BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF A SHOW CAUSE ORDER )
DIRECTED TO ENTERGY ARKANSAS, INC. )
REGARDING ITS CONTINUED MEMBERSHIP IN THE )
CURRENT ENTERGY SYSTEM AGREEMENT, OR ANY ) Docket No. 10-011-U
SUCCESSOR AGREEMENT THERETO, AND )
REGARDING THE FUTURE OPERATION AND )
CONTROL OF ITS TRANSMISSION ASSETS )

SUPPLEMENTAL INITIAL TESTIMONY

OF

CARL A. MONROE
EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER
SOUTHWEST POWER POOL, INC.

ON BEHALF OF SOUTHWEST POWER POOL, INC.

JULY 12, 2011
Q. Please state your name and business address.

A. My name is Carl A. Monroe. My business address is 415 N. McKinley, Suite 140, Little Rock, AR 72205.

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

A. I am employed by Southwest Power Pool, Inc. (“SPP”) as Executive Vice President and Chief Operating Officer.

Q. Mr. Monroe, have you previously filed testimony in this docket?

A. Yes, I filed Direct Testimony in this docket on February 11, 2011 and Supplemental Direct Testimony on March 18, 2011.

Q. What is the purpose of your testimony today?

A. The purpose of my testimony is to establish that membership in SPP is the best Regional Transmission Organization (“RTO”) option for Entergy Arkansas, Inc. (“EAI”), as well as all of the Entergy Operating Companies (“Entergy”). Accordingly, my testimony will specifically address Entergy’s May 12, 2011 Evaluation Report (“Evaluation Report”), and I will also address a number of specific quantitative and qualitative factors which support the conclusion that SPP should be the RTO of choice. In addition, I will address the benefits Arkansas and its ratepayers if Entergy joined SPP and I will also explain the negative impacts on the SPP system and Arkansas ratepayers should Entergy join the Midwest ISO (“MISO”). I will demonstrate that this should not be a decision
merely centered on a Day 2 market and that there are many other factors that should be considered. These factors include, but are not limited to, a lack of transfer capability between MISO and Entergy, the costs and benefits of transmission upgrades, various operational matters, and other significant issues herein and in the testimony submitted in this docket by Mr. Craig Roach of Boston Pacific Company, Inc., on behalf of SPP.

Q. **How is your testimony presented here today?**

A. My testimony is essentially divided into 8 sections.

Q. **What are the 8 sections and could you briefly describe them?**

A. Yes. A description of each section is provided in Table One below.

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SECTION I: SPP’S VIEW OF ENTERGY’S RTO ASSESSMENT

Q. What is SPP’s overall view of Entergy’s RTO assessment?

A. SPP agrees with Entergy that RTO membership is in the best interest of Entergy and its customers; however SPP believes that SPP membership is a much better choice for Entergy’s ratepayers and the region than MISO. Additionally, SPP believes that the Entergy-MISO proposal creates numerous transmission and operational problems as well as significant cost risks to Entergy customers, SPP’s members and other Arkansas ratepayers, that are not in the public interest.

Q. Why does SPP believe that it is a better RTO choice for Entergy than MISO?

A. There are a number of reasons, but my testimony will focus on two main reasons. First, the independent analysis and study performed by Charles River Associates (“CRA”), indicates that the SPP option is better for consumers from the cost and benefit perspective than MISO. This economic evaluation is described in the testimony of Mr. Roach, which also includes economic benefit to Arkansas if Entergy joins SPP instead of MISO. Second, SPP is a much stronger choice from a qualitative benefits perspective when considering SPP’s governance structure, including that of SPP’s Regional State Committee (“RSC”), as well as the trust that has been developed through the history of SPP’s stakeholder process.

Q. Does Entergy joining SPP create more risk for Entergy customers?

A. No, Entergy joining SPP provides more certainty and less risk for Entergy’s customers than the alternative. There would not be a transition period if Entergy
joins SPP as compared with a transition period of many years if Entergy joins MISO. By joining SPP, Entergy customers would have the certainty of RTO benefits, in contrast to the unknowns associated with the MISO transmission planning proposal. SPP would not have to seek waivers or exceptions from its regulators if Entergy joined.

Q. You mentioned transmission and operational problems as well as cost risk to Entergy customers, could you elaborate?

A. Yes, as explained in more detail in Section IV of my testimony, the Entergy-MISO proposal to “remedy” the lack of meaningful transmission interconnection between MISO and Entergy, is to impose never before contemplated power flows on the transmission system of SPP members and adjacent systems like Tennessee Valley Authority (“TVA”) and Associated Electric Cooperative Inc. (“AECI”) without compensation. This “remedy” will unfairly impose cost burdens on SPP members including the SPP member utilities serving customers in Arkansas. In addition to the compensation concerns related to usage of SPP transmission facilities, the proposal to deliberately rely upon the transmission systems of others creates operational problems for grid operators and places significant cost risks upon Entergy’s customers. Further, without fair compensation for usage of SPP’s and others’ transmission systems, there is no incentive to proactively manage flows on the transmission system or to expand the transmission system in order to reduce operational and cost risks. Finally, as explained in Section V and VI of my testimony, the Entergy-MISO proposal for a special MISO South Planning
Region raises a series of significant issues and the pending MISO capacity market places significant cost risks on Entergy’s customers, as well as its neighbors.

Q. Are you familiar with the independent studies conducted by CRA?

A. Yes. I have previously relied upon studies conducted by CRA in my prior testimony, which are as follows: Cost-Benefit Analysis of Entergy and Cleco Joining the SPP RTO, dated September 30, 2010, (“SPP Entergy/Cleco CBA”); the Cost-Benefit Analysis of Entergy Arkansas, Inc. Joining the SPP RTO, dated October 27, 2010, (“SPP EAI CBA”); the Cost-Benefit Analysis of Entergy and Cleco Power Joining the SPP RTO Addendum Study, dated December 8, 2010, (“SPP Addendum CBA”); the Cost-Benefit Analysis of Entergy/Cleco Power or Entergy Arkansas Joining MISO, Addendum Study, dated March 10, 2011, (“MISO CBA” and collectively, with the SPP Entergy/Cleco CBA, SPP EAI CBA and SPP Addendum CBA, the “CRA Studies”) and the Summary of CBA Modeling Differences, dated March 10, 2011, (“Modeling Summary”).

As I have previously testified, the SPP Entergy/Cleco CBA was conducted under the direction and guidance of the Entergy Regional State Committee (“E-RSC”) and the Federal Energy Regulatory Commission (“FERC”), through an extensive open and transparent process with participation open to any and all stakeholders and interested parties, including Entergy. The SPP EAI CBA relied upon the same assumptions and was also developed under the direction and guidance of the E-RSC, stakeholders and interested parties in the same open and transparent...
manner. The MISO CBA study process, on the other hand, relied upon
assumptions which did not undergo the extensive vetting that took place in the
SPP Entergy/Cleco CBA and the SPP EAI CBA. There was no FERC, E-RSC or
extensive stakeholder oversight or involvement, and the process was not open and
transparent.

Q. Why were the CRA Studies conducted?

A. The SPP Entergy/Cleco CBA was conducted under the direction of the Arkansas
Public Service Commission (“Commission”) and FERC. On June 24, 2009,
FERC Chairman John Wellinghoff offered to pay for the cost benefit study of
Entergy joining SPP, but not the cost of the individual Entergy Operating
Company studies. This Commission then ordered SPP to conduct an EAI specific
study of the costs and benefits associated with EAI becoming a full ‘stand-alone’
member of SPP, with the assistance of an independent third party. Following an
extensive proposal and bidding process, FERC retained CRA to conduct the SPP
Entergy/Cleco CBA and in Order No. 6 in this docket, this Commission directed
SPP to coordinate with CRA to facilitate such a study and EAI was ordered to
fully cooperate with SPP and CRA. It is my understanding that the intention of
both FERC and this Commission was to have a study conducted by an
independent third-party consultant, in order to enhance the credibility and
reliability of the study.
Q. Have you reviewed the Evaluation Report and related testimony filed in this docket by Entergy on May 12, 2011?
A. Yes, I have reviewed the Evaluation Report and related testimony.

Q. Do you have any concerns with the findings contained in the Evaluation Report?
A. Yes, the Commission ordered that an independent study of the benefits and costs of Entergy joining the SPP in Order No. 6 in this Docket and Order No. 10 in Docket No. 08-136-U. My concern is that Entergy’s internal evaluation and comparison between SPP and MISO is not independent and was not openly vetted. Instead, the report comparing MISO and SPP is skewed toward MISO and attempts to reverse the findings of CRA’s independent study. My concerns are further heightened in light of the findings contained in Mr. Roach’s testimony.

Q. How are your concerns related to the orders of the Commission?
A. Having participated in this Docket and read the Commission’s Orders, it is my impression and understanding that the APSC realizes that the magnitude of the decision of what EAI does after exiting the System Agreement is extremely important to Arkansas ratepayers for years, if not decades, to come. As such, the Commission ordered that an independent study and evaluation be conducted so that the Commission will be presented fair evaluations of all the EAI’s option upon its exit from the System Agreement and that this information will ultimately help the Commission decide what is best for Arkansas ratepayers. Based upon
my reading of the Commission’s Orders, the Commission placed a strong emphasis on the independence of the studies so that the findings would be fair, meaningful, and helpful to the Commission in its deliberations in this proceeding. After participating as a stakeholder in the studies related to SPP that were performed by CRA and contrasting the CRA study with Entergy’s Evaluation Report, I am concerned that Entergy altered the independent CRA studies to, in essence, reverse CRA’s conclusion that joining SPP would yield greater net benefits. Also, by conducting its own Evaluation Report in house, Entergy disregards the Commission mandate that the evaluation be independent.

Q. What were the conclusions of CRA’s independent analysis?

A. The conclusions of the CRA independent study were that the trade benefits of Entergy joining SPP were $155 million (or 21%) greater than Entergy joining MISO and that, in the end, the potential benefits were greater with Entergy as a member of SPP as compared to MISO. The results are shown in the table below and explained in greater detail in the testimony of Mr. Roach.
Table Two
CRA’s Estimates of Net Benefits to the Entergy Area
(Present values for 2013 to 2022 in millions)

<table>
<thead>
<tr>
<th></th>
<th>Join SPP(^1)</th>
<th>Join MISO(^2)</th>
</tr>
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<tbody>
<tr>
<td>Trade Benefits</td>
<td>$891</td>
<td>$737</td>
</tr>
<tr>
<td>Administrative Costs</td>
<td>($230)</td>
<td>($209)</td>
</tr>
<tr>
<td>Net Benefits</td>
<td>$661</td>
<td>$529</td>
</tr>
<tr>
<td>Transmission Cost Allocation</td>
<td>($937) to $23</td>
<td>($782)</td>
</tr>
<tr>
<td>Net benefits After Allocation</td>
<td>($276) to $684</td>
<td>($254)</td>
</tr>
</tbody>
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Q. In its Evaluation Report, did Entergy come to the same conclusion as CRA?

A. No. Entergy’s revisions reversed the CRA conclusion in favor of joining MISO.

Q. Do you have concerns with Entergy’s reversal?

A. Yes. I also believe the Evaluation Report contains incorrect and inaccurate assumptions and calculations of the benefits and costs of Entergy joining SPP or MISO. The testimony of Mr. Roach specifically addresses these inaccuracies, incorrect assumptions and calculations in detail.

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\(^2\) Ibid at page 11.
Q. Do you have other concerns with the Evaluation Report?

A. Yes. I have two other major concerns with the report. These concerns relate to MISO’s proposed capacity market and the special Entergy planning zone which has been referred to as MISO South.

