0354

3

4

5

6

7

8

9

10

11

12

13

14

L&P has filed for the following rate increases:

Case No.	Date Filed	Amount Requested	Amount Authorized	Effective Date of Rates
ER-2007-0004 (filed as Aquila entity)	July 3, 2006	\$22.4 million (22.1% increase)	\$13,583,600million (12,79% increase)	June 3, 2007
ER-2009-0090	September 5, 2008	\$ 17.1 million (14.4 % increase excluding any impact of the fuel clause)	\$15 million (11.85% increase)	September 1, 2009
ER-2010-0356	June 4, 2010	\$ 22.1 million (13.9% increase excluding any impact of the fuel clause)	Yet to be determined	May 4, 2011 (expected)

On April 4, 2007, GPE, KCPL, and Aquila, Inc. ("Aquila"), filed a joint application with the Missouri Public Service Commission ("the PSC" or "the Commission"), designated as Case No. EM-2007-0374 requesting approval for a series of transactions which ultimately would result in GPE acquiring Aquila's Missouri electric and steam operations, as well as its merchant services operations. These merchant services operations primarily consisted of a 340 megawatt generating facility located in Mississippi, ("Crossroads"), and certain residual natural gas contracts. The Commission approved the request of GPE, KCPL, and Aquila in an Order effective July 1, 2008. GPE acquired Aquila on July 14, 2008 and later in 2008, Aquila changed its name to KCP&L Greater Missouri Operations Company ("GMO").

Staff Expert/Witness: Cary G. Featherstone

# II. Executive Summary

Curt Wells, of the Commission's Utility Operations Division, and Cary Featherstone of the Utilities Services Division sponsor Staff's Cost of Service Report, Schedules and Accounting

quantities for both MPS and L&P, as are Retail Sales, Wholesale Sales and Company Use. Therefore, by inputting these components into the above equation, one can solve for system energy losses for both MPS and L&P. Staff then divided the resulting system energy losses by NSI for both MPS and L&P respectively and multiplied by 100 ((system energy losses/NSI) X 100%) to obtain the system energy losses as a percentage of NSI. This result is referred to as the system energy loss factor, also called the line loss factor.

Staff has calculated a system energy loss percentage for the twelve months ending December 2009 of 6.14% of NSI for MPS and 6.26% of NSI for L&P. These line loss percentages were provided to Staff expert Walt Cecil, who used them in developing the system loads for both MPS and L&P that are inputted into Staff's fuel model.

Staff Expert/Witness: Alan J. Bax

# 10. Planned and Forced Outages

Planned and forced outages are infrequent in occurrence, and variable in duration. In order to capture this variability, the GMO generating unit outages were normalized by averaging the nine years of actual values taken from data supplied by GMO to comply with 4 CSR 240-3.190.

Staff Expert/Witness: David W. Elliott

# 11. Capacity Requirements for the Territory Formerly Known as MPS

# a. Capacity Requirements for This Filing

Staff has included in its case for MPS the capital costs of two 105 megawatts (MW) combustion turbines (CTs) on the six 105 MW CT South Harper site that have not been built. Staff refers to these two combustion turbines as Prudent Turbines 4 and 5. As it has in prior

cases, the capital costs Staff used for these two CTs in its case are the book values they would have had if the two CTs had been built and become fully operational and used for service at the same time in 2005 when the three 105 MW CTs that are on the six CT South Harper site were built and Aquila began to use them for providing service. It is Staff's position that Aquila should have built five 105 MW CTs at the South Harper site, rather than the three it actually built, given the information that was available to GMO (then known as Aquila, Inc.) through its resource planning process at the time GMO was deciding how it was replacing the power it was getting from the Aries plant (now the Dogwood plant) through a capacity contract.

Staff first raised in testimony pre-filed in September 2003, in Case No. EF-2003-0465, its concerns regarding Aquila, Inc.'s lack of planning to replace the 500 MW of summer capacity and energy that it was then obtaining from the exempt wholesale generator Aries plant owned jointly by Aquila's subsidiary Aquila Merchant Services, Inc. and Calpine through a five-year purchased power agreement ("Aries PPA") that was to end in May 2005. At that time, Aquila had not informed Staff of how it planned to meet the capacity needs of MPS for the summer of 2005. A description of the correspondence and discussions that occurred between Staff and GMO for the next two years is described in the attached Appendix 5, Schedule LMM-1.

Appendix 5, Schedule LMM-1 also describes that Staff first presented its position that the prudent decision for Aquila was to build five 105 MW CTs at the South Harper site, not three in Case No. ER-2005-0436. Staff has not waivered from this position in any case since that Aries PPA expired. Staff maintained the same position in Aquila's following two general rate increase cases, Case No. ER-2007-0004 and Case No. ER-2009-0090 (filed as GMO).

As a part of GMO's last rate increase request, Case No. ER-2009-0090, because the legal cloud South Harper was resolved, Staff included the three 105 MW CTs built at the South

Harper site as part of GMO's rate base. However, it is still Staff's position that GMO should have built five 105 CTs at the South Harper site when it built only three. Therefore, in this case Staff is imputing both the capital and running costs of two 105 MW CTs at the South Harper site in its direct filing that GMO did not build.

Since GMO should have built five 105 MW CTs at its South Harper site to meet the customer load on its system when the Aries PPA expired, Staff is not including the capital and running costs of GMO's Crossroads four 75 MW CT power plant in Staff's direct case. A utility should locate and size a generating plant to serve its native load. The Crossroads power plant was neither located nor sized to meet MPS's native load. It was built as a merchant plant to sell energy at market value. Where the price and circumstances are right, such as distress sales, acquisition of plants built by others, including those built as merchant plants such as Crossroads, acquiring an existing power plant could be a preferred option. Staff did not include the capital and running costs of the Crossroads power plant for four reasons: (1) affiliate transaction concerns discussed in greater detail in the next section of this report; (2) historically the prices of natural gas delivered to Crossroads have been higher than the natural gas prices delivered to South Harper; (3) the cost of transmission to move the energy from Crossroads to GMO's service area when, since South Harper is in GMO's service area, there is no similar cost for South Harper; and (4) the ability of GMO to properly provide managerial oversight on a power plant located in Mississippi, several hundred miles from GMO's load center.

# b. Potential Impact on Future Capacity Balance

Staff still remains concerned with GMO's resource plans. Appendix 5, Schedule LMM-2 is a capacity balance sheet for GMO with the two CTs Staff is imputing to the South Harper site.

All other capacity resources and the peak forecast are the same as the preferred plan that GMO

1	filed with the Commission in its last Chapter 22 Electric Utility Resource Planning compliance
2	filing (Case No. EE-2009-0237). This schedule shows that **
3	
4	
5	** Since GMO's last rate case, GMO has **
6	
7	** at the time of its last rate case, Case No. ER-2009-0090.
8	Staff is concerned that GMO will not be able to obtain the demand-side reduction shown on
9	Appendix 5, Schedule LMM-2 because KCPL has publically stated that it is not going forward
10	with any additional demand-side programs and GMO's demand-side programs are tied to those
11	of KCPL. GMO has not requested non-traditional rate-making treatment, as allowed by the
12	Missouri Energy Efficiency Investment Act ("MEEIA"), and GMO has stated that it will not
13	seek that non-traditional rate-making treatment allowed by the MEEIA until the Commission
14	rules are final. While Staff sees the value in waiting until Commission rules are final, the
15	MEEIA is the law and nowhere in the MEEIA is it required there be Commission rules before a
16	utility can ask for non-traditional rate-making treatment. Demand-side resources, like
17	supply-side resources, take time to implement. So this delay could mean that GMO will not have
18	enough capacity over the next few years to meet its customers' demand for electricity. After
19	KCPL's statement that it will not be going forward with any additional demand-side programs,
20	GMO has not changed its resource plans to meet the anticipated additional demand for electricity
21	through supply-side resources.
22	If, instead of using the capital and running costs of two additional 105 MW CTs for
23	determining GMO's cost of service, the Commission uses the capital and running costs of the

1	Crossroads units (four 75 MW CTs for a combined capacity of 300 MW) GMO acquired from					
2	unregulated affiliate Aquila Merchant, **					
3	** However, if GMO **					
5						
6	**					
7	Staff Expert/Witness: Lena Mantle					

# 12. Allocation of Iatan 2 Capacity Between MPS and L&P

Staff recommends that 100 MW of GMO's 153 MW share of latan 2 be allocated to L&P, including the investment and costs associated with it, and the remaining 53 MW be allocated to MPS. Staff primarily bases its position on St. Joseph Light & Power Company's ("SJLP's") resources when GMO<sup>41</sup> and SJLP merged. At that time SJLP had an 18% ownership of latan and a 100 MW base load purchased power agreement ("PPA").

GMO obtained its ownership in the latan Station, including the opportunity to own part of latan 2, when it acquired SJLP. At the time of the merger, SJLP owned 18% of latan. Now GMO owns 18% (153 MW) of the 850 MW latan 2 plant. GMO has two sets of rates. GMO's service area where L&P rates are in effect is the former SJLP service area. L&P rates are still primarily based on the same generating plant and purchased power agreements ("PPAs") SJLP used to serve its customers before GMO acquired SJLP; including SJLP's costs and investment in latan 1 and its PPA with Nebraska Public Power District ("NPPD PPA"). L&P's base load capacity will be reduced by 100 MW when the NPPD PPA ends on May 31, 2011.

<sup>&</sup>lt;sup>41</sup> In this section of the Report "GMO" refers to KCP&L-Greater Missouri Operations Company and its predecessors Aquila, Inc. and UtiliCorp United, Inc.



6

7

8 9

10 11

12 13

14

16

15

17 18

19 20

21

22

2 investment and costs in L&P's revenue requirement will not be easy for many of its customers. However, in the long run, as they are with latan 1, L&P customers will reap the benefits of this low cost base load unit for many years to come. Staff Considerations in Determining Its Recommendation

Staff realizes that economic conditions are tough and the rate impact of adding 100 MW of latan

With this allocation, both L&P and MPS receive some of the Iatan 2 base load capacity.

GMO, in 2000 when it was named UtiliCorp United, Inc., merged with SJLP. Afterward it consolidated the tariffs of the two former entities into one tariff, except that it kept separate rate schedules for the pre-merger GMO and SJLP service areas. To avoid the issue of increasing rates in the SJLP service area due to the merger and GMO's financial situation, in its application to the Commission for authority to merge, GMO committed to not changing the rates in that service area because of the merger. GMO expressed a long term goal of having one rate schedule rather than two - single tariff pricing; however, it has not yet proposed to move MPS and L&P rates to a single rate schedule for the entirety of GMO's service area.

Until this case, with the addition of latan 2 at a nearly \$2 billion cost, GMO's capacity costs were easily identifiable to either MPS or L&P. Although MPS and L&P generation is jointly dispatched, GMO has not needed additional capacity to serve L&P customers until now. Prior to the addition of Iatan 2, GMO's capacity addition investment and costs since the merger have all been assigned to MPS. The portion of the high capital cost of the latan 1 scrubber that was GMO's responsibility was only included in the revenue requirement upon which rates were set for L&P customers in GMO's last rate case, Case No. ER-2009-0090 because SJLP owned 18% of Iatan 1 when GMO merged with it and the scrubber addition was an improvement to

latan 1. A more detailed explanation of why MPS and L&P have separate rates and their resources can be found in Appendix 5, Schedule LMM-3.

GMO has not proposed in this case to begin merging the MPS and L&P rates. GMO's proposed rates for MPS and L&P in this case would have the effect of making the difference between MPS rates and L&P rates greater. If GMO had single tariff pricing, then there would be no allocation of latan 2 investment and costs within GMO.

Given GMO has shown no inclination to begin to merge the MPS and L&P rates, the best way to determine how to allocate latan 2 investment and costs between them for ratemaking purposes would be to base the allocation on resource planning by GMO performed separately for MPS and L&P. Of course, one of the synergies of the merger of GMO and St. Joseph Light & Power Company is that GMO does not have to build separately to meet load for MPS and L&P, i.e., all the generation is jointly dispatched. Therefore, GMO has not performed resource planning separately for MPS and L&P.

In its resource planning meetings before GMO acquired ownership of a portion of latan 2, Staff urged GMO to build or acquire base load capacity to better balance its generation portfolio. When GMO obtained an ownership interest in latan 2, it was not immediately evident how GMO intended to recover its capital investment in latan 2, i.e., which GMO retail customers would pay for latan 2 – those billed under MPS rates or those billed under L&P rates, or both. GMO had been doing its resource planning on a total company basis, not separately for MPS and L&P. Until the addition of latan 2, it was obvious that the decisions GMO (then known as UtiliCorp) made in 2000 were driving GMO's needs for additional capacity to serve MPS customers.

8

9

10

11

12

13

14 15

16

17

18

19 20

21

22

Initially, GMO wanted to allocate the investment and costs of all 153 MW of GMO's share of Iatan 2 to MPS. This would have given MPS some fuel and purchased power expense stability, and diversified MPS's generation portfolio. Staff and other stakeholders voiced their concerns about allocating all of latan 2 to GMO. Iatan 2 was, and is, likely to be one of the last coal plants built in the Midwest for quite some time due to uncertainty regarding potential federal emissions restrictions. Absent its merger with SJLP, which owned 18% of latan 1, it is unlikely that GMO could have acquired any ownership of latan 2. In addition, L&P needed additional capacity to replace L&P's base load contract with NPPD that would end soon after latan 2 was planned to come on line.

When Staff expressed its concerns regarding GMO's intent to allocate all of latan 2 to MPS, Aquila committed to Staff that it would work with stakeholders to develop a methodology to allocate latan 2 between MPS and L&P.

Staff also expressed its concerns regarding the allocation of latan 2 to Great Plains Energy, Inc. ("GPE") when GPE requested authorization from the Commission to acquire GMO (then named Aquila). Again, GPE assured Staff that it understood Staff's concerns and committed to work with stakeholders to develop a methodology for allocating Iatan 2 between MPS and L&P. After GPE acquired GMO, GMO again assured Staff that it was working on an allocation methodology and that it would share that methodology with Staff and other stakeholders.

Despite all these assurances by GPE and GMO, which started before construction of Iatan 2 began, that GMO would work with Staff to develop an appropriate allocation of Iatan 2 investment and costs between MPS and L&P, GMO's direct testimony filing in this case is the

when GMO and SJLP merged in 2000, and GMO's current resource plans.

With these limits, if MPS were a standalone utility, it would be very beneficial for MPS to diversify its generation portfolio with base load capacity. In addition, MPS likely will need more capacity, if not in 2010, soon after. The lower fuel cost of base load capacity would also likely stabilize MPS's fuel costs. Scenario 5 above, all of latan 2 allocated to MPS, would be the most appropriate scenario, if the only consideration is MPS's needs as a standalone utility.

If L&P were a stand-alone utility, it would need to replace the 100 MW NPPD PPA that ends in May 2011. Since the NPPD PPA is a base load contract, it would be logical for L&P to replace it with base load capacity. It would also be logical, since L&P already has so much base load capacity, that L&P instead add lower capital cost peaking capacity rather than base load capacity. But, since the opportunity to own a portion of another base load unit in the Midwest is not likely to occur in the near future, and given that L&P could sell excess energy on the market, L&P, as it did when it invested in Iatan 1, may have chosen to add more base load. Scenarios 1, 2 and 3 are reasonable for GMO if the only consideration is L&P's needs as a stand alone utility.

# Ownership Rights to Iatan 2

GMO obtained ownership of Iatan 1 by merging with St. Joseph Light & Power Company. If they had not merged, given GMO's poor financial condition when KCPL was looking for potential partners for Iatan 2, KCPL would not have considered GMO as a potential partner.

If ownership rights were the only factor considered for allocating Iatan 2, then all of GMO's portion of Iatan 2 would be allocated to L&P. Therefore Scenario 1 would be appropriate, if the only consideration is the source of ownership rights to Iatan 2.

#### Impact on Rates

The capital investment in latan 2, a base load plant, is very high. However the impact on revenue requirement due to capital investment should not be considered alone when determining the revenue requirement impacts of latan 2. Because latan 2 is expected to be the most efficient unit and to have the lowest running cost of all of GMO's generating resources, the revenue requirement impacts due to the reduction of fuel and purchased power costs associated with latan 2 should also be considered. Integral to the current methodology of allocating fuel costs to MPS and L&P is the assignment of power plants to either MPS or L&P. A history and description of the fuel allocation methodology can be found on Appendix 5, Schedule LMM-4.

The fuel cost to MPS is minimized when all of Iatan 2 is allocated to MPS. And the same is true for L&P when all of Iatan 2 is allocated to L&P. Therefore the net fuel cost impact on either MPS or L&P is the difference between the fuel cost of each scenario minus the fuel cost of the scenario where all of Iatan 2 is allocated either to MPS or to L&P. In addition, the net impact on L&P is less than GMO's capital investment and costs of Iatan 2 since L&P will no longer have to pay the NPPD PPA capacity costs that L&P have been paying since 1996. The non-fuel net cost to L&P is the difference between the revenue requirement due to the capital investment and costs of Iatan 2 and the NPPD PPA capacity costs.

To get a feel for the total revenue requirement impacts on MPS and L&P, Staff calculated the Iatan 2 revenue requirement<sup>42</sup> for MPS and L&P for the scenarios listed above. Staff's fuel and purchased power allocation methodology described in Appendix 5, Schedule LMM- 4 was applied to the results of Staff's fuel run model<sup>43</sup> for each of the five scenarios to calculate the

<sup>&</sup>lt;sup>42</sup> Fixed charges and depreciation at Staff mid-point ROR of 7.98%. Does not include fuel, non-wage O&M, wage, insurance, property taxes

<sup>&</sup>lt;sup>43</sup> Staff's fuel run model with latan 2, without Crossroads, with Prudent CTs 4 & 5, without NPPD PPA, and with December 2010 estimated fuel prices.

4

2 S

difference in the fuel costs for MPS and L&P for each of the five scenarios. From these results

Staff was able to estimate the impact of Iatan 2 on fuel costs. The total impacts on MPS and

L&P and the percent of current revenues for each are shown in the tables below.

MPS									
Scenario	Capital Costs	Change in Fuel Costs	Total	% of Current Revenue					
1	\$0	\$14,115,884	\$14,115,884	2.6%					
2	\$18,645,319	\$10,532,214	\$29,177,533	5.3%					
3	\$35,180,760	\$6,079,896	\$41,260,656	7.5%					
4	\$39,401,433	\$4,764,849	\$44,166,282	8.0%					
5	\$53,825,174	\$0	\$53,825,174	9.8%					

L&P										
Scenario	Capital Costs	Change in Fuel Costs	NPPD Capacity Payment	Total	% of Current Revenue					
1	\$53,446,831	\$0	\$12,120,000	\$41,326,831	31.4%					
2	\$34,933,389	\$3,583,635	\$12,120,000	\$26,397,024	20.1%					
3	\$18,514,261	\$8,035,858	\$12,120,000	\$14,430,119	11.0%					
4	\$14,322,353	\$9,350,953	\$12,120,000	\$11,553,306	8.8%					
5	\$0	\$14,115,810	\$12,120,000	\$1,995,810	1.5%					

5

6

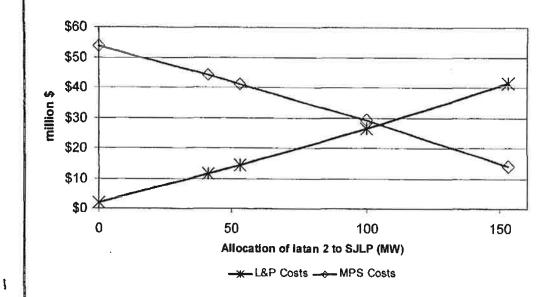
7 8

9

10

Choosing a scenario that minimizes rate impacts for MPS customers results in the maximum rate impacts for L&P customers, and when rate impacts are minimized for L&P customers they are maximized for MPS customers.

To get an idea of what allocation would minimize the costs to both MPS and L&P, Staff plotted the total cost for the 5 scenarios. This graph is shown below.



These two lines cross at approximately 100 MW, i.e., the cost to the MPS and L&P are the same at 100 MW.

Staff's position of 100 MWs for L&P will potentially cause the rate increase to L&P customers to be almost four times the rate increase to MPS customers. However, currently the bill of a typical residential customer using the Company's estimated use of 1130 kWh per summer month and 780 kWh per winter month on MPS's residential rates is approximately 19% higher than a residential customer with the same usage on L&P's residential rate. Staff's proposed allocation will not result in GMO's rates for L&P surpassing GMO's rates for MPS. However, this proposed allocation of Iatan 2 investment and costs is not outside the probable realm of what would have occurred to the rates of L&P customers if they were still in a stand-alone St. Joseph Light & Power Company, and moves GMO's L&P rates closer to those of MPS.

### Conclusion

Taking into account their probable resource needs if MPS and L&P each were stand alone utilities, the source of GMO's ownership rights to Iatan 2, and rate impacts, it is Staff's

12

13

14

15

16

17

18

19

20

21

22

23

Staff Expert/Witness: Lena Mantle

13. MPS Prudent Combustion Turbines

customers of these utilities - lower rates which those customers are now enjoying.

Staff is sponsoring adjustments for MPS to continue Staff's position in GMO's last three rate cases, Case Nos. ER-2005-0436, ER-2007-0004, and ER-2009-0090 as it relates to the GMO capacity issue described above by Staff witness Mantle. The adjustments Staff is proposing reflect the continuation of Staff's position that GMO should have prudently addressed its capacity needs for MPS to replace the Aires PPA when it expired on May 31, 2005. As related by Staff witness Mantle GMO chose not to replace the Aires PPA with its least cost option of building and owning five 105 MW CTs.

utilities' revenue requirements, in the long-term they have resulted in lower rates for the

Staff's position is that it was imprudent of GMO not to build and own the five 105 MW CTs in 2005. Instead, GMO only built three 105 MW CTs and continued to rely on short-term

purchased power capacity contracts for the remaining 210 MWs until 2008. In 2008 GMO, through an unreported affiliate transaction with its Merchant affiliate began relying on capacity located in Mississippi from another peaking facility—four 75 MW CTs at a site called Crossroads Energy Center ("Crossroads") that was built in 2002 by Aquila Merchant. GMO's approach was short-sighted and imprudent because it placed the short-term financial considerations of GMO over the long-run financial interests of GMO's customers paying MPS rates. Due to this imprudence GMO has incurred higher long-term capacity costs than it should have and Staff is making adjustments to GMO's plant in service and expenses so those higher costs are not passed on to GMO customers. The adjustment value is the difference between including the higher costs of GMO's Crossroads in rate base less the costs of adding two additional 105 MW CTs at South Harper in 2005 when it constructed and installed three 105 MC CTs.

South Harper is a natural gas-fired peaking facility currently capable of generating up to 315 MW that is located in Cass County, Missouri. As a peaking facility, South Harper typically operates during peak electricity demand periods, such as the hot summer days in June, July, August, and September; however, it may also operate in non-peak periods to support the power system grid during maintenance on other units, or during generation shortages and emergencies, or other circumstances where it is the lowest cost plant to dispatch. Major construction of South Harper was completed in June and July 2005. The site was designed for six 105 MW CTs, but GMO has only constructed three 105 MW CTs. Staff refers to these three CTs are South Harper CTs 1, 2 and 3. Because GMO should have built five 105 MW CTs in 2005 rather than three, Staff is imputing to MPS the costs GMO would have incurred if GMO had built and installed five 105 MW CTs at South Harper in 2005. Therefore, in determining the revenue requirement

 for MPS Staff has, in addition to including the costs of the South Harper CTs 1, 2 and 3, included the costs of two additional 105 MW CTs--South Harper prudent CTs 4 and 5.

Because GMO is meeting its capacity needs with the CTs at Crossroads and not the South Harper prudent CTs 4 and 5 Staff has also made adjustments to its Accounting Schedules to remove all incremental costs related to the Crossroads facility that are included in GMO's test year books and records for MPS—costs such as costs to operate Crossroads, including depreciation expense, transmission charges to transfer the electricity from Mississippi to Missouri, maintenance charges including labor, operations and maintenance expenses, and property taxes. In their place, Staff has included what it believes to be a reasonable approximation of the costs that GMO would incur had it built and installed the South Harper prudent CTs 4 and 5 at South Harper in 2005.

To estimate the costs GMO would now be incurring for five 105 MW CTs at South Harper, Staff has factored up GMO's 2009 test year costs of the three CTs it built and installed at the South Harper in 2005 on a pro rata basis to be representative of five 105 MW CTs. These costs include plant and reserve, depreciation expense, maintenance charges including labor, operations and maintenance expenses, deferred taxes and natural gas pipeline reservation charges. When the plant costs for South Harper Prudent CTs 4 and 5 are included in the rate base for MPS they generate depreciation expense and an overall rate of return on the net rate base amount.

Staff calculated a pro rata amount of depreciation reserve and deferred income taxes associated with South Harper Prudent CTs 4 and 5 and made and adjustment to reflect this amount in the revenue requirement for MPS. To calculate June 30, 2010 depreciation reserve balances for South Harper Prudent CTs 4 and 5 Staff took the June 30, 2010 reserve to plant

balance ratio for South Harper CTs 1, 2 and 3 and multiplied the June 30, 2010 plant balances it calculated for South Harper Prudent CTs 4 and 5 by this ratio. To calculate the level of South Harper Prudent CTs 4 and 5 accumulated deferred income taxes to include in the rate base for MPS, Staff calculated the cumulative depreciation timing differences of accelerated tax depreciation and book depreciation through June 2010 and multiplied this cumulative timing difference by GMO's approximately 38.4 percent effective tax rate.

The plant and reserve amounts for South Harper Prudent CTs 4 and 5 that Staff included in its June 2010 revenue requirement for MPS are shown below.

Acct	Prudent CTs 4 &5	June 2010	Dep Reserve	Net Plant
353	Transmission Plant	\$2,211,353	191,282	2,020,071
340	Land	0	0	0
341	Structures	\$5,142, <b>02</b> 9	386,084	4,755,945
342	Fuel Holders	\$2,102,714	334,934	1,767,780
343	Prime Movers	\$36,255,099	8,061,969	28,193,130
344	Generators	\$9.217,285	1,727,638	7,489,647
345	Accessory Equip	\$9,447,889	1,195,102	8,252,787
346	Misc Pwr Plt Equip	<u>\$66,435</u>	8.462	<u>57,973</u>
		\$64,442,804	11,905,471	52,537,333

The total plant costs for South Harper Prudent CTs 4 and 5 included in this case were based on Staff's estimate of the costs to build South Harper prudent CTs 4 and 5 in 2005. In Case No. ER-2005-0436, Staff used documents containing GMO's actual costs data for the purchase of the three 105 MW CTs GMO built and installed at South Harper in 2005 as the basis for Staff's calculation of the costs of South Harper Prudent CTs 4 and 5. This amount is

\*\*

\*\*, less accumulated depreciation. The chart below shows all of the plant components included in the total gross plant amount for South Harper Prudent CTs 4 and 5 included in Staff's Surrebuttal filing in Case No. ER-2005-0436:

NP

3

4 5 6

7

8

9

10

11

12 13

14

15 16

17

18

19 20

21

22

The \$18.7 million estimated cost of the South Harper Prudent CTs 4 and 5 and the \$2.1 million estimated cost of the transmission upgrades are addressed by Staff witness Featherstone. Added to the estimated cost of the CTs is an allowance for funds used during construction (AFUDC). AFUDC represents the cost of both debt and equity funds used to finance utility plant additions during the construction period. AFUDC is capitalized as a part of the cost of utility plant.

As the basis for its AFUDC estimate, Staff used a workpaper GMO provided that reflects the actual costs of construction of the three South Harper CTs. The cost sheet, titled "South Harper Peaking Facility Weekly Cash Flow Updated September 21st" (South Harper Construction Cost workpaper) reflects the construction costs of South Harper Units 1, 2 and 3 through September 21, 2005. The actual AFUDC costs charged to South Harper Unit #1 was \$1.6 million.

This amount applied to capitalized direct charges of \$23 million, results in an AFUDC rate of approximately 7%. Staff's \$18.7 million cost per Ct multiplied by 7% results in the capitalized AFUDC cost of \$1.3 million per CT.

Staff used the same method to determine the AFUDC rate for transmission plant. The South Harper Construction Cost workpaper for the Belton South to Peculiar transmission project shows AFUDC loadings of \$187,751 based on direct charges of \$3.5 million, for an AFUDC rate of 5.3%. Applying this rate to the transmission plant cost of \$2.1 million, results in a capitalized AFUDC cost of \$111,353.

Therefore, Staff added \$7.6 million of construction costs for each CT. The CT construction costs are based on GMO's actual costs to build the three CTs at South Harper. The highest cost GMO incurred to construct any of the three South Harper CTs was \$7.5 million. This was the cost of construction for South Harper CT 3.

The South Harper Construction Cost workpaper shows total costs to construct common plant at South Harper for three CTs, or 315 MW, to be \$19.3 million. Staff used a ratio of 210 MW/ 315 MW and multiplied this 67% times the \$19.3 million to arrive at a value of \$12.9 million. Staff then applied a fifty percentage (50%) downward adjustment factor to this result. The downward adjustment was made to recognize the likelihood that building two additional CTs will increase the need for additional common plant, but the additional common plant needed by adding two CTs will be significantly less than in initial common plant built for the three CTs at South Harper.

Staff's position in Case No. ER-2005-0436, Aquila's 2005 rate case was that while the cost of constructing two additional CTs was higher in the short-term, because the rate of return is applied to a declining net plant amount over time, the cost of ownership will decline over time and it will be cheaper in the long run to own the CTs than continue to use short-term PPAs. For example, by including South Harper Prudent CTs 4 and 5 in rate base in Aquila's 2007 rate case, No. ER-2007-0004 Staff's revenue requirement recommendation increased by \$12 million. This \$12 million included by Staff was higher by \$4.6 million than the cost for this capacity proposed by GMO in that case—\$7.3 million.

Staff's position that although the cost of constructing two additional CTs was higher in the short term than relying on PPAs, because plant-related costs decline over time, it will be cheaper in the long run to build them began to bear fruit in GMO's 2009 rate case,

No. ER-2009-0090. In that rate case the cost included in Staff's revenue requirement for its 310 MW of capacity (two 105 MW CTs and a 100 MW PPA) was approximately \$12 million. The costs GMO included in its case for 310 MW from Crossroads was approximately \$23 million, for a revenue requirement difference of about \$11 million. This \$11 million represents part of the cost of the imprudent capacity planning decisions of GMO that Great Plains Energy inherited when it purchased Aquila, Inc. GPE's management has deal with this cost, but it should not be allowed to pass this cost on to GMO's ratepayers. That is still Staff's recommendation to the Commission.

In this case, the cost difference between including Crossroads in rate base for MPS instead of South Harper Prudent CTs 4 and 5 is \$15 million. A snapshot of this revenue requirement differential is shown below. This analysis uses the grossed up rate of return GMO proposes in this case, GMO's and Staff's respective proposed depreciation rates, and assumes no material impact of the differences in property taxes, maintenance and other related expenses between Crossroads and South Harper Prudent CTs 4 and 5.

Crossroads	CT 3 & 4
\$107	\$52.5
( <u>\$6</u> )	( <u>\$17</u> )
\$101	\$35.5
12.5%	12.5%
\$12.6	\$4.4
\$5.5	\$2.3
\$5.4	\$0
<u>\$0.5</u>	<u>\$2.4</u>
\$24	\$9
	(\$15)
	\$107 (\$6) \$101 12.5% \$12.6 \$5.5 \$5.4 \$0.5

The reason for the significant difference is deferred taxes between Crossroads and Prudent CTs 4 and 5 is that GMO refuses to include the cumulative deferred taxes that have accrued on Crossroads since that plant has been operating. GMO's position is that it's Missouri

3 4

5

6

Staff Expert: Charles R. Hyneman

transferred with the ownership of the Crossroads plant.

7

8

9

10

11

12

13

14

15

16 17

18

19

20

21 22

Payroll Costs

All employees of Great Plains Energy are considered employees of KCPL. These KCPL and GPE employees perform all services for Great Plains Energy, KCPL and GMO (MPS and L&P). An allocation of costs is necessary to assign a proper amount of payroll costs to each of the Great Plains Energy entities. Staff reviewed the allocation of actual payroll costs for each of these entities since the acquisition of the former Aquila Missouri electric operations of MPS and L&P, and allocated the annualized payroll based on this allocation.

regulated customers are not entitled to the deferred taxes that accrued to Crossroads while it was

a Merchant Plant for Aquila. When KCPL and GMO transferred Crossroads from non-regulated

Merchant Plant to Regulated Plant, Aquila recognized a significant inter-company gain which it

retained for non-regulated operations and eliminated the accrued deferred taxes that should have

B. Payroll, Payroll Related Benefits including 401K Benefits Costs and

The transfer of the former Aquila employees was made at the close of the acquisition transaction on July 14, 2008. The former Aquila entities now are providing utility services under the name KCP&L Greater Missouri Operations Company: GMO MPS, GMO L&P and GMO L&P Steam. Because all former Aquila employees providing service to the GMO MPS, GMO L&P and GMO L&P steam operations became part of the KCPL employee base, KCPL now has to allocate costs directly to each KCPL service territory and the two GMO operating entities, MPS and L&P. Additionally, L&P operations supplies utility services to electric and steam customers and L&P labor costs must be allocated between the electric and steam operations.

Exhibit No.:

Issues: Overview

Revenue Requirement

True-up Allowance for Changes

Witness: Cary G. Featherstone
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony

File No.: ER-2010-0356

Date Testimony Prepared: November 17, 2010

### MISSOURI PUBLIC SERVICE COMMISSION

### UTILITY SERVICES DIVISION

### **DIRECT TESTIMONY**

**OF** 

**CARY G. FEATHERSTONE** 

### KCP&L GREATER MISSOURI OPERATIONS COMPANY FILE NO. ER-2010-0356

Jefferson City, Missouri November 2010

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



1	TABLE OF CONTENTS
2	CARY G. FEATHERSTONE
3	KCP&L GREATER MISSOURI OPERATIONS COMPANY
4	FILE NO. ER-2010-0356
5	CREDENTIALS1
6	EXECUTIVE SUMMARY4
7	OVERVIEW OF KCP&L GREATER MISSOURI OPERATIONS COMPANY FILING 9
8 9	BRIEF HISTORY OF GREAT PLAINS ENERGY AND KCP&L GREATER MISSOURI OPERATIONS COMPANY11
10 11	STAFF FINDINGS AND RECOMMENDATIONS FOUND IN STAFF'S COST OF SERVICE REPORT AND STAFF'S ACCOUNTING SCHEDULES
12	Test Year and Known & Measurable Period
13	Estimated True-up Case
14 15	Revenue Requirement Ratemaking Adjustments
16	ORGANIZATION OF STAFF'S COST OF SERVICE REPORT28
17	OVERVIEW OF STAFF'S FILING, FINDINGS AND RECOMMENDATIONS29
18	Overall Revenue Requirement29
19	Rate of Return
20	Rate Base31
21	INCOME STATEMENT31
22	Revenues31
23	Expenses
24	ALLOWANCE TO THE REVENUE REQUIREMENT33
25	COST REVIEW OF CONSTRUCTION PROJECTS34
26	KCP&L GREATER MISSOURI OPERATIONS COMPANY ELECTRIC RATES 35
27	SOUTH HARPER COMBUSTION TURBINE VALUES38
28	SOUTH HARPER PRUDENT TURBINES 4 and 5 COMBUSTION TURBINES
29	VALUES42
30	COMBUSTION TURBINE COSTS44
31	GENERAL ELECTRIC MODEL 7 EAS47
32 33	SALE OF NATURAL GAS-FIRED COMBUSTION TURBINES AT RACCOON CREEK AND GOOSE CREEK
2.4	DOLLS DOVCE DOWED VENTURES OFFED

1	OTHER UTILITY OFFERS 5:
2	COMBUSTION TURBINES HAVE EXPERIENCED A SIGNIFICANT DECLINE IN
3	VALUES 50
4	TRANSMISSION COSTS FOR SOUTH HARPER PRUDENT TURBINES 4 and 5 59

1		DIRECT TESTIMONY
2		OF
3		CARY G. FEATHERSTONE
4		KCP&L GREATER MISSOURI OPERATIONS COMPANY
5		FILE NO. ER-2010-0356
6	Q.	Please state your name and business address.
7	A.	Cary G. Featherstone, Fletcher Daniels State Office Building, 615 East 13 <sup>th</sup>
8	Street, Kansa	s City, Missouri.
9	Q.	By whom are you employed and in what capacity?
10	A.	I am a Regulatory Auditor with the Missouri Public Service
11	Commission	(Commission).
12	CREDENT	TALS
13	Q.	Please describe your educational background.
14	A.	I graduated from the University of Missouri at Kansas City in December 1978
15	with a Bache	elor of Arts degree in Economics. My course work included study in the field of
16	Accounting a	and Auditing.
17	Q.	What job duties have you had with the Commission?
18	A.	I have assisted, conducted, and supervised audits and examinations of the
19	books and re	cords of public utility companies operating within the state of Missouri. I have
20	participated	in examinations of electric, industrial steam, natural gas, water, sewer and
21	telecommun	ication companies. I have been involved in cases concerning proposed rate
	II .	

