

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of the Application of Aquila,)	
Inc., d/b/a Aquila Networks - MPS and Aquila)	Case No. EO-2008-0046
Networks - L&P for Authority to Transfer)	
Operational Control of Certain Transmission)	
Assets to the Midwest Independent Transmission)	
System Operator, Inc.)	

POST HEARING BRIEF
OF MIDWEST INDEPENDENT
TRANSMISSION SYSTEM OPERATOR, INC.

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I. Introduction and Summary

On August 20, 2007, Aquila Inc. filed an application seeking to transfer operational and functional control of select transmission assets to the Midwest Independent Transmission System Operator, Inc. (Midwest ISO). Quite justifiably, the parties have universally agreed that a “not detrimental to public interest” standard is the legal standard that applies and what should be followed by the Commission as it reviews and considers the evidence submitted in this case.

This standard derives from Section 393.190, RSMo 2000 and its predecessors.

Section 393.190 provides in pertinent part:

No gas corporation, electrical corporation, water corporation or sewer corporation shall hereafter sell, assign, lease, transfer, mortgage or otherwise dispose of or encumber the whole or any part of its franchise, works or system, necessary or useful in the performance of its duties to the public, nor by any means, direct or indirect, merge or consolidate such works or system, or franchises, or any part thereof, with any other corporation, person or public utility, without having first secured from the commission an order authorizing it so to do.

Section 393.190 does not set forth an explicit process, criteria, or test for the Commission's review and consideration of the request for this type of proposed qualified

transfer. However, the Missouri Supreme Court in *State ex rel. City of St. Louis v. Public Service Commission*, 73 S.W.2d 393, 400 (Mo. banc 1934), determined that Section 393.190's predecessor, Section 5195, RSMo 1929, recognized the standards for Commission approval to be a review and analysis of whether the transaction involved is not detrimental to the public interest. This standard of review is further endorsed and embraced by the Commission in its own rules, which require an applicant, who seeks authority to transfer assets, to state in its application "[t]he reason the proposed sale of the assets is not detrimental to the public interest." 4 CSR 240-3.110(1)(D) (applying to electric corporations).¹ "The Commission may not withhold its approval of the disposition of assets unless it can be shown that such disposition is detrimental to the public interest." *State ex rel. Fee Fee Trunk Sewer, Inc. v. Litz*, 596 S.W.2d 466, 468 (Mo. App. 1980).

When applying the "lack of detriment to the public interest" standard, the Commission has considered such factors as the transferee's experience in the utility industry; the transferee's history of service difficulties; the transferee's general financial health and ability to absorb the proposed transaction; and the transferee's ability to operate the assets safely and efficiently.

In the instant matter, Aquila presented sufficient and compelling evidence that the transfer of functional control of its transmission assets to the Midwest ISO is not only not detrimental to the public interest, but does indeed create value and a benefit for Aquila and ultimately its customers. As primary support of this proposition, Aquila presented the CRA International (CRA) analysis (the Aquila Study) which investigated and

¹ For similar requirements for other regulated entities see 4 CSR 2403.210 (1)(D) (applying to gas corporations); 4 CSR 240-3.310(1)(D)(applying to sewer corporations) and 4 CSR 240--3.605(1)(D) (applying to water corporations).

quantified the benefits Aquila and its customers would receive by joining a regional transmission authority (RTO). It must be noted and underscored from the outset that Aquila specifically requested and has maintained throughout the proceeding, in spite of numerous suggestions, attacks and proposals to the contrary, that it be allowed to transfer operational control of its transmission assets to the Midwest ISO. That resolve has been and continues to come under fire by a number of other parties to the proceeding. In spite of these attacks, Applicant continues to support and single-mindedly request such transfer be granted in this docket. Other parties have suggested the Commission, *sua sponte*, consider ordering Aquila to join SPP based solely on the CRA analysis. Not only are such requests an inappropriate attempt to hijack/commandeer Applicant's case, they are not supported by credible and sufficient evidence in this docket.

The Aquila Study, that ably supports Applicant's requested relief, was attached to the testimony of Aquila's lead witness, Dennis O'Dell. (Ex 1, O'Dell Direct, Schedules DO-3 and DO-4). The Aquila Study examined the costs and benefits associated with transferring functional control of Aquila's transmission assets to the Midwest ISO. Additionally, and as noted in the Study itself, CRA also looked at the Southwest Power Pool ("SPP") as an alternate option. In both cases, the Aquila Study found that the benefits of joining an RTO exceeded the incremental cost of RTO membership. The analysis contained in the Aquila Study supported the Applicant's requested relief in showing that Aquila would *benefit* by joining Midwest ISO. This proposition was further bolstered by the uncontested testimony and information presented by the Midwest ISO Witness Richard Doying² who provided compelling evidence of additional benefits of

² Mr. Doying's testimony will be reviewed in further detail below.

Aquila's full participation in the Midwest ISO beyond those production cost savings measured and considered by CRA.

Under the well accepted and codified review analysis that the Commission imposes under the "not detrimental to the public interest" standard, the inquiry about the merits of Aquila's proposal could and should end at this point. Clearly, Aquila's proposal to join Midwest ISO provides sufficient, quantifiable and credible benefits to Aquila and its customers. As such the request by Aquila is in the public interest. Notwithstanding, Staff, Office of Public Counsel (OPC), and some intervening parties in this matter are now inviting the Commission to create and employ a completely new form of review standard or interpretation of the Commission's "not detrimental to the public interest" review process. Such an invitation not only runs afoul of Applicant's single-focused request to join the Midwest ISO in this docket, but also runs the risk of being considered arbitrary and capricious – based solely on a projected cost modeling analysis that is founded on unrealistic and hypothetical scenarios and long range projections, and which, as will be examined further below, contains numerous flaws and shortcomings.

The original Aquila Study, upon which all of the parties who oppose the relief requested base their positions, forecasts that Aquila would experience greater benefits if it joined SPP.³ It must be noted that none of the parties disputed the fact that the Midwest ISO provided benefits to its members and would likewise provide benefits to Aquila and its customers should it be granted the authority sought in this docket. Accordingly, the attempt by the opposition parties to shift the focus of the Commission to

³ Aquila has not sought approval to join SPP and therefore the proposition is outside the scope of this proceeding. Aquila, Midwest ISO, and the City of Independence have strongly disagreed with including a comparison of benefits between Midwest ISO and SPP as part of the "not detrimental to the public interest" evaluation in this case.

creating and applying their newly concocted standard of review should be rejected. Despite Aquila's, Midwest ISO's and the City of Independence's objections, these efforts and questions stubbornly underlie this proceeding and are baselines for the testimony provided by Staff, OPC, and Dogwood Energy, LLC (Dogwood). Even if the Commission were to accept these parties' newly defined standard of review, which it should not, the evidence when fully examined does not withstand reasonable scrutiny and does not support the conclusions the opposition grasps for, namely that the SPP alternative provides greater benefits.

The Commission has before it a single-focused request from Aquila to allow it to transfer operational control of its transmission assets to the Midwest ISO. Nothing more and nothing less. Accordingly, the Commission must avoid these attempted distractions and delay tactics and sharpen its focus exclusively on the accepted standards of review and determine whether Aquila's participation in Midwest ISO is not detrimental to the public interest and end the questioning there. There are two reasons: 1) the accepted standard of review does not and should not arbitrarily add or accommodate a second tier of analysis called for by Staff, OPC, and Dogwood; and 2) the original Aquila Study upon which they base this new review consideration is seriously flawed and cannot be relied upon for the purpose of determining whether the Midwest ISO or SPP offer greater benefits to Aquila. Simply stated, the facts do not support the conclusion that greater benefits flow to Aquila by joining SPP as opposed to the Midwest ISO. Key assumptions used by CRA were invalidated or shown lacking not only in rebuttal evidence but also confirmed during cross examination at hearing. Even the expert witness called by Dogwood Energy agreed that the uncertainties inherent in the GE-

MAPS modeling performed by CRA preclude making a definitive decision about the benefits of Aquila's membership in SPP versus Midwest ISO. (Tr. 427) (Ex. 17, Lesser Surrebuttal, p. 11 lines 13-15; p. 16 lines 11-13.)

