

Exhibit No.:	_____
Issue:	Flaws in CRA International RTO cost-benefit study and additional CRA simulations
Witness:	Johannes P. Pfeifenberger
Sponsoring Party:	Midwest Independent Transmission System Operator, Inc.
Case No.:	Case No. EO-2008-0046

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MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.

SURREBUTTAL TESTIMONY

OF

JOHANNES P. PFEIFENBERGER

Cambridge, Massachusetts
February, 2008

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of)
Aquila, Inc., d/b/a Aquila)
Networks – MPS and Aquila)
Networks – L&P for Authority to)
Transfer Operational Control of)
Certain Transmission Assets)
to the Midwest Independent)
Transmission System Operator, Inc.)

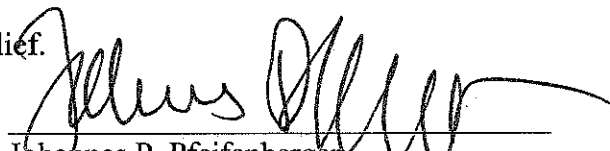
Case No. EO- 2008-0046

AFFIDAVIT OF JOHANNES P. PFEIFENBERGER

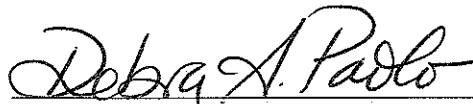
COMMONWEALTH OF)
MASSACHUSETTS) ss.
COUNTY OF MIDDLESEX)

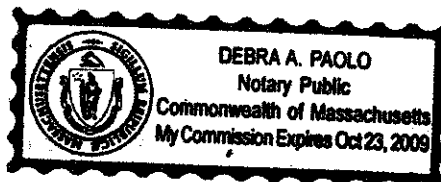
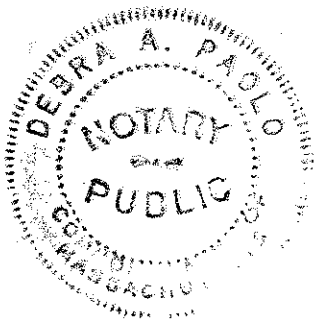
Johannes P. Pfeifenberger, being first duly sworn on his oath, states:

1. My name is Johannes P. Pfeifenberger. I am presently a Principal for The Brattle Group, which serves as consultant for Midwest Independent Transmission System Operator, Inc.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my personal knowledge, information and belief.


Johannes P. Pfeifenberger

Subscribed and sworn before me this 26th day of February, 2008.


Notary Public for Middlesex County, Massachusetts
My Commission expires: October 23, 2009



1
2 **BEFORE THE PUBLIC SERVICE COMMISSION**
3 **OF THE STATE OF MISSOURI**

4
5 **SURREBUTTAL TESTIMONY OF**
6 **JOHANNES P. PFEIFENBERGER**
7 **ON BEHALF OF**
8 **MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.**
9 **CASE NO. EO-2008-0046**

10
11 **Q. Please state your name.**

12 A. My name is Johannes P. Pfeifenger.

13 **Q. Are you the same Johannes P. Pfeifenger who previously submitted rebuttal and**
14 **supplemental rebuttal testimonies in this case on behalf of the Midwest ISO?**

15 A. Yes, I am.

16 **Q. What is the purpose of your surrebuttal testimony?**

17 A. The purpose of my surrebuttal testimony is to respond to certain critical issues and
18 statements raised in rebuttal testimony. I will reiterate the concerns raised in my rebuttal
19 testimony related to the limitations and concerns with the GE-MAPS production cost
20 modeling and simulations performed by CRA on behalf of Aquila; present the
21 Commission with actual data to rebut assertions and claims from Intervenor Dogwood
22 Energy, LLC (Dogwood) witness Mr. Robert Janssen; and discuss the need for the
23 Commission to consider factors beyond just the production cost modeling in its review
24 and consideration of the request put forward by Aquila or those of other parties during
25 their rebuttal presentations, including Dogwood.

1 **Q. Who are Mr. Janssen and Dogwood?**

2 A. Mr. Janssen is a Vice President for Kelson Energy Inc. (Kelson), the holding company
3 that wholly owns Dogwood, the plant that has been referred to as the “Aries” merchant
4 generating plant in this case.