3

4

5

6

7

8

9

10

11 12

13

14

15

16

17

18 19

20

21

22

23

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

- Q. Have you previously testified before this Commission?
- A. Yes. The Schedule 1 attached to this testimony contains a list of rate cases in which I have submitted testimony. In addition, I also identify in Schedule 1, other cases where I directly supervised and assisted Commission Staff (Staff) in audits of public utilities, but where I did not testify.
- Q. With reference to File No. ER-2010-0356, have you examined and studied the books and records of KCP&L Greater Missouri Operations Company regarding its electric operations?
  - A. Yes, with the assistance other members of the Commission Staff.
- Q. What knowledge, skill, experience, training and education do you have with regard to KCP&L Greater Missouri Operations Company's general rate increase tariff filing that is the subject of File No. ER-2010-0356?
- A. I have acquired knowledge of the ratemaking and regulatory process through my employment with the Commission. I have participated in numerous rate cases, complaint cases, merger cases and certificate cases, and filed testimony on a variety of topics. I have also acquired knowledge of these topics through review of Staff work papers from prior rate cases filed before this Commission relating to KCP&L Greater Missouri Operations Company electric operations (which may also be referred to as GMO or as "Company") and its affiliate, Kansas City Power & Light Company (KCPL). I have previously examined generation and generation-related topics; conducted and participated in several construction audits involving plant and construction records, specifically the costs of construction projects

relating to power plants. I have also been involved in the fuel and fuel-related areas for power plant production, purchased power and off-system sales on numerous occasions.

In particular, I have been involved in many GMO electric and natural gas rate cases, both under its current name and when it was named Aquila Inc. (Aquila). I have also been involved in many KCPL electric rate cases—three under its experimental alternative regulatory plan (herein referred to as the "Regulatory Plan") the Commission approved in Case No. EO-2005-0329 and others in the early 1980's, in particular the rate case concerning the in-service of the Wolf Creek Nuclear Generating Station (Wolf Creek). I was also involved in KCPL's steam rate cases in the early 1980's when KCPL had steam operations in downtown Kansas City before they were sold to Trigen Kansas City Energy in 1990.

Previously Aquila was named UtiliCorp United, Inc. (UtiliCorp). Before UtiliCorp merged with St. Joseph Light & Power Company in December 2000, Case No. EM-2000-292, I participated in electric, natural gas and steam rate cases for St. Joseph Light & Power Company. UtiliCorp changed its name to Aquila in early 2002. Aquila created operating divisions named Aquila Networks-MPS and Aquila Networks-L&P for its Kansas City and St. Joseph, Missouri utility operations, respectively. Aquila had different rate designs and rate structures for each division. After Great Plains Energy, Inc. acquired Aquila on July 14, 2008, and renamed it GMO, GMO eliminated the operating divisions, but, because they still have different rate designs and rate structures, for regulatory purposes GMO refers to its Kansas City area operations as MPS and its St. Joseph area operations as L&P. L&P has both electric and steam operations.

Since GMO became an affiliate of KCPL, both entities have engaged in much consolidation of their operations; essentially, operationally, KCPL runs GMO. Therefore,

specifically, for this rate case, I reviewed testimony, work papers and responses to data requests from both KCPL and GMO, along with documents such as data request responses and work papers in prior cases involving rates, electric and steam, for what are now referred to as MPS and L&P. I conducted and participated in interviews of Company personnel relating to this rate case, and I performed extensive discovery concerning aspects of the construction and operation of GMO's electric operations. Over the years I have had many discussions with the Company regarding GMO's rate case & regulatory activities, earnings reviews, and merger, acquisition and sale transactions.

I also participated in the 1996 merger application of KCPL and Aquila, where they applied for Commission authority to consolidate those two operations in Case No. EM-96-248. After that merger did not close, I participated in the two cases where KCPL and Westar Energy (then called Western Resources) sought authority to merge in 1998 and 1999, Cases No. EM-97-515. I participated in the case where St. Joseph Light & Power Company and Aquila sought Commission authority to merge. That merger closed December 2000. The St. Joseph Light & Power Company merger application was designated as Case No. EM-2000-292. I was also involved the case, Case No. EM-2000-0369, where Aquila and The Empire District Electric Company sought Commission authority to merge. That merger did not close.

In addition to the foregoing cases, during my employment at the Commission I have been involved in many other reviews and investigations that were initiated by applications filed by KCPL or GMO.

### **EXECUTIVE SUMMARY**

Q. Please summarize your testimony.

A. Curt Wells, of the Commission's Utility Operations Division, and I sponsor Staff's Cost of Service Report and Accounting Schedules in this proceeding that are being filed concurrently with this testimony and Mr. Wells' testimony. Staff's Cost of Service Report supports Staff's recommendation of the amount of the rate revenue increase for GMO based on information through the period ending June 30, 2010 using actual historical information and the recommendation that Staff expects it will find after true-up to be appropriate for GMO in this case. Staff prepared its revenue requirement results MPS and L&P based on actual results through the June 30, 2010 update period and included an estimate of the expected results through the December 31, 2010 true-up period. The true-up results will be referred to as the Estimated True-up Case. This rate revenue recommendation is found in Staff's separately filed Accounting Schedules for MPS and L&P for the June 30, 2010 update, which also contain information supporting the estimated true up recommendation.

I present an overview of the results of Staff's review of GMO's revenue requirement started in response to GMO's general rate increase request made on June 4, 2010. Several members of the Commission's Staff participated in Staff's examination of GMO's books and records for all the relevant and material components that make up the revenue requirement calculation. These components can be broadly defined as (1) capital structure and return on investment, (2) rate base investment and (3) income statement results, including revenues, operating and maintenance expenses, depreciation expense, and the taxes related to revenues and these expenses, including income taxes. I provide an overview of the Staff's work on each of these broadly defined components.

1

3

4

5 6

7 8

9

10

11

12

13 14

15

16

17 18

19

21

20

O. Based on its review of the calendar year 2009 updated through June 30, 2010, at this time, what is Staff's recommendation of GMO's revenue requirement increase that should be reflected in a rate increase?

Staff's Estimated True-up Case is based on the use of a mid-point rate of A. return of 7.98% on a return on equity of 9.0%. Because of the significant cost increases relating to the plant additions and substantial fuel cost increases resulting primarily from a new freight contract that goes into effect on January 1, 2011, Staff has included estimates for them in its direct case. Those estimates will change when Staff has actual numbers for the true up through December 31, 2010 which will be presented to the Commission on February 22, 2011—the date of the True-up Direct filing.

Staff is presenting its true-up estimate, based on Staff's Construction Audit and Prudence Review Iatan Construction Project for Costs Reported as of June 30, 2010 Report, of what it believes will be the results of its true-up of GMO's revenue requirement through the period ending December 31, 2010. That true-up will include GMO's share of the newly constructed Iatan Unit 2. Staff will perform the true-up audit and make a recommendation regarding the revenue requirement based on actual results for the December 31, 2010 at that time. Based on its Estimated True-up Case, Staff has calculated an estimate of the increase for the true-up and included an allowance for known and measurable changes (allowance) expected to occur from July 1 through December 31, 2010, that have not been reflected in its direct filing. The Estimated True-up Case along with the allowance for changes is based on Staff's mid-point rate of return of 7.98% on a return on equity of 9.0%.

1

3

4 5

6 7

8 9

10

12

11

13

14 15

16

17

18

19

20

The true-up estimate of GMO's revenue requirement through the true-up period ending December 31, 2010, reflects rate base additions for Iatan Unit 2 with associated increases in returns, depreciation expense and operating and maintenance costs.

While the Iatan Unit 2 addition are now known, there will be other plant additions added through the time of the true-up in this case causing GMO's revenue requirement to increase. The need for the allowance is to address other costs that will likely change and, therefore, materially affect Staff's current calculation of GMO's revenue requirement. In addition to other plant investment besides Iatan Unit 2, the allowance includes estimates for payroll; payroll-related benefits, such as pensions and medical costs; and fuel costs, including fuel commodity price changes and freight price changes. Staff knows of a contracted freight price that will increase on January 1, 2011. While it has reflected an estimate for the increase in fuel costs, the true-up will include the actual price increases for the supply and freight costs. Although beyond the true-up period cut-off date, Staff will include this material cost change in its calculation of GMO's revenue requirement in its true-up filing. Doing so comports with past Commission practice of recognizing material events that occur very shortly after the end of a true-up period, here, December 31, 2010. Consequently, the allowance covers any reasonable and prudent cost increases through the end of the year that are not specifically included in Staff's direct filing.

Q. What are the major areas of Staff's recommended increase in GMO's revenue requirement in this case?

1	A.	The following represent a non-exhaustive list of areas that make up
2	Staff's filing:	
3		• Rate of Return
4		• GMO's investments in Iatan Unit 2,
5 6 7		• Remaining costs for the plant upgrades for environmental costs for GMO investment in the Iatan 1 AQCS (Air Quality Control System) not captured in its last rate case
8 9		• GMO's investment in Iatan Common Plant not captured in its last rate case
10 11		• GMO's fuel costs, including freight rate increase and purchased power costs
12 13		• GMO's off-system sales margins from the firm and non-firm bulk power markets
14		• GMO's pension and other post-employment benefits (OPEBS) costs
15		Acquisition savings and transition costs
16		• The treatment of a capacity addition for MPS
17	Q.	Did you review any specific components of the revenue requirement
18	calculation Sta	aff used for calculating GMO's revenue requirement in this case?
19	A.	Yes. I examined with Staff witness Alan Bax the jurisdictional assignment
20	and allocation	of costs, i.e., the assignment and allocation of costs between the retail and the
21	wholesale mar	ckets, to identify the rate base investment and income statement expenses to
22	include in dev	eloping the revenue requirement for MPS for serving its retail customers—the
23	Missouri retail	jurisdiction. L&P does not have any wholesale customers that fall under the
24	jurisdiction of	the Federal Regulatory Commission (FERC); therefore, no jurisdictional
25	allocation of it	s costs is required.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

I am also providing support on the capacity requirement issue that Staff has had historically for the MPS system. Staff has consistently advocated the need for MPS to have generation under its control and installed as a regulated asset. Staff has proposed an adjustment to MPS operations to address this capacity requirement issue. Staff witnesses Lena M. Mantle and Charles R. Hyneman are also providing testimony on this subject.

# OVERVIEW OF KCP&L GREATER MISSOURI OPERATIONS COMPANY FILING

Q. What is the purpose of your direct testimony?

With Mr. Wells, I present an overview of the results of Staff's review of A. GMO's revenue requirement in response to GMO's general rate increase request made on June 4, 2010. I provide an overview of the Staff's work on each component of the revenue requirement calculation Staff used for determining an appropriate revenue requirement for GMO in this case. Mr. Wells provides an overview of the work of the members of Operations Division who worked on in this case. Several members of Staff had specific assignments relating to different components of the revenue requirement calculation, and were responsible for different calculations used in developing the overall revenue requirement. Results of different components of the Staff's revenue requirement calculation for GMO are contained in Staff's Accounting Schedules that are also being filed with Staff's Cost of Service Report, my testimony and the testimony of Mr. Wells. Staff refers to its revenue requirement model as "Exhibit Model System" or "EMS," and refers to the results of its modeling with inputs as "EMS" runs. In general, and here, Staff derives a utility's revenue requirement from the work product of members of both the Utility Services Division and the Operations Division of the Commission. Staff presents its

- results in Accounting Schedules that are separately filed as an exhibit in the case.

  My direct testimony, Mr. Wells' direct testimony, the Staff's Cost of Service Report and

  Accounting Schedules together present and support Staff's revenue requirement calculation for GMO.
  - Q. Why did Staff review GMO's books and records and calculate a revenue requirement for GMO in this case?
  - A. GMO filed its general rate increase case on June 4, 2010, for its electric operations. GMO has different sets of rates in two different geographic areas one in and about Kansas City, which it formerly served under the d/b/a Aquila Networks MPS and one about St. Joseph, Missouri, which it formerly served under the d/b/a Aquila Networks L&P. For ease, the areas with differing rates are referenced as "MPS" and "L&P" in Staff's direct case. GMO has stated that the new tariff sheets it filed for MPS are designed to increase its revenues from MPS retail customers by \$78.8 million per year, a 14.4% increase (excluding the impacts of the fuel clause) and that the new tariff sheets it filed for L&P are designed to increase its revenues from retail electric customers by \$22.1 million, a 13.9% increase (excluding the impacts of the fuel clause). Like KCPL's request, the GMO requests for MPS and L&P are based on a proposed rate of return on equity of 11.0% applied to the 46.16% equity capital structure based on the capital structure of its parent holding company Great Plains Energy [page 3 of GMO Minimum Filing Requirements-- Application].
  - Q. Did GMO's affiliate KCPL file tariff sheets designed to implement a general increase it is electric rates in Missouri?
  - A. Yes. KCPL also filed tariff sheets designed to increase its electric rates on June 4, 2010. The Commission designated that case as File No. ER-2010-0355. This filing

- contains tariff sheets designed to implement an increase in its electric retail rate revenues in Missouri, exclusive of gross receipts, sales, franchise and occupational fees or taxes, of \$92.5 million. If implemented on an equal percentage basis, this represents a 14.8% increase in existing KCPL rates. KCPL, in part, based its rate increase request on a proposed rate of return on equity of 11.0% applied to a 46.16% equity capital structure based on the capital structure of its parent holding company Great Plains Energy Incorporated (GPE).
  - Q. When did Staff file direct testimony in the KCPL rate case?
- A. Staff filed its KCPL electric rate increase case (File No ER-2010-0355) direct testimony on November 10, 2010.

## BRIEF HISTORY OF GREAT PLAINS ENERGY AND KCP&L GREATER MISSOURI OPERATIONS COMPANY

- Q. Please provide a brief history of Great Plains Energy and its affiliates.
- A. Great Plains Energy is a holding company incorporated in Missouri in 2001. It has two wholly-owned subsidiaries-- KCPL and GMO (MPS, L&P and L&P steam)—that provide regulated utility services in Missouri. It also owns KLT Inc., which has very small non-regulated operations that presently are not active. Great Plains Energy also wholly owns Great Plains Energy Services Incorporated (GPES). GPES provided corporate services at cost to Great Plains Energy and its subsidiaries, including KCPL and GMO until December 16, 2008, when, in a restructuring, all Great Plains Energy and GPES employees were transferred to KCPL. Following that restructuring, KCPL employees perform all the work for Great Plains Energy and its subsidiaries, including GMO.
  - Q. What is GMO?

2 train
 3 As
 4 GM
 5 MF
 6 ele
 7 Mi

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

1

A. GMO is an integrated, regulated electric utility that provides generation, transmission, distribution and sells electricity to retail customers in the state of Missouri. As described earlier, it has two service areas with different rates—MPS and L&P. GMO provides electric service only in Missouri. In addition to serving retail customers, MPS, under the jurisdiction of the Federal Energy Regulatory Commission (FERC), sells electricity at wholesale to several municipalities Missouri. L&P does not. GMO is a Missouri corporation incorporated in 2008. The Company, and its predecessors, began providing electric service to the public in the late 19<sup>th</sup> century.

# STAFF FINDINGS AND RECOMMENDATIONS FOUND IN STAFF'S COST OF SERVICE REPORT AND STAFF'S ACCOUNTING SCHEDULES

Q. How did Staff conduct its audit of GMO?

A. Staff conducted interviews with GMO personnel. Staff reviewed KCPL's and GMO's responses to data requests issued in this and other previous cases. Staff reviewed the minutes of meetings of GPE's and KCPL's Boards of Directors as well as the minutes of the former Aquila Board of Directors. Staff reviewed the books and records of KCPL and GMO, including: the general ledger, plant ledgers and various other documents, including the FERC Form 1, for the last several years. Staff toured most of KCPL's and GMO's plant facilities, including the Iatan Project— Iatan Unit 1 Air Quality Control System and Iatan Unit 2, both of which GMO owns jointly with KCPL and other entities.

Staff toured several of GMO's generating facilities including Sibley Generating Unit (Sibley), Jeffrey Energy Center (Jeffrey) Lake Road Generating Station (Lake Road) and several of its combustion turbines. MPS wholly owns Sibley and 8% of Jeffrey.

Page 12

Q. Which members of Staff were assigned to this case?

1	A. Several Staff experts from the Commission's Utility Services Division were
2	assigned to this case. Their names follow with a brief description of their contribution to the
3	Staff's Cost of Service Report:
4	Financial Analysis Department
5	David Murray Rate of Return and Capital Structure.
6	Engineering and Management Services Department
7	Lisa A. Kremer Quality of Service
8	Arthur W. Rice Depreciation Rates.
9	Auditing Department
10 11	<ul> <li>Cary G. Featherstone Overall Revenue Requirement Results and Jurisdictional Allocations.</li> </ul>
12	<ul> <li>V. William Harris Fuel and Purchased Power Costs, Fuel Inventories, Off-system Sales</li> </ul>
14 15	<ul> <li>Paul R. Harrison Income Taxes, Deferred Income Taxes, Deferred Income Tax</li> <li>Reserve; Pensions and Other Post-Retirement Employment Benefits</li> </ul>
16	■ Charles R. Hyneman Construction Audit
17 18 19	<ul> <li>Karen Lyons Plant in Service, Accumulated Depreciation Reserve, Depreciation Expense; Operation and Maintenance Expense Non-wage, Cash Working Capital, warranty payments.</li> </ul>
20	Keith A. Majors— Acquisition Savings and Construction Audit
21 22	<ul> <li>Amanda C. McMellen Electric Revenues and Uncollectible Revenues (Bad Debts)</li> </ul>
23 24	Bret G. Prenger— Payroll, Payroll Related Benefits, Payroll Taxes and Incentive Compensation, material and supplies, prepayments, advertising and lease expenses

recommendations.

Additionally, Commission Staff experts from the Utility Operations Division were 1 2 assigned to the development of the revenue requirement as follows: **Energy Department-**-3 4 Alan J. Bax - Jurisdictional Allocations and Losses 5 Daniel I. Beck - Transmission Expenses and Transmission Expense Tracker Walt Cecil - Sales- Weather Normalization, Days Adjustment Sales and Net 6 System Input Carol Gay Fred - Low-Income Programs 8 9 Randy S. Gross - Smart Grid Application 10 Hojong Kang - Demand Side Management David Elliott - Fuel and Purchased Power Costs, the Production Cost Model and 11 12 **Engineering Reviews** 13 Shawn Lange – Engineering Reviews ■ Erin L. Maloney - Spot Market Prices of Purchased Power and Fuel and 14 Purchased Power Allocations 15 16 Lena M. Mantle – Iatan 2 Cost Allocations and Capacity Requirement 17 John A. Rogers - Demand Side Management and Fuel Adjustment Clause 18 Henry E. Warren - Low-Income Programs 19 Curt Wells - Revenue, Large Customer Annualization/ Rate Switching, Revenue 20 Days Adjustment, Revenue Annualization for Rate Change, Special Contracts and Other Customer Discounts and Project Coordinator for Operations Division 21 22. 23 Seoung Joun Won - Weather Normalization. 24 Each of these Staff experts' work product was used as a direct input to the various 25 adjustments contained in Staff's Accounting Schedules and revenue requirement

Q. Would you provide an overview of how the Staff assigned to this case worked together to arrive at Staff's revenue requirement recommendations for MPS and L&P?

A. All of the Staff members assigned to this case are, by education and experience, experts at performing their regulatory responsibilities as members of the Commission Staff. These regulatory experts rely on the work of each other to develop Staff revenue requirement recommendations regarding filings made by public utilities made before the Commission. The work of each Staff member is an integral part of the Staff's Cost of Service Report and Accounting Schedules which contain the results of their collective efforts in Staff's findings and recommendations. Mr. Wells and I relied on these findings and recommendations to develop Staff's ultimate recommendations in this direct filing. Many of the individual sections presented include references indicating reliance on the work of other contributing experts. Additionally, for developing its true-up estimate, I, with other members of Staff, relied on the Staff's Report of its Construction Audit and Prudence Review of the Iatan Project and the work of the members of Staff who worked on and prepared that report.

As sponsoring witnesses, Mr. Wells and I relied on the work product of every Staff expert assigned to this case. Each Staff expert provided the results of their review and analysis as inputs to the revenue requirement calculation, and is identified in the sections of the report submitted by that expert. An affidavit, credentials, and the qualifications of each Staff expert are attached to the Report. Each Staff expert assigned to the KCPL and GMO rate cases are providing their work papers supporting the findings and recommendations to the Company and to other parties, as the Commission has ordered in setting the procedural schedule in this case. Finally, each Staff expert assigned to this rate case will be available to

1

4

5

7

9

8

1011

1213

14

15

1617

18 19

2021

2223

answer Commissioner questions and to be cross-examined by any party who wishes to conduct cross-examination regarding information on how Staff's findings and recommendations were developed and presented in the Cost of Service Report and Accounting Schedules.

- Q. What was your overall responsibility in this case?
- A. I was one of two project coordinators assigned to identify the work scope for the case, make Staff assignments, and supervise and oversee all work product development. With the exception of the Construction Audit and Prudence Review of the Iatan Project, I specifically supervised all areas of the audit work assigned to and the responsibility of the Auditing Department. I worked closely with other Staff experts assigned to this rate case. I worked with the depreciation and rate of return experts as well as the Utility Operations experts assigned to revenues and fuel costs.

I have overall responsibility to ensure the revenue requirement calculations using the Staff's computer model are timely completed. This involves all aspects of the elements making up the revenue requirement recommendations. To this end, I, along with those under my direct supervision, either developed directly, or was provided with, the information used to support the Staff's revenue requirement recommendations for MPS and L&P.

- Q. What information did other Staff experts provide to Staff experts in the Auditing Department to develop Staff's revenue requirement recommendations?
- A. Staff expert David Murray's recommendations from his capital structure and rate of return analyses were provided as inputs to the revenue requirement calculations and appear as part of Accounting Schedule 12. His findings are also in Staff's Cost of Service Report, along with his schedules.

December 1, 2010.

1	Staff expert Arthur W. Rice provided the results of his depreciation analysis, which
2	also are reflected in Staff's Cost of Service Report, and in a schedule.
3	Staff experts Curt Wells, Seoung Joun Won, Amanda C. McMellen and Walt Cecil
4	worked closely together and are sponsoring the revenue adjustment results.
5	Staff experts David Elliott, Erin L. Maloney and V. William Harris worked together
6	in developing the Staff's fuel costs for GMO in this case.
7	Staff expert Alan J. Bax developed the energy and demand jurisdictional allocators
8	used to allocate the appropriate portion of MPS costs of MPS operations to the MPS
9	retail jurisdiction.
10	Q. Did Staff develop its revenue requirement recommendations for MPS and
11	L&P in this rate case consistently with how Staff has developed its revenue requirements for
12	other utilities when they have made requests to increase their rates?
13	A. Yes. Based on my experience as a regulatory auditor, my many years of
14	experience as a project coordinator in numerous rate cases, the effect of the inputs provided
15	by the various Staff experts assigned to the GMO rate case on Staff's overall revenue
16	requirements for GMO as presented in the Accounting Schedules and the results discussed in
17	the Staff Cost of Service Report, Staff has developed its revenue requirements for GMO
18	consistently with how Staff has developed its revenue requirements for other utilities, and the
19	inputs provided by the various Staff experts assigned to the GMO rate case are reasonable.
20	Q. Does this November 17, 2010 filing by Staff present all of Staff's direct case?
21	A. No. Staff is scheduled to file its rate design recommendation on

#### Test Year and Known & Measurable Period

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

O. What is a test year?

A. A test year is an historical year used as the starting point for determining the basis for adjustments which are necessary to reflect annual revenues and operating costs in calculating any shortfall or excess of earnings by a rate-regulated utility. It is important to identify the utility's ongoing costs to provide utility service in the future and what its rates need to be set at to collect sufficient revenues to pay for those ongoing costs, plus a reasonable profit, in the future. In determining ongoing revenues and costs to develop the utility's revenue requirement, the first step is to identify the test year costs levels, which serve as the starting point for making all the adjustments to arrive at the revenue requirement recommendation.

Q. What is the test year in this case?

A. The ordered test year for this case, File No. ER-2010-0356, is the year ended December 31, 2009. The December 31, 2009 test year was chosen by the Company, agreed to by Staff, and approved by the Commission in its August 18, 2010 Order Approving Nonunanimous Stipulation and Agreement, Setting Procedural Schedule, and Clarifying Order Regarding Construction and Prudence Audit. Staff made annualization and normalization adjustments to the test year results when the unadjusted results did not fairly represent the utility's most current annual level of existing revenue and operating costs.

Selecting a "known and measurable date" or "known and measurable period" is important to synchronize and capture—"match"—all revenues and expenses. A proper determination of revenue requirement is dependent upon a consideration of all material components of the rate base, return on investment, current level of revenues, along with

22.

operating costs, at the same point in time. This ratemaking principle is commonly referred to as the "matching" principle. The known and measurable dates established for this case, ER-2010-0356, are December 31, 2009 (test year), June 30, 2010 (update period end) and December 31, 2010 (true-up period end). The Staff's direct case filing represents a determination of GMO's revenue requirements for MPS and L&P based upon known and measurable results as of June 30, 2010. The June 30, 2010 date for the known and measurable period was chosen to enable the parties and Staff an update period that provides sufficient time to obtain actual information from GMO upon which to perform analyses and make calculations regarding various components to the revenue requirements and still base their revenue requirement recommendations used for proposing new prospective rates on very recent information. This date represents the latest time frame to reflect known changes that can be measured or quantified and still be included in this filing.

- Q. What is the purpose of the test year?
- A. The purpose of a test year, and more importantly the update period, is to develop a relationship between the various components of the ratemaking process and keep those relationships in synchronization. In order to determine the appropriate level of utility rates, Staff examines the major elements of the utility's operations. These include rate base items such as plant in service, accumulated depreciation, deferred income tax reserves, fuel stocks, material and supplies, and other investment items. Also essential in this process is a review of the utility's revenues and expenses, making adjustments through the annualization and normalization processes. These items include: payroll, payroll-related benefits, payroll taxes, fuel and purchased power costs including the updating of current fuel prices, operation and maintenance costs for non-payroll related costs such as material

and equipment costs, small tool costs, and outside vendor costs for equipment repairs.

Depreciation expense and taxes, including federal, state, local and property taxes, are all considered in setting rates.

It is important to maintain a representative relationship between rate base, revenues and expenses at a point in time near to when new prospective rates become effective in order for a public utility to have an opportunity to earn a fair and reasonable return. An attempt is made in the regulatory process to set rates to properly reflect the levels of investment and expenses necessary to serve the retail customer base which provides revenues to the utility. The Commission concisely stated the purpose of using a test year in its Order in KCPL's 1983 general rate case, Case No. ER-83-49:

The purpose of using a test year is to create or construct a reasonable expected level of earnings, expenses and investments during the future period in which the rates, to be determined herein, will be in effect. All of the aspects of the test year operations may be adjusted upward or downward to exclude unusual or unreasonable items, or include unusual items, by amortization or otherwise, in order to arrive at a proper allowable level of all of the elements of the Company's operations. The Commission has generally attempted to establish those levels at a time as close as possible to the period when the rates in question will be in effect.

In Case No. ER-83-49, regarding the need for a true-up, the Commission stated that it would not "consider a true-up of isolated adjustments, but will examine only a package of adjustments designed to maintain the proper revenue-expense-rate base match at a proper point in time." [26 Mo P.S.C. (N.S.) 104, 110 (1983)] This concept of developing a revenue requirement calculation based on a consideration of all relevant factors has been a long-standing approach to ratemaking in this state, and is the approach Staff is following in this case.

### **Estimated True-up Case**

Because of the significant plant additions of Iatan 2 anticipated by the end of 2010, at GMO's request the Commission established a true-up through the end of December 31, 2010. While no party disputed using a 2009 test year, not all parties agreed to the update and true-up periods. In its August 18, 2010 Order where it set the procedural schedule in this case, the Commission said the following regarding the true-up:

A true-up period of the 12 months ending December 31, 2010, and Iatan 2 and Iatan Common Plant cutoff period of October 31, 2010, is ordered, assuming that the actual in-service date of Iatan 2 is projected to occur no later than December 31, 2010. However, in the event that the in-service date of Iatan 2 is projected to be delayed beyond December 31, 2010, the true-up period would be moved to the last day of the same calendar month as the actual in-service date of Iatan 2 and the Iatan Common Plant cutoff period would be moved to two months prior the revised true-up date...

If the true-up period is adjusted, KCP&L Greater Missouri Operations Company shall extend the effective date of its tariffs four months past the end of the true-up period; however, such adjustment shall not extend beyond an in-service date for Iatan 2 of March 31, 2011.

KCP&L Greater Missouri Operations Company shall indicate by filing a pleading no later than October 6, 2010 if it seeks to adjust the true-up period.

[Commission Order issued August 18, 2010, pages 2-3]

Thus, the Commission authorized that the true-up in this case be through December 31, 2010, unless an extension became necessary as a result of the Iatan 2 construction project currently undertaken by GPE and its subsidiaries. GMO and KCPL notified the Commission on October 6, 2010 that "the Companies hereby notify the Commission that they do not seek to extend the true-up period in these cases beyond the December 31, 2010 date established in the

Procedural Order." Therefore, the true-up in this case, as well as the KCPL rate case, will be through December 31, 2010.

### Revenue Requirement Ratemaking Adjustments

aras ap aan

Q. Does Staff make any adjustments to the raw company test year, update and true-up data?

A. Yes. The ratemaking process includes making adjustments to reflect normal, on-going operations of a utility. This process generally uses four approaches to reflect changes determined to be reasonable and appropriate. These are commonly referred to as annualization adjustments, normalization adjustments, disallowances, and *pro forma* adjustments.

Q. What is an annualization adjustment?

A. An annualization adjustment is made when costs or revenues change during the audit period that will be ongoing at a level different than they existed during the audit period. Typical examples are payroll increases granted to employees or employees starting employment mid-year which would require an annualization adjustment to reflect a full annual period of payroll costs. Without such an adjustment payroll would be understated since that increased payroll will continue into the future. Reflecting new customers that start taking service at the end of the test year or update period would also require an annualization to properly reflect a full 12-month of revenues associated with them. If a customer takes service the last month of the update period, no revenues from that customer will be included in the test year. Consequently, if that customer's only month of revenues is not reflected for a full twelve-month period, then revenues will be substantially understated, to the benefit of the utility.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Staff annualized many aspects of the current GMO rate case, such as payroll and revenues.

Q. What is a normalization adjustment?

A. A normalization adjustment is an adjustment made to reflect normal, on-going operations of the utility. Revenues or costs that were incurred in the test year that are determined not to be typical or abnormal will get specific rate treatment. These abnormal events will generally require some type of adjustment to reflect normal or typical operations. The ratemaking process removes the costs or revenues of abnormal or unusual events from the cost of service calculation and replaces them with normal levels of revenues or costs. An example of an abnormal event is the impact of unusually hot or cold weather on revenues for those customers that are weather sensitive. Extreme temperatures can have significant impacts on revenues, resulting in a distortion to test-year revenue requirement results. Since utility rates are set using normalized inputs, adjustments to test-year input levels must be made when it is determined that unusual or abnormal events cause unusually high or low results. In the case of weather impacts on utility results, detailed information is examined to determine if revenues, and related fuel costs must be adjusted for the effects that warmer or colder than normal temperatures have on the utility's operations. Weather during in the test year is compared to normal annual daily temperatures based on actual temperature measurements taken over a substantial period of time, many times a 30-year time horizon. An adjustment is made to weather sensitive revenues in the test year to reflect normal weather conditions. The resulting weather-normalized sales volumes are also used as basis for the utility's fuel and purchased power costs, so that abnormal weather impacts are isolated and removed from those costs.

1
 2
 3

Another example of application of the normalization process is the examination of maintenance and operation costs relating to production equipment, such as coal-fired generating units. Costs are examined to determine if unusual events like major maintenance on turbines have occurred during the test year. It is common in the ratemaking process to reflect normalization adjustments. If these types of adjustments are not made, the utility revenues and costs, which both directly impact earnings, would be either over- or understated. For example, cooler than normal weather in the summer will negatively impact an electric utility's revenues since the demand for electricity for air conditioning will be decreased. Staff proposes adjustments to normalize the costs and revenues of events that are expected to vary from the "average" year.

In this case, Staff, based on an examination of actual historical events, has made both a weather adjustment for revenues and normalized non-payroll operation and maintenance expenses.

- Q. What is a disallowance adjustment?
- A. This type of adjustment removes cost elements from the cost of service for test-year results because the items are either non-recurring, not necessary to the provision of utility service, or were imprudently incurred. A disallowance adjustment results when the cost recovery in rates is considered inappropriate. Disallowances are made to eliminate costs from test year results—and thus the recommended revenue requirement—either entirely or partially. One example is the removal from test results of certain advertising costs. While some advertising costs should be included in rates, others should be eliminated because they are not necessary to the provision of utility service.

during the test year.

3

Q. What is a *pro forma* adjustment?

4 5

6

7

8

9

10

11

12

13

14

15

16

17 18

19

20

21

22

A. This type of adjustment is made to reflect increases and decreases to revenue

In this case, Staff disallowed the costs for certain advertisements GMO incurred

requirement because of a rate increase or decrease. Pro forma adjustments are made because

of the need to reflect the impact of items and events occurring subsequent to the test year.

These items or events significantly impact revenue, expense and the rate base relationship,

and should be recognized to address the forward-looking objective of the test year. Caution

must be taken when recognizing pro forma adjustments to ensure that all items and events

subsequent to the test year are examined to avoid not recognizing offsetting adjustments.

In addition, some post-test year items and events may not have occurred yet—be known—

and or may not have been sufficiently measured—be measurable. As a result,

quantification of some pro forma adjustments may be more difficult than the quantification

of other adjustments. A true-up audit that considers a full range of items and events that

occur subsequent to the test year and update period attempts to address the maintenance of a

proper relationship between revenues, expenses and investment, as well as address the

difficulty in quantification associated with making pro forma adjustments.

The most common example of a pro forma adjustment is the grossing up of

net income deficiency for income tax purposes. This involves calculating the revenue

requirement before income taxes. If rates need to be adjusted to increase utility revenues,

then those revenues need to be factored up for income taxes. This is necessary because every

additional revenue dollar collected in rates requires income taxes to be paid.

	As an illustration, if the utility needs to increase rates by \$1 million,	then it must
	increase rates by a significantly greater amount to receive the full \$1 million incre	ease because
	of the associated income taxes that must be paid to the taxing authorities. As an	example, the
	revenue requirement model (Accounting Schedule 1) used by Staff to determine	the findings
	of the cost of service review calculates the revenue requirement as follows using	g illustrative
	dollar amounts only:	
	Net Income Required	\$1,000,000
	Net Income Available	600,000
	Additional Net Income Required	\$400,000
	Income Tax Gross Up Factor (using a 38.39% effective tax rate)	<u>x 1.6231</u>
	Recommended Revenue Requirement Increase	\$649,240
	For the utility to recover the full \$400,000 of additional revenues on an at	fter-tax basis
ı	as required based on the cost of service results found in Staff's analysis, rates w	ould have to
	increase an additional amount of \$249,240, for payment of income taxes. This	results in the
	total revenue requirement of \$649,240 that rates would have to be increased so	the company
	would be left with \$400,000 needed to earn an appropriate return and recover allo	owed costs.
	Another way of considering the effects of income taxes in the ratemaking	process is:
	Additional Revenue Collected in Rates from Rate Increase	\$649,240
	Less: Income Tax Based on 38.39% Effective Tax Rate	(249,240)
	Additional Net Income from Rate Increase	\$400,000
	Revenue Requirement Calculation	
	Q. What does "revenue requirement" mean as it is used in the	context of
	determining rates for public utilities?	