Midwest ISO joins Aquila in asking the Commission to apply the standard it has utilized so many times in the past and approve Aquila's application to transfer control and be able to promptly reap the full benefits and rewards⁴ of being a member of Midwest ISO. Accordingly, Aquila's application should be promptly approved.

II. Discussion of Issues

Issue 1. *Is "not detrimental to the public interest" the appropriate standard for the Commission to use in making its determinations in this case?*

Midwest ISO summarily explained above why the "not detrimental to the public interest" applies in this case. All parties agreed that it is the standard of review and should be applied in this instance as well. Therefore, there should be no question that it is appropriate. The Commission has asked the parties to thoroughly address the meaning of this standard in the briefing. Simply stated, the Commission cannot and should not venture into the dubious territory it is now invited to step into a regulatory and legal minefield, namely (1) ignoring the relief requested by an Applicant and (2) then imposing its views and determinations of choosing which alternative is the better option. The Commission is bound by and must decide the cases before it, not ones raised by anecdotal inferences. Furthermore, the evidence, upon closer examination, upon which the parties inviting the Commission take these two imprudent steps rely, does not support the action

⁴ It was refreshing to see both Aquila and the Commission object to a ten day extension to file briefs so that access to the benefits of Midwest ISO membership for Aquila and its ratepayers would not be further delayed.

they ultimately seek, namely ordering Aquila to join SPP. As Midwest ISO submits below its review of the evidence and its positions and arguments on the relevant points, it will further explain what it believes and submits is the only viable and rational application and meaning of the Commission's standard of review and the appropriate application of that standard in deciding the case.

Issue 2. *Should the Commission determine that Aquila's application to join MISO is not detrimental to the public interest, what considerations should the Commission take into account in making its determination?*

The evidence presented in this proceeding convincingly supports a determination by the Commission that it is not detrimental to the public interest for Aquila to join Midwest ISO. In reaching that determination, a chief consideration for the Commission is the range of benefits Midwest ISO can and will provide Aquila. No party disputed the fact that the Midwest ISO can and does provide benefits to its member companies. This proposition was underscored by Witness Odell and the underlying CRA analysis summarized in the Aquila Study attached to Mr. Odell's testimony. (Schedule DO-3). The Aquila Study identified a present value of \$21.1 million dollars in benefits that would be realized by Aquila by becoming a member of the Midwest ISO. Additionally, the uncontested testimony and evidence offered by Witness Richard Doying presented significant potential benefits both in the form of real and quantifiable annual savings totaling between \$13.9 to \$18.9 million, *annually*. In addition, Mr. Doying described accepted qualitative but less quantifiable benefits that members received such as valuable market price information and coordinated, centralized regional planning efforts.

Even though the Midwest ISO took issue with certain portions of the original Aquila Study, Witness Pfeifenberger agreed that the analysis if properly done and interpreted, shows that the Aquila Study was consistent with many other studies which have evaluated the net positive benefits of an electric company's membership in an RTO. However, because the original Aquila Study showed such a large deviation of benefits as between the Midwest ISO and SPP, further scrutiny and a closer review was warranted. This was especially the case as a number of parties in the docket were and are basing their opposition on the results of this projected cost study. Upon further examination, there are substantial flaws in certain critical assumptions underpinning the Aquila Study, the most relevant of which will be reviewed and discussed further below. These flaws produce significant inaccuracies and overstated benefits in the "Aquila in SPP" scenario. Accordingly, any conclusions based upon those portions of the CRA Aquila Study are at best suspect and should be rejected. More relevant is the steadfast position taken by applicant which was firmly stated by Aquila Witness Odell when rebuffing concerns about the considerations related to the SPP alternative, with the following response:

Q. Do you agree with this position?

A. No. Aquila is proposing in this docket to take an affirmative step that would, according to the Study, provide substantial net benefits to its customers. The existence of an alternative that may provide greater benefit does not, in my view, mean that the first alternative is detrimental to the public interest.

(Ex. 1, p. 4, ln 15-19)

Other considerations for the Commission are laced throughout the brief.

Review of Evidence and Discussion

A. Aquila's Application and Evidence

In its Application, Aquila sets forth the complicated and circuitous procedural route taken that ultimately resulted in the request to transfer the operational control of Aquila's transmission facilities, 100kV and above, to the Midwest ISO. (See Application, ¶ 20.). As support of its requested transfer of control, Aquila cites the CRA cost-benefit study's determination of Midwest ISO benefit of "approximate \$21 million over ten years to Aquila's retail electric customers." (See Application, ¶ 22, and Attached Appendix G.). Further in both his direct and rebuttal phase testimonial filings, Aquila's Witness Dennis Odell maintains the plan and desire to obtain the Commission's approval to join the Midwest ISO. Specifically, Mr. Odell states, "The Study demonstrates that joining the MISO provides net benefits for Aquila's customers, and as such, Aquila seeks the approval requested." (Ex. 1, Odell Direct, p. 8). Additionally, in rebuffing several other parties' attempts to interject irrelevant issues or a new, heightened standard of review, Witness Odell testifies that, "Aquila is proposing in this docket to take an affirmative step that would, according to the Study, provide substantial net benefits to its customers. The existence of an alternative that may provide greater benefit does not, in my view, mean the first alternative is detrimental to the public interest." (Ex.2, Odell Surreb., p. 4). Finally, putting a fine edge on their position, Witness Odell had the following exchange in response to a question from Commissioner Murray during the hearing:

Q. So if we look at whether this would be detrimental to the public interest, are we considering whether it would be detrimental to the public interest to join MISO versus standalone or are we considering whether it's detrimental by considering the weighing it against the heaviest benefits that you could receive in any of the three scenarios?

A. Well, Commissioner, in my view you're weighing it against the alternative that is presented, which is the standalone case, and that's really

been the crux of our -- of our argument all along is that there's a \$21 million benefit, according to the study, for us joining MISO, and that that's clearly a benefit to the public.

Tr 124, ln. 21-25, 125, ln 1-9.

B. Midwest ISO Range of Benefits

Midwest ISO's first witness in this proceeding was Mr. Richard Doying, Vice President of Market Operations. His rebuttal testimony provided the Commission with extensive detail about the Midwest ISO and its operations. He testified that the Federal Energy Regulatory Commission (FERC) approved the establishment of the Midwest ISO as an "ISO" – i.e., an Independent System Operator – in 1998 in the mid-western part of the United States. Then in 2001, FERC ruled that Midwest ISO also met the requirements for being an "RTO" – i.e., a Regional Transmission Organization. (Ex. 4, Doying Rebuttal, p. 4)

1. Footprint and Tariffing

The Commission should take particular note of the immense size of Midwest ISO. The Midwest ISO's operational area or "footprint" consists of 15 states and the province of Manitoba, Canada. This area covers 920,000 square miles of territory, and 93,600 miles of transmission lines. The Midwest ISO performs its Energy Markets Tariff and related responsibilities over this broad region through control rooms located in Carmel, Indiana, and Saint Paul, Minnesota. (Ex. 4, Doying Rebuttal, p. 4)

As an ISO, Midwest ISO administers a common tariff that applies to all transmission services provided on the transmission facilities placed under its control. FERC developed a template for such a common tariff – called an "Open Access

Transmission Tariff,” or “OATT.” Mr. Doying explained that the common tariff ensures that the same set of rules applies to all transmission customers, and eliminates the dreaded “pancaking” of rates that occurs when power goes through transmission facilities governed by multiple tariffs each of which may impose separate charges and terms of service. Midwest ISO has implemented subsequent FERC directives related to accessibility and reliability of transmission system operations. For instance, Midwest ISO operates transmission system over a broad region, and it has adopted market-based approaches to congestion management and schedule imbalance services. (Ex. 4, Doying Rebuttal, p. 4-5)

