

Exhibit No:

Issue:

Witness: Mark J. Volpe

Type of Exhibit: Rebuttal Testimony

Sponsoring Party: City of Independence,
Missouri

Case No: EO-2008-0046

Date Testimony Prepared: November 29, 2007

**BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION**

CASE NO: EO-2008-0046

REBUTTAL TESTIMONY OF

MARK J. VOLPE

ON BEHALF OF

THE CITY OF INDEPENDENCE, MISSOURI

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

**In the Matter of Aquila, Inc. for
Approval of RTO Membership with
the Midwest Independent
Transmission System Operator, Inc.**

Case No. EO-2008-0046

AFFIDAVIT OF MARK J. VOLPE


STATE OF INDIANA

COUNTY OF HAMILTON

Mark J. Volpe, being first duly sworn on his oath, states:

1. My name is Mark J. Volpe. I am a consultant with the law firm of Jennings, Strouss and Salmon PLC. My business address is 1700 Pennsylvania Avenue N.W., Suite 500, Washington, D.C., 20006 and my office address is 5898 Garden Gate Way, Carmel, Indiana 46033. My business telephone number is (317) 246-0933.

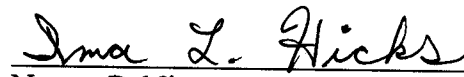
2. I certify that the foregoing Testimony was prepared by me or under my direct supervision and that such Testimony is true and correct to the best of my knowledge and belief.



Mark J. Volpe

Subscribed to and sworn to me this 30th day of November 2007.





Notary Public

**Irma L. Hicks
Notary Public, District of Columbia
My Commission Expires 01/14/2011**

**REBUTTAL TESTIMONY
OF
MARK J. VOLPE**

CASE NO: EO-2008-0046

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** My name is Mark J. Volpe. My business address is 1700 Pennsylvania Avenue,
3 N.W., Suite 500, Washington, D.C., 20006-4725.

4

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 **A.** I am employed by the law firm of Jennings, Strouss & Salmon, PLC as a non-
7 lawyer consultant. My firm has been retained by the City of Independence,
8 Missouri ("City") to assist them in evaluating the effects of Aquila's application
9 to join the Midwest ISO.

10

11 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND**
12 **AND BUSINESS EXPERIENCE.**

13 **A.** I hold a Bachelor of Science degree in Business Administration, majoring in
14 accounting and legal studies, from Ohio Northern University (1981) and a
15 Masters in Business Administration from Ashland University (1988). From
16 March 2000 through April 2007, I worked for the Midwest Independent
17 Transmission System Operator ("Midwest ISO") serving as the Midwest ISO's
18 Director of Regulatory Affairs. Prior to working for the Midwest ISO, I worked

1 for Cinergy Corporation from 1997 to 2000 as a Senior Contract Analyst in the
2 Energy Delivery Business Unit. Prior to Cinergy, I worked for FirstEnergy
3 Corporation from 1987 to 1997.

4
5 **Q. PLEASE DESCRIBE YOUR CURRENT CONSULTING WORK WITH**
6 **JENNINGS STROUSS.**

7 **A.** As a non-lawyer consultant, I work with clients in the areas of retail and
8 wholesale electric cost of service development, support and analysis. This
9 consulting work also includes Regional Transmission Organization (“RTO”) and
10 individual company tariff matters on issues including, but not limited to revenue
11 sufficiency guarantee charges, grandfathered agreements, and RTO membership
12 evaluation criteria and analysis. I also provide energy market and transmission
13 consulting services relating to overviews for state regulatory commissions and
14 consumer advocate groups; transmission expansion system planning, cost
15 recovery mechanisms, transmission pricing proposal consulting; and
16 interconnection agreement negotiations.