1	A. Generally, the term "revenue requirement" is used to identify the results of an
2	examination of the utility's cost of service - rate of return and capital structure on the
3	investment together with the costs to provide a particular utility service. This difference
4	between the revenue requirement from a cost of service calculation and revenues based on
5	existing rates identifies any revenue shortfall (need to increase rates) or excess (need to
6	decrease rates).
7	Q. Did Staff examine GMO's cost of service for both its MPS and L&P areas?
8	A. Yes. Staff reviewed all the material and relevant components making up the
9	Company's revenue requirements for both MPS and L&P, which are: rate of return and
10	capital structure, rate base investment, and revenues and expenses, maintaining the
11	relationship between each of these components through the update period through
12	June 30, 2010.
13	Q. How do each of these elements relate to one another?
14	A. The ratemaking process for regulated utilities is a process whereby the
15	Commission makes rate decisions regarding how utilities charge customers for utility
16	services using a prescribed formula. The revenue requirement calculation can be identified
17	by a formula as follows:
18	Revenue Requirement = Cost of Providing Utility Service
19	Or
20	RR = O + (V-D)R; where,
21	RR = Revenue Requirement
22 23	O = Operating Costs (Payroll, Maintenance, etc.) Depreciation and Taxes

1 2 3	\	V	=	Gross Valuation of Property Required for Providing Service (including plant and additions or subtractions of other rate base items)
4 5	I	D	=	Accumulated Depreciation Representing Recovery of Gross Depreciable Plant Investment.
6 7	\	V-D	=	Rate Base (Gross Property Investment less Accumulated Depreciation = Net Property Investment)
8	F	R	=	Rate of Return Percentage
9	(V-D	)R	=	Return Allowed on Rate Base (Net Property Investment)
10	This for	mula p	orovide	s the traditional rate of return calculation this Commission uses
11	to set just and	reason	able ra	ates. The result provides a total revenue requirement amount.
12	That amount re	eprese:	nts the	incremental change in revenues over existing rates for the
13	test year necessary to allow the utility the opportunity to earn the return the Commission			
14	authorizes for it. That return is collected on the appropriate level of rate base investment.			
15	The revenue requirement calculation also allows for the recovery of the proper level of utility			
16	costs, including income taxes.			
1.5	OD CANAZAZ	ETON.	OF C	
17	ORGANIZAT	HON	OF S	TAFF'S COST OF SERVICE REPORT
18	Q. I	How is	Staff's	s Cost of Service Report organized?
19	A, S	Staff h	nas org	ganized its Cost of Service Report by each major revenue
20	requirement category as follows:			
21 22	I			round of Great Plains Energy and L Greater Missouri Operations Company
23	I	I.	Execut	ive Summary
24	Г	II.	Constr	uction Audit

1		IV.	KCP&L Greater Missouri Operations Company's Rate Case Filing
2		V.	Rate of Return and Capital Structure
3		VI.	Rate Base
4		VII.	Income Statement- Revenues
5		VIII.	Income Statement- Expenses
6		IX.	Depreciation
7		X.	Current and Deferred Income Tax
8		XI.	Jurisdictional Allocations
9		XII.	Transition Cost Recovery Mechanism
10	These	catego	ories have several subsections which identify in detail the specific
11	elements of St	taff's re	evenue requirement recommendations for MPS and L&P.
12	OVERVIEV	V OF S	STAFF'S FILING, FINDINGS AND RECOMMENDATIONS
13	Q.	Please	e identify the findings of Staff's review of GMO's rate increase request.
14	A.	Staff	conducted a review of GMO June 4, 2010 rate increase filing and has
15	identified the	followi	ng areas in its findings and recommendations:
16		<u>Overa</u>	all Revenue Requirement
17	Q.	How	did Staff determine its revenue requirements for MPS and L&P?
18	A.	The in	nitial revenue requirements were determined using a test year of calendar
19	year 2009 upo	lated th	rough June 30, 2010. However, because of the significant cost increases
20	relating to the	e plant	additions and substantial fuel cost increases resulting primarily from a
21	new freight co	ontract,	the June 30, 2010 update case will change significantly.
22	The t	rue-up	in this case will include GMO's share of the newly constructed
23	Iatan Unit 2.	Staff w	rill perform the true-up audit and make a new recommendation regarding
	1		

the revenue requirement at that time based on actual costs. Staff has projected the impact of the true-up and identified this as the Estimated True-up Case for both MPS and L&P. However, other cost increases are expected to occur besides those included in the Estimated True-up Case. These types of costs are not as easily identified and quantified, so Staff included an allowance to reflect those costs.

This true-up estimate reflects rate base additions for GMO's share of Iatan Unit 2, with associated increases in rate of returns, depreciation expense and operating and maintenance costs.

There are other costs that will likely change and, therefore, materially affect Staff's current calculation of GMO's revenue requirement. Those other costs include payroll; payroll-related benefits, such as pensions and medical costs; and fuel costs, including fuel commodity price changes and freight price changes.

#### Rate of Return

The rate of return Staff used to calculate its revenue requirement recommendations for GMO in this case is based on Great Plains Energy's capital structure and corporate results. David Murray, of the Commission's Financial Analysis Department, determined that the appropriate rate of return on equity is in a range of 8.50% to 9.50% with a mid-point of 9.00% which results in an overall rate of return on investment of 7.74% to 8.22% with a mid-point of 7.98%. Mr. Murray examined the Company's capital structure and cost of money and provided the Staff's proposed rate of return which it used to calculate its revenue requirement recommendations for GMO in this case.

#### Rate Base

Plant in Service and Accumulated Depreciation Reserve are reflected in the rate base as of June 30, 2010. All plant additions and retirements were included in the revenue requirement calculations as of June 30, 2010. Staff will add plant additions and retirements through the end of the true-up period, currently December 31, 2010. Several plant construction projects are being completed which will be addressed in the true-up.

Cash Working Capital has been included in rate base using a lead-lag study developed by GMO and Staff over the last three rate cases.

Fuel Stock (Coal) Inventories, Material & Supplies and Prepayments were included as of the June 30, 2010. These items will be re-examined in the true-up.

Prepaid Pension Asset relates to previous Stipulations and Agreements from previous rate cases approved in Case No. ER-2007-0004 and GMO's 2009 rate case, Case No. ER-2009-0090.

Accumulated Deferred Income Taxes Reserves were included as an offset to rate base as of June 30, 2010. Deferred tax reserves will be updated for the true-up.

Other rate base components for customer deposits, customer advances for construction, deferred SO<sub>2</sub>, coal premiums, and other regulatory liability for emission allowance sales are included through end of the update period of June 30, 2010.

#### **INCOME STATEMENT**

#### Revenues

Staff annualized and normalized revenues through June 30, 2010 to reflect an annual level of weather normalized revenues. Revenues will be trued-up through December 31, 2010.

4

3

5

6

7

8 9

10

11

12

13 14

15

16

17

18 19

20

21 22

23

Off-system sales for firm and non-firm customers have been included in the case. Staff has reflected an amount in this direct filing based on an appropriate level. Staff will continue to examine the off-system sales for firm and non-firm as the case progresses.

#### Expenses

Fuel costs in this case are based on using coal and natural gas prices through June 30, 2010. Purchased power costs were also included through June 30, 2010. Other inputs such as fuel mix, and station outages and distribution losses were determined using historical information. Fuel and purchased power costs will be trued-up through December 31, 2010.

Payroll, payroll related benefits, and payroll taxes were annualized through June 30, 2010. Payroll will be updated in the true-up to as of December 31, 2010.

Operations and maintenance costs, other than payroll costs, were included in the case at test year 2009 levels or at averages for various years.

Outside Services Expenses were analyzed, and amounts that were verified and supported related to on-going company operations were included in the case.

Depreciation Expense was annualized based on depreciation rates developed by Staff witness Arthur W. Rice of the Commission's Depreciation Engineering and Management Services Department. The depreciation rates were applied to Staff's recommended plant values as adjusted plant-in-service jurisdictional amounts, resulting in total annualized jurisdictional depreciation expense. Depreciation will be updated for plant additions included in the true-up.

Staff calculated Income Taxes based on the results of the revenue requirement calculation as of June 30, 2010. The income tax expense amount will be trued-up as of

December 31, 2010. Deferred income tax reserve will also be trued-up as of December 31, 2010 from the level reflected as of June 30, 2010.

#### **ALLOWANCE TO THE REVENUE REQUIREMENT**

- Q. What is the True-up Case Staff is submitting in its direct filing?
- A. Staff is filing its revenue requirements for GMO in its direct filing to reflect the 2009 test year results updated for known and measurable changes through June 30, 2010 and to include an estimate for the revenue requirement impacts of anticipated true-up results through December 31, 2010. The MPS and L&P revenue requirements in this case are being referred to as the Estimated True-up Case.

In the Estimated True-up Case, Staff has made an estimate designed to cover an expected or anticipated increase to the overall revenue requirements being recommended for MPS and L&P in this case due to events in the true-up period. This estimate is being used to consider the additional revenue requirement in this case for plant additions that are expected to be complete by the true-up ending period of December 31, 2010. The higher costs for these plant additions along with other cost increases are expected beyond the update period, in this case June 30, 2010, so that the True-up Case approximates the impact of these higher costs. For purposes of this case, the Commission has authorized the use of updating the revenue requirement through the end of December 31, 2010, primarily to address GMO's significant increases for plant additions and also an expected increase in fuel costs.

- Q. What higher costs does Staff believe may exist when the true-up period of December 31, 2010 is completed?
- A. GMO completed its construction of the plant addition for Iatan 2, which involved very substantial costs to GMO, and to KCPL. An estimate for this plant addition is

included in the Estimated True-up Case for both MPS and L&P. There will be other typical plant additions that will occur during the six months between the update period of June 30, and the true-up period of December 31, 2010 that will be included in the true-up.

Staff will examine fuel and purchased power costs. Staff anticipates additional costs for payroll, payroll- related benefits such as pensions, and other costs through the end of the December 31, 2010, true-up period.

#### COST REVIEW OF CONSTRUCTION PROJECTS

Q. Is Staff currently looking at the construction costs for major plant additions for GMO?

A. Yes. A very important part of this case is the Staff's review of several construction projects that were completed by, or are being completed by KCPL and GMO. Staff has reviewed costs for the plant additions for environmental equipment being installed at the Iatan 1, referred to as AQCS (air quality control systems) and the completion of Iatan 2 generating unit along with the common plant constructed for the support of both Iatan units. These plant additions involve two GPE entities— KCPL has a 70% ownership share of Iatan Unit 1, and is its operating partner. In addition, through its acquisition of St. Joseph Light and Power Company, GMO has an 18% ownership share of Iatan 1. These plant additions at the Iatan Station, referred to in Staff's Construction Audit and Prudence Review of the Iatan Project as the "Iatan Project," have ramifications for the MPS and L&P rates of GMO. KCPL has a 55% ownership share of Iatan 2 and a 61% ownership share of the Iatan Common Plant. KCPL operates both units and the Iatan site. GMO has an 18% ownership share of Iatan 2 and the Iatan Station Plant.

Q. What construction projects is Staff reviewing?

15

16

17

18 19

20

	Cary G. Featherstone
1	A. The construction of Iatan 2 is the largest of the construction activities whose
2	in service timeframe will be included in the true-up ending December 31, 2010. Iatan 1 had
3	a selective catalytic reduction (SCR) system and other environmental projects installed in late
4	2008 and 2009, with construction completion in February 2009 and in-service April 2009.
5	Staff is also looking at plant additions for Sibley which is wholly owned by GMO,
6	attributed to MPS, and the three coal-fired generating units at the Jeffrey Energy Center
7	which is operated by Westar Energy with MPS having an 8% ownership share.
8	A SCR system was installed at Sibley, with the completion and in-service first quarter 2009.
9	Westar completed the Jeffrey Energy Center 1 and 3 SCR systems in 2008 and completed the
10	SCR system for Unit 2 in the second quarter of 2009.
11	Q. Has Staff completed a review of the costs of construction of the Iatan Unit 1
12	AQCS, Iatan Unit 2 and Iatan Common Plant?
13	A. Yes, using an audit cut-off date of June 30, 2010. However, Staff will

Yes, using an audit cut-off date of June 30, 2010. However, Staff will A. continue its audit to capture additional construction costs through the cost information cut-off date of October 31, 2010 established for the true-up. Staff filed its Construction Audit Report on November 3, 2010. Staff witness Charles R. Hyneman is

addressing the construction audits in his direct testimony.

## KCP&L GREATER MISSOURI OPERATIONS COMPANY ELECTRIC **RATES**

Please provide a summary of GMO's rate cases. Q.

A. GMO has filed for the following rate increases for MPS and L&P,

respectively:

2

3

MPS

Case No.	Date Filed	Amount Requested	Amount Authorized	Effective Date of Rates
ER-2007-0004	July 3, 2006	\$94.5 million (22% increase)	\$ 45.3 million (11.64%increase)	June 3, 2007
ER-2009-0090	September 5, 2008	\$ 66 million (14.4 % increase excluding any impact of the fuel clause)	\$48 million (10.46% increase)	September 1, 2009
ER-2010-0356	June 4, 2010	\$78.8 million (14.4% increase excluding impact of the fuel clause)	Yet to be determined	May 4, 2011 (expected)

4

5

L&P

Case No.	Date Filed	Amount Requested	Amount Authorized	Effective Date of Rates
ER-2007-0004	July 3, 2006	\$22.4 million (22.1% increase)	\$13.6 million (12.79% increase)	June 3, 2007
ER-2009-0090	September 5, 2008	\$ 17.1 million (14.4 % increase excluding any impact of the fuel clause)	\$15 million (11.85% increase)	September 1, 2009
ER-2010-0356	June 4, 2010	\$22.1 million (13.9% increase excluding impact of the fuel clause)	Yet to be determined	May 4, 2011 (expected)

6

Q. How do GMO's rates in Missouri compare with those of other electric utilities?

7

3

4 5

6

7

A. Based on reports from EEI which KCPL and GMO provided in response to a Staff data request, the rates GMO charges its MPS customers in relation to those of other Missouri and mid-western utilities are highest in the state. MPS' rates are generally below the national average, but above the Missouri average. The rates GMO charges its L&P customers are the second lowest rates in the state, and well below both the national average and the Missouri average.

The following table shows such a comparison of GMO residential customer rates:

Missouri and Kansas Residential- in cents per kilowatthour	2009	2008	2007	2006	2005
KCPL- Kansas	9.07 cents/kwh	8.43	7.43	6.92	6.88
KCPL-Missouri	8.51	8.14	7.61	6.90	6.88
MPS	9.67	9.10	8.64	8.08	7.45
L&P	7.43	7.03	6.78	6.31	5.97
Ameren Missouri	7.03	6.53	6.60	6.60	6.52
Empire	9.75	9.19	9.10	8.35	7.98
Missouri Average	7.77	7.27	5.93	6.96	6.77
USA Average	11.72	11.52	10.95	10.62	9.60

Source: EEI Winter 2010 Report, page 180 provided Data Request 380

9

8

11 12

13

As shown in the table, GMO's residential rates for its MPS customers are now, and for several years have been, higher than those for its L&P customers and for KCPL's residential customers. While MPS rates are above the Missouri average, its L&P rates are below the Missouri average. Both are below the United States national average.

# SOUTH HARPER COMBUSTION TURBINE VALUES

- Q. What value is Staff using for the three combustion turbines built and installed at South Harper in 2005?
- A. In Case No. EO-2005-0156, GMO (Aquila), Office of Public Counsel and Staff agreed to a value of \$66.76 million for the combustion turbines, or \$22.25 million per turbine. The cost for these turbines is \$211.9 per kilowatt (\$66.76 million divided by 315,000 kilowatts—each turbine is rated at 105 megawatts so the three combustion turbines total at 315 megawatts). GMO (Aquila) wrote down the turbines to the agreed upon amount and has reflected that amount on its books and records. Both GMO (Aquila) and Staff have included the written down value of \$66.76 million for the three turbines in this case.
- Q. Was the value for the turbines the parties agreed to in Case No. EO-2005-0156 the value Staff proposed?
- A. Yes. Staff filed extensive testimony in that case supporting the value to which GMO (Aquila), the Office of Public Counsel and Staff finally agreed.
  - Q. Would you quantify each of the write-downs?
- A. GMO (Aquila) made a write-down of over \$10 million in November 2004 to reflect, what it believed was a fair value for the three turbines installed at South Harper. Additionally, GMO (Aquila) agreed to an almost \$4 million additional write-down when it agreed to value the turbines at the \$66.76 million.
- Q. Does Staff have market value information for valuing the South Harper combustion turbines?
- A. Staff filed testimony in Case No. EO-2005-0156 to support a valuation of \$66.76 million for the three South Harper turbines, including related equipment. At one time

12.

- GMO (Aquila) offered to sell the turbines for \$69 million including a warranty, to KCPL. That offer formed the basis for the Staff's valuation. Attached as Highly Confidential Schedule 3 are documents relating to GMO's (Aquila's) offer to KCPL provided in Data Request No. 38 in Case No. EO-2005-0156. Also, Schedule 2 is a table identifying the various values Staff considered for these units (Data Request No. 5 in Case No. EO-2005-0156).
  - Q. How did Staff arrive at a valuation of \$66.76 million?
  - A. Because the warranty for the combustion turbines expired while they were in storage, the \$69 million was adjusted downward by \$2.240 million to reflect the estimated value of the warranty. This estimate of \$2.240 million originated from GMO (Aquila) and was the result of discussions it had with the turbine manufacturer and a consultant (R.W. Beck) hired to assist in developing a fair value of the units.
    - Q. Who manufactured the three combustion turbines?
  - A. These combustion turbines were manufactured by Siemens and are identified as 501D5A with a capacity rating of 105 megawatts each, resulting in 315 megawatts of total South Harper station capacity.
    - Q. Did GMO (Aquila) purchase these units for its MPS system?
  - A. No. The units were originally purchased by a GMO (Aquila) subsidiary, Aquila Merchant in 2002 under an agreement signed in September 2001. Originally, the units were to be installed at the Aries Generating Facility and were called "Aries II." Those plans were cancelled in July 2002 during the period of the collapse of the merchant business that affected Aquila Merchant especially hard. GMO started taking delivery of the units in

finally committed to installing these units for MPS in January 2004.

1

4

3

5

6 7

8

9 10

11

12 13

14

15

16

17 18

19

20

21

22

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

- O. When did GMO's regulated operations personnel for MPSlearn of the three combustion turbines GMO later installed at South Harper?
- At the summer 2002 IRP meeting, MPS identified the need for capacity to A. replace the Aries agreement that was expiring May 31, 2005. Staff indicated to MPS's Resource Planning Group that three combustion turbines existed within GMO (Aquila's) organization; and inquired if they would be considered for replacing the Aries capacity. The GMO (Aquila) personnel attending the meeting stated they were unaware of the existence of these combustion turbines. At the summer of 2003 IRP meeting MPS's Resource Planning Group personnel indicated that they were still unaware of the existence of these combustion turbines and, therefore, could not model them. At that time, GMO (Aquila) was considering only purchased power agreements for replacing the Aries capacity. At this 2003 meeting, Staff made it clear that it knew GMO (Aquila) had the combustion turbines in storage, and inquired why GMO (Aquila's) Resource Planning Group was not considering those combustion turbines to meet MPS's capacity requirements in lieu of purchased power agreements. MPS responded that it could only consider what it knew was available, and those combustion turbines were not available for MPS's capacity requirements.

1	

4

5

6

7

8

9

10

11

12

13

14

# 15

16

17

18

19

20

21

22

Q. Did GMO (Aquila) ever consider the three combustion turbines for meeting MPS's capacity requirements?

A. Yes. When Aguila Merchant planned on installing these combustion turbines at the Aries facility as a non-regulated merchant plant, GMO (Aquila) was negotiating with its affiliate Aguila Merchant for a 15-year purchased power agreement for MPS. In a presentation made by GMO (Aquila's) Capital Deployment Group entitled "Aries II -Peaking Power Facility" dated March 5, 2002, GMO identifies that these combustion turbines were to provide capacity to MPS through 2020.

After the merchant business collapsed in mid-2002, GMO's subsidiary Aquila Merchant Services decided in July 2002 not to deploy the three combustion turbines at the Aries site. At this point, these three combustion turbines were no longer considered for meeting MPS' capacity needs. GMO (Aguila) finally decided in January 2004 to use this capacity for MPS, after no other home was found for the three combustion turbines.

### SOUTH HARPER PRUDENT TURBINES 4 AND 5 COMBUSTION **TURBINES VALUES**

- What turbine values did Staff rely on for South Harper Prudent Turbines 4 Q. and 5?
- The total value for each of the two turbines is \$18.7 million, or a total of A. \$37.4 million. This amount was determined based on several different options GMO (Aquila) had during the time it would have been in planning stages of adding needed capacity for MPS with an in-service date of June 2005, consistent with the time of the termination of the Aries I purchased power agreement which was May 31, 2005.

- Q. What were the several different option available to GMO that relied on for valuing South Harper Prudent Turbines 4 and 5?
- A. Staff reviewed the combustion turbine market in the 2004 and 2005 time frame which is the time GMO (Aquila) would have placed an order for turbines to be installed in summer 2005, and found the Company had several options available to it to acquire the needed equipment to meet this installation date. An affiliate of GMO (Aquila)—Aquila Merchant-- had several combustion turbines available for installation in its load center area. These combustion turbines could have been installed at South Harper, a site which was sized for 6 combustion turbines the size of South Harper Turbines 1, 2 and 3. Aquila Merchant either sold these combustion turbines at distressed prices on the grey market or paid the manufacturer termination fees to not accept delivery.

Staff also reviewed non-GMO (Aquila) purchases of combustion turbines to evaluate its value for South Harper Prudent Turbines 4 and 5 and a publication known as *Gas Turbine World* where information on actual purchases made by the electric industry regarding the pricing of combustion turbines can be found.

As with many things, the combustion turbine market varies over time with manufacturing supply and utility demand considerations. The economy affects pricing as the utility industry compresses during times of economic decline.

- Q What was the turbine market like when GMO (Aquila) would have been deciding to purchase capacity to be installed in 2005?
- A. During the 2004 / 2005 time period the turbine market had collapsed from the "sellers" market of 2001 when Aquila Merchant purchased South Harper combustion turbines 1, 2 and 3. Subsequent to the "buyers" market of 2004 and 2005, turbine prices

1 increased. Thus, any combustion turbines purchased for installation after 2005 and 2006 2 would be more costly. 3 **COMBUSTION TURBINE COSTS** What is your basis for asserting combustion turbine prices went up after the 4 Q. time when GMO should have decided in 2004 to replace the capacity it was obtaining from 5 6 the 2005 Aries capacity agreement? 7 In every case since GMO's 2005 rate case Staff has reviewed the pricing of A. 8 combustion turbines. As in previous GMO rate cases, Staff reviewed the industry 9 publication Gas Turbine World for years 2007, 2008 and 2009. In the 2007-2008 10 GTW Handbook, Gas Turbine World reports that turbine prices increased 20 to 30 % over 2006 levels. At page 29 of this industry publication the following appears: 11 12 Seeing dramatic increase in prices 13 During the past 18 months we have seen power plant 14 equipment prices increase by as much as 20-30 percent over 15 pre-2006 levels. Meanwhile delivery schedules have stretched 16 out to 16-18 months from 12 months or less, as growing 17 demand puts strain on available manufacturing capacity. Special orders that require additional engineering can add 18 seven months of lead time. 19 20 The rise in equipment price levels since 2006 has been driven by a worldwide increase in cost of materials, higher 21 22 manufacturing costs, and growing market demand. 23 Over the last few years, copper has more than tripled to \$3.40 24 per pound from around \$1, molybdenum six-fold to \$31 per 25 pound from around \$5, aluminum almost doubled to \$2,800 per ton from \$1,500, and nickel almost quadrupled to \$31,000 per 26 27 ton form \$8,000. Staff's review of Gas Turbine World identified that General Electric's new model that 28 29 replaced the 7 EA model that is installed at Crossroads is valued at \$19.5 million in the

2007-2008 GTW Handbook and \$25.9 million in the 2009 GTW Handbook. This indicates

	Cary
1	that
2	GM
3	need
4	
5	the S
6	of ca
7	501
8	
9	2004
10	
1	Gen
12	mod
13	Miss
14	selli
15	\$21
16	each
17	gene
18	duri

20

21

22

23

that prices in the 2007 and 2008 time period show substantial increases over the prices when GMO (Aquila) should have installed additional combustion turbines to meet the capacity needs of its MPS customers back in 2005.

The General Electric 7 EA models are rated at 75 megawatts of capacity rather than the Siemens Westinghouse model 501 D5A combustion turbines which have 105 megawatts of capacity. South Harper combustion turbines 1, 2 and 3 are Siemens Westinghouse model 501 D5A combustion turbines.

Q. Were the General Electric 7 EA model combustion turbines valued less in the 2004 time period?

A. Yes. At a time GMO (Aquila) should have added capacity in 2005, the General Electric 7EA models were significantly less costly than the General Electric 7EA models Aquila Merchant Services purchased in 2001 that it installed at Crossroads in Mississippi. *Gas Turbine World* reported in its 2004-2005 Handbook that these units were selling for \$14.8 million. The 2003 price was \$16.6 million and the 2000-2001 price was \$21 million. This compares to the actual Crossroads book value of \*\* \_\_\_\_ \*\* million each. The volatility of the natural gas market contributed to the decline in sales of gas-fired generation on top of a market decline caused by the implosion of the merchant energy market during the 2002 to 2005 time period. This would have been an ideal time to purchase capacity, if a utility needed capacity, which GMO (Aquila) did.

In 2006, the price for the General Electric 7 EA (new model PG7121(EA)) had gone up to \$19.2 million according to the 2006 *Gas Turbine World* Handbook.

The South Harper Siemens 501D5A units saw prices follow the same pattern going from high at the start of the decade to significant price reductions during 2003 and 2004 time



10

11

12

13

14

15

16

17

18

19

20

21

22

1 frame. In the "2004-05 GTW Handout, published by Gas Turbine World, the price of 2 Siemens 501D5A was quoted at \$18.7 million. In the 2003 Gas Turbine World Handbook, 3 the value was \$19.9 million and the 2000-2001 Gas Turbine World Handbook has 4 model 5015DAs priced out at \$25.5 million. Based on this information, the market cost of 5 these units has been trending downward during the time GMO (Aguila) would have been 6 needed the five turbines to replace the Aries PPA capacity. 7 However, recently the 2006 Gas Turbine World Handbook identified a significant 8 price increase for the Siemens 501D5A (new model SGT6-3000E) to \$22.8 million per unit.

Q. Is Staff's \$18.7 million for South Harper Prudent CTs 4 and 5—both Siemens Westinghouse model 501 D5A combustion turbines—solely the turbine cost, or does it include related costs?

A. Gas Turbine World does surveys of the industry and contacts turbine manufactures to determine the pricing information it publishes. Some of its data is for actual purchases made by companies - regulated utilities and merchant companies alike. While these combustion turbines prices may include added costs for specific features based on individual needs such as duel fuel source burning capability and fast-start capability, typically these are prices what the industry relies on to trend costs of turbine equipment.

- Q. What information, other than Aquila Merchant's \$69 million offer to sell them to KCPL, is Staff aware of bearing on the valuation of the three combustion turbines GMO (Aquila) installed at the South Harper Facility?
- A. has Aquila Merchant made offers to sell turbines to third parties and has sold or given up rights to several turbines over the past several years. Staff has reviewed

1	documents relating to these offers and sale transactions which identified the pricing of				
2	turbines from 2002 to present.				
3 4 5	1) Aquila Merchant Services had four General Electric model 7EA natural gas-fired 75 megawatt turbines that it sold in 2003.				
6 7	<ol> <li>Aquila Merchant Services sold to AmerenUE its Goose Creek and Raccoon Creek Generating Facilities in 2006.</li> </ol>				
8 9 10	<ol> <li>Aquila Merchant Services had an offer from Rolls-Royce Power Company to sell two Siemens 501 D5A natural gas- fired combustion turbines.</li> </ol>				
11 12 13	4) Staff has seen offers made by turbine manufacturers to another Missouri utility in the range identified in the Gas Turbine World.				
14	GENERAL ELECTRIC MODEL 7 EAS				
15	Q. At what price did GMO's subsidiary Aquila Merchant sell its General Electric				
16	combustion turbines?				
17	A. Aquila Merchant Services sold three General Electric 7 EA turbines with rated				
18	capacity of 75 megawatts each to two non-affiliates after the 2002 collapse of Aquila and the				
19	decline of the turbine market. Two of these units sold for ** ** million or				
20	** ** million each and a third turbine was sold for ** ** million. All three				
21	turbines were sold substantially below the original purchase price of ** ** million				
22	each [Data Request No. 77 in Case No. EO-2005-0156]. The average price that				
23	Aquila Merchant sold these units in 2003 was ** ** million [** ** million				
24	plus ** ** million divided by three]. Using this average price, GMO (Aquila) would				
25	have had a far better price at which to deploy these three General Electric turbines to meet its				
26	regulated system requirements and greater megawatt capacity. These prices compare with				



1	the Crossroads turbine values of ** ** million per unit price for the same GE / EA
2	model.
3	The total costs for the three General Electric turbines Aquila Merchant sold to third
4	parties was ** ** million with a total capacity of 225 megawatts, or
5	** ** per kilowatt. This per kilowatt cost is far below the per kilowatt cost of the
6	three Siemens turbine costs GMO installed at South Harper. Two 501D5A turbines are
7	210 megawatts of capacity. Three General Electric 7EA turbines is 225 megawatts of
8	capacity. It would have been more cost effective for GMO to install the three
9	General Electric 7EAs having greater capacity than the two Siemens units. Staff, in pricing
10	the South Harper Prudent CTs 4 and 5, chose to include the higher costs of the Siemens
11	turbines to be conservative in its costing of these units.
12	Q. Where were the purchasers of these three 75 megawatt combustion turbines
13	located?
14	A. Two turbines were sold to a utility in Beatrice, Nebraska, and the third turbine
15	was sold to a utility in Colorado (Data Request No. 43 in Case No. EO-2005-0156).
16	Q. Did Aquila Merchant have any other General Electric combustion turbines?
17	A. Yes. Aquila Merchant originally purchased 18 General Electric 7 EAs, taking
18	delivery and deploying 10 turbines at two different site locations in Illinois (these turbines
19	will be discussed later). Four others were deployed at the Crossroads Energy Center located
20	in Mississippi.
21	As noted above, three of the General Electric turbines were sold to Colorado and
22	Nebraska entities and a fourth turbine was release back to the manufacturer, with
23	Aquila Merchant losing the reservation (ontion) payments it had made to General Electric



1	Q. Did Aquila Merchant make any offers regarding the four General Electric
2	combustion turbines before executing the contracts under which they were sold?
3	A. Yes. Like the Siemens turbines installed at South Harper, Aquila Merchant
4	offered the General Electric turbines to other entities, including KCPL.
5	Q. Did GMO (Aquila's) MPS or L&P divisions have an opportunity to acquire
6	any of these four General Electric 7 EAs combustion turbines?
7	A. No. GMO (Aquila) never considered using these turbines for its regulated
8	operations, even though MPS needed to replace the Aries purchased power agreement
9	by June 2005. GMO (Aquila) indicated that these turbines were sold in 2003, in advance of
10	its decision to install turbines at South Harper. (Data Request No. 43, Case
11	No. EO-2005-0156).
12 13	SALE OF NATURAL GAS-FIRED COMBUSTION TURBINES AT RACCOON CREEK AND GOOSE CREEK
14	Q. Did Aquila Merchant have generating facilities located outside of GMO's
15	service territories?
16	A. Yes. Aquila Merchant built two generating facilities in Illinois, Raccoon
17	Creek and Goose Creek.
18	Q. Would you describe these facilities?
19	A. Aquila Merchant installed ten General Electric 7EAs, 75 megawatt
20	combustion turbines, at two locations in Illinois. Six 7EAs were installed at Goose Creek
21	
<b>41</b>	Energy Center having a combined capacity of 510 megawatts. Four 7EAs were installed at
22	Energy Center having a combined capacity of 510 megawatts. Four 7EAs were installed at Raccoon Creek Energy Center having a combined capacity of 340 megawatts.

summer of 2005. GMO (Aquila) disclosed to the Staff it had offered in August 2005 to sell 1 2 them to AmerenUE in response to Data Request No. 464 (Case ER-2005-0436). Q. What were the terms of GMO (Aquila's) original offer? 3 4 A. GMO (Aquila) offered to sell both facilities (ten installed turbines) to 5 AmerenUE on the following terms. 6 7 9 10 11 12 13 14 15 [Data Request No. 464 in ER-2005-0436; Highly Confidential Schedule 13-4] 16 17 Q. Has the sale been completed? Yes. On December 16, 2005, GMO (Aquila) entered into an asset purchase 18 A. 19 and sale agreement with the final sale transaction completed in early 2006. 20 Q. Do you know if negotiations between the two parties changed the initial terms 21 of the offer? 22 Yes, it did. The final sale price for both Raccoon Creek and Goose Creek was A. 23 \$175 million for all the generating equipment, substation and transmission costs. The total 24 capacity of these two generating stations is 850 megawatts resulting in an installed capacity



1	of \$205.88 per kilowatt (\$175 million divided by 850,000 kilowatts) [source: Aquila's SEC
2	Form 8-K filed December 16, 2006].
3	Q. Based on the original offer, what would the price be on an installed kilowatt
4	basis?
5	A. The installed kilowatt for Aquila's initial offer would be between
6	**
7	**. The final price paid for both facilities of \$175 million resulted in the
8	installed kilowatt of \$205 per kilowatt [\$175 million dividend by 850,000 kilowatts of
9	installed capacity].
10	Q. Did GMO (Aquila) lose money on the sale of these units?
11	A. Yes. Because of the distressed nature of the merchant business at the time,
12	GMO (Aquila) incurred a pre-tax non-cash impairment charge of approximately
13	\$93.6 million for Goose Creek and \$65.9 million for Raccoon Creek, or a total after-tax loss
14	of \$99.7 million (\$58.5 million and \$41.2 million) [source: Aquila's SEC Form 8-K filed
15	December 16, 2006].
16	Q. Are the Raccoon Creek and Goose Creek facilities both fully operational
17	generating plants?
18	A. Yes. Both of these facilities are fully operating generating stations. They
19	were installed in 2003 and are currently operating as part of the AmerenUE fleet providing
20	electric service to its Missouri customers.
21	Q. Did GMO (Aquila's) MPS or L&P divisions have an opportunity to acquire
22	these facilities?



- A. No. GMO (Aquila's) position was that the units were located in Illinois and there was not sufficient transmission path to get the power from those units to the MPS and L&P systems.
  - Q. Could the combustion turbines at these facilities be moved?
- A. Yes. The combustion turbines presently at South Harper were moved from the Ralph Green Generating Facility where they were in storage. While these units were not installed at Ralph Green, the units, with considerable effort, were moved to the South Harper facility. Turbines, generators and related equipment are heavy pieces of machinery requiring special transportation and hauling, but they are moved from the manufacturer and from different locations. Moving such equipment in the electric utility industry is not particularly unique. Indeed the Greenwood Generating Facility, which has four combustion turbines, initially had a lease agreement that required GMO (Aquila) to move, at its expense, the generating units at the end of the lease to a destination designated by the Greenwood owners. Since the Greenwood Units were reacquired by GMO (Aquila) in 2000, the units were not moved.
- Q. Did the sale of the Raccoon Creek or Goose Creek facilities have any impact on the Staff's estimate of the cost to GMO (Aquila) of additional combustion turbines capable of generating about 210 megawatts?
- A. No. Staff's estimate did not change as result of this sale transaction. But the sale price on a cost per kilowatt identified above supports the conservative nature of Staff's installed kilowatt costs identified in Mr. Hyneman's section of the cost of service report. The installed cost for South Harper Prudent Turbines 4 and 5 of \$304 per kilowatt is significantly

1	higher than the final selling price of \$205 per kilowatt costs for the Raccoon Creek and			
2	Goose Creek facilities.			
3	Initially, in a previous case, Staff relied on the Aquila offer made to AmerenUE for			
4	Raccoon Creek and Goose Creek facilities as a conservative estimate for South Harper			
5	Prudent Turbines 4 and 5 costs. Since the final price for these units were not finalized a			
6	the time of the direct filing in the 2005 case, Staff used a \$275 kilowatt amount for			
7	210,000 kilowatts compared to the ** ** per kilowatt offer price. In			
8	GMO's last rate case, Staff made an additional conservative approach to the nature to the			
9	costs for South Harper Prudent Turbines 4 and 5 by identifying the costs of the turbines and			
10	construction costs which resulted in even higher costs of \$304 per kilowatt. At the same			
11	time the final costs for the Raccoon Creek and Goose Creek facilities decreased to			
12	\$205 per kilowatt, resulting in almost a \$100 per kilowatt higher amount for the			
13	two additional combustion turbines referred to as South Harper Prudent Turbines 4 and 5.			
14	Q. Are the Raccoon Creek and Goose Creek installed costs paid by AmerenUE			
15	lower than the installed costs of Crossroads?			
16	A. The installed costs of Crossroads is ** ** per kilowatt while the			
17	Raccoon Creek and Goose Creek installed cost is \$205 per kilowatt.			
18	Q. Have there been other generating facilities sold recently?			
19	A. Yes. On January 10, 2007, it was announced that Public Service Enterprise			
20	Group sold to American Electric Power, a relatively new natural gas-fired 1,096 megawatt			
21	combined cycle power plant located in Lawrenceburg, Indiana. The selling price was			
22	\$325 million resulting in a \$296.53 per kilowatt value, lower than the South Harper installed			



costs of \$454.17 per kilowatt and the South Harper Prudent Turbines 4 and 5 installed costs of \$304.12 per kilowatt.