2. Congestion Management

This topic, namely congestion management, is pertinent to a later discussion and has greater significance relative to how the Aquila Study and the underlying analysis of CRA dealt with congestion. However, this section will focus on the less defined concept and certain claims by several witnesses that “congestion” between Midwest ISO and the Aquila networks produce higher costs in the “Aquila in Midwest ISO” scenario. The logic behind the alleged congestion claims was simple. There are five (5) tie lines between the Aquila and the Midwest ISO as compared to fourteen (14) between Aquila and SPP. Like most aspects of the power industry this is not the end of the discussion and it is much more complicated than just a simple fourteen versus five comparison. Real world operations show that Aquila has ably supplied its customers utilizing cost effective power purchases through the Midwest ISO markets. This advantage to Midwest ISO participation is described below in further detail in the discussion of Issue 5d. Furthermore, the differences in how the relative Midwest ISO versus SPP markets are

operated becomes an important factor. For purposes of this congestion management issue what must be emphasized is that Midwest ISO has in place proven effective and efficient systems by which to manage congestion on its system. As Mr. Doying explained, system operations under the Midwest ISO's Open Access Transmission and Energy Markets Tariff ("Energy Markets Tariff") include balancing of generation supply to assure demand is satisfied in a dependable and efficient manner and managing transmission congestion that arises due to physical limitations of the transmission system. These services are provided by the Midwest ISO through a coordinated competitive market for electric energy. The Midwest ISO energy market operates by matching offers to sell energy with bids to buy energy through a process that determines market clearing quantities and prices while assuring total demand ("load") is satisfied at the lowest possible cost while honoring the physical limitations of the transmission used to deliver energy from generation to load. (Ex. 4, Doying Rebuttal, p. 5).

3. *Day Ahead Market—Ancillary Services Markets*

Unlike SPP, which lags behind in market design,⁵ Midwest ISO's energy markets currently operate over two timeframes. First is a "Day-Ahead" market, through which market participants can pre-schedule the transactions they plan to engage in on the following operating day. The second time frame is a "Real Time" market, where market participants can buy or sell energy to meet conditions during the operating day that may differ from those anticipated in the Day-Ahead market. Unlike SPP, which still relies on rejected transmission requests to manage congestion on a day-ahead basis, in the

⁵ Aquila witness O'Dell confirmed for the parties that SPP has no Day 2 type market, and the difference between Midwest ISO's markets and SPP's certainly could affect trading patterns. (Tr. 76). He also did not know if SPP would ever develop a Day 2 market although the Aquila Study assumes it has a Day 2 market in producing its comparisons. (Tr. 77).

Midwest ISO congestion is managed efficiently through markets on both a day-ahead and real-time basis.

Midwest ISO is also working to further reduce supply cost and improve reliability by seeking to consolidate certain functions currently performed by twenty-four (24) separate Balancing Authorities or Control Area Operators. To achieve this, the Midwest ISO is presently underway in implementing an Ancillary Services Markets, or “ASM,” designed to facilitate the better utilization and management of Operating Reserves. In addition the Midwest ISO is pursuing: 1) mechanisms to encourage more flexible demand participation, 2) further coordination of transmission planning, and 3) implementation of new mechanisms to assure longer-term adequacy of regional supply resources. These enhancements will provide additional tangible benefits in terms of more energy being available, thus resulting in lower energy costs and improved reliability throughout the Midwest ISO region. (Ex. 4, Doying Rebuttal, p. 5-6)

4. Transmission Expansion Planning

Another important category of RTO membership benefits is associated with transmission expansion planning. Mr. Doying testified that Midwest ISO is the NERC Planning Authority for its member footprint, and performs regional planning in accordance with FERC Planning Principles delineated in Order 890. The Midwest ISO regional planning process integrates the local planning processes of its member companies into a coordinated regional transmission plan and identifies additional expansions. The regional plan has as its objective the provision of an efficient and reliable transmission system that delivers reliable power supply to connected load customers, expands trading opportunities, better integrates the grid, alleviates congestion,

provides access to diverse energy resources, and enables state and federal energy policy objectives to be met. Regional plans are produced no less frequently than biennially, and are publicly available on the Midwest ISO web site. (Ex. 4, Doying Rebuttal, p. 6-7)

5. Midwest ISO Value Proposition⁶

Mr. Doying included in his testimony a discussion of the Midwest ISO Value Proposition which was a concerted effort to measure, where possible, and report on benefits that accrue to the region as a result of the Midwest ISO's operations. Mr. Doying recognized that many of the benefits are difficult to quantify with precision. However, it is Midwest ISO's contention that the difficulty in measurement should not be a reason to put aside a valuation of the benefits of Aquila's participation in the Midwest ISO.

Mr. Doying identified three groups of significant direct and indirect benefits which Aquila would derive from participation as a transmission-owning member of the Midwest ISO and those benefits are of the type that cannot be fully captured by production cost studies such as the Aquila Study. He categorized the benefit groups as follows: (1) improved reliability; (2) improved efficiency; and (3) improved opportunities for development of generation and transmission infrastructure. He reasoned that the benefits would accrue to Aquila in a proportion based upon its load and generation in the Midwest ISO footprint, which was approximately 1.7%. He testified

⁶ The list of issues for this proceeding includes whether 1) the Commission should consider cost-benefit analyses sponsored by parties other than Aquila; or 2) costs and/or benefits not included in the CRA International cost-benefit study sponsored by Aquila or cost-benefit analyses sponsored by parties other than Aquila. Midwest ISO considers discussion of those issues to be subsumed in this portion of its brief and will not give them separate treatment.

that this was a conservative figure and Aquila could anticipate a benefit yield in a higher range. (Ex. 4, Doying Rebuttal, p. 8-9)

Improved Reliability

The reliability benefits can themselves be broken down into three categories: (a) improved reliability as compared to stand-alone operations; (b) enhanced seams management; and (c) regulatory compliance. The first category has been quantified. Spanning 15 states and the Canadian province of Manitoba, the Midwest ISO leverages its broad regional view to identify potential impacts of transmission or generation issues on the entire Midwest ISO power system as well as on bordering regions. This analysis looks at more than 7,500 “what if” scenarios every five minutes to identify the quickest, most effective way to manage potential issues, while also ensuring the continued operation of the wholesale bulk electric system. A quick response requires accurate information.

The Midwest ISO processes system condition information every four seconds, resulting in appropriate signals being sent to generation owners in a timely manner. Using more than 240,000 points of information, the Midwest ISO examines the state of the system every 90 seconds, allowing for greater visibility into system conditions, increased ability to quickly identify the most effective response, and better coordination of needed system maintenance. The reliability benefits resulting from the above were quantified by evaluating the reduced size, duration, cost and probability of transmission outages under regional rather than stand-alone transmission systems operations. Those benefits were estimated to be between \$230 and \$340 million per year. (Ex. 4, Doying Rebuttal, p. 9-10) Mr. Doying’s illustrative table is reprinted below.

Midwest ISO Annual Benefit: Improved Reliability⁷

Market-wide Improved Reliability Benefit

\$230 to \$340 million

Aquila Potential

\$4.0 to \$5.9 million

Improved Efficiency

Mr. Doying noted that efficient dispatch of energy, as compared to stand-alone operations, may overlap with the Aquila Study but he provided the information for additional points of reference since efficiency benefits would specifically relate to Aquila's full participation in the Midwest ISO. He testified that the Midwest ISO broad regional competitive wholesale market allows the Midwest ISO to match the most cost effective and reliable source of generation with power needs over an extensive area, consequently reducing the amount of generation supply required to serve the region's needs. The annual benefits associated with the categories of efficiency-related benefits are estimated at between \$450 and \$600 million for the Midwest ISO region as a whole. He illustrated the estimates in a table on page 11 of his testimony:

Midwest ISO Annual Benefit: Improved Efficiencies⁸

Market-wide Improved Efficiencies Benefit

Dispatch of energy: \$200 to \$250 million

Contingency reserves: \$135 to \$145 million

Aquila Potential

\$3.4 to \$4.3 million

\$2.3 to \$2.5 million

⁷ Figures reflect annual benefits reflected in 2007 U.S. dollars, including both current and achieved benefits and projected future benefits.

⁸ Figures reflect annual benefits reflected in 2007 U.S. dollars, including both current and achieved benefits and projected future benefits.

