April 8, 2011  
The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Re: Midwest Independent Transmission System Operator, Inc.  
Docket No. EL11-___-000  
Petition for Declaratory Order, Request for Shortened Notice Period,  
and Request for Expedited Treatment

Dear Secretary Bose:

Pursuant to Rule 207 of the Federal Energy Regulatory Commission’s Rules of Procedure, 18 C.F.R. § 385.207, the Midwest Independent Transmission Operator Inc. (“MISO”) is filing the attached Petition for Declaratory Order, Request for Shortened Notice Period, and Request for Expedited Treatment. As required by Rule 381.302(a), 18 C.F.R. § 381.302(a), MISO is having delivered today a check in the amount of $23,540 to the Secretary’s Office in order to cover the filing fee.

In addition to its normal stakeholder distribution list and posting on its website, MISO is sending copies of this Petition via e-mail to Entergy Arkansas (and affiliates), Southwest Power Pool, the Arkansas Public Service Commission, and other commissions in the Entergy region.

Please contact the undersigned with any questions.

Very truly yours,

/s/ Stephen L. Teichler
Stephen L. Teichler
UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Midwest Independent Transmission System Operator, Inc. ) Docket No. EL11-____-000

PETITION FOR DECLARATORY ORDER AND REQUEST FOR SHORTENED NOTICE PERIOD AND FOR EXPEDITED TREATMENT OF THE MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.

Pursuant to Rule 207(a)(2) of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission" or "FERC"), 18 C.F.R. § 385.207(a)(2)(2011), the Midwest Independent Transmission System Operator, Inc. ("MISO") hereby files this Petition for Declaratory Order ("Petition") seeking Commission confirmation that the terms of the Joint Operating Agreement ("JOA") in effect between Southwest Power Pool ("SPP") and MISO,1 regarding the sharing of transmission capacity on a common path, as set forth in Section 5.2 of the JOA, will remain in effect and applicable to Entergy Arkansas, Inc. ("Entergy Arkansas")2 in the event Entergy Arkansas becomes a transmission-owning member of MISO.3 SPP and MISO have arrived at divergent interpretations of the contract path capacity sharing language of Section

1 The full name of the JOA is the “Joint Operating Agreement between the Midwest Independent Transmission System Operator, Inc. and Southwest Power Pool, Inc.” Both MISO and SPP are FERC-approved Regional Transmission Organizations (“RTOs”). The Commission directed MISO and SPP to enter into the current JOA, which was approved in 2004, to better coordinate power flows and improve “seams” management between the two RTOs. See Southwest Power Pool, Inc., 109 FERC ¶ 61,008 (2004), reh’g denied, 110 FERC ¶ 61,031 (2005). The JOA is designated as “Midwest ISO Second Revised Rate Schedule FERC No. 6” and “Southwest Power Pool, Inc. Second Revised Rate Schedule FERC No. 9.”

2 Entergy Arkansas Inc. is one of the operating companies of Entergy Corporation ("Entergy"), owning certain transmission, distribution and generation facilities in the State of Arkansas. The remaining Entergy Operating Companies are: Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans Inc., and Entergy Texas, Inc.

3 Such transmission-owning members of MISO are referred to in this Petition as “Transmission Owners” or “MISO Transmission Owners.”
5.2, which has resulted in substantial uncertainty with respect to the meaning of this language and its future applicability to Entergy Arkansas. This uncertainty, in turn, is frustrating Entergy Arkansas’ ability to make an informed RTO choice, and the ability of its regulators to review it. MISO requests that the Commission, pursuant to its authority under the Federal Power Act (“FPA”)4 and the Administrative Procedure Act (“APA”),5 remove the uncertainty and interpret Section 5.2 of the JOA as set forth herein.

MISO further requests a shortened notice period and expedited treatment for this Petition in order to accommodate ongoing regulatory proceedings at the Arkansas Public Service Commission (“APSC”) in which this issue has been raised.6 As part of the aforementioned proceedings, the APSC is expected to opine whether it will be prudent for Entergy Arkansas to join either of the two RTOs or to operate on a stand-alone basis after its exit from the Entergy System Agreement (“ESA”).7 Entergy Arkansas has indicated to MISO that obtaining clarity with respect to the meaning of Section 5.2 of the JOA is material to its discussion of the alternatives. Likewise, SPP has recognized in its testimony before the APSC that “as a threshold matter, issues regarding the interpretation and implementation of the JOA would need to be addressed under the MISO alternative.”8 Finally, the APSC has indicated that removing the

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5 5 U.S.C. § 500, et seq.
7 The ESA and the APSC proceedings are discussed in more detail in Section II.A, infra.
8 See Direct Testimony of Carl A. Monroe, Executive Vice President and Chief Operating Officer of Southwest Power Pool, Inc. on Behalf of Southwest Power Pool, Inc., APSC Docket No. 10-011-U, at 21:1-21:3 (February 11, 2011) (“Monroe Testimony”). An excerpt from the Monroe Testimony is attached hereto as Exhibit A.
uncertainty with respect to the future application of Section 5.2 to Entergy Arkansas will be important to its ability to make an informed decision.\(^9\)

Under the APSC procedural schedule, Entergy Arkansas is required to file an assessment of its reorganization options, \(i.e\), the SPP option, the MISO option and the stand-alone option by noon May 12, 2011.\(^{10}\) To ensure that that Entergy Arkansas, the ASPC and all other affected parties have the benefit of the Commission’s timely and authoritative interpretation of Section 5.2 of the JOA, MISO respectfully requests that the Commission: (1) establish April 29, 2011, twenty-one (21) days after the filing of this Petition, as the deadline for all responsive pleadings; and (2) issue its decision on the Petition by no later than June 7, 2011, sixty (60) days after the filing date of this Petition.

I. EXECUTIVE SUMMARY

Section 5.2 of the JOA provides, in pertinent part, that where MISO and SPP “have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties.”\(^{11}\) Section 5.2 is not unique to the JOA and similar language appears in certain other inter-RTO joint operating agreements. The essential purpose of this provision is to ensure that an RTO member with existing paths to its host RTO and another RTO can use the capacity of either RTO to fully participate in the energy markets, and to maintain interconnection during outages. This issue has immediate significance because Entergy Arkansas will rely upon

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\(^9\) Other members of the Entergy Regional State Committee (“ERSC”), which includes state regulators in the Entergy footprint, have expressed similar concerns that this issue could affect their own reviews of an RTO decision by the remaining Entergy operating companies.


\(^{11}\) JOA § 5.2.
existing transmission capacity, in both SPP and MISO, to reach the markets in which it operates in the event it becomes a transmission-owning member in either RTO.

Accordingly, MISO seeks an order from this Commission declaring that Section 5.2 of the JOA provides for the sharing of available transmission capacity on common paths, when the entities using that capacity are transmission-owning members of either RTO. A declaratory order by the Commission is necessary and proper because MISO and SPP have publicly disagreed on the application and meaning of this language with regard to the ability of Entergy Arkansas to share transmission capacity under the control of one RTO after it becomes a member of the other RTO. This has created an uncertainty whose adverse effect is immediate and substantial. In fact, a recent supplemental study by an independent consultant retained to assess the relative costs and benefits of Entergy joining MISO indicates that significantly greater benefits than would otherwise be available could accrue to Entergy and its customers in the event MISO’s interpretation of Section 5.2 prevails.\textsuperscript{12} The significance of quickly resolving this question was not lost on other Entergy regulators who attended the March 17 and 18 ERSC meeting, at which the study results were reviewed.\textsuperscript{13}

\textsuperscript{12} See Cost/Benefit Analysis of Entergy/Cleco Power or Entergy Arkansas Joining the Midwest ISO, Addendum Study, prepared by Charles River Associates, App. B-2, at 38, attached hereto as Exhibit B. As explained by Mr. Richard Doying, MISO's Vice President of Operations, in his testimony before the APSC "The figures in Appendix B [of the CRA Study] were premised on a simulation that attempts to use the correct assumption that the MISO and SPP would fully utilize the transmission facilities on the interconnections, as well as the existing 1000MW contract path, to enable transactions between Entergy and the rest of the MISO footprint. As noted above, the CRA summary figures found in their Appendix B suggest that there are significant additional, available customer benefits that the [APSC] should consider." Direct Testimony of Richard Doying on Behalf of MISO Intervenors, APSC Docket No. 10-011-U, at 12:4-11 (March 18, 2011) ("Doying Testimony"), attached hereto as Exhibit C.

\textsuperscript{13} See Comments of ERSC President Anderson (Texas PUC) at 261-62 of the published transcript of the meeting, posted on the SPP website, http://www.spp.org/publications/Official%20Transcript%20ERSC%20March%2017%2018%202011.pdf.
MISO believes that Section 5.2 should be interpreted consistent with its antecedent language in the MISO-PJM Interconnection, L.L.C. (“PJM”) Joint Operating Agreement,\textsuperscript{14} permitting the transmission-owning members of an RTO to share the adjoining RTO’s available capacity on a reciprocal basis. In contrast, SPP’s interpretation of this provision is that capacity sharing is available to Entergy Arkansas only so long as it operates on a stand-alone basis, but not after it transfers its transmission facilities to either RTO’s functional control. The parties have reached an impasse in their efforts to bridge the gap between these two irreconcilable constructions of Section 5.2, and the Commission’s assistance with this critical issue is both requested and needed.

MISO respectfully submits that its construction of Section 5.2 is the correct one and should prevail. As detailed herein, MISO has based its interpretation on both the plain language of Section 5.2 and the history and intent of this provision. In addition, MISO’s interpretation is consistent with how a virtually identical provision in the PJM JOA has been interpreted and applied. Perhaps of the greatest import, MISO’s interpretation gives full effect to the Commission’s RTO and open transmission access policy, including the obligation imposed on RTOs by Order No. 2000 to address parallel flows on an interregional basis.\textsuperscript{15} In contrast, SPP’s reading of Section 5.2 ignores the language and intent of Section 5.2 and raises artificial barriers between the two RTOs.


\textsuperscript{15} See 18 C.F.R. § 35.34(k)(3). “Parallel path flow. The Regional Transmission Organization must develop and implement procedures to address parallel path flow issues within its region and with other regions.”
II. BACKGROUND

A. Entergy, the ESA and the ASPSC Proceedings

Historically the relationship between the Entergy operating companies has been governed by the ESA. The purpose of the ESA is to economically dispatch all Entergy resources to Entergy load across the entire system, and to provide a basis for planning the electric transmission system jointly among the operating companies. Helped by a series of Commission orders, Entergy eventually developed a methodology to allocate production costs among the operating companies in a manner that achieves what is called Rough Production Cost Equalization (“RPCE”).

After a Commission order related to RPCE in late 2005, Entergy Arkansas filed a notice to terminate the ESA effective December 2013. In April 2006, the Commission approved Entergy’s proposal to enter into an Independent Coordinator of Transmission (“ICT”) Agreement, with SPP serving as the ICT administrator. That order also stipulated that a Weekly Procurement Process (“WPP”) would become operational by June 2007.

After significant delays in implementing the WPP, the APSC found in May 2009 that the ICT had failed to deliver the promised benefits. In the wake of the APSC order, the ERSC was formed to enhance oversight of Entergy-related transmission issues. In February 2010, the APSC initiated a proceeding to manage the process of choosing a successor arrangement to the

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18 In November 2007, Entergy Mississippi, another Entergy operating company, filed notice to withdraw from the ESA effective November 2015.
ESA for Entergy Arkansas.\textsuperscript{21} The FERC agreed to fund a cost-benefits study to determine what, if any, benefits might accrue from Entergy joining SPP. Subsequently, the scope of the study was expanded to include a review of similar costs and benefits that might accrue to Entergy from MISO membership.\textsuperscript{22} Entergy Arkansas is also evaluating a stand-alone option that would replace the current ESA. As noted above, Entergy Arkansas is required to file with the APSC by May 12, 2011, declaring whether it believes SPP, MISO, or a new stand-alone arrangement, would offer the greatest benefit to its customers.\textsuperscript{23}

\textbf{B. Transmission Paths between Entergy Arkansas, MISO and SPP}

The MISO Transmission System currently has a direct high-voltage interconnection with Entergy Arkansas’ transmission facilities. The interconnection is located at New Madrid, Missouri, where Ameren Corporation (“Ameren”),\textsuperscript{24} Associated Electric Cooperative, Inc. (“AECI”), and Entergy Arkansas share the capacity of the 500/345 kilovolts (“kV”) transformers. The direct contiguous tie capability between Entergy Arkansas and Ameren is approximately 1,000 megawatts (“MWs”) of the 1,500 MW total capability of the interconnection. The tie is governed by a 1977 Interchange Agreement,\textsuperscript{25} which was amended in

\textsuperscript{23}See id. at P 4 & n.3. Responses to the Entergy filing are then due on July 12, 2011. Id. at P 5.
\textsuperscript{24}Ameren is a MISO Transmission Owner and its Missouri transmission facilities, including its portion of the interconnection, are under MISO’s functional control. AECI currently is not a transmission-owning member of MISO.
\textsuperscript{25}The full name of the Interchange Agreement is the “Interchange Agreement between Arkansas-Missouri Power Company, Associated Electric Cooperative, Inc. and Union Electric Company for the Missouri-Arkansas EHV Interconnection.” Entergy Arkansas is the successor in interest to Arkansas-Missouri Power Company and Ameren is the successor in interest to Union Electric Company.
1996 in compliance with Order No. 888,\textsuperscript{26} to ensure that open access is provided over the entire interconnection and to remove all contractual restrictions on third-party use.\textsuperscript{27} In addition, the SPP transmission system is interconnected with the transmission facilities of another MISO Transmission Owner – MidAmerican Energy Company (“MEC”). The combined transfer capability of the SPP/MEC tie is approximately 5,100 MWs. Finally, Ameren is interconnected with SPP by approximately 1,800 MWs of transfer capability, for a total interconnection between MISO and SPP of approximately 6,900 MWs.

Entergy has a number of direct interconnections with the SPP transmission system. According to SPP, “there are 41 physical ties between Entergy and SPP capable of transferring up to 14,100 MW of power.”\textsuperscript{28}

\noindent C. SPP and MISO Adopted Diverging Interpretations of Section 5.2 As May Be Applicable to Entergy Arkansas upon Its Integration into MISO

Until recently, the two RTOs’ application of Section 5.2 had been non-controversial. On at least one prior occasion, unrelated to the Entergy RTO membership issue, SPP and MISO had implemented capacity sharing under Section 5.2 during line outages affecting the Ameren system.\textsuperscript{29} Only in 2010, when the APSC broadened its ESA inquiry to include the MISO option as a choice available to Entergy Arkansas did the controversy arise with respect to the future application of Section 5.2.

In light of the Entergy developments at the APSC, in the second half of 2010 MISO began to participate in various workshops and discussions with SPP, Entergy and the state

\textsuperscript{26} See Entergy Servs., Inc., FERC Docket No. OA97-285-000 (December 31, 1996). A letter order issued in this docket on November 5, 1998, accepted the proposed amendment.
\textsuperscript{27} The initial term of the Interchange Agreement expires in June 2013, after which the agreement remains in effect on a yearly basis, subject to cancellation by any party upon 4-year notice. It is MISO’s understanding that the parties to the Interchange Agreement are in negotiations concerning its extension beyond the initial term.
\textsuperscript{29} See Affidavit of Thomas J. Mallinger on Behalf of Midwest Independent Transmission System Operator, Inc. ¶ 13 (“Mallinger Affidavit”), attached hereto as Exhibit D.
regulators in the Entergy region regarding MISO as an alternative RTO choice for Entergy. MISO was asked to confirm the availability of transmission path sharing under Section 5.2 of the JOA in the event Entergy Arkansas chooses, or is directed by the APSC, to join MISO as a Transmission Owner. As part of that effort, MISO’s counsel prepared a legal analysis of Section 5.2, which was shared with the ERSC, the Arkansas PSC and other affected state commissions and their staff. In their analysis, MISO’s counsel reviewed the language of Section 5.2, the history of the contract path sharing provisions in joint operating agreements with SPP and PJM, and a course of performance by the parties to these agreements. MISO’s counsel concluded, ceteris paribus, that “the transmission-sharing provisions of Section 5.2 would be applicable to the Entergy interconnection after Entergy becomes a [MISO] Transmission Owner and should be interpreted to allow [MISO] to utilize the combined transmission capacity of the existing SPP interconnections with Entergy and [MISO].”

On January 11, 2011, SPP distributed to an ERSC Working Group a document entitled “Limitations on Midwest ISO use of SPP Transmission Capacity to Integrate Entergy into the Midwest ISO System” (“White Paper”). In the White Paper, SPP directly challenged MISO’s analysis of Section 5.2 and concluded that MISO would not be able to rely on the contract path sharing provisions of Section 5.2 in the event Entergy Arkansas decides to become a MISO Transmission Owner. SPP asserted that MISO’s analysis was not consistent with the plain meaning of Section 5.2 and claimed that a hypothetical 2013 expiration of the Interchange

30 See Memorandum from Stephen L. Teichler and Ilia Levitine to Wayne Schug and Gregory A. Troxell regarding Sharing Contract Path Capacity Under the MISO/SPP Joint Operating Agreement (dated October 13, 2010), attached here to as Exhibit E.
31 Id. at 2.
32 The White Paper is attached hereto as Exhibit F.
Agreement would “eliminate any high-voltage connection between [MISO] and Entergy.”