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

#### **ROLLS-ROYCE POWER VENTURES OFFER**

- Q. Is the Staff aware of any other offers for sale of combustion turbines involving GMO (Aquila)?
- A. Yes. During the audit in Case No. EO-2005-0156, GMO (Aquila) provided supporting information on the appraisals per the South Harper valuation issue (Data Request No. 5 in Case No. EO-2005-0156). In material supplied by GMO (Aquila), the Staff learned that on September 23, 2004, Rolls-Royce Power Ventures (Rolls-Royce) offered to sell GMO (Aquila) two new Siemens 501D5A natural gas-fired turbines that were manufactured in 2001 and placed in storage in Houston and Germany. Both units were offered for \$43 million, or \$21.5 million each. This initial price was less than the South Harper turbines 1, 2, and 4 but, for comparison purposes, several adjustments to the price needed to be added, such as transportation costs and Siemens Technical Field Assistance. Also, the warranty had expired similar to the South Harper turbines 1, 2, and 3 and it was estimated that would increase both unit costs by total of \$2.240 million, the same as the warranty

estimate for the South Harper turbines—GMO (Aquila) ultimately opted not to re-purchase the warranty from Siemens for the South Harper turbines. Another major expense would be converting the combustion system for approximating \$5 million. Adding all the costs to the initial offer of \$43 million did not make these units attractive to GMO (Aquila).

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

#### **OTHER UTILITY OFFERS**

- Q. Does Staff have experience with equipment supply agreements in the course of performing its duties for the Commission?
- A. Yes. Over the course of many years Staff has seen numerous contracts for actual purchases of equipment. Staff has seen numerous bids or quotes for proposed purchases of equipment. Without detailing the specifics, turbine costs have generally declined during the period from early in the decade to the period of 2004 and 2005, at time when GMO (Aquila) should have made the decision to install additional capacity over the levels it did at South Harper. Now the turbine prices have gone back up. GMO is using the higher priced turbines to justify its decision to rely on Crossroads—a plant that has overstated turbine costs, has high transmission costs and is located in Mississippi that has higher natural gas costs. Turbine prices started to increase as the turbine market stabilizes from the fallout of the collapse of the merchant market.

,

-

#### 

# 

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

A. Yes. At various times, in rate cases, construction audits, development of regulatory plans or as part of the Commission's Chapter 22 resource planning process, Staff has had opportunities to review request for proposals, offers and bids for generating equipment, including turbine offers.

While this information on other utilities is confidential, the offers we have seen over the past several years substantiate the general decline in the turbine market during the time GMO (Aquila) needed to make decision to replace the Aries purchased power agreement. Specifically, during the time frame of 2003 and 2004, there was very attractive pricing for turbine equipment. Other companies benefited from this "buyers" market, but GMO (Aquila) chose not to make the proper decisions to meet its capacity needs. Consequently, GMO was faced with need for capacity in 2008 and made decision to use a generating station located in Mississippi that is poorly situated to meet system load requirements in its service territory—Crossroads is the wrong plant, located at the wrong place and was placed into service for MPS at the wrong time.

# <u>COMBUSTION TURBINES HAVE EXPERIENCED A SIGNIFICANT DECLINE IN VALUES</u>

- Q. When did Aquila Merchant and Siemens negotiate for the three combustion turbines that Aquila installed at South Harper?
- A. In late 2000 throughout summer 2001. The turbine contract between Siemens and Aquila Merchant was signed September 2001 for an in service date of June 2003. Aquila Merchant planned to have a purchased power agreement with MPS for 15 years starting in June 2005.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

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

In 2000 and 2001, when Aquila Merchant negotiated to buy A. Yes. South Harper turbines 1, 2, and 3, the power equipment industry was experiencing a sellers' market. Purchasers were paying premiums to reserve manufacturer's slots to place orders and negotiate contract terms. During an interview David Kreimer, GMO's (Aquila) former Director of Engineering, indicated "that during the time Aquila Merchant was negotiating with Siemens for the three combustion turbines it was a brutal sellers market for all forms of generation." He stated "that it was the most brutal sellers' [market] that he experienced in the 30 years that he had been working in the industry at the time of the negotiations and when Aguila Merchant entered into the agreement to purchase these combustion turbines." Mr. Kreimer stated that "the sellers' market peaked around August 2002 and pricing for the large F frame machines began to decline quickly....the sellers' market for the larger [Siemens] F model combustion turbines started losing value first before the values for the smaller Siemens 501D5a's and General Electric 7EA combustion turbine[s] started to decline—the smaller combustion turbine's market value lasted longer" [Source: Data Request No. 56.1 in Case No. EO-2005-0156, April 29, 2005 Kreimer interview].

- Q. What is the size of the 1 F frame combustion turbines that Mr. Kreimer referred to in his interview?
- A. The F frame units are Siemens 501FD combustion turbines and are the range of 150 to 160 megawatts in size. The Aries Combined Cycle Unit has two F frame combustion turbines. The Siemens 501D5A combustion turbines GMO (Aquila) installed at

1	the South Harper Facility are 105 megawatts and the smaller General Electric 7EA		
2	combustion turbines are the units installed at Crossroads, Raccoon Creek and Goose Creek.		
3	These are nominally rated at 75 to 80 megawatts. [Source: Data Request No. 56.1,		
4	April 29, 2005 Kreimer interview]		
5	Q. Was Mr. Kreimer involved in Aquila Merchant's purchase of the three		
6	Siemens turbines from Siemens Westinghouse?		
7	A. Yes. When GMO (Aquila) negotiated for and bought these units,		
8	Mr. Kreimer was employed by Aquila Merchant. He was directly involved in the discussions		
9	between Siemens Westinghouse and GMO (Aquila) regarding these combustion turbines.		
10	Mr. Kreimer also was involved in the negotiations of a 1999 contract to purchase two		
11	Siemens 501F EconoPacs installed at the Aries facility near Mount Pleasant, Missouri to		
12	create the combined-cycle unit.		
13	Q. Why is the nature of the combustion turbine market that was occurring in		
14	2000 and 2001, described as a brutal sellers' market, important now?		
15	A. Combustion turbine prices declined after the 2001-2002 timeframe ending the		
16	sellers' market in this country. The power equipment market was substantially impacted as		
17	result of the collapse of the merchant power market and the utility industry's building of		
18	natural gas-fired generation.		
19	During this sellers' market is when the Crossroads units were originally purchased by		
20	Aquila Merchant. The values that GMO is requesting to be included in rate base in this case		
21	are the book values of the original purchased price made in the very high sellers' turbine		
22	market. Therefore, the GMO recommended rate base amount in this case is higher than it		

should be if GMO (Aquila) would have purchased the Aries replacement power at the time
when the turbine market collapsed during the 2003 and 2004 time period.

# TRANSMISSION COSTS FOR SOUTH HARPER PRUDENT TURBINES 4 AND 5

- Q. What are the costs for transmission plant for South Harper Prudent Turbines 4 and 5?
- A. GMO (Aquila) estimated \$2.1 million for transmission upgrades for South Harper Prudent Turbines 4 and 5. This estimate was made in a March 5, 2002 presentation for the original Aries II project. This presentation was made by the Capital Deployment Group of Aquila Merchant—the operating company of the former Aquila who had responsibility for the merchant plants (see Schedule 3-13—Data Request 58 in Case No. EO-2005-0156). This group was looking at the installation costs for the addition of three combustion turbines at the Aries site—now called Dogwood. The combustion turbines were planned as an expansion to this site which already had Aries combined cycle unit in operation.
  - Q. How many turbines were planned for Aries II?
- A. Originally the Aries site was to have three combustion turbines added with combined 310 megawatts of capacity. These units were not installed at Aries but instead installed at South Harper in 2005. Staff used the Aries II projected costs for the upgrades to transmission facilities for the planned expansion at Aries as an estimate of the transmission upgrades needed for South Harper Prudent Turbines 4 and 5. While the \$2.1 million transmission cost upgrades were for three combustion turbines, Staff is using this estimate for only two combustion turbines.

- 1 Q. Does this conclude your direct testimony?
- 2 A. Yes, it does.

## BEFORE THE PUBLIC SERVICE COMMISSION

## OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L ) Greater Missouri Operations Company for ) Approval to Make Certain Changes in its Charges ) for Electric Service )						
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 <u>loo</u> 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 and that he conducted his audit activities in accordance with Generally Accepted Auditing Standards (GAAS).						
Cary G. Featherstone						
Subscribed and sworn to before me this day of November, 2010.						
NIKKI SENN Notary Public - Notary Seal State of Missouri Commissioned for Osage County My Commission Expires: October 01, 2011 Commission Number: 07287016						

# CARY G. FEATHERSTONE SUMMARY OF RATE CASE INVOLVEMENT

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	Case
1980	ER-80-53	St. Joseph Light & Power Company (electric rate increase)	Direct	Stipulated
1980	OR-80-54	St. Joseph Light & Power Company (transit rate increase)	Direct	Stipulated
1980	HR-80-55	St. Joseph Light & Power Company (industrial steam rate increase)	Direct	Stipulated
1980	GR-80-173	The Gas Service Company (natural gas rate increase)	Direct	Stipulated
1980	GR-80-249 Coordinated	Rich Hill-Hume Gas Company (natural gas rate increase)	No Testimony filed- revenues & rate base	Stipulated
1980	TR-80-235	United Telephone Company of Missouri (telephone rate increase)	Direct- construction work in progress Rebuttal	Contested
1981	ER-81-42	Kansas City Power & Light Company (electric rate increase)	Direct-payroll & payroll related benefits; cash working capital Rebuttal	Contested
1981	TR-81-208	Southwestern Bell Telephone Company (telephone rate increase)	Direct-cash working capital; construction work in progress; income taxes-flow- through Rebuttal Surrebuttal	Contested
1981	TR-81-302	United Telephone Company of Missouri (telephone rate increase)	Direct- construction work in progress	Stipulated
1981	TO-82-3	Investigation of Equal Life Group and Remaining Life Depreciation Rates (telephone depreciation case)	Direct- construction work in progress	Contested

# CARY G. FEATHERSTONE SUMMARY OF RATE CASE INVOLVEMENT

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	Case
1982	ER-82-66 and HR-82-67	Kansas City Power & Light Company (electric & district steam heating rate increase)	Direct- fuel & purchased power; fuel inventories Rebuttal Surrebuttal	Contested
1982	TR-82-199	Southwestern Bell Telephone Company (telephone rate increase)	Direct- revenues & directory advertising	Contested
1983	EO-83-9	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric forecasted fuel true-up)	Direct	Contested
1983	ER-83-49	Kansas City Power & Light Company (electric rate increase)	Direct- fuel & fuel inventories Rebuttal Surrebuttal	Contested
1983	TR-83-253	Southwestern Bell Telephone Company (telephone rate increase - ATT Divesture Case)	Direct- revenues & directory advertising	Contested
1984	EO- <b>8</b> 4-4	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric forecasted fuel true-up)	Direct	Contested
1985	ER-85-128 and EO-85-185 Coordinated	Kansas City Power & Light Company (electric rate increase- Wolf Creek Nuclear Generating Unit Case)	Direct- fuel inventories; coordinated construction audit	Contested
1987	HO-86-139 Coordinated	Kansas City Power & Light Company (district steam heating discontinuance of public utility and rate increase)	Direct- policy testimony on abandonment of steam service Rebuttal Surrebuttal	Contested
1988	TC-89-14	Southwestern Bell Telephone Company	Direct- directory advertising	Contested
	Coordinated Directory	(telephone rate complaint case)	Surrebuttal	

Schedule CGF 1-2

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	Type of Testimony/Issue	Case
1989	TR-89-182 and TC-90-75	GTE North, Incorporated (telephone rate increase)	Direct- directory advertising Rebuttal Surrebuttal	Contested Decided Feb 9, 1990
1990	GR-90-50 Coordinated	Kansas Power & Light - Gas Service Division (natural gas rate increase)	Direct- prudency review of natural gas explosions	Stipulated
1990	ER-90-101 Coordinated	UtiliCorp United Inc., Missouri Public Service Division (electric rate increase- Sibley Generating Station Life Extension Case)	Direct- Corporate Costs and Merger & Acquisition Costs Surrebuttal	Contested
1990	GR-90-198 Coordinated	UtiliCorp United, Inc., Missouri Public Service Division (natural gas rate increase)	Direct- Corporate Costs and Merger & Acquisition Costs	Stipulated
1990	GR-90-152	Associated Natural Gas Company (natural gas rate increase)	Rebuttal- acquisition adjustment; merger costs/savings	Stipulated
1991	EM-91-213	Kansas Power & Light - Gas Service Division (natural gas acquisition/merger case)	Rebuttal- acquisition adjustment; merger costs/savings tracking	Contested
1991	EO-91-358 and EO-91-360 Coordinated	UtiliCorp United Inc., Missouri Public Service Division (electric accounting authority orders)	Rebuttal- plant construction cost deferral recovery; purchased power cost recovery deferral	Contested
1991	GO-91-359 Coordinated	UtiliCorp United Inc., Missouri Public Service Division (natural gas accounting authority order)	Memorandum Recommendation- Service Line Replacement Program cost recovery deferral	Stipulated

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	Case
1993	TC-93-224 and TO-93-192	Southwestern Bell Telephone Company (telephone rate complaint case)	Direct- directory advertising Rebuttal	Contested
	Coordinated Directory	(telephone rate complaint case)	Surrebuttal	
1993	TR-93-181	United Telephone Company of Missouri (telephone rate increase)	Direct- directory advertising Surrebuttal	Contested
1993	GM-94-40	Western Resources, Inc. and Southern Union Company (natural gas sale of Missouri property)	Rebuttal- acquisition adjustment; merger costs/savings tracking	Stipulated
1994	GM-94-252 Coordinated	UtiliCorp United Inc., acquisition of Missouri Gas Company and Missouri Pipeline Company	Rebuttal- acquisition of assets case	Contested
		(natural gasacquisition case)		
1994	GA-94-325 Coordinated	UtiliCorp United Inc., expansion of natural gas to City of Rolla, MO (natural gas certificate case)	Rebuttal- natural gas expansion	Contested
1995	GR-95-160	United Cities Gas Company (natural gas rate increase)	Direct- affiliated transactions; plant	Contested
	Coordinated	,	•	
1995	ER-95-279	Empire District Electric Company (electric rate increase)	Direct- fuel & purchased power;	Stipulated
	Coordinated	(electric rate increase)	fuel inventories	
1996	GA-96-130	UtiliCorp United, Inc./Missouri Pipeline Company (natural gas certificate case)	Rebuttal- natural gas expansion	Contested
1996	EM-96-149	Union Electric Company merger with CIPSCO Incorporated	Rebuttal- acquisition	Stipulated
	Coordinated	(electric and natural gas acquisition/merger case)	adjustment; merger costs/savings	
1996	GR-96-285	Missouri Gas Energy Division of Southern Union Company	Direct- merger savings recovery;	Contested
	Coordinated	(natural gas rate increase)	property taxes Rebuttal Surrebuttal	

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	<u>Case</u>
1996	ER-97-82	Empire District Electric Company (electric interim rate increase case)	Rebuttal- fuel & purchased power	Contested
1997	GA-97-132	UtiliCorp United Inc./Missouri Public Service Company (natural gas—certificate case)	Rebuttal- natural gas expansion	Contested
1997	GA-97-133	Missouri Gas Company (natural gas—certificate case)	Rebuttal- natural gas expansion	Contested
1997	EC-97-362 and EO-97-144	UtiliCorp United Inc./Missouri Public Service (electric rate complaint case)	Direct fuel & purchased power; fuel inventories Verified Statement	Contested Commissio n Denied Motion
1997	ER-97-394 and EC-98-126 Coordinated	UtiliCorp United Inc./Missouri Public Service (electric rate increase and rate complaint case)	Direct- fuel & purchased power; fuel inventories; re- organizational costs Rebuttal	Contested
			Surrebuttal	
1997	EM-97-395	UtiliCorp United Inc./Missouri Public Service (electric-application to spin-off generating assets to EWG subsidiary)	Rebuttal- plant assets & purchased power agreements	Withdrawn
1998	GR-98-140 Coordinated	Missouri Gas Energy Division of Southern Union Company (natural gas rate increase)	Testimony in Support of Stipulation And Agreement	Contested
1999	EM-97-515	Kansas City Power & Light Company merger with Western	Rebuttal- acquisition	Stipulated (Merger
	Coordinated	Resources, Inc. (electric acquisition/ merger case)	adjustment; merger costs/savings tracking	eventually terminated)
2000	EM-2000-292	UtiliCorp United Inc. merger with St. Joseph Light & Power Company	Rebuttal- acquisition	Contested (Merger
	Coordinated	(electric, natural gas and industrial steam acquisition/ merger case)	adjustment; merger costs/savings tracking	closed)

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	<u>Case</u>	
2000	EM-2000-369	UtiliCorp United Inc. merger with Empire District Electric Company	Rebuttal- acquisition	Contested (Merger	
	Coordinated	(electric acquisition/ merger case)	adjustment; merger costs/savings tracking	eventually terminated)	
2001	ER-2001-299	Empire District Electric Company (electric rate increase)	Direct- income taxes; cost of	Contested	
	Coordinated		removal; plant construction costs; fuel- interim energy charge Surrebuttal True-Up Direct		
2001	ER-2001-672 and EC-2002-265	UtiliCorp United Inc./Missouri Public Service Company (electric rate increase)	Verified Statement Direct- capacity purchased power	Stipulated	
	Coordinated		agreement; plant recovery Rebuttal Surrebuttal		
2002	ER-2002-424	Empire District Electric Company (electric rate increase)	Direct- fuel-interim energy charge	Stipulated	
	Coordinated		Surrebuttal		
2003	ER-2004-0034 and HR-2004-0024 (Consolidated)	Aquila, Inc., (formerly UtiliCorp United Inc) d/b/a Aquila Networks-MPS and Aquila Networks-L&P	Direct- acquisition adjustment; merger savings tracking Rebuttal	Stipulated	
	Coordinated	(electric & industrial steam rate increases)	Surrebuttal		
2004	GR-2004-0072	Aquila, Inc., d/b/a Aquila Networks-MPS and	Direct- acquisition adjustment; merger	Stipulated	
	Coordinated	Aquila Networks-L&P (natural gas rate increase)	savings tracking  Rebuttal		
2005	HG 0005 0001	T. V. O': D		0	
2005	HC-2005-0331 Coordinated	Trigen Kansas City Energy [Jackson County Complaint relocation of plant for Sprint Arena]	Cross examination- relocation of plant assets	Contested	
	Coordinated	(steam complaint case)	453013		

Year	Case No.	<u>Utility</u>	Type of Testimony/Issue	<u>Case</u>
2005	EO-2005-0156	Aquila, Inc., d/b/a Aquila Networks- MPS	Rebuttal- plant valuation	Stipulated
	Coordinated	(electric- South Harper Generating Station asset valuation case)	Surrebuttal	
2005	ER-2005-0436	Aquila, Inc., d/b/a Aquila Networks- MPS and Aquila	Direct- interim energy charge; fuel;	Stipulated
	Coordinated	Networks- L&P (electric rate increase)	plant construction; capacity planning Rebuttal Surrebuttal	
2005	HR-2005-0450	Aquila, Inc., d/b/a Aquila Networks- L&P	Direct	Stipulated
	Coordinated	(industrial steam rate increase)		
2006	ER-2006-0314	Kansas City Power & Light Company	Direct-construction audits	Contested
	Coordinated	(electric rate increase)	Rebuttal- allocations Surrebuttal- allocations	
2006	WR-2006-0425	Algonquin Water Resources (water & sewer rate increases)	Rebuttal- unrecorded plant;	Contested
	Coordinated		contributions in aid of construction Surrebuttal unrecorded plant; contributions in aid of construction	
2007	ER-2007-0004	Aquila, Inc., d/b/a Aquila Networks- MPS and Aquila	Direct-fuel clause, fuel, capacity	Contested
	Coordinated	Networks- L&P (electric rate increase)	planning Rebuttal Surrebuttal	
2007	HO-2007-0419	Trigen Kansas City Energy [sale of coal purchase contract]	Recommendation Memorandum	Stipulated
	Coordinated	(steam)		

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	Case
2007	HR-2007-0028, HR-2007-0399 and HR-2008-0340	Aquila, Inc., d/b/a Aquila Networks- L&P [Industrial Steam Fuel Clause Review]		Pending
	HC-2010-0235	(industrial steam fuel clause review)		
2008	HR-2008-0300	Trigen Kansas City Energy (steam rate increase)	Direct - sponsor Utility Services portion of the Cost of Service Report, overview of rate	Stipulated
	Coordinated		case, plant review and plant additions, fuel and income taxes	
2009	ER-2009-0089	Kansas City Power & Light Company (electric rate increase)	Direct- sponsor Utility Services Cost of Service Report,	Stipulated
	Coordinated		Additional Amortizations and Iatan 1 construction Rebuttal- allocations Surrebuttal- allocations	
2009	ER-2009-0090	KCPL Greater Missouri Operations Company (former Aquila, Inc. Missouri electric properties)	Direct- sponsor Utility Services Cost of Service	Stipulated
	Coordinated	(electric rate increase)	Report Surrebuttal- capacity planning	
2009	HR-2009-0092 Coordinated	KCPL Greater Missouri Operations Company (former Aquila, Inc. Missouri electric properties)	Direct- sponsor Utility Services Cost of Service	Stipulated
		(industrial steam rate increase)	Report	

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony/Issue	<u>Case</u>
2010	SR-2010-0110 at WR-2010-0111  Coordinated	Lake Region Water and Sewer Company (water & sewer rate increase)	Direct- sponsor Utility Services Cost of Service Report Surrebuttal True-up Direct Reports to Commission	Contested
2010	ER-2010-0355	Kansas City Power & Light Company (electric rate increase)	Direct- sponsor Utility Services Cost of Service Report	Pending
Coord	inated			¥

**CASES SUPERVISED AND ASSISTED:** 

#### Case No. **Utility** Type of Case Year Disposition **Testimony** Stipulated 1986 TR-86-14 ALLTEL Missouri, Inc. (telephone rate increase) Coordinated 1986 Continental Telephone Stipulated TR-86-55 Company of Missouri Coordinated (telephone rate increase) 1986 TR-86-55 Continental Telephone Stipulated Company of Missouri Coordinated (telephone rate increase) 1986 TR-86-63 Webster County Telephone Stipulated Company Coordinated (telephone rate increase) 1986 GR-86-76 **KPL-Gas Service Company** Withdrawn (natural gas rate increase) Coordinated Withdrawn prior Withdrawn 1986 TR-86-117 United Telephone Company of Missouri to filing Coordinated (telephone rate increase) St. Joseph Light & Power Deposition Stipulated 1988 GR-88-115 Company Coordinated (natural gas rate increase) 1988 St. Joseph Light & Power Deposition Stipulated HR-88-116 Company

(industrial steam rate increase)

#### **CARY G. FEATHERSTONE**

#### SUMMARY OF RATE CASE INVOLVEMENT

#### CASES SUPERVISED AND ASSISTED:

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	Type of Testimony	<u>Case</u> <u>Disposition</u>	
1994	ER-94-194	Empire District Electric Company (electric rate increase)			
2003	QW-2003-016 QS-2003-015	Tandy County (water & sewer informal rate increase)	Recommendation Memorandum	Stipulated	
2004	HM-2004-0618 Coordinated	Trigen- Kansas City Energy purchase by Thermal North America (steam - sale of assets)		Stipulated	
2005	GM-2005-0136 Coordinated	Partnership interest of DTE Enterprises, Inc. and DTE Ozark, Inc in Southern Gas Company purchase by Sendero SMGC LP (natural gas sale of assets)	Recommendation Memorandum	Stipulated	
2005	Case No. WO-2005-0206	Silverleaf sale to Algonquin (water & sewer- sale of assets)		Stipulated	
	Coordinated				
2006	WR-2006-0250	Hickory Hills (water & sewer- informal rate increase)	Recommendation Memorandum	Contested	
2006	HA-2006-0294 Coordinated	Trigen Kansas City Energy (steam- expansion of service area)	Recommendation Memorandum & Testimony	Contested	
2007	SR-2008-0080 QS-2007-0008	Timber Creek (sewer- informal rate increase)	Recommendation Memorandum	Stipulated	

#### CASES SUPERVISED AND ASSISTED:

<u>Year</u>	Case No.	<u>Utility</u>	Type of Case Testimony Disposition
2008	QW-2008-0003	Spokane Highlands Water Company (water- informal rate increase	Recommendation Stipulated Memorandum
2009	WR-2010-0139 SR-2010-0140	Valley Woods Water Compa	ny Recommendation Stipulated Memorandum
2009	EO-2010-0060	KCPL Greater Missouri Operations—	Recommendation withdrawn Memorandum
		Blue Springs service center s	ale
2010	EO-2010-0211	KCPL Greater Missouri Operations—	Recommendation Stipulated Memorandum
		Liberty service center sale	
2010	WR-2010-0202	Stockton Water Company	Recommendation Stipulated Memorandum
2010	SA-2010-0219	Canyon Treatment Company Certificate	Recommendation Pending Case Memorandum
2010	SR-2010-0320	Timber Creek Sewer Company	Testimony Pending

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

DATE OF REQUEST:

December 10, 2004

DATE RECEIVED:

December 10, 2004

DATE DUE:

December 29, 2004

REQUESTOR:

Phil Williams

BRIEF DISCRIPTION:

Please provide all appraisals of the plant site and the value of the

combustion turbines.

**QUESTION:** 

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

RESPONSE: See files on attached CD

ATTACHMENT: CD with 17 liles

ANSWERED BY: Robert Brune

SIGNATURE	OF	RESPONDENT
DATE		

**SCHEDULE 4-1** 

**SCHEDULE 2-1** 

#### Aquila CT Appraisal - Pricing Summary

**SCHEDULE 2-2** 

010144 02-01362-01000 11/19/2004

* edjysted for three units  Transformers & Breakers  Transformers only Cost \$1,686,150 \$		Original Cost	Replacement Cost	Aquila offer to sell to KCPL	Rolls Royce offer to sell to Aquile	SWPC offer to sell grey unit to Aquilz	Penn Energy Internet offer (	Penn Energy Internet ofter 2	Utility Warehouse Internal offer
Cost	ÇT								
Adjustments CO No. 1 (Collon Payment CO No. 1 (Collon (1) (Collon (1) (Eshaust Stacks) CO No. 1 (Collon (1) (Collen) Workmany Guarantees Ped Mods Rehabilishion (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,240,000) (\$52,250,000 \$52,350,000 \$52,350,000 \$52,350,000 \$52,000,000 \$53,000		3	1		3 2	. 1	' 1	1	ī
CO No. 1 (Subaust Stacks) CO No. 1 (Subaust Stacks) CO No. 1 (19he) Worranty Worranty Guarantees Prof Mods Rehabilation (\$50,000) Rehabilation (\$50,000) Rehabilation (\$50,000) Rehabilation (\$500,000) Rehabilation (\$500,000	Adjustments			\$69,000,000	\$43,000,000	\$19,000,000	\$26,000,000	000,000,882	\$15.000,000
Worranty	CO No. 1 (Exhaust Stacks)	(\$3,712,500)		)	(\$1,849,200)	(\$1,849,200)	(\$1,849,200)	(51,549,200)	
Pred Mods	Werranty	(\$2,240,000)	(\$2,240,000)	(\$2,240,000	}	(52,240,000)	ı		
TFA   \$2,350,000   \$2,350,000   \$2,350,000   \$2,000,000   \$3,000,000	Pred Mods				<				
Transportation interal Labor (\$39,399)		•		)	\$2,350,000	\$2,350,000			\$2,350,000
Total Adjustments									
Total Adjustments		(600 200)			\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000
CT Subtotal*     ** edjusted for three units  Transformers & Breakers  Storage (\$1,550) (\$15,500) (\$1				(\$2.240,000	\$6 700 800	\$4.450.800	/5649 2001	(\$649.200)	ER 560 000
Transformers & Breakers  Transformers olly Cost S1,686,150 S1,686,100 S1,686,100 S1,686,100 S1,686,100 S1,686,100 S1,686,100 S1,686,100 S1,686,	CT Subtotal*								353,550,000
Transformers oly Cost Cost S1,686,150 S1,686,100 S1,641,300 S1,641	* adjusted for three units				II ATMINESSIMESIMES	C-CASE MARK COM		5000 BEN 1081 STOR	
Clay									
Adjustments Storage (\$15,500) (\$15,5	aly								. 5
Storage   (\$15,500)   (\$15,5		\$1,686,150	\$1,686,150		\$1,888,150	\$1,686,150	\$1,686,150	\$1,686,150	\$1,666,150
Relesting   (\$28,305)   (\$28		(516 500)	/e15.500		/515 COO	(#16 5A)	/ess Early	Jese Spot	IS1E EDM
Additional Retainage Transformer Subtotal  Transformer Subtotal  S1,641,300  S									
Breakers qty 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Additional Retainage						(\$1,045)		
Qty         3         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         7         6         5         7         6         5         7         6         5         7         6         5         7         6         5         7         5         7         6         5         7         5         7         5         7         5         7         5         7         6         7         5         7         3         7         3         7         3         7         3         7         3         7         3         7         3         7         3         7         3         3         3         3	Transformer Subtotal	\$1,641,300	\$1,841,300		\$1,641,300	\$1,641,300	\$1,641,300	\$1,641,300	\$1,641,300
Cost         \$765,570 <th< td=""><td>Breakers</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Breakers								
Adjustments Bord (\$7,500) (\$7,500] (\$7,500) (\$7,500] (\$7,500) (\$7,500] (\$7,500) (\$7,500] (\$7,500) (\$7,500] (\$7,500] (\$7,500) (\$7,500] (\$7,									
Bord   \$27,500		\$765,570	\$765,570		\$765,570	\$765,570	\$785,570	\$765,570	\$765,570
Slorage   Slor		467 500	407 500		187 FD.				
Brenkers Subtotal   \$744,750									
Procurement Cost \$126,644 \$126									
Cost   S126,644   S1		133,574,343	e immortant		3900000	iii isenaneses	4.00.4.0.4		
B&M Services (\$126,644) (\$126,644	Cost	\$126,644	\$126,644		\$126,644	\$126,644	\$126,644	\$125,644	\$128,644
Procurement Sublotel 50 50 50 50 50 50 50 50 50 50 50 50 50		(\$126,644)	(\$126.544	15	<b>(\$126.644</b>	(\$126.644	1\$126.644	I\$126.B44	(\$126,644)
Transformers & Breakers Subtotal \$2,386,050 \$2,386,050 \$2,386,050 \$2,386,050 \$2,386,050 \$2,386,050	Procurement Sublotel	\$0							
771.632.020 \$70,796,850 \$66,760,000 \$73,586,850 \$63,846,850 \$79,736,850 \$100,736,850 \$55,936,050			\$2,386,050		\$2,366,050	\$2,386,050	\$2,386,050	\$2,386,050	\$2,386,050
	CO Total	\$71,632,020	\$70,796,850	\$66,760,000	\$73,586,850	563,846,850	\$70,736,850	\$100,736,850	\$55,936,050
	並 ※								
프	<u>"</u>								
	č								
H # # # # # # # # # # # # # # # # # # #	F								
H # # # # # # # # # # # # # # # # # # #	ш								
HEDULE	4								
HEDULE 4	Ň								
Ø Total \$71,632,020 \$70,796,850 \$66,760,000 \$73,586,850 \$63,846,850 \$79,736,850 \$100,736,850 \$55,936,050 ☐  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □									

**SCHEDULE 4-2** 

**SCHEDULE 2-2** 

Schedule GRM-2 Page 78 of 79

## **SCHEDULE 3**

## HAS BEEN DEEMED

## **HIGHLY CONFIDENTIAL**

**IN ITS ENTIRETY** 

SCHEDULE 3

NP

Schedule GRM-2
Page 79 of 79

Exhibit No .:

Issue:

Capacity Planning Witness: Cary G. Featherstone

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony

File No.: ER-2010-0356

Date Testimony Prepared: December 15, 2010

## MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

REBUTTAL TESTIMONY

**OF** 

**CARY G. FEATHERSTONE** 

KCP&L GREATER MISSOURI OPERATIONS COMPANY FILE NO. ER-2010-0356

> Jefferson City, Missouri December 15, 2010

Denotes Highly Confidential Information \*\*

Staff Exhibit No GMO-216
Date 1/18/11 Reporter LMB
File No ER-2010-0356

1	TABLE OF CONTENTS OF
2	REBUTTAL TESTIMONY OF
3	CARY G. FEATHERSTONE
4	KCP&L GREATER MISSOURI OPERATIONS COMPANY
5	FILE NO. ER-2010-0356
6	EXECUTIVE SUMMARY 3
7	GREAT PLAINS ENERGY ACQUISITION OF CROSSROADS ENERGY CENTER 3
8	CROSSROADS VALUATION5
9	AFFILIATED TRANSACTION
10	DEPRECIATION—GENERAL PLANT
11	

1	REBUTTAL T	<b>TESTIMONY</b>
2	O	F
3	CARY G. FEA	THERSTONE
4	KCP&L GREATER MISSOUR	RI OPERATIONS COMPANY
5	FILE NO. EI	R-2010-0356
6	Q. Please state your name and busin	ness address.
7	A. Cary G. Featherstone, Fletcher	Daniels State Office Building, 615 East 13 <sup>th</sup>
8	Street, Kansas City, Missouri.	
9	Q. By whom are you employed and	in what capacity?
10	A. I am a Regulatory Auditor wi	ith the Missouri Public Service Commission
11	("Commission").	
12	Q. Are you the same Cary G. Fer	atherstone who filed direct testimony in this
13	proceeding?	
14	A. Yes, I am. I, with Curt We	ells, filed direct testimony in this case on
15	November 17, 2010 sponsoring Staff's Cos	st Of Service Report ("COS Report") for
16	KCP&L Greater Missouri Operations Company	y's ("GMO" or "Company") rate case filed on
17	June 4, 2010.	
18	I also filed direct testimony on Nov	vember 10, 2010 and rebuttal testimony on
19	December 8, 2010 in the affiliated Kansas Ci	ty Power & Light Company's ("KCPL") rate
20	case filed by that company on June 4, 2010.	
21	Q. What is the purpose of your rebu	uttal testimony?

1

3

4 5

6

7

8

9

10 11

12

13 14

15

16

17

19

18

20

21

22

23

The purpose of this rebuttal testimony is to address the inclusion of certain plant assets in the direct filing made by GMO for its MPS operating area. Specifically, this plant relates to generating units known as Crossroads Energy Center ("Crossroads").

Staff has not reflected in its case any of GMO's positions regarding Crossroads, but has instead included capacity for two combustion turbines identified as Prudent Turbines 4 and 5 at a site located in MPS's load center.

Specifically, I will provide the Commission the appropriate cost to GMO of acquiring the four 75 megawatt combustion turbines ("CTs") located at a site called Crossroads Energy Center near Clarksdale, Mississippi. While Staff is opposed to the inclusion of the costs of the Crossroads in GMO's rate base for MPS in this case, the Staff believes it is important for the Commission to be made aware of the actual cost at which Great Plains Energy Incorporated ("Great Plains" or "GPE"), the parent company of KCPL and GMO, acquired this generating asset.