5 **Q. What are the conclusions you present in your surrebuttal testimony?**

6 A. Dogwood recommends that the Commission order Aquila to join SPP, arguing that it
7 would not be in the public interest for Aquila to join the Midwest ISO. Dogwood’s only
8 basis for this recommendation is its claim that the public interests of Aquila are aligned
9 with the financial interest of Dogwood. I submit that this is not the case. Dogwood’s
10 stated interests are to sell power from the Aries plant at the highest available prices and,
11 ultimately, sell the plant itself at the highest possible price. Asking the Commission to
12 force Aquila into SPP, as recommended by Dogwood, is in Dogwood’s interest because it
13 would provide the Aries plant with better access to a higher-priced power market with
14 lower reserve margins. I submit that this is unlikely to be in the best interests of Aquila, a
15 net buyer of power, and its customers.

16 **Q. What are the main recommendations by Mr. Janssen on behalf of Dogwood?**

17 A. Dogwood recommends “(1) that the Commission reject Aquila’s application to join
18 MISO; and (2) order Aquila to take all actions necessary to join SPP as soon as possible.”
19 (Janssen rebuttal, page 3, lines 16-18). Surprisingly, Mr. Janssen also argues that “it is
20 not in the public interest for Aquila to join MISO rather than SPP” (*id.*, page 11, line 19)
21 and attempts to support this claim with reference to the Aquila Study, which (as I have
22 addressed in my rebuttal and supplemental rebuttal testimonies) erroneously estimated
23 that the benefits of Aquila joining SPP exceeded those of joining the Midwest ISO.

1 Mr. Janssen also stresses that “the net financial benefits of Aquila joining the SPP are
2 substantially higher than any benefits of it joining MISO” (page 15, lines 18-19) but
3 leaves unclear whether this statement refers to higher “net financial benefits” to
4 Dogwood or to higher “net financial benefits” to Aquila and its customers.

5 **Q. Is Dogwood’s implicit claim that its private financial interests are aligned with the**
6 **“public interest” and that of Aquila and its customers consistent with the available**
7 **data?**

8 A. No. Dogwood’s claims are not supported by a number of important facts. First,
9 Dogwood’s claim that its interests are aligned with Aquila’s interest is inconsistent with
10 the results of the Aquila Study. Second, Aquila is a net purchaser of power, while
11 Dogwood is a seller of power. What is beneficial for Aquila (i.e., lower purchase prices)
12 consequently is generally not in Dogwood’s financial interest. Similarly, what is
13 beneficial for Dogwood (i.e., higher market prices and higher profits) is generally
14 contrary to Aquila’s interest as its customers would ultimately bear the burden of those
15 higher costs. As a consequence, if Dogwood correctly assessed its financial interests,
16 Aquila and its customers may actually be worse off if the Commission adopted
17 Dogwood’s recommendation.

18 **Q. Mr. Janssen notes that the Aquila Study shows higher benefits to Aquila if it joined**
19 **SPP. Since Dogwood proposes that the Commission order Aquila into SPP, does**
20 **that not suggest that Dogwood’s and Aquila’s interests may be aligned?**

21 A. No. I have already addressed the flaws of the Aquila Study in my rebuttal and
22 supplemental rebuttal testimonies, finding that even the corrected results of the Aquila
23 Study as presented in my rebuttal and supplemental rebuttal testimonies are not

1 sufficiently precise to conclude whether joining the Midwest ISO or SPP would produce
2 larger savings for Aquila. However, even if one would assume the Aquila Study
3 accurately estimated the relative size of SPP and Midwest ISO benefits, which Mr.
4 Janssen does in his testimony (but which is not the case, as explained in my rebuttal and
5 supplemental rebuttal testimonies), the simulation results for Dogwood show that the
6 Aries plant would always be more profitable and more frequently dispatched in the
7 “Aquila in Midwest ISO” cases than in the “Aquila in SPP” cases. These data are
8 summarized in Schedule JPP-3. Thus, at their face value, the CRA simulations on which
9 the Aquila Study is based show higher benefits to Dogwood if Aquila joined the Midwest
10 ISO.

11 **Q. Mr. Janssen suggested in his rebuttal testimony that, if Aquila joined SPP, it would**
12 **give Dogwood more robust access to both transmission and power supplies in the**
13 **region. What does that likely mean in the context of Dogwood’s financial interests?**

14 A. Considering Dogwood’s financial incentives, the statement appears to mean that, if
15 Aquila were to join SPP, it would give Dogwood better access to higher-priced power
16 markets. Of course, this would also likely mean that Aquila would face power purchases
17 at higher prices.

18 **Q. Is there any evidence in support of this interpretation?**

19 A. Yes, this interpretation is consistent with the stated and observed business strategy of
20 Kelson, the owner of Dogwood. This interpretation is further corroborated by reserve
21 margin data and market prices in the neighboring SPP and Midwest ISO market areas.