Finally, SPP asserted that no “significant firm ‘rights’ exist to provide [MISO] the allocations needed to reliably serve the loads of [MISO] and Entergy using the flowgates of SPP, or other neighboring transmission systems, much less gain the benefit of joint operations of the combined facilities” and that “the JOA would limit [MISO’s] use of SPP flowgates based on historic firm ‘rights.’”

Aware of the APSC procedural schedule, and because MISO viewed the question as a very narrow contract interpretation dispute, MISO initiated, on January 17, 2011, a dispute resolution process under Section 14.2 of the JOA in hopes that a structured process would enable the parties to reach accommodation. In particular, MISO stated its preference, given the nature of the dispute, for proceeding directly to mediation under the auspices of the FERC Dispute Resolution Service, as provided in Section 14.2.3 of the JOA. SPP, however, declined to proceed expeditiously, stating its belief that there is no “current dispute ripe for invocation of the dispute resolution procedures of the JOA.” In its response, MISO disagreed with SPP’s assessment that “there is no dispute ripe for dispute resolution,” noting in particular that “[t]he views of the two organizations published to date indicate a fundamental difference over what Section 5.2 of the JOA is intended to accomplish” and that “[t]his subject is not amenable to resolution by a committee of engineers.” Nonetheless, SPP continued to oppose

33 Id. at 2.
34 Id. at 4.
35 Section 14.2 provides for a three-step dispute resolution process that applies to “any dispute that arises from either Party’s performance of, or failure to perform [the JOA] and which the Parties are unable to resolve prior to invocation of these procedures.” A copy of Section 14.2 is attached hereto as Exhibit G.
36 See Letter from Mr. John R. Bear to Mr. Nick Brown Re: Notice of Dispute Pursuant to Section 14.2 of the Joint Operating Agreement between Midwest Independent Transmission System Operator, Inc. and Southwest Power Pool, Inc. (Jan. 17, 2011), attached hereto as Exhibit H.
37 See Letter from Mr. Nick Brown to Mr. John R. Bear at 1 (Jan. 25, 2011), attached hereto as Exhibit I.
38 See Letter from Mr. John R. Bear to Mr. Nick Brown at 1 (Feb. 9, 2011), attached hereto as Exhibit J.
commencement of the Section 14.2 process, preferring instead an informal discussion under the auspices of the JOA Seams Agreement Coordinating Committee (“SACC”).

In an attempt to address SPP’s expressed concerns, MISO agreed to SPP’s request to discuss the matter in the March 11, 2011 meeting of the SACC. On March 22, 2011, a subsequent meeting took place in Little Rock, Arkansas between MISO and SPP to address the same question. Regrettably, SPP remains unwilling to change its publicly stated interpretation of Section 5.2, that capacity sharing during outages, or to internalize Entergy’s parallel flows, will no longer be available once Entergy joins an RTO. In such circumstances, the instant Petition is the only practicable course for MISO to ensure the definitive and expeditious resolution of an uncertainty created by the parties’ irreconcilable interpretations of Section 5.2 of the JOA.

III. MISO’S INTERPRETATION OF SECTION 5.2 SHOULD BE ADOPTED BY THE COMMISSION.

A. The Plain Language of Section 5.2 Supports MISO’s Interpretation.

Section 5.2 of the JOA states as follows:

Section 5.2 Sharing Contract Path Capacity. If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically or contractually interconnect and [MISO] will not be able to deal directly with companies with which it does not physically or contractually interconnect.

MISO has offered a straightforward interpretation of this provision. By its own terms, Section 5.2 applies when SPP and MISO (i.e., “the Parties”) “have contract paths to the same

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39 See Letter from Mr. Nick Brown to Mr. John R. Bear (Feb. 15, 2011), attached hereto as Exhibit K.
40 Section 2.2.41 provides that the terms “Party” or “Parties,” when capitalized, mean SPP and/or MISO.
In such a case, “the combined contract path capacity will be made available for use by both Parties.” Because SPP and MISO have contract paths to Entergy Arkansas, these paths are subject to sharing under Section 5.2 of the JOA, and this sharing will continue if Entergy Arkansas becomes a MISO Transmission Owner. SPP is not disputing that both SPP and MISO have contract paths to Entergy Arkansas. Nor is SPP disputing that these contract paths currently are subject to the Section 5.2 sharing. In fact, in its November 17, 2010 presentation to the ERSC, SPP stated as follows:

Entergy today, is a good example of an “entity” to which both MISO and SPP have a contract path.

- Has been interpreted this way recently by SPP and MISO
- MISO could schedule 300 MW to Entergy, for example, and if the contract capacity on MISO-Entergy ties were limited, the contract capacity over SPP would be available (absent congestion dealt with in the CMP section).

The SPP argument, therefore, is not that Entergy Arkansas is currently ineligible for sharing under Section 5.2, but that this current sharing would have to be discontinued upon Entergy Arkansas’ integration into MISO as a Transmission Owner. According to SPP, Entergy Arkansas would cease to be the “same entity” within the meaning of Section 5.2 in such a case because it “would now be a part of the [MISO] system as a whole.” In short, SPP believes that Section 5.2 applies only when MISO and SPP have contract paths to the “same third-party system.”

The chief problem with this interpretation is that it has no basis in the plain language of Section 5.2. While a “third-party system” certainly can be an “entity,” as this word is used in

41 In the White Paper, SPP acknowledges that “Section 5.2 applies when each of the two parties, [MISO] and SPP, have ‘contract paths to the same entity.’” Ex. F, White Paper at 3.
42 JOA § 5.2.
43 The relevant excerpt from the November 17, 2010 presentation is attached hereto as Exhibit L.
45 Id. (emphasis added).
Section 5.2, individual transmission owners of either RTO also can be such entities. When crafting the JOA, the parties were assisted by legal counsel who knew how to draft legal documents and, if the word “entity” really had been intended to mean “a third-party entity,” then such a qualification could have been easily inserted. Furthermore, the term “Third Party” is a defined term in Section 2.2.53 of the JOA, meaning “any entity other than a Party to [the JOA].” Had the two RTOs intended to limit the scope of Section 5.2 as SPP suggests, the defined term “Third Party” would have been used rather than a more inclusive term, such as “entity.”

The conclusion is inescapable that, as written, Section 5.2 simply does not contain the claimed “third-party system” limitation. It is well established that “[w]hen presented with a dispute concerning the interpretation of a tariff or contract, the Commission looks first to the language of the tariff or contract itself and, only if it cannot discern the meaning of the contract or tariff from the language of the contract or tariff, will it look to extrinsic evidence of intent.” 46 In this case, the language of the JOA is clear on its face, and is not susceptible to the ambiguity which SPP seeks to find. Accordingly, the Commission should find that the term “entity” encompasses the two RTOs’ transmission-owning members and that the current Section 5.2 contract path sharing between SPP and MISO will continue unaffected by Entergy Arkansas’ integration into MISO.

B. The Purpose and Intent of Section 5.2, As Well As a Course of Performance under a Similar Provision in the PJM JOA, Support MISO’s Construction.

While the Commission should grant MISO’s requested interpretation of Section 5.2 based on its plain language alone, it is the history of this provision that demonstrates with great clarity that MISO’s interpretation is the correct one. Consequently, in the unlikely event the Commission finds that Section 5.2 is ambiguous with respect to the issue presented herein,

MISO requests that the Commission take into account the regulatory background and application of Section 5.2 and its parallel provision in the PJM JOA.


The RTO contract path sharing provisions, as embodied by Section 5.2, originated in the PJM JOA, which became the template for the subsequent SPP agreement.\(^{47}\) The PJM JOA and its contract path sharing provisions were created in direct response to the Commission’s recognition, in its orders addressing the RTO choices of the former Alliance Companies, “of the partial electrical stranding of Wisconsin and Michigan given the RTO participation choices conditionally accepted.”\(^{48}\) Specifically, the Commission directed PJM and MISO to address the following problem:

We agree, and are also mindful of the partial electrical stranding of Wisconsin and Michigan given the RTO participation choices conditionally accepted. Illinois Power, in fact, recognized the potential to become electrically isolated during the discussion at the July 17 meeting:

And my concern about [Illinois Power] being left behind [in MISO] and ComEd and AEP going to PJM is, we've become almost stranded at this point because we have to rely on going through Ameren to get anywhere into [MISO] with any significant ties, and there's not any capacity available, because it's already sold out to third parties. We're not going to be able to get imports or exports in without having to pay huge fees that occur sometimes at the borderlines of RTOs.

Therefore, we direct AEP, ComEd, Illinois Power, [MISO] and PJM to propose a solution which will effectively hold harmless utilities in Wisconsin and Michigan from any loop flows or congestion that results from the proposed configuration. Such a solution is to be part of an overall joint operational plan to be filed by [MISO] and PJM under which both organization [sic] will

\(^{47}\) See Ex. D, Mallinger Affidavit ¶¶ 6-10.

\(^{48}\) Alliance Cos., 100 FERC ¶ 61,137, at P 53 (2002).
manage seams and any reliability or operational issues there under.\textsuperscript{49}

The resulting solution was Section 6.5 of the PJM JOA, providing for sharing of capacity across the seam. As originally filed with the Commission in 2003, it read:

\textbf{6.5 Sharing Contract Path Capacity.} In recognition that the Joint and Common Market is expected to eliminate distinct [MISO] contract path limits versus PJM contract path limits and in recognition that the sharing of flowgate capacity on a historical usage basis is the first step toward the elimination of distinct contract path limits, [MISO] and PJM have agreed to the following phased approach to the elimination of such contract path limits:

(a) When PJM expands its market to include Commonwealth Edison, there will be a sharing of contract path capacity that existed on a historical basis \textit{(i.e.,} a sharing of the combined contract path capacity where both RTOs have contract paths to the same entity). The combined contract path capacity will be made available for use by both Parties. This will not open up new paths that have not existed previously. PJM will not be able to deal directly with companies with which it does not physically interconnect and [MISO] will not be able to deal directly with companies with which it does not physically interconnect.

(b) When [MISO] commences operation of energy markets, the sharing of contract path capacity where [MISO] and PJM have existing contract path capacity to the same entity will continue to exist. [MISO] and PJM may need to resolve any coordination issues such that the combined contract capacity is not exceeded by the operation of the two markets. This phase will still not open up any new paths for the Parties.

(c) When a Joint and Common Market exists between [MISO] and PJM as is expected, the sharing of contract path capacity between [MISO] and PJM will occur on a complete basis. All physical connections to the combined [MISO] and PJM RTOs will be available for use by the market. Whether the physical path connections are within [MISO] or PJM will not affect a customer’s participation in the market. Only actual physical limitations will

\textsuperscript{49} \textit{Id.} (initial alteration in original).
impact how the customer is able to use these connections to the market.\(^{50}\)

In their joint filing letter, PJM and MISO stated their expectation that the joint and common market between the two RTOs would yield a higher degree of flowgate coordination “because it will, eventually, eliminate distinct [MISO] or PJM contract paths.”\(^{51}\) The sharing of flowgate capacity was intended to be a first step to achieve this result. As explained by the RTOs:

Toward this goal, when PJM expands its markets to include Commonwealth Edison there will be sharing of contract path capacity measured on a historic basis. JOA § 6.5. Additional contract path sharing will occur when [MISO] opens its markets. When the joint and common market is underway, capacity sharing will become complete. All physical connections of the combined grids will be available for use by the markets.\(^{52}\)

As Mr. Mallinger explains in his supporting affidavit, this provision was included in the PJM JOA in response to the Commission’s directive to resolve the Michigan and Wisconsin limited connectivity.\(^{53}\) Similarly, Mr. Doying explains in his APSC testimony:

The purpose of this element of the agreements is threefold: to ensure that the contiguity requirement I discussed earlier is maintained in the event of a transmission outage, whether due to planned maintenance or natural disasters, to internalize regional loop flows between the RTOs, and to maximize market efficiency by ensuring maximum utilization of the actual physical capabilities of the transmission system. It was inserted as part of the PJM agreement because FERC was concerned that our Michigan utilities could become “islanded” from the rest of the MISO footprint if the limited Michigan-Indiana transmission interconnections were out of service, and because the limited interconnections could result in reduced benefits for the Michigan and Wisconsin companies if transmission usage was restricted to contract path limits rather than physical transmission operating limits after Commonwealth Edison joined PJM. The solution was the capacity “sharing” concept that allows each RTO to backstop the

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\(^{50}\) The original language of Section 6.5 was later amended to a much shorter version, resembling that in Section 5.2 of the JOA.


\(^{52}\) Id.

\(^{53}\) See Ex. D, Mallinger Affidavit ¶ 7.
other during outage situations and to maximize the efficient use of the transmission system.\textsuperscript{54}

MISO and PJM have applied Section 6.5 of the PJM JOA in accordance with these stated purposes. While there has been some capacity path sharing between PJM and MISO under Section 6.5 of the PJM JOA for reliability purposes, this provision also has been consistently utilized to serve MISO’s load in Michigan, which is dependent on Section 6.5.\textsuperscript{55} Significantly, this situation “exists all the time and is not dependent on a prior transmission line outage” and “by having access to MISO-PJM JOA Section 6.5, MISO is able to meet its contract path obligations to continuously serve Michigan load.”\textsuperscript{56} In addition, MISO believes that “when PJM is making large exports from ComEd simultaneous with the Wilton Center-Dumont 765 kV line being out of service, PJM is relying on MISO-PJM JOA Section 6.5 to meet its contract path obligations.”\textsuperscript{57} These practices and a course of conduct by the two RTOs are highly significant and material to the instant Petition because the Michigan Zone entities are MISO Transmission Owners.\textsuperscript{58} Consequently, PJM and MISO have not limited the scope of this provision to “third-party entities,” but applied it to their own transmission-owning members.\textsuperscript{59} As explained directly below, the SPP contract path sharing provision was intended to be patterned on Section 6.5 of the PJM JOA, and it was not expected to yield a dramatically different result.

\textsuperscript{54} Ex. C, Doying Testimony at 14:12-15:5.
\textsuperscript{55} See Ex. D, Mallinger Affidavit ¶ 11.
\textsuperscript{56} Id.
\textsuperscript{57} Id.
\textsuperscript{58} Id.
\textsuperscript{59} Id. ¶ 12.
2. **The Development of Section 5.2 of the JOA**

When SPP applied for RTO approval in 2004, the Commission conditioned its acceptance on SPP’s participation in the Joint and Common Market with MISO and PJM.\(^{60}\) The Commission also directed SPP to address “seams” issues between SPP and MISO through a seams agreement that is “compatible” with other similar agreements, which, at the time, meant the PJM JOA.\(^{61}\) In its first compliance filing following the initial order, SPP stated that it was “pursuing a broader joint operating agreement with [MISO], which is expected to be based upon the [MISO]/PJM JOA” and that its progress on this issue was “comparable to, or exceeds, the progress achieved by [MISO] and PJM at the time they were formally recognized as RTOs.”\(^{62}\) While the SPP compliance filing included no JOA, it contained a Memorandum of Understanding between the SPP and MISO, which expressly committed the parties to “explore the possibility of sharing the contract tie capacity available within each party’s transmission facilities with each other.”\(^{63}\) The Commission acknowledged SPP’s commitment to file a fully-fledged JOA and provided additional guidance as to its generic components.\(^{64}\)

Despite the Commission’s directives, MISO and SPP could not reach agreement on a JOA. As a result, SPP unilaterally filed its proposed JOA in August 2004, which omitted a number of crucial provisions that were in the PJM JOA. MISO protested the truncated JOA and included its own, fuller version in its protest. The chief difference between the two versions was the lack of a Congestion Management Process (“CMP”) protocol for market to non-market

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\(^{60}\) See *Southwest Power Pool, Inc.*, 106 FERC ¶ 61,110, at P 3 (2004).
\(^{61}\) *Id.* at P 202. (“We offer the following as additional guidance to SPP in developing seams agreements. We do not require that all RTOs necessarily must have a uniform practice, but that RTO reliability and market interface practices must be compatible. RTOs must coordinate their practices with neighboring regions to ensure that market activity is not limited because of different regional practices.”).
\(^{63}\) *Southwest Power Pool, Inc.*, FERC Docket Nos. RT04-1-002 and ER04-48-002, App. 4, Memorandum of Understanding, Section 2.2(d) (May 3, 2004).
\(^{64}\) *Southwest Power Pool, Inc.*, 108 FERC ¶ 61,003, at PP 52-54 (2004).
congestion management in the SPP version, but the language regarding contract path sharing had also been omitted. The MISO version included the CMP and the missing contract path sharing language from Section 6.5 of the PJM JOA.