- Is Staff opposed to including the Crossroads Energy Center in GMO's rate Q. base in this case?
- Yes. Staff's position is that GMO should have prudently addressed its capacity A. needs for MPS to replace the Aries purchased power agreement ("PPA") when it expired on May 31, 2005. MPS determined in its integrated resource planning that its least cost plan to replace the Aries capacity was to build the 5 combustion turbines in 2005. Instead, MPS decided to build only 3 combustion turbines and enter into purchased power agreements for the rest of the capacity it needed to meet 2005 system load requirements. Staff has maintained this decision was imprudent because it placed the short-term financial considerations of GMO over the long-run costs to MPS's customers. The rationale and

- support for the Staff's position is included in the direct testimonies of Staff witnesses Lena M.
- 2 Mantle and Charles R. Hyneman. It is also included in the rebuttal testimony of Staff
- 3 witnesses Mantle and here.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

#### **EXECUTIVE SUMMARY**

- Q. Please summarize your rebuttal testimony.
- A. The Commission should reject GMO's proposed inclusion of Crossroads in rate base in this case. This facility is overvalued based on the investment Great Plains paid for this asset at the time of the acquisition of Aquila, Inc. ("Aquila") on July 14, 2008. Staff believes the Commission should not include the costs of Crossroads in GMO's rate base for MPS. Instead the costs of two turbines—Prudent Turbines 4 and 5—should be used as proxies, since they are what GMO should have built to meet the system load requirements of MPS. However, if the Commission decides to allow Crossroads in GMO's rate base, then the value of Crossroads for purposes of rate base in MPS should be the value of \$51.6 million Great Plains put on it when it acquired Aquila, less accumulated depreciation from the time of the July 14, 2008 acquisition. This amount includes both production and transmission facilities.

# GREAT PLAINS ENERGY ACQUISITION OF CROSSROADS ENERGY CENTER

- Q. Please describe how Great Plains acquired Crossroads.
- A. In February 2007, Great Plains entered into an agreement to acquire Aquila, Inc., (now referred to as GMO). The acquisition closed on July 14, 2008. Immediately prior to closing, Black Hills Corporation acquired Aquila's electric utility in Colorado and its gas utilities in Colorado, Kansas, Nebraska and Iowa plus associated liabilities. Following

÷

closing, Great Plains became the owner of Aquila with its remaining Missouri-based electric utilities which included MPS and L&P as well as Aquila's merchant service operations, which primarily consisted of the Crossroads Energy Center and residential natural gas contracts. Following the completion of the Black Hills Purchase, the Aquila corporate entity consisted of (i) Aquila's current Missouri electric operations, i.e., MPS and L&P and (ii) Aquila's St. Joseph Industrial Steam operations; and (iii) Aquila's nonregulated merchant services operations, which primarily consisted of the Crossroads Energy Center in Mississippi.

- Q. Please provide a history of the ownership of the Crossroads.
- A. Crossroads was built in Clarksdale Mississippi in 2002 by Aquila Merchant Services, then a non-regulated wholly-owned subsidiary of Aquila. The following is a timeline of Crossroads ownership and significant events related to Crossroads based in part on a memorandum received from Great Plains dated October 31, 2007 explaining the history of the Crossroads plant. This memorandum is attached as Schedule 1 to this testimony.
  - October 2002 Crossroads was moved from business unit MEP (Merchant Energy Partners Investment LLC) into business unit ACEC (Aquila Crossroads Energy Center). ACEC was a business unit under the non-regulated subsidiary of Aquila MEP.
  - October 2002 to March 2007 Crossroads remained on the books of Aquila's non-regulated Merchant Energy partners.
  - February 2007 Great Plains Energy announced an agreement to acquire Aquila, Inc.
  - March 2007 the regulated jurisdictional operations of Aquila, now known as GMO, issued a request for proposal (RFP) for a long-term supply option. Crossroads was bid into the RFP at net book value to satisfy the long-term supply option. Based on 2007 time frame Crossroads was selected as the least cost and preferred option for long-term supply.
  - March 2007 Crossroads was transferred from Aquila Merchant to Aquila, Inc., referred to as GMO, at net book value and recorded on the books of a non-regulated business unit CECAQ (Crossroads Energy

Center Aquila) where it resided when Great Plains Energy acquired Aquila (GMO).

- May 2007 Great Plains Energy and Aquila filed a Joint Proxy Statement/Prospectus with the Securities and Exchange Commission. Great Plains Energy management told the SEC, the financial community and its shareholders that it found \$51.6 million to be an appropriate estimate of the fair value of Crossroads. Great Plains Energy estimated that this was the amount of proceeds it would receive from the sale of Crossroads to an unrelated party of similar capacity in the current market place.
- June 2007 In a filing with the SEC, Great Plains Energy management told the SEC, the financial community and its shareholders that it found \$51.6 million to be an appropriate estimate of the fair value of Crossroads.
- August 2007 In another filing with the SEC, Great Plains Energy management told the SEC, the financial community and its shareholders that it found \$51.6 million to be an appropriate estimate of the fair value of the Crossroads.
- May 2008 Great Plains Energy concurred with Aquila's recommendation to use Crossroads as the least cost and preferred option in its utility resource planning process as a long-term supply option.
- July 2008 Close of Great Plains Energy's acquisition of Aquila.
   Aquila, Inc began using the business name GMO then later changed its name to GMO. Crossroads was recorded on the books of GMO business unit NREG by Great Plains Energy.
- August 2008 Crossroads was moved from the books of GMO's business unit NREG to GMO's regulated books for MPS.
- September 2008 GMO filed a Missouri rate case seeking to include Crossroads in rate base for MPS at net book value of \$117 million.

### CROSSROADS VALUATION

- Q. What is the current value of Crossroads?
- A. The value of Crossroads on MPS's books at June 30, 2010 included in GMO's case is identified on Schedule 3 (page 2) of the Exhibit Modeling System ("EMS") run as production plant in service of \$118,981,043 (\$119 million) less accumulated depreciation

2

3

4

5

6

7

8

9

10

11

reserve (reserve) (Schedule 6, page 2 of the EMS) of \$29,660,009 (\$29.7 million). The net book value at June 30, 2010 for the production plant of Crossroads is valued at \$89,321,034 (\$89.3 million). There is also transmission plant for Crossroads valued at June 30, 2010 at \$21,901,183 (\$21.9 million) less reserve of \$4,106,472 (\$4.1 million). Staff made adjustments to plant in service and the depreciation reserve to eliminate the value of the production and transmission plant of Crossroads in the direct filing replacing this generation with the values of Prudent Turbines 4 and 5.

Q. What was the book value of Crossroads when Great Plains acquired Aquila?

A. The following table identifies the booked amounts of Crossroads at September 30, 2010 which approximates the July 14, 2008 closing date of the Aquila acquisition compared with the current June 30, 2010 net plant:

12 13	Crossroads	September 30, 2008	June 30, 2010
14	<b>Production Plant</b>		
15	Plant	\$118.8 million	\$119 million
16	Less: Reserve	(21.2 million)	(29.7 million)
17	Net Production	\$97.6 million	\$89.3 million
18	Transmission Plant		
19	Plant	\$21.9 million	\$21.9 million
20	Less: Reserve	(3.1 million)	(4.1 million)
21	Net Transmission	\$18.8 million	\$17.8 million
22	Total Production and Transmission Plant		
23	Plant	\$140.7 million	\$140.9 million
24	Less: Reserve	(24.3 million)	(33.8 million)
25	Net Crossroads	\$116.4 million	\$107.1 million

[Source: EMS Schedule 3, pages 1 & 2 and Schedule 6, pages 1 & 2 in Case No. ER-2009-0090 and EMS Schedule 3, page 2 and Schedule 6, page 2 in Case No. ER-2010-0356]

What value did GMO place on Crossroads in rate base for MPS in this case? 1 Q. 2 A. GMO's work papers reflect a net book value amount at June 30, 2010 of \$107 million (Gross plant of \$140.7 million less accumulated depreciation of \$33.7 million). 3 4 Q. Does Staff agree that Crossroads should be valued at the book amounts 5 identified on MPS's accounting records? 6 A. No. GMO has significantly overstated the amount of the Crossroads plant it is 7 proposing to include in MPS' rate base by approximately \$65 million. 8 Q. Why is the amount GMO has included in MPS's rate base for Crossroads 9 overstated by \$65 million, if Crossroads is included in that rate base? 10 Great Plains performed what is referred to as due diligence regarding the assets A. 11 of Aquila it planned on purchasing as well as a review of the Missouri electric operations of 12 both MPS and L&P in late 2006 and early 2007when it was negotiating the acquisition price 13 of Aquila. During this phase of the acquisition process, Great Plains valued Crossroads at 14 substantially less than what Aquila Merchant paid for Crossroads. Great Plains made a Security Exchange Commission ("SEC") filing in which it disclosed that it viewed Crossroads 15 16 to have a market value of \$51.6 million. In comparison the net book value of Crossroads at 17 September 30, 2008, close to the time of closing of transaction, was \$116.4 million. Note that 18 the net book value amount was higher at the July 14, 2010 date when Great Plains closed its 19 acquisition of Aquila. 20 The overstatement of Crossroads of \$65 million is based on the following: 21 Net Plant \$116.4 million 22 Great Plains 51.6 million 23 Valuation 24 Overvaluation \$64.8 million

- Q. Why should Crossroads be valued at \$51.6 million for rate base purposes?
- A. When Great Plains offered to acquire Aquila in February 2007, its offer was based on a fair market valuation of Crossroads of \$51.6 million. Since Aquila accepted Great Plains' offer, Great Plains acquired Aquila Merchant based on Great Plains' valuation of Crossroads at \$51.6 million. Any attempt by Great Plains through GMO to place Crossroads in a regulated rate base in Missouri subsequent to its acquisition of Aquila and Aquila Merchant requires that the asset be placed in rate base at the price actually paid for the asset—the original cost.

The best evidence of the original cost of Crossroads is Great Plains disclosure to the Securities and Exchange Commission, its investors, and the public at large, by its SEC filing where identified the fair market value of Crossroads at the date of acquisition at \$51.6 million.

By proposing to include Crossroads in MPS rate base at its non-regulated book value amount of \$107 million [\$140.9 million less reserve of \$33.8 million], when Great Plains actually valued Crossroads at \$51.6 million when it acquired the asset (by acquiring Aquila Merchant which had little of value other than Crossroads), Great Plains is asking the Commission to value Crossroads at nearly twice more than what Great Plains viewed itself that it paid to acquire Crossroads in 2007. This is tantamount to including an acquisition adjustment for Crossroads of approximately \$65 million. The calculation of this proposed acquisition adjustment is based on Crossroads' net book value at time of the acquisition of \$116 million, less the cost to Great Plains acquisition costs for this asset of \$51.6 million.

- Q. What is an acquisition adjustment?
- A. An acquisition adjustment results when utility property is purchased or acquired for an amount either in excess of or below book value. Book value relates to

the value placed on utility property and recorded on the Company's books and records at the time the utility property is first placed in public service, adjusted for depreciation and amortization. This assessment of value is commonly referred to as the property's "original cost." The acquisition adjustment is made up of two components, the merger premium and the transaction costs. The transaction costs are pre-merger costs to close or complete the merger.

- Q. What is original cost?
- A. The term "original cost," as defined by the Electric Plant Instruction Section of the FERC Uniform System of Accounts ("USOA"), relates to:

All amounts included in the accounts for electric plant acquired as an operating unit or system, except as otherwise provided in the texts of the intangible plant accounts, shall be stated at the cost incurred by the person who first devoted the property to utility service. (Paragraph 15,052 of USOA).

Depreciation and amortization of the utility property from the previous owner must be deducted from the original cost, which results in a net original cost figure to be recorded on the purchaser's books and records. The acquired property is valued at the same value the seller placed on it, hence the "original cost when first devoted to public service," adjusted for depreciation and amortization, concept.

- Q. Is use of net original cost for valuing rate base still the predominant form of regulation?
- A. Yes. In the State of Missouri, the use of original cost less depreciation and amortization, i.e., net original cost, to set rates is not only the predominant form of regulation, but to my knowledge, the only form that has been employed by this Commission.
  - Q. How does an acquisition adjustment result?

A. Utility property is recorded on the company's books and records at net original cost. A utility must account for any difference between the acquisition cost or purchase price of property and the net original cost, i.e., the amount paid to the original owner (the seller) for utility property being first placed into service and the recorded net original cost amount. This difference in purchase price is recorded in USOA Account No. 114, Electric Plant Acquisition Adjustments. The amortization of the acquisition adjustment is made to Account 406, Amortization of Electric Plant Acquisition Adjustments, if authorization is granted to include the adjustment in cost of service for ratemaking purposes (above—the—line treatment). If no authorization is given to include an amortization for ratemaking purposes (i.e., below—the—line treatment occurs), then Account No. 425, Miscellaneous Amortization must be used.

#### Account 114 states:

A. This account shall include the difference between (1) the cost to the accounting utility of electric plant acquired as an operating unit or system by purchase, merger, consolidation, liquidation, or otherwise, and (2) the original cost, estimated, if not known, of such property, less the amount or amounts credited by the accounting utility at the time of acquisition to accumulated provisions for depreciation and amortization and contributions in aid of construction with respect to such property.

 C. Debit amounts recorded in this account related to plant and land acquisition may be amortized to account 425, Miscellaneous Amortization, over a period not longer than the estimated remaining life of the properties to which such amounts relate. Amounts related to the acquisition of land only may be amortized to account 425 over a period of not more than 15 years. Should a utility wish to account for debit amounts in this account in any other manner, it shall petition the Commission for authority to do so. Credit amounts recorded in this account shall be accounted for as directed by the Commission.

1 Account No. 406 states:

This account shall be debited or credited, as the case may be, with amounts includible in operating expenses, pursuant to approval or order of the Commission, for the purpose of providing for the extinguishment of the amount in account 114, Electric Plant Acquisition Adjustments.

#### Account No. 425 states:

This account shall include amortization charges not includible in other accounts which are properly deductible in determining the income of the utility before interest charges. Charges includible herein, if significant in amount, must be in accordance with an orderly and systematic amortization program.

#### **ITEMS**

- 1. Amortization of utility plant acquisition adjustments, or of intangibles included in utility plant in service when not authorized to be included in utility operating expenses by the Commission.
- 2. Other miscellaneous amortization charges allowed to be included in this account by the Commission.
- Q. Did Great Plains' senior management perform a fair market valuation of Crossroads?
- A. Yes. Great Plains made a "fair market valuation" of Crossroads in the February to May 2007 time frame. This valuation was an objective fair market valuation of a reasonable cost of Crossroads in early 2007. This valuation was released to the public on at least three occasions from May 2007 to August 2007 in successive Great Plains and Aquila's joint proxy statements and amendments filed with the SEC. Great Plains estimated that \$51.6 million was the dollar amount of proceeds it would receive from the sale of Crossroads to an unrelated party in the then current market place. The following is a quote from the joint proxy statement and amendments:

14

15

16

17

18

19

20

21 22

23

24

25

26

27

28

29

30

31

D - The pro forma adjustment represents the adjustment of the 1 2 estimated fair value of certain Adjusted Aquila non-regulated tangible assets and reduction of depreciation expense associated with the 3 decreased fair value. The adjustment was determined based on Great 4 5 Plains Energy's estimates of fair value based on estimates of proceeds from sale of units to an unrelated party of similar capacity in the current 6 7 market place. The preliminary internal analysis indicated a fair value estimate of Aquila's non-regulated Crossroads power generating 8 facility of approximately \$51.6 million. This analysis is significantly 9 affected by assumptions regarding the current market for sales of units 10 of similar capacity. The \$66.3 million adjustment reflects the difference 11 between the fair value of the combustion turbines at \$51.6 million and 12 the \$117.9 million book value of the facility at March 31, 2007. 13

Great Plains Energy management believes this to be an appropriate estimate of the fair value of the facility. The adjusted value will be depreciated over the estimated remaining useful lives of the underlying assets and could be materially affected by changes in fair value prior to the closing of the merger. An additional change in the fair value of the facility of \$15 million would result in an additional change to annual depreciation expense of approximately \$0.5 million.

[Great Plains Energy & Aquila Joint Proxy Statement/Prospectus the SEC on May 8, 2007, page 175]

Aquila's, then owner of Crossroads in 2007, apparently also believed the value of Crossroads was \$51.6 million since it was part of the Joint Proxy Statement/Prospectus filed with the SEC in May 2007.

- Q. Did Great Plains make any pro forma adjustments to the value of Crossroads on its Pro Forma Balance Sheet that is included in the May 8, 2007 proxy statement?
- A. Yes, it did. At page 170 of this proxy statement is Great Plains' Pro Forma Combined Balance Sheet as of December 31, 2006. This balance sheet shows in Pro Forma Adjustment D that Great Plains management estimated that it would have to write down the value of Aquila's Nonutility Plant by \$67.25 million, with \$66.3 million of this amount



Executive Vice-President and Chief Financial Officer stated that it was Great Plains' intention 1 2 to "monetize" or sell Crossroads. The relevant portion of this transcript is reflected below: 3 Mike Chesser Operator, we'd like to take one more question if we could because you all might expect we have quite a busy schedule ahead of us today. 456789 Operator Michael Lapides of Goldman Sachs. Michael Lapides Easy one. Mike, Terry, what are your thoughts on the peaking plant, the gas plant that Aquila owns? Mike Chesser At this stage as you know it is in litigation. And it has been appealed or it has been ruled on and appealed and it's being re-appealed. We have 10 done quite a bit of due diligence around the potential outcomes on that and we have 11 factored that impact into our purchase price. 12 13 14 Michael Lapides I'm thinking not the regulated one but the merchant one. Terry Bassham Crossroads. Michael Lapides My apologies for not being --15 Terry Bassham That is okay, Michael. As Mike said we looked at (indiscernible) 16 from a Crossroads perspective. We looked at the ability to utilize that or sell it. Our 17 preference would be probably to get value through monetizing it. But if not we've 18 looked at other options as well. What is the significance of the fact that Great Plains' preference was to sell 19 Q. Crossroads after acquiring Aquila? 20 The significance is because Great Plains intended to sell Crossroads, it 21 A. included in the amount it paid Aquila's shareholders an amount that it expected to receive 22 23 from the sale of this asset. The fact that Great Plains did not sell Crossroads, despite being its stated preference, means that like Aquila, it could not find a buyer, or it decided not to sell 24 25 Crossroads for some other reason. Does the Commission require that assets acquired in a merger or acquisition be 26 Q. included in rate base at net original cost? 27 28 Yes. The Commission has consistently applied the net original cost standard when placing a value on assets for purposes of establishing a utility's rates. 29 What did GPE believe was Crossroads' "cost" when it evaluated the purchase O. 30 price to pay Aquila to acquire this asset? 31

1	A. The original cost to Great Plains to acquire the Crossroads asset would be	
2	the fair market value at which Great Plains placed on Crossroads on the date of acquisition.	
3	This amount was \$51.6 million. Under the Commission's Affiliate Transactions Rule,	
4	4 CSR 240-20.015 Affiliate Transactions, any transfer of Crossroads from non-regulated to	
5	regulated operations would have to be at or below the \$51.6 million.	
6	Q. Did Great Plains address any other asset it was purchasing from Aquila?	
7	A. Yes. At the time of the Aquila acquisition, Aquila's South Harper	
8	three 105 megawatt combustion turbine generating station was in litigation regarding	
9	whether that station could remain operational at its near Peculiar, Missouri, location.	
10	During the due diligence phase acquiring Aquila, Great Plains identified there was an	
11=	issue with South Harper, and indicated it considered this concern in its purchase price of the	
12	Aquila assets.	
13	In the SEC filing made in Form 425 on February 8, 2007, Great Plains included	
14	transcript of a joint webcast call by Great Plains, Aquila and Black Hills Corporation of	
15	February 7, 2007. Mr. Chester, the Chief Executive Officer of Great Plains, made the	
16	following statement:	
17 18 19 20 21	Mike Chesser At this stage as you know it is in litigation. And it has been appealed or it has been ruled on and appealed and it's being reappealed. We have done quite a bit of due diligence around the potential outcomes on that and we have factored that impact into our purchase price.	
22	Q. Has Staff made any adjustment to exclude costs for the South Harper station in	
23	this case?	
24	A. No. While some costs were excluded in prior cases for the problems	

associated with South Harper, Staff has not reflected any adjustment relating to Great Plains

paying a reduced price for this generating station because of the legal problems it had regarding that station. While South Harper could be considered overstated in value because of Great Plains concerns with this generating station, Staff continues to believe it is properly valued in MPS' rate base today, and therefore, has not made any adjustment to remove costs for the this facility for valuation purposes.

#### AFFILIATED TRANSACTION

Q. Is the transfer of the Crossroads combustion turbines from a non-regulated Aquila affiliate to Aquila's regulated operations a transaction subject to the Commission's Affiliate Transactions Rule?

A. Yes, it is. As noted below, in August 2008 Crossroads was moved from the books of Aquila's non-regulated business unit NREG to its regulated books for MPS. This transfer of assets is required to be accomplished in compliance with Commission Rule 4 CSR 240-20.015 Affiliate Transactions. The purpose or objective of this rule is to prevent regulated utilities from subsidizing their non-regulated operations. To accomplish this objective, the Commission has standards with which utilities are required to comply. The overriding goal of this rule, and its effective enforcement, will provide the public the assurance that their rates are not adversely impacted by the utilities' non-regulated activities.

Q. How does rule Commission Rule 4 CSR 240-20.015 define an affiliate transaction?

A. The rule states that affiliate transaction means "any transaction for the provision, purchase or sale of any information, asset, product or service, or portion of any product or service, between a regulated electrical corporation and an affiliated entity, and shall include all transactions carried out between any unregulated business operation of a

1	regulated electrical corporation and the regulated business operations of a electrical		
2	corporation."		
3	Q. What are the standards on affiliate transactions as defined by Commission Rule		
4	4 CSR 240-20.015?		
5	A. The primary standard to be met as it relates to the transfer of Crossroads from		
6	non-regulated to regulated operations is that the transfer be done at the lesser of the fair		
7	market price or the cost to the utility to provide the capacity provided by Crossroads for itself.		
8	Paragraph 2, Standards, states:		
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	<ul> <li>(A) A regulated electrical corporation shall not provide a financial advantage to an affiliated entity. For the purposes of this rule, a regulated electrical corporation shall be deemed to provide a financial advantage to an affiliated entity if—</li> <li>1. It compensates an affiliated entity for goods or services above the lesser of— A. The fair market price; or B. The fully distributed cost to the regulated electrical corporation to provide the goods or services for itself; or</li> <li>2. It transfers information, assets, goods or services of any kind to an affiliated entity below the greater of— A. The fair market price; or B. The fully distributed cost to the regulated electrical corporation.</li> <li>(B) Except as necessary to provide corporate support functions, the regulated electrical corporation shall conduct its business in such a way as not to provide any preferential service, information or treatment to an affiliated entity over another party at any time.</li> </ul>		
24	Q. Should GMO have requested the Commission to address its affiliate		
25	transaction to treat Crossroads as part of GMO's commission-regulated operations?		
26	A. Yes. Just as Aquila did in 2005 when it sought Commission approval of		
27	the transfer of the three combustion turbines—the turbines used at the South Harper		

facility-- from the non-regulated operations of Aquila Merchant to its regulated MPS

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

- O. What was the outcome of the filing made by Aquila relating to South Harper?
- A. Aquila was required to write-down the South Harper combustion turbines twice—once by an appraisal done by an independent party and a second based on an agreement Aquila made with the Office of Public Counsel and Staff to value the turbines at distressed values. This filing was designated as Case No. EO-2005-0156.

#### **DEPRECIATION—General Plant**

- Q. What is the purpose of this portion of your rebuttal testimony?
- A. I am addressing the GMO proposal regarding an amortization of its general plant along with Staff witness Arthur W. Rice. This proposal by GMO concerning the General Plant depreciation is discussed in the direct testimony of the Company's witnesses John P. Weisensee and John S. Spanos. I address here Staff's concerns with GMO's General Plant depreciation request relating to alleged intra-jurisdictional discrepancies, which I discuss below. Staff's deprecation positions are generally contained in Staff witness Rice's direct and rebuttal testimonies.
- Q. Is Staff opposed to the Company's proposed treatment on the General Plant depreciation?
- A. Yes. As discussed in Staff witness Rice's direct and rebuttal testimonies, Staff is opposed to GMO's requested cost recovery of the General Plant depreciation. Mr. Rice states in his rebuttal testimony that "GMO's requested change in method for certain General Plant accounts to an Amortization method is not supported by their direct filing. Staff's

current recommendation is to leave the depreciation rates for these accounts at the current ordered rates until verification of plant in service is conducted to verify the amortization periods proposed or a revised depreciation rate assigned."

Q. What is GMO's General Plant depreciation request?

A. GMO is requesting an amortization relating to the General Plant over a period of 20 years. For MPS and L&P, GMO identifies the following in its work papers regarding this issue:

		MPS	L&P
	Total Unrecovered Reserve Amount	\$14,076,020	\$4,744,481
	Amortization Period	20 years	20 years
	Amortization per year.	\$703,801	\$237,224
	Jurisdictional Factor	99.513%	100%
	Missouri Jurisdictional Amount	\$700,374	\$237,224
Į	[Source: MPS and L&P work papers CS – 122]		

Q. Does Staff disagree with these amounts?

A. No. However, Staff is using a slightly higher Missouri jurisdictional factor for General Plant of 99.5450% which will result in an immaterial difference with GMO for MPS of \$700,599 [\$703,801 times 99.5450%] instead of the \$700,374 amount shown above and in MPS work papers.

Q. What makes up the General Plant amounts GMO is seeking the amortizations?

A. GMO is requesting the amortization treatment because it alleges there were different depreciation rates authorized in the states Aquila operated in. GMO contends that

3

4

5

6

7

8

9 10

11

12

13

14 15

16

17 18

19

20

21

22

23

because of the use of different depreciation rates by the various states Aquila operated in, the Company has unrecovered a portion of the General Plant accounts.

GMO has two types of General Plant (1) Plant relating to the regulated GMO operations and (2) General Plant relating to the former corporate offices of Aquila.

It is this latter category of General Plant which is the subject of the Company's proposed amortization of the former corporate office costs. These corporate costs were primarily at the former corporate office headquarters of Aquila known as 20 West Ninth. The corporate office costs were for furniture, office equipment, with majority of the costs identified as computer and computer related costs.

- In which states did Aquila formerly operate? O.
- Besides Missouri, Aquila had regulated operations in Colorado, Kansas, Iowa, A. Michigan, and Nebraska. Aquila also had vast non-regulated operations in its Aguila Merchant company operating in many states, a regulated electric utility in Canada, and substantial overseas operations in the United Kingdom, New Zealand, as well as other countries. All these entities—regulated and non-regulated alike—had a portion of the Aquila corporate costs assigned to them.
  - Did the other jurisdictions use different depreciation rates? Q.
  - Yes, to my knowledge they did. A.
  - Has Staff included the effect of the General Plant costs in its case? Q.
- Yes. While these amounts were not initially included in Staff's direct filing A. made on November 17, 2010, Staff has included the General Plant costs as a negative depreciation reserve which is the exact treatment GMO gave them. Once it was pointed out to Staff by the Company that the amounts in the Accumulated Depreciation Reserve referred to

2

3

4

5

6

7

8

9

10

- as the "UCU Common General Plant" were not included in Staff's direct filing as was done in previous cases, Staff revised its cost of service run (the Exhibit Modeling System or the EMS) for both MPS and L&P. The section of Depreciation Reserve is identified as Schedule 6 (page 4 of 4) of the EMS run. The Staff revised EMS runs for MPS and L&P are filed as schedule attachments to the rebuttal testimony of GMO witness Weisensee.
- Q. Why is Staff opposed to the proposed amortization treatment of the General Plant presented by GMO witnesses Weisensee and Spanos?
- A. As indicated by Mr. Rice, Staff believes there is insufficient evidence at this time to warrant any such additional cost increases for this plant.
  - Q. Does this conclude your rebuttal testimony?
- 11 A. Yes.

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L ) Greater Missouri Operations Company for ) Approval to Make Certain Changes in its ) Charges for Electric Service )
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 Rebuttal Testimony in question and answer form, consisting of pages to be presented in the above case; that the answers in the foregoing Rebuttal 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.
Pary G. Featherstone
Subscribed and sworn to before me this
Notary Public - Notary Seal State of Missouri Commissioned for Osage County My Commission Expires: October 01, 2011 Commission Number: 07287016



To:

Files

From:

Ron Klote, Senior Manager Regulatory Accounting

CC:

Darrin Ives

Date:

October 31, 2008

Subject:

Crossroads Energy Center Transfer to the KCP&L Greater Missouri Operations Company

Regulated Jurisdiction's MOPUB Business Unit

#### Purpose:

To document the reason for and the timing of the property accounting move of the Crossroads Energy Center to the books and records of KCP&L Greater Missouri Operations Company's ("GMO") MOPUB business unit. In addition, documenting the recording of the Crossroads Energy Center as a capital lease and how the accumulated deferred income taxes ("ADIT") should be treated associated with the plant.

#### Relevant Guidance Researched:

Code of Federal Regulations Title 18 Part 101

#### Background:

The Crossroads Energy Center is an approximately 300MW combustion turbine power plant consisting of four General Electric 7EA units. It was built in 2002 by a non-regulated subsidiary of Aquila, Inc. titled Aquila Merchant Services. It is located in Mississippi and is owned by the City of Clarksdale for property tax abatement purposes. GMO holds a purchase option that provides the opportunity for GMO to purchase the plant from the City of Clarksdale at any time for \$1,000. This purchase would eliminate the property tax abatement treatment of the plant. The Crossroads Energy Center is controlled by GMO through a long-term tolling agreement. The plant is recorded as a capital lease on the books and records of MOPUB.

The placement of the Crossroads Energy Center on the books and records of Aquila; Inc. was as follows. In October 2002, the Crossroads Energy Center was moved from business unit MEP (Merchant Energy Partners Investment LLC) CWIP account into business unit ACEC (Crossroads Energy Center) plant accounts. ACEC was a business unit under the non-regulated subsidiary of MEP. In March 2007, due to the wind down of Aquila's Merchant operations and their inability to effectively dispatch power from the Crossroads Energy Center, there was a negotiation of the rights and obligations of the plant to Aquila, Inc. This transfer was governed by a Master Transfer Agreement dated March 31, 2007. Aquila, Inc. paid \$117.9 million to Aquila Merchant which was equivalent to the net book value of Crossroads at this time. Rather than pay a cash purchase price, the purchase price took the form of a credit that reduced the amount of indebtedness owed by Aquila Merchant to Aquila parent. On March 31, 2007, Crossroads Energy Center was recorded at Net Book Value to a nonregulated business unit CECAQ (Crossroads Energy Center Aquila) where it resided at the time of the acquisition of Aquila, Inc. by Great Plains Energy (GPE).

On March 19, 2007, the regulated jurisdictional operations of GMO issued a request for proposal for a long-term supply option. The Crossroads Energy Center was bid into the request for proposal at net book value to satisfy the long-term supply option. The candidates submitting bids for the long-term supply option were evaluated and the Crossroads Energy Center was selected as the least cost and preferred option for long-term supply. The evaluation process and selection of the Crossroads Energy Center as the preferred option was presented to the Missouri Public Service Commission Staff on October 31, 2007.

On approximately May 14, 2008 Aquila's management presented a review of the IRP process presented to Staff in October 2007 with GPE management. During this presentation, the Request for Proposal process was discussed with GPE management and Aquila's decision to select Crossroads as the least cost and preferred option was reviewed. At this meeting, GPE concurred with Aquila's recommendation to use Crossroads as a long-term supply option. (Added by Tim Rush on 1/6/09: Attendees, Todd Kobayashi, Kevin Bryant, Tim Rush, Scott Heidtbrink, Davis Rooney, Gail Allen, Gary Clemens, Denny Williams, Jeremy Morgan. As a note, in the initial evaluation of the acquisition of Aquila, GPE had not made a decision on how it would address the Crossroads facility.)

On August 31, 2008 the Crossroads Energy Center was moved from GMO's business unit NREG, where it was recorded after the acquisition of Aquila, Inc. by Great Plains Energy on July 14, 2008, to MOPUB's books and records. MOPUB is the regulated business unit which previously served the territory known as Missouri Public Service. On September 5, 2008 GMO regulated jurisdictions filed a rate case including the Crossroads Energy Center in MPS's rate base at net book value.

#### Conclusion:

The following actions regarding the accounting of the Crossroads Energy Center are appropriate:

1. The Crossroads Energy Center should be recorded at net book value on the books and records of KCP&L Greater Missouri Operations Company's MOPUB business unit.

2. August 2008 was the appropriate time to move the Crossroads Energy Center to the MOPUB business unit.

3. The Crossroads Energy Center is appropriately recorded as a capital lease as part of the continuing properly records.

4. The ADIT associated with the time period that the Crossroads Energy Center was recorded on the non-regulated subsidiary of Aquila, Inc. should be recorded on the non-regulated business unit AQP (GMO's non-regulated subisidiary). The ADIT balances from March 2007 when the Crossroads Energy Center was moved to a business unit under Aquila, Inc. parents books and records until the present should be recorded on the business unit MOPUB.

#### Support of Conclusion:

Recorded at Net Book Value on MOPUB's Books and Records

The support for the decision by GPE's management to record the Crossroads Energy Center at net book value can be directly linked to the Request for Proposal process by GMO. As discussed in the background section above, on March 19, 2007 the regulated jurisdictional operations of GMO sent out a Request for Proposal to evaluate and choose a long-term supply option. Aquila, Inc. bid the Crossroads Energy Center into the Request for Proposal process at net book value. All bids were accumulated and evaluated. The Crossroads Energy Center was selected as the least cost and most preferred option. This was presented to Missouri Public Service Commission Staff on October 31, 2007.

Additionally, with the acquisition of Aquila, Inc. by Great Plains Energy, PricewaterhouseCoopers was engaged to complete a Purchase Accounting Valuation. As part of this analysis, there was an assessment of the fair market value of the Crossroads Energy Center. This evaluation resulted in an amount that was in excess of the Net Book Value that was offered into the Request for Proposal process Initiated by Aquila Inc. GPE's management made the decision to not record a fair market value adjustment on the Crossroads Energy Center, but instead record the plant at net book value and include the property as part of GMO's regulated jurisdiction. This amount is being requested to be part of rate base at net book value in GMO's current rate case filing, case number ER-2009-0090.

Recorded at August 2008 on Business Unit MOPUB

The support to move the Crossroads Energy Center to MOPUB's business unit in August 2008 can be linked to a series of events ultimately concluding in GPE management's decision to include the Crossroads Energy Center in the GMO's regulated jurisdiction rate base calculation in the September 5, 2008 rate case filing (ER-2009-0090). The series of events as discussed in the background section of this whitepaper are detailed below:

- On March 31, 2007, the non-regulated subsidiary Merchant Energy Partners negotiated an assignment of the rights and obligations of the Crossroads Energy Center to the Parent company Aquila, Inc.
- Subsequently, Aquila, Inc. bid the Crossroads Energy Center into a Request for Proposal by GMO's regulated jurisdiction for a long-term supply option.
- GMO's evaluation of the bids offered concluded that the Crossroads Energy Center was the least cost and preferred option for the long-term supply option.
- On October 31, 2007, a presentation was made to the Missouri Public Service Commission Staff communicating the results of the Request for Proposal process.
- Approximately May 14, 2008 Aquila's management reviewed the results of the IRP process and the results
  of the Request for Proposal process with GPE's management. GPE's management concurred with the
  decision that Crossroads was the least cost and preferred long-term supply option.
- On July 14, 2008 Great Plains Energy completed their acquisition of Aquila, Inc.
- August 2008, GPE's management decided to include the Crossroads Energy Center in rate base in its GMO regulated jurisdiction.
- On August 25, 2008, GPE's management met with Missouri Public Service Commission Staff and
  discussed GPE's decision to move the Crossroads Energy Center onto the books and records of GMO's
  regulated jurisdiction and include the net book value of the plant in rate base in the upcoming rate case
  filling.
- August 31, 2008 Crossroads Energy Center was transferred to GMO's regulated jurisdiction.
- September 5, 2008, GMO filed a rate case under the docket number ER-2009-0090 including the Crossroads Energy Center in rate base at net book value.

#### Recorded as a Capital Lease

The "General Instructions" number 19 of 18 CFR part 101 states the following:

If at the inception a lease meets one or more of the following criteria, the lease shall be classified as a capital lease. Otherwise, it shall be classified as an operating lease.