Dispatch of reserves: \$115 to \$205 million	\$2.0 to \$3.5 million
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Mr. Doying also testified that another benefit of participation in a large regional system is more efficient use of the existing infrastructure, both generation and transmission. Similar to the savings associated with pooling of contingency reserves, pooling of planning reserves over a larger region reduces the level necessary to assure reliable service in future periods. In the Midwest ISO region, Mr. Doying's estimate was annual savings of \$135 to \$150 million.

<u>Midwest ISO Annual Benefit: Investment⁹</u>	
<u>Market-wide Improved Efficiencies Benefit</u>	<u>Aquila Potential</u>
Planning reserves: \$135 to \$150 million	\$2.3 to \$2.6 million

The summed total of the value benefits that Mr. Doying described is:

<u>Midwest ISO Annual Benefit by Total Value Benefit¹⁰</u>	
<u>Gross Annual Market-wide Benefit¹¹</u>	<u>Aquila Potential¹²</u>
\$805 to \$1,100 million	\$13.9 to \$18.9 million

⁹ Figures reflect annual benefits reflected in 2007 U.S. dollars, including both current and achieved benefits and projected future benefits.

¹⁰ Figures reflect annual benefits reflected in 2007 U.S. dollars, including both current and achieved benefits and projected future benefits.

¹¹ The Gross Benefits sum to slightly less than the individual components due to rounding and do not reflect the Midwest ISO operational and other cost components, which total approximately \$250 million.

¹² The Aquila portion, if netted with its prorated portion of Midwest ISO operational costs, would be fixed at approximately \$4.3 million less regardless of where in this range it fell.

6. *Other Benefits*

To round out the range of benefits Aquila would receive from participation in Midwest ISO, Mr. Doying identified several areas which were more difficult to quantify but which are nonetheless material. Not sharing and raising them for the Commission's consideration would leave an incomplete record and understate the total benefits of participation in the Midwest ISO. One such benefit of this type results from the price signals that are provided by the Midwest ISO's open and transparent Day-Ahead and Real-Time Markets. That information and those price signals provide a level of transparency that simply was not available prior to the market's inception. Mr. Doying stated that this greater level of transparency:

- allows users or participants to efficiently respond to market conditions and adjust consumption levels,
- enables platforms for demand participation in the form of price-responsive demand response programs, and
- supports investment analysis for future generation and transmission infrastructure development.

Another invaluable benefit is associated with coordinated regional transmission planning. In the new and evolving power industry marketplace, the processes of considering when, where and how to build new generation facilities and/or where transmission is appropriate and necessary depends on true indicators of where needs exist. The market price information provides the industry participants with that necessary planning and forecasting information. On the reliability side, the Midwest ISO planning

process strives to implement enhancements in a manner that allows energy to flow through the system in a reliable and cost effective manner. On the business side, the planning process supports efforts to access low cost supplies while also reducing congestion on the system, making it easier to transfer energy between the buyer and seller. (Ex. 4, Doying Rebuttal, p 13-14).

C. Additional Considerations

As mentioned earlier, the Midwest ISO has not nor does it believe that the Aquila Study should be completely disregarded or excluded entirely from consideration in this matter. There are flaws and problems with portions of the study, but these were not deemed fatal to the entire study. The impacts and significance of the most critical flaws will be addressed in full in subsequent sections of this brief as will several other specific considerations the parties enumerated in the list of issues filed March 7, 2008. Further, the Aquila Study is just one element that the Commission should consider in its deliberations and review. There are other benefits and values which were not fully captured in the Aquila Study that have been presented by other witnesses such as Richard Doying from the Midwest ISO and Carl Monroe from SPP.

Based on the foregoing, the Commission can readily conclude that a remarkable number of benefits will accrue to Aquila if it joins Midwest ISO.

Issue 3. *If the Commission approves Aquila's application to join MISO, should the Commission make its approval subject to certain conditions? If so, what are the conditions?*

Briefly, and to reiterate what it wrote in its previously filed position statement, Midwest ISO will defer to the Commission on whether to place conditions and what conditions it may deem appropriate and necessary. The conditions suggested in the

rebuttal testimony of Mr. Michael Proctor provide a reasonable starting point but certain items would require input and negotiating by the parties.

Issue 4. *In making its determination whether to grant Aquila’s application to join MISO, should the Commission compare Aquila’s membership in MISO to other alternatives? If so, what are the alternatives and what do the comparisons of the alternatives show?*

Midwest ISO’s position has not changed on this issue. The Commission should not compare Aquila’s membership in Midwest ISO to other alternatives. The appropriate standard of review by the Commission is and has been whether the request is “not detrimental to the public interest.” Aquila has focused its requested relief on joining the Midwest ISO. Midwest ISO objects to the aberrations of the “not detrimental to the public interest” standard which other parties have attempted to inject into the proceeding. Midwest ISO contends that the standard has no “least cost alternative” or “greatest benefits” component.

The Commission is being asked to follow another path because the Aquila Study has calculated that Aquila will experience greater trade benefits if it joins SPP. Even assuming for argument only that the “not detrimental to the public interest” standard can be expanded as Staff, OPC and others suggest, this is no case in which to exercise it. The Aquila Study suffers from significant flaws which render it inherently inaccurate in determining the overall benefit Aquila may derive from membership in SPP.

Issue 5. *To what extent should the Commission take into account the following in its determination of whether or not to approve Aquila’s application to join MISO?*

a. *The CRA International, Inc. cost-benefit study sponsored by Aquila;*

Dennis O’Dell testified about the end result of the Aquila Study.

The Study concluded that Aquila's membership in either RTO offers significant net benefits as compared to the stand-alone case. Specifically, the net benefits over the 2008 – 2017 time period analyzed were over \$21 million for MISO and over \$86 million for SPP.

(Ex. 1, O'Dell Direct, p.8) It is on the estimates provided in the Aquila Study that Staff, OPC and other parties have argued that this application should be denied. They contend that because the study shows greater estimated benefits accruing to Aquila by SPP membership there is detriment to the public if Aquila joins Midwest ISO.

For the arguments of these parties to have any merit, the Commission must first determine that the Aquila Study has accurately and reliably projected the benefits which Aquila would experience from membership in SPP. Stated differently, the question is whether the model employed by the Aquila Study has simulated the actual conditions that will exist for SPP and Aquila in the time period analyzed. Midwest ISO is confident that study has failed in these respects. In its 44 or more pages the Aquila Study engages in elaborate and complicated calculations that are at war with reality. If the Commission should decide to deny this application because the Aquila Study deems an "Aquila in SPP" is a better alternative than "Aquila in Midwest ISO" it will do so under a cloak of false confidence.

A. Flaws of the Aquila Study

Johannes P. Pfeifenberger was retained by Midwest ISO to review and analyze the Aquila Study. His testimony addresses for the Commission the flaws discovered in the Aquila Study particularly with respect to the manner in which it estimated the "Aquila in SPP" scenario.

Mr. Pfeifenberger is Principal and Director of The Brattle Group, an economic consulting firm with offices in Cambridge, Massachusetts; Washington, D.C.; San

Francisco; London; and Brussels. He is an economist with a background in power engineering and 20 years of experience in the areas of regulated industries, energy policy, and finance. He received an M.A. in Economics and Finance from Brandeis University and an M.S. in Electrical Engineering with a specialization in Power Engineering and Energy Economics from the University of Technology, Vienna, Austria. He is eminently qualified to speak to the Commission on these topics. He has frequently testified on RTO operational and transmission matters before the Federal Energy Regulatory Commission. His expertise has been sought out by state regulatory commissions, the courts and by Congress. (Ex. 5, JPP Rebuttal, p. 2; Schedule JPP-1).

Mr. Pfeifenberger was the only witness in this proceeding who investigated in depth whether the assumptions utilized by the Aquila Study could be confirmed, or at least corroborated, by actual conditions. No other witness undertook the task to confirm that the benefits Aquila might derive from RTO membership were based in actual fact and not invention. Mr. Pfeifenberger uncovered a series of assumed conditions each of which 1) were crucial to the Aquila Study's conclusions about the benefits of Aquila's SPP membership; and 2) were invalidated by actual fact.