In its order on the proposed JOA, the Commission conditionally accepted the SPP version only as a limited interim solution and required SPP to file a revised version addressing the CMP and market-to-non-market issues identified by MISO. The Commission further stated that “while some minor adjustments may be necessary, we do not believe that the market-to-non-market provisions in the SPP JOA must significantly differ from those in the PJM JOA, which we have determined to be just and reasonable.” The Commission then concluded that “the substantive components of the PJM JOA . . . are appropriate for use in the market-to-non-market circumstances under which SPP and [MISO] will operate.”

In conformity with this directive, SPP made a filing on December 2, 2004, which contained an executed JOA closely paralleling the version that the parties had previously agreed to in July 2004 and that MISO attached to its protest. Consistent with the PJM JOA, Section 5.3 of the executed document stated as follows:

**Section 5.3 Sharing Contract Path Capacity – All Phases.** The Parties have agreed to the following phased approach to the elimination of such contract path limits:

(a) If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically or contractually interconnect and [MISO] will not be able to deal directly with companies with which it does not physically or contractually interconnect.

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66 Id. at P 32.
67 Id.
(b) When [MISO] and SPP commence operation of energy markets, the sharing of contract path capacity where [MISO] and SPP have existing contract path capacity to the same entity will continue to exist. [MISO] and SPP may need to resolve any coordination issues such that the combined contract capacity is not exceeded by the operation of the two markets. This phase will still not create new contract paths for the Parties.

(c) When a Joint and Common Market exists between [MISO] and SPP as is expected, the sharing of contract path capacity between [MISO] and SPP will occur on a complete basis. All physical connections to the combined [MISO] and SPP RTOs will be available for use by the market. Whether the physical path connections are within [MISO] or SPP will not affect a customer’s participation in the market. Only actual physical limitations will impact how the customer is able to use these connections to the market.68

SPP sought rehearing of the Commission’s directive to file a JOA that is consistent with the PJM document. The Commission, however, rejected the SPP arguments, stating as follows:

As for the substance of the option we provided to SPP, SPP has raised no operational problems with the PJM JOA, nor has it argued that a market-to-non-market JOA is not necessary. SPP acknowledges the need to have coordinated operations, especially in light of its commitment to participate in the Joint and Common Market, which would necessitate a common form of coordinated operations across all three RTOs. While we have not found that the PJM JOA is the only satisfactory approach, the JOA proposed by [MISO] does adopt procedures to address these loops flows, providing certainty of inter-RTO transmission rights for both economic and reliability purposes. While we encourage the parties to jointly develop enhancements to the SPP-[MISO] JOA, we have further found, and reiterate here, that the market-to-non-market JOA must provide for coordinated flowgates in order to maintain reliability and for SPP to qualify as an RTO.69

This history establishes beyond reasonable doubt that the current Section 5.2 of the JOA was not intended by the parties and the Commission to be materially different from Section 6.5

68 Southwest Power Pool, Inc., Docket No. ER04-1096-002, Original Sheet Nos. 21-22.
69 Southwest Power Pool, Inc., 110 FERC ¶ 61, 031, at P 24 (2005). After it became clear that SPP was not going to be a part of the Joint and Common Market in the foreseeable future, the sharing language was changed to eliminate references to the Joint and Common Market, and was renumbered to the present version as part of other JOA changes in December 2008. The revisions were accepted by a Commission letter order issued in February 2009. See Letter Order, Docket No. ER09-468-000 (Feb. 12, 2009). Similar changes to the contract path sharing language were made to the PJM JOA. Thus, today, the SPP and PJM versions are virtually identical.
of the PJM JOA. The limited interpretation advanced by SPP, however, narrows down considerably the scope of Section 5.2 as compared to its PJM JOA counterpart. In fact, the SPP construction would have prevented capacity sharing in the Michigan and Wisconsin situation, which was how the contract path sharing provisions came about in the first place. Despite SPP’s obfuscation, the actual operating situation followed by PJM and MISO in managing the ComEd integration into PJM, and its impact on Wisconsin and Michigan, illustrates the appropriate interpretation of the language.

C. MISO’s Interpretation Is in Accord with the Commission’s RTO Policy.

The Commission’s policy is to encourage voluntary development of RTOs. These organizations were conceived as bulwark against undue discrimination and economic and operational inefficiencies inherent in a fragmented grid. On a conceptual level, the essential purpose of RTOs is to maximize transmission utilization through the indivisible and transparent operation of transmission assets. The RTO exercises functional control of the transmission capacity of its transmission-owning members without preference or discrimination. In providing transmission service and operating its wholesale electricity markets, the RTO does not consider whether the requestor is an affiliate of the owner, an unaffiliated merchant generator or even a member of another RTO. The charge to the RTO is to efficiently utilize transmission capacity based upon open and nondiscriminatory access principles.

As the Commission perfected RTOs, it extended intra-RTO principles to inter-RTO relations. RTOs were required to work together to avoid “seams” and efficiently allocate inter-

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72 Id. at 14:22-14:23.
RTO capacity. They were tasked with adopting mechanisms to address transmission congestion at the borders. And, they were called upon to minimize inter-RTO loop flows. The RTOs are called upon to share capacity when, and as needed, by an “entity” that has an existing path to both of the adjoining RTOs. This sharing is to be without distinction whether the “entity” is an RTO transmission-owning member or an unaffiliated vertically integrated utility. Section 5.2 of the JOA is a manifestation of this principle and MISO’s interpretation gives full effect to the motivating purpose of RTO creation.

The Commission’s policy to drive down barriers to trade across RTO seams is complemented by sharing unused transmission capacity, providing more efficient use of transmission at a lower cost, reducing ultimate energy costs to consumers. The capacity sharing requirement also has the added benefit of encouraging closer regional planning between interconnected transmission owners, consistent with Order No. 890, to reach mutually agreeable transmission improvements to reduce or eliminate the instances when sharing is necessary, particularly in congested parts of the system. The Commission recently emphasized that “the lack of coordinated transmission planning processes across the seams of neighboring transmission planning regions could be needlessly increasing costs for customers of transmission providers.”

The use of Reciprocal Coordinated Flowgates (“RCFs”) under the JOA allows SPP and MISO to maximize transmission system utilization for all parties because it allows reciprocal use

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74 See, e.g., Alliance Cos., 100 FERC ¶ 61,137, at P 53 (2002) (directing PJM and MISO to file a joint operating agreement); Southwest Power Pool, Inc., 106 FERC ¶ 61,110, at P 202 (2004) (directing SPP and MISO to file a joint operating agreement). MISO also has similar agreements with TVA and IESO, and offers the same congestion management via a tariff provision that mirrors the JOA and uses the CMP. See §§ 79, et seq., and Attachment LL of the Tariff.


76 Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Notice of Proposed Rulemaking, Docket No. RM10-23-000, at P 113 (June 17, 2010).
up until congestion occurs and then the parties return to their allocation based on historic use. The parties are returned to the historic firm parallel flow impacts that the parties have had in the past, meaning the parties are not creating additional parallel flow on the reciprocal entity’s transmission system. Because MISO has the ability to redispatch generation in its energy market, available shared transmission capacity is more efficiently used under normal operating conditions, but can be “turned back” when congestion requires flow reductions to insure that the owner of the capacity is able to serve its network and native loads.77

Finally, the capacity sharing provision supports the Commission’s policy that RTO membership is voluntary, and the preferences of transmission owners to join a particular RTO, or not, should be accommodated to the extent reasonably possible. Where capacity is available that can be used to accommodate a transmission owner’s RTO membership preference, it should be shared on a common and reciprocal basis. This logic does not create any undue advantages for any particular RTO but benefits all RTOs as a class and works to facilitate the achievement of the Commission’s RTO policy goals.

D. The Remaining Objections Raised by SPP Are Either Speculative or Not germane to This Petition.

MISO believes that the foregoing sections address all of the issues that are germane to this Petition. SPP, however, has raised several tangential questions that bear no relevance to the relief requested by MISO. While MISO hopes that the Commission will recognize these issues for what they are – a red herring, MISO is offering a short response.

In the White Paper, SPP states that the Ameren/Entergy Arkansas/AECI Interconnection is “the only high voltage connection between [MISO] and Entergy” and that AECI, the non-
jurisdictional party to the Interchange Agreement, gave a notice to withdraw, effective June 2013. According to SPP, “[a]bsent a replacement arrangement, the cancellation of the Interchange Agreement will eliminate any high-voltage connection between [MISO] and Entergy.”

MISO believes that the status of the Interchange Agreement is immaterial to the interpretative task at hand. By its own terms, Section 5.2 applies if the SPP and MISO have contract paths to the same entity. There is no need for the Commission to determine the application of Section 5.2 in the event the Interchange Agreement is modified or replaced by another contractual arrangement at some point in the future. At this time, any such determination would be speculative. As SPP itself acknowledges, the parties to the Interchange Agreement might enter into a replacement arrangement and, in fact, MISO has been informed by Ameren that the parties are negotiating such an arrangement.

SPP also has raised a series of objections based on its interpretation of the JOA’s CMP provisions. SPP claims that under the CMP the parties agreed to allocate transmission capacity on flowgates based on their uses of the regional systems as of April 1, 2004. According to SPP, “[MISO] and Entergy would be constrained in the amount of firm energy flow they could place on SPP flowgates to the allocations derived from the share of the firm ‘rights’ they possessed on these flowgates in 2004.” SPP further states that, “[g]iven the limited ties between [MISO] and Entergy at that time (and today) and based upon SPP’s initial assessment, it does not appear that significant firm ‘rights’ exist to provide [MISO] the allocations needed to reliably serve the loads

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79 SPP also ignores that the Interchange Agreement contains certain grandfathering provisions that protect all existing transactions using the interconnection, preserving the arrangement in the event the Interchange Agreement is cancelled or substantially modified, at least as long as such transactions remain effective.
of MISO and Entergy using the flowgates of SPP, or other neighboring transmission systems, much less gain the benefit of joint operations of the combined facilities.\textsuperscript{81}

Although MISO disagrees entirely with this particular argument and SPP’s framing of it, it is entirely immaterial to the instant Petition. Contract path sharing does not override the obligation to manage congestion under the CMP. The JOA was designed to automatically accommodate the parties’ expansion, including the integration of new transmission owners, and the contraction of withdrawing transmission owners.\textsuperscript{82} To the extent SPP arguments have any merit, the JOA has a process to address such matters in ongoing meetings of the SACC, the joint regional planning provisions of the JOA, the broader CMP Council of all Reciprocal Entities using this process, and ultimately dispute resolution.

\textbf{IV. REQUEST FOR SHORTENED COMMENT PERIOD AND FOR EXPEDITED TREATMENT}

As set forth above, and shown in the exhibits to this pleading, MISO has filed this Petition as soon as practicable following the clear understanding that SPP has no incentive to resolve this issue in a timely manner. If the APSC proceedings are to have a reasoned outcome on the time track established for Entergy Arkansas’ decision, and the eventual implementation of that decision, MISO requests Commission action on this Petition by June 7, 2011. As discussed \textit{supra}, the ASPC, Entergy Arkansas, and SPP – all recognize that a definitive and timely interpretation of Section 5.2 is highly significant for the selection of a proper course by Entergy Arkansas.

\textsuperscript{81} \textit{Id.}

\textsuperscript{82} No JOA amendments were required to accommodate the departures of LG&E, First Energy, or Duke from MISO, or the integration of a MidAmerican Energy into MISO, or the integration of NPPD or OPPD into SPP. Nonetheless, if more than modeling adjustments are required for the Entergy integration, the JOA provides the mechanisms to address those concerns.
In order to permit expedited Commission action, MISO also requests that a shortened twenty-one (21) day comment period be established for this Petition, with all responsive pleadings being due no later than April 29, 2011. This three-week comment period is adequate and will not prejudice any party in interest. The dispute is well framed, limited, and does not involve the resettlement of markets or refunds involving multiple parties. The discussion has been clearly framed for months. Hence, those that may be affected by this Petition are familiar with its subject matter and have already developed views with respect to its content. Replies to this Petition and its limited subject matter can easily be prepared in a short time.

V. CORRESPONDENCE AND COMMUNICATION

All communications in this matter should be directed to:

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VI. CONCLUSION

WHEREFORE, the Midwest Independent Transmission System Operator, Inc., respectfully requests that the Commission issue an order declaring that Section 5.2 of the JOA
will remain in effect and applicable to Entergy Arkansas in the event it becomes a transmission-owning member of MISO, or of SPP.

Respectfully submitted,

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Dated: April 8, 2011
EXHIBITS

A. Direct Testimony of Carl A. Monroe on behalf of SPP before the Arkansas Public Service Commission, Docket No. 10-011-U (February 11, 2011)

B. Cost Benefit Analysis of Entergy/Cleco Power or Entergy Arkansas Joining the Midwest ISO, Addendum Study, Charles River Associates (March 10, 2011)

C. Direct Testimony of Richard Doying on Behalf of MISO before the Arkansas Public Service Commission, Docket No. 10-011-U (March 18, 2011)


E. Memorandum, “Sharing Contract Path Capacity under the MISO/SPP Joint Operating Agreement” (October 13, 2010)


G. Section 14.2 of the Joint Operating Agreement between the Midwest Independent Transmission System Operator, Inc. and Southwest Power Pool, Inc. (December 11, 2008)


I. Letter from Mr. Nick Brown to Mr. John R. Bear (January 25, 2011)

J. Letter from Mr. John R. Bear to Mr. Nick Brown (February 9, 2011)

K. Letter from Mr. Nick Brown to Mr. John R. Bear (February 15, 2011)

L. Excerpts from November 17, 2010 SPP Presentation to Entergy Regional State Committee
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 SUCCESSOR AGREEMENT THERE TO, )
AND REGARDING THE FUTURE OPERATION AND )
CONTROL OF ITS TRANSMISSION ASSETS )

Docket No. 10-011-U

DIRECT TESTIMONY

OF

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

ON BEHALF OF SOUTHWEST POWER POOL, INC.

FEBRUARY 11, 2011
and MISO. Hence, as a threshold matter, issues regarding the interpretation and
implementation of the JOA would need to be addressed under the MISO
alternative.

Moreover, there is very limited interface capacity between MISO and Entergy.
Currently, there are 41 physical ties between Entergy and SPP capable of
transferring up to 14,100 MW of power. In contrast, there is only one tie between
MISO and Entergy and transfer capability across that tie is approximately 1,000
MW. These connectivity issues present potential reliability and operational
issues impacting SPP and its members, suggesting the need for careful and
detailed studies before the MISO alternative(s) can be given serious
consideration.

Additionally, more information on the expected transmission cost consequences
of MISO’s newly approved multi-value project (“MVP”) cost allocation
methodology would need to be provided and considered. Projects approved, or
expected to be approved, could have cost implications for EAI.

From a structural perspective, MISO’s governance offers only advisory roles for
EAI and the Commission. As I described earlier, this is unlike the SPP RTO
structure where the authority and influence of members and state regulators is
substantial and beneficial.

The market environment within MISO is also a factor. Within SPP and EAI,
there are no retail open access regions. That is not the case in MISO, where retail
open access continues to impact MISO’s operations and decisional processes.

Finally, recent member withdrawals from MISO should be scrutinized. The
implications of additional future withdrawals, including cost impacts to existing
and prospective members, are relevant to any analysis of the MISO alternative(s).
EXHIBIT B
Cost-Benefit Analysis of Entergy/Cleco Power or Entergy Arkansas Joining the Midwest ISO

Addendum Study

Prepared By:
Charles River Associates

Date: March 10, 2011
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1. INTRODUCTION

Charles River Associates ("CRA") has previously issued three cost-benefit analyses ("CBAs") regarding the potential membership in the Southwest Power Pool ("SPP") \(^1\) regional transmission organization ("RTO") of Entergy \(^2\) and Cleco Power \(^3\) on a combined basis, or the separate membership of Entergy Arkansas ("EAI").

**SPP-Entergy CBA.** On September 30, 2010, CRA and Resero Consulting issued the final report for the SPP-Entergy CBA sponsored by the Federal Energy Regulatory Commission ("FERC").\(^4\) The SPP-Entergy CBA concluded that Entergy and Cleco Power joining the SPP RTO will yield significant economic benefits to the collective SPP/Entergy region.\(^5\) The net benefits to the Entergy and Cleco Power regions were highly dependent on the allocation of regional high voltage transmission expansion costs.\(^6\) Aside from the allocation of transmission expansion costs, the benefits to the Entergy region of joining the SPP RTO were relatively robust across the sensitivity scenarios examined. A number of important qualitative

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1. Southwest Power Pool, Inc. is a group of 57 members in Arkansas, Kansas, Louisiana, Mississippi, Missouri, Nebraska, New Mexico, Oklahoma, and Texas that serve more than five million customers. Membership is comprised of investor-owned utilities, municipal systems, generation and transmission cooperatives, state authorities, wholesale generators, power marketers, and independent transmission companies. SPP's footprint includes 29 balancing authorities and 50,575 miles of transmission lines. SPP was designated by the FERC as a RTO in 2004. As an RTO, SPP ensures reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity. SPP is a North American Electric Reliability Corp. ("NERC") Regional Entity. Entergy is not currently a member of the regional market operated by the SPP, but is a member of the SPP Regional Entity. Entergy is a member of the SERC Regional Entity.