Q. What are your concerns with the report as it relates to MISO’s proposed capacity market?

A. The report lacks any analysis and contains no detail about the cost risk to Arkansas customers that I think should be considered when analyzing a capacity market. I discuss in more detail, my concerns with MISO’s capacity market in Section VI of my testimony.

Q. What are your concerns with the report as it relates to the proposed special Entergy Planning Region or a MISO South?

A. The report lacks any detail as to how the proposed MISO South planning region will work. The report does not detail how transmission upgrades will be selected and what cost allocation methodology will used to fund these upgrades. As the Commission knows, the SPP process for determining transmission upgrades and the cost allocation methodologies as developed and approved by the SPP RSC are in operation and are open and transparent. These are very important issues to this region’s transmission system. In light of this Commission’s previously expressed concerns about the lack of investment in transmission by Entergy, all impacted stakeholders should have the ability to know and understand the details of this
special planning region. I know that these details are very important to SPP in how we would need to plan for transmission projects in Arkansas along a new SPP-MISO seam. I discuss these concerns in more detail in Section V of my testimony.

Q. What is your opinion as to the consideration that should be given to the Evaluation Report?

A. It is my opinion that the Commission should consider the independent CRA Studies that were ordered by it and were facilitated by FERC. I also recognize that the Commission will likely give consideration to the Evaluation Report. By the same token, I urge the Commission to consider the analysis of the report conducted by Mr. Roach and which is the subject of his testimony that explains the numerous inaccuracies and incorrect assumptions in Entergy’s Evaluation Report.

SECTION II. QUANTITATIVE BENEFITS TO MEMBERSHIP IN SPP

Q. What are the quantitative benefits of Entergy joining SPP?

A. The quantitative benefits of Entergy joining SPP are numerous. For purposes of my testimony, I will concentrate my discussion on the most significant quantitative benefits. These benefits include trade benefits and other production cost benefits, which could include savings related to the procurement of contingency reserves, planning reserves, and regulation. In its study, CRA found that joining SPP would lead to “potentially lower regulation and capacity reserve
requirements.” By capacity reserve requirements, CRA means planning and contingency reserves. The lower contingency and planning reserves would stem from SPP offering a more efficient reserve procurement and management process. The reduction in regulation requirements would be driven by the combination of increased operational coordination between SPP and Entergy and by a reduction in the aggregate variability of load and resources that is inherent in a larger, more diverse system.

Q. **Are the quantitative benefits limited to Entergy’s customers?**

A. No. Entergy joining SPP will bring benefits to the State of Arkansas, including existing SPP members that are Arkansas utilities. These include the Arkansas Electric Cooperative Corporation (“AECC”), Southwestern Electric Power Company (“SWEPCO”), Oklahoma Gas & Electric Company (“OG&E”), and the Empire District Electric Company (“Empire”).

Q. **Do you believe that the Commission should consider the benefits to other Arkansas utilities that are members of SPP in addition to benefits to Entergy’s customers during the Commission deliberation of this docket if Entergy should join SPP?**

A. Yes. Although EAI has approximately 693,000 customers, there are approximately 674,000 non-EAI customers in Arkansas. Specifically, AECC has approximately 490,000 Arkansas customers, SWEPCO has approximately 114,000 Arkansas customers, OG&E has approximately 66,000 Arkansas
customers, and Empire has approximately 4,000 Arkansas customers. Entergy’s
decision will impact almost as many non-EAI Arkansas customers as it will EAI’s
customers. I believe that the Commission has an obligation to consider the
impacts of EAI’s decision on all Arkansas ratepayers.

Q. Did Entergy consider the impact of its decision on non-EAI customers in the
   State of Arkansas?

A. No. See EAI’s response to SPP Data Request 1, Question No. 5, filed in this
docket on June 23, 2011, and attached hereto as Attachment 1.

SECTION III. QUALITATIVE BENEFITS OF MEMBERSHIP IN SPP

Q. Could you explain the various qualitative benefits of EAI/Entergy’s
   membership in SPP?

A. Yes, while there are many, one of the most significant qualitative benefits is the
   high level of involvement and influence among SPP’s stakeholders which is
   shown in their high satisfaction with SPP.

Q. Please elaborate on SPP’s stakeholder process?

A. As I have previously testified, SPP places great importance on its stakeholder
   process and its relationship with its members and other stakeholders. SPP is truly
   a “member-driven” organization, which means that our members determine SPP
   policy and take part in major decisions and plans for the future. This is unique to
   SPP and provides benefits outside of those which can be quantified in the CRA
study or others studies. SPP has a diverse membership as well as an independent
and open Board of Directors. The Board of Directors can only meet in an open,
transparent environment with members and other stakeholders participating.
While the Board of Directors may meet in executive session, SPP’s Member’s
Committee has historically always been requested to participate in those sessions.
SPP members also have a full representation committee called the Market and
Operations Policy Committee (“MOPC”) that provide decisional and advisory
functions to the SPP Board of Directors. This group has authority over SPP
Business Practices and Market Rules, thereby giving the members of SPP direct
authority over the operations and planning within SPP.

Another of the strongest qualitative benefits of SPP to its regulators and its
stakeholders is the RSC, which is comprised of regulatory commissioners from
SPP’s member states. The SPP RSC plays more than just an advisory role in the
policies and responsibilities of SPP. The RSC is an active and important part of
the SPP stakeholder process, providing collective state regulatory agency input on
matters of regional importance related to the development and operation of bulk
electric transmission. Article 7 of the SPP Bylaws specifically extends to state
regulatory agencies specific rights and authority over matters including the
administration and planning of the SPP transmission system. As a result, the RSC
has played, and continues to play, a significant role in establishing transmission
planning and cost allocation policy and retains primary responsibility for
determining regional proposals concerning: (i) whether and to what extent
participant funding will be used for transmission enhancements; (ii) the rate structure for SPP’s regional access charge (e.g., postage stamp or license plate); (iii) allocation of Financial Transmission Rights, where a locational price methodology is used; and (iv) transition mechanisms to be used to ensure that existing firm customers receive FTRs equivalent to the customer’s existing firm rights. In addition, the RSC also determines the approach for resource adequacy across the entire region and, with respect to transmission planning; the RSC determines whether transmission upgrades for remote resources will be included in the regional transmission planning process and the role of transmission owners in proposing transmission upgrades in the regional planning process.

Once the RSC determines a methodology to address any of the above issues, SPP is required to file such proposal with FERC, retaining the right to submit an alternative proposal. SPP’s specific grant of authority to the SPP RSC as part of SPP’s open and transparent stakeholder process is further strengthened by the RSC having its own distinct FERC Section 205 filing rights as part of SPP’s Open Access Transmission Tariff (“SPP Tariff”). In addition to state commissioner involvement in the SPP process through the RSC, the Cost Allocation Working Group (“CAWG”) is an RSC working group comprised of staff members from each state commission or review board who provide invaluable input to the RSC as well as the SPP stakeholder process.

Q. Can you provide examples of the role the RSC plays within SPP?

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3 SPP Bylaws, Article 7.2.
A. Yes. The RSC was the key decision maker in developing and approving cost allocation mechanisms that have been used by SPP since obtaining status from FERC as an RTO. In 2005, in its first major effort after its formation, the RSC developed and approved the Reliability Base Plan Funding mechanism, for reliability upgrades in which one-third (1/3) of transmission expansion costs are regionally funded and two-thirds (2/3) of the costs are assigned to the zone(s). In 2008, the RSC developed and approved an approach for much needed economic upgrades known as the Balanced Portfolio Funding mechanism. This mechanism provided an avenue for a select group of economic projects having a balanced benefit (known as the “Balanced Portfolio”) to be regionally funded. Then, in 2009 the RSC continued the evolution and development of cost allocation with their leadership which led to the approval of the Highway/Byway cost allocation methodology (“Highway/Byway”).

Q. Did the Commission have input in the development and approval of these cost allocation mechanisms?

A. Yes. The APSC’s representatives supported all three of these cost allocation mechanism.

Q. Can you provide some other examples of the role of the RSC and its impact on SPP policy outside of cost allocation?

A. Yes. The RSC sponsored the study on the costs and benefits of SPP’s energy imbalance market and the developing the Integrated Marketplace, which is SPP’s
Day 2 market. These studies were material considerations within the SPP stakeholder process to proceed with the implementation of these markets. Another recent example is a set of five recommendations that were made by the RSC on October 25, 2010. Specifically, after lengthy discussions amongst the RSC, the SPP Board of Directors and SPP stakeholders regarding transmission project cost estimate increases, there arose a need for refinements to the current cost estimation and planning procedures, so the RSC made five recommendations. First, the RSC recommended that SPP review what is the best manner to address significant cost increases and/or overruns of transmission projects that are regionally funded. Second, the RSC recommended that SPP review the novation process and report to the RSC by April 2011. Third, RSC recommended that SPP consider establishing design and construction standards for transmission projects at 200KV and above that are regionally funded. Fourth, the RSC recommended that SPP evaluate how cost estimates are established for transmission projects before cost benefit analysis are performed. Finally, the RSC recommended that the CAWG study various methods on how costs that exceed some standard can be addressed with different cost allocation mechanisms and recommend strategies to the RSC.

Q. What actions has SPP taken to respond to these motions?

A. The SPP Board accepted the motions the very next day (October 26, 2010), and assigned the first four to SPP’s Strategic Planning Committee (“SPC”) for consideration and analysis with the fifth already being assigned by the RSC to the
CAWG. As a result, the SPC has worked, and continues to work, through the SPP stakeholder process to develop policies that address the four RSC motions assigned to the SPC. A further report from the SPC on those four RSC motions will be given to the RSC during its July 2011 meeting in Kansas City, Missouri.

Q. **Are there other examples of the ways that the RSC adds value to SPP?**

A. When FERC approved the Highway/Byway proposal developed by the RSC for the SPP region, FERC also approved a requirement that the impacts of the Highway/Byway be reviewed at least every three years. This review is often referred to as an “Unintended Consequences” review and is the review that was highlighted in the SPP proposal to Entergy. The first review of the Highway/Byway cost allocation implications is required to be performed in 2013. In order to begin the process for a review in 2013 of the Highway/Byway cost allocation, the RSC and MOPC have formed the Regional Allocation Review Task Force (“RARTF”) to proceed with developing “the analytical methods to be used” by SPP staff to review the Highway/Byway impacts in 2013. The RARTF is fairly balanced with three RSC members serving on the RARTF (Michael Siedschlag from Nebraska, Thomas Wright from Kansas and Olan Reeves from Arkansas); three SPP members serving on the Task Force (Richard Ross from American Electric Power (“AEP”), Philip Crissup from OG&E, and Bary Warren from Empire) and Harry Skilton from the independent SPP Board of Directors.
Q. Is this RARTF process adequate to protect SPP members from unfair cost allocation?

A. Yes. In approving the Highway/Byway FERC also agreed with SPP that a reasonableness review, which had been in place since Base Plan Funding was adopted, continue on at least an every three year basis. Upon the completion of this process, SPP staff must publish its review and findings to SPP stakeholders regarding the review of the Highway/Byway cost allocation. After the publication of SPP staff’s review, the RSC has the authority to make changes to the specifics results from the Highway/Byway cost allocation or to the mechanism itself if necessary. As you can see SPP and the RSC has already started a process that is only contemplated in the MISO’s Tariff waiver filing at FERC, made on June 3, 2011 in FERC Docket No. ER11-3728 based on the need to address comparability between MISO North and MISO South. In addition, the RSC is playing a major defining and authoritative role. In MISO, there is no direct involvement outlined for the OMS.