In his rebuttal testimony he identified three aspects of the Aquila Study that should raise alarm with the Commission just as they did with him. The first was the magnitude of the benefits for Aquila joining SPP compared to the benefits estimated for Aquila joining the Midwest ISO. The difference was contrary to Mr. Pfeifenberger's experience with this type of study. (Ex. 5, JPP Rebuttal, p. 3-4)

Second, the Aquila Study suggests that participating in SPP would reduce Aquila's Missouri generation by between 15% and 23%, whereas participation in the

Midwest ISO would reduce it only by between 1% and 3%. The 15% to 23% displacement of Aquila Missouri generation in the SPP case, as compared to only 1% to 3% in the Midwest ISO case, was utterly contrary to what commonly is the extent to which RTO participation may affect generation dispatch.

Finally, the larger SPP benefits as well as the large displacement of Aquila Missouri generation in the SPP case are driven almost entirely by the Aquila Study's assumptions and results for the commitment and dispatch of a single merchant power plant, the Aries plant, in Aquila's control area. (Ex. 5, JPP Rebuttal, p. 5)

Upon closer inspection, Mr. Pfeifenberger found that the production cost savings estimated in the Aquila Study (1) were driven by entirely unrealistic simulation of unit commitment for the Aries plant¹³ in the Aquila control area; and (2) were exacerbated by the erroneous treatment of Aries-related "uplift" costs in the "Aquila in Midwest ISO" case. As mentioned in an earlier section of this brief, the Aquila Study also assumes that SPP has a full Day 2 market, exactly like Midwest ISO's, but SPP does not have a full Day 2 market and it is not clear whether it will ever have one. (Tr. 77, lines 5-12) **If these items are corrected, the Aquila Study's estimated RTO-related benefits are essentially the same for Aquila's participation in either the Midwest ISO or SPP.**

Mr. Pfeifenberger explained the use of the term "uplift costs." "Uplift" costs are start up and operating costs incurred by a generator that are greater than the price of power during the time the unit is committed and operated. He testified that in the Midwest ISO, "uplift" costs are allocated to and paid by **all** load serving entities and

¹³ The Aries plant is the name in the Aquila Study for an approximately 600 MW gas-fired combined-cycle merchant plant that is now called the Dogwood plant. The name of the power plant changed when the facility was sold by Calpine to Kelson Energy in January 2007. (Ex. 5, JPP Rebuttal, p. 5)

other market participants in order to generate sufficient revenue to compensate the generator for providing power.¹⁴

As Mr. Pfeifenberger explained, in the Aquila Study the estimated “uplift” costs for the Aries plant were greatly and erroneously overstated in the Midwest ISO case. In addition, to make matters worse, they were also assigned **solely** to Aquila in all scenarios, which is contrary to what would occur in real conditions. This, again, leads to estimates by the Study of SPP benefits that are erroneously and significantly overstated relative to the estimated Midwest ISO benefits.

1. Unrealistic Simulation of Aries Unit Commitment

After explaining how the Aquila Study computes the cost savings that could be realized from the “Aquila in Midwest ISO” and “Aquila in SPP” scenarios, Mr. Pfeifenberger testified that:

[d]ue to unique interactions of the simulation model’s commitment algorithm and the modeled generation and load serving requirements within the Aquila control area, the model greatly over-commits the Aries merchant plant in the “Aquila Stand Alone” and the “Aquila in Midwest ISO” cases, but not in the “Aquila in SPP” case. The commitment of the Aries unit in both of these cases is uneconomic thereby causing Aquila to incur greater costs in these cases than in the “Aquila in SPP” case.¹⁵ **As such, the disproportionately larger benefit of participation in SPP is due to the fact that the uneconomic costs associated with over commitment of the Aries unit are not present in the “Aquila in SPP” case.** [emphasis supplied]

(Ex. 5, JPP Rebuttal, p. 8-9)

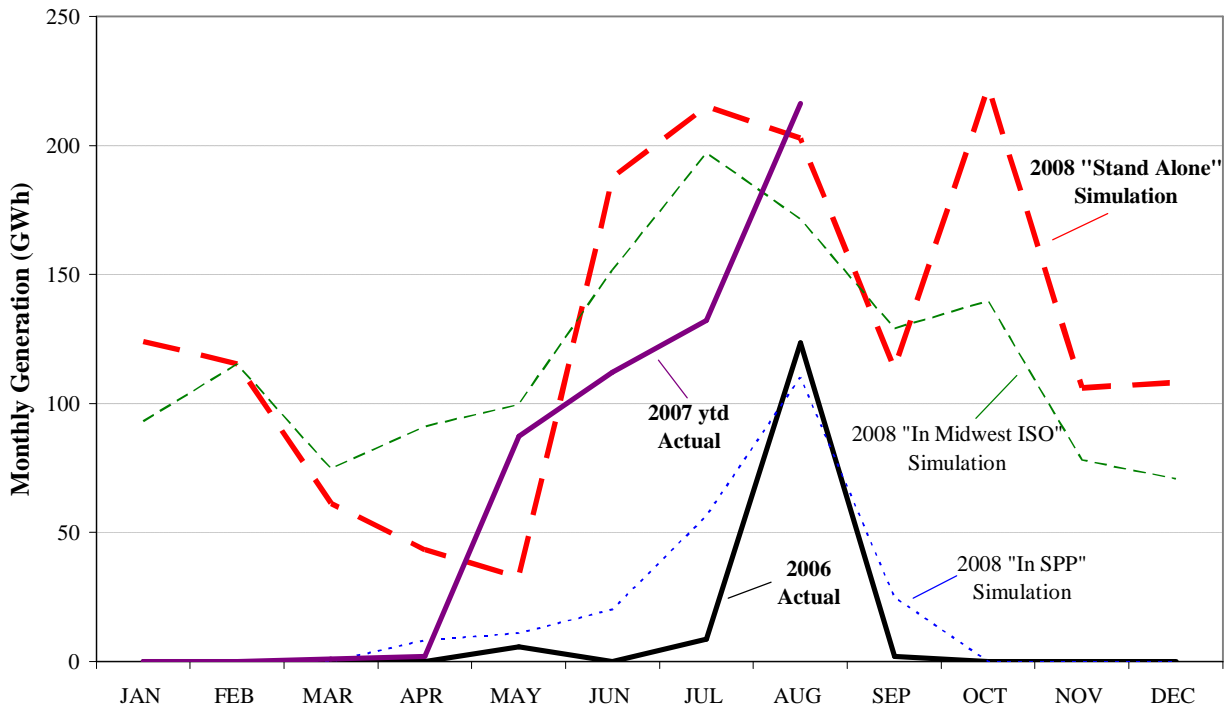
¹⁴ Start up and operating costs that exceed market prices are routinely incurred by vertically integrated utilities and paid for by ratepayers. These costs are part of the overall operating costs incurred by the vertically integrated utility as part of its unit commitment and dispatch process. In this sense, these costs are not new or unique to RTOs. They are simply made transparent under the RTO’s market design. (Ex. 5, JPP Rebuttal, p. 6 fn 4).

¹⁵ Regarding uneconomic dispatch, Mr. Pfeifenberger observed that in the “Aquila Stand Alone” and “Aquila in Midwest ISO” cases, the Aries plant is committed and dispatched (mostly only at minimum load) routinely even when the price for power is less than the cost of operating the Aries plant. This renders the model results unrealistic. (Ex. 5, JPP Rebuttal, p. 9)

Compounding the unrealistic simulation of the Aries Plant, the Aquila Study assumes that Aquila (and only Aquila) would make the Aries plant whole, financially, by paying an “uplift” charge to cover the difference between the high cost to operate the unit and the often much lower price for market available power under the simulation. Because the simplified modeling under the Aquila Study improperly dispatched the Aries plant, it then allocated substantial uplift costs solely to Aquila which resulted in artificially and unrealistically inflating costs to Aquila in the “Aquila Stand Alone” and “Aquila in Midwest ISO” cases as compared to the “Aquila in SPP” case. Consequently, **the Aquila Study incorrectly overstates the estimated benefits of Aquila being in SPP relative to the benefit of Aquila joining the Midwest ISO.**

To confirm his findings and conclusions, Mr. Pfeifenberger examined historical data related to the dispatch of the Aries Plant. He compared the simulated commitment and dispatch of the Aries generating unit in 2008 for the three cases presented in the study—the “Aquila Stand Alone” case, the “Aquila in Midwest ISO” case and the “Aquila in SPP” case—with the actual historic generation of the Aries plant. His comparison was reduced in Figure 1 found on page 11 of his rebuttal testimony. Figure 1 is reproduced below.