17
18 **Q. WHAT WERE YOUR JOB RESPONSIBILITIES AT THE MIDWEST**
19 **ISO?**

20 **A.** As the Director of Regulatory Affairs for the Midwest ISO, I was responsible for
21 the continued development of the Midwest ISO’s OATT, including the related
22 tariff administration implementation and support of all regulatory filings with the
23 Federal Energy Regulatory Commission (“FERC” or “Commission”). I

1 coordinated with the Midwest ISO's Transmission Owners on various ratemaking
2 issues and the development of transmission policy and I worked on the resolution
3 of seams issues between the Midwest ISO and its bordering entities such as PJM
4 Interconnection, L.L.C. ("PJM") and the Southwest Power Pool, Inc. ("SPP").

5

6 While at Midwest ISO, I was also responsible for the resolution of stakeholder
7 issues in conjunction with the development of policy and procedures related to
8 drafting necessary rates, terms and conditions to be embodied in the Midwest
9 ISO's Open Access Transmission and Energy Markets Tariff ("Market Tariff").

10 The Market Tariff contains the rates, terms and conditions governing the
11 implementation and operation of the Midwest ISO's Day-Ahead and Real-Time
12 Energy Markets (collectively "Energy Markets") and Financial Transmission
13 Rights ("FTRs"). I also frequently responded to market participants' questions
14 regarding policy and interpretation, working closely with the Midwest ISO's legal
15 department and outside counsel to ensure the proposed resolutions were consistent
16 with the Midwest ISO's policies.

17

18 **Q. HAVE YOU SPONSORED TESTIMONY BEFORE THE MISSOURI**
19 **PUBLIC SERVICE COMMISSION ("MPSC" OR "COMMISSION") OR**
20 **ANY OTHER REGULATORY BODY?**

21 **A.** Yes. A list of regulatory proceedings for which I previously sponsored testimony
22 is attached hereto as Attachment A.

23

1 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR TESTIMONY IN THIS**
2 **PROCEEDING?**

3 **A.** The purpose of my testimony is to explain why the City supports Aquila's
4 proposal to join the Midwest ISO and to explain some fundamental flaws in the
5 RTO Cost-Benefit Analysis performed by CRA International, which Aquila
6 provided as Attachment G to its Application in this proceeding ("CRA Analysis").
7 These flaws result in a substantial over-statement of the benefits of participating
8 in SPP as compared to the Midwest ISO.

9
10 **Q. BRIEFLY SUMMARIZE YOUR TESTIMONY.**

11 **A.** The City prefers to have Aquila participate in the Midwest ISO versus SPP from
12 the standpoint of broader access to organized energy markets. The CRA Analysis
13 concludes that there are benefits to joining either the Midwest ISO or the SPP, as
14 opposed to not joining either. It also concludes that the expected benefits to
15 joining SPP are greater than the expected benefits to joining the Midwest ISO.
16 However, the CRA Analysis expressly assumes that SPP has implemented energy
17 markets substantially similar to the Midwest ISO's markets, even though that is
18 not in fact the case. SPP's energy market, under a design comparable to the
19 Midwest ISO, is far from operational and will more than likely not be
20 implemented for a number of years. Thus, the conclusion that Aquila would
21 experience higher net benefits by participating in SPP rather than the Midwest
22 ISO is premised on an assumption that the analysis itself acknowledges is not the
23 case. At the very least, trade benefits for the time period from 2008 through 2010

1 should be taken out of the analysis because it is unrealistic to assume that the SPP
2 energy markets will or can be operational during the first three years at a
3 minimum.

4
5 I also explain why SPP's administrative costs are likely to be higher for Aquila
6 than they would otherwise be if Aquila were to join the Midwest ISO as intended
7 under their RTO membership application in this case.