Q. Would this protection apply to Entergy as a Transmission Owning member of SPP?

A. Yes. This was outlined in the SPP proposal to Entergy.

Q. Would you agree that the RSC has shown an interest in seams issues related to cost allocation between regions?
A. Yes, during the RSC’s January 24, 2011 meeting the Committee agreed to issue a Request for Proposal for a seams consultant to assist SPP, the SPP RSC and SPP stakeholders in a review of the allocation of transmission upgrades between two or more seams entities. In an RSC teleconference on April 11, 2011 the Committee agreed to retain The Brattle Group to provide this service and the effort is currently underway.

Q. How does the Organization of MISO States (“OMS”) differ from the RSC?

A. While the OMS and the RSC are both composed of state regulators they differ in regards to their roles in the governance structures of SPP and MISO. The OMS is an external group to MISO while the RSC is an official organizational group within SPP as reflected in SPP’s Bylaws. Additionally, the MISO OMS responsibilities are not specified in a FERC-approved tariff, as is the case with the RSC. When MISO drafted its transmission cost allocation proposal internally, the OMS had no authority to make decisions during the process other than to submit comments and recommendations, whereas the RSC takes the lead in developing SPP’s cost allocation methodologies.

Q. Has the RSC objected to SPP Tariff filings at FERC?

A. Since the beginning of 2006, SPP has submitted 141 initial Tariff filings. The RSC has never filed a single protest or otherwise requested modifications to, or relief from, any aspect of SPP’s filings.

Q. Has the OMS participated in MISO-initiated proceedings before FERC?
1. A. Yes.

2. Q. On how many occasions has the OMS filed pleadings in response to MISO filings?

3. A. According to our review, since the beginning of 2006, MISO has filed approximately 184 initial Tariff filings. Of those 184 proceedings, the OMS either protested or otherwise requested relief from, or modifications to, the MISO proposals on 18 occasions.

4. Q. What inferences do you draw from the activity level of OMS, on the one hand, and the RSC, on the other hand?

5. A. The frequent filings by the OMS reflect the significant differences in the way the MISO and SPP stakeholder processes defer to the view of their state regulators. Under MISO’s governance structure, the OMS acts in a purely external “advisory” role, whereas under SPP’s governance structure the RSC is vested with substantive authority to direct policy changes within SPP. As a result, it is not surprising that MISO and the OMS often are unable to collaborate and/or agree on the development of changes to the MISO Tariff and/or on policy matters affecting MISO operations. Thus, when disagreements arise between MISO management and the OMS, the only recourse available to OMS is through regulatory processes, i.e., after MISO has developed and submitted its proposal for approval.
Q. Please describe some of the qualitative efficiencies for Arkansas utilities that will be created if Entergy were to join SPP.

A. If Entergy joins MISO, half of Arkansas ratepayers will be in the SPP Region and the other half in the MISO-South region. This division of transmission planning and operations will create difficulties for utilities that must dispatch generation in two regions, which would not exist if Entergy joined SPP. There are some Arkansas utilities that would have generation facilities in the two RTOs. This adds a layer of complexity, duplicity, and costs that would not exist if Entergy joins SPP. Also, if Entergy joins SPP, this will eliminate a substantial seam within Arkansas as was contemplated in FERC Order 2000. Elimination of the seam between Entergy and SPP will provide benefits to Arkansas customers because it facilitates greater access to transmission service and transmission expansion needed to bring benefits to ratepayers. The reduction of a major seam in Arkansas along with a single cost allocation methodology in the state will greatly enhance transmission expansion that is needed in Arkansas to provide both economic and reliability benefits to its ratepayers.

Q. Please describe some of the qualitative efficiencies for state regulators that will be created if EAI/Entergy were to join SPP as compared to MISO.

A. I would anticipate there to be significant and material regulatory oversight burdens placed on the APSC and its staff if EAI/Entergy were to join MISO. As this Commission well knows, state regulators have broad scope and oversight
over a number of very important and complex public policy issues. Having a state’s utilities in two different RTOs will add to the burden and cost regulators are expected to bear as they perform their important public service functions.

Q. **Earlier, you spoke to SPPs high stakeholder satisfaction. How do the results of SPP stakeholder satisfaction surveys compare to the MISO stakeholder satisfaction survey results?**

A. As I have previously testified, SPP stakeholder satisfaction is very high. It is significantly higher when compared to MISO’s stakeholder satisfaction. Specifically, SPP’s 2010 Stakeholder Satisfaction Survey\(^4\) showed that 71% of respondents responded favorably to the statement, “Overall, I am satisfied with SPP’s service.” According to MISO’s 2010 Customer Opinion Report,\(^5\) “Only 29% of respondents are satisfied with Midwest ISO overall. Nearly half of respondents (48%) are more satisfied with other ISOs with which they interact than they are with Midwest ISO.”

**SECTION IV. RISK OF ENTERGY MEMBERSHIP IN MISO DUE TO LIMITED CONNECTION**

Q. **Has SPP analyzed the potential operational and cost impacts of the Entergy-MISO proposal?**

A. Yes. Our analysis identified significant operational and retail rate impacts based on MISO’s interpretation of the Joint Operating Agreement between SPP and

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MISO (“JOA”) and the planned full-capacity usage of the SPP system pursuant to such interpretation. I would emphasize, however, that given the lack of detail from MISO as to how they plan to use neighboring transmission systems and in light of the recent FERC decision in Docket No. EL11-34-000, it is still difficult to draw definitive conclusions regarding the Entergy-MISO proposal. What is clear is that FERC acknowledged MISO’s duty to in good faith renegotiate the terms of the JOA if Entergy were to join MISO. This renegotiation must address compensation terms dealing with real-time congestion management, transmission usage, and transmission expansion.

Q. Please summarize the dispute regarding the JOA and the impact of FERC’s recent order in EL11-34-000.

A. There have been and remain disagreements on many levels between the SPP and MISO, as well as other interested parties. Although FERC agreed with MISO and clarified disagreements as to procedure, FERC did not clarify to what extent or under what terms and conditions SPP and MISO may use each other’s transmission systems should Entergy join MISO. Most importantly, FERC did not rule that MISO could use SPP’s system without compensation. Instead FERC stated that MISO has “an obligation to negotiate in good faith” changes to the JOA due to Entergy’s potential membership in MISO. Additionally, FERC recognized that other issues “may need to be renegotiated as a result of EAI’s determination to join MISO” under Section 3.1 of the JOA. From the view of SPP members, the amount of compensation MISO and/or Entergy customers will
owe SPP and its members for usage of their facilities is critical. Equally, important is how much cost MISO and Entergy’s customers will bear for necessary upgrades or use of existing or planned facilities in SPP based upon the limited transmission capacity between MISO and Entergy.

Q. Has MISO or Entergy provided to this Commission the transmission costs associated with their proposal?

A. No. Neither Entergy nor MISO has provided this Commission any cost estimates as to the cost of using SPP’s transmission system or the cost of necessary upgrades to the transmission system due to Entergy’s integration into MISO. Thus, the impact of such on Arkansas ratepayers remains unknown.

Q. Has MISO or Entergy had any communications with SPP or offered SPP any proposals of how SPP members will be compensated for usage of their system?

A. No.

Q. How does the uncertainty as to how much capacity above and beyond the capacity of the interchange facilities — potentially impact SPP’s operations and retail rates?

A. MISO has taken the position that under the JOA it is entitled to access capacity across the entire SPP transmission system without providing any compensation. In contrast, SPP asserts that the JOA, which was executed in 2004, could not have contemplated that MISO would be permitted to add the 22,000-megawatt Entergy
system to its grid, using only 1,000 megawatts of its own interconnections with Entergy and 14,000 megawatts of SPP’s interconnections with Entergy and therefore requires renegotiation. Following FERC’s directive that MISO and SPP have “an obligation to negotiate in good faith” changes to the JOA due to Entergy’s potential membership in MISO; the cost impacts may be significant for Entergy customers. This includes both the compensation for the usage of neighboring systems, as well as the cost for necessary upgrades between MISO and Entergy. Regardless of the compensation to SPP members and other Transmission Owners, any excess flows that MISO claims are authorized under the JOA will unquestionably impact the embedded utilities within SPP.

In pleadings filed in FERC Docket No. EL11-34-000, over 17 parties protested or filed comments documenting these impacts and demonstrating that MISO’s proffered interpretation of the JOA, if implemented without appropriate revisions to the JOA, would (i) create loop flow impacts on SPP transmission owners, without compensation and with increased reliability risks; (ii) permit cost-free usage of the substantial new SPP transmission enhancements underway (e.g., Balanced Portfolio and Priority Projects), which SPP members, not Entergy nor

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6 MISO seeks to add all of the Entergy operating companies to the MISO footprint. Its counsel’s legal memorandum (MISO Petition, FERC Docket No. EL11-34-000, Exhibit E), for example, references all of the Entergy system’s operating subsidiaries in its analysis, as does the CRA study (MISO Petition, Exhibit B). See also Entergy Corporation press release, April 25, 2011, available at: [http://www.entergy.com/news_room/newsrelease.aspx?NR_ID=2114](http://www.entergy.com/news_room/newsrelease.aspx?NR_ID=2114). At the time of the execution of the JOA, MISO had only approximately 1,600 megawatts of interconnections with SPP that it could even consider using for such an arrangement. An additional approximately 4,900 megawatts of MISO – SPP interconnection capacity, which MISO says it is entitled to use to integrate Entergy, came into existence only in 2009, when several Nebraska utilities joined SPP and MidAmerican Energy joined MISO. Obviously, MISO’s use of these new interconnections to integrate a distant, large system like Entergy’s could not have been reasonably within the parties’ contemplation when the JOA was signed years before.
MISO, are funding at billions of dollars of costs; and (iii) allow Entergy to avoid
any cost responsibility for transmission upgrades on neighboring transmission
systems that may be needed to enable MISO to dispatch energy to satisfy
Entergy’s load.

SPP will not sit idly by allowing such unjust action to be imposed on its system
and its members at their expense. SPP will take any and all actions necessary to
protect its members from being financially harmed and inappropriately exposed to
reliability risks. These actions will include, but are not limited to: (i) seeking fair
and equitable compensation for usage of its facilities, (ii) seeking appropriate
sharing of redispatch costs necessary to reliably manage the system, (iii) seeking
appropriate sharing of costs for currently planned and any future transmission
upgrades that will facilitate MISO’s dispatch of energy to Entergy, and, (iv)
considering potential transmission solutions that redirect MISO’s flow away from
SPP’s system onto MISO’s system in order to appropriately impose costs and
impacts on the “causer” of those costs and impacts. SPP would be willing to
impose the same conditions upon itself in renegotiating the JOA with MISO in the
event that Entergy were to join SPP. However, SPP believes that the costs that
should be imposed upon MISO to reliably integrate Entergy in a way that imposes
no undue burden on SPP are much greater than would be imposed upon SPP if
Entergy were to join SPP.

Q. Have other parties corroborated SPP’s concerns regarding potential
operational impacts?
A. Yes. In comments filed in response to MISO’s Petition for Declaratory Order, in FERC Docket No. EL11-34-000, AEP, on behalf of its several affiliated utilities (including SWEPCO, Public Service Company of Oklahoma, AEP Southwestern Transmission Company, and AEP Oklahoma Transmission Company) expressed serious concerns over the Entergy-MISO proposal and urged the development of additional studies to determine the magnitude and affects of the parallel flows. AEP described the crux of MISO’s Petition as “…asking the Commission to declare that, when Entergy or EAI joins MISO, it may use and impose significant new flows on SPP’s system, including the AEP system and assets paid for by AEP Zone rate payers, without restriction.”