Figure 1: Aries Monthly Generation
2006-07 Actual vs. 2008 Simulations



Sources: CRA Workpapers (simulations), EIA / Energy Velocity (actuals)

Figure 1 shows that the market simulation for the “Aquila Stand Alone” case (dashed red line) resulted in substantially greater dispatch of the Aries plant than the dispatch levels the plant has actually experienced in 2006 and 2007 (solid black and purple lines). The same is true for the “Aquila in Midwest ISO” case (dashed thin green line). In comparison, the “Aquila in SPP” case resulted in a simulated Aries dispatch that is close to the plant’s actual operations during 2006.

Importantly, Figure 1 reveals that under actual market conditions the Aries plant generally is not dispatched during the fall, winter and early spring. This makes intuitive sense because during these relatively lower-load periods the regional power market is dominated by coal-fired power plants, which generally makes it uneconomic to operate natural-gas fired power plants, such as Aries. Moreover, Aquila’s purchase history

similarly suggests that the plant is fairly inactive during winter months. Mr. O'Dell testified that, for instance in 2001, Aquila purchased no power from Aries in January and February and roughly 13,000 MWh over November and December of that year, substantially less than the 100,000 MWh's it would purchase during the summer when peaking power is needed. (Tr. 63.) As shown above in Figure 1, the model used in the Aquila Study forces an unrealistic dispatch of the Aries plant in the "Aquila Stand Alone" and "Aquila in Midwest ISO" cases of approximately 100 GWh (or 100,000 MWh) during the winter months. This improperly and unrealistically adds significant uplift costs to these two scenarios. However, because the unrealistic dispatch and associated costs do not occur in the "Aquila in SPP" case, the CRA study attributes this erroneous difference to SPP-related benefits, which then compounds this error and greatly overstates the study's estimate of SPP-related benefits.

2. Magnitude of the Uplift Costs

Mr. Pfeifenberger reviewed the workpapers for the 2008 simulations used in the Aquila Study and found that the out-of-market dispatch of the Aries plant added over \$15 million in unrealistic uplift costs to the "Aquila Stand Alone" case and approximately \$13 million of erroneous uplift costs in the "Aquila in Midwest ISO" case. (Ex. 5, JPP Rebuttal, p.13). The simulation results for the "Aquila in SPP" case resulted in negligible uplift costs of only approximately \$0.1 million. Interestingly and inexplicably, this latter amount (\$0.1 million) was based on the more reasonable and historic dispatch of the Aries unit.

Midwest ISO contends that the colossal uplift costs imposed on Aquila in the "Aquila in Midwest ISO" case strongly supports the conclusion that the portion of the

Aquila Study relative to the estimated greater benefit of Aquila joining SPP is seriously flawed, completely unreliable, and purely fiction. By just excluding the improperly calculated uplift costs from consideration is illustrative of this point. Mr. Pfeifenberger prepared a table that illustrates for the Commission the effect of excluding the unrealistic Aries uplift costs calculated and assigned by the Study in 2008¹⁶ that were assigned solely to Aquila.

Table 1: 2008 Aquila Net Generation Costs Without Aries Uplift Costs¹⁷

	Total Aquila Costs Original 2008 case	Aries Uplift	Total Aquila Costs Without Aries Uplift
Aquila Stand Alone	\$231.8 million	\$15.3 million	\$216.4 million
Aquila in Midwest ISO	\$225.4 million	\$13.0 million	\$212.4 million
Aquila in SPP	<u>\$218.0 million</u>	\$0.1 million	<u>\$217.9 million</u>
SPP cost reduction	\$13.8 million		(\$1.5) million
Midwest ISO cost reduction	\$6.4 million		\$4.0 million
Apparent SPP Advantage over Midwest ISO	\$7.4 million		(\$5.5) million

The first column summarizes the Aquila Study results for 2008 prior to adjusting for the unrealistic Aries uplift costs. This column shows that the Aquila Study's estimated 2008 annual benefits of Aquila joining SPP exceed the benefit of joining the Midwest ISO by \$7.4 million. However, if the unrealistic Aries uplift charges shown in the second column are excluded from the determination of Aquila costs, the revised

¹⁶ It should be noted that these are the uplift charges just for one of the ten years covered by the Aquila Study. During cross examination Witness Proctor indicated that he expected that any uplift charges for all other years would be allocated solely to Aquila in a similar fashion. Tr. 305, ln. 15-17, 306ln. 19-24).

¹⁷ The costs and cost differentials in this table are stated in 2005 dollars. The 2008 cost differentials in Tables 15 and 16 of the Aquila Study (p. 39) are stated in nominal (i.e., actual 2008) dollars. As stated in footnotes 7 and 13 of the Aquila Study, an inflation rate of 2.5% was applied to convert the simulation results (in year-end 2005 dollars) to the trade benefits (in mid-year 2008 dollars) shown in Tables 15 and 16.

results indicate the estimated annual benefits of Aquila joining SPP could be \$5.5 million less than the benefits of joining the Midwest ISO.¹⁸

3. *Erroneous Assignment of the Uplift Costs Exclusively to Aquila.*

In order for the full extent of the uplift costs to be allocated to Aquila as set out in the Aquila Study, the Study must assume that Aquila is under contract with Aries (Dogwood) so as to be obligated to pay the above market costs of its operations. (Ex. 5, JPP Rebuttal, p.15) In the absence of such a contract, Aquila would have no obligation for those costs. Each witness questioned on this critical point confirmed that no such contract existed. Mr. O'Dell admitted on cross examination that Aquila had no contract to purchase power from Dogwood. (Tr. 59). Dogwood's witness Mr. Robert Janssen was not aware of any contract either. (Tr. 403). Accordingly, the testimony and evidence is clear on this point; the simplified Study resulted in uplift costs, and those uplift charges were unrealistically and erroneously assigned solely to Aquila under the Study.

Mr. Pfeifenberger also testified that:

Further, even if the Aries plant was physically owned or contractually obligated to provide power to Aquila, which it is not, it would still not make sense for Aquila to commit the plant to generate, as modeled, under out-of-market conditions. Aquila simply does not need to rely on out-of-market (i.e., uneconomic) generation from the Aries plant. As shown in Table 14 of the Aquila Study (p. 38), Aquila physically or contractually owns over 1,900 MW of generation resources—which compares to a modeled 2008 peak load of 1,942 MW. In fact, Aquila's modeled 2008 load exceeds 1,700 MW during only approximately 200 hours a year. Thus, Aquila rarely needs to rely on non-Aquila generating resources from a reliability perspective.

¹⁸ Mr. Pfeifenberger was quick to point out however that the substantial variance in Aries commitment across the three scenarios also distorts market prices and the dispatch of other generation in the regional market. As such, the adjusted results in Table 1 are only indicative of the relative direction to which RTO savings for the Midwest ISO and SPP cases are affected by the unrealistic commitment of the Aries plant.

(Ex. 5, JPP Rebuttal, p. 15). Mr. O'Dell verified during cross examination that Aquila does not rely on the Aries (or Dogwood) plant for load serving or reliability reasons and that Aquila purchases only economy power from that plant. (Tr. 60). Any suggestion in the Aquila Study to the contrary is entirely baseless and inaccurate.