1 **Q. What is Kelson's stated business strategy?**

2 A. As indicated in the articles reproduced as Schedule JPP-4, Kelson's business strategy
3 appears to be to acquire power plants at a discount, improve their operational and
4 financial performance, and then divest the assets at the highest possible price. As also
5 indicated in Schedule JPP-4, providing Kelson's power plants with access to regions with
6 lower reserve margins and higher market prices appears to be part of that strategy. This
7 is consistent with testimony Mr. Janssen recently filed in Texas, in which he documented
8 Kelson's effort to build transmission such that the company's Cottonwood plant could be
9 "moved" electrically from the Entergy service area, which has excess generation, into
10 ERCOT, which he states has virtually no reserve margin by 2009.¹

11 **Q. Is there any indication that, if Aquila joined SPP rather than the Midwest ISO, the**
12 **Aries plant would similarly have improved access to a region with lower reserve**
13 **margins?**

14 A. Yes. The "2007 Long-Term Reliability Assessment" by the North American Electric
15 Reliability Corporation (NERC)² shows that the 2007 available capacity margin in the
16 SPP region was 14.6%, while the 2007 available capacity margin in the Midwest ISO
17 portion immediately to the east of Aquila (i.e., SERC's "Gateway" region) was 21.3%.
18 The difference in 2007 *potential* capacity margins (i.e., including currently uncommitted
19 generating capacity) was even more striking: 28.7% for SPP and 43.1% for SERC-
20 Gateway. (NERC Assessment, page 40.) NERC's assessment of 2011 potential capacity

¹ Direct Testimony of Robert J. Janssen on behalf of Cottonwood Energy Company in Entergy Gulf States, Inc.'s Transition to Competition Plan, PUCT Docket No. 33687, April 27, 2007 (a copy of which was provided by Dogwood in response to Midwest ISO data request No. 3), pages 6-7.

² NERC, 2007 Long-Term Reliability Assessment, October 2007 ("2007 NERC Assessment"), posted at http://ftp.nerc.com/pub/sys/all_updl/docs/pubs/LTRA2007.pdf.

1 margins also shows a similar pattern: 28.6% for SPP and 39.2% for SERC-Gateway.
2 (NERC Assessment, page 42.)

3 **Q. What does that mean for Aquila?**

4 A. This likely means that, if Aquila joined SPP, it may be more costly for Aquila to access
5 and purchase the generating capacity it needs to serve customer loads.

6 **Q. Mr. Janssen noted in his rebuttal testimony that Dogwood is selling significant**
7 **amounts of power to Westar, KCPL and other customers in SPP and that he expects**
8 **“this trend to continue” (page 13, lines 4-6). Given that the Aries plant is not**
9 **currently located in SPP, why would Dogwood be so focused on sales into SPP?**

10 A. I was initially surprised by this statement given Dogwood’s heavy reliance on the CRA
11 Study and the contrary information the study provides with respect to Dogwood’s
12 financial interests. Therefore, I proceeded to investigate and analyze real-time energy
13 prices for SPP and Midwest ISO pricing points adjacent to the Aquila service area.
14 Because SPP started its real-time market in February 2007, I was able to compare SPP
15 and Midwest ISO prices for the 12 month period from February 2007 through January
16 2008.

17 **Q. Please explain how you compared SPP and Midwest ISO real-time prices and what**
18 **that comparison shows.**

19 A. I first analyzed prices for SPP and Midwest ISO service areas adjacent to Aquila and then
20 compared SPP’s real-time prices for its KCPL and Westar zones with the Midwest ISO’s
21 real-time price for its AmerenUE zone. I also compared SPP’s price for MPS (its
22 interconnection with Aquila) with the Midwest ISO’s price for MPS, as well as SPP’s
23 price for a major generating unit close to Aquila’s service area (Iatan) with the Midwest

ISO price for a major neighboring generating unit (Callaway). These price comparisons, which are summarized in Table 1 below, show (on both a simple average and an Aquila purchase-weighted average basis) that SPP's real-time energy prices adjacent to Aquila are consistently between \$2 to \$6 per MWh higher than the real-time energy prices in the adjacent portion of the Midwest ISO.

Table 1
Comparison of Actual SPP and Midwest ISO Real-Time Energy Prices
(February 2007 through January 2008)

	Simple Average (\$/MWh)	Aquila Purchase Weighted Average (\$/MWh)
Midwest ISO prices:		
Missouri Zone	43.14	49.80
Ameren CIPS	44.51	51.81
AmerenUE load zone	43.81	51.50
Callaway plant (in AmerenUE)	41.78	47.22
MPS	42.98	49.67
SPP prices:		
KCPL load zone	46.86	53.74
WESTAR load zone	46.36	55.11
Iatan plant (in KCPL)	45.94	53.22
MPS	47.43	54.28
Extent to which SPP prices exceed Midwest ISO Prices adjacent to Aquila control area:		
KCPL - AmerenUE	3.06	2.24
WESTAR - AmerenUE	2.55	3.61
Iatan - Callaway	4.16	6.00
MPS(SPP) - MPS(Midwest ISO)	4.45	4.61

Source: ISO data compiled by Global Energy Decisions, Inc.