Q. What specific issues did AEP identify with regard to the Entergy-MISO proposal?

A. AEP expressed general concerns on whether the MISO and Entergy systems could be “effectively interconnected.” AEP explained that the Entergy-MISO proposal relies on the assumed use/operation of the SPP system in a manner that defies the original intent of the JOA and does so without compensation or reciprocal benefit to SPP and its customers. AEP noted that no consideration had been paid to the economic and reliability consequences of the new flows imposed on SPP’s system by virtue of the Entergy-MISO proposal. AEP persuasively established that the integration of Entergy in MISO requires, at a minimum, a detailed analysis of the costs and intended use of facilities that SPP has already constructed or is planning to construct. AEP cited recently approved upgrades
priced under SPP’s Highway/Byway cost allocation methodology that will be
affected by increased power flows between MISO and Entergy and argued for
protections to ensure proper compensation to AEP zone rate payers and other SPP
member companies.

Q. Did any other party oppose MISO’s petition for declaratory order?

A. Yes. Empire filed a protest in response to MISO’s Petition. Empire embraced
and reiterated many of the specific arguments advanced by SPP.

Q. Did Empire elaborate on the “adverse economic and operational impacts”
that it attributed to MISO’s JOA interpretation and the related proposal for
integrating Entergy into MISO?

A. Yes. Noting the lack of significant direct intertie capability between Entergy and
MISO, Empire warned that the planned MISO-Entergy integration threatened to
impose large unscheduled parallel flows on neighboring utilities and would likely
require increased redispatch by intervening generation owners. Empire further
explained that the lack of adequate electrical contiguity between Entergy and
MISO could impair congestion management, system reliability and result in new
and higher seams charges. Empire identified several other specific operational
concerns, including potential impacts to Empire’s Plum Point entitlements, effects
on SPP’s Reserve Sharing Group, and implications for SPP and its members with
respect to transmission planning and cost allocation for “mutually beneficial”
regional projects.
Q. Please explain how the Entergy-MISO proposal will impose loop / parallel flows on the SPP transmission system and the transmission system of other affected utilities.

A. Neither Entergy nor MISO disputes that their proposal will impose loop flows on neighboring transmission systems. Depending on the magnitude of the loop flows and operational circumstances affecting the grid, loop flows can cause or aggravate constraints on discrete portions of a transmission system. For example, SPP has already experienced significant amounts of congestion on flowgates in Nebraska and Kansas City, Missouri areas that can be largely attributed to MISO parallel flows. Thus far in 2011, MISO flows have been observed to contribute between 30% and 65% of the allowable flow on these flowgates during congestion and as high as 75% in 2010. Approximately 2,500 hours of congestion were experienced on these flowgates in 2010 and approximately 2,700 hours are expected in 2011 due to large parallel flow contributions from MISO. Assuming transfers between MISO and Entergy of 1000 MW, SPP anticipates that the hours of congestion in this area would approximately double.

Entergy has provided in FERC Docket No. EL11-34 an analysis that it maintains demonstrates that the interface with MISO is less limited than the contract path which is their legal method to transact business. SPP has just recently been provided their analysis and has evaluated the results. First, Entergy’s analysis relied on a subset of MISO and SPP generation selected by Entergy to participate in the transfers simulated between MISO and Entergy and between SPP and
Entergy. Second, Entergy only selected certain systems within their model to monitor for overloads in their analysis. Questionably absent from the systems they chose to monitor are the facilities in Nebraska that have already experienced significant congestion as a result of MISO parallel flows. Third, Entergy used normal ratings for transmission facilities in its analysis rather than emergency ratings that SPP would rely upon when monitoring its own facilities. The assumptions made by Entergy in their analysis certainly skew the results while the basis for their assumptions are questionable and without merit.

Q. Are there cost implications associated with such loop flows?

A. Yes. However, neither Entergy nor MISO acknowledges any cost or compensation responsibility in their proposals. In their view, section 5.2 of the JOA allows MISO, at no cost, to schedule transmission service in excess of the 1000 MW contract path that it currently has to Entergy over AECI’s Interchange Facilities. MISO defended this position in its Answer filed in FERC Docket No. EL11-34-000, where it claimed that it was authorized to approve transmission requests above the nominal rating of the Interchange Facilities because, according to MISO, “…energy will not flow on that discrete segment in those volumes.”

In other words, MISO plans to schedule transmission service in excess of the ability of the 1000 MW path and to impose these excess flows on neighboring transmission systems without arranging appropriate transmission service from the intervening or compensating those affected transmission systems.
In light of FERC’s ruling, the compensation issue must be addressed by MISO and Entergy and as the dollar amounts are significant, these issues will be of great importance to Entergy’s retail regulators. Let me illustrate the potential significance of the compensation. First, MISO has stated in a hearing held at the Commission on September 14, 2010 that it would utilize up to 4000 MW of transfer capability between it and Entergy. Under a contract path compensation approach, considering MISO has a 1000 MW path to Entergy, the remaining 3,000 MW when purchased using long-term firm transmission service from SPP would cost approximately $42 million per year assuming the base rate. Point-to-Point Transmission Service is the higher of the base rate or the cost of transmission to accommodate the request. Under a flow-based compensation approach, knowing that 30% of the 4,000 MW would flow over SPP facilities, long-term firm transmission service when obtained from SPP would cost approximately $17 million per year assuming the base rate.

Q. Has SPP analyzed the anticipated flows from MISO to Entergy, when MISO dispatches energy from the existing MISO footprint to serve the Entergy system load?

A. Yes. Based on an evaluation of a representative snapshot of the transmission grid, SPP estimates that roughly 8% of that energy today will flow over the Interchange Agreement facilities from Ameren to Entergy, while the rest will flow over other parties’ systems, including 30% flowing over the SPP transmission system. Another estimated 42% of the dispatched energy will flow over TVA’s system
(and a quarter of this also will flow over the Southern Companies’ system), and
17% over AECI’s facilities. Of course, when the single interconnection between
MISO and Entergy is out of service, 100 percent of the MISO market energy
flows to Entergy will use SPP and other systems. Q. Please describe how
these anticipated flows adversely affect third-party systems.

A. Simply put, when MISO places flows on a non-MISO transmission system and
does not provide any compensation for such use, the owner of the affected
transmission system is denied the opportunity to schedule transmission service
over those facilities and recover the rates associated with such service.

Q. In addition to lost opportunity costs, how will these anticipated flows impact
third party systems?

A. The Entergy-MISO proposal may cause market distortions through increases in
locational marginal prices due to increased congestion. The locational marginal
price is increased in response to congestion because the dispatch of higher-cost
generation required to alleviate the constraints which result in increased costs to
that region. Some mitigation of these costs might be possible in coordination with
MISO through the renegotiation of the JOA.

Q. Have you studied how flows would travel from MISO to Entergy across SPP?

7 Exhibit F to SPP’s protest filing in EL11-34 depicts the flows of energy from MISO’s market dispatch to
Entergy under the Entergy-MISO proposal, and is available at:
A. Yes. Because approximately 75% of the interconnection capacity between MISO and SPP is north of Kansas City, moving energy from MISO to Entergy would require using a portion of the SPP system between Nebraska, Missouri, and Kansas that is already congested. As discussed, these added flows will affect the cost of energy in these regions. MISO stated at the September 14, 2010 hearing that it expects to have at least 4000 MW of capacity between MISO and Entergy by way of SPP’s transmission system available to serve Entergy.

Q. What other comments and observations do you have regarding loop flows?

A. While I agree that loop flows are not only an issue on adjacent systems if Entergy joins MISO or SPP, the data from the CRA simulations demonstrate that loop flows on SPP and neighboring systems are much worse if Entergy were to join MISO, the impact on MISO and adjacent systems if Entergy were to join SPP.

Q. Did Entergy provide any analyses or supporting evidence to analyze loop flows?

A. Nothing substantive, despite data requests from SPP to obtain information from Entergy to help address this issue. Entergy provided statements about net generation within Entergy to show that it didn’t change anything about loop flows (FERC Docket No. EL11-34-000). However, I disagree with Entergy’s assessment and conclusions because it is incomplete in one apparent aspect, as Entergy removed independent power producers (“IPP”) from the calculations, even though IPPs are embedded within Entergy. Those IPP resources, like any
other resource within Entergy, should not be excluded from any assessment of
loop flows since they will be affecting adjacent systems due to potential market
changes. Other issues that would need to be explored are whether the loop flows
in Entergy’s filing in FERC Docket No. EL11-34-000 represent the range of
impacts on the other systems or just an average or net flow that can skew or under
represent the impacts on other parties.

Q. Does one have to be careful in drawing conclusions about loop flows based on
net energy or average flows?

A. Yes. Net energy flows within an area are not a good metric to evaluate the
impacts of loop flows on adjacent systems, and averages can be very misleading.
It is has been difficult to capture the affects of loop flows in CRA GEMAPS
models including the flaw that there was no attempt to create additional flowgates
as a result of the MISO-Entergy proposal that could affect adjacent systems such
as TVA, AECI and SPP. GEMAPS does provide hourly interface flows between
zones. SPP has reviewed that data and it only captures net flows on an interface
which can be very misleading. For example, net hourly flows on the Entergy –
AEP/SWEPCO interface are captured in GEMAPS. However, net hourly flows
that may be coming into SWEPCO from Entergy in northwest Arkansas and
leaving SWEPCO to Entergy in Louisiana are not captured in GEMAPS and are
potentially problematic loop flows that warrant a substantive analysis. While the
net interface flows should capture the impacts of increased losses due to loadings
associated with loop flows within a zone, the net interface flows will not capture
the through transactions that may warrant compensation for the use of capacity in neighboring systems.

Q. What analyses have been done by SPP to support the claim loop flows are worse if Entergy joins MISO than if Entergy joins SPP?

A. CRA provided SPP with hourly interface flows for the most recent 2019 Base Case, Join MISO Case and Join SPP Case. In light of the difficulty in extracting the real loop flows given the net interface data, SPP focused on Entergy imports and how they change in these models. Average Entergy summer imports increased by 246 MW and average Entergy non-summer imports increased by 270 MW in the Join MISO Case relative to the Base Case. Comparatively, average Entergy summer imports decreased by 23 MW and average Entergy summer imports increased by 62 MW in the Join SPP Case relative to the Base Case. Again, these are not only average, but also net, values that do not necessarily capture the extremes of the loop flows that will appear on adjacent systems, but do provide an indication of net aggregate impacts for the two cases compared to the Base Case.

Q. Why was only 2019 data considered by SPP in this assessment?

A. The 2019 models include a 2022 transmission topology, which should result in conservative impacts in terms of loop flows since only transmission expansion projects which have been approved are included in the models. The loop flows and imports which are captured in this model are
likely lower than can be expected since these simulations will have more congestion and less transactions.

Q. Leaving aside issues associated with the JOA, are existing contractual arrangements in place to support anticipated flows on third-party systems?

A. No. Notably, TVA, which SPP estimates will experience 42% of the anticipated flows, has rejected MISO’s attempt to “share” capacity at a no cost basis. The Joint Reliability Coordination Agreement between MISO and TVA (which also includes PJM Interconnection, L.L.C.) contained a capacity sharing provision similar to that in the JOA. However, that agreement has been terminated as between MISO and TVA. TVA and MISO negotiated an Adjacent Reliability Coordination Agreement (“ARCA”) to manage the seam between the two entities which became effective June 15, 2011. The ARCA does not contain a capacity sharing provision and contains no provisions to address the management of the market-to-non-market interface between MISO and TVA.