Mr. Pfeifenberger also ran simulations with the assistance of CRA which allowed him to estimate the impact on benefits quantified in the Study if the Aries plant were excluded. The results of this sensitivity analysis were shown on Table 2 of his rebuttal:

Table 2: 2008 Aquila Net Generation Costs Without Aries¹⁹

	Total Aquila Costs Original 2008 case	Total Aquila Costs “No-Aries” Sensitivity
Aquila Stand Alone	\$231.8 million	\$224.6 million
Aquila in Midwest ISO	\$225.4 million	\$220.9 million
Aquila in SPP	<u>\$218.0 million</u>	<u>\$220.6 million</u>
SPP cost reduction	\$13.8 million	\$3.95 million
Midwest ISO cost reduction	\$6.4 million	\$3.65 million
Apparent SPP Advantage over Midwest ISO	\$7.4 million	\$0.31 million

Table 2 illustrates that the large difference in estimated RTO-related benefits of Aquila joining the Midwest ISO versus SPP disappears if the Aries generating plant is removed from the simulations. This valuable exercise²⁰ shows a difference in 2008 cost savings realized from Aquila participation in the Midwest ISO as compared to participation in

¹⁹ The costs and cost differentials in this table are stated in 2005 dollars. The 2008 cost differentials in Tables 15 and 16 of the Aquila Study (p. 39) are stated in nominal (i.e., actual 2008) dollars. As stated in footnotes 7 and 13 of the Aquila Study, an inflation rate of 2.5% was applied to convert the simulation results (in year-end 2005 dollars) to the trade benefits (in mid-year 2008 dollars) shown in Tables 15 and 16.

²⁰ As stated by Witness Proctor during cross examination, “I think Mr. Pfeifenberger provided some needed input to this process and pointed out some issues that probably wouldn’t have been discovered had he not been part of the process. So, yes, in that sense, I -- I appreciate his participation in the process.” (Tr. 299, ln. 8-12).

SPP of only \$0.3 million a year. This difference in estimated RTO-related savings is only 0.14%, or less than two tenths of one percent, of the estimated \$220 million in annual Aquila generation and net purchase costs. (Ex. 5, JPP Rebuttal, p. 18).

It is evident that the Aquila Study's original simulations result in erroneous and unnecessary imposition of uplift costs in the "Aquila Stand Alone" and "Aquila in Midwest ISO" cases. The results are unrealistic because, as Mr. Pfeifenberger testifies, (1) the Aries unit is neither owned by nor under contract to Aquila; and (2) the difference in Aquila's RTO-related cost savings cannot reasonably be expected to be driven entirely by the existence (or absence) of a single merchant generating plant. As the Tables above show once the Aries-related distortions are removed in the simulations, the estimate of RTO-related benefits of Aquila joining the Midwest ISO are virtually the same as those of Aquila joining SPP.

There is yet another important point to bring to the Commission's attention regarding the Aquila Study's allocation of the uplift costs to only Aquila in the "Aquila in Midwest ISO" scenario. If Aquila joined Midwest ISO and if the uplift costs were a factor in its membership, **100% those costs would not be Aquila's responsibility.** The Commission should be mindful that if Aquila joins Midwest ISO, generation and dispatch of the Aries would be arranged by Midwest ISO, not Aquila. If there were uneconomic dispatch of the Aries plant in those circumstances the costs would be incurred by all load serving entities and other market participants in the Midwest ISO not just Aquila.

Mr. Pfeifenberger explained that

Under the Midwest ISO tariff, the Aries plant would be reimbursed for its out-of-market costs through what are known as revenue sufficiency guarantee ("RSG") payments, which would be collected from all Midwest ISO load serving entities and other market participants that contributed to

the need to commit the Aries plant. **Under no circumstance would one hundred percent of incremental RSG charges be assigned to a single load-serving entity such as Aquila.** Rather, the Midwest ISO's RSG payments are recovered from all load-serving entities and other market participants in part based on an entity's load as a share of total Midwest ISO load and in part based on the extent their real-time schedules deviated from their day-ahead schedules. Considering that Aquila would constitute less than 2% of total Midwest ISO load,²¹ Aquila's share of Aries-related uplift costs would likely be minimal in the "Aquila in Midwest ISO" case. [emphasis supplied]

(Ex. 5, JPP Rebuttal, p. 22) Again, the Aquila Study's assumption that the uplift costs are an exclusive responsibility for Aquila is invalid.

B. Reactions of Buyers and Sellers to the Aquila Study.

The accuracy and reliability of the Aquila Study can also be measured by its acceptance or rejection among parties in this case who are active in the marketplace. The parties here include two "net buyers" and one "net seller" of power. The net buyers of power are Aquila and the City of Independence. The net seller is Dogwood Energy, the owner of the Dogwood or Aries Plant.

Dr. Proctor testified to a basic economic principle while under examination by attorneys for the City of Independence. He confirmed that buyers favor lower prices over higher prices and sellers prefer higher prices rather than lower prices. He also agreed that Aquila is a net buyer; Independence is a net buyer; and Dogwood is a net seller. (Tr. 291) The Commission will note from the position statements filed in this case, and from the interplay of the examination at hearing, that both Aquila and Independence contend that the Commission **should grant** Aquila's application to join Midwest ISO. Dogwood

²¹ For example, Aquila's projected 2008 peak load of 1,942 MW (as used in the Aquila Study) compares to a 2006 Midwest ISO peak load of approximately 109,000 MW.

Energy on the other hand asks for a Commission order denying the application and directing Aquila to join SPP.

Dogwood's opposition to Aquila's application cannot be reconciled with the results of the Aquila Study which shows that if Aquila joined Midwest ISO, Dogwood would make more money than if Aquila joined SPP. The comparison was shown on Schedule JPP-3 attached to Mr. Pfeifenberger's Surrebuttal testimony. This result is inconsistent with Dogwood's expectations of higher profits if Aquila joined SPP, which again invalidates the results of the CRA study with respect to the relative magnitude of Midwest ISO and SPP benefits offered to Aquila. (See Tr. 407-408).

For the "Aquila in SPP" scenario, the Aquila Study anticipates that in 2008, the first year of the membership under consideration, the Aries plant total output²² would be 231 gigawatt hours ("GWh"). Mr. Janssen, Vice President of Kelson Energy, Inc., which is the corporate parent of Dogwood Energy, LLC, and the owner of the Dogwood plant, testified that for 2007, the full year output for the plant was in the range of 781 GWh. (Ex. 16, Janssen Surrebuttal, p. 8), and that in 2008, he anticipated that the plant would generate 1000 gigawatt hours. (Tr. 396) Therefore, the Aquila Study predicts that if Aquila joins SPP, Dogwood's total output in the first year of the membership **would plunge** by 75% to 80%. If Aquila joins Midwest ISO, the Aquila Study predicts that Dogwood's first year total output would be 1413 gigawatt hours, a 41% increase in output.

Quite obviously, by recommending to the Commission that Aquila join SPP, Dogwood has discarded the Aquila Study findings. Dogwood is in the business of

²² Dr. Proctor also confirmed that the Aquila Study figures for the Dogwood Plant in each of the scenarios was total annual output, not just output to cover Aquila's power needs. (Tr. 385).

making money (Tr. 408) and it has determined that it will not make as much money if Aquila joins Midwest ISO. Is there any argument that Aquila should not be in the business of doing what will make more money for Dogwood? Is it not clear that Dogwood's interest in having Aquila join SPP may be directly contrary to what is best for Aquila and its customers? It should be telling to the Commission that net buyers ask that the Commission approve Aquila's request to join the Midwest ISO and that the net seller, contrary to what the Study suggests is in its best interest, so vigorously favors and argues that the Commission mandate membership in SPP. Dogwood's motivation to oppose the application is better understood when the existing relationships between Aquila, SPP and Midwest ISO are examined.

Issue 5: *To what extent should the Commission take into account the following in its determination of whether or not to approve Aquila's application to join MISO?*

d. Aquila's current relationships with MISO and SPP;

The Commission should consider the current relationships Aquila has with Midwest ISO and SPP.