- 1. The lease transfers ownership of the property to the lessee by the end of the lease term.
- 2. The lease contains a bargain purchase option.
- 3. The lease term is equal to 75 percent or more of the estimated economic life of the leased property.
- 4. The present value at the beginning of the lease term of the minimum lese payments, excluding that portion of the payments representing executory costs such as insurance, maintenance and taxes to be paid by the lessor, including any profit theron, equals or exceeds 90 percent of the excess of the fair value of the leased property to the lessor at the inception of the lease over any related investment tax credit retained by the lessor and expected to be realized by the lessor.

The Crossroads Energy Center has been recorded on the books and records since October 2002 as a capital lease. This is supported by the following:

- Criteria number 3 states that the lease term is equal to 75 percent or more of the estimated economic life of the leased property. The Crossroads Energy Center meets this criteria. The lease term agreed to with the City of Clarksdale was for an original term of 30 years and two 5 year extension options. The economic life of the plant is estimated at 40 years. This equates to 75 percent of the economic life when considering the original terms and 100 percent of the economic if the two 5 year extension periods are exercised. Both meet or exceed the 75 percent criteria discussed above.
- In addition, criteria number 2 states that the lease must contain a bargain purchase option. Effective
  March 28, 2008 GMO finalized a purchase option that allows it to purchase the Crossroads Energy
  Center from the City of Clarksdale at any time for \$1,000. \$1,000 would be considered a bargain
  purchase option as it is significantly less than the fair market value of the plant. Crossroads would
  meet this requirement.

Recording of ADIT Balances

ADIT balances to date associated with the Crossroads Energy Center can be grouped into two separate categories as follows:

- ADIT accumulated from original in service date during 2002 to the date the plant was transferred to Aquila, Inc.'s parents books CECAQ in March 2007.
- ADIT accumulated on Aquila, Inc.'s parents books from March 2007 to present.

The ADIT in the first grouping when the Crossroads Energy Center was recorded on Aquila's non-regulated subsidiary Merchant Energy Partner's with a business unit titled ACEC is attributable to the deferred intercompany gain from when the Plant was transferred to Aquila, Inc.'s parents books. The transfer of these ADIT balances to Parent would not be appropriate as the Parent or the future GMO jurisdiction has not received any benefits of the accelerated depreciation that was recognized on the non-regulated subsidiary books. As such, the ADIT associated with this time period is recorded presently on the non-regulated business unit AQP.

The ADIT associated with the time period of when the plant was recorded on Aquila Inc.'s parents books to the present is attributable to the tax effected difference between book and tax depreciation. Due to tax normalization rules, these amounts are required to follow the plant as it gets transferred to the GMO regulated jurisdiction of MOPUB. These ADIT amounts will be used as rate base offsets to the plants net book value that will be included in GMO's rate case filings.

Exhibit No.:

Issue:

Capacity Planning Cary G. Featherstone

Witness: Sponsoring Party:

MoPSC Staff

Sponsoring Party: Type of Exhibit:

Surrebuttal Testimony

File No.:

ER-2010-0356

Date Testimony Prepared:

January 12, 2011

# MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

**OF** 

**CARY G. FEATHERSTONE** 

KCP&L GREATER MISSOURI OPERATIONS COMPANY
FILE NO. ER-2010-0356

Jefferson City, Missouri January, 2011

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

Staff Exhibit No GMO-217
Date 1/18/4 Reporter LMB
File No ER-2010-0356

NP

1	TABLE OF CONTENTS OF	
2	SURREBUTTAL TESTIMONY OF	
3	CARY G. FEATHERSTONE	
4	KCP&L GREATER MISSOURI OPERATIONS COMPANY	
5	FILE NO. ER-2010-0356	
6	EXECUTIVE SUMMARY	3
7	CROSSROADS ENERGY CENTER GENERATING UNITS	8
8	THE FORMER AQUILA'S CAPACITY PLANNING AND ADDITIONAL PEAKING	
9	TURBINES	11
10	ADVANTAGES OF UTILITY OWNING GENERATING ASSETS	20
11	EFFECTS OF AQUIILA'S DECISION NOT TO TREAT ARIES AS A REGULATED	
12	GENERATING FACILITY	. 26
13	KCP&L GREATER MISSOURI OPERATIONS' MANAGEMENT OF CROSSROADS	. 42
14	CROSSROADS NATURAL GAS COSTS	. 43
15	ALLOCATION OF IATAN 2 BETWEEN MPS AND L&P	. 4:
16	CONCLUSIONS FOR CAPACITY PLANNING AND PEAKING TURBINES	. 4
17		

1	SURREBUTTAL TESTIMONY	
2	OF	
3	CARY G. FEATHERSTONE	
4	KCP&L GREATER MISSOURI OPERATIONS COMPANY	
5	FILE NO. ER-2010-0356	
6	Q. Please state your name and business address.	
7	A. Cary G. Featherstone, Fletcher Daniels State Office Building, 615 East 13	3 <sup>th</sup>
8	Street, Kansas City, Missouri.	
9	Q. By whom are you employed and in what capacity?	
10	A. I am a Regulatory Auditor with the Missouri Public Service Commission	on
11	("Commission").	
12	Q. Are you the same Cary G. Featherstone who filed direct and rebuttal testimon	ny
13	in this proceeding?	
14	A. Yes, I am. I, with Curt Wells, filed direct testimony in this case of	on
15	November 17, 2010 sponsoring Staff's Cost Of Service Report ("COS Report") f	or
16	KCP&L Greater Missouri Operations Company's ("GMO" or "Company") rate case filed	on
17	June 4, 2010. I also filed rebuttal testimony on December 15, 2010.	
18	I also filed direct testimony on November 10, 2010, rebuttal testimony	on
19	December 8, 2010 and surrebuttal testimony on January 5, 2011 in the affiliat	.ed
20	Kansas City Power & Light Company's ("KCPL") rate case filed by that company	on
21	June 4, 2010.	
22	Q. What is the purpose of your surrebuttal testimony?	

A. The purpose of this surrebuttal testimony is to address the inclusion of certain plant assets in the direct filing made by GMO for its MPS operating area. This plant relates to generating units known as Crossroads Energy Center ("Crossroads").

Staff of the Missouri Public Service Commission ("Staff") has not reflected in its case any of GMO's costs regarding Crossroads, but has instead included capacity for two combustion turbines identified as Prudent Turbines 4 and 5 at a site located in MPS's load center.

Specifically, I address the rebuttal testimony of GMO's witness Burton L. Crawford, Senior Manager, Energy Resource Management, concerning the inclusion of the costs of Crossroads in rate base by the Company. I respond to GMO witness Marvin L. Rollison, Vice President of Renewables and Gas Generation, rebuttal testimony regarding the ability of GMO to provide management oversight of the Crossroads facility. Finally, I respond to the rebuttal testimony of GMO witness WM. Edward Blunk, Supply Planning Manager, on the subject of natural gas prices for Crossroads.

I will also address GMO's witness Curtis D. Blanc concerning GMO's share of Iatan 2 allocation between MPS and L&P.

- Q. How will you refer to the Company in this testimony?
- A. At various places in this surrebuttal testimony when I discuss historical aspects of GMO capacity planning I will use the name GMO was using at the time—Aquila (Aquila, Inc.) during the period early 2002 to mid 2008 and UtiliCorp (UtiliCorp United, Inc.) before early 2002. I refer to the former operating divisions of Aquila-Aquila Networks-MPS and Aquila Networks-L&P, as MPS and L&P, respectively, when discussing GMO when it

was named Aquila, i.e., before it was acquired by Great Plains Energy Incorporation (Great Plains) on July 14, 2008.

#### **EXECUTIVE SUMMARY**

- Q. Would you please summarize your surrebuttal testimony on the area of the capacity planning of Aquila and the related costs of the Crossroads combustion turbines?
  - A. The following summarizes my testimony on this topic.

GMO presents in its rebuttal testimony what it believes is justification for its inclusion of Crossroads in its rate base for MPS in this filing. GMO believes that Crossroads is the lowest cost generation planning and, therefore, represents the best option that the Company had in the 2007 and 2008 time period to meet its system load requirements. Staff does not agree with this assessment. Staff has examined the capacity issue at GMO (Aquila) since 1999 and has concluded that the replacement of a major purchased power agreement that terminated in May 2005 has never been completely addressed by GMO (Aquila) until 2008, when the Company moved Crossroads from an unregulated affiliate into its regulated plant investment. Staff opposes the inclusion of the cost of Crossroads in rate base for MPS as it was not a least-cost planning decision and the plant is located in the state of Mississippi several hundred miles and over nine (9) hours from GMO's service territory.

The least cost planning decision for ratemaking in this case should be focused on the events surrounding the time period of 2004 and 2005 when GMO (Aquila) was deciding how to replace the full 500 megawatt capacity needs it had that it was meeting with a purchased power agreement that expired before the summer of 2005. GMO is misdirecting the Commission to the wrong time horizon.

In lieu of GMO's 315 megawatt South Harper facility and GMO's Crossroads facility, Staff proposes to include the costs of what it has described as the MPS facility. The MPS facility is a 525 megawatt facility based on the costs Aquila prudently incurred in building its South Harper facility plus the costs of two additional 105 megawatt combustion turbines. Since the legal issues surrounding the South Harper facility are now resolved with the March 28, 2009 effective date of the Commission's Report and Order in Case No. EA-2009-0118, the MPS facility is now the South Harper facility plus two additional 105 megawatt combustion turbines. This position is addressed at pages 90 to 94 and pages 103 to 110 in the Staff Cost of Service Report, and rebuttal and surrebuttal testimonies of Staff witness Lena M. Mantle. This testimony supports that GMO (Aquila) should have built its own generation to meet its growing electric needs and should have been doing so since at least the late 1990s.

The South Harper facility is the first regulated generating capacity that GMO (Aquila) built since 1983. Between 1983 and 2005 GMO relied on purchased power agreements to meet the growing demand for electricity in its MPS service territory. Staff was put into the position of imputing the MPS facility to GMO because GMO (Aquila) did not build generating assets for MPS, or L&P, for a substantial period of years.

Unlike the costs of a six combustion turbine site with three installed 105 megawatt combustion turbines, which were based on Aquila's costs for South Harper facility as built in 2005, Staff did not have such a basis for the costs to acquire and build the two additional combustion turbines to value the two additional turbines referred to as Prudent Turbines 4 and 5 in this case (as well as the last three MPS rate cases - Case ER-2005-0436, Case No. ER-2007-0004 and Case No. ER-2009-0090). This is because Aquila did not adequately plan

and pursue building generating assets to meet its system load requirements. GMO (Aquila), with Calpine, built the Aries Combined Cycle Generating Station (Aries), a 585 megawatt power plant. That power plant went into service in early 2002. At that time, GMO, then known as UtiliCorp United, Inc., had a corporate policy not to build generating assets for its regulated utility operations. The Aries power plant was conceived, planned, designed, engineered and costs determined by GMO, but GMO turned the project over to its unregulated subsidiary Aquila Merchant Inc. (Aquila Merchant) to build.

GMO (Aquila) signed a five-year purchased power agreement with Aquila Merchant for supplying power from the Aries power plant needed by its MPS operations that ended May 31, 2005, (the Aries Agreement). Before it began imputing generating assets, Staff took the position in GMO's prior rate cases that the Aries Agreement was not an arms' length transaction, and made adjustments in each of those cases to exclude the full value of the capacity agreements between MPS and its affiliate, Aquila Merchant.

Planning for the expiration of the May 31, 2005, Aries Agreement, MPS developed a least cost plan in early 2004 to meet MPS' capacity needs for the summer of 2005. This capacity plan, the least cost plan, was to build five (5) turbines having a total capacity of 525 megawatts. However, in the summer of 2005 Aquila MPS installed only three combustion turbines totaling 315 megawatts at its South Harper site designed for six such combustion turbines, following what it referred to as its "preferred plan." The remaining capacity to replace Aries was to be met by power from purchased power agreements. South Harper was the subject of extensive litigation. Originally, the three turbines GMO (Aquila) installed at South Harper were held in storage from 2002 to 2005 after GMO (Aquila) no longer planned for them to be used by GMO's non-regulated subsidiary, Aquila Merchant,

who had planned to install them at its then owned Aries generating site, as Aries II. GMO (Aquila) unsuccessfully attempted to sell these turbines before storing them long term. Rather than building additional capacity, GMO (Aquila) subjected itself to the volatile market conditions of the energy power markets. After installing the combustion turbines at South Harper in 2005, GMO (Aquila) continued to rely on short-term purchased power agreements for the remaining capacity necessary for it to meet its system load requirements year-after-year. GMO (Aquila) did so until the decision by GMO (Aquila) to transfer Crossroads from its non-regulated affiliate Aquila Merchant to MPS in August 2008, after it was acquired by Great Plains Energy Incorporated (Great Plains).

Up until January 2004, GMO's (Aquila) resource planning analyses only considered capacity agreements. Since January 2004, GMO (Aquila) performed resource planning analyses year-after-year, identifying a need to build generating units to make up for the lost Aries capacity. Other than South Harper, GMO (Aquila) never built any of these units. Even though GMO (Aquila) expressed to Staff in the past several years its intent to build generating facilities, it failed to do so. GMO (Aquila) made no plans to build future generating plant, other than its participation in the Iatan 2 coal-fired project.

The value of Crossroads is substantially overstated by GMO because the four combustion turbines installed at that facility were purchased at a time when turbine manufactures were selling those units in sellers' market with very high prices. GMO (Aquila) had many opportunities to acquire turbine capacity for installation in and around its load center at greatly reduced prices relative to the prices paid for the turbines installed at the Crossroads facility. If the Commission allows Crossroads in rate base, it should do so at a

23

1 substantially reduced amount compared to what GMO is requesting in this case. This is 2 discussed in my direct testimony. The four Crossroads turbine have a book value of approximately \*\* \_\_ \*\* million 3 each, or a total of \*\* \_\_\_\_ \*\* million. Based on GMO's imprudency in not acquiring that 4 5 owned capacity in 2004-2005, Staff believes those values should be significantly reduced to in the range of \*\* \_\_\_\_\_ \*\* million each or total range of \*\* \_\_\_\_\_ \*\* million, 6 7 based on sales and offers to other utilities for the same turbine model. 8 In addition to the turbine values being overstated, the cost of the transmission plant at 9 Crossroads is higher than it would be if GMO (Aquila) had installed the turbines at an existing site, a site such as South Harper. Staff believes that the there was a \*\* 10 11 million amount that was estimated for transmission upgrades at the Aries site where those 12 three South Harper turbines were originally planned to be installed. Crossroads transmission 13 is substantially higher than this transmission upgrade estimate. 14 The annual transmission expenses are higher for the Crossroads units because of 15 where they are located. If the turbines would have been installed in the Kansas City area the 16 transmission costs would be dramatically less. 17 Staff believes that natural gas costs are generally higher at Crossroads than they would be if the capacity was located in the Kansas City area. 18 19 Staff also believes it is more difficult to provide the kind of management oversight of 20 the Crossroads plant by virtue of its location in Clarkdale, Mississippi, over 500 miles from 21 Kansas City. 22 To put succinctly, Crossroads is the wrong plant—built as a merchant plant, built at



the wrong place—Mississippi and built at the wrong time—in 2002 with high costs.

#### CROSSROADS ENERGY CENTER GENERATING UNITS

- Q. What is Crossroads Energy Center?
- A. Crossroads Energy Center is a four unit 75-megawatt natural gas combustion turbine generating site with a total capacity of 300 megawatts located at near Clarksdale, Mississippi. These four units are General Electric model 7 EAs and were built in 2002 as a merchant plant for the former Aquila Merchant Services Inc. (Aquila Merchant), a wholly-owned subsidiary of Aquila, Inc. (Aquila) and an affiliate of GMO.
- Q. Mr. Crawford states at page 3 of his rebuttal testimony that "Staff claims to rely on an analysis conducted by the Company" in February 2004. Is this correct?
- A. Yes. As part of GMO's (Aquila) commitment to the resource planning process, it presented findings from its least cost planning study in 2004. This analysis was based on responses GMO (Aquila) had received from Request for Proposals (RFP's) (similar to the REF process GMO used to support its Crossroads decision in 2007). The 2004 analysis concluded that the least cost plan to replace the Aries purchased power agreement was the construction and installation of five combustion turbines, with each unit sized at 105 megawatts, for a total of 525 megawatts of capacity. In 2004, Staff expressed to the Company that Staff thought GMO's (Aquila) least cost plan was the best course for GMO (Aquila) to follow. Attached as Highly Confidential Surrebuttal Schedule 1 is the 2004 integrated resource planning presentation regarding its Resource Planning dated February 9, 2004.

The RFP process that GMO wants to ignore from the 2004 time period is the same RFP process GMO used in 2007 that it now embraces to support its view that Crossroads is the most economic decision. While there is nothing wrong with the 2007 RFP process that

6

7

8

9

10

11

12

13

14

1.5

16

17

18

19

20

21

22

23

GMO conducted to determine its future capacity planning needs, this analysis just is not the one that would address GMO's (Aquila) earlier capacity needs in the 2005 time frame. The actual decision needed to be made in 2004 because of the May 2005 expiration of the Aries 500 megawatt purchased power agreement. GMO used the right analysis, just at the wrong time.

- Q. Mr. Crawford also refers to a 2010 study at page 9 of his rebuttal testimony. What is this study?
- A. In the 2009 GMO rate case, the Company agreed to perform a study regarding GMO's capacity requirements. Mr. Crawford indicates in his rebuttal this analysis was completed in April 2010, at which time GMO supplied the results to Staff. This analysis appears as a schedule to Mr. Crawford's rebuttal as Schedule BLC2010-10 (HC). As discussed in his rebuttal testimony the study was performed in carrying out part of the Non-unanimous Stipulation and Agreement in Case No. ER-2009-0090.

Just as with the 2007 analysis performed by GMO, the 2010 study found Crossroads was the least cost. However, just as with the 2007 analysis, the 2010 analysis uses a time frame that was much too late to properly evaluate the replacement of the Aries generation in 2005. There was nothing wrong with the 2010 study, other than it is also based at the wrong time.

- O. Did Staff rely on GMO's (Aquila) 2004 least cost plan approach in previous GMO (Aquila) rate cases?
- Yes. After the completion of the Aries capacity agreement, GMO (Aquila) constructed three combustion turbines at its South Harper facility. This facility was originally sized to accommodate up to six combustion turbines of at least the size of the Siemens model

501 D, each having 105 megawatts of capacity. Installation of the three combustion turbines totaling 315 megawatts of capacity was completed in June and July of 2005. Staff supported the use of the cost of these units in rate base in the 2005 rate case. However, the South Harper site was subject to significant legal challenges resulting in the Commission to have to rule on GMO's authority to construct South Harper and these units three separate times. Therefore, Staff used the costs of South Harper as a surrogate, or proxy, in GMO's (Aquila) 2005 (Case No. ER-2005-0436) and 2007 (Case No. ER-2007-0004) rate cases. After the legal challenges were completed, Staff used the South Harper costs in GMO's 2009 rate case- Case No. ER-2009-0090. In addition to the three combustion turbines, Staff included the capacity for two more combustion turbines of the same size, 105 megawatts totaling 210 megawatts.

- Q. Has Staff included the South Harper Generating Facility in the rate base of MPS?
- A. It is my understanding that the legal issues surrounding the South Harper facility were resolved with the March 28, 2009 effective date of the Commission's Report and Order in Case No. EA-2009-0118. Staff considered the South Harper facility to be in rate base in GMO's 2009 rate case. In addition to South Harper generation Staff continues to support the two additional 105 megawatt combustion turbines addressed at pages 90 to 94 and pages 103 to 110 in the Staff Cost of Service Report filed on November 17, 2010, and rebuttal and surrebuttal testimonies of Staff witnesses Lena M. Mantle.

# THE FORMER AQUILA'S CAPACITY PLANNING AND ADDITIONAL PEAKING TURBINES

- Q. Mr. Crawford states, at page 8 of his rebuttal testimony, that GMO "concluded that the Crossroads Energy Center would result in the lowest 20-year NPVRR." Does Staff agree that this is the lowest cost generation that GMO should have considered?
- A. No. GMO proposes to include Crossroads, a generating unit built in 2002 as a merchant plant, in its rate base in this case.
  - Q. Does Staff believe the costs of Crossroads are in GMO's rate base?
- A. No. The Company proposed to include this unit in rate base in its 2009 rate case, but Staff also opposed this treatment in the last rate case. That case was settled with no specific ratemaking treatment addressed for Crossroads.
  - Q. Why does Staff believe Crossroads is not GMO's least cost option?
- A. Staff believes that the time period of 2007 that GMO is relying on to evaluate the costs of this generating capacity is misplaced, and well past the time when this capacity was needed by the Company. The time that is relevant to the evaluation of least cost capacity planning for Aquila is the time period of 2004 when the Company had to make decisions regarding its replacement of the 500 megawatt Aries purchased power agreement that expired May 31, 2005. This agreement was originally with an affiliate of Aquila who owned and built Aries with its partner, Calpine. Aquila signed a five-year purchased power agreement with Aquila Merchant for MPS in 1998 for the period summer of 2000 to May 2005.

Upon termination of the 500 megawatt Aries purchased power agreement, Aquila committed to replacing part of its capacity shortfall with three combustion turbines that an Aquila affiliate had in storage - the combustion turbines it installed at South Harper. In January 2004, Aquila informed Staff that it was going to use these combustion turbines to

partially replace the 500 megawatts of capacity it had been obtaining from the Aries station in order to meet its capacity needs during the summer of 2005 peak season. At the time, Staff questioned Aquila why it was only installing three combustion turbines, when the Company's own analysis showed the least costs planning to replace the 500 megawatt Aries PPA (purchase power agreement) was to install five combustion turbines. In 2004, Aquila explained that it only had three combustion turbines to install and it also thought there were attractive short-term purchased power agreements available for the summer of 2006 which was the summer after the South Harper units were to become operational.

- Q. Did Staff accept this explanation by Aquila?
- A. No. Staff continued to express its concerns it had previously communicated to Aquila many times that Staff believed the best approach for the Company was to pursue the installation of three combustion turbines that were eventually installed at South Harper and to build additional generating capacity making up the shortfall. Staff expected Aquila to build five combustion turbines making up approximately 525 megawatts of capacity which would have more than adequate to replace Aries 500 megawatts of capacity.
- Q. Did Aquila ever have an opportunity to purchase Aries after its unregulated affiliate sold its interest to Calpine?
- A. Yes. Aquila bid for this generating facility on December 4, 2006, but was not the successful bidder.
  - Q. Would you briefly describe both the Aries and Iatan 2 power plants?
- A. Yes. Aries is a 585 megawatt combined cycle facility, and would have more than met MPS' system load requirements for 2007 and beyond, possibly through 2010 when Aquila's share of the Iatan 2 Generating facility was expected become available. Iatan 2 is a

7

8

9 10

11

12

13

14

1.5 16

17

18

19

20

21 22 coal-fired generating plant recently completed by Kansas City Power & Light Company (KCPL) and, in which GMO (Aquila) has an 18 percent ownership share.

- Did Calpine's sale of Aries in 2006 influence Aquila's decision to build Q. new capacity?
- Because Aquila did not need peaking capacity in addition to the A. 585-megawatt Aries combined cycle facility—an intermediate capacity plant, it would not commit to building combustion turbines before Calpine sold Aries.

Staff believes that Aquila's decision in 1998 to build Aries as merchant plant caused the problems with its capacity planning that is the basis for the issue today. Aries was previously owned by Aquila as a non-regulated unit. Aquila sold a 50% share of Aries in late 1999 to Calpine. Had Aquila built this plant as a regulated facility, there would not be the capacity issues that have plagued the Company over the past several years. With ownership and control of the Aries capacity, Aquila would not have been subjected to the capacity market year after year.

- 0. Since Aquila did not acquire the Aries Unit how did it meet its capacity needs during the summers of 2007 and 2008 to meet system loads?
  - Α. With short-term purchased power agreements for capacity from Crossroads.
- Q. Why is the time frame of the Aries contract which ended in 2005 relevant to the discussion of Crossroads?
- A. Since GMO has taken the position through Mr. Crawford's rebuttal testimony that Crossroads is the most economical capacity generation available to the Company, it is essential to any assessment of the Crossroads facility to understand that it is GMO's actions in

the most were no it i

.

the past were as it appears on the surface this rate base decision looks good in the 2007 study referenced in Mr. Crawford's rebuttal.

Staff believes, however, that the relevant time period is when the Aries contract ended in 2005, not two years later in 2007 or five years later in 2010. The costs of combustion turbine acquisition and installation in 2005 are substantially different than in the 2007, 2008 or 2009 time periods. For the Aries capacity replacement to have occurred by May 2005, Aquila would have had to have purchased the turbine equipment by 2004. The combustion turbine market in 2004 was completely different than the market during 2007 and 2008 when GMO made its analysis and concluded that Crossroads was the least cost decision. Prices in the 2004 turbine market were much lower than in the 2001 turbine market when Aquila originally purchased the turbines installed at Crossroads. Thus, the book Crossroads turbine values are higher compared to what they would be if they, or comparable turbines, were purchased in 2004.

- Q. Upon what did GMO base its decision that Crossroads was its least cost capacity decision in 2007 and 2008?
- A. GMO witness Mr. Crawford generally describes on page eight (8) of his rebuttal testimony the process GMO went through to determine that Crossroads was the best decision for the Company. GMO received responses from a request for proposal (RFP) for purchased power agreements and self-build options. The self-build options contained prices for turbines and equipment priced at 2007 costs. These costs would have significantly increased compared to when Aquila should have evaluated the capacity addition back in 2004. To suggest that Crossroads is an economic decision as GMO indicates in Mr. Crawford's rebuttal testimony is simply wrong.

- 1
- Q. Are the transmission costs higher for Crossroads?

A. Yes. Mr. Crawford agrees in his rebuttal testimony at page 10 that the

3

Q. Did Aquila ever look at other generating units outside its service territory?

transmission costs are higher for Crossroads compared to a plant located in GMO's area.

5

A. Yes. Aquila Merchant once owned two non-regulated generating facilities

6

called Raccoon Creek and Goose Creek. These units were sold to Ameren Missouri in early

7

2006 as distressed property. Staff inquired of Aquila why these units were not considered for

8

its regulated operations in Missouri. Aquila maintained it could not get sufficient

9

transmission back to MPS load center and it was too costly to transport the power back. In a

10

June 26, 2003 Resource Planning presentation, Aquila identified companies submitting

11

responses to RFP's but they were rejected primarily because they were located in Illinois

12

which Aquila believed had transmission issues.

13

Q. GMO witness Crawford states at page 8 of his rebuttal testimony that GMO

14

considered self-build options, but determined acquiring Crossroads to be a lower cost option

15

than self-building. Does Staff agree that Crossroads is a low cost option for GMO to meet its

16

generating needs?

17

A. No. The comparison that GMO (Aquila) made prior to being acquired by

18

Great Plains was based on the wrong time period. GMO (Aquila) examined the costs in 2007

19

based on 2007 costs, but that was three years after the analysis should have been done. By

20

2007, the cost of combustion turbines had increased substantially causing Aquila to make the

21

wrong decision on the costs of Crossroads. The analysis that was done used inflated turbine

22

costs over those that the Company could have received had it pursued the self-build option in

23

2004 as opposed to 2008. More important, GMO (Aquila) likely would have never

considered adding a power plant located in Mississippi to its generating fleet to meet its Missouri load requirements, unless the costs were substantially lower than any other option. Having a power plant several hundred miles from the Company's load center presents logistic problems for operations and maintenance and, in particular, substantial costs to transport the power back to GMO's customers. Clearly, it is beneficial to have the generating fleet close to where the electricity is going to be used.

Had KCPL or GMO ever suggested to consider the Crossroads facility, Staff would have wanted to know the magnitude of the additional costs that would be involved in managing the plant facility and the substantial costs relating to the transmission of the power back to the load center. Those are costs that are incurred as long as the plant is needed for system load requirements.

- Q. At page 3 of Mr. Crawford's rebuttal testimony, he identifies the February 2004 meeting where Aquila presented the least cost plan to Staff. Did you attend meetings between Aquila and Staff regarding Aquila's decision to build South Harper?
- A. Yes. On January 27, 2004, Staff met with several Aquila personnel, including Mr. Richard C. Green, then Aquila's Chairman, Chief Executive Officer and President. During that meeting Aquila, based on its 2004 resource plan, committed to install three combustion turbines by June 2005. GMO had these units in storage at its Ralph Green plant located at Pleasant Hill, Missouri. Within a couple of weeks, GMO had a second meeting on February 9, 2004 with Staff and Public Counsel at GMO's 6-month Integrated Resource Planning (IRP) presentation to provide the results of its review of its capacity needs. At this meeting Aquila provided its analyses of its least cost and preferred plans. Staff questioned Aquila about its analysis of the Preferred Plan to only install three combustion turbines. Staff

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18 19

20

21

22

23

expressed its concerns with Aquila's past capacity planning effort and took strong exception with its decision not to build more generating assets, particularly since Aquila's analysis justified building more combustion turbines as its "least cost" plan.

- Did Aquila only evaluate its preferred plan? Q.
- A. No. When Aquila developed its capacity plan and presented it to Staff in January 2004, Aquila determined that its least cost plan was to install five combustion turbines, not three. At the February 9, 2004, IRP meeting, Aquila's lowest cost plan, on a net present value revenue requirements over a 20-year period, identified replacing the Aries Agreement by constructing five combustion turbines totaling 535 megawatts, instead of the three totaling 315 megawatts that they installed at the South Harper facility.

Staff asked Aquila why it was not pursuing its least cost plan, instead of installing three turbines. Aquila indicated that it only had three combustion turbines in storage at the time and planned to use them in its preferred plan. With its preferred plan, Aquila would make up the capacity shortfall resulting from the expiration of the Aries Agreement with purchased power agreements.

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

 From the time Aquila signed the Aries agreement in February 1999, it started considering replacing the Aries capacity, but only with purchased power agreements. Even though the combustion turbines that are presently installed at the South Harper facility had been in storage since beginning August 2002, it was not until the January 2004 meeting that Aquila committed to building a generating plant. In fact, just prior to the January meeting, Staff discussed the capacity planning matter as part of the 2004 rate case and Aquila had not made any plans to use the combustion turbines that were in storage. It was not until Staff pushed for these turbines to be used to meet Aquila's capacity requirements for the expiring Aries capacity in June 2005 did the Company commit to install the three combustion turbines at the site now known as South Harper.

- Q. How did Aquila meet its capacity requirements after the summer of 2005 when South Harper was completed?
- A. Since Aquila did not build its least cost plan of five combustion turbines, it relied on short term agreements in each of the years from 2006 to 2008.
  - Q. Does Staff believe that Aquila's capacity planning was prudent?
- A. No. Staff has been very critical of Aquila's approach to addressing its capacity needs for its system. Examples of the former Aquila decision making:
  - Having a corporate policy not to build regulated generation evidenced by not having built generation since 1983, except for South Harper in 2005 which effects the regulated operations to this day. GMO had not added any capacity until the completion of Iatan 2 in this case, with the exception Crossroads in August 2008.
  - In 1997 attempted to move all generating assets to an Exempt Wholesale Generator (EWG), Case No. EM-97-395. Application was withdrawn after opposition by Staff.
  - MPS Resource planning in 1992 determined need for a combined cycle unit by 2000 for MPS yet Aquila's corporate decision made to build unit as a

1 2		non-regulated merchant plant (Aries) after regulated operations did most of the preliminary work for the development of the project.
3 4	•	MPS purchased power agreement from 2001 to 2005 from a non-regulated Aquila affiliate (the Aries Combined Cycle Agreement).
5 6	•	In 2004, Aquila sold its 50% share of Aries giving its partner ** ** to take unit over.
7	•	Aquila attempts unsuccessfully to re-acquire Aries in December 2006.
8 9 10 11	•	Despite having a known certain date to replace the Aries Agreement by June 2005, Aquila did not timely plan for the replacement of this capacity. Until January 2004, did not seriously consider building generation instead looking at another purchased power agreement from an affiliate (Aries II).
12 13 14 15 16 17 18 19 20	•	Aquila attempts to sell at steep discounts three turbines which were to be installed at Aries as Aries II in 2002. Units were placed in storage. While units were for sale, at no time were the units ever considered or offered to MPS to meet its growing capacity needs before January 2004. In January 2004 Aquila made decision to replace Aries Capacity Agreement with three combustion turbines it had left over from its merchant business. These units had been in storage since 2002 during which the units' warranty expired. Units were eventually installed at the South Harper facility in June and July 2005.
21 22 23 24 25		South Harper legal issues caused by having to move forward on project to get units in service by June 2005 to replace Aries Agreement. Since Aquila already had possession of units since 2002, appropriate planning could have taken place much earlier than it did providing ample time to get necessary community support.
26 27 28 29 30 31 32 33	.*	Aquila had many combustion turbines, three of which were new units, in its asset portfolio that it sold at distressed values resulting in hundreds of millions of dollars of impairment charge losses that the Company did not consider to use for its regulated operations despite MPS' need to for capacity. (Raccoon Creek (340 megawatts) and Goose Creek (510 megawatts) sold to Union Electric Company d/b/a AmerenUE, now d/b/a Ameren Missouri, in 2005 with sale completed in early 2006 and three other General Electric 7 EAs combustion turbines sold to non-investor owned utilities in Nebraska).
34 35 36 37 38 39	•	In 2000 Aquila re-acquired MPS' four combustion turbines at Greenwood which it had built starting in 1975 and sold under a sale lease back which had a provision where the Company could acquire the units at the end of the lease at the existing market value. Aquila re-acquired the units at greater than the original purchase price even though the units were 25 years old. The units were reacquired by a Aquila non-regulated MPS affiliate with a

corporate decision that MPS entered into a 15-year purchased power agreement. This agreement was ultimately terminated and the units were moved back in the regulated operations of MPS. The 25-year old units are now in rate base at a greater amount than what they were originally purchased for in 1975 and 1976. Customers will have in essence paid for these units twice- once through the lease payments which were included in rates and now again in rate base. If the units had been rate based from the mid-1970s the units would have been close if not fully depreciated except for additions occurring over the operating life of the assets.

The foregoing demonstrates that Aquila has not had appropriate and effective decision-making regarding its resource plans or its resource planning process. These events and circumstances are not the actions of a typical utility this Commission regulates. When Great Plains acquired GMO, it inherited the many problems and the long-term issues with the former Aquila capacity planning.

#### ADVANTAGES OF UTILITY OWNING GENERATING ASSETS

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

  Companies can better manage costs for maintenance and reliability of units if they own them. In

essence, by controlling the generating unit, the Company is much more in charge of its own destiny. In an interview with Staff on November 14, 2003, Mr. Terry Hedrick, then Aquila's Generation Services Manager and the Project Manager of South Harper and now KCPL's Manager of Plant Engineering, indicated that he believed there were "significant advantages in both owning and operating the generation equipment in developing maintenance expertise. If you control / own the equipment, he believes that there are advantages in the areas of costs, manpower and staffing and dispatch flexibility." (Data Request No. 616.1 in Case No. ER-2004-0034)

- Q. Are there advantages to customers if regulated utilities own their generating assets?
- A. Yes. Generally, the costs (revenue requirements) are higher in the early years of ownership. The capital costs of the plant investment require a return (return on investment) and the utility is entitled to a recovery of the investment (return of investment). As the plant investment is recovered through depreciation (the return of investment) the rate base return required (return on the investment) decreases. At some point in the future, especially if the plant operates longer than expected, such as in the case of GMO's Sibley generating units, the customers will have the benefit of the plant while the rate base investment is very low. The return on investment declines which causes the revenue requirements to decline dramatically through ownership.
  - Q. Is GMO in a position to reap these advantages?
- A. No. GMO operating as Aquila, by deciding not to build regulated generation for a period of over 20 years since 1983 put its customers at risk because there was a substantial amount of capacity that it had to replace at least 500 megawatts since the Aries purchased

power agreement expired in May 2005. Aquila made no commitment to build regulated generation for over 20 years, unlike every other major electric utility that operates in this state, and faced the challenge of replacing the Aries capacity in large block of power, at least 500 megawatts. It met part of this capacity with South Harper—315 megawatts but did not make the right decision to replace the entire 500 megawatts with owned assets.