Q. Please explain how under the Entergy-MISO proposal Entergy will take advantage of, but not pay its appropriate share of, SPP’s new transmission enhancements.

A. As transmission facilities are constructed in the SPP Region, the costs of these projects are expected to be borne by the ratepayers of the SPP members. Obviously, to the extent Entergy and MISO anticipate unlimited access to, and power flows across, the SPP system, these parties will realize material benefits by
virtue of these new upgrades. Yet, the Entergy-MISO proposal fails to provide any compensation for the use and benefit of these new transmission enhancements.

SPP knows from experience that service provided on its system affects systems outside of its transmission system. In providing transmission service for its customer, SPP regularly encounters issues on the Entergy transmission system that would create reliability issues it would have to manage. SPP always directs the transmission customer to work with Entergy to resolve these issues (as stated in the SPP/Entergy Seams Agreement). Some of the resolutions to these issues include upgrades on the Entergy system where Entergy charges the SPP transmission customer the full cost of the upgrade. In fact, outside of the supplemental upgrades that Entergy has funded, SPP customers have committed to a substantial cost to upgrade the Entergy transmission system to mitigate any burden their service would cause on Entergy. This means that Entergy requires external customers to fund upgrades on its system that they would cause, but does not recognize that same on the SPP system by its proposal.

Q. You mentioned the reliance upon SPP, TVA and AECI that will occur should EAI/Entergy join MISO. Does this have any reliability implications?

A. Absolutely. The parallel flows created on three other parties’ systems will have reliability implications in excess of what exists today or what would exist if Entergy were to join SPP. As stated above, SPP has already seen how rapidly
flows on its flowgates can increase beyond their reliability limits mostly due to large, highly fluctuating amounts of wind in MISO. Because SPP has no control over those flows and the congestion management actions necessary to control these flows requires transmission loading relief ("TLR") and coordination with MISO, it can take a considerable amount of time to reduce these flows down to reliable operating levels. Further, SPP has noted large amounts of market flow from MISO’s operations that are not reported to the Interchange Distribution Calculator ("IDC") as a result of the manner in which MISO calculates their market flows. SPP has attempted to work with MISO over the last year to improve these calculations but has not been successful in achieving a satisfactory resolution. During TLR, it is essential that sufficient and accurate amounts of market flow be reported to the IDC to facilitate both reliable and equitable congestion management. If Entergy joins MISO, the significant increase in load to MISO’s economic dispatch engine further south of these already congested flowgates will increase loading on these flowgates and make it even more difficult to reliably manage flows on SPP’s system, particularly if a large portion of those flows are not even reported to the IDC. Finally, the lengthening of the MISO seam along the SPP, AECI, and TVA borders will require even more coordination than exists today and certainly more than would be needed if Entergy were to join SPP. Notwithstanding the fact that flows are expected to increase on SPP’s, AECI’s and TVA’s systems causing increased TLR activity, the need to coordinate activities on a seam of the magnitude that would exist if Entergy were
to join MISO will increase the potential that operational complexity will open the
door for errors to occur.

Q. Please explain the significance of costs associated with transmission upgrades
needed for reliability purposes.

A. The Entergy-MISO proposal fails to account and compensate for any transmission
upgrades necessary to accommodate the significant incremental flows that will be
imposed on neighboring transmission systems. These heretofore unplanned for
flows are likely to require the addition of transmission upgrades to maintain
system reliability in accordance with applicable reliability standards or at least to
deliver the benefits of economic energy transfers that MISO and Entergy are
relying on to justify their integration. Inasmuch as any such facilities will inure to
the benefit of Entergy and MISO, their associated costs ought to be borne by these
parties.

Q. Has Entergy and/or MISO addressed this problem?

A. Only in a dismissive way. They argue that the JOA’s Congestion Management
Protocols (“CMP”) will provide adequate protection by requiring that when a
reciprocally coordinated flowgate becomes congested each party must return to its
historical firm allocations. Of course, this assertion side-steps entirely the
likelihood that the significant new flows caused by the Entergy-MISO proposal
will require, absent successful renegotiation of the JOA, SPP to include these
changes to the system models that dictate when and where reliability and
economic upgrades are needed that would be only funded by SPP members including Arkansas customers.

Q. Do you find any irony in the fact that the Entergy-MISO proposal seeks to use others systems without compensation?

A. Yes. Entergy has been a strong advocate for and proponent of participant funding as its methodology for allocating transmission costs. Now Entergy wants to use SPP members’ transmission system without compensation.

Q. What is “participant funding”?

A. Participant funding is the industry term used for transmission cost allocation of upgrades in which those entities participating in the requirement to build the transmission pay for it. Parties choose to fund upgrades in return for the economic benefits they create.

Q. What is your opinion about participant funding and how has Entergy advocated for this method of funding?

A. Entergy has been a strong proponent of and currently uses participant funding for transmission expansion. It is ironic that the Entergy-MISO proposal is to use SPP’s transmission facilities and the transmission facilities of other Arkansas utilities without compensating those entities for such use. The Entergy-MISO proposal is completely opposite from the premise of the participant funding methodology Entergy has advocated for years.
SECTION V. CONCERNS OF A SPECIAL MISO SOUTH REGION

Q. Are you familiar with MISO’s recent FERC filing in FERC Docket No. ER11-3728, seeking waiver of certain Tariff provisions (“Waiver Request”)?

A. Yes. MISO filed a Tariff Waiver Request on June 3, 2011 and is currently pending before FERC. MISO requested the waiver in connection with seeking insight on their proposed method of integration of Entergy and its operating companies as transmission-owning members of MISO.

Q. Please describe the tariff provisions that MISO proposes to waive.

A. One of the difficulties in assessing MISO’s filing is that the scope of the requested waiver is not entirely clear. MISO makes general reference to the cost allocation provisions contained in Attachments X, N, CC, FF, GG, and MM, and in Schedules 25, 26, and 26-A, but notes that its waiver is not limited to these provisions.

Q. What support does MISO provide in connection with its Waiver Request?

A. As noted, the crux of MISO’s filing is to establish a framework for transitioning Entergy into the MISO RTO. To that end, MISO proposes to create separate sub-regions – i.e., a Southern Region and a Northern Region – for planning and cost allocation purposes. The Southern Region would encompass all of Entergy, while the Northern Region would include the existing MISO members. Essentially, the costs associated with Network Upgrades terminating within either of the planning regions would be charged exclusively to that region. In the SPP proposal for
Entergy to join SPP, SPP addresses cost allocation and planning directly. From day one of EAI/Entergy membership in SPP, the SPP transmission planning and cost allocation would address EAI/Entergy’s transmission issues as a part of the SPP Region, and not as a separate region.

Q. Has Entergy stated how long it would remain in its own separate planning area?

A. Yes. At the May 19, 2011 ERSC meeting, Mr. Rick Riley, Entergy’s Vice President of Delivery indicated that the special Entergy MISO South planning area would last “out towards the ten-year area as opposed to the five-year.” Based on that statement, I conclude that Entergy plans on using the special MISO South Planning area for approximately ten years.

Q. Do you have any other concerns about the proposed MISO South planning region?

A. Yes. Based on the lack of detail and specificity in the Waiver Request, I am certainly concerned that the proposed MISO South planning region will only continue the status quo regarding much needed investment in Entergy’s transmission system, and leave unanswered questions about the transmission capability between MISO and Entergy, what costs would be incurred to increase that capability, as well as questions about the need to mitigate the loop flows on other systems created by the proposed joining of the Entergy and MISO.

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8 May 19, 2011 ERSC Transcript, Page 347.
Q. Can you identify key uncertainties related to EAI/Entergy joining MISO that are outlined by MISO in the Waiver Request?

A. The filing is predicated on the uncertainties related to Entergy joining MISO. In particular, MISO states on Page 4 that the proposed up to 10-year transition period is needed because “MISO has not historically planned system upgrades in close coordination with Entergy.” In addition, the proposed transition period “will permit MISO the opportunity to evaluate and determine whether the level of transmission infrastructure (as well as the associated congestion level) in the Southern Planning Region is sufficiently comparable to that of the Northern Planning Region to warrant the regional allocation across both Planning Regions of the costs of Network Upgrades terminating exclusively in one or the other Planning Region and to plan for any transmission expansion necessary to bring each planning region into a comparable state.”

MISO further explains on Page 4 that “due to the absence of any seams agreement between them, MISO and Entergy have not had any historical opportunity to study the levels, and to address the interaction of, congestion and related factors in their respective areas.” Also, MISO explains that it “needs to study Entergy’s congestion and other pertinent characteristics, and work towards achieving comparability in infrastructure levels, before fully applying regional cost allocation rules to Network Upgrades located and terminating solely in either the Southern Planning Region or the Northern Planning Region.”
On Page 10, MISO states that “if comparability is not achieved at the end of the 10-year maximum transition period, MISO will study and propose alternative cost allocation approaches appropriate for the circumstances prevailing at that time.”

Q. Do you believe that these uncertainties related to congestion, planning and cost allocation exist in the EAI/Entergy join SPP proposal?

A. No. First, the SPP proposal is clear in the methods of transmission planning and cost allocation. Also, based on the long-standing history between SPP and Entergy, there are far fewer uncertainties with integrating EAI/Entergy into SPP. SPP has been assessing impacts on the EAI/Entergy system for years as a neighboring Transmission Provider. Today, SPP has a seams agreement with Entergy that provides for coordinated transmission planning, transmission service and generation interconnection administration, data sharing, and reliable operations. Because of that coordination experience and through the experience gained in performing as the Independent Coordinator of Transmission (“ICT”), SPP has an expert knowledge of congestion areas within and around Entergy and has worked for years with Entergy and its stakeholders to provide solutions and bring proper resolution to those issues. Additionally, SPP and Entergy work closely on joint planning with a coordinated Entergy SPP Regional Planning Process (“ESRPP”). The ESRPP is a study process wherein transfers between Entergy, SPP and surrounding regions are studied to determine what upgrades may be necessary to accommodate those inter-regional transfers. SPP (ICT and RTO) performs high-level transfer analysis for these studies and coordinates the
results with Entergy. If required, Entergy will perform a more detailed analysis including scoping of transmission facilities, short-circuit and transient stability analysis. The Acadiana Load Pocket transmission expansion plan facilitated by SPP among Entergy, Cleco, and City of Lafayette is a prime example of SPP’s ability to facilitate appropriate transmission planning and cost allocation that benefit ratepayers of Entergy and surrounding systems.

Q. What impact does SPP’s role as the ICT have?

A. In its ICT capacity, SPP provides four primary functions for Entergy: (1) SPP serves as Entergy’s Reliability Coordinator, ensuring the reliability of Entergy’s transmission grid through outage prevention and congestion management; (2) SPP conducts Entergy’s long-term transmission planning including cost allocation determinations; (3) SPP independently administers Entergy’s Open Access Transmission Tariff (“Entergy OATT”); and (4) SPP oversees Entergy’s Weekly Procurement Process, which facilitates the integration of merchant generation and other wholesale suppliers into Entergy’s generation mix.

With respect to Entergy’s long-term planning process, SPP administers Entergy’s process in accordance with Entergy’s own planning procedures as set forth in the Entergy OATT. Those planning procedures require the ICT annually to develop a Base Plan, pursuant to Attachment K of the Entergy OATT. The Base Plan identifies the transmission upgrades that the ICT deems necessary to comply with Entergy’s Planning Criteria. Entergy is not ultimately required to construct the
facilities that are identified in the ICT Base Plan; thus, Entergy’s three year
Construction Plan can differ from the ICT Base Plan. These plans are the subject
of a Differences Report filed each year by SPP as the ICT with FERC and this
Commission that describes in detail every difference between the ICT Base Plan
and Entergy Construction Plan.