8

9 **Q. PLEASE EXPLAIN THE RATIONALE SUPPORTING THE CITY'S**
10 **PREFERENCE THAT AQUILA PARTICIPATE IN THE MIDWEST ISO**
11 **VERSUS SPP.**

12 **A.** As stated in the testimony of Paul N. Mahlberg, the City prefers participation in
13 the Midwest ISO by Aquila for a number of reasons. The City and Aquila's other
14 customers will realize operational benefits and flexibility due to increased access
15 to organized energy markets for the purposes of sales and purchases via access the
16 Midwest ISO Energy Market and to the combined Midwest ISO/PJM region at a
17 single, non-pancaked transmission rate. This broad market access would allow
18 Aquila on behalf of its customers, and the City and other wholesale customers, to
19 access a large geographical region stretching from the Atlantic Ocean to the
20 Rocky Mountains and from Manitoba to the state of Missouri. Access to markets
21 of this breadth and scope, given the City's direct interconnections to Aquila, is
22 superior to the region covered by SPP. SPP is not as far along in its market
23 development process as compared to the more mature markets currently operating

1 in both the Midwest ISO and PJM. The City already has access to SPP via its
2 interconnections with KCPL.

3

4 **Q. IS IT TRUE THAT THE MIDWEST ISO ENERGY MARKET HAS**
5 **HIGHER COSTS AND THEREFORE PROVIDES LESS BENEFITS TO**
6 **CUSTOMERS?**

7 **A.** Not necessarily. While the CRA Analysis shows substantially greater trade
8 benefits -- \$65.8 million accruing to Aquila over the ten year time-period from
9 2008 through 2017, with \$95.7 million in trade benefits attributable to SPP
10 participation versus \$29.9 million under Midwest ISO's existing energy markets
11 (CRA Analysis at 4) -- the SPP benefits are based on a key assumption that is
12 fundamentally flawed. The CRA Analysis thus significantly over-states the
13 benefits of SPP participation as compared to Midwest ISO participation.

14

15 **Q: PLEASE FURTHER EXPLAIN WHAT IS MEANT BY THE KEY**
16 **ASSUMPTION THAT IS FUNDAMENTALLY FLAWED.**

17 **A.** The current SPP energy market consists primarily of a market for imbalance
18 energy. Imbalance energy is the difference between the amount of energy that
19 actually flows from each generator and to each load, and the amount that was
20 prearranged through schedules. This is in contrast to the Midwest ISO Day-
21 Ahead and Real-Time security constrained markets where Network Resources are
22 required to submit offers to supply their generation in the Day-Ahead Energy
23 Market. The major difference between the SPP model and the Midwest ISO's

1 market is that there is no financially binding Day-Ahead market within SPP's
2 market design and the majority of the transactions in SPP occur on a bilateral
3 basis because there is no centrally administered market as there is in the Midwest
4 ISO. Furthermore, in SPP there are no Financial Transmission Rights to provide
5 customers with the opportunity to hedge against the costs of congestion in a
6 Locational Marginal Price based market as is the case in the Midwest ISO. SPP
7 thus still utilizes TLRs to address congestion, rather than the Midwest ISO's use
8 of congestion charges based on locational marginal pricing and Financial
9 Transmission Rights (FTRs) to enable hedging against congestion charges. SPP's
10 market, in contrast, is still rooted in a defined set of physical transmission rights,
11 whereas the Midwest ISO's existing two-market settlement (Day-Ahead and
12 Real-Time) is more complex and more mature, having been in operation since
13 April 2005 compared to the SPP imbalance market that began commercial
14 operations in February 2007.

15
16 **Q. PLEASE FURTHER EXPLAIN THE ASSUMPTIONS IN THE COST-**
17 **BENEFIT ANALYSIS.**

18 **A.** The analysis repeatedly states that it is premised on the assumption that the SPP
19 RTO market will be similar in overall design to that of the Midwest ISO over the
20 ten-year time frame evaluated in the study. (CRA Analysis at 3, 5, 8, 20, 22).
21 But, the study further acknowledges that the costs and benefits of RTO market
22 development require formal and complex study and evaluation. (Id. at 3). The
23 CRA Analysis states it is anticipated that the SPP RTO will institute additional

1 market development *if* cost-benefit studies indicate that the projected benefits
2 exceed the costs. The CRA Analysis itself reports that SPP has not yet budgeted
3 or even begun work on analyzing the costs and benefits of such markets, making
4 the “if and when” of such market development speculative. (CRA Analysis at 3,
5 6, 8, 17, 20, 22).