The table also shows that these price differences between SPP and Midwest ISO locations adjacent to the Aquila control area are all within the same range both in terms

1 of the simple and weighted averages applied to the individual hours within the 12 month
2 period.

3 **Q. What conclusions do you draw from these results?**

4 A. These price differentials illuminate, in my opinion, Dogwood's motivation for urging the
5 Commission to order Aquila to join SPP. Adoption of this recommendation would
6 provide the Aries generating plant with improved access to a higher-priced market area
7 while at the same time eliminating additional transmission charges for Dogwood that
8 Dogwood currently faces when selling into the SPP market area. Conversely, because
9 Aquila is a net purchaser of power, the higher prices in SPP also suggest that Aquila
10 could be worse off by such a move; or, by comparison, would be better off by fully
11 participating in the Midwest ISO rather than SPP.

12 **Q. Do you believe that SPP's energy prices adjacent to Aquila will likely remain higher
13 than those in the adjacent portion of the Midwest ISO?**

14 A. Yes. Based on NERC's reserve margin outlook discussed above, I would expect that
15 price difference between SPP and the Midwest ISO likely continues going forward. This
16 is also consistent with Dogwood's testimony that it expects the 2007 pattern of SPP sales
17 "trend to continue."³

18 **Q. Given the fact that Aquila is a net purchaser of power, by how much could higher
19 SPP prices affect Aquila's annual purchased power costs?**

20 A. The Aquila Study estimated that Aquila's net power purchases for 2008 would be
21 approximately 1.5 million MWh. This means that if Aquila joined SPP and faced market
22 prices that are just \$3/MWh higher than the market prices it would face in the Midwest

³ Janssen rebuttal Testimony, p. 13.

1 ISO, Aquila's annual power purchase costs would be approximately \$4.5 million higher
2 in SPP.

3 **Q. Have you analyzed how the prices from Aquila's 2008 simulations compare with the**
4 **actual 2007-08 market prices for energy in SPP and the Midwest ISO?**

5 A. Yes, I have. I compared the actual 2007-08 market prices in SPP and the Midwest ISO as
6 shown in Table 1 with the 2008 estimated market prices from Aquila's "Stand Alone"
7 market simulations.⁴ To facilitate this comparison, I summarized in Table 2 below the
8 pricing points available from the Aquila simulations that closely match several of the
9 pricing points shown in Table 1 above. These overlapping pricing data points from the
10 simulations are: (1) Ameren's load LMP⁵ and Callaway generation LMP as adjacent
11 Midwest ISO pricing points; and (2) KCPL's load LMP and Iatan generation LMP as
12 adjacent SPP pricing points.

13 **Q. What does this comparison of simulation results for 2008 show relative to the actual**
14 **2007-08 price differences that you provided above in Table 1?**

15 A. Table 2 shows that the simulations produced less stable price differentials between SPP
16 and Midwest ISO pricing points adjacent to the Aquila control area. In comparison,
17 while the actual price differentials shown in Table 1 have all the same sign and are
18 roughly in the same range (i.e., adjacent SPP prices are \$2-6/MWh higher than adjacent
19 Midwest ISO prices), the simulation results reflected in Table 2 present a very different
20 pattern.

⁴ Given that Aquila has not yet joined an RTO, the "Stand Alone" cases represent the most representative cases for the purpose of comparing them with actual market conditions.

⁵ The "Ameren" load zone as defined in the Aquila Study includes both AmerenUE and AmerenCIPS service areas.

Table 2
Comparison of Simulated 2008 SPP and Midwest ISO Energy Prices in Stand Alone Scenarios

	<u>Original Run</u>		<u>No Aries Run</u>		<u>Revised Run</u>	
	Simple Average (\$/MWh)	Aquila Purchase Weighted Average (\$/MWh)	Simple Average (\$/MWh)	Aquila Purchase Weighted Average (\$/MWh)	Simple Average (\$/MWh)	Aquila Purchase Weighted Average (\$/MWh)
Midwest ISO prices:						
Ameren load zone	40.77	49.65	43.94	54.66	38.01	47.74
Callaway plant (in Ameren)	40.22	49.16	42.82	54.12	36.55	46.76
SPP prices:						
KCPL load zone	41.40	52.42	44.30	58.45	39.27	52.94
Iatan plant (in KCPL)	38.40	49.31	40.66	55.08	32.76	47.22
Extent to which SPP prices exceed Midwest ISO Prices adjacent to Aquila control area						
KCPL - Ameren	0.64	2.77	0.36	3.79	1.26	5.20
Iatan - Callaway	(1.82)	0.15	(2.16)	0.97	(3.79)	0.47
<i>Source: CRA Simulations</i>						