3. Cleco Power LLC is a regulated electric utility company that serves about 277,000 customers across Louisiana.

4. See http://www.spp.org/publications/FERC%20SPP%20Entergy%20CBA%20Report%20Final.pdf. As this is a follow-on addendum study, the detailed descriptions of the CRA modeling approach and input data contained in the SPP-Entergy CBA are not fully repeated herein. See the SPP-Entergy CBA for further detail on these issues.

5. The "SPP/Entergy region" refers to all load and generation in the current Entergy-SPP-Cleco Power transmission system footprint, including that of merchant generators and cooperative and municipal utilities.

6. The "Entergy region" refers to the area within the Entergy transmission system footprint, and for purposes of the SPP-Entergy CBA included Louisiana Generating and Louisiana Energy and Power Authority. The "Cleco region" refers to the area within the Cleco transmission system footprint as well as the Cleco Power load served by the Entergy transmission system, and for purposes of this study includes the City of Lafayette. The "SPP region" refers to the SPP transmission system footprint that is currently operating within the SPP Energy Imbalance Service market.
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considerations were identified as well, with both qualitative benefits and offsetting costs incurred by Entergy and Cleco Power if they joined the SPP RTO.

**SPP-EAI CBA.** The Arkansas Public Service Commission ("APSC") directed the SPP to perform within the context of the broader SPP-Entergy CBA, an EAI-specific CBA ("SPP-EAI CBA") associated with EAI becoming a full "standalone" member of the SPP RTO at the time it would leave the Entergy System Agreement ("ESA"). CRA was engaged by SPP to perform the SPP-EAI CBA using the models and input assumptions developed under the FERC-funded SPP-Entergy CBA. The SPP-EAI CBA report issued on October 27, 2010 concluded that EAI alone joining the SPP RTO, relative to operating on a standalone basis, will not yield significant economic benefits to the EAI region or the collective SPP/Entergy region.⁷

**SPP-Entergy CBA Addendum.** During the course of the SPP-Entergy CBA, parameters worthy of additional analysis were identified by study stakeholders, including seams charges and the treatment of Entergy QFs. In response, CRA was engaged by Entergy to perform an addendum study to analyze additional sensitivity cases using the models and input assumptions developed under the SPP-Entergy CBA. Based on the addendum sensitivity analyses performed, the SPP-Entergy CBA Addendum report issued on December 6, 2010 continued to conclude that Entergy and Cleco Power joining the SPP RTO will provide significant economic benefits to the collective SPP/Entergy region.

In this Join MISO CBA Addendum, the potential membership in the Midwest ISO of Entergy and Cleco Power or, alternatively, EAI is evaluated. CRA⁸ was engaged by Entergy to evaluate the costs and benefits of:

1. Entergy and Cleco Power joining the Midwest ISO

2. EAI joining the Midwest ISO relative to operating as a standalone entity

This Join MISO CBA Addendum uses the models and assumptions developed under the SPP-Entergy CBA and SPP-EAI CBA as the basic framework. As described in detail below, certain modifications to the modeling assumptions and framework were required to evaluate the join Midwest ISO option. As such, for consistency, the costs and benefits of

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⁷ Docket No. 08-136-U, Order No. 13.

⁸ The "EAI region" refers to all load and generation in the EAI transmission system footprint including that of merchant generators and cooperative and municipal utilities. The "Rest of Entergy region" refers to the area within the Entergy transmission system footprint excluding the EAI transmission system, and for purposes of this study includes Louisiana Generating and Louisiana Energy and Power Authority.

⁹ Principal study Investigators for CRA were Ralph Luciani, Bruce Tsuchida and Pablo Rutz. The findings and conclusions contained in this CBA are solely those of the CRA team.
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Entergy/Cleco Power or EAI joining the SPP RTO were reevaluated in this CBA using this same modified assumptions and framework. The evaluation of the costs and benefits of Entergy and Cleco Power joining the Midwest ISO or SPP RTO is summarized in Section 2. The evaluation of the costs and benefits of EAI joining the Midwest ISO or SPP RTO is summarized in Section 3.10

As discussed in detail in the following sections, we continue to find that there will be significant benefits for the Entergy region to join an RTO, but these benefits are or can be more than offset by the allocation to the Entergy region of RTO transmission expansion costs. We continue to find that the benefits of EAI joining an RTO are more limited, and these benefits also are or can be more than offset by the allocation to the EAI region of RTO transmission expansion costs.

2. ENTERGY AND CLECO IN THE MIDWEST ISO OR SPP RTO

2.1. STUDY METHODOLOGY

Three different cases were analyzed over the 10-year period from 2013 to 2022:

1. Entergy and Cleco Power continue to operate as they do today ("Status Quo Case")

2. Entergy and Cleco Power join the SPP RTO ("Join SPP Case")

3. Entergy and Cleco Power join the Midwest ISO ("Join MISO Case")

In the Status Quo Case, SPP is assumed to continue in its capacity as Independent Coordinator of Transmission ("ICT") for the Entergy transmission system. As the SPP RTO is working toward instituting a Day 2 market, a Day 2 market is presumed to be in place in the SPP RTO throughout the 2013-2022 study period.11 The Midwest ISO already has a Day 2 market in place.

CRA analyzed the impacts on the Entergy, Cleco Power and SPP regions using the General Electric Multi-Area Production Simulation ("GE MAPS") model of the entire Eastern Interconnection. A separate evaluation of the specific costs and benefits to the existing

---


11 A Day 2 market refers to a two-settlement (day-ahead and real-time) energy market using hourly locational marginal prices and financial transmission rights (FTRs). Day 2 markets are currently in place in PJM, the Midwest ISO, ISO New England and the New York ISO.
Midwest ISO region was not performed. GE MAPS is a detailed economic dispatch and production costing model that simulates the operation of the electric power system taking into account transmission topology. GE MAPS runs were performed for the years 2013, 2016, 2019 and 2022, with intervening years interpolated.

The same model input assumptions applied and described in the SPP-Entergy CBA are used in this addendum study. However, certain modeling assumptions had to be modified to assess the Midwest ISO option, including seams charges and Midwest ISO demands, new wind capacity and transmission expansion. These modifications are described in detail below.

2.1.1. Seams Charges

In the GE MAPS modeling, there is a commitment (next-day) step and a dispatch (real-time) step. In the commitment process, generating units in a region are turned on or kept on in order for the system to have enough generating capacity available to meet the expected peak load in the region for the next day. GE MAPS then uses the set of committed units to dispatch the system on an hourly real-time basis, whereby committed units throughout the modeled footprint are operated between their minimum and maximum operating points to minimize total production costs.

As discussed in the SPP-Entergy CBA, GE MAPS was used to model different impediments to SPP-Cleco-Entergy trade under the Status Quo Case and the Join SPP Case. The impediments to trade applied include commitment and dispatch seams charges. Seams charges are applied by CRA in the GE MAPS model at the "seam" or border between regions (e.g., between Entergy and SPP, Entergy and Cleco, SPP and the Midwest ISO, and Entergy and Southern Company). In the absence of seams charges, GE MAPS will optimize the commitment and dispatch of generation across the entire Eastern Interconnection as if it were one balancing authority with traders and operators having perfect information about all load, resources and transmission congestion, and with no transmission wheeling charges payable for regional imports and exports.

For this Join MISO CBA Addendum, the seams charges were modified to incorporate the Join MISO option as discussed below.

1000 MW Contract Path. The principal Interconnection between the Midwest ISO and Entergy is located at New Madrid, Missouri, where Ameren (a member of the Midwest ISO), Associated Electric Cooperative, Inc. ("AECl"), and Entergy share 1500 MW of tie-line capacity. The 1500 MW of capacity is shared between AECl, Ameren and Entergy in equal thirds, with any two of the parties able to use the sum of their shares. The net effect of

---

12 This is the Lutesville 345kV (Ameren) – Essex 345kV (AECl) – New Madrid 345/500kV (AECl) – Dell 500kV (Entergy) line.
Join MISO CBA Addendum

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this agreement is the availability of a 1000 MW contract path between the Midwest ISO and Entergy ("1000 MW Contract Path").

For purposes of the SPP-Entergy CBA, this contract path arrangement was not specifically addressed for modeling purposes. The path was treated simply as an interconnection with hurdles between Entergy and AECI, and a separate interconnection with hurdles between AECI and the Midwest ISO. However, for this Join MISO CBA Addendum, the 1000 MW Contract Path represents the key means by which Entergy and the Midwest ISO could optimize commitment and dispatch of operations if Entergy were to join the Midwest ISO.\(^{13}\) To reflect this, in the Join MISO Case, the seams charges are eliminated entirely on the 1000 MW Contract Path (i.e., both the Entergy to/from AECI leg and the AECI/Ameren leg).

**Dispatch Seams Charges.** The dispatch seams charges applied in this Join MISO CBA Addendum are summarized in Table 1. These are the same dispatch seams charges applied in the SPP-Entergy CBA. In the Status Quo Case and the Join SPP Case, the hurdle on the 1000 MW Contract Path is comprised of the MISO to/from AECI dispatch seams charges, and the AECI to/from Entergy dispatch seams charges.\(^ {14}\) In the Join MISO Case, both of these seams charges are eliminated on the 1000 MW Contract Path.

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\(^{13}\) There is no direct path between Cleco Power and the Midwest ISO, thus, Cleco Power would interconnect with the Midwest ISO only through Entergy if Entergy and Cleco Power were to join the Midwest ISO. It is our understanding that the transmission arrangement between AECI, Ameren, and Entergy is currently set to expire in 2013, with discussions between the parties expected to take place prior to that time regarding an extension or a replacement arrangement with similar terms. It is assumed in this Join MISO CBA Addendum that the 1000 MW Contract Path is in place throughout the study period.

\(^{14}\) The AECI to Entergy dispatch seams charge is $3 for wheeling and $3 for trading friction. A possible refinement to the GE MAPS analyses in this study would be to run the Status Quo Case and Join SPP Case with only a single hurdle from the Midwest ISO to Entergy on the 1000 MW Contract Path.
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Table 1: Dispatch Seams Charges in GE MAPS In the SPP/Entergy/MISO Region

<table>
<thead>
<tr>
<th>Status Quo Case</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td></td>
<td>3+2</td>
<td></td>
</tr>
<tr>
<td>To SPP</td>
<td></td>
<td></td>
<td>3+2</td>
</tr>
<tr>
<td>From Entergy</td>
<td>3+3</td>
<td></td>
<td>3+3</td>
</tr>
<tr>
<td>To Entergy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Cleco</td>
<td>3+3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Cleco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From MISO</td>
<td>3+5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To MISO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entergy-Cleco Join SPP Case</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To SPP</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>From Entergy</td>
<td>0</td>
<td></td>
<td>3+2</td>
</tr>
<tr>
<td>To Entergy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Cleco</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>To Cleco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From MISO</td>
<td>3+5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To MISO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entergy-Cleco Join MISO Case</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td></td>
<td>3+2</td>
<td></td>
</tr>
<tr>
<td>To SPP</td>
<td></td>
<td>3+2</td>
<td></td>
</tr>
<tr>
<td>From Entergy</td>
<td>3+3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Entergy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Cleco</td>
<td>3+3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Cleco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From MISO</td>
<td>3+5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To MISO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commitment Pool. As described in the SPP-Entergy CBA, to model the commitment process, CRA defines major "commitment pools" in GE MAPS in which units inside the pool are committed to run to ensure reliable service within the commitment pool without consideration of external non-firm resources. These major commitment pools include, among others, PJM, Southern Company and TVA. To the extent that the commitment process for regions within a major commitment pool is not jointly optimized, CRA applies a $10 per MWh commitment hurdle between these regions. That is, generating units in a commitment pool will not be committed to meet load in another region within the same commitment pool unless there is at least a $10 cost advantage over units that would be available within that region.16

In the SPP-Entergy CBA, the SPP, Entergy and Cleco regions (along with AECI) were assumed to be in a single commitment pool. The Midwest ISO was in a separate commitment pool. This commitment pool arrangement was ideal for a focused analysis on Entergy and Cleco Power joining the SPP RTO. However, having the Midwest ISO in a separate commitment pool in GE MAPS does not allow for the optimization of the RTO commitment process if Entergy and Cleco Power were to join the Midwest ISO.

As such, a commitment pool that includes the Midwest ISO, SPP RTO, Entergy and Cleco Power was applied in all GE MAPS runs in this Join MISO CBA Addendum. As shown in Table 2, other than inclusion of the Midwest ISO in the SPP/Entergy Commitment pool with a

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15 See the SPP-Entergy CBA for a summary of the seams charges applied throughout the Eastern Interconnect.

16 Modeling commitment pools, rather than applying commitment seams charges between all balancing regions in the Eastern Interconnect, greatly speeding up the optimization process in GE MAPS.
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$10/MWh hurdle, there were no other changes to the commitment hurdles from those used in the SPP-Entergy CBA. In the Status Quo Case and the Join SPP Case, the hurdle on the 1000 MW Contract Path is comprised of the MISO to/from AECI $10/MWh commitment seams charges, and the AECI to/from Entergy $10/MWh commitment seams charges. In the Entergy-Cleco Join MISO Case, both of these seams charges are eliminated on the 1000 MW Contract Path.

Table 2: Commitment Seams Charges ($/MWh) in GE MAPS in the SPP/Entergy/MISO Region

<table>
<thead>
<tr>
<th>Status Quo Case</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>From SPP</td>
</tr>
<tr>
<td>From Entergy</td>
</tr>
<tr>
<td>From Cleco</td>
</tr>
<tr>
<td>From MISO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entergy-Cleco Join SPP Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
</tr>
<tr>
<td>From Entergy</td>
</tr>
<tr>
<td>From Cleco</td>
</tr>
<tr>
<td>From MISO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Entergy-Cleco Join MISO Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
</tr>
<tr>
<td>From Entergy</td>
</tr>
<tr>
<td>From Cleco</td>
</tr>
<tr>
<td>From MISO</td>
</tr>
</tbody>
</table>

The change in the commitment pool modeling to include the Midwest ISO in the SPP-Entergy region commitment pool required changes in the modeling of losses in GE MAPS. For the SPP-Entergy CBA, marginal losses were used in the GE MAPS optimization process for both the commitment and dispatch steps. In this Join MISO CBA Addendum, average losses are used in the modeling of the commitment step, while marginal losses are used, as before, in the dispatch step. All else equal, the use of average losses for the commitment step will tend to result in the commitment of more distant units to meet load. As a result, this change will contribute to differences in results from those of the FERC-sponsored SPP-Entergy CBA.

The change in loss modeling for the commitment step was implemented because of the significant computational effort of performing commitment with marginal losses across such a large commitment pool footprint. Using marginal losses requires an iterative process where loss factors are updated to adjust for changes in transmission flows. With the Midwest ISO in the SPP-Entergy commitment pool, the processing time required to iterate the commitment step with marginal losses made it difficult to ensure the modeling was working correctly in the time available for this study. In addition, it is CRA's understanding that the Midwest ISO uses fixed loss factors that are estimated based on marginal loss-based historical values in its
commitment optimization. GE MAPS similarly uses fixed loss values with the average loss commitment step used in this CBA.\textsuperscript{17}

2.1.2. Midwest ISO Demand, New Wind Capacity and Transmission Expansion

In the SPP-Entergy CBA, all regions in the Eastern Interconnection outside of the SPP-Entergy region had their energy demand and generation expansion frozen in GE MAPS after 2013. As noted in the SPP-Entergy CBA, this was performed to minimize uncertain external impacts on the analysis of the SPP-Entergy region. For this Join MISO CBA Addendum, Midwest ISO energy demand and generation expansion after 2013, along with additional Midwest ISO transmission expansion, are also taken into account.

The increase in MISO energy demand after 2013 is taken from the most recent Midwest ISO forecasts. The Midwest ISO region is currently above its target reserve requirement, and additional wind capacity is the major type of new capacity that likely will be constructed in the Midwest ISO region during the study period. Table 3 shows the total wind capacity modeled in the SPP region and in the Midwest ISO in this Join MISO CBA Addendum. The SPP wind capacity is the same as that used in the prior CBAs.

| Table 3: Wind Capacity In SPP and the Midwest ISO (GW) |
|-------------|------|-----|-----|-----|
| SPP         | 2013 | 2016| 2019| 2022|
| Midwest ISO | 10.0 | 15.0| 15.0| 19.4|

The increase in Midwest ISO wind capacity is related to the contemplated expansion of the Midwest ISO transmission system to incorporate the often remote locations of likely wind capacity expansion. These Midwest ISO "Multi-Value Projects" or "MVPs" represent a significant expansion of the Midwest ISO transmission system, and are designed to 1) meet public policy goals such as renewable portfolio standards, 2) provide widespread economic benefits, or 3) provide a combination of widespread economic and reliability benefits.