In the SPP planning process, SPP is obligated to follow through to construct any
approved facilities. This responsibility would be met even if the local
Transmission Owners are unwilling or unable to.

Q. Would the level of study and extended integration period identified in the
Waiver Request be needed to fully integrate EAI into SPP?

A. No, it would not be needed. No waiver or exceptions would be necessary for
Entergy to join SPP. As I explained in my February 18 Testimony, EAI was an
original member of SPP. Up until 1997, EAI and the entire Entergy system fully
participated in SPP, engaging in all aspects of operations and planning. These
collaborative efforts helped develop the foundation for the transmission system
and processes that exist today. This should permit EAI’s transition into SPP to
occur in a timeframe compatible with termination of the Entergy System
Agreement and in a manner that best responds to the Commission’s stated goals
of improving service and lowering rates within the State of Arkansas.

Also, SPP did an extensive study of the Entergy system as part of the FERC-
ordered SPP Entergy/Cleco CBA. This extensive study was performed in order to
determine if the Entergy system met the SPP interpretation of reliability criteria and standards. SPP determined that if all the projects that Entergy had in its construction plan and also in the horizon plan were completed, Entergy would meet those requirements. This study did not determine if there were additional transmission upgrades that would provide economic benefits to Entergy customers and/or SPP customers. As noted above, the SPP transmission customers do encounter issues that are on the Entergy transmission system based on their needs for transmission service. It would be expected that with the integration of the Entergy transmission system into SPP, there would be opportunities for transmission expansion that would provide benefits greater than the costs of those upgrades. This effort would start on day one with Entergy as a member of SPP.

Q. Have MISO members, market participants and/or state regulators fully embraced the proposed waiver?

A. No. Numerous protests and comments were filed in response to MISO’s Waiver Request for a special Entergy sub-region. Many of these identified the same deficiencies and ambiguities in MISO’s filing that I describe above. Of particular note, the state regulatory agencies of Missouri, Illinois, Indiana, and Wisconsin raised a series of questions and concerns regarding, e.g., the timing, completeness, and reasonableness of MISO’s Waiver Request. In addition, other interveners representing transmission customers and other MISO market participants weighed in urging FERC to defer or deny MISO’s Waiver Request until a complete record
could be developed on cost allocation and subsidization impacts.\textsuperscript{9} Still others suggested that the proposed creation of sub-regions for planning and cost allocation purposes could not be selectively applied to Entergy and should be extended for purposes of implementing sub-regions (or sub-sub-regions) in other parts of the existing or expanded MISO footprint.\textsuperscript{10}

Q. What conclusions can be reasonably drawn with respect to FERC’s ongoing deliberations on MISO’s Waiver Request?

A. I believe that the MISO waiver request demonstrates that there is a great deal of uncertainty surrounding Entergy’s proposal to join MISO. As MISO explained, they have not had the opportunity to study the two systems and it will take at least five years, and likely up to ten years, to resolve these uncertainties. I believe one of the biggest uncertainties is what new transmission facilities may be needed to obtain comparability and what those facilities could cost. There also is uncertainty as to what benefits Entergy/EAI will actually receive from the transmission projects in the MISO North planning region, as well as uncertainties about how costs will ultimately be allocated to Entergy. Also, I believe that this Waiver Request demonstrates that there is a question about how much of an obligation EAI/Entergy has to construct and pay for transmission facilities as the MISO South planning region. In addition, as I just mentioned, there are numerous

\textsuperscript{9} See, e.g., Protest of Coalition of Midwest Transmission Customers at 3-4; Comments of Alliant Energy Corporate Services, Inc. at 4-7.

\textsuperscript{10} See Petition to Intervene of the Association of Businesses Advocating Tariff Equity at 5; Motion to Intervene and Protest of Cleco Power, LLC at 3.
protests to the Waiver Request. Should FERC deny MISO’s request I believe that
raises a number of questions as to how Entergy would be integrated into MISO
and what the impacts of that integration would be on ratepayers.

SECTION VI. CONCERNS RELATING TO THE PENDING
MISO CAPACITY MARKET

Q. MISO has proposed a capacity market to address regional resource
adequacy. How does SPP determine its approach for addressing regional
resource adequacy?

A. There are a number of ways to handle regional resource adequacy, and a capacity
market is only one option. As mentioned earlier, SPP has granted the SPP RSC
the authority and primary responsibility for determining the approach used to
address regional resource adequacy. Specifically, Article 1, Section 2 of the SPP
RSC Bylaws states:

PURPOSE: The SPP RSC shall provide collective state regulatory
agency input and participation in the Southwest Power Pool, Inc.
(“SPP”) and SPP’s Board of Directors, committees, working
groups and task forces, including any independent transmission
system operator (“ISO”) or regional transmission organization
(“RTO”) formed by the SPP. Such input and participation shall
include but not be limited to: whether and to what extent
participant funding will be used for transmission enhancements;
whether license plate or postage stamp rates will be used for the
regional access charge; determination of Financial Transmission Rights (“FTR”) allocations where a locational price methodology is used; determination of the transition mechanism to be used to assure that existing firm customers receive FTRs equivalent to the customers’ existing firm rights; determination of the approach for resource adequacy across the entire region; determination of whether transmission upgrades for remote resources will be included in the regional transmission planning process; and determination of the role of transmission owners in proposing transmission upgrades in the regional planning process.

One of the enumerated RSC functions is “a determination of the approach for resource adequacy across the entire region.” Simply put, the RSC to date has not seen any need for and has not considered a forward capacity market or any other resource adequacy options. Thus, Arkansas ratepayers are not burdened with the additional costs associated with a capacity market. Moreover, any change in the manner by which resource adequacy is managed within SPP will necessarily have the support of retail regulators through the input and participation of the RSC.

Q. Has SPP had problems with resource adequacy?

A. No. SPP's 2011 summer reserve margin based on Anticipated Capacity Resources is 21.2% as listed in the 2011 North American Electric Reliability Corporation
1. (“NERC”) Summer Reliability Assessment report. This is perhaps a major reason that an assessment of resource adequacy and/or indirectly a forward capacity market has not been undertaken. In addition, under SPP Criteria 2.1.9, the requirement for resource adequacy, both long and short-term, is on each Load Serving Member. If the long-term resource adequacy of a member appears insufficient, then the Load Serving Member and the applicable state regulatory entity, such as the Commission, is notified of the shortage. Since there is no Retail Open Access within the SPP Region, the Load Serving Members are regulated monopolies with a requirement to serve. Therefore, the responsibility for Load Serving Members to meet the resource adequacy needs is consistent with the regulatory environment within each state in the SPP Region.

2. Q. Is MISO’s planned capacity market adequately supported in Entergy’s proposal?

3. A. It is not. MISO is in the process of developing a Resource Adequacy proposal that would establish a forward capacity market. Because MISO has not finalized its forward capacity market proposal, the implications of its final proposal cannot be definitively discerned. However, there are general concerns regarding forward capacity markets that should not be ignored. As FERC Commissioner LaFleur recently noted “capacity markets are still in their toddler stage – some would say

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in the terrible twos – and we have a lot to work out.”\textsuperscript{12} The OMS was opposed to MISO’s proposed capacity market, however, MISO proceeded despite this opposition by its state regulators. Specifically, the OMS stated that, “a forward capacity auction in the Midwest ISO cannot be justified at this time.”\textsuperscript{13}

Q. What are the issues with a forward capacity market?

A. Although there are a number of issues, I will focus on those which demonstrate that not only is a capacity market not needed in Arkansas, but also that it could be detrimental to ratepayers. First, the goals of forward capacity markets generally are to: (1) recover “missing money” that is not recovered in the energy and operating reserves markets for generation assets; and (2) provide incentives for new generation.\textsuperscript{14} The jury is still out on whether forward capacity markets achieve these goals. Moreover, in regulated states, such as Arkansas, generation assets do not experience “missing money” problems.

Furthermore, in traditionally regulated states, such as Arkansas, planning to satisfy future capacity reserve requirements is conducted by either state regulatory bodies or vertically integrated utilities and the Commission has Integrated Resource Planning Rules. There is no need to attract the installation of new

\textsuperscript{12} Electric Power Daily, “FERC’s LaFleur says capacity markets still works in progress” (June 29, 2011).
\textsuperscript{13} February 10 OMS Comments; see also November 17 OMS Comments and November 29 OMS Comments.
generation resources through a capacity market, because vertically integrated utilities will either construct them or enter into a long-term, bilateral energy contract with a capacity component (e.g., a power purchase agreement) because of their obligation to serve. In addition, regardless of their participation in wholesale energy markets, vertically integrated utilities do not have a “missing money” problem because generation assets are fully compensated by inclusion into retail rates for costs incurred as well as capital expenses.\textsuperscript{15}

Also, there are legitimate questions concerning the long-term reliability benefits provided by forward capacity markets. The three to five year forward planning horizon is designed to attract new peaking units but is not well suited to the longer-term contracting required to develop baseload generation.\textsuperscript{16} Furthermore, forward capacity markets also have not wholly eliminated the need for cost-based reliability must-run agreements to keep expensive, inefficient generation units online for reliability purposes.\textsuperscript{17} In addition, forward capacity markets do not take into account a state’s social or environmental goals like encouraging renewable energy resources such as wind in long-term resource planning. In a forward capacity auction the resources that clear the auction are based on offer prices, without regard to the type of the resource and often without regard to its location. Thus, a planned wind facility – developed in response to a state’s clean energy initiative – may not be able to compete with the net cost of new entry of a  

\textsuperscript{15} See February 10, 2011 OMS Comments.  
\textsuperscript{16} See PLC Whitepaper at 20.  
\textsuperscript{17} See, e.g., Exelon Generating Company, LLC, 135 FERC ¶ 61,190 (2011).
combustion turbine, and therefore may not clear the capacity auction. As the
Indianapolis Power and Light Company so aptly stated, “[t]he Eastern-style
capacity market would turn traditional state-controlled [Integrated Resource Plan]
into a FERC-jurisdictional wholesale market. States would lose control of
ensuring reliability, public policy, and localized least-cost planning objectives are
integrated in the utility’s portfolio.”18

Moreover, there is a reason that the OMS continuously “expresses strong
opposition to a capacity market of any kind”19 – retail ratepayers potentially pay
much more for capacity than they did prior to the institution of a forward capacity
market. As was demonstrated by the Brattle Report, it is likely that the retail
utility rates would increase without a commensurate benefit.20 Because MISO

18 Locational Capacity Requirements in the Midwest ISO: An Alternative to MISO's Proposed Eastern-
Style Capacity Market, Indianapolis Power and Light Company, at 21-22 (Jan. 19, 2010), available at

19 State Regulatory Authorities Sector (OMS) Responses to the November 17 Advisory Committee
Library/Repository/Meeting%20Material/Stakeholder/AC/2010/20101201/20101201%20OMS%20RA%20Comments.pdf (“November 17, 2010 OMS Comments”); see also State
Regulatory Authorities Sector Responses by OMS to the December 1 Advisory Committee Questions, The

20 Prior to commencement of a forward capacity market, there are significant implementation costs in
setting up a market this complex. See Brattle Report at 50. These costs would be passed through to
ratepayers. In a forward capacity auction, a single market clearing price is determined for capacity in that
region at a price high enough to attract the development of new generation. In theory, this is a price at
which a new peaking (combustion turbine) power plant will enter the market and offer capacity to satisfy
the final increment of capacity required. As a result, the market clearing price generally is higher than the
price of providing existing capacity.20 Consequently, retail ratepayers with rates currently based on the
embedded costs of existing capacity would face the threat of flow-through of new increased wholesale
has not yet implemented its forward capacity market, EAI ratepayers in Arkansas likely would bear an allocated share of these costs, and, once implemented, capacity costs included in utility rates also would likely increase. Neither of these potential costs was accounted for in either the CRA Studies or the Evaluation Report.