Table 2 also shows that the price differential at the adjacent generating plants (Iatan vs. Callaway) is either negative or close to zero depending on how the average is calculated. The table also shows that the price differential for adjacent service areas (KCPL vs. Ameren) varies significantly across the three simulations, with annual averages from close to zero to over \$5/MWh, depending greatly on whether a simple or Aquila purchase weighted average is applied. The large variations across simulations, the variations in SPP-MISO differentials across various points within each RTO, and the sensitivity to how the annual average is calculated are in significant contrast to the actual differences in market prices shown in Table 1.

Q. What do these pricing patterns imply?

A. These pricing patterns first raise additional questions about the accuracy of the simulations and make it more difficult to understand how Aquila's option to join an RTO will affect its costs—positively or negatively. This ambiguity further confirms that the

1 precision of CRA's GE-MAPS simulations is limited and, as I concluded in my
2 supplemental rebuttal testimony, calls into question any reasonable attempt to
3 conclusively make a recommendation based solely on the Aquila Study and GE MAPS
4 simulations done to-date. I consequently recommend and suggest that the Commission
5 consider and review additional factors beyond the GE-MAPS simulations in considering
6 Aquila's RTO membership in this docket.

7 **Q. What other factors do you believe should be considered by the Commission in its**
8 **review of Aquila?**

9 A. I have, in response to claims raised by Dogwood, looked at actual market prices. This
10 actual market data reveal a consistent pattern of higher SPP prices and lower Midwest
11 ISO prices. (See Table 1, above.) This likely means that Aquila would have improved
12 access to lower-priced power if it joined the Midwest ISO. Finally, the fact that the
13 Midwest ISO has an operational Day 2 market and has just recently received FERC
14 approval to move forward with its ancillary service market should be taken into
15 consideration as well. The benefits associated with the Midwest ISO's more fully
16 developed markets are discussed by Midwest ISO witness Richard Doying in his rebuttal
17 testimony.

18 **Q. Is there an overlap between available actual market price data and the projections**
19 **for 2008 made in the Aquila Study?**

20 A. Yes, there is. The Aquila Study, which was completed in March 2007, projected market
21 prices for calendar year 2008, including January 2008. Actual January 2008 data is now
22 available for comparison purposes.

1 **Q. How do the Aquila Study’s projected market prices for January 2008 compare with**
2 **actual market prices for January 2008?**

3 A. Based on the review of my workpapers for Tables 1 and 2, which include monthly
4 summaries, simulated prices for January 2008 are very different from actual prices. Such
5 differences must, of course, be expected because the model does not attempt to capture
6 actual market conditions, such as actual fuel prices, actual generation outages, or actual
7 loads and weather conditions. However, I also looked at the differences between SPP
8 and Midwest ISO pricing points adjacent to the Aquila control area. Such locational
9 price differentials tend to be less sensitive to discrepancies between actual and simulated
10 market conditions. I nevertheless found strikingly large discrepancies that, again, cast
11 doubt on the reliability of the simulation results.

12 For example, the *actual* weighted average of January 2008 market prices shows
13 that Iatan prices are almost \$9/MWh *higher* than Callaway prices. However, based on
14 Aquila’s market simulations, *projected* Iatan prices for January 2008 are approximately
15 \$5/MWh *lower* than Callaway prices in the original simulations performed for the Aquila
16 study, approximately \$4/MWh *lower* in the “No Aries” simulations (discussed in my
17 rebuttal testimony), and approximately \$9/MWh *lower* in the “revised” simulations
18 (whose shortcomings I addressed in my supplemental rebuttal testimony).

19 These comparisons consequently suggest that the pricing patterns in the revised
20 simulations may be the most unrealistic, suggesting that Iatan prices should be \$9/MWh
21 lower than Callaway prices when actual market prices show the exact opposite. Pricing
22 variances this large are evidence for either a lack of precision or some other fundamental
23 flaw in the modeling for this specific situation. This is especially disconcerting in a study

1 whose conclusions depend on the small percentage differences in Aquila's production
2 costs that are associated with alternative RTO membership scenarios. Despite the fact the
3 revised simulations resulted in a more reasonable commitment and dispatch of the Aries
4 plant, they appear to have yielded less realistic market prices for SPP and Midwest ISO
5 locations adjacent to Aquila. As I explained in my supplemental rebuttal testimony, this
6 may be the result of additional flow-based pancaking of transmission charges
7 encountered in the revised simulations.