A portfolio of approximately $4.4 billion of Multi-Value Project expansion has been developed by the Midwest ISO for development within the next 5 to 10 years.\textsuperscript{18} Based on input from the Midwest ISO, these Multi-Value Projects are included in the power flow used in the 2019 and

\textsuperscript{17} Entergy is currently a member of the SPP reserve sharing group. In this CBA and in all prior CBAs, the Entergy region's spinning reserve requirement is assumed to remain the same in all cases, as this requirement already reflects the benefits of being a member of a reserve sharing group.

\textsuperscript{18} Midwest ISO Transmission Cost Allocation for Entergy, March 3, 2011, Midwest ISO.
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2022 GE MAPS runs in this Join MISO CBA Addendum. While a portion of the Multi-Value Projects may come on-line in the 2013 to 2016 period, these are expected to be relatively small and were ignored for purposes of the GE MAPS modeling in this CBA. As discussed further below, the corresponding costs allocated by the Midwest ISO to Entergy and Cleco for Multi-Value Projects was captured in this CBA.

2.1.3. Summary of Modeling Changes

Because of the change in the commitment pool modeling as well as inclusion of additional demand, wind capacity and transmission expansion in the Midwest ISO, the results for the Status Quo Case and Join SPP Case would be expected to change from those of the SPP-Entergy CBA. The differences in modeling assumptions between the SPP-Entergy CBA and this Join MISO CBA Addendum are summarized in Table 4.

Table 4: Summary of Modeling Assumption Changes

<table>
<thead>
<tr>
<th></th>
<th>SPP-Entergy CBA</th>
<th>Join MISO CBA Addendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment Pool</td>
<td>SPP/Entergy/Cleco region, with marginal losses in commitment step and dispatch step. No commitment optimization between MISO and SPP/Entergy/Cleco.</td>
<td>SPP/Entergy/Cleco/MISO region, with average losses in commitment step, and marginal losses in dispatch step. $10/MWh commitment hurdle between SPP and MISO in all cases, and between Entergy/Cleco and MISO in Status Quo and Join SPP Cases.</td>
</tr>
<tr>
<td>Midwest ISO Demand and New Wind Capacity</td>
<td>Frozen at 2013 levels</td>
<td>Increasing throughout study period. MISO wind capacity increases from 10 GW in 2013 to 19.4 GW in 2022.</td>
</tr>
<tr>
<td>Midwest ISO MVP Transmission Expansion</td>
<td>Not included in GE MAPS runs</td>
<td>Included in 2019 and 2022 GE MAPS runs for all cases. MVP cost allocation to Entergy and Cleco assessed in Join MISO Case.</td>
</tr>
<tr>
<td>SPP Transmission Expansion Cost Allocation</td>
<td>September 2010 estimate</td>
<td>February 2011 Estimate²⁰</td>
</tr>
</tbody>
</table>

2.1.4. Joint Operating Agreement

It is CRA’s understanding that under the Joint Operating Agreement ("JOA") between the Midwest ISO and the SPP RTO, there may be additional ability to coordinate flows between the Midwest ISO and the Entergy and Cleco regions (as members of the Midwest ISO) than

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¹⁹ See Power Flow Case Update prepared by the Midwest ISO. A number of 2019 and 2022 GE MAPS runs were completed and discussed with study stakeholders prior to the time that the modification of the 2019 and 2022 power flow in GE MAPS was completed. The trade benefit results of these runs are included in Appendix B. Also see Appendix C for further detail on new 345 kV lines included in the modified 2019 and 2022 power flow.

²⁰ See Section 2.2.4 for a discussion of the SPP-provided update to its transmission expansion cost allocation.
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captured in this CBA. It is also CRA's understanding that the potential coordination that could take place under the JOA is a subject of disagreement between the Midwest ISO and the SPP RTO.

To help assess the potential benefits of the JOA to coordinate operations between the Midwest ISO and the Entergy and Cleco regions, CRA performed GE MAPS runs to estimate the impact on trade benefits if certain lines between Ameren and Entergy through TVA and through SPP were converted into "interfaces" and relieved of hurdles in the Join MISO Case. These trade benefit results were provided to stakeholders during the course of this CBA. However, setting up these interfaces in GE MAPS, and ensuring that the associated modeling changes were resulting in appropriate consequences for trade and flows in the region of study, was not fully feasible in the time available for this CBA. As such, the results of those GE MAPS runs are not included in the overall costs and benefit results presented in this CBA. The trade benefit results of these and other GE MAPS runs prepared during the course of this CBA are summarized in Appendix B.

2.2. FINDINGS – ENTERGY AND CLECO IN THE MIDWEST ISO OR SPP RTO

2.2.1. Summary of Results

Entergy-Cleco in SPP. Shown in Table 5 are the overall net benefits to the SPP/Entergy region of Entergy and Cleco joining the SPP RTO using the modeling assumptions and updated cost assumptions in this Join MISO CBA Addendum. As shown, the overall net benefit for the SPP/Entergy region is $779 million (2010 present value) over the 2013 to 2022 period. See Appendix A for more detail.

Table 5: 2013-2022 Benefits (Costs) to the SPP, Entergy and Cleco Power Regions
If Cleco Power and Entergy Join the SPP RTO
(in millions of 2010 present value dollars; positive numbers are benefits)

<table>
<thead>
<tr>
<th></th>
<th>SPP</th>
<th>Cleco</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Benefits</td>
<td>(17)</td>
<td>(17)</td>
<td>891</td>
</tr>
<tr>
<td>Admin Costs: RTO Administrative Costs net of Avoided ICT Charges</td>
<td>169</td>
<td>(25)</td>
<td>(164)</td>
</tr>
<tr>
<td>Admin Costs: FERC &amp; Capital/ labor Costs</td>
<td>0</td>
<td>(12)</td>
<td>(65)</td>
</tr>
<tr>
<td>SubTotal Net Benefits</td>
<td>171</td>
<td>(64)</td>
<td>661</td>
</tr>
<tr>
<td>Transmission Expansion Cost Allocation</td>
<td>(5) to 1,034</td>
<td>(104) to (18)</td>
<td>(837) to 23</td>
</tr>
<tr>
<td>Total Net Benefits (Costs)</td>
<td>166 to 1,206</td>
<td>(168) to (72)</td>
<td>(276) to 684</td>
</tr>
</tbody>
</table>

This $779 million compares to the $739 million found for the same case in the FERC-sponsored SPP-Entergy CBA. The only changes in Table 5 in comparison to the results shown in Table 12 of the SPP-Entergy CBA are to the trade benefits (based on the GE MAPS modeling changes discussed above) and an SPP-provided update to the transmission expansion cost allocation (see Section 2.2.4).
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In contrast, the net benefits to the individual SPP, Entergy and Cleco Power regions change more significantly from those in the SPP-Entergy CBA. The benefits for the Entergy region are higher, while those for the SPP regions and Cleco Power regions decrease. The trade benefit impacts that yield these regional changes are discussed further in Section 2.2.2.

Entergy-Cleco in MISO. For Cleco Power and Entergy joining the Midwest ISO, the net benefit results are summarized in Table 6. As shown, the net benefits/(costs) to the Entergy region are ($254) million and for the Cleco Power region are ($133) million. See Appendix A for more detail.

Table 6: 2013-2022 Benefits (Costs) to the Entergy and Cleco Power Regions
If Cleco Power and Entergy Join the Midwest ISO
(In millions of 2010 present value dollars; positive numbers are benefits)

<table>
<thead>
<tr>
<th></th>
<th>Cleco</th>
<th>Entergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Benefits</td>
<td>(32)</td>
<td>737</td>
</tr>
<tr>
<td>Admin Costs: RTO Administrative Costs net of Avoided ICT Charges</td>
<td>(23)</td>
<td>(143)</td>
</tr>
<tr>
<td>Admin Costs: FERC &amp; Capital/Labor Costs</td>
<td>(12)</td>
<td>(65)</td>
</tr>
<tr>
<td>SubTotal Net Benefits</td>
<td>(67)</td>
<td>529</td>
</tr>
<tr>
<td>Transmission Expansion Cost Allocation</td>
<td>(66)</td>
<td>(782)</td>
</tr>
<tr>
<td>Total Net Benefits (Costs)</td>
<td>(133)</td>
<td>(254)</td>
</tr>
</tbody>
</table>

The impact on the existing Midwest ISO was not evaluated, as the Midwest ISO trade benefits were not specifically evaluated as discussed above. As such, an aggregate total is not presented in Table 6. Aside from trade benefit impacts, the Midwest ISO would benefit from reduced administrative and transmission expansion costs with Entergy and Cleco paying a pro rata share of these costs.

As shown in Table 5 and Table 6, there are significant trade benefits to the Entergy region whether joining the SPP RTO or the Midwest ISO. As noted in prior CBAs, the assumption that Entergy QF is become firm resources in an RTO is a key driver of trade benefits in any join RTO scenario for the Entergy region. Including administrative costs, but prior to the allocation of transmission expansion costs, the benefits to the Entergy region of joining the SPP RTO are about $130 million higher than joining the Midwest ISO assuming a Day 2 market is in place for the SPP RTO by 2013. After allocation of transmission expansion costs, the net benefits to the Entergy region are negative in the Join MISO Case, and range from equally negative or significantly positive in the Join SPP Case, depending on the transmission cost allocation that would be applied upon joining the SPP RTO.

The net benefit to Cleco Power of joining the SPP RTO or Midwest ISO is negative. In contrast, the net benefit of Cleco Power joining the SPP RTO was roughly neutral in the SPP-Entergy CBA (depending on the transmission expansion cost allocation). The net benefit to
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the SPP region of Entergy and Cleco joining the SPP region continues to be positive, with the range significantly affected by the transmission cost allocation that would be applied.

Each cost-benefit measure is discussed in greater detail below.

2.2.2. Trade Benefits

As described in the SPP-Entergy CBA, the calculation of trade benefits for each region is based on the difference in costs in each case for five basic components:

1. Production costs of the generating units in the region (e.g., fuel, variable O&M)
2. Purchase costs for the region (hourly flows in at split-savings prices)
3. Sales revenue for the region (hourly flows out at split-savings prices)
4. Transmission costs incurred by the region for Purchases and Sales (50% of the hourly wheeling charges paid by the purchasing region and 50% by the selling region).
5. Transmission revenue collected by the region for Sales (100% of the hourly wheeling revenue collected by the selling region's transmission provider).

The first four components comprise adjusted production costs, and the last component is the corresponding transmission revenue impact on the region's transmission provider. The differences between cases (e.g., Status Quo and Join SPP) in these five components represent trade benefits as referenced in this CBA. See the SPP-Entergy CBA for more detail.

Lost Transmission Revenue and Avoided Costs Based on Historical Transactions

In the SPP-Entergy CBA, the impact on wheeling costs incurred and wheeling revenue collected for transactions between SPP, Entergy and Cleco in the Join SPP Case was assessed by SPP, Entergy and Cleco Power using historical transmission transaction data. SPP then performed an analysis of the amount of total SPP transmission revenue that would be allocated between Entergy, SPP, and Cleco under the SPP OATT using this same historical data. For this CBA, a similar analysis was performed by Entergy and the Midwest ISO using historical data for transactions between the Midwest ISO, Entergy and Cleco regions.

As shown in Table 7, the net annual benefit/(cost) from eliminating intra-RTO wheeling charges, based on historical data, is ($9) million for the Entergy region and $6 million for the Cleco region when joining the SPP RTO.21 Similarly, as shown in Table 8, when joining the Midwest ISO, the net annual benefit/(cost) is ($23 million) for the Entergy region and $3 million for the Cleco region. Much of the difference results from the allocation of transmission revenues under the SPP and Midwest ISO OATTs.

---

21 See the SPP-Entergy CBA for additional detail.
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Table 7: Annual Benefits (Costs) to the SPP, Entergy and Cleco Power Regions if PTP Wheeling Charges were Eliminated between SPP, Entergy and Cleco

<table>
<thead>
<tr>
<th></th>
<th>SPP</th>
<th>Cleco</th>
<th>Entergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission Costs Avoided</td>
<td>13</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Transmission Revenues Lost</td>
<td>(11)</td>
<td>(3)</td>
<td>(21)</td>
</tr>
<tr>
<td>-- SPP Tariff Allocation Impact on Revenues</td>
<td>(1)</td>
<td>3</td>
<td>(2)</td>
</tr>
<tr>
<td>Net Benefit</td>
<td>0</td>
<td>6</td>
<td>(9)</td>
</tr>
</tbody>
</table>

Table 8: Annual Benefits (Costs) to the Entergy and Cleco Power Regions if PTP Wheeling Charges were Eliminated between MISO, Entergy and Cleco

<table>
<thead>
<tr>
<th></th>
<th>Cleco</th>
<th>Entergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission Costs Avoided</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Transmission Revenues Lost</td>
<td>(1)</td>
<td>(25)</td>
</tr>
<tr>
<td>-- MISO Tariff Allocation Impact on Revenues</td>
<td>0</td>
<td>(9)</td>
</tr>
<tr>
<td>Net Benefit</td>
<td>3</td>
<td>(23)</td>
</tr>
</tbody>
</table>

These annual transmission costs avoided and transmission revenues lost were applied throughout the study period in the derivation of the wheeling cost and wheeling revenue component of trade benefits.

For the wheeling cost and wheeling revenue impacts with other major neighbors not in the RTO (e.g., TVA), the GE MAPS physical wheel charges were tracked and the resulting change in these wheeling revenues and wheeling costs between cases were included in the trade benefits calculation. The significantly higher Midwest ISO wheel-out rate ($5/MWh) in comparison to that of the SPP RTO ($2/MWh) leads to significantly increased wheeling revenues across these *non-RTO* seams for the Entergy region in the Join MISO Case in comparison to the Join SPP Case. This *additional sharing* of this increased Entergy region wheeling revenue would not be captured in the historical wheeling revenue analysis. As such, based on the Entergy analysis of the revenue sharing that would take place under the Midwest ISO OATT, it was assumed that the Entergy region would retain 59% of the amount by which the wheeling revenue in the Join MISO Case exceeds that of the Status Quo Case across non-RTO seams.22

Adjusted Production Costs and Trade Benefits

Summarized in Table 9 are the adjusted production costs and lost transmission revenue for the SPP, Entergy and Cleco regions if Entergy and Cleco join the SPP RTO. Similarly,

22 As in prior CBAs, a similar factor was not applied to the Entergy region's non-RTO wheeling revenue in the Join SPP Case, as there was not a material difference in the Entergy region's non-RTO wheel revenue in the Join SPP Case relative to the Status Quo Case.
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summarized in Table 10 are the adjusted production costs and lost transmission revenue for the Entergy and Cleco regions if they join the Midwest ISO.

Table 9: 2013-2022 Benefits (Costs) to the SPP, Entergy and Cleco Power Regions
If Cleco Power and Entergy Join the SPP RTO
(in millions of 2010 present value dollars; positive numbers are benefits)

<table>
<thead>
<tr>
<th></th>
<th>SPP</th>
<th>Entergy</th>
<th>Cleco</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in Adjusted</td>
<td>69</td>
<td>1,056</td>
<td>(22)</td>
<td>1,103</td>
</tr>
<tr>
<td>Production Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost Transmission</td>
<td>(86)</td>
<td>(164)</td>
<td>5</td>
<td>(246)</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trade Benefits</td>
<td>(17)</td>
<td>891</td>
<td>(17)</td>
<td>857</td>
</tr>
</tbody>
</table>

Table 10: 2013-2022 Benefits (Costs) to the Entergy and Cleco Power Regions
If Cleco Power and Entergy Join the Midwest ISO
(in millions of 2010 present value dollars; positive numbers are benefits)

<table>
<thead>
<tr>
<th></th>
<th>Entergy</th>
<th>Cleco</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in Adjusted</td>
<td>868</td>
<td>(21)</td>
</tr>
<tr>
<td>Production Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost Transmission</td>
<td>(131)</td>
<td>(10)</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trade Benefits</td>
<td>737</td>
<td>(32)</td>
</tr>
</tbody>
</table>

As shown, significant trade benefits accrue to the Entergy region in joining an RTO, with the benefits of joining the SPP RTO about $150 million higher (about 20%) higher than those for the Midwest ISO, assuming a Day 2 market is in place for the SPP RTO by 2013. The trade benefits for Cleco Power are somewhat negative in joining either RTO. As discussed in the SPP-Entergy CBA, a significant portion of the SPP-Entergy region trade benefits accrue to the Entergy region largely because of the greater mix of higher cost gas-fired generation in the Entergy region that is displaced in the Join SPP Case and Join MISO Case. In addition, there are a significant number of Qualifying Facilities ("QFs") in the Entergy region that become firm resources in the Join SPP Case and Join MISO Case.