SECTION VII. MISO AND SPP MARKET COMPARISONS

Q. Entergy has indicated that it does not believe SPP can implement its Integrated Marketplace on time or in budget. Do you agree?

A. No, I do not agree.

Q. How does SPP expect to implement its Integrated Marketplace on time?

A. SPP has the benefit of knowledge and lessons learned related to other market implementations efforts to help provide it a solid implementation plan. In the first place, SPP has already approved the necessary market rules that were largely based on the success of other markets. Second, SPP has already contracted with vendors that provided systems within those successful markets. Third, SPP has already contracted with a successful program manager vendor and they have responsibility for the integration of vendor systems with each other and with SPP legacy systems. Fourth, SPP’s working arrangements with Electric Reliability capacity costs based on “replacement costs”—and with the replacement being a new peaking plant potentially built far from Arkansas. Given the little benefit of a new capacity market of this type to retail ratepayers in traditionally regulated states, this increase in capacity costs would be little more than a transfer of wealth from ratepayers to generators. See November 29, 2010 OMS Comments (“The OMS instead sees the effort to establish a forward capacity auction as a means to preserve generator membership at the expense of electric power consumers. The result is a wealth transfer from consumers to generators.”).
Council of Texas and PJM have been valuable in validating, and some cases changing, SPP’s approach based on their experience. By leveraging others’ experience and that gained through SPP’s own EIS market implementation SPP fully expects to implement the Integrated Marketplace on time and within budget.

Q. Do you agree with Entergy’s position that the cost of SPP’s Integrated Marketplace will nearly double?

A. No, I do not. Entergy’s response to SPP’s Data Request 1, Question No. 1 dated June 23, 2011, does not give a full or fair comparison of the costs of SPP’s Integrated Marketplace and the markets of other RTO/ISOs. It appears that Entergy estimated the cost of implementing SPP’s Integrated Marketplace based on a comparison of three of the six Day 2 Market startup costs and selected none of the entities that were successful with implementation budgets and schedules. Entergy’s response to SPP’s Data Request 1, Question No. 1 is attached hereto as Attachment 2. Also it has to be noted that the costs that Entergy used were not validated to be on the comparative basis with the current state of market implementation in SPP.

Q. What is the status of SPP’s Integrated Marketplace design and deployment and how is it proceeding?

A. SPP is on schedule with the implementation of the Integrated Marketplace. In developing the Integrated Marketplace, SPP has paid particular attention to and
learned from issues with market designs in other markets. This reflects part of
SPP’s value proposition to be “Evolutionary vs. Revolutionary.”

Q. How does SPP provide market monitoring oversight and why?

A. FERC has explicitly stated there are three approaches an RTO or ISO may utilize to comply with the requirement to establish and maintain market monitoring oversight. Market monitoring can be conducted through an internal, external, or hybrid structure. Each approach is acceptable and FERC has expressed no preference, as it declined to impose any particular market monitoring structure for RTOs and ISOs in Order 719. In fact, in Order ER09-1050, the commission expressly “disagree[d] with [the] assertion that a Market Monitoring Unit structure that lacks a unit that is independent of, and external from, the RTO or ISO is severely diminished in its ability to perform market monitoring functions.”

FERC continued to state in Order ER09-1050 that it “has not observed any deficiencies in performance by internal Market Monitoring Units that can be attributed to their structures.”

As SPP staff expertise has expanded, SPP evolved from an external to an internal market monitor structure. This FERC-approved internal market monitoring methodology enhances real-time monitoring and is cost effective, thereby increasing the benefits to SPP market participants. As required by FERC, the Market Monitoring Unit reports to the SPP Board of Directors through its Oversight Committee. If at any time in the future there is sufficient reason to
review the placement or direction of any organizational component, such a review
would be initiated.

Q. It appears that a primary reason Entergy chose MISO was that MISO has “a
properly functioning Day 2 market.” Entergy proposes to join MISO’s Day
2 Market in December 2013 and SPP’s Day 2 Market is scheduled to launch
on March 1, 2014. Do you think it is appropriate to eliminate SPP because
its Integrated Marketplace is not in operation currently?

A. No. When you consider that joining an RTO as a Transmission Owning member
is a long-term decision that will likely last years if not decades, a 90-day
difference between the date Entergy proposes to join MISO (Dec. 1, 2013) and
the date SPP is scheduled to launch the Integrated Marketplace (March 1, 2014),
is not a realistic reason to not join SPP.

Q. Both the Entergy Evaluation Report and Mr. McDonald’s Supplemental
Direct Testimony detail the ostensible benefits of MISO membership, relying
in large part on the opportunity of Entergy to take advantage of “a properly
functioning Day 2 market.” Report at 44. Do these descriptions present a
complete picture of MISO’s operations?

A. No, they do not. It is certainly true that participation in a Day 2 Market provides
access to a broader pool of generating resources and related services. It is also
true that a properly functioning Day 2 market will offer economic dispatch and
more efficient integration of pooled transmission and generation assets. However,
Entergy’s presentation provides only part of the story. Noticeably absent from the Evaluation Report and Mr. McDonald’s testimony is any discussion of the current benefits of the SPP Energy Imbalance Market, as well as the various problems and disputes that have arisen within MISO, including issues associated with Day 2 Market operations and escalating operating/administrative costs that have caused MISO members to question the value of continued membership.

**Q. Would Entergy participation in SPP’s Energy Imbalance Market provide benefits to Entergy?**

**A.** SPP members such as Empire, OG&E, and AEP Company have demonstrated in their respective filings with this Commission that there are substantive benefits in SPP’s current markets.

**Q. Please describe the problems and disputes in the MISO Day 2 market.**

**A.** In two ongoing FERC proceedings, issues regarding potential price discrimination and/or gaming within MISO’s Day 2 market have been identified and are under investigation. In addition, since the commencement of market operations, market settlement problems have continued to plague MISO, no doubt contributing to the withdrawal of several significant member utilities, and adversely impacting market participants. And the situation does not appear to be improving, as evidenced by other member withdrawals threatened and a recent customer opinion survey indicating a high, and growing, level of dissatisfaction across all sectors of MISO’s membership.
Q. What are the specific issues under review in the FERC proceedings?

A. In FERC Docket No. EL07-86, et al., FERC is examining the allocation of Revenue Sufficiency Guarantee (“RSG”) charges to market participants under the Midwest ISO’s Tariff and possible discrimination between MISO’s treatment of market participants who withdraw energy in the real-time energy market (for which a real-time RSG charge is assessed based on virtual supply offers and real-time load, injection, export and import deviations) and market participants who submit virtual bids and do not make actual withdraws from the real-time energy market and are not assessed RSG charges. In addition to the complaint proceeding in EL07-86, et al, there is an ongoing Tariff proceeding in FERC Docket No. ER04-691 regarding proposed revisions to MISO’s Tariff to provide that RSG costs should be allocated to virtual offers, irrespective of whether the market participant withdraws energy.

In a separate FERC proceeding, MISO’s Day-Ahead Margin Assurance Payment (“DAMP”) make-whole payment are being contested following the identification by MISO’s Market Monitor of a gap in MISO’s Tariff giving market participants an undue opportunity to game DAMAP make-whole payments. These payments are designed to address price volatility by providing an incentive for market participants to be flexible in their offers in the real-time market. The identified flaw has raised concerns that market participants could make low day-ahead offers that understate production costs and then make a
higher real-time offer. MISO’s proposed Tariff revisions to address this loophole remain pending before FERC.

Q. **How should these problems be factored into the examination of potential benefits associated with MISO’s Day 2 market?**

A. At a minimum, they should be acknowledged as adding to the complexity and imprecision of any attempt to quantify MISO’s market benefits. By failing to do so, Entergy’s Evaluation Report and related testimony suggest a level of simplicity and accuracy in the cost/benefit analysis that is not realistic.

Q. **What market-specific data can be gleaned from MISO’s 2010 customer opinion survey?**

A. There are DAMAP and RSG problems and issues involving chronic re-settlements of market transactions. Other areas of concern identified in survey responses include barriers to market entry, market design and process flaws, non-transparent decision-making and lack of collaboration with members. Some of the more strident views were offered by Transmission Owner members, who questioned the value of MISO membership, given the various obstacles and costs.

**SECTION VIII. SPP’S RECOMMENDATIONS TO THE COMMISSION**

Q. **What recommendation does SPP have regarding EAI’s request/proposal to join MISO?**
A. SPP believes membership in SPP is EAI/Entergy’s best option. Accordingly, SPP believes that the Commission should determine that SPP, and not MISO, is the appropriate RTO, and if EAI requests a change of control to MISO, the Commission should deny any such request. If however, the Commission allows EAI to move forward with its proposal to join MISO, the Commission should conditionally approve EAI’s change of control request by placing conditions on the EAI’s proposal and should withhold approving EAI’s membership until uncertainties related to EAI membership in MISO are resolved, such as withholding approval until the JOA is renegotiated, and approved by FERC, so that the Commission can fully understand the cost implications to Arkansas.

Q. Are you aware of any precedent for a state regulatory authority denying a utility’s request to join an RTO?

A. Yes, I am. In Case No. EO-2008-0046 before the Missouri Public Service Commission (“MoPSC”), Aquila, Inc. (“Aquila”) sought to become a full member of MISO. The MoPSC denied Aquila’s application to join MISO.21 The MoPSC stated that an RTO “provides a path by which electricity can be reliably transmitted from a generating facility to the customers that need that electricity” and that it “facilitates short-term deliverability of electricity for economic transactions.”

Prior to Case EO-2008-0046, Aquila had previously applied for approval to transfer operational control of its transmission system to MISO, but withdrew its application before the MoPSC because AmerenUE, upon which Aquila was dependent for its physical connection to MISO, had withdrawn from MISO, leaving Aquila with no physical connection to MISO. On August 20, 2007, Aquila filed another application before the MoPSC to transfer operational control of its transmission system to MISO.

In connection with Case No. EO-2008-0046, CRA performed a cost-benefit analysis considering three scenarios: membership in Midwest ISO, membership in SPP and a move to stand-alone status. CRA found that there was $21.1 million in benefits to joining MISO, as compared to the stand-alone scenario and $86.9 million in benefits to joining SPP, as compared to the stand-alone scenario. The MoPSC opined that the studies by CRA demonstrated a drawback to Aquila’s proposed membership in MISO was that Aquila simply did not have adequate transmission links with the rest of MISO. The MoPSC explained that Aquila was linked to MISO by just two tie line connections with AmerenUE, which was a member of MISO, whereas Aquila was linked to SPP by 14 tie lines, and that the greater interconnection with SPP would allow Aquila to displace expensive generation in its own control area with less expensive purchased power from the SPP control area, resulting in cost savings for Aquila.

The MoPSC opined that foregoing greater financial benefits that could be obtained from joining SPP to instead accept lesser financial benefits from joining
MISO is a potential detriment to the public that the Commission must consider. In addition, it further stated that although MISO offered a more fully developed day-ahead energy market than SPP, that Aquila’s decision to join an RTO is a long-term decision, so it is appropriate to place greater emphasis on the long-term results of that decision, determining that over the long term, SPP’s markets are likely to catch-up with those offered by MISO and the CRA analysis appropriately accounted for those differences in the short-term. Finally, the MoPSC held that a real life problem with Aquila’s proposal to join MISO is that Aquila’s existing transmission connections to the rest of MISO, through its interconnections with AmerenUE, simply are not as extensive as its connections to SPP and that the additional transmission congestion over those limited connections that would result if Aquila joined MISO was an additional detriment to the public.