8 **Q. Mr. Janssen suggests in his rebuttal testimony that Aquila joining SPP may provide**
9 **more “robust access to both transmission and power supplies in the region” (page 4,**
10 **lines 16-17). Does he independently support this statement?**

11 A. No. Mr. Janssen fails to point to any substantive basis for this claim and simply refers to
12 the Aquila Study results. He mostly points out that Aquila is more heavily
13 interconnected with SPP than with the Midwest ISO.

14 **Q. Does the fact that Aquila is interconnected more heavily with SPP than with the**
15 **Midwest ISO likely mean that Aquila would be better off in SPP?**

16 A. No. As Staff witness Dr. Proctor summarizes in Schedule 2 of his rebuttal testimony, the
17 rating of Aquila's interconnection with the Midwest ISO is over 1,200 MVA.
18 Considering that Aquila's 2008 peak load is less than 2,000 MW (as modeled in the
19 Aquila Study), Aquila's interconnection with the Midwest ISO does not appear to impose
20 a meaningful constraint on Aquila's ability to purchase power from the Midwest ISO.

21 **Q. Has the fact that Aquila is less strongly interconnected with the Midwest ISO than**
22 **SPP limited Aquila's purchases of power from the Midwest ISO markets?**

1 A. No. It appears that Aquila actually purchases just as much, if not more of its power from
2 the Midwest ISO than from SPP. Schedule JPP-5, which summarizes data provided by
3 Aquila in response to Dogwood data requests Nos. DOG-0001 and DOG-0004, indicates
4 that in 2007 Aquila actually purchased significantly more power from the Midwest ISO
5 market than from the SPP market.⁶

6 A similar pattern of significant purchases from the Midwest ISO is confirmed by
7 Aquila's summary of transactions with counterparties in SPP and the Midwest ISO,
8 which was provided in response to data request No. MISO-0005 (attached as Schedule
9 JPP-6). These data show that Aquila has been a net buyer from the Midwest ISO, while
10 it has been a net seller to SPP. Placing to the side for the moment Aquila's sales into
11 SPP, the 2007 gross purchases from both the Midwest ISO and SPP have been
12 approximately 300,000 MWh per year. However, based on these data, the average
13 Midwest ISO purchase price was more than \$7/MWh below the average SPP purchase
14 price. The data also show that purchases from the Midwest ISO have been increasing,
15 while purchases from SPP have been falling.

16 In addition, these comparisons of purchases from SPP and the Midwest ISO and
17 counterparties in the two RTOs' footprint will likely understate the significance of
18 Aquila's interconnection with the Midwest ISO. Because a single transmission access
19 charge applies to the combined footprint of the Midwest ISO and PJM, Aquila's
20 purchases from PJM should also be considered when evaluating participation in the
21 Midwest ISO. Such purchases from PJM have been and may continue to be significant.

⁶ Schedule JPP-5 summarizes Midwest ISO and SPP transactions that Aquila recorded in account 232004, which Aquila explained represents power purchases for its regulated utilities. The table also shows a summary based on a subset of entries in account 232004 that include labels suggesting the entry relates purchased power (as opposed to administrative or transmission fees).

1 The most current FERC Form No. 1 of Aquila Networks-MPS (pages 326.1 and 327.1)
2 documents that Aquila purchased 675,000 MWh of energy worth \$34 million from PJM
3 in 2006. Based on Aquila's response to Midwest ISO data request No. 26 identifying the
4 sources of power reported in its 2006 FERC Forms No. 1, Aquila's total 2006 purchases
5 from the Midwest ISO and PJM footprint amounted to 758,000 MWh, compared to only
6 338,000 MWh of purchases from the SPP footprint, which includes purchases from
7 Aquila's West Plains subsidiary. Aquila's preliminary FERC Form No. 1-equivalent
8 purchase data for 2007, which were provided on a highly confidential basis in Aquila's
9 response to Midwest ISO data request No. 27, similarly confirm that Aquila does not
10 more heavily rely on purchases from the SPP footprint, particularly if purchases from its
11 West Plains subsidiary are excluded. These (non-confidential) 2006 and (highly-
12 confidential) 2007 purchase data are summarized in Schedule JPP-7, of which I have
13 prepared a non-confidential and a highly-confidential version.