As noted above, there is a significant loss in transmission revenue for Entergy when joining an RTO, based on the analysis of historical transmission revenue. The higher lost transmission revenues for Entergy in the Join SPP Case ($164 million) than in the Join MISO Case ($131 million) result from additional wheel revenues being collected by the Entergy region when joining the Midwest ISO. The Midwest ISO has a higher wheel-out charge than does the SPP RTO ($5/MWh for the Midwest ISO and $2/MWh for the SPP RTO in this study).

To help better assess the difference in trade benefits (before wheeling cost or revenue impacts) between the Join SPP Case and Join MISO Case, a comparison of the generation, purchases and sales in the Join SPP Case and Join MISO Case for the Entergy region in 2013 is shown in Table 11. As shown, the Entergy region generation is higher in the Join MISO Case than in the Join SPP Case, but the additional cost of this generation is not fully offset by reduced purchase costs and/or increased sales revenues.
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Table 11: 2013 Entergy Region Generation, Purchases, Sales in Join SPP and Join MISO Cases
(2010 dollars, positive dollars are costs)

<table>
<thead>
<tr>
<th></th>
<th>Join SPP</th>
<th></th>
<th>Join MISO</th>
<th></th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWH</td>
<td>M$</td>
<td>$/MWh</td>
<td>TWH</td>
<td>M$</td>
</tr>
<tr>
<td>Generation</td>
<td>128.1</td>
<td>3,139</td>
<td>24.5</td>
<td>128.6</td>
<td>3,172</td>
</tr>
<tr>
<td>Purchases</td>
<td>40.0</td>
<td>1,486</td>
<td>37.4</td>
<td>40.0</td>
<td>1,491</td>
</tr>
<tr>
<td>Sales</td>
<td>(18.2)</td>
<td>(718)</td>
<td>39.4</td>
<td>(18.8)</td>
<td>(723)</td>
</tr>
<tr>
<td>Total</td>
<td>149.9</td>
<td>3,918</td>
<td>28.1</td>
<td>149.9</td>
<td>3,940</td>
</tr>
</tbody>
</table>

As shown in Table 12, the source of the additional generation in the Entergy region in the Join MISO Case is gas-fired generation, while coal-fired generation is actually reduced. Additional gas-fired generation for a net-purchasing region typically means the cost of generation is higher, and purchases and sales activity are less economic, leading to higher adjusted production costs.

Table 12: 2013 Entergy Region Gas- and Coal-fired Generation in Join SPP and Join MISO Cases
(2010 dollars, positive dollars are costs)

<table>
<thead>
<tr>
<th></th>
<th>Join SPP</th>
<th></th>
<th>Join MISO</th>
<th></th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWH</td>
<td>M$</td>
<td>$/MWh</td>
<td>TWH</td>
<td>M$</td>
</tr>
<tr>
<td>Gas-fired</td>
<td>26</td>
<td>1,381</td>
<td>53.0</td>
<td>27</td>
<td>1,425</td>
</tr>
<tr>
<td>Coal-fired</td>
<td>46</td>
<td>1,440</td>
<td>31.7</td>
<td>45</td>
<td>1,430</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>2,822</td>
<td>39.4</td>
<td>72</td>
<td>2,855</td>
</tr>
</tbody>
</table>

Differences in Join SPP Trade Benefits from the SPP-Entergy CBA

In comparison to the SPP-Entergy CBA, the trade benefits for the SPP-Entergy region are similar ($857 million in comparison to $817 million) in the Join SPP Case. However, in this Join MISO CBA Addendum, significantly more of the trade benefits accrue to the Entergy region. In reviewing the differences, we note the following (focusing on the 2013 trade benefit results).

In the Join SPP Case in this CBA, Entergy increases its coal generation more, and decreases the generation from its combined-cycle and steam gas units significantly more than in the SPP-Entergy CBA. The reduced generation is replaced largely with increased imports from SPP, and to a lesser extent from AECI and TVA (pathways to Entergy from MISO), as shown in Table 13.

Table 13: Increase in 2013 Entergy Region Imports in the Join SPP Case in Comparison to the Status Quo Case in the SPP-Entergy CBA and the Join MISO CBA Addendum (GWh)

<table>
<thead>
<tr>
<th>Source of Entergy Imports</th>
<th>SPP-Entergy CBA</th>
<th>Join MISO CBA Addendum</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td>1,916</td>
<td>2,892</td>
<td>776</td>
</tr>
<tr>
<td>From AECI</td>
<td>444</td>
<td>773</td>
<td>329</td>
</tr>
<tr>
<td>From TVA</td>
<td>548</td>
<td>876</td>
<td>330</td>
</tr>
</tbody>
</table>

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As shown in Table 14, despite increasing Entergy purchases, the average purchase costs for Entergy decrease in both the Status Quo and Join SPP Cases (e.g., from $37.2 to $36.6 for EAI and from $42.1 to $41.5 for Entergy Louisiana in the Join SPP Case), indicating that Entergy is able to purchase its imports at lower prices in this CBA than in the SPP-Entergy CBA. As a purchaser, Entergy benefits from lower prevailing prices, and particularly so when it is able to better optimize its commitment when joining the SPP RTO with the larger commitment pool and thereby increase its purchases further (as shown in Table 13).

Table 14: 2013 Average Area Prices ($/MWh) in the Join SPP Case in Comparison to the Status Quo Case in the SPP-Entergy CBA and the Join MISO CBA Addendum

<table>
<thead>
<tr>
<th>SPP-Entergy CBA</th>
<th>Join MISO CBA Addendum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Status Quo</td>
</tr>
<tr>
<td>AEP West</td>
<td>33.5</td>
</tr>
<tr>
<td>AECI</td>
<td>36.6</td>
</tr>
<tr>
<td>TVA</td>
<td>38.7</td>
</tr>
<tr>
<td>Entergy AR</td>
<td>35.1</td>
</tr>
<tr>
<td>Entergy LA</td>
<td>35.8</td>
</tr>
</tbody>
</table>

In converse, in SPP the prices (using AEP West) are similar in the Status Quo Case, but do not increase as much with the larger commitment pool in this CBA (a similar impact takes place for AECI and TVA). As an exporter, the lower prices sales in SPP and in Entergy in the Join SPP Case yield less in the way of benefits to SPP in the Join SPP Case despite the additional exports made to Entergy.

Overall, we attribute the Join SPP Case change in trade benefits (higher for Entergy, lower for SPP) in this CBA relative to the SPP-Entergy CBA to a more efficient commitment of the Entergy units under average loss commitment along with inclusion of MISO in the commitment pool in this CBA. The decrease in sales prices for sales to Entergy from SPP result in a decline in the benefits for SPP.

2.2.3. Administrative Costs

Based on its current forecast of administrative charges under Schedules 10, 16 and 17, the Midwest ISO provided an estimate of the administrative charges that would be incurred by Entergy and Cleco if they were to join the Midwest ISO. This analysis took into account the economies of scale that the Midwest ISO would obtain by spreading its costs over a larger footprint.

The Midwest ISO administrative charges estimates are close to, but somewhat below those estimated by SPP for Entergy and Cleco to join the SPP RTO. Over the 2013-2022 period, the Midwest ISO administrative costs are about $2 million lower for the Cleco region and $21 million for the Entergy region than those estimated to be incurred as members of the SPP RTO. See Appendix A for more detail. The SPP cost estimates are from September 2010 and those from the Midwest ISO are from February 2011. Given the long-term similarity in the
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RTO markets assumed, it is likely that costs would be roughly comparable between the two RTOs, with a key differentiating factor being the size of the RTO footprint over which the RTO costs can be allocated. The impact on RTO administrative costs of other parties potentially leaving or entering the RTO adds additional uncertainty to the SPP and Midwest ISO estimates.

The additional FERC fees that would be paid as members of an RTO by Cleco and Entergy are assumed to be the same whether joining the SPP RTO or the Midwest ISO. Similarly, the internal costs incurred by Cleco and Entergy to interface with an RTO are assumed to be the same whether joining the SPP RTO or the Midwest ISO. In the Join MISO Case, the revenues lost by SPP from Entergy no longer having an ICT are assumed to be exactly offset by costs avoided by SPP in no longer operating the ICT (yielding no impact on SPP with respect to administrative costs).

2.2.4. Transmission Cost Expansion

For this CBA, SPP provided an updated Entergy and Cleco region transmission expansion cost allocation for Study 1, 2 (Study 3 is unchanged) based on updated transmission expansion cost information since September 2010. The updated results are shown in Table 15. See the SPP-Entergy CBA for further detail on SPP Study 1, 2 and 3.

Table 15: 2013-2022 Transmission Expansion Cost Allocation Benefits (Costs) to the SPP, Entergy and Cleco Power Regions If Cleco Power and Entergy Join the SPP RTO

(in millions of 2010 present value dollars; positive numbers are benefits)

<table>
<thead>
<tr>
<th>SPP RTO Transmission Expansion Costs Allocated</th>
<th>SPP</th>
<th>Cleco</th>
<th>Entergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 All Regional Costs</td>
<td>1.034</td>
<td>(104)</td>
<td>(937)</td>
</tr>
<tr>
<td>2 Regional Costs beginning Jan. 2013</td>
<td>726</td>
<td>(80)</td>
<td>(666)</td>
</tr>
</tbody>
</table>

In this update, for the Entergy region, costs increased from $902 million to $937 million for Study 1 and from $614 million to $666 million for Study 2. For the Cleco region, costs increased from $93 to $104 million for Study 1 and from $68 to $80 million for Study 2. Study 3 results are unchanged.

For the Join MISO Case, the Midwest ISO provided the allocation of Entergy and Cleco region transmission expansion costs, which are predominately due to the Multi-Value Projects discussed in Section 2.1.2. The costs for these Multi-Value Projects are shared largely on an energy-for-load basis across the Midwest ISO footprint, and there is a four-year phase-in for new RTO members. As shown in Table 16, there is a significant allocation of transmission expansion costs to the Entergy and Cleco regions when joining the Midwest ISO. For the Entergy region, the allocated transmission expansion costs in the Join MISO Case are $805
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million more than SPP Study 3, $116 million more than SPP Study 2, and $155 million less than SPP Study 1.23

Table 16: 2013-2022 Transmission Expansion Cost Allocation Benefits (Costs) to the Entergy and Cleco Power Regions if Cleco Power and Entergy Join the Midwest ISO
(In millions of 2010 present value dollars; positive numbers are benefits)

<table>
<thead>
<tr>
<th>Midwest ISO Transmission Expansion Cost Allocation</th>
<th>Cleco</th>
<th>Entergy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(65)</td>
<td>(782)</td>
</tr>
</tbody>
</table>

The corresponding benefit to the existing Midwest ISO of the allocation of the $4.4 billion of Multi-Value Projects across a larger footprint is not captured in this study. The $4.4 billion initial set of Multi-Value Projects does not include any projects in the Entergy or Cleco regions.

3. EAI IN THE MIDWEST ISO OR SPP RTO

3.1. STUDY METHODOLOGY (EAI EVALUATION)

Three different cases were analyzed over the nine-year period from 2014 to 2022:

1. EAI operates as a "standalone" entity not under the ESA ("EAI Standalone Case"),

2. EAI, but not the Rest of Entergy, joins the SPP RTO ("EAI Joins SPP Case").

3. EAI, but not the Rest of Entergy, joins the Midwest ISO ("EAI Joins MISO Case")

In the EAI Standalone Case, the load serving entities in the EAI region, including the EAI Opco, are assumed to be network service customers under the Entergy Open Access Transmission Tariff ("CATT"), paying a load ratio share of the Entergy transmission system revenue requirements. A share of Entergy transmission system revenue is distributed to the EAI Opco to recover the revenue requirement of the EAI Opco transmission assets.

In the EAI Joins SPP Case, EAI Opco transmission assets become part of the SPP transmission system and are transferred to the SPP tariff. Given that there are point-to-point transmission charges applicable for "out" transactions ("wheeling charges") between SPP and Entergy today, EAI joining the SPP RTO results in the imposition of SPP RTO transmission wheeling charges between EAI and the Rest of Entergy.

23 While the Midwest ISO did not provide a range of transmission expansion cost estimates, the ultimate number of new Multi-Value Projects and their associated cost allocation will depend on future Midwest ISO planning approvals and FERC decisions regarding the Midwest ISO transmission cost allocation process.
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Similarly, in the EAI Joins MISO Case, EAI Opco transmission assets become part of the MISO transmission system and are transferred to the MISO tariff. Given that there are point-to-point transmission charges applicable for "out" transactions between MISO and Entergy today, EAI joining the Midwest ISO results in the imposition of Midwest ISO transmission wheeling charges between EAI and the Rest of Entergy.

SPP is assumed to continue in its capacity as ICT for the Entergy transmission system in the EAI Standalone Case, and for the Rest of Entergy transmission system in the EAI Joins SPP Case and EAI Joins MISO Case. The key differences between the modeling assumptions in the SPP-Entergy CBA issued in September 2010 and the SPP-EAI CBA issued in October 2010 are captured in Table 20.

Table 17: Summary of Modeling Differences between the SPP-Entergy CBA and SPP-EAI CBA

<table>
<thead>
<tr>
<th>Regions Joining the SPP RTO</th>
<th>SPP-Entergy CBA</th>
<th>SPP-EAI CBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAI and Rest of Entergy Relationship</td>
<td>Treated as one combined region</td>
<td>Treated as separate regions in Base Case; EAI Joins SPP in Join SPP Case</td>
</tr>
<tr>
<td>Commitment Seams Charges in Base Case</td>
<td>$10/MWh between SPP, Entergy and Cleco</td>
<td>$10/MWh between SPP, EAI, Rest of Entergy and Cleco</td>
</tr>
<tr>
<td>Dispatch Seams Charge in Base Case</td>
<td>Wheeling and trading friction charges between SPP, Entergy and Cleco.</td>
<td>Wheeling and trading friction charges between SPP, EAI, Rest of Entergy and Cleco, except the EAI and Rest of Entergy charge does not include a wheeling charge.</td>
</tr>
<tr>
<td>Commitment Seams Charges in Join SPP Case</td>
<td>$0/MWh between SPP, Entergy and Cleco</td>
<td>$0/MWh between SPP and EAI, $10/MWh between SPP/EAI, Rest of Entergy and Cleco.</td>
</tr>
<tr>
<td>Dispatch Seams Charges in Join SPP Case</td>
<td>No wheeling or trading friction charges between SPP, Entergy and Cleco.</td>
<td>No wheeling or trading friction charges between SPP and EAI. Wheeling and trading friction charges between SPP/EAI and Rest of Entergy and Cleco.</td>
</tr>
<tr>
<td>Entergy QF Treatment in Base Case</td>
<td>Non-firm resources</td>
<td>Non-firm resources</td>
</tr>
<tr>
<td>Entergy QF Treatment in Join SPP Case</td>
<td>Firm resources</td>
<td>Firm resources for IPPs in EAI region; non-firm resources for IPPs in Rest of Entergy region</td>
</tr>
<tr>
<td>Lost Transmission Revenue from Joining SPP RTO</td>
<td>Historical transmission data analysis for SPP-Entergy-Cleco transactions. Change in wheeling charges on GE MAPS physical flows for other neighboring regions</td>
<td>Change in wheeling charges on GE MAPS physical flows for all regions.</td>
</tr>
<tr>
<td>Transmission Expansion Cost Allocation in Join SPP Case</td>
<td>Allocated to Entergy and Cleco</td>
<td>Allocated to EAI only</td>
</tr>
</tbody>
</table>

In this Join MISO CBA Addendum, to evaluate the EAI RTO alternatives, corresponding changes were made to the GE MAPS modeling as described in detail in Section 2.1 for Entergy and Cleco Power joining the Midwest ISO. The 1000 MW Contract Path through AECI between the Entergy region and the Midwest ISO discussed in Section 2.1.1 is assumed to transfer to EAI if EAI is separated from the Rest of Entergy. In addition, the same assumptions described in Section 2.1.2 were used for Midwest ISO demand, new wind
capacity, and transmission expansion. The specific seams charges applied in this CBA for the EAI RTO alternatives are summarized below. Changes were also required with respect to wheeling costs and wheeling revenues, as also described below.

### 3.1.1. Seams Charges (EAI Evaluation)

The dispatch seams charges applied in this Join MISO CBA Addendum to evaluate the EAI RTO alternatives are summarized in Table 18. These are the same dispatch seams charges applied in the SPP-EAI CBA. As in the SPP-EAI CBA, in the EAI Standalone Case and the EAI Jolns SPP Case, the hurdle on the 1000 MW Contract Path is comprised of the MISO to/from AECI dispatch seams charges, and the AECI to/from EAI. In the EAI Jolns MISO Case, both of these dispatch seams charges are eliminated on the 1000 MW Contract Path.