Ultimately, the MoPSC determined that “Aquila, and thereby its ratepayers, will benefit if Aquila joins an RTO” but found that “MISO was not the appropriate RTO for Aquila to join.” The question of whether Aquila should join SPP was not before the MoPSC at that time, so the MoPSC did not order Aquila to join SPP, but recognized that Aquila was free to then apply to the MoPSC for authority to join the RTO which best met its needs. Clearly, there is precedence for the APSC to make a determination that although RTO membership is beneficial to EAI and its ratepayers, that MISO is not the appropriate RTO for EAI to join.
Q. So based upon your involvement in the MoPSC Case No. EO-2008-0046 and

knowledge of the Entergy-MISO proposal before the Commission, what is

your view of the MoPSC ruling in the Aquila case?

A. Clearly, there is precedence for the Commission to make a determination that

although RTO membership is beneficial to EAI and its ratepayers, that MISO is

not the appropriate RTO for EAI to join and that Arkansas ratepayers would be

better served by EAI joining SPP.

Q. Alternatively, what conditions should the Commission consider?

A. As discussed in Section IV of my testimony, Entergy’s proposal to join MISO,

including its goal to use the transmission system of others without compensation,

if implemented, would result in the substantial use of SPP’s transmission system

as well as other neighboring transmission systems. Conditions should be required

to ensure that appropriate compensation is paid for the flows across these systems

and any incremental impacts associated with such flows. In this context, the

Commission should require that these costs and the impacts to SPP and other

utilities are resolved prior to a final determination.

Q. What specific issues need to be addressed?

A. Earlier, I touched on the impacts on SPP (and other neighboring systems)

resulting from the loop flows that will be created by the new Entergy-MISO

configuration. One of the primary purposes of appropriately scoped RTOs is to
“internalize” the loops flows among the systems that are its members. \(^{22}\)

Entergy’s joining MISO does not internalize loop flows between MISO’s existing footprint and Entergy; rather, loop flows will be created on the SPP system as MISO and Entergy integrate their markets. These loop flow and congestion effects on SPP are neither trivial nor incidental. This Commission should ensure that SPP members’ are held harmless from these effects.

Q. Is there precedent for holding third party systems harmless from such effects?

A. Yes. In 2003, when Commonwealth Edison Company (“ComEd”) and the operating companies of AEP chose to join PJM rather than MISO, FERC held that certain MISO utilities had to be “held harmless” from the loop flow effects of ComEd’s and AEP’s choices. In that instance, FERC explained that the “purpose of the hold harmless condition is to protect [MISO] utilities from the financial impacts associated with loop flows and congestion created by ComEd’s and AEP’s RTO choices, essentially making [MISO] utilities whole for those impacts.”\(^{23}\) It further reasoned that “given the location of [ComEd and AEP] and their links with neighboring facilities, outright acceptance of their RTO choices,


without any conditions, would not have been just and reasonable.” Therefore, FERC conditioned its approval of ComEd and AEP’s plans to join PJM on AEP, ComEd, PJM and MISO devising “a solution which will effectively hold harmless utilities in [MISO] from any loop flow or congestion that results from the proposed configuration.” The same type of hold harmless safeguard should be developed to protect SPP and any other neighboring system that is similarly affected if Entergy is allowed to join MISO.

Q. For purposes of providing hold-harmless protection, how should the adverse financial impacts be determined?

A. FERC stated in *Alliance Cos.* that the baseline for determining the adverse financial impacts from which the MISO utilities would be held harmless was the situation that would have existed had ComEd and AEP joined MISO (rather than PJM) and the loop flows were internalized within a single RTO. Just as in that case, if Entergy chose to join SPP the loop flows between the SPP and Entergy systems would be internalized rather than placed on a neighboring system. Because Entergy proposes to join MISO instead, to determine the adverse impact on SPP from Entergy’s RTO choice, the flows on SPP’s system if Entergy had joined SPP must be compared with the flows on SPP’s system as a result of Entergy’s choice to join MISO.

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25 *Alliance Cos.*, 103 FERC ¶ 61,274, at P 39.
26 *Alliance Cos.*, 102 FERC ¶ 61,214, at P 10 (2003); *Commonwealth Edison Co.*, 106 FERC ¶ 61,250, at P 40.
Q. What other adverse impacts should be addressed through safeguards?

A. As I discuss in Section IV, SPP currently has planned and approved over $4 billion of new facilities to address the reliability and economics of the SPP system. These facilities were planned for the use of SPP members, and SPP members will pay for them. As a result of Entergy joining MISO, some of the capacity created by these upgrades will be monopolized by Entergy; yet SPP members will be paying for them while Entergy and MISO will benefit from them at no cost. Similarly, significant reliability upgrades on the SPP and neighboring systems will be required to accommodate Entergy’s proposal to join MISO. The SPP members and the neighboring systems should not be required to fund these upgrades without any contribution from those (i.e., MISO/Entergy) that are causing the need for them.

Q. Are there any other issues that should be addressed to safeguard SPP’s system or customers?

A. Yes. Consideration must be paid to the congestion management issues that may stem from the proposed Entergy integration into MISO. To move energy from MISO to Entergy will require using a portion of the SPP system between Nebraska, Missouri, and Kansas, as an example previously discussed that is already congested. Increased use of these facilities would reduce the ability of SPP members to use them for their own reliability and economic purposes. As MISO has indicated at the September 4, 2011 hearing in this docket, it expects to
have available at least 4,000 megawatts of capacity between MISO and Entergy by way of SPP’s transmission system to use to serve Entergy. The potential impact on SPP’s system of such a large use of capacity, including potential increases in locational energy prices, must be studied and addressed as suggested by SWEPCO. In addition, the parties must address how operations will be handled when MISO’s single direct interconnection to Entergy is out of service and resulting energy flows will be entirely on SPP’s and others’ systems. Entergy and MISO simply assumes that its energy transfers may continue unabated, despite the lack of any physical interconnection to Entergy in these circumstances. As acknowledged by FERC, the JOA must be renegotiated in light of the reliability and equity problems created by Entergy’s plans to join MISO.

Q. Short of voluntary renegotiation of the JOA, are there any alternatives to addressing the impacts of the Entergy-MISO proposal on SPP?

A. The regulatory processes, both state and Federal, must recognize and account for these impacts through the establishment of protective conditions that require appropriate compensation to SPP and other affected third-party systems. Following FERC’s lead from the Commonwealth case, any regulatory approvals should ensure full compensation for the financial impacts associated with resulting loop flows and congestion created by the Entergy-MISO proposal.

Q. **In conclusion, please summarize your recommendation to the Commission.**

A. For all of the reasons set forth in this testimony, my previous testimony and in the testimony of Craig Roach, the Commission should determine that membership in SPP to be the appropriate choice for EAI. Therefore, the Commission should reject EAI/Entergy’s proposal. In summary, SPP’s concerns with the inaccuracies contained in the self-directed Evaluation Report as compared to the CRA report which was prepared as directed by the Commission, the roles of regulators and stakeholders in SPP as compared to MISO, and the planning and physical concerns that have been raised individually and collectively lead to the recommendation for EAI to join SPP.

As I’ve already explained, if the Commission does approve EAI’s proposal, it should be done with conditions that fully compensate SPP members for the usage of their transmission systems and properly account for any pending costs for future transmission expansion projects caused in whole or in part by MISO/Entergy’s usages. Further, in order to fully understand the cost the Entergy-MISO proposal will place on Arkansas ratepayers, it would be prudent for the Commission to wait for a FERC approved renegotiation of the JOA before making a decision.

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

A. Yes.
AFFIDAVIT

STATE OF ARKANSAS       
COUNTY OF PULASKI        

I, Carl A. Monroe, being duly sworn according to law, state under oath that the matters set forth in my Supplemental Initial Testimony in this docket are true and correct to the best of my knowledge, information and belief.

Carl A. Monroe

Subscribed and sworn to before me, a Notary Public, on this 12th day of July, 2011.

michelle Harris
Notary Public

My Commission Expires: 04-01-2018

SEAL
CERTIFICATE OF SERVICE

I, Erin E. Cullum, attorney of record for Southwest Power Pool, Inc., do hereby certify that I have, on this 12th day of July, 2011, duly served a true and correct copy of the above and foregoing pleading upon all parties of record by electronic mail.

Erin E. Cullum
Attachment 1

EAI’s response to SPP Data Request 1, Question No. 5
Response of: Entergy Arkansas, Inc.
to the First Set of Data Requests
of Requesting Party: Southwest Power Pool

Filed: 6/23/11

Question No.: SPP 1-5
Part No.: Addendum:

Question:

Has any analysis or inquiry been conducted to determine the rate impacts on non-EAI ratepayers in Arkansas of EAI joining either SPP or MISO? If so, please provide all workpapers, assumptions and any other analysis or information considered or relied upon. Please provide all responsive material in native format with formulas intact, where applicable.

Response:

No.
Attachment 2

EAI’s response to SPP Data Request 1, Question No. 1
Response of: Entergy Arkansas, Inc.
to the First Set of Data Requests
of Requesting Party: Southwest Power Pool

Filed: 6/23/11

Question No.: SPP 1-1

Part No.: Addendum:

Question:

Please provide all workpapers, assumptions and any other analysis or information considered or relied upon in determining that SPP’s implementation costs for the Integrated Marketplace would increase to $200 Million. Please provide all responsive material in native format with formulas intact, where applicable.

Response:

As part of its analysis of RTO administrative charges, the Entergy Operating Companies reviewed the Day 2 Market startup cost experience of other RTOs. The result of that due diligence was the finding, as noted in the Evaluation Report at page 24, that “No RTO has met its initial schedule or budget, and other RTOs have experienced delays in Day 2 Market implementation ranging from 12 to 26 months (at costs that ranged from 150% to more than 500% of the original budget).”

EAI’s response to AAG-12-6 summarizes and documents the Day 2 Market startup costs and implementation schedules of other RTOs, and supports the above-referenced statement. A table used in EAI’s response to AAG 12-6 is reproduced below. This table and Figure TA-2 of the Evaluation Report show that SPP’s $105 million estimate of startup costs for its Integrated Marketplace is a very low estimate relative to the actual startup cost experience of recent market development efforts in MISO ($316 million), CAISO ($200 million), and ERCOT ($530 million). Rather than use SPP’s estimate of $105 million, the Evaluation Report uses the actual cost experience of CAISO ($200 million), which had the lowest startup cost experience in recent history.
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<th>Cost Overrun (millions $)</th>
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PJM, Not available.

3. CAISO, Press Release, CAISO Board Decision on MRTU Budgets and Efficiency on MRTU, 4/8/16.
11. MISO, 2009 FERC Form 30, at 25.
12. MISO, Press Release, Midwest ISO Launches New Markets, 4/16/05.
15. FERC, SANE CMS Compliance, Docket No. EL00-62, 7/28/00, at 17.
17. FERC, Amendment to Start-Up Cost Recovery, Docket No. ER99-4235, 1/1/00, at 2.
18. FERC, Amendment to Start-Up Cost Recovery, Docket No. ER99-4235, 1/1/00, at 3.
19. Power Economics, NYISO Start Up, 12/1/00.
21. ERCOT has been unable to locate PJM cost data.
22. FERC, Order Granting Motion, Docket No. GA97-261, 12/03/97, at 1.
23. The Electricity Daily, PJM revenue received, 4/2/98.