14 **Q. What overall conclusions do you draw from these Aquila power purchase data with**
15 **respect to Dogwood's claim that Aquila would be better off in SPP due to more**
16 **robust access to transmission and power supplies?**

17 A. These purchase data further stand in stark contrast to Dogwood's reasoning that Aquila
18 would be better off in SPP simply because Aquila is more heavily interconnected with
19 SPP. To the contrary, while the higher market prices in SPP and the stronger
20 interconnections with SPP would likely benefit Dogwood by increasing the value of the
21 Aries plant and its generation output, the higher financial benefit to Dogwood does not
22 likely translate into higher benefits to Aquila and its customers. I submit that quite the
23 opposite would appear to be the case.

1 **Q.** **Does this conclude your surrebuttal testimony?**

2 **A.** Yes, it does.

Schedule JPP-3

Aries Margin and Generation in CRA Simulations

	Aries Margin			Aries Generation		
	Stand Alone (millions)	In MISO (millions)	In SPP (millions)	Stand Alone (GWh)	In MISO (GWh)	In SPP (GWh)
Original Run						
2008	\$3.7	\$4.4	\$3.1	1,533	1,413	231
2012	\$8.6	\$9.2	\$7.2	2,263	2,124	564
2017	\$16.2	\$17.1	\$13.3	3,239	2,939	1,054
2012 (High Gas Price)	\$10.4	\$13.4	\$10.5	2,006	1,667	505
No Aries Run						
2008	-	-	-	-	-	-
Revised Run						
2008	\$2.9	\$3.8	\$3.2	416	494	429

Source: CRA simulation data in trade benefits calculation pages

Kelson Holdings sells 1,230-MW Redbud plant

MW Daily 1-23-08

Independent power producer Kelson Holdings Monday said it would sell its 1,230-MW Redbud power plant near Luther, Oklahoma, to OGE Energy subsidiary Oklahoma Gas & Electric for \$852 million.

Kelson said OG&E has also agreed to sell partial stakes in the Redbud plant to the Grand River Dam Authority and the Oklahoma Power Municipal Authority. The transaction is subject to various closing conditions and regulatory approvals. "The sale of our Redbud power plant to OG&E reflects Kelson's strategy of acquiring assets at a discount, improving their operating and financial performance and then divesting when we can realize a full and fair price," Neal Cody, Kelson Holdings president, said in a statement. "We believe that newbuild costs for power plants in the regions in which we operate have increased dramatically over the past several years, and the \$693/kW purchase price for Redbud reflects a discount to actual replacement cost."

Kelson also said its Kelson Energy III affiliate was recently approved as the stalking horse bidder in the proposed sale of Southaven Power assets at a bankruptcy auction. Southaven is an 810-MW combined-cycle natural gas-fired power plant in DeSoto County, Mississippi. Cody said Southaven is a natural fit with the existing Kelson portfolio of assets given its location, technology, fuel source and merchant operating status.

Kelson said the Redbud sale and potential acquisition of Southaven reflect its ongoing evaluation of strategic alternatives, which was first announced in October as declining reserve margins across the US increase the value of existing plants. Kelson, a subsidiary of Harbinger Capital Partners Funds, owns or leases four combined-cycle gas-fired facilities located in the Southwest Power Pool and the Southeast Electric Reliability Council with a combined capacity of 4,002 MW. — Jeff Barber

Aquila won't buy Calpine power plant after being outbid

The Associated Press

KANSAS CITY, Mo.

Utility operator Aquila on Tuesday said it no longer plans to buy power producer Calpine's Aries power plant in Pleasant Hill after being outbid in Monday's auction.

Kansas City-based Aquila Inc. said in September it planned to buy the 580-megawatt, natural gas-powered plant for \$158.5 million.

San Jose, Calif.-based Calpine Corp., which is operating under bankruptcy protection, used that offer as a way to attract other bidders. Kelson Energy, a Baltimore-based utility holding company, won the auction, beating Aquila's high offer of \$230 million.

"The bidding reached a point where it did not make economic sense for our customers," said Keith Stamm, Aquila's chief operating officer, in a release.

A bankruptcy judge still must approve the sale to Kelson in a hearing scheduled for Wednesday. Aquila will remain obligated to buy the plant for \$230 million until Dec. 28, should the Kelson deal fall through.

Assuming that doesn't happen, Stamm said money set aside to buy the plant would go to reduce debt and pay off other liabilities.

Aquila said it needed the Aries plant to meet the growing demand for daily power in Missouri.

The company serves 1.2 million electric and natural gas customers in Colorado, Iowa, Kansas, Missouri, Minnesota and Nebraska.