<table>
<thead>
<tr>
<th>Table 18: Dispatch Seams Charges Applied in GE MAPS in the SPP/Entergy/MISO Region</th>
</tr>
</thead>
</table>
| \begin{tabular}{|l|l|l|l|l|} \hline
| EAI Standalone Case & & & & \\
| From SPP & From Rest of Entergy & To EAI & To MISO & \\
| 3+3 & - & 3+2 & 3+2 & \\
| 3+3 & - & 3+0 & - & \\
| 3+5 & - & 3+5 & - & \\
| \hline
| EAI Jolns SPP Case & & & & \\
| From SPP & From Rest of Entergy & To EAI & To MISO & \\
| 3+3 & - & 3+2 & 3+2 & \\
| 3+3 & - & 3+2 & 3+2 & \\
| 3+5 & - & 3+5 & - & \\
| \hline
| EAI Jolns MISO Case & & & & \\
| From SPP & From Rest of Entergy & To EAI & To MISO & \\
| 3+3 & - & 3+2 & 3+2 & \\
| 3+3 & - & 3+2 & 3+2 & \\
| 3+5 & - & 3+5 & - & \\
| \hline
\end{tabular} |

As shown in Table 19, other than inclusion of the Midwest ISO in the SPP/Entergy Commitment pool with a $10/MWh, there were no other changes to the commitment hurdles from those used in the SPP-EAI CBA.

---

24. A possible refinement to the GE MAPS analyses in this study would be to run the Status Quo Case and Join SPP Case with only a single hurdle on the 1000 MW Contract Paths. The AECI to EAI dispatch seams charge is $3 for wheeling and $3 for trading friction.

25. See the SPP-EAI CBA for the seams charges applied throughout the Eastern Interconnect.
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Table 19: Commitment Seams Charges ($/MWh) in GE MAPS in the SPP/Entergy/MISO Region

<table>
<thead>
<tr>
<th></th>
<th>To SPP</th>
<th>To Rest of Entergy</th>
<th>To EAI</th>
<th>To MISO</th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From Rest of Entergy</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From EAI</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From MISO</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

EAI Joins SPP Case

<table>
<thead>
<tr>
<th></th>
<th>To SPP</th>
<th>To Rest of Entergy</th>
<th>To EAI</th>
<th>To MISO</th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From Rest of Entergy</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From EAI</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From MISO</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

EAI Joins MISO Case

<table>
<thead>
<tr>
<th></th>
<th>To SPP</th>
<th>To Rest of Entergy</th>
<th>To EAI</th>
<th>To MISO</th>
</tr>
</thead>
<tbody>
<tr>
<td>From SPP</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From Rest of Entergy</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From EAI</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>From MISO</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

3.1.2. Transmission (Wheeling) Revenue and Costs Methodology (EAI Evaluation)

As discussed above, the impacts on wheeling costs incurred and wheeling revenue collected between SPP, Entergy and Cleco in the Entergy-Cleco Join SPP Case and between the Midwest ISO, Entergy and Cleco in the Entergy-Cleco Join MISO Case were assessed using historical data. As discussed in the SPP-EAI CBA, a similar historical analysis could not be performed for the EAI RTO alternatives given that there is no specific historical data identifying whether an Entergy transmission transaction is using the EAI or the Rest of Entergy transmission system.

As such, the impact on wheeling revenues and costs for EAI is assessed using the change between cases in GE MAPS physical flow wheeling revenues and wheeling costs. In doing so, key related assumptions include: 1) how wheeling costs and revenues are shared between EAI and Rest of Entergy in the EAI Standalone Case, 2) how wheeling revenue is shared between EAI and the RTO when EAI joins the Midwest ISO or SPP RTO, and 3) how wheeling costs are assessed for the 1000 MW Contract Path. Each is discussed in turn below.

EAI Transmission Revenue and Cost Sharing when Standalone. In the SPP-EAI CBA, in the EAI Standalone Case it was assumed that both the wheeling revenue and wheeling costs collected by the Rest of Entergy and EAI were aggregated and shared on a load ratio basis. Upon further review, in this CBA, only the wheeling revenues are shared on a load ratio
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basis. This assumption changes shifts about $20 million per year in wheeling costs from the rest of Entergy to EAI in the EAI Standalone Case, thereby increasing the benefits of EAI joining the SPP RTO or Midwest ISO.

EAI Transmission Revenue Sharing in RTO. Based on an analysis of the Midwest ISO OATT, Entergy estimated that 52% of wheeling revenue collected on the EAI seams (as modeled in GE MAPS) would be retained by EAI with the remainder allocated to the rest of the Midwest ISO. Similarly, it was estimated that 56% of wheeling revenue on the EAI seams would be retained by EAI as a member of the SPP RTO. In addition, EAI was assumed to share 5.6% of the existing SPP region wheeling revenue in the EAI Joins SPP Case and 2.5% of the existing MISO region wheeling revenue in the EAI Joins MISO Case.

In the SPP-EAI CBA, in the EAI Joins SPP Case, it was assumed the wheeling revenue allocated by EAI to SPP would be fully offset by an allocation of SPP transmission revenue to EAI. In contrast, using the sharing factors above in this CBA, reduces the EAI wheeling revenue by about $12 million per year in the EAI Joins SPP Case and by about $38 million per year in the EAI Joins MISO Case. The much higher revenue sharing in the EAI Joins MISO Case results from the significantly higher wheeling rate for the EAI region in the Join MISO case ($5/MWh) in comparison to the EAI Joins SPP Case ($2/MWh).

EAI Wheel Costs for the 1000 MW Contract Path. For consistency across cases, in the trade benefit post-processing calculations in this Join MISO CBA Addendum, the wheeling charge on flows on the 1000 MW Contract Path were assessed for the wheeling charges on both legs of the Contract Path. In the SPP-EAI CBA, only the wheeling charges on the AEIC-

26 Wheeling costs on the GE MAPS physical flows are assigned 50% to the selling region (generators) and 50% to the purchasing region (load). In the SPP-EAI CBA, it was assumed that a network transmission arrangement between Entergy and Rest of Entergy would result in the sharing of both wheeling revenues and wheeling costs. The ultimate treatment of wheeling costs and revenues with EAI as a standalone entity will depend on the specifics of the transmission arrangements between EAI and the Entergy transmission provider.

27 For 2013, the GE MAPS-based wheeling costs for Rest of Entergy are $43 million, and for EAI are $45 million in the EAI Standalone Case. The Rest of Entergy region is about 74% of the load in the Entergy region, while the EAI region is 26%. An allocation of wheeling costs would yield EAI wheeling costs of $23 million [(43+45)*26%]. With no allocation, as in this CBA, the EAI wheeling costs are $45 million, which is $22 million higher.

28 Since GE-MAPS based wheeling revenues were not calculated for the Midwest ISO in this study, these percentages were applied to the annual Midwest ISO and SPP wheeling revenue from the historical wheeling revenue analysis.

29 For 2013, the GE MAPS-based wheeling revenue for EAI is $36 million in the EAI Joins SPP Case, of which 56% is assumed to be retained by EAI to yield net EAI wheeling revenue of $20 million—a decrease of $16 million. The wheeling revenue for EAI is $83 million in the EAI Joins MISO Case, of which 52% is assumed to be retained by EAI to yield net EAI wheeling revenue of $43 million—a decrease of $40 million. The corresponding sharing of existing RTO revenues with EAI adds $3.5 million per year to EAI wheeling revenue for the EAI Joins SPP Case and $1.5 million per year for the EAI Joins MISO Case.
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Entergy path were assessed in the trade benefit post-processing calculations. This assumption change does not impact the EAI Joins SPP Case trade benefits materially as the wheeling charges on the 1000 MW Contract Path are in place in both the EAI Standalone and EAI Join SPP Cases. It increases the EAI Join MISO Case benefits by about $12 million per year, because the wheeling charges on the 1000 MW Contract Path are eliminated in the EAI Joins MISO Case.30

3.1.3. Summary of Modeling and Assumption Changes (EAI Evaluation)

The modeling and assumption changes between the SPP-EAI CBA and the Join MISO CBA Addendum discussed above are summarized in Table 20.

Table 20: Summary of EAI Modeling Assumption Changes

<table>
<thead>
<tr>
<th>SPP-EAI CBA</th>
<th>Join MISO CBA Addendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 MW Contract Path</td>
<td>Hurdles between EAI-AECl and AECl-Amren in Status Quo and Join SPP Cases. Same for Status Quo and Join SPP Cases. Hurdles between EAI-AECl and AECl-Amren eliminated in Join MISO Case.</td>
</tr>
<tr>
<td>Commitment Pool</td>
<td>SPP-Entergy-Cleco region, with marginal losses in commitment step and dispatch step. No commitment optimization between MISO and SPP/Entergy/Cleco. SPP-Entergy-Cleco-MISO region, with average losses in commitment step, and marginal losses in dispatch step. $10/MWh commitment hurdle between SPP/Rest of Entergy/Cleco and MISO in all cases, and between EAI and MISO in Status Quo and Join SPP Cases.</td>
</tr>
<tr>
<td>Midwest ISO Demand and New Wind Capacity</td>
<td>Frozen at 2013 levels Increasing throughout study period, 10 GW of MISO wind capacity in 2013 increasing to 19.4 GW in 2022</td>
</tr>
<tr>
<td>Midwest ISO MVP Transmission Expansion</td>
<td>Not Included Included in 2019 and 2022 GE MAPS runs. MVP cost allocated to EAI in EAI Joins MISO Case</td>
</tr>
<tr>
<td>EAI Transmission Revenue and Cost Sharing in Standalone Case</td>
<td>EAI and Rest of Entergy wheeling revenues and wheeling costs shared on a load ratio basis. EAI and Rest of Entergy wheeling revenues shared on a load ratio basis. Wheeling costs kept by region that incurred them</td>
</tr>
<tr>
<td>EAI Transmission Revenue and Cost Sharing in Join RTO Case</td>
<td>EAI wheeling costs and wheeling revenues not shared. EAI wheeling costs not shared. EAI transmission revenues shared with RTO (keep 56% in SPP, keep 52% in MISO). Existing SPP (5.5%) and MISO (2.5%) wheeling revenues shared with EAI.</td>
</tr>
<tr>
<td>1000 MW Contract Path Transmission Costs</td>
<td>Wheeling costs included for EAI on EAI-AECl leg for EAI Standalone Case and Join SPP Case. Wheeling costs included for EAI on both EAI-AECl and AECl-Amren leg for EAI Standalone Case and Join SPP Case in post-processing of trade benefits.</td>
</tr>
<tr>
<td>Join SPP Transmission Expansion Cost Allocation</td>
<td>September 2010 estimate February 2011 Estimate31</td>
</tr>
</tbody>
</table>

30 The AECl to EAI dispatch wheel charge is $3/MWh and the Amren to AECl wheel charge is $5/MWh, 50% of which is assumed to be assessed to EAI for flows on the 1000 MW Contract Path from Amren to EAI. This yields an effective wheel cost of $4/MWh (50%($3+$5)) from Amren to EAI on this path. Based on an average flow of about 550 MW from AECl to EAI on the 1000 MW Contract Path, this change yields an increase in the EAI wheeling costs in the EAI Standalone Case and the EAI Joins SPP Case of about $12 million (($4 - 50%*$3)*550*10760) in 2013.

31 See Section 3.2.4 for a discussion of the SPP-provided update to the transmission expansion cost allocation.
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3.2. FINDINGS -- EAI IN SPP OR MISO

3.2.1. Summary of Results for EAI in RTO

Shown in Table 21 are the overall net benefits of EAI joining the SPP RTO using the modeling assumptions and updated costs assumptions in this Join MISO CBA Addendum. As shown, the overall net benefit (cost) for the EAI region is ($371) to $29 million (2010 present value) over the 2014 to 2022 period. This compares to the ($372) to ($52) million found for EAI in the SPP-EAI CBA. The net benefit/costs to the SPP-Entergy region are $37 million, in comparison to the ($13) million found in the SPP-EAI CBA. The trade benefit impacts that yield these regional changes are discussed further in Section 3.2.2.

Table 21: 2014-2022 Benefits (Costs) to the EAI, SPP, Rest of Entergy and Cleco Power Regions if EAI Joins the SPP RTO

| (in millions of 2010 present value dollars; positive numbers are benefits) |
|------------------|---|---|---|---|
|                  | EAI | SPP | Rest of Entergy | Cleco |
| Trade Benefits   | 95  | 65  | ($121)          | 26   |
| Administrative Costs | (79) | 51  | 0               | 0    |
| Transmission Cost Allocation | (388) to 13 | (13) to 388 | 0 | 0 |
| Net Benefits     | (371) to 29 | 103 to 502 | ($121) | 26  |

Entergy-Cleco in MISO. For EAI joining the Midwest ISO, the results are as summarized in Table 22. As shown, the net benefit/costs to the EAI region are ($201) million and for the Rest of Entergy region are ($144) million.

Table 22: 2014-2022 Benefits (Costs) to the EAI and Rest of Entergy Regions if EAI Joins the Midwest ISO

| (in millions of 2010 present value dollars; positive numbers are benefits) |
|------------------|---|---|
|                  | EAI | Rest of Entergy |
| Trade Benefits   | 129 | (144)          |
| Administrative Costs | (75) | 0             |
| Transmission Cost Allocation | (255) | 0             |
| Net Benefits     | (201) | (144)          |

Note that the impact on the existing Midwest ISO was not evaluated, as the Midwest ISO trade benefits were not specifically evaluated as noted above. As such, an aggregate total is not presented in Table 22. Aside from the trade benefit impacts, the Midwest ISO would

32 The only changes in Table 21 in comparison to the results of the SPP-EAI CBA are to the trade benefits (based on the GE MAPS modeling changes discussed above) and an SPP-provided update to the transmission expansion cost allocation (see Section 3.2.4).
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benefit from reduced administrative and transmission expansion costs with EAI paying a pro rata share of these costs.

As shown in Table 21 and Table 22, there are positive trade benefits to the EAI region whether joining the SPP RTO or the Midwest ISO. Including administrative costs, but prior to the allocation of transmission expansion costs, the benefits to the EAI region of joining the Midwest ISO are about $35 million higher than joining the SPP RTO. After allocation of transmission expansion costs, the net benefits to the EAI region are negative in the EAI Joins MISO Case, and range from significantly negative to somewhat positive in the EAI Joins SPP Case, depending on the transmission cost allocation that would be applied upon joining the SPP RTO. The corresponding benefits to the Rest of Entergy region are negative in both EAI Joins RTO cases. The net benefit to SPP of EAI joining the SPP RTO is positive, with the range significantly affected by the transmission cost allocation that would be applied.

As discussed in the SPP-EAI CBA, four factors limit the amount of trade benefits that would take place for EAI if it were to join an RTO.

- The smaller size of EAI in joining an RTO relative to the entire Entergy/Cleco region.

- The imposition of transmission wheeling charges between EAI (as part of SPP or MISO) and the Rest of Entergy, leading to a less efficient dispatch between the Rest of Entergy and EAI generating assets.

- The heavily baseload (nuclear and coal-fired) generating assets in the EAI region. The commitment and dispatch of these types of facilities tend to be less affected by increased regional integration, resulting in reduced dispatch savings opportunities if EAI alone joins an RTO, than if Entergy as a whole joins.

- Of the QFs in the Entergy region, only one is in the EAI region. As described in the SPP-Entergy CBA, QFs in an RTO are assumed to become firm resources allowing for a more efficient commitment process. With only one QF moving to an RTO as part of EAI, there are fewer savings than if Entergy as a whole joins the SPP RTO.

These four factors contribute to yield only a modest level of EAI trade benefits in the EAI Joins SPP Case and EAI Joins MISO Case. This modest amount of trade benefits is not

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As discussed in the SPP-EAI CBA, the reserve margin in the EAI region over the 2014-2022 period, inclusive of all load and capacity in the region including IPP capacity, is projected to be significantly above 20%. Thus, a reduction in the EAI planning reserve margin in the EAI Joins SPP Case or the EAI Joins MISO Case would not result in avoiding the construction of any new capacity and would not therefore result in any capacity benefit savings to the EAI region as a whole during this period. See the SPP-EAI CBA for a discussion of the potential capacity benefits for the EAI Opco. Also see the SPP-EAI CBA for a discussion of the potential additional transmission revenues that would be received by the EAI region if it were to join an RTO for the net payment/receipt of point-to-point transmission charges with the Rest of Entergy for designated network resources.
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significant enough to offset the payment by the EAI region of RTO administrative costs and RTO transmission expansion costs, with the exception of the SPP Study 3 allocation.

The Rest of Entergy region is negatively impacted by the loss of the significant through and out revenue for transactions that exit the Entergy transmission system from the EAI region. In the EAI Standalone Case, this revenue is shared on a load ratio basis with the rest of the Entergy transmission system. In the EAI Joins RTO cases, this revenue largely accrues to the EAI region under the RTO tariff. Moreover, the institution of wheeling charges for purchases by the Rest of Entergy region from the EAI region in the EAI Joins RTO cases further negatively impacts the Rest of Entergy region, which is a net purchaser from the EAI region.