- Q. Did Aquila Merchant recognize the advantages of owning generating facilities?
- A. Yes. Aquila Merchant acquired several generating assets during the 2000 and 2001 time frame including Aries. Aquila believed that the forecast for power costs would be increasing over time, and made decisions to "lock in" the cost of owning its own generation, so it could take advantage of the increasing market for power costs. In an October 29, 2003, interview Mr. Max Sherman, a former Aquila Merchant employee and Project Manager during the early development and construction phase of the Aries plant and Crossroads, discussed the need for generating units:

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

[Data Request No. 549 in Case No. ER-2004-0034; emphasis added]

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

11

12

13

14

15

16

17

18

19

20

21

22

23

that power costs were going to increase, it would have to enter into purchased power agreements priced at market-based rates. The non-regulated merchant company who negotiated to deliver power to the regulated entity at the escalating market-based contracts benefit if they own and operate their generation assets. In some cases the non-regulated merchant may supply power by either generating or acquiring power through a purchase from another party. The profitability of the non-regulated merchant will depend on the ability to acquire or generate the power at a cost that would be below that which it would receive in revenues. Since GMO (Aquila) believed there was going to be a significant rise in the power market costs, the non-regulated subsidiary built and acquired generating assets to engage in the open market for power.

If the regulated entity that did not build and operate its own generating units believed

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

A. Yes. The approach that Aquila Merchant pursued could also have been followed by the regulated MPS division. For the exact reasons that Aquila Merchant believed it was necessary to own the generating assets, MPS should have built and operated its own generation. This was especially important when you take into consideration that the Company believed that the power market costs were going to rise significantly over time, as it did in 2001 through 2005. The decision by Aquila to allow the Aquila Merchant organization to build and acquire generating assets and sell that power through the open market through purchased power agreements like those entered into between the Aries partners and MPS resulted in the situation where Aquila's regulated operations were subjected to the volatility of the market for power costs. It is clear that Aquila Merchant believed that it could not enter

1

3

4

5 6

7

8 9

10

11 12

13

14 15

16

17

18 19

20

22

21

into long-term agreements and be subjected to the whims of the market place in supplying that power, thus causing them to reach a decision to own the generating assets in order to supply those power needs to their non-regulated customers. It should be just as clear that the regulated entity, MPS, would also want to own generating assets in this same situation.

- Q. Do know of any non-regulated merchant company that builds its own generating facilities?
- Yes. In a meeting with Calpine in the spring 2005, Staff asked Calpine if it supplied electricity to its customers on a long-term basis using purchased power agreements. Calpine indicated that it was in the business of owning and operating its generating facilities and would not meet long-term power commitments to customers by purchasing the power.
- Q. Are there advantages to the utility in owning and operating generating facilities as regulated assets?
- Yes. Regulated assets are typically put in rate base which, when the units are A. completed and declared in service, are included in rates allowing the utility a reasonable return on the investment and a recovery over the life of the generating asset through depreciation expense. Thus, a utility is provided some reasonable assurance that the investment in the regulated asset will be fully recovered from its retail electric customers. This provides some reasonable assurance to investors that their asset will be protected through the regulatory process by rate basing the asset. Utility customers benefit by being insulated from rising costs for power during a time when those costs are expected to significantly increase. The customers and the utility owners gain substantial advantages when a company builds and places in service, generating facilities in its regulated operations.

1

operations?

4

3

5 6

7

8

9

10 11

12

13 14

15

16

17

18 19

20

21

22 23 Q. Are there also disadvantages in placing generating assets in the regulated

A. Yes. If there are rising power market costs, a company owning both regulated and non-regulated entities would be at a relative disadvantage if it put the generating facilities in its regulated operations, because it would not be able to shield the profits obtained from the regulated entity. This is the situation MPS found itself in 2000 through 2005 with Aquila Merchant's ownership of Aries and ultimately with the planned second purchased power agreement contemplated with Aries II. But the power market collapsed as did Aquila's non-regulated operations so Aquila made the decision to get out of the merchant business before this agreement ever was finalized. While the regulated entity would have an opportunity to sell the energy from the generating capacity in the open market during the period of expected rising power costs, the profits from these transactions are typically included in the ratemaking process. For as long as the regulated entity can stay out of a rate case, the company will benefit from the increased sales. However, when the regulated entity files for rate relief, the power sales would be considered in the rate process.

The decision to put generating assets in a regulated entity of a company would cause the non-regulated entity to miss opportunities for profit making in the increased power market. Assets that are in the regulated operations would be held to a typical regulated return which would likely be less than those that would be received by non-regulated entities engaging in profit taking from a rising power market. Aquila believed that it could receive greater returns on its investment dollars by having a non-regulated entity, Aquila Merchant, own the generating facilities and selling the power through purchased power agreements to entities like MPS in the open market through market-based pricing. As the market reflected

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- Q. Is there an example where Aquila was subjected to increasing costs because it failed to secure the ownership of generating assets?
- Yes. In 1975, Aquila, then operating as Missouri Public Service Company, A. purchased and built four combustion turbines at its Greenwood Generating Station which GMO still operates. Upon completion of the construction before the units went into service, the Company sold at book value to financial institutions, all four of the combustion turbines, and received the capacity power through a 25-year lease for each of the generating units. The lease did not allow for any residual value to be passed to the utility entity that originally owned the generating units. Upon expiration of the lease, Aquila reacquired those four combustion turbines at an existing market-based price. In essence, the Company purchased the same asset twice. The cost to reacquire the assets at the current market was very close to the original purchase price paid for the assets when they were new. Thus, Aquila bought 25-year-old generators and paid close to what the original investment was back in the mid-1970s. Customers paid for 25 years lease payments which covered the fixed costs of the units with MPS having the responsibility for all operating and maintenance costs along with any capital additions. MPS customers are currently paying in rates for the units which have a greater value than when they were new-- in essence paying a second time for the units. The benefits of ownership are not being realized for the Greenwood units because of this sale/lease back arrangement.

### EFFECTS OF AQUIILA'S DECISION NOT TO TREAT ARIES AS A REGULATED GENERATING FACILITY

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

:

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

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

- Q. Why didn't the regulated side of Aquila (MPS) build the combined cycle unit as an EWG?
- A. The MPS regulated operations of Aquila presented its proposal to Robert K. Green, then Aquila President, who made the decision that the regulated side of its operations would not build Aries. The material covered two different dates: 1) October 8, 1998, Financial Analysis of Supply Options, and 2) October 28, 1998, Updated Analysis of Supply Options. The presentation material was provided to Staff in response to Data Request No. 301 (Case No. ER-2004-0034) and is attached to this testimony as Highly Confidential Surrebuttal Schedules 3 and 4.
- Q. How did Staff learn of the process Aquila used to determine who would build Aries?

- A. This was discussed with former Aquila personnel who were involved in not only the issuance and review of the RFP, but also as one of the bidders to the RFP to supply capacity to MPS through the EWG. Staff conducted an interview with the individuals who were directly involved in the issuance and review of the RFP and also in making the decision to submit a bid to build a combined cycle unit to supply power to MPS as an EWG.
  - Q. How did the interview with the former Aquila personnel come about?
- A. Staff indicated to Aquila that it wanted to discuss the RFP process and aspects of how MPS came to agree to purchase power from the Aries partners. Aquila contacted two individuals who were directly involved in these decisions and provided them for an interview with Staff.
- Q. Is it Staff's view that Aquila should have given more consideration to building Aries as a regulated unit?
- A. Yes. Staff believes that had Aquila built Aries as a regulated generating station and rate based it in the traditional manner, Aquila likely would not have the capacity issues it has today. Staff has had issues with Aquila's decision making regarding building generating units since Aquila's 2001 rate case, Case No. ER-2001-672. In each rate case since the 2001 through the last Aquila rate case, Case Nos. ER-2004-0034, ER-2005-0436, and ER-2007-0004, Staff expressed its concerns on the Company's decision not to build generation units and relying on purchase power agreements to meet capacity. Now with the acquisition by Great Plains, GMO continues to have issues with the capacity decisions of the former Aquila—now with Crossroads.
- Q. Had Aquila examined building a combined cycle unit as a regulated asset in the past?

1	A. Yes, In its 1992 Integrated Resource Plan dated February 1992,			
2	GMO (Aquila) identified that its recommendation was to build **			
3	** for MPS.			
4	[February 3, 1992 Integrated Resource Plan-Executive Summary, Item 6.]			
5	Q. Did the regulated MPS develop the Aries project?			
6	A. Yes. MPS throughout the late 1990s developed the 500 MW combined-cycle			
7	unit that ultimately became the Aries Combined Cycle Generating Facility. The site for Aries			
8	was land that was previously owned by Missouri Public Service Company, the predecessor to			
9	UtiliCorp.			
10	Q. Did MPS incur costs to develop the Aries site?			
11	A. During the early and mid-1990's, the regulated MPS expended funds to			
12	continue to study and develop the preliminary work that was necessary to prepare for			
13	construction of this project. Ultimately, Aquila's corporate management determined that the			
14	regulated MPS would not be permitted to build the Aries facility but rather its non-regulated			
15	Aquila Merchant would develop this project. Aquila Merchant took over the Aries project in			
16	the summer of 1998.			
1.7	Q. When was the Aries capacity agreement signed with MPS?			
18	A. MPS entered into this purchased power agreement with its affiliate,			
19	Aquila Merchant, in February 1999.			
20	Q. Did MPS prepare cost estimates for the Aries project?			
21	A. Yes. In an interview with David Kreimer, he indicated that he spent a			
22	substantial amount of his time during the winter and enring months of 1998 developing			



2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

- preliminary cost data and studying the estimates for the 500 MW combined cycle unit that ultimately became Aries.
- Q. Were these cost estimates and studies provided to Aquila Merchant assisting in building the Aries facility?
- Yes. The regulated MPS did much of the preliminary work to get Aries project A. to the construction stage.
  - O. How did the Aries purchased power agreement come about?
- A. In the spring of 1998, MPS issued a request for proposal (RFP) for its power needs in the early years of this decade. It received responses in July 1998 offering to provide MPS power needs through a variety of options from several different entities. As part of this evaluation by MPS, it also examined the option of building and owning itself a 500 megawatt combined cycle unit with a projected in-service date in 2001.

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

- Did MPS pursue building the 500 megawatt combined cycle unit? Q.
- Yes. However, Aquila, at some point, assigned the construction project away A. from Aquila's regulated MPS operations and transferred it to Aquila Power Corporation, Aguila's non-regulated operations later known as Aquila Merchant.

Initially, the regulated operations of MPS pursued building the Aries Combined Cycle Unit as an unregulated EWG. The studies and analyses performed by personnel of the regulated operations ultimately led to the conclusion that the 500 megawatt combined cycle unit was the

1 least cost option to meet the capacity needs of MPS starting in 2001. This was confirmed by the 2 independent engineering firm, Burns & McDonnell in an August 1998 report to the Company. 3 In an August 24, 1998 study entitled "UtiliCorp United Inc. Missouri Public Service 4 1998-2003 Preliminary Energy Supply Plan," the Company independently determined that the 5 construction of a 500 megawatt combined cycle unit was the least cost plan for MPS. Under the 6 Executive Summary Section 1, "Conclusions," the following appears: 7 Conclusions 8 Based on the 1998-2003 supply-side analysis, the least cost plan for 9 MPS consists of executing short term purchase contacts to meet MPS 10 capacity needs through the year 2000, and the construction of a 11 gas-fired 500 MW combined cycle unit to meet all of MPS' capacity 12 needs in 2001-2003 time frame and a majority of its needs thereafter. 13 The above supply provides the least cost means to meet the MPS 14 capacity and energy needs even though MPS' has a low annual load factor of <50% and an abundant supply of low-cost energy supplied by 15 16 its existing resource base which is 64% coal-fired base load generating 17 capacity. 18 The ability of combined cycle units to complete in the regional energy 19 market place enables these resources to provide sufficient revenue to 20 offset their higher capital cost. 21 1.5 Recommended Action Plan 22 As a result of the analysis outlined in this report, it is recommended 23 that UCU [(Aquila/UtiliCorp)]: 24 Negotiate extension of the existing lease agreements on the Greenwood 25 combustion turbines. 26 Secure short term capacity to meet MPS' capacity needs thru 2000. 27 Pursue the construction of a 500 MW combined cycle unit proposed 28 with an in service date of June 1, 2001. 29 [Source: Data Request No. 607 in ER-2004-0034—1998-2003 30 Preliminary Energy Supply Plan

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Did Aquila, then operating as UtiliCorp, ever examine the option of MPS 0. building and owning the Aries Combined Cycle Unit as part of its regulated operations?

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

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

Yes. To not have even considered the option of building regulated generating assets held by MPS to meet the capacity needs of Aquila's Missouri regulated operations is a failure on the Aquila's part and constitutes imprudence. This decision by Aquila resulted in Aquila's regulated Missouri operations being at the mercy of purchased power agreements priced at market-based rates through May 31, 2005, when the Aries agreement terminated. Aquila continued to be subjected to market-based rates for the power used by its Missouri regulated operations right up to acquisition by Great Plains in July 2008.

- Q. What was the effect of Aquila's strategy to not build regulated generating assets until recently?
- Aguila subjected its MPS and now, L&P operations, to purchased power A. agreements priced at market-based rates. The market rates for purchased power during the

period of most of this decade has increased significantly over what they were in the late 1990s when Aquila entered into the Aries purchased power agreement.

- Q. What is the basis for the Staff's belief that Aquila did not consider building regulated generation to meet its capacity needs in Missouri and, instead, committed to building unregulated generation?
- A. Aquila freely admitted that it never considered building regulated generating facilities to meet the capacity needs of its regulated utility operations in the state of Missouri. Mr. Frank DeBacker, Aquila Vice President, (page 9, line 9 DeBacker rebuttal in ER-2004-0034) and Mr. Keith Stamm, Aquila Senior Vice President, (page 12, line 18 Stamm rebuttal in ER-2004-0034) both admit in their rebuttal testimonies filed in Case No. ER-2004-0034, that this option was never considered by Aquila's regulated operations. In Case No. ER-2001-672, Aquila provided response to Data Request No. 365 where it stated that "the Company believes that the current regulatory climate does not warrant the business risks associated with constructing and owning rate based generating plants."

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

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

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

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

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

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

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

2

1

3

4

5

6

7

8

9

10

11

12 13

14

15

16

17 18

19

20

21 22

23

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

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

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

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

describe this:

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

35

36 37

4

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

[Source: October 28, 2003 interview with Mr. DeBacker and Mr. Holzwarth; emphasis added]

1	The dec	cision was made to obtain power from other sources. Mr. DeBacker and
2	Mr. Holzwarth i	indicated that they were not aware of any records documenting the reasons for the
3	MPS EWG opti	on rejection by Aquila's upper management.
4 5 6 7 8 9	]	Mr. Holzwarth stated that the ultimate decision would have been made by Bob Green and/or Harvey Padawer; however, the consensus opinion of senior management was that a regulated power plant with its potential stranded cost issues was not desirable. Mr. Holzwarth indicated he did not make the decision; he only made the presentation recommending that his group UtiliCorp Power Supply build a generating unit as a non-regulated EWG.
1 2		Source: October 28, 2003 interview with Mr. DeBacker and Mr. Holzwarth,]
3	Q. 1	Did Staff ask who made the decision not to build regulated generating units?
4	Α.	Yes. Staff submitted a data request asking the following:
15 16 17 18		Why was the decision made by Aquila (formerly UtiliCorp United) not to build and operate Aries Combined Cycle Unit as a "regulated" power plant to be included in rate base? Include in your response all reasons and rationales why this decision was made.
19 20 21 22 23 24		Response: Uncertainty surrounding the deregulation of the electric power industry and the possibility of incurring unrecoverable "stranded costs". Avoiding long term power supply commitments was viewed as a means to effectively mitigate potential "stranded costs" arising from potential retail generation choice.
25 26 27		<ol> <li>Provide all supporting documentation relating to and relied on upon in making this decision, including but not limited to reports, analyses, studies, etc.</li> </ol>
28 29 30 31		Response: Compliance with MPS Joint Agreement with MPSC Missouri Public Service Commission] and Office of Public Counsel—approved by PSC in Case No. EO-98-316 on 6/25/98.
32		Secondary Concern
33 34 35 36		<ol> <li>Inexperience in operating large F-frame combustion turbine generating units and uncertainty surrounding the actual maintenance costs of these machines.</li> <li>[Data Request No. 302 in Case No. ER-2004-0034]</li> </ol>

1	This project then became assigned to Aquila Merchant and the Aries project was
2	developed as part of the merchant energy partners segment of that operation.
3 ,	Q. Who at GMO (Aquila) made the decision to not to build regulated generating
4	assets to meet MPS capacity requirements?
5	A. As indicated above cited in the October 28, 2003 interview, Mr. Holzwarth said
6	Mr. Bob Green and Harvey Padawer made the decision not to build regulated generating assets.
7	In response to the Data Request No. 302 in Case No. ER-2004-0034 the Company identified the
8	following decision makers on that issue:
9	Bob Green - Chief Operating Officer supervised by Rick Green
10	Jim Miller - Leader Business Segment UED (UtiliCorp Energy Delivery)
11	Harvey Padewar - Leader Business Segment UEG (UtiliCorp Energy Group)
12	In the October 28, 2003, Staff interview with Mr. DeBacker and Mr. Holzwarth, when
13	asked about who made the decision to build Aries as a nonregulated plant, according to Staff
14	notes of the interview reviewed by the interviewees, they stated:
15 16 17 18 19 20 21 22 23 24	Were Bob Green, Harvey Padawer and Jim Miller involved in meetings dealing with Aquila Merchant matters? DeBacker and Holzwarth said Padawer would have been; he was head of Aquila Merchant at the time and reported to Mr. [Bob] Green. They supposed Bob Green would have met with Aquila Merchant people; Bob Green as President of Aquila (UtiliCorp) was over Aquila Merchant as well as the regulated utility operations. Mr. DeBacker and Mr. Holzwarth were not sure about Mr. Miller, Senior Vice President of UtiliCorp Energy Delivery (UED) which was responsible for the transmission and distributions system (pipes and wires) of the regulated utilities.
25	[Data Request No. 548 in Case No. ER-2004-0034]
26	Q. Who was Mr. Bob Green?
27	A. Until October 2002, Mr. Green was the President and Chief Executive Officer of
28	GMO (Aquila) and President of Aquila Merchant.
	Sign Control of the C

Q. Who is Mr. Harvey Padawer?

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

Q. Who is Jim Miller?

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

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

A. Yes. As noted earlier, utilities such as Empire, KCPL and AmerenUE all embarked on building generating assets, and owning and controlling those generating assets as part of their regulated operations. Staff supported this approach and has encouraged this practice by utilities through the IRP process, as well as various applications that have appeared before the Commission concerning restructuring and reorganizations of the various corporate entities.

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

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

l and the result of the result of the result of the arrangement of the

16

17

18

19

20

21

22

23

- Q. Why is this important since GMO no longer has an affiliate company that is attempting to sell power to its regulated companies?
- A. While GMO does not have an affiliate selling it power, the aftermath of the Aries decision still affects the Company's decision making right up to 2008. Aries originally was owned by Aquila exclusively until it sold 50% of its ownership interests to Calpine. In 2004, Aquila sold its entire interest in Aries to Calpine. Not only did Aquila lose a 585 megawatt combined cycle unit a subject this Commission is still having to deal with in finding a replacement to this power but it lost very valuable land, transmission and natural

gas pipeline rights. This facility was sized for additional generating units. In fact, the three turbines installed at South Harper were originally planned to be installed at Aries as Aries II. When Aquila gave up its ownership interest in Aries, and going back even further when it decided to get a partner for Aries, has caused the Company great hardship in its capacity planning and meeting the energy needs of its customers.

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

- Q. Did Cass County provide zoning and permitting authority to Aquila to build Aries?
- A. Yes. Aquila sought all the necessary zoning and permitting requirements in building Aries.
- Q. How has the Company's inattention to the Missouri-regulated operations of the Company impacted those operations and its customers?
- A. In every instance, the Staff knows about with regard to other Missouri utilities, the companies have pursued meeting their customers' long-term capacity needs through building and owning generating assets unless utilities obtain very favorable base load generation pricing such as the two NPPD capacity agreements like GMO has. Empire had a very favorable long-term base load agreement with a Kansas utility Westar Energy. But other utilities for the most part want to own and control their generating assets. Aquila stood alone when it made decisions year after year to pursue purchase power agreements with market-based rates. The decision by Aquila's management to embark on a non-regulated path to meet its capacity needs put the regulated operations "behind the curve" in the sense of ownership of power production facilities. Empire as a company, and Empire's customers,

- have enjoyed the benefits of the State Line Combined Cycle since it went into production of electricity in June 2001. Empire and its customers will have the benefit of that unit for many years to come. GMO's customers, however, will not have the same opportunities for those benefits and will pay more in the long-run by not building generation since 1983 with the exception of the South Harper facility, and now latan 2.
  - Q. Will prudent ownership of generating assets produce the lowest overall cost?
- A. Very likely. Aquila produced a study for the January 2004 IRP analysis that concluded that building and owning five combustion turbines was the least cost scenario for replacing the Aries capacity agreement in June 2005.

### KCP&L GREATER MISSOURI OPERATIONS' MANAGEMENT OF

#### CROSSROADS

- Q. Mr. Rollison discusses the management oversight of Crossroads in his rebuttal testimony. Is it common to have a generating plant located such a distance from where the electricity is used?
- A. No. Utilities site power plants in and around their load centers—close to where the electricity is needed.
- Q. Mr. Rollison discusses the oversight of Crossroads by GMO indicating it makes site visits to Mississippi. How close is Clarksdale to GMO?
- A. Crossroads is located over 525 miles from Great Plains corporate headquarters in downtown Kansas City, Missouri. According to Mapquest a trip to Clarksdale, Mississippi from Great Plains offices' takes 9 hours- one way (see Schedule 5). It is difficult to understand how GMO can provide the necessary management oversight of one its power plant investments with the facilities located so far away. While it is not impossible to manage a

production facility so far from home it is extremely difficult and certainly not the ideal situation for GMO.

3

Q. Was Crossroads designed to be a regulated power plant?

4

5

J

6

7

8

9

10

11

12

13

14

15

16

17

18 19

20

21

22

23

A. No. At the time Crossroads was place in service in 2002 by Aquila Merchant the facility was intended on being operated as a merchant plant selling power into a non-regulated environment. Up till the acquisition of Aquila by Great Plains, Crossroads was only used as a merchant plant selling power through long- and short-term capacity contracts.

Q. Is Crossroads the only merchant plant Aquila Merchant invested in?

A. No. Aquila Merchant also built two other separate natural gas-fired facilities in Illinois called Raccoon Creek and Goose Creek as merchant plants. These two power plant sites were sold to Ameren in 2005 at highly discounted values as distressed properties as Aquila was selling off its non-regulated operations. This sale transaction was discussed in my direct testimony at pages 49 to 54.

#### CROSSROADS NATURAL GAS COSTS

- Q. GMO witness Blunk discusses in his rebuttal testimony natural gas costs for Crossroads. Has Crossroads had higher natural gas costs in the past?
- A. Historically Crossroads based on its Mississippi location has experienced higher natural costs when compared to natural gas prices and costs in the mid-west region. GMO gets its natural gas in the area known as Midcontinent region of the United States—a location where natural gas prices tend to be lower than most of the other parts of the country and in the Gulf region—Mississippi. The Midcontinent region includes portions of Texas, Oklahoma and Kansas. The natural gas prices of the Midcontinent region has been significantly lower in the past compared to the prices at the Henry Hub area in Louisiana. In

1

2

3

4

5

6

7

8

9

10

the past there were basis adjustments made the price of natural gas when comparing regional prices differences resulting with the Henry Hub prices being higher. These basis adjustments have been as high as over \$1 per mmbtu. Currently, there is a small difference, but it is unlikely that will remain the case over time. While the natural gas costs are comparable today between Kansas City area and the area where Crossroads purchases its natural gas, historically, natural gas has been higher for the Crossroads plant compared to South Harper of the Greenwood Generating Facility, GMO other large combustion turbine facility.

- Q. What are the comparisons in natural gas costs between these units?
- A. The following table compares Crossroads natural gas costs with both South Harper and Greenwood:

Generating Unit		200	8		200			Nover	2010 through November	
	mmbtu	mmbtu Per mmbtu		mmbtu	Per m	mbtu	mmbtu	Per-mmbtu		
South Harper										
mmbtu	1,267,064			609,228			688,741			
commodity		**	**		**	**		**	**	
Commodity with variable transportation		**	**		**	**		**	**	
Commodity with all transportation		**_	**		**	p.÷		**	**	
Greenwood						C				
mmbtu	333,734			437,199			423,042	V		
commodity		**_	**		**	e*		**	**	
Commodity with variable transportation		**	**		**_	±н		**	**	
Commodity with all transportation		**	**		**_	**		**	**	
Crossroads										
mmbtu	121,736			121,326			306,454			
commodity		**	**		**	**		**	**	
Commodity with variable transportation		**_	**		**_	**		**	**	
Commodity with all transportation		**_	**		**_	**		**_	**	

Source: Data Request No. 70



While South Harper has higher total natural gas costs if the firm transportation costs are included than Crossroads the last two years for 2009 and 2010 (through November), Greenwood has significantly lower costs. Also, noteworthy is that Greenwood had significantly more use despite not having firm transportation for natural gas delivery.

Equally important, the lower natural gas prices at Crossroads is off-set by the higher transmission costs to transport the power back to Kansas City to serve GMO's customers.

#### ALLOCATION OF IATAN 2 BETWEEN MPS AND L&P

- Q. GMO witness Blanc states at page 9 of his rebuttal testimony that "Staff makes the unsubstantiated claim that KCPL 'would not have considered GMO as a potential partner' so it is somehow appropriate to favor L&P for getting GMO's toe in the door" relating to the latan 2 ownership. Do you have any information concerning KCPL being reluctant to have GMO as a partner in the latan 2 project?
- A. Yes. I was involved with the "collaborative process" regarding the Regulatory Plan referenced in Mr. Blanc's rebuttal testimony. I was also involved in the discussions concerning the Iatan 2 project and how that unit related to the Iatan 1 partners KCPL, GMO and The Empire District Electric Company (Empire). Early in the process it was apparent that KCPL was reluctant to include either of its two Iatan 1 partners in the Iatan 2 project. Staff had discussions with KCPL and emphasized its belief that both GMO and Empire had certain rights to participate in the Iatan 2 project by virtue of their joint ownership of Iatan 1 with KCPL. KCPL separately met with both GMO and Empire independently to discuss their potential to be partners in the Iatan 2 project.
- Q. When KCPL was having these discussions with GMO and Empire, did either GMO or Empire contact Staff?

- A. Yes. Staff not only had ongoing discussions with KCPL regarding the latan 2 project, but it also engaged in discussions about the project with both Empire and GMO.

  Q. When did these discussions take place?

  A. They occurred in the 2004 and 2005 time period. GMO and Empire
  - A. They occurred in the 2004 and 2003 time period. GMO and Empire participated in the KCPL work shops that culminated in KCPL's Regulatory Plan. During this period, Staff monitored the discussions, and ultimately the progress of the negotiations between the three Iatan 1 partners for participation in ownership in Iatan 2. Ultimately, KCPL agreed to include GMO and Empire as partners in Iatan 2, based on the same ownership share percentages they had in Iatan 1—GMO 18% and Empire 12%.
  - Q. Did either Empire or GMO contact you directly regarding their discussions with KCPL for ownership in the Iatan 2 project?
  - A. Sometime during the "collaborative process," but prior to the final agreement including Empire as a partner of Iatan 2, Brad Beecher, Vice President of Empire, contacted me and another Staff member, Steve Traxler, at our Kansas City offices to discuss the progress of Empire's meetings with KCPL. Empire expressed concern at that time that KCPL was showing a reluctance to include Empire and GMO in the Iatan 2 project and, in particular, talks were not going as well as they had hoped.

During its regulatory plan meetings GMO (Aquila) also discussed with Staff its belief that KCPL did not want GMO to be a partner in latan 2 because of GMO's financial condition.

During Staff's discussions with Empire and GMO regarding the possibility of their own regulatory plans, each independently stated they believed KCPL's initial desire was to have a larger share of latan 2 by excluding them as owners and, instead of having them as partners, enter into purchased power agreements with GMO and Empire, its two latan 1 partners. Ultimately, it worked out that Empire and GMO became partners in latan 2 on the same percentage of ownership basis these entities had in latan 1.

- Q. Did KCPL ever express to Staff concern about having Aquila as a partner in the latan 2 project?
- A. Yes. KCPL expressed concern regarding Aquila's financial condition to Staff during its regulatory plan meetings. During one of these meetings, Chris Giles, then KCPL's Vice President, indicated KCPL was reluctant to have GMO as a partner since its credit ratings were not investment grade.
- Q. Did GMO ever approach Staff regarding its involvement in the latan 2 project after the ownership agreement between KCPL, GMO, Empire and others was finalized?
- A. Yes. Sometime during Aquila's 2005 rate case, Max Sherman, an Aquila Vice President at the time, expressed his and the Company's appreciation for Staff's involvement in monitoring the ongoing negotiations of the latan 2 partnership agreement. Mr. Sherman indicated that without Staff's oversight he didn't believe Aquila would have been included as a partner in the latan 2 project.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

- Q. Were the discussions Staff had with the three Iatan 1 partners the basis for the statement made by Staff witness Lena M. Mantle in her testimony regarding the ownership rights issue.
  - A. Yes.

#### CONCLUSIONS FOR CAPACITY PLANNING AND PEAKING TURBINES

- Q. What are the conclusions that Staff has regarding the Company's building generation?
- GMO (Aquila) made the decision to not build regulated generating assets as a A. corporate policy and as a consequence did not build generating assets from 1983 until the completion of South Harper in 2005. During the late 1990's up through 2008 IRP process, GMO (Aquila) never looked at building regulated assets in any meaningful way except South Harper. GMO (Aquila) continued the no build option right to current with the exception of its base load coal-fired latan 2 commitment made in 2005. GMO (Aquila) did not submit any RFPs to turbine manufacturers to get turbine pricing so that it could do complete and thorough studies concerning the build vs. purchasing options until late 2005, well after the time for decision concerning the replacement of the Aries Agreement. GMO (Aquila) did not present any plans to build capacity for, even though it indicated that its system needs capacity during the period from 2005 to current. Staff has proposed what it believes is a conservative amount for the two additional turbines identified as Turbines 4 and 5. The turbines prices declined during the period that Aquila would have needed to place orders for the units with an in-service date by June 2005. There would have been economies of scale to building the five combustion turbines instead of three. GMO (Aquila's) IRP Plan presented in January 2004 concluded that the least costs plan for the 2005 replacement of the

- 1 Aries Agreement was the building of five combustion turbines instead of three combustion
- 2 turbines.
- Q. Does this conclude your surrebuttal testimony?
- 4 A. Yes.

#### BEFORE THE PUBLIC SERVICE COMMISSION

### OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L ) Greater Missouri Operations Company for ) Approval to Make Certain Changes in its ) Charges for Electric Service )
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 Surrebuttal Testimony in question and answer form, consisting of pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.
Cary G. Featherstone
Subscribed and sworn to before me this 12th day of January, 2011.
D. SLIZIE MANKIN Notary Public - Notary Seei State of Missouri Commissioned for Cole County My Commission Expires: December 08, 2012 Commission Number; 08412071

### **SCHEDULES 1 THROUGH 4**

HAVE BEEN DEEMED

HIGHLY CONFIDENTIAL

IN THEIR ENTIRETY

## mapquest man

Trip to: Clarksdale, MS 525.88 miles 8 hours 51 minutes

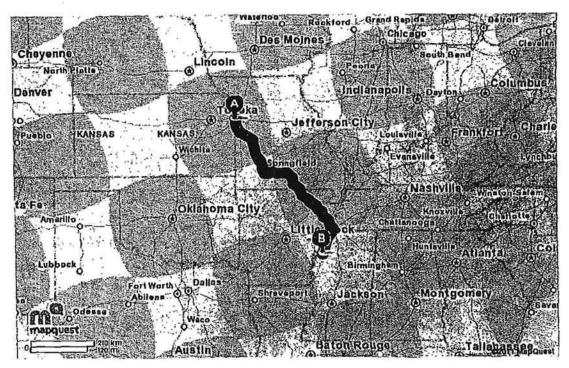
Notes				
Lancon and a contract	 		-	_
10				
i				
lin				
\$1.				
267				
<b>₽</b>				
1				



P	<b>1200 Main St</b> Kansas City, MO 64105-2122	Miles Per Section	Miles Driven	
•	Start out going SOUTH on MAIN ST toward W 13TH ST.	Go 0.3 MI	. 0.3 mi	
4	2. Turn LEFT onto TRUMAN RD S. TRUMAN RD S is just past TRUMAN RD N	Go 0.2 MI	0.4 mi	
<b>5</b> '	3. Keep LEFT at the fork to continue on TRUMAN RD S.	Go 0.04 MI	0.5 mi	
WP)	4. Take the I-70 E ramp.	Go 0.1 MI	0.6 mi	
†	5. Merge onto I-670 E / I-70-ALT E.	Go 0,2 Mi	0.8 mi	
III	6. Merge onto US-71 S via EXIT 2M.	Go 37.7 Mi	, 38.5 ml	
XIT R	7. Take the MO-7 S exit toward CLINTON.	Go 0.2 Mi	38.7 mi	
<b>(</b>	8. Turn LEFT onto MO-7 S.  If you reach US-71 S you've gone about 0.1 miles too far	Go 39,2 MI	77.9 mi	
†	9. MO-7 S becomes MO-13 S.	Go 84.5 Mi	162.4 mi	
*	10. Merge onto I-44 E via the ramp on the LEFT toward I-44 E / ROLLA.  If you reach MO-13 N you've gone a little too far	Go 4.5 Mi	166.9 ml	
	11. Merge onto US-85 S / SCHOOLCRAFT FWY via EXIT 82A toward BRANSON.	Go 8.7 Mi	175.6 mi	

村	12. Merge onto US-60 E toward CABOOL.	Go 82.3 MI	: 257.9 ml
1	13. US-60 E becomes US-63 S (Crossing into ARKANSAS).	Go 81.7 Mi	319.8 mi
4	14. Turn LEFT onto US-412 / US-62 / US-63.  US-412 is just past US-63	Go 1.6 MI	321.2 mi
4	15. Turn LEFT onto US-63 / US-63-BR / US-412 / US-62 / AR-175, Continue to follow US-63 W.	: Go 105.4 MI	426.6 ml
*	16. Merge onto I-55 S via EXIT 1A toward MEMPHIS (Crossing into TENNESSEE).	Go 28.3 MI	454.9 ml
W	17. Merge onto US-61 S via EXIT 7 toward VICKSBURG (Crossing into MISSISSIPPI).	Go 66.8 MI	521.7 mi
7	18. Turn SLIGHT RIGHT onto MS-161.  MS-161 is 0.1 miles past RODGERS RD	Go 3.4 MI	525.2 mi
Þ	19. Turn RIGHT onto DESOTO AVE.  DESOTO AVE is just past MISSISSIPPI AVE	Go 0.4 Mi	525.6 mi
4	20. Turn LEFT onto MARTIN LUTHER KING / 4TH ST.  MARTIN LUTHER KING is just past 5TH ST	Go 0.2 Mi	525.8 ml
<b>F</b>	21. Turn RIGHT onto W TALLAHATCHIE ST. W TALLAHATCHIE ST is just past E TALLAHATCHIE ST	Go 0.09 MI	525,9 ml
1	22, W TALLAHATCHIE ST becomes EDWARDS ALY.	Go 0.02 MI	525.9 mi
•	23. Welcome to CLARKSDALE, MS.  If you reach ISSAQUENA AVE you've gone a little too far	Go 0.01 M)	525.9 ml
φ	Clarksdale, MS	525.9 ml	525.9 ml

Total Travel Estimate: 525.88 miles - about 8 hours 51 minutes.



All rights reserved. Use subject to License/Copyright

Directions and maps are informational only. We make no warranties on the accuracy of their content, road conditions or route usability or expeditiousness. You assume all risk of use. MapQuest and its suppliers shall not be liable to you for any loss or delay resulting from your use of MapQuest. Your use of MapQuest means you agree to our <u>Terms of Use</u>

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI



In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service.

File No. ER-2010-0356

#### **REPORT AND ORDER**

Issue Date:

May 4, 2011

**Effective Date:** 

May 14, 2011

evidence establishing a causal connection or "nexus" between the alleged imprudent action and the costs incurred.

#### Decision - latan

The costs for construction resurfacing, campus relocation for the latan 2 Turbine Building, the WSI change order, and the temporary auxiliary boiler shall be excluded from rate base. All other rate base additions shall be included in rate base.