6

7 **Q. WHY IS THIS A SIGNIFICANT FACTOR IN THE COST-BENEFIT**
8 **ANALYSIS?**

9 **A.** Given that SPP has not begun to conduct further cost/benefit analysis or to
10 develop markets analogous to the Midwest ISO’s existing energy market, which is
11 a long-term, costly and highly complex undertaking, the conclusion of the CRA
12 Analysis that the net trade benefits of SPP participation are \$65.8 million greater
13 than those that would result from participation in the Midwest ISO is premised on
14 the assumption that Aquila would participate in SPP energy markets that do not
15 exist. It would be more realistic to assume that SPP cannot implement a market
16 similar to Midwest ISO’s before 2011, at the earliest. (Of course, SPP’s market
17 implementation could occur later, could occur in a form that differs from the
18 Midwest ISO’s markets, or might not occur at all.) At the very least, the total net
19 trade benefits of \$45.1 million for the years 2008 through 2010 (See CRA
20 Analysis, Table 16 at 39) should be subtracted from the analysis depicted in Table
21 16 of the study. This single adjustment lowers the difference in net trade benefits
22 associated with SPP participation versus the Midwest ISO from \$65.8 million to
23 \$20.7 million. If the SPP market does not materialize for an additional year and

1 one thus subtracts \$15.8 million as the net trade benefits shown on Table 16 for
2 2009, then the study would indicate that the benefits from participating in the
3 Midwest ISO or SPP would differ by only approximately \$5 million.

4
5 The cost-benefit analysis conclusions made by CRA International, which
6 seemingly provides overwhelming support for SPP participation for Aquila versus
7 the Midwest ISO, is based on speculation and conjecture given the current
8 embryonic stage of market development at SPP.

9

10 **Q: IS THIS THE ONLY ERRONEOUS ASSUMPTION IN THE CRA**
11 **ANALYSIS?**

12 **A:** No. The study identifies congestion management based on locational pricing to
13 be beneficial over Transmission Loading Relief (“TLR”), thus producing a
14 portion of the study’s benefits due to better flowgate utilization. (CRA Analysis at
15 10). However, SPP does not currently use an LMP based congestion management
16 mechanism including FTRs, as is currently the case within the Midwest ISO, but
17 instead still relies on TLRs to manage congestion. This portion of the benefits is
18 not currently available and will not be unless and until SPP develops such LMP
19 based markets.

20

21 **Q. DO YOU AGREE WITH THIS ASSERTION IN THE COST-BENEFIT**
22 **ANALYSIS THAT PORTRAYS SPP’S ADMINISTRATIVE COSTS TO BE**
23 **EQUAL TO MIDWEST ISO’S ADMINISTRATIVE COSTS (\$23.5**

**MILLION) FOR OPERATING THE ENERGY MARKET OVER THE
TEN-YEAR TIME PERIOD? (CRA ANALYSIS AT 3, 17, 20.)**

A. No. The RTO administrative costs associated with developing and operating an energy market are largely fixed costs. The costs of the software systems, which may be the largest single cost component used to run and settle an energy market are fixed for the most part as there is very little scalability associated with these software costs and these costs will not vary from one RTO to another. As stated in the study, SPP is approximately 1/3 the size of the Midwest ISO with regard to the billing determinants available to recover these fixed costs. Therefore, given that recovery of the fixed costs are to be spread over a smaller denominator in SPP compared to a larger denominator in the Midwest ISO, it would be logical to conclude that the share of administrative costs associated with Aquila's participation in SPP to be higher due to the fact that there are significantly less billing determinants or load to spread these fixed costs over. For the costs to be the same, the fixed costs would need to be significantly lower in SPP and it is highly unlikely that SPP could develop and operate energy markets at 1/3 of the costs experienced by the Midwest ISO.