A. Real Time Energy Price Comparison

As a consequence of Dogwood's insistence on Aquila joining SPP, Mr. Pfeifenberger decided to investigate and analyze real-time energy prices for SPP and Midwest ISO pricing points adjacent to the Aquila service area. Because SPP started its real-time market in February 2007, he was able to compare SPP and Midwest ISO prices for the 12 month period from February 2007 through January 2008. What he discovered was that on both a simple average and an Aquila purchase-weighted average basis, 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. His Surrebuttal testimony provided a table showing the comparisons:

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
<i>Source: ISO data compiled by Global Energy Decisions, Inc.</i>		

(Ex. 7, JPP Surrebuttal, p. 7)

These comparisons shine a bright light on Dogwood's motives in this case. If Dogwood's recommendations are adopted by the Commission, the Aries generating plant would enjoy improved access to a higher-priced market area while at the same time eliminating additional transmission charges for Dogwood that Dogwood currently faces

when selling into the SPP market area. Because Aquila is a net buyer of power, the higher prices in SPP also suggest that Aquila could face worse conditions by such a move; or, by comparison, would be in a better position by fully participating in the Midwest ISO rather than SPP. (Ex. 7, JPP Surrebuttal, p. 8).

B. Aquila's Interconnections with and Purchases From Midwest ISO and SPP.

The level of Aquila's interconnection with Midwest ISO as compared to SPP has been an issue in this proceeding. Aquila is more heavily interconnected with SPP but that, however, has not influenced the nature and extent of power purchased by Aquila from Midwest ISO. Aquila actually purchases just as much, if not more of its power from the Midwest ISO than from SPP. Mr. Pfeifenberger prepared Schedule JPP-5, which summarized data provided by Aquila in response to Dogwood data requests Nos. DOG-0001 and DOG-0004. The schedule shows that in 2007 Aquila actually purchased significantly more power from the Midwest ISO market than from the SPP market.²³ (Ex. 7, JPP Surrebuttal, p.13).

The Commission should also pay close attention to Schedule JPP-6 attached to Mr. Pfeifenberger's Surrebuttal. This schedule shows Aquila's summary of transactions with counterparties in SPP and the Midwest ISO. Aquila has been a net buyer from the Midwest ISO, while it has been a net seller to SPP. Not considering Aquila's sales into SPP, the 2007 gross purchases from both the Midwest ISO and SPP have been approximately 300,000 MWh per year. However, based on these data, the average

²³ 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).

Midwest ISO purchase price was more than \$7/MWh below the average SPP purchase price. The data also show that purchases from the Midwest ISO have been increasing, while purchases from SPP have been falling.

Issue 5: *To what extent should the Commission take into account the following in its determination of whether or not to approve Aquila's application to join MISO?*

e. Differences in the development of electricity markets between MISO and SPP;

Midwest ISO contends that this is definitely a matter which the Commission should consider. It would be inappropriate and shortsighted to ignore the size of the Midwest ISO and the maturity of its markets and operations when reviewing the pertinent factors in this docket. In previous sections of this brief, the Midwest ISO has highlighted the characteristics of its market, its administration, and the advancements in services it provides to its participants.

Unlike Midwest ISO, SPP does not have a full Day 2 market and it bears repeating that it is unknown if it ever will have a full Day 2 market.

As testified to by Mr. Janssen, transmission service requests are regularly denied by SPP due to unavailability of transmission. (Tr. 391). SPP lacks centralized or optimized unit commitment. (Tr. 392) SPP still uses Transmission Loading Relief (TLR) to manage congestion on its network. The TLR is used by SPP because it still has physical schedules as opposed to financial schedules for transmission service. (Tr. 394). SPP's quarterly reports show a very significant number of TLRs and a dramatic jump in their number since the start of the market. (Tr. 395).

In 2005, SPP was able to use only 90% of its transmission facilities because of inefficient congestion management. SPP's inefficient congestion management was assumed for purposes of the Aquila Study. (Tr. 421-422).

Issue 5: *To what extent should the Commission take into account the following in its determination of whether or not to approve Aquila's application to join MISO?*

f. The proposed acquisition of Aquila by Great Plains Energy that is the subject of Case No. EM-2007-0374;

As Midwest ISO stated in its previously filed position statement, the acquisition of Aquila by Great Plains Energy should not be considered by the Commission in this case. Applicant has been steadfast in its position that this should not be a consideration and it has considered the implications. (Aquila Statement of Position, p. 4; Tr. 80, ln. 6-10). This would add a significant layer of complexity that is better left to the Applicant to assess and decide upon. If and when appropriate, Applicant does have the opportunity to affirmatively pursue another course of action. If the Commission were to approve the acquisition/merger and it closes, and the resultant combined company wishes to operate within a single RTO, the combined company could follow the procedures outlined in the agreements it signed and withdraw its Aquila transmission assets from the Midwest ISO by providing appropriate notice and honoring its contractual obligations. The Midwest ISO submits that Applicant is in the best position to understand and assess the potential impacts and implications. Aquila has chosen to stay the course and request authority from this Commission to join the Midwest ISO.

Issue 5: *To what extent should the Commission take into account the following in its determination of whether or not to approve Aquila's application to join MISO?*

- g. *Union Electric Company's continuing membership in MISO;*

This is not a consideration in this case. If AmerenUE elects to withdraw its transmission assets from the functional control of the Midwest ISO at some point in the future, the Transmission Owners Agreement provides certain rights to Aquila to protect it against adverse consequences of AmerenUE's actions if any should take place. Further, AmerenUE is a member of the Midwest ISO and it has filed its request to continue to be a Midwest ISO member.

Issue 5: *To what extent should the Commission take into account the following in its determination of whether or not to approve Aquila's application to join MISO?*

- h. *Aquila's obligation to MISO made in FERC Docket No. ER02-871 to file and support Aquila's application to join MISO;*

As part of its initial filing, the Applicant provided reference to the settlement that was reached and subsequently approved by FERC under Docket No. ER02-871. While the record in the instant matter is replete with most if not all of the witnesses recognizing the settlement exists and was one of the factors that Aquila took into consideration when filing its request, there is precious else presented. Staff Witness Proctor who was directly questioned on the topic simply recognized and indicated this was a settlement between the Company and the Midwest ISO. (Tr. 341, ln. 19-20). He further stated that, "I think the Commission understands that agreement was out there and you agreed to do that and it was in the context of—of—of—a disagreement that you – well a case." (Tr. 341, ln 22-25). Intervenor Dogwood Energy, through its witnesses and counsel, made unfounded allegations that the agreement was somehow "stale" but failed to provide any further information as to what this meant, any legal basis or any support whatsoever for their

claim. Although a FERC approved agreement such as this may potentially have implications for Aquila or others, the basic terms are consistent with the relief sought and are what has been supported in this docket. Further, the agreement is not currently before the Commission for review and approval and therefore is of little import. Finally, because the case presented in support Aquila's requested relief has amply met the burden of showing that it is not detrimental to the public interest, there is no need to bother further with this issue.

CONCLUSION

The record evidence in this matter firmly supports a finding and conclusion that considerable benefits will flow to Aquila and its customers from membership in the Midwest ISO. Those benefits include the Midwest ISO's expansive footprint and membership base; its sophisticated day ahead market, soon-to-be-operating ancillary services market; and its transmission planning features. As a member of Midwest ISO, compared to "stand alone" operations, Aquila will experience improved reliability and improved efficiencies all derived from the Midwest ISO's extensive North American presence, its high speed processing systems, and broad and thriving wholesale market.

The Aquila Study cannot and should not be excluded from consideration in this matter. It does have its flaws and shortcomings but those relate to the SPP analysis and, as noted above, are irrelevant to these considerations. The Midwest ISO contends, as does Aquila, that the Aquila Study does fully justify and support approval of Aquila's membership in Midwest ISO. Under the "not detrimental to the public interest" standard applicable to this case, the Commission can close its evaluation and rule in favor of the application without other inquiry.

If the Commission should, over the objections of Applicants, Midwest ISO and others, delve into and attempt to engage in an evaluation of the SPP alternative, the Commission must recognize and conclude that the degree of imprecision and incorrect assumptions abounding in that part of the Aquila Study which tangentially examines “Aquila in SPP” precludes its use in deciding about the benefits of Aquila’s membership in SPP versus Midwest ISO.

Based upon the foregoing, the Commission should approve Aquila’s application and allow Aquila to promptly join the Midwest ISO so as to allow Aquila’s customers to begin to realize the full and growing list of benefits that this RTO can and does provide each and every day.

Respectfully submitted,

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Certificate of Service

I hereby certify that a true and correct copy of the above and foregoing document was sent via e-mail on this 29th day of May, 2008 to:

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