#### **B.** Crossroads

Was the decision to add the approximately 300 MW of capacity from Crossroads prudent?

If the decision to add Crossroads was prudent, what is the appropriate valuation of Crossroads?

If Crossroads is included in rate base, should the accumulated deferred taxes associated with Crossroads be used as an offset to rate base?

If Crossroads is included in rate base, should the transmission expense to get the energy from Crossroads to MPS's territory be included in expenses?

If transmission expense is included, should the Commission reflect any transmission cost savings to the Company resulting in its future participation in SPP as a network service customer related to the Crossroads plant be an offset?

#### Findings of Fact – Crossroads

219. GMO seeks recovery of costs associated with its capacity planning, namely: (1) the construction of three 105 MW combustion turbines at South Harper and a 200 MW system-participation based purchased power agreement ("PPA"); and (2) adding Crossroads Energy Center ("Crossroads") to the MPS generation fleet. Staff,

the Industrials, and Dogwood Energy dispute the prudence of these decisions and their associated costs.

#### **History and Prudence**

220. The Crossroads issues have their genesis from GMO's (then known as Aquila, Inc.) anticipation in the late 1990's and early 2000's of the deregulation and decoupling of generation from regulated electric utility operations in Missouri and its participation in the energy market in Missouri and other states through a non-regulated subsidiary, Aquila Merchant Services, Inc.

221. As part of its merchant generation activities, in 2000, Aquila Merchant, with Calpine, built the Aries Plant (now known as Dogwood). The Aries Plant is a natural gas-fired, 585 MW, combined-cycle, intermediate generating facility within Aquila, Inc.'s MPS service area. A five-year PPA with Aquila, Inc. that expired in May 2005 was used as an anchor for building the facility.<sup>280</sup>

222. Aquila Merchant also purchased eighteen 75 MW model 7EA combustion turbines from General Electric and, in 2002, at least three 105 MW model 501D combustion turbines from Siemens-Westinghouse.<sup>281</sup>

223. Aquila Merchant used four of the 75 MW combustion turbines at the facility it built near Clarksdale, Mississippi in 2002—Crossroads. Aquila Merchant sold, at substantial discounts from its cost, three of the 75 MW combustion turbines to unaffiliated entities in 2003. Aquila Merchant released one of the 75 MW combustion turbines back to the manufacturer, and in 2003 installed six of them at the Goose Creek

<sup>&</sup>lt;sup>280</sup> Ex. GMO 210, p. 91.

<sup>&</sup>lt;sup>281</sup> Ex. GMO 215, pp. 39, 48.

<sup>&</sup>lt;sup>282</sup> Ex. GMO 216, p. 4.

Energy Center and the other four at the Raccoon Creek Energy Center, both in Illinois. Aquila Merchant kept the three 105 MW Siemens-Westinghouse combustion turbines it purchased in 2002 intending to install them at the 585 MW, combined-cycle generating facility for a purchased power agreement with GMO after the 5-year purchased power agreement with GMO expired in May 2005. When it could not sell them, they were stored until 2005 when they were installed as regulated units at South Harper to be used for the MPS service area. 284

224. Aquila Merchant sold both its Goose Creek Energy Center and its Raccoon Creek Energy Center to Union Electric Company d/b/a AmerenUE (now d/b/a Ameren Missouri) at substantially below book value in 2006.<sup>285</sup>

225. The table that follows shows the installed cost per kilowatt of 17 of the combustion turbines Aquila Merchant bought and took delivery of, and the price per kilowatt it received when it disposed of them:<sup>286</sup>

<sup>&</sup>lt;sup>283</sup> Ex. GMO 215, pp. 47-51.

<sup>&</sup>lt;sup>284</sup> Ex. GMO 215, pp. 39-40.

<sup>&</sup>lt;sup>285</sup> Ex. GMO 215, p. 47.

<sup>&</sup>lt;sup>286</sup> Ex. GMO 215, p. 51; Ex. GMO 262, Staff MPS Accounting Schedules 3-1, 3-2, 6-1 and 6-2.

Installed site	No. of Turbines	Date Installation / Sold	Cost	Capacity	Price per kilowatt
Raccoon Creek	4	2003 installed	\$175 million	850,000 kW	\$205.88
Goose Creek	6	2006 sold to Ameren			
South Harper	3	2001 Purchased 2005 installed	At Dec 31, 2010 Plant \$120.4 million Reserve \$24.4 Net \$95.9	315,000 kW	\$382.16
Crossroads	4	2002 installed 2008 transferred to MPS regulated	At Dec 31, 2010 Plant \$119.2 million Reserve 32.1 Net \$87.1 million  Transmission upgrades (intangibles) Plant \$22.5 million Reserve 4.4 Net \$18.1 million  Total Plant \$141.7 million Reserve 36.5 Net \$105.2 million	300,000 kW	\$427.46

226. Although every other investor-owned electric utility in Missouri built generation, Aquila, Inc. had a corporate policy not to build regulated generating units that it followed until it built South Harper in 2005. Instead, Aquila, Inc. relied exclusively on purchased power to meet its retail customers' increasing demands for electricity.

<sup>&</sup>lt;sup>287</sup> Ex. GMO 217, pp. 34 and 39.

227. In 2000, Aquila, Inc. entered into the five-year purchased power agreement for power from the Aries Plant. That agreement, which expired in May 2005, provided for 500 MW of capacity in the summer and 320 MW in the winter. <sup>288</sup>

228. Aquila, Inc. knew in 2000 when it began taking power under the five-year purchased power agreement that it would have to replace that capacity by June of 2005. 289

229. In 2001, Aquila, Inc. began exploring what options might be available in 2005 to replace the 500 MW of capacity. It did so by issuing a request for proposals ("RFPs") in the spring of 2001 for delivery of energy beginning in June of 2005. Because of changes in the industry, Aquila, Inc. reissued those RFPs in early 2003.<sup>290</sup>

230. Staff has criticized and challenged GMO's<sup>291</sup> capacity planning in rate cases over the past decade. It did so in File Nos. ER-2001-672 and ER-2004-0034, criticizing Aquila, Inc. for entering into the five-year purchased power agreement for power from a 585 MW natural gas-fired combined cycle generating unit built by Calpine and Aquila, Inc.'s affiliate Aquila Merchant Services, Inc., instead of building generation it owned. Staff also criticized Aquila, Inc. in File No. ER-2005-0436, challenging the prudency of how Aquila, Inc. built South Harper in the face of opposition to the siting of that facility and its decision to only install three 105 MW combustion turbines instead of five. And Staff had criticism again in File Nos. ER-2007-0004 and ER-2009-0090,

<sup>&</sup>lt;sup>288</sup> Ex. GMO 210, p. 91; Ex. GMO 233, p. 4.

Ex. GMO 3601, pp. 3-5 and 8-11. Other capacity issues which will also create pressure for GMO to find new capacity solutions include the expiration of a 75 MW purchased power agreement with the Nebraska Public Power District ("NPPD") in 2014 (Ex. GMO 11, p. 6; and Tr. 4045) coal plant retirements, and integration of intermittent resources such as wind generation (Ex. GMO 3601, pp. 4 and 10-13).

<sup>&</sup>lt;sup>290</sup> Ex. GMO 210, Appendix 5, Sch. LMM-1,p. 1.

<sup>&</sup>lt;sup>291</sup> Even when it was known as Aquila, Inc.

taking issue with the prudency of Aquila, Inc./GMO for installing three 105 MW combustion turbines in 2005 instead of five.

231. At Aquila, Inc.'s June 26, 2003, resource planning update meeting with Staff and the Office of the Public Counsel, it presented the results of its analysis of the proposals it received. With the exception of one proposal, the proposals were for purchased power agreements, with the source of the capacity and energy varying among wind, coal, combustion turbines, and combined-cycle units. Aquila, Inc. also disclosed then that one bid for 600 MW of capacity which Aquila, Inc. considered to be "excellent" had been made. By September 10, 2003, however, the bid had been withdrawn and not replaced. 292

232. On January 27, 2004, only sixteen months before its 500 MW capacity agreement would expire, Aquila, Inc. met with and informed Staff of Aquila, Inc.'s power acquisition process for the following five years. In that meeting GMO presented its preferred/proposed resource plan to build what became South Harper, and enter into three-to-five year purchased power agreements for the balance of its resource needs based on the responses to the spring 2003 request for proposals. Staff responded it was concerned that Aquila, Inc. would become overly dependent on short-term purchased power agreements and needed to evaluate adding baseload generation.<sup>293</sup>

233. At its next resource planning update, on February 9, 2004, Aquila, Inc., based on a twenty-year planning period, disclosed that its least cost resource plan was to build five 105 MW combustion turbines in 2005 and buy a small amount of capacity from the market in 2005, meet load growth with additional market purchases until 2009,

<sup>&</sup>lt;sup>292</sup> Ex. GMO 210, Appendix 5, Sch. LMM-1 at pp. 1-2.

<sup>&</sup>lt;sup>293</sup> Ex. GMO 210, Appendix 5, Sch. LMM-1 at p. 2.

when it would build an additional 105 MW combustion turbine and a second in 2010, as well as pursue adding baseload capacity for 2010. Therefore, in February of 2004, about sixteen months before its five-year 500 MW purchased power agreement expired, Aquila, Inc.'s least cost resource plan included building five 105 MW combustion turbines in 2005. <sup>294</sup>

234. At its following semi-annual update to Staff and the Office of the Public Counsel, held on July 9, 2004, GMO disclosed it had entered into an agreement to purchase 75 MW of power from NPPD, but that its least cost plan still included building five 105 MW combustion turbines in 2005, although its preferred plan still was to build three 105 MW combustion turbines in 2005 and rely on purchased power for the balance of its needs. Therefore, in July of 2004, about eleven months before its five-year 100 MW purchased power agreement expired, Aquila, Inc.'s least cost resource plan included building five 105 MW combustion turbines in 2005. <sup>295</sup>

235. After prudently exploring and planning its capacity needs following the expiration of its five-year 500 MW purchased power agreement in May of 2005, GMO elected not to build five combustion turbines, and instead built three 105 MW combustion turbines at South Harper, a site designed for up to six 105 MW combustion turbines, and entered into PPA that included base load capacity in order to diversify its resource portfolio additions. "GMO concluded that it would be prudent to spread the execution and operating risks from the resource additions between building combustion turbines and adding a PPA that contained some level of base load capacity."

 $<sup>^{294}</sup>$  Ex. GMO 210, Appendix 5, Sch. LMM-1 at p. 3.

<sup>&</sup>lt;sup>295</sup> Ex. GMO 210, Appendix 5, Sch. LMM-1 at p. 3.

<sup>&</sup>lt;sup>296</sup> Ex. GMO 11, p. 4.

236. Staff argues that its adjustments<sup>297</sup> "reflect the continuation of Staff's position that GMO should have prudently addressed its capacity needs for MPS to replace the Aires PPA when it expired on May 31, 2005." Notably, Staff's conclusion is based on the same analysis as that developed and used by the Company in deciding to pursue the three combustion turbine/system-participation PPA.

237. The difference between Staff's preferred five combustion turbine plan and the Company's three Combustion turbine/system-participation PPA plan is minimal.<sup>299</sup> Even Staff witness Lena Mantle testifies that she did not believe the cost difference between the Company's preferred plan and Staff's five combustion turbine option over 20 years was significant,<sup>300</sup> and that she did not find the Company's decision based on this difference to be imprudent.<sup>301</sup>

238. Ultimately, the Company did not precisely implement its preferred plan. Based on the 2004 analysis, the preferred plan called for three 105 MW combustion turbines and a 200 MW system PPA. The three combustion turbines were completed in the summer of 2005, but the Company was unable to complete the system PPA. Instead, the Company entered into a 9-year 75 MW base load contract with the Nebraska Public Power District ("NPPD") and purchased power from Crossroads short-term for the remaining 200 MW. 302

<sup>&</sup>lt;sup>297</sup> The Company denotes the two additional 105 MW combustion turbines Staff would impute to GMO instead of Crossroads as "phantom turbines."

<sup>&</sup>lt;sup>298</sup> Ex. GMO 210, p.103.

<sup>&</sup>lt;sup>299</sup> Ex. GMO 217, Sch. 119.

<sup>&</sup>lt;sup>300</sup> Tr. 4090.

<sup>&</sup>lt;sup>301</sup> Tr. 4091.

<sup>&</sup>lt;sup>302</sup> Ex. GMO 210, Appendix 5, Sch. LMM-1, pp. 1 and 3.

239. After a thorough analysis of available options, the Company determined the 300 MW Crossroads Energy Center was the lowest cost option for meeting its requirements.

240. In August 2008, after the Great Plains Energy acquisition of Aquila, the Crossroads unit was transferred to the regulated books of GMO. 303

241. In 2010, per the Stipulation and Agreement in GMO's last rate case, GMO conducted a 20-year analysis to determine a preferred plan after reviewing and analyzing the responses from a 2007 Request for Proposals for supply resources. The analysis showed that Crossroads would result in the lowest 20-year net present value of revenue requirements ("NPVRR").

#### **Delivered Natural Gas Prices**

242. Historically the prices of natural gas delivered to Crossroads (Clarksdale, Mississippi) have been higher than the prices of natural gas delivered to South Harper (Peculiar, Missouri). More recently, in the first ten months of 2010, the average commodity cost for natural gas shipped to Crossroads was less than gas shipped to South Harper. Moreover, the average delivered cost of natural gas to Crossroads was about half the average delivered cost of natural gas to South Harper. The explanation is that while the commodity prices of natural gas are higher at Crossroads than at South Harper, adding the firm transportation costs to the commodity price for natural gas at South Harper results in a higher natural gas price at South Harper than

<sup>&</sup>lt;sup>303</sup> Ex. 216, p. 5.

<sup>&</sup>lt;sup>304</sup> Ex. GMO 11, p. 8.

<sup>&</sup>lt;sup>305</sup> Ex. GMO 217, p. 43.

 $<sup>^{306}</sup>$  Ex. GMO 8, p. 2.

the natural gas price that was paid at Crossroads the past two years—2009 and 2010. 307

243. One of the benefits of Crossroads over the two turbines at South Harper "is that natural gas shipped to Crossroads typically comes from a different supply region than natural gas shipped to South Harper. This allows the GMO to take advantage of short-term pricing disparities." With Crossroads in the portfolio "the Company can choose to generate electricity from the region with the lower priced natural gas." However, the lower natural gas prices at Crossroads are offset by much higher electric transmission costs, discussed below. 310

#### **Transmission Cost**

244. Staff argues that the cost of transmission to move energy from Crossroads in Mississippi to GMO's service territory justifies, in part, removing Crossroads from GMO's cost of service. The Company argues that the cost of transmission is offset by the lower gas reservation costs.

245. The cost of transmission to move energy from Crossroads to customers served by MPS is a very significant cost that is far greater than the transmission costs for power plants located in the MPS district.<sup>311</sup> The annual energy transmission cost was estimated as \$406,000 per month.<sup>312</sup> This is also substantially higher on an annual

<sup>&</sup>lt;sup>307</sup> Ex. GMO 217, p. 44.

<sup>&</sup>lt;sup>308</sup> Ex. GMO 8, pp. 4-5.

<sup>&</sup>lt;sup>309</sup> Ex. GMO 8, p. 5.

<sup>&</sup>lt;sup>310</sup> Ex. GMO 217, p. 44.

<sup>&</sup>lt;sup>311</sup> Ex. GMO 217, p.7; Ex. GMO 11, p. 10.

<sup>&</sup>lt;sup>312</sup> Tr. 4050.

basis than the transmission plant costs for the Aries site where the three South Harper Turbines were originally planned to be installed.<sup>313</sup>

246. This higher transmission cost is an ongoing cost that will be paid every year that Crossroads is operating to provide electricity to customers located in and about Kansas City, Missouri. GMO does not incur any transmission costs for its other production facilities that are located in its MPS district that are used to serve its native load customers in that district. This ongoing transmission cost GMO incurs for Crossroads is a cost that it does not incur for South Harper, and is the cause of one of the biggest differences in the on-going operating costs between the two facilities.

247. It is not just and reasonable to require ratepayers to pay for the added transmission costs of electricity generated so far away in a transmission constricted location. Thus, the Commission will exclude the excessive transmission costs from recovery in rates.

#### **Special Protection Scheme**

248. Crossroads faces local (Mississippi) transmission constraints, because the existing lines cannot carry the full load of the plant under certain circumstances.<sup>314</sup> As a result, it is subject to a special protection scheme mandated by the Southwest Power Pool ("SPP").<sup>315</sup>

249. The special protection scheme requires the ramp down of the output of one of its four combustion turbines if a particular one of the two transmission lines used to move energy from Crossroads to MPS becomes unavailable. This risk of capacity

<sup>&</sup>lt;sup>313</sup> Ex. GMO 217, p. 7.

<sup>&</sup>lt;sup>314</sup> Tr. 4050.

<sup>&</sup>lt;sup>315</sup> Ex. GMO 3601, p. 8; Tr. 4051, Ex. GMO 3603, p. 14 and pp. 31-33; Tr. 4125.

loss is one of the transmission-related risks of Crossroads. GMO's MPS retail customers should bear neither the costs nor risks associated with the transmission limitations in getting electricity from Crossroads to MPS. In determining that transmission costs will be excluded, the Commission has sufficiently addressed these risks and costs.

# **Plant Managerial Oversight**

250. Staff also expressed concern with GMO's ability to provide appropriate management oversight of a plant located in Mississippi.

251. To reduce transmission losses and outages power plants are built close to where the electricity is needed—close to customers. Crossroads, however, is located over 9 hours and 525 miles from Kansas City, Missouri. 318

252. No KCPL employees operate Crossroads, rather, GMO has contracted with the City of Clarksdale, Mississippi to operate Crossroads under an agreement with the Clarksdale Public Utilities Commission. 319

253. A tolling agreement for the capacity and energy of the plant was originally held by MEP Clarksdale Power, LLC, which became Aquila Merchant Services, which assigned the agreement to Aquila, Inc., which is now GMO. The agreement runs through 2032 with a right to extend up to ten more years. GMO also holds a purchase

<sup>&</sup>lt;sup>316</sup> Ex. GMO 233, pp. 5-6,

<sup>&</sup>lt;sup>317</sup> Ex. GMO 217, p. 42.

<sup>&</sup>lt;sup>318</sup> Ex. GMO 217, p. 42

<sup>&</sup>lt;sup>319</sup> Ex. GMO 31, p. 2.

option, but does not intend to exercise it because the advantages of tax exempt financing would be lost. 320 The municipal ownership facilitated tax exempt financing. 321

254. GMO witness Rollison identifies the agreement as a "Generation, Operations and Maintenance Agreement" between Clarksdale and GMO. The agreement "permits GMO to receive the output of the plant in exchange for payments that cover fixed and variable costs to produce the electrical output, as well as to maintain and operate the facility." The Generation Agreement between the Clarksdale Public Utilities Commission and GMO states that "GMO has the right to review and approve the annual Operating Plan which constitutes a comprehensive and detailed plan for operating the facility for [the] coming two-year period." In addition, GMO has the authority to review and approve the annual operating plan and budget, as well as to audit costs and inspect the facility.

255. GMO is supposed to pay Clarksdale an "Availability Incentive Bonus Fee" for increased availability of generation and has the right to invoke an "Availability Liquidated Damages" clause for reduced availability, although there is no evidence as to whether or how often such clauses have actually been applied. There would be no comparable internal fees if GMO owned and operated the plant itself. 326

 $<sup>^{320}</sup>$  Ex. GMO 3601, p. 7-8; Ex. GMO 31, p. 2; Ex. GMO 42, p. 55; Tr. 4053 and 4059,

<sup>&</sup>lt;sup>321</sup> Tr. 4053.

<sup>&</sup>lt;sup>322</sup> Ex. GMO 31, p. 2-3.

<sup>&</sup>lt;sup>323</sup> Ex. GMO 31, p. 3.

<sup>&</sup>lt;sup>324</sup> Ex. GMO 31, p. 3; Tr. 4078-79.

<sup>&</sup>lt;sup>325</sup> Tr. 4076.

<sup>&</sup>lt;sup>326</sup> Tr. 4076.

- 256. The City agrees to protect GMO from various risks by means of an indemnification clause.<sup>327</sup>
- 257. With the exceptions of the Wolf Creek nuclear plant (of which KCPL is a minority owner) and the Jeffrey Energy Center (of which GMO is a minority owner), KCPL employees operate all other KCPL and GMO plants.<sup>328</sup>
- 258. GMO also has ownership interest in other generating facilities operated and managed by non-GMO employees. It is not uncommon in the industry to have plants run by someone other than the owner. For example, KCP&L runs plants for Westar, Empire, GMO and MJMEUC. Further, other utilities run Wolf Creek and Jeffrey Energy Center, of which KCP&L and GMO, respectively, are minority owners.
  - 259. GMO personnel have visited the site six times over the past two years. 329
- 260. The ability of GMO to provide managerial oversight to the plant is only slightly hampered by the long distance location of the plant facilities.
- 261. The management oversight has not proven to be a problem and therefore is not a reason for denial of recovery.

# **Ultimate Finding Regarding Prudence of Crossroads**

262. Considering the costs involved, the fact that this was an affiliate transaction rather than an arms-length transaction, the relative reliability of transmission, the excessive costs of that transmission, the reduced costs for natural gas and the alternative supply source, the distance of the power in location to the customers served, and the other facts set out above, the Commission finds that the decision not to

<sup>&</sup>lt;sup>327</sup> Ex. GMO 31, p. 4.

<sup>&</sup>lt;sup>328</sup> Tr. 4054, 4075 and 4079.

<sup>&</sup>lt;sup>329</sup> Ex. GMO 3601, pp. 4-5; Tr. 4052-54; and Tr. 4078-79.

build two more 105 MW combustion turbines at South Harper was not imprudent. In addition, the decision to include Crossroads in the generation fleet at an appropriate value was prudent with the exception of the additional transmission expense, when other low-cost options were available. Paying the additional transmission costs required to bring energy all the way from Crossroads and including Crossroads at net book value with no disallowances, is not just and reasonable and is discussed in detail below.

## **Valuation of Crossroads**

263. With regard to the valuation of Crossroads, Staff's primary recommendation is that Crossroads should be disallowed in its entirety.<sup>330</sup> It argues alternatively that if the Commission decides to allow Crossroads in GMO's cost of service, then the value of Crossroads for ratemaking purposes is \$51.6 million or another alternative of \$61.8 million. GMO believes its valuation of Crossroads at \$104 million is appropriate.<sup>331</sup>

264. GMO argues that because it did not dismantle the plant and it was able to obtain transmission from Crossroads to GMO, the value of the plant was \$94.75 million, assuming that \$20 million in transmission upgrades would be required. GMO was ultimately able to obtain transmission service with only a minimal transmission investment of \$145,000, bringing its estimated value of Crossroads to \$114.60

<sup>&</sup>lt;sup>330</sup> Ex. GMO 210, p. 92.

<sup>&</sup>lt;sup>331</sup> Ex. GMO 12, p. 3.

million.<sup>332</sup> This value is more than the net book value of \$104 million GMO has requested for ratemaking treatment in this case.<sup>333</sup>

265. At December 31, 2010, the plant and transmission facilities values for Crossroads were:<sup>334</sup>

Plant in Service	\$119.1 million
Depreciation Reserve	\$ 32.1 million
Net Plant	\$ 87.0 million
Transmission Rights Intangible	\$ 22.5 million
Reserve	\$ 4.4 million
Net Transmission	\$ 18.1 million
Total Crossroads Plant	\$141.7 million
Reserve	\$ 36.5 million
Net Plant	\$105.2 million

266. Aquila, Inc. attempted to sell Crossroads, but was unable to sell it. 335 It follows that, absent a write-down which GMO has not taken, the market value of Crossroads is less than its booked value.

267. In February 2007, Great Plains Energy announced that it was seeking to acquire Aquila, Inc. Given several recent divestitures by Aquila, Great Plains acquisition amounted to simply the Missouri regulated electric operations as well as the Crossroads Energy Center. Over the next several months, Great Plains made three separate filings with the Securities Exchange Commission regarding the "fair value" of the Crossroads unit. As Great Plains indicated:

The preliminary internal analysis indicated a fair value estimate of Aquila's non-regulated Crossroads power generating facility of approximately \$51.6 million. This analysis is significantly affected by assumptions regarding the current market for sales of units of similar capacity. The

<sup>&</sup>lt;sup>332</sup> Ex. GMO 12, p. 3.

<sup>&</sup>lt;sup>333</sup> Ex. GMO 12, p. 3.

<sup>334</sup> Ex. GMO 262, Schs. 3-1, 3-2, 6-1 and 6-2.

<sup>335</sup> See the specifics regarding bids in the "Highly Confidential" Information at Ex. GMO 216, p. 13.

\$66.3 million adjustment reflects the difference between the fair value of the combustion turbines at \$51.6 million and the \$117.9 million book value of the facility at March 31, 2007. Great Plains Energy management believes this to be an appropriate estimate of the fair value of the facility. 336

The valuations disclosed by Great Plains to the Securities Exchange Commission were made under oath.

268. GMO claims that the fair market value of Crossroads is established by an RFP conducted in March 2007, prior to the SEC disclosures. GMO postulates that, the responses to this RFP, demonstrate that fair market value is comparable to the proposed net book value. GMO fails to explain, however, given the alleged results of the RFP, why it announced to the Securities Exchange Commission, mere months later, that "fair value" was only \$51.6 million.

269. GMO's assertion is also inconsistent with real world evidence as to the diminution in value experienced by these deregulated generating assets. The evidence indicates that, following the crash of the deregulated electric market and the bankruptcy of Enron, many deregulated generating assets, including combustion turbines identical to those in service at Crossroads, experienced a significant devaluation. Specifically, the evidence indicates that Aquila sold General Electric combustion turbines, identical to those installed at Crossroads in 2006. At that time, Aquila also sold its ownership interest in Raccoon Creek and Goose Creek in Illinois to AmerenUE. Given the deterioration in the deregulated market, Aquila took a write-off, from net book value, of

<sup>337</sup> Ex. GMO 215, p. 58; Ex. GMO 217, p. 6.

<sup>&</sup>lt;sup>336</sup> Ex. GMO 216, p. 12 (citing to Great Plains Energy & Aquila Joint Proxy Statement / Prospectus, filed with the SEC on May 8, 2007, at page 175).

\$99.7 million.<sup>338</sup> Aquila sold other General Electric turbines to Nebraska and Colorado utilities.<sup>339</sup> Again, the price received by Aquila was significantly affected by the deterioration in the deregulated energy market.<sup>340</sup>

270. These sales by Aquila, of combustion turbines identical to those installed at Crossroads, are not only a good indicator of the fair market value, but also clearly show that the fair market value of these General Electric combustion turbines was significantly below the net book value.

271. When conducting its due diligence review of Aquila's assets for determining its offer price for Aquila, GPE would have considered the transmission constraints and other problems associated with Crossroads.<sup>341</sup> It is incomprehensible that GPE would pay book value for generating facilities in Mississippi to serve retail customers in and about Kansas City, Missouri. And, it is a virtual certainty that GPE management was able to negotiate a price for Aquila that considered the distressed nature of Crossroads as a merchant plant which Aquila Merchant was unable to sell despite trying for several years. Further, it is equally likely that GPE was in as good a position to negotiate a price for Crossroads as AmerenUE was when it negotiated the purchases of Raccoon Creek and Goose Creek, both located in Illinois, from Aquila Merchant in 2006.

272. The ten 75 MW General Electric model 7EA combustion turbines installed at Raccoon Creek and Goose Creek that Aquila Merchant sold to AmerenUE in 2006 are ten of the eighteen combustion turbines Aquila Merchant bought at the same time.

<sup>&</sup>lt;sup>338</sup> Ex. GMO 215, p. 51.

<sup>&</sup>lt;sup>339</sup> Ex. GMO 215, p. 48.

<sup>&</sup>lt;sup>340</sup> Ex. GMO 215, p. 48.

<sup>&</sup>lt;sup>341</sup> Ex. GMO 216, p. 7.

Four of those eighteen were installed at Crossroads. The turbines sold at an average installed cost of \$205.88 per kW. 342 Based on that average installed cost of \$205.88 per kW, the 300 MW of combustion turbines at Crossroads would have an installed cost of \$61.8 million.

273. Aquila Merchant purchased a total of 21 combustion turbines. It offered three of them at below its cost to several entities, including KCPL, in 2002 before it stored them. These turbines were eventually installed at South Harper and are in MPS's rate base at a discount from what Aquila Merchant paid for them. Aquila merchant also sold thirteen other combustion turbines below its cost to buy them as follows:<sup>343</sup>

- Goose Creek—6 General Electric turbines sold to AmerenUE in 2006.
- Raccoon Creek—4 General Electric turbines sold to AmerenUE in 2006.
- Utility in Beatrice, Nebraska 2 General Electric turbines sold in 2002.
- Utility in Colorado 1 General Electric turbines sold in 2002.

274. All the above generating assets are now serving customers at prices consistent with the turbine market after the Enron collapse.<sup>344</sup> Even Aquila wrote-down from what Aquila Merchant paid for them the combustion turbines it installed at South Harper to comply with the Commission's affiliated transaction rule.<sup>345</sup> Yet, in this case GMO is seeking to include the full value of Crossroads on its books, without a write-down, in MPS's rate base.

<sup>&</sup>lt;sup>342</sup> Ex. GMO 215, pp. 50-51.

<sup>&</sup>lt;sup>343</sup> Ex. GMO 216, pp. 47 and 49.

<sup>&</sup>lt;sup>344</sup> Ex. GMO 215, pp. 48-51.

<sup>&</sup>lt;sup>345</sup> Ex. GMO 216, pp. 17-18.

275. Considering the depressed market as exhibited by the sale of similar turbines to Ameren, and the valuation of these assets reported to the SEC by GPE, the Commission finds that \$61.8 million is an accurate reflection of the fair market value of Crossroads as required by the affiliate transaction rule as of July 14, 2008.

#### **Deferred Income Taxes**

276. Since Crossroads became part of the non-regulated operations of Aquila Merchant in 2002, deferred income taxes accumulated.<sup>346</sup> In all instances, KCPL and GMO use deferred income taxes relating to regulated investment assets as an offset (reduction) to rate base, except now for Crossroads.<sup>347</sup> It is GMO's position that since Crossroads was not part of its regulated operations when those deferred taxes were created, they should not be used as an offset to MPS's rate base now. If the Commission authorizes GMO to rate base Crossroads in this case, then it is Staff's position that all the accumulated deferred income taxes associated with Crossroads should be offset against rate base attributable to MPS.

277. The accumulated deferred taxes associated with Crossroads should be applied as an offset to MPS's rate base. 348

<sup>&</sup>lt;sup>346</sup> Ex. GMO 210, p. 109.

<sup>&</sup>lt;sup>347</sup> Ex. GMO 210, p. 109.

<sup>&</sup>lt;sup>348</sup> Ex. GMO 210, p. 110.

## Dogwood

278. Dogwood Energy, LLC (Dogwood) is both a retail power customer of GMO and a wholesale power supplier to GMO.<sup>349</sup> As a customer, Dogwood supported Staff's disallowance of Crossroads and imputation of two phantom turbines in order "to protect GMO's retail customers, including Dogwood, against exorbitant rates." With regard to its interest as a wholesale supplier to GMO, Dogwood suggests that the Commission discourage GMO from using the Crossroads facility and instead replace it with a local unit -- such as Dogwood's combined cycle facility. <sup>351</sup>

279. Dogwood argues that the cost of natural gas to Dogwood is cheaper than to Crossroads, transmission service to Crossroads is problematic and the Company's resource planning analyses are flawed because the Company failed to contact Dogwood. In addition, Dogwood makes a number of legal challenges to inclusion of Crossroads in rates.

280. Contrary to Dogwood's arguments, the testimony and evidence presented in this case demonstrate that the delivered cost of natural gas is cheaper to Crossroads than to Dogwood, however that cost is offset by the transmission costs. In addition, GMO's firm transmission service is reliable and sufficient and GMO has repeatedly considered Dogwood in its resource planning decisions, including the Company's recent 2010 Stipulation 8 Capacity Study.

281. Dogwood has not been the lowest cost resource option.

<sup>&</sup>lt;sup>349</sup> Ex. GMO 3601, p. 3.

<sup>&</sup>lt;sup>350</sup> Ex. GMO 3601, p. 4.

<sup>&</sup>lt;sup>351</sup> Ex. GMO 3601, p. 4.

### Conclusions of Law - Crossroads

24. This issue concerns the appropriate valuation to place on the Crossroads generating unit recently devoted by GMO to serving its ratepayers. The Supreme Court has held that the utility must be permitted to earn a return on the "fair value" of the property devoted to the public convenience.

The corporation may not be required to use its property for the benefit of the public without receiving just compensation for the services rendered by it. . . . We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation . . . must be the *fair value of the property being used by it for the convenience of the public*. What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be extracted from it than the services rendered by it are reasonably worth. 352

25. The Commission's authority to establish the valuation of an electric corporation's plant has also been memorialized in Section 393.230:

The commission shall have the power to ascertain the value of the property of every . . . electrical corporation . . . in this state and every fact which in its judgment may or does have any bearing on such value. The commission shall have power to make revaluations from time to time and to ascertain all new construction, extensions and additions to the property of every . . . electrical corporation. (emphasis added).

26. Recognizing that Crossroads was transferred from a non-regulated affiliate to the Missouri regulated operations, the Commission's affiliate transaction rule is implicated. The affiliate transaction rule, as it applies to the immediate issue, provides that the purchase of "goods or services" from an affiliate shall be "the <u>lesser</u> of: (a) fair market price; or (b) the fully distributed cost."

<sup>&</sup>lt;sup>352</sup> Smyth v. Ames, 169 U.S. 466, 546-547 (1898) (emphasis added).

<sup>&</sup>lt;sup>353</sup> 4 CSR 240-20.015(2)(A) (emphasis added).

- 27. The Commission concludes that if included in rate base at a fair market value, rather than the higher net book value paid to its affiliate, and except for the additional cost of transmission from Mississippi to Missouri, the Company's 2004 decision to pursue the construction of three 105 MW combustion turbines at South Harper and pursue a 200 MW system-participation based purchased power agreement, and the Company's decision to add the Crossroads generating facility to the MPS generation fleet were prudent and reasonable decisions.
- 28. The Commission rejects Staff's adjustment to disallow the recovery of the entirety of Crossroads in the Company's cost of service and instead recover the cost of the "phantom turbines." The Commission concludes, however, that GMO is requesting the Commission value these turbines based on that overly high valuation (net book value) and that Crossroads includes significantly higher transmission costs it will incur over the life of Crossroads. The Commission concludes that Crossroads should be included in rate base at a value of \$61.8 million based on the average installed dollar per kilowatt basis AmerenUE paid for the combustion turbines at Raccoon Creek and Goose Creek.
- 29. In addition to the valuation, the Commission concludes that but for the location of Crossroads customers would not have to pay the excessive cost of transmission. Therefore, transmission costs from the Crossroads facility, including any related to OSS shall be disallowed from expenses in rates and therefore also not recoverable through GMO's fuel adjustment clause ("FAC").
  - 30. The Commission concludes deferred taxes shall be an offset to rate base.

31. The Commission rejects the Industrials' position to the extent and for the same reasons set out in response to Staff's arguments.

#### **Decision – Crossroads**

The Commission rejects Staff's adjustment to disallow the recovery of Crossroads in the Company's cost of service and replace it with the cost of two "phantom turbines." The Commission also rejects GMO's inclusion of Crossroads in rate base at its net book value. The Commission determines that given Great Plains' statements to the Securities Exchange Commission shortly before the transfer of the Crossroads unit to the Missouri regulated operations, as well as the arms-length sale of other General Electric combustion turbines by Aquila, that the fair market value of Crossroads at the time of transfer (August 2008) was \$61.8 million. Given the subsequent 32 months, the fair market value of Crossroads for purposes of establishing rate base in this case should also reflect 32 months of depreciation on that unit.

The Commission further determines that it is not just and reasonable for GMO customers to pay the excessive cost of transmission from Mississippi and it shall be excluded. Finally, deferred income taxes shall also be an offset to rate base.

### C. Jeffrey FGD Rebuild Project

Should the Jeffrey Rate Base Additions be included in rate base in this proceeding?

Should the Commission presume that the costs of the Jeffrey Rate Base Additions were prudently incurred until a serious doubt has been raised as to the prudence of the investment by a party to this proceeding?

Has a serious doubt regarding the prudence of the Jeffrey Rate Base Additions been raised by any party in this proceeding?