The CRA International analysis also includes forecasted administrative costs for the Midwest ISO from 2008 and beyond that includes costs attributable to the Midwest ISO's development and operation of an ancillary services market. (CRA Analysis at 8). The inclusion of Midwest ISO's costs for the ancillary services market development further distorts the study results, and depicts Midwest ISO's

1 costs as much higher than they should be for administrative costs because the
2 “apples to apples” comparison between the respective RTOs market operation
3 functions is lost. The RTO administrative costs analysis should focus on only the
4 costs of developing and operating an LMP based Day-Ahead and Real-Time
5 Energy Markets. Given inflation and the fact that the Midwest ISO’s current
6 energy market costs are known and that their market is already in place, coupled
7 with the prior amortization of a portion their energy market start-up costs, one
8 would expect SPP’s administrative costs to be greater on a per unit basis than
9 Midwest ISO’s administrative costs. Adjustments that show higher SPP
10 administrative costs and lower Midwest ISO administrative costs would further
11 reduce the overall difference in total benefits of each RTO, thus further eroding
12 the study’s implication that SPP participation would be more beneficial than
13 Midwest ISO participation.

14
15 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.**

16 **A.** The conclusions of the CRA Analysis indicating that Aquila would experience
17 \$66 million in greater benefits over a ten-year period by participating in SPP
18 rather than the Midwest ISO are unrealistic and over-stated. Because the Midwest
19 ISO-style markets do not exist in SPP, and will not exist for at least three years, at
20 least the first three years of trade benefits shown by the study should be
21 eliminated. Subtraction of the alleged, but unachievable benefits shown for 2008
22 - 2010 would reduce the reported trade benefits difference between Aquila’s
23 participation in the Midwest ISO versus SPP from roughly \$66 million to \$20

1 million. These benefits would be further reduced if the SPP markets take more
2 than 3 years to come into existence. The benefits are also skewed because the
3 study assumes administrative costs for SPP to be less costly than is likely to be
4 the case, and at the same time assumes inflated estimates of the Midwest ISO
5 administrative costs. Finally the study's reported benefits associated with
6 participation in SPP should be further reduced because the study indicates benefit
7 from use of congestion management charges instead of TLRs and calculates the
8 benefits as if SPP was utilizing congestion charges even though it in fact still uses
9 TLRs.

10

11 From a probabilistic standpoint, there is much more certainty with regard to the
12 benefits that would be attained by Aquila's participation in Midwest ISO's
13 existing market design as depicted within the study.

14

15 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

16 **A.** Yes.

Attachment A**List of Regulatory Proceedings
in which Mark J. Volpe has Testified**

Regulatory Body	Docket Number	Party on whose Behalf Testimony was Sponsored
FERC	ER01-780-000 (Commonwealth Edison's withdrawal from Midwest ISO)	Midwest ISO
FERC	RT01-87-000 (Order No. 2000 Compliance Filing)	Midwest ISO
FERC	ER02-111-000 (Unbundling of MISO's Schedule 10 Administrative Cost Adder)	Midwest ISO
FERC	ER02-1420-000 (Proposed combination of Midwest ISO and SPP)	Midwest ISO
FERC	ER03-1118-000 (changes to transmission provisions to incorporate energy markets)	Midwest ISO
FERC	ER04-961-000 (proposal to allow independent power producers to receive revenues for reactive power)	Midwest ISO
FERC	ER04-691-000 (regarding implementation of Midwest ISO energy markets)	Midwest ISO
Missouri PSC	EM-2007-0374 (Proposed merger of KCPL and Aquila)	City of Independence, Mo