Calpine Form 10-Q (Filing Date:5/9/2007)

On January 16, 2007, we completed the sale of the Aries Power Plant, a 590-MW natural gas-fired facility in Pleasant Hill, Missouri, to Dogwood Energy LLC, an affiliate of Kelson Holdings, LLC for \$234 million plus certain per diem expenses incurred by us for running the facility after December 21, 2006, through the closing of the sale. We recorded a pre-tax gain of approximately \$78 million during the first quarter of 2007 related to the sale. As part of the sale we were also required to use a portion of the proceeds received to repay approximately \$159 million principal amount of financing obligations, \$8 million in accrued interest, \$11 million in accrued swap liabilities and \$14 million in debt pre-payment and make whole premium fees to our project lenders.

<http://sec.edgar-online.com/2007/05/09/0000916457-07-000057/Section12.asp>

Schedule JPP-5

Aquila Transactions with SPP and MISO in 2006 and 2007

	Year	Transactions to Account #232004	Transactions to Account #232004 (Purchased Power only)	Other	Total Transactions
		\$	\$	\$	\$
SPP					
	2006	3,135,438	1,559,732	2,735,005	5,870,443
	2007	6,480,281	4,430,851	4,701,703	11,181,984
MISO					
	2006	6,359,677	5,250,404	288,792	6,648,469
	2007	10,945,928	9,243,275	1,299,576	12,245,504

Source: Aquila response to DOG-0001 and DOG-0004

Schedule JPP-6
(Page 1 of 2)

Data Request MISO-0005
Quarterly Summary of SPP Counterparties
Data Thru October 2007

		Buy	Buy	Sell	Sell
Year	Quarter	MWH	Avg Price	MWH	Avg Price
2005	1	-100,507	39.76	44,197	39.42
	2	-259,751	45.16	248,705	48.49
	3	-159,134	27.22	301,904	45.23
	4	-85,084	45.61	243,439	67.39
2005 Total		-665,869	39.89	863,696	52.03
2006	1	-76,727	27.77	338,096	49.39
	2	-102,551	32.71	405,610	47.27
	3	-192,061	50.66	268,005	53.30
	4	-76,910	33.60	204,538	40.73
2006 Total		-448,249	39.71	1,216,249	48.09
2007	1	-133,483	37.96	122,758	49.05
	2	-66,624	52.22	103,874	51.48
	3	-91,628	64.86	77,905	44.88
	4	-8,854	62.89	51,354	47.96
2007 Total		-300,589	50.05	355,891	48.69

* Adjusted to Exclude Jan 2005

Schedule JPP-6
(Page 2 of 2)

Data Request MISO-0005
Quarterly Summary of MISO Counterparties
Data Thru October 2007

Year	Quarter	Buy		Sell	
		MWH	Avg Price	MWH	Avg Price
2005	1	-73,981	41.87	17,912	49.56
	2	-23,416	38.46	5,750	55.17
	3	-31,997	32.62	21,608	80.27
	4	-16,475	47.71	62,893	65.28
2005 Total		-164,324	40.07	115,826	63.68
2006	1	-19,793	40.30	18,833	50.81
	2	-9,153	38.54	25,229	71.99
	3	-9,957	35.93	29,846	72.39
	4	-44,287	41.05	18,130	42.35
2006 Total		-83,190	39.98	92,038	61.95
2007	1	-61,663	44.26	21,673	45.04
	2	-78,649	43.34	32,663	60.85
	3	-120,107	41.61	31,001	71.13
	4	-20,010	41.07	8,558	55.72
2007 Total		-280,429	42.64	93,895	60.13

* Adjusted to Exclude Jan 2005

Aquila Missouri Purchases in 2006 and 2007
(2007 Data Designated Highly Confidential)

		Aquila Networks - L&P		Aquila Networks - MPS		Total Aquila Missouri	
		MWh	Amount	MWh	Amount	MWh	Amount
2006	SPP*	84,723	\$2,425,060	252,825	\$8,902,718	337,548	\$11,327,778
	MISO/PJM	600	\$123,943	757,694	\$38,540,938	758,294	\$38,664,881
	Other identified locations	754,361	\$16,972,337	1,915,832	\$88,150,683	2,670,193	\$105,123,020
2007	SPP*	****	****	****	****	****	****
	MISO/PJM	****	****	****	****	****	****
	Other identified locations	****	****	****	****	****	****

Source: Aquila Response MISO DR 26 and 27 (based on Aquila 2006 and preliminary 2007 FERC Form 1 data)

*includes a total of 243,449 MWh (2006) and **** MWh (2007) of purchases from Aquila's West Plains subsidiary

**** Denotes Highly Confidential information