Each cost-benefit measure is discussed in greater detail below.

3.2.2. Trade Benefits (EAI Evaluation)

As described in Section 2.2.2, trade benefits in joining an RTO are comprised of the decrease in a region's adjusted production costs (generation production costs plus purchase costs minus sale revenues and wheeling costs) and the increase in the region's wheeling revenues. Summarized in Table 23 are the adjusted production costs and lost transmission revenue for the EAI region if EAI joins the SPP RTO or Midwest ISO.

<table>
<thead>
<tr>
<th></th>
<th>EAI Joins SPP</th>
<th>EAI Joins MISO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decrease in Adjusted Prod Costs, excl. Wheeling Costs</strong></td>
<td>34</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Decrease in Wheeling Costs</strong></td>
<td>3</td>
<td>(54)</td>
</tr>
<tr>
<td><strong>Subtotal: Decrease in Adjusted Production Costs</strong></td>
<td>37</td>
<td>(57)</td>
</tr>
<tr>
<td><strong>Lost Transmission (Wheeling) Revenue</strong></td>
<td>58</td>
<td>185</td>
</tr>
<tr>
<td><strong>Total Trade Benefits</strong></td>
<td>95</td>
<td>129</td>
</tr>
</tbody>
</table>

Unlike the Entergy-Cleco Join RTO results, there are significant benefits in wheeling revenues for EAI joining an RTO for the following reasons.

1. In the EAI Standalone Case, the EAI and Rest of Entergy regions are assumed to share their wheeling revenues on a load ratio share basis. However, based on GE MAPS physical flows, the EAI wheeling revenues are nearly three times those of the Rest of Entergy region. As a result, the revenue sharing results in EAI "re-allocating" significant wheeling revenue to the Rest of Entergy in the EAI Standalone Case.

2. In contrast, when EAI joins an RTO, it no longer has to share these wheeling revenues with the Rest of Entergy. But, EAI must share its wheeling revenues with the RTO in accordance with the RTO OATT. At the same time, EAI also gets to share a portion of the existing RTO's wheeling revenue. For EAI joining the SPP RTO, the net wheeling
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Revenue impact is a benefit to the EAI region of about $10 million per year (yielding the $58 million shown in Table 23).

3. The significantly higher Midwest ISO wheel-out rate ($5/MWh) in comparison to the SPP RTO ($2/MWh) leads to significantly increased wheeling revenues for EAI in the Join MISO Case in comparison to the Join SPP Case. As a result, for EAI joining the Midwest ISO, the net wheeling revenue impact is a benefit to the EAI region of about $30 million per year (yielding the $185 million shown in Table 23).

4. However, the increased EAI wheel-out rates in the EAI Joins MISO Case also contribute to an increase in EAI region wheeling costs. Wheeling costs are assumed to be shared 50/50 between the importing region (load) and the exporting region (generators). As shown in Table 23, the impact on wheeling costs is close to zero when EAI joins the SPP RTO. However, when EAI joins the Midwest ISO, the net additional cost is about $10 million per year on average, yielding the $54 million of increased EAI wheeling costs shown in Table 23.

In sum, the net wheeling cost and revenue benefits total to about $61 million for the EAI region when joining SPP, and about $131 million for the EAI region joining the Midwest ISO. Correspondingly, the net benefits of the remaining components of adjusted production costs (production costs plus purchases costs net of sales revenues) are $34 million for the EAI region when joining SPP, and ($3) million for the EAI region when joining the Midwest ISO.

To help better assess the difference in trade benefits (before wheeling cost or revenue impacts) between the EAI Joins SPP Case and EAI Joins MISO Case, a comparison of the generation, purchases and sales in the EAI Joins SPP Case and EAI Joins MISO Case for the EAI region in 2013 is shown in Table 24. As shown, the EAI region generation is lower in the EAI Joins MISO Case than in the EAI Joins SPP Case, but the savings from this reduced generation is offset by increased purchase costs and particularly reduced sales revenues.

Table 24: 2013 EAI Region Generation/Purchases/Sales In EAI Joins SPP and Joins MISO Cases
(2010 dollars, positive dollars are costs)

<table>
<thead>
<tr>
<th></th>
<th>Join SPP</th>
<th>Join MISO</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWH</td>
<td>M$</td>
<td>$/MWh</td>
</tr>
<tr>
<td>Generation</td>
<td>43.5</td>
<td>947</td>
<td>21.6</td>
</tr>
<tr>
<td>Purchases</td>
<td>12.0</td>
<td>467</td>
<td>39.0</td>
</tr>
<tr>
<td>Sales</td>
<td>(18.2)</td>
<td>(678)</td>
<td>37.3</td>
</tr>
<tr>
<td>Total</td>
<td>37.4</td>
<td>736</td>
<td>19.7</td>
</tr>
</tbody>
</table>

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As in the SPP-EAI CBA, the GE MAPS model was run for 2013 to interpolate results for the years 2014-2015.
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As shown in Table 25, the reduced generation in the EAI region in the EAI Joins MISO Case relative to the EAI Joins SPP Case is mostly coal-fired. With low-cost coal-fired capacity available in the Midwest ISO, it is not surprising that EAI coal-fired generation would decline in a Join MISO Case. Indeed, the imports through AECI to EAI increase by 0.8 TWh in the EAI Joins MISO Case in comparison to the EAI Joins SPP Case. While this reduces EAI’s production costs, the lost EAI sales revenue more than offsets this in 2013. EAI exports decrease by 0.9 TWh to TVA and by 0.4 TWh to the Rest of Entergy in the EAI Joins MISO Case in comparison to the EAI Joins SPP Case, and the sales that remain are at a lower average price.

Table 25: 2013 EAI Region Gas- and Coal-fired Generation in Join SPP and Join MISO Cases (2010 dollars, positive dollars are costs)

<table>
<thead>
<tr>
<th></th>
<th>Join SPP</th>
<th>Join MISO</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas-fired</td>
<td>TWH 3.1</td>
<td>TWH 2.9</td>
<td>-0.2</td>
</tr>
<tr>
<td></td>
<td>M$ 156</td>
<td>M$ 146</td>
<td>-10</td>
</tr>
<tr>
<td></td>
<td>$/MWh 49.9</td>
<td>$/MWh 50.6</td>
<td></td>
</tr>
<tr>
<td>Coal-fired</td>
<td>TWH 22.2</td>
<td>TWH 20.1</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>M$ 705</td>
<td>M$ 641</td>
<td>-64</td>
</tr>
<tr>
<td></td>
<td>$/MWh 31.7</td>
<td>$/MWh 31.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWH 25.4</td>
<td>TWH 23.0</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>M$ 851</td>
<td>M$ 787</td>
<td>-74</td>
</tr>
<tr>
<td></td>
<td>$/MWh 34.0</td>
<td>$/MWh 34.2</td>
<td></td>
</tr>
</tbody>
</table>

In sum, the somewhat higher trade benefits for EAI joining the Midwest ISO relative to the SPP RTO appear largely driven by wheeling cost and wheeling revenue impacts.\(^{35}\)

3.2.3. Administrative Costs (EAI Evaluation)

Based on its current forecast of administrative charges under Schedules 10, 16 and 17, the Midwest ISO provided an estimate of the administrative charges that would be incurred by EAI if it were to join the Midwest ISO. This analysis took into account the economies of scale that the Midwest ISO would obtain by spreading its costs over a larger footprint. The Midwest ISO administrative charges estimates for EAI are about $4 million (2010 present value) below those estimated by SPP for EAI to join the SPP RTO over the 2014-2022 period. See Appendix A for more detail. As discussed previously, it is likely that Day 2 RTO costs will be roughly similar among RTOs, with the key differentiating factor between RTOs being the size of the footprint to which the costs can be assigned.

The additional FERC fees that would be paid as members of an RTO by EAI are assumed to be the same whether joining the SPP RTO or the Midwest ISO. Similarly, the internal costs incurred by EAI to interface with an RTO are assumed to be the same whether joining the SPP RTO or the Midwest ISO. In the Join SPP and Join MISO Cases, the revenues lost by SPP from EAI no longer participating in the Entergy ICT are assumed to be exactly offset by

\(^{35}\) While not evaluated in this study, if EAI were to pursue joining an RTO, it may be that the RTO might be required by FERC to waive wheeling charges to the Rest of Entergy across the EAI/Rest of Entergy seam, if such charges did not exist prior to EAI joining the RTO.
costs avoided by SPP in operating the ICT (yielding no impact on SPP with respect to administrative costs).

3.2.4. Transmission Expansion Cost (EAI Evaluation)

For this CBA, SPP provided an updated EAI transmission expansion cost allocation for Study 1, 2 (Study 3 is unchanged) based on updated transmission expansion cost information since September 2010. The updated results are shown in Table 15. See the SPP-EAI CBA for further detail on SPP Study 1, 2 and 3. In this update, for the EAI region, costs increased from $307 million to $386 million for Study 1 and from $209 million to $291 million for Study 2. Study 3 results are unchanged.

For the EAI Joins MISO Case, the Midwest ISO provided the allocation of EAI transmission expansion costs, which is predominately due to Multi-Value projects. The costs for these Multi-Value Projects are shared largely on an energy-for-load basis across the Midwest ISO footprint, and are phased in over a four-year period. The share that would be allocated to EAI if it joined the Midwest ISO is shown in Table 27. As shown, the allocation would be $268 million more than SPP Study 3, $36 million less than SPP Study 2, and $131 million less than SPP Study 1.

The corresponding benefit to the existing Midwest ISO of the allocation of the $4.4 billion of Multi-Value Projects across a wider footprint is not captured in this study. The $4.4 billion initial set of Multi-Value Projects does not include any projects in the EAI region.
4. OTHER ISSUES

The general qualitative consideration of Entergy joining the SPP RTO examined in detail in the SPP-Entergy CBA were not reexamined in this CBA, as they would be expected to apply as a general matter to Entergy/Cleco or EAI joining the Midwest ISO as well. One related key uncertainty is the timing and ultimate level of costs associated with the upcoming transition by SPP to a Day 2 market, whereas the Midwest ISO has a Day 2 market in place already. Other key uncertainties include:

- The ability to extend the 1000 MW Contract Path arrangement between Entergy, Ameren, and AECL over the long-term is an uncertainty in Entergy/Cleco or EAI joining the Midwest ISO.

- The ability to which the SPP-Midwest ISO JOA could be used to better coordinate the operations of Entergy/Cleco or EAI in the Midwest ISO than modeled herein is an uncertainty dependent on the result of potential discussions between SPP and the Midwest ISO.

- The assignment of SPP transmission expansion costs to Entergy/Cleco or EAI if joining the SPP RTO (i.e., Study 1, 2 or 3) is uncertain.

- The amount of additional RTO transmission expansion needed in the future to support renewable portfolio standards/increased wind power is an uncertainty for both SPP and the Midwest ISO, along with the ultimate mechanism that may be used to allocate these costs to RTO members.

- The ultimate size of each RTO over the long-term is a key uncertainty, as the RTO footprint size is a key driver of the administrative charges each RTO assesses.

- The exact transmission arrangements between EAI and Rest of Entergy with EAI on a stand-alone basis is an uncertainty for assessing the benefits of EAI joining an RTO.

- Whether FERC would allow the institution of wheeling charges on an EAI/Rest of Entergy seam is an uncertainty associated with EAI joining an RTO.

5. CONCLUSION

As discussed in detail above, we continue to find that there will be significant benefits for the Entergy region to join an RTO, but these benefits are or can be more than offset by the allocation to the Entergy region of RTO transmission expansion costs. We continue to find that the benefits of EAI joining an RTO are more limited, and these benefits also are or can be more than offset by the allocation to the EAI region of RTO transmission expansion costs.
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There are a number of key uncertainties associated with these findings, including the Day 2 market evolution in SPP, the coordination that could take place under the SPP-Midwest ISO JOA, the extension of AECI-Entergy transmission arrangements, the future footprint of each RTO, and, perhaps most importantly, the ultimate amount and allocation of RTO transmission expansion costs.
APPENDIX A: ENTERGY/CLECO IN RTO FURTHER RESULTS

A.1 ENTERGY/CLECO IN SPP RTO

The net benefit to each region including the impact of transmission cost allocation is captured in Table 28.

Table 28: Net Benefit to Entergy, Cleco and SPP Regions of Join SPP Case

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<td><strong>SPP-ENTERGY-CLECO Net Benefits</strong></td>
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<tr>
<td><strong>Net Benefits</strong></td>
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<td>154</td>
<td>148</td>
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<td>1.131</td>
<td>1.169</td>
<td>1.196</td>
<td>1.216</td>
<td>1.249</td>
<td>1.290</td>
<td>1.312</td>
<td>1.346</td>
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Note: The “ENTERGY region” refers to the areas within the Entergy transmission system footprint, and for purposes of this study includes Louisiana Generating and Louisiana Energy and Power Authority. The “CLECO region” refers to the areas within the Cleco transmission system footprint as well as the Cleco Power load served by the Entergy transmission system, and for purposes of this study includes the City of Lafayette. The “existing SPP region” refers to the SPP transmission system footprint that is currently operating within the SPP Energy imbalance Service area.

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Further detail regarding the net benefits to each of the regions prior to consideration of transmission cost allocation is captured in Table 29.

Table 29: Net Benefit of Entergy/Cleco Joining the SPP RTO, excluding Transmission Cost Allocation

<table>
<thead>
<tr>
<th>Region</th>
<th>Net Benefit of Entergy/Cleco Joining the SPP RTO, excluding Transmission Cost Allocation</th>
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<tr>
<td></td>
<td>In Millions of Nominal As-spent Dollars</td>
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<tr>
<td></td>
<td>Benefits are shown as positive figures, costs as negative figures, Inflation 2.5%</td>
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<td></td>
<td>Discount Rate 8.0%</td>
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</table>

1. ENERGENCY REGION IN SPP RTO
2. Trade Benefits
3. + Increase in Adjusted Prod Costs 183 192 201 210 193 176 157 161 166 171 1,055
5. + Subtotal Trade Benefits 157 165 173 182 185 147 127 131 125 139 691
6. Administrative Costs
7. + Avoided ICT Charges 20 21 22 23 24 25 26 27 27 28 136
8. + RTO Administrative Costs (46) (50) (50) (51) (51) (53) (53) (50) (50) (50) (200)
12. SubTotal 121 128 136 145 156 128 107 88 88 91 94 851
13. 14. CLECO REGION IN SPP RTO
15. Trade Benefits
17. + Lost T&D Trans Revenue 1 1 1 1 1 1 1 1 1 1 1 5
19. Administrative Costs
20. + RTO Administrative Charges (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (25)
21. + FERC Charges (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) (3)
22. + Internal Capital/Labor (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (3)
24. SubTotal (12) (14) (16) (18) (13) (7) (1) (6) 1 3 (54)
25. 26. IMPACT ON EXISTING SPP
27. Trade Benefits
28. + Increase in Adjusted Prod Costs 11 (1) (13) (26) (5) 17 41 43 46 49 69
30. + Subtotal Trade Benefits (2) (14) (27) (40) (30) 2 24 27 29 31 (17)
31. Administrative Costs
32. + RTO Administrative Charges 30 33 32 32 31 32 34 35 35 37 189
33. SubTotal 27 15 5 (5) (5) 11 34 58 62 65 68 171
34. 35. SPP-ENERGENCY-CLECO Net Benefits
36. Trade Benefits
37. + Increase in Adjusted Prod Costs 167 192 177 191 191 191 202 211 222 229 1,103
38. + Lost T&D Trans Revenue (39) (40) (41) (41) (43) (44) (45) (46) (47) (48) (246)
39. + Subtotal Trade Benefits 147 142 138 130 139 148 157 165 173 181 857
40. Administrative Costs
41. + Avoided ICT Charges 20 21 22 23 24 25 26 27 28 28 136
42. + RTO Administrative Charges (20) (21) (22) (23) (24) (25) (26) (27) (27) (27) (136)
46. Net Benefits 138 130 123 117 125 133 142 150 157 165 779
47. 48. Inflation Factor 1.077 1.104 1.131 1.160 1.189 1.218 1.249 1.280 1.312 1.345

Page 33
### A.2 Entergy/Cleco in the Midwest ISO

Table 30: Net Benefit to Entergy and Cleco Regions of Join MISO Case

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<th>Benefits are shown as positive figures, costs as negative figures</th>
<th>In Millions of Nominal As-spent Dollars</th>
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<th>Discount Rate</th>
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<td><strong>ENTERGY REGION IN MISO</strong></td>
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<td>Trade Benefits</td>
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<td>+ Decrease in Adjusted Prod Costs</td>
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<tr>
<td>+ Lost T&amp;D Trans Revenue</td>
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<td>= Subtotal Trade Benefits</td>
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<tr>
<td>Administrative Costs</td>
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<tr>
<td>+ Avoided ICT Charges</td>
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<tr>
<td>+ RTO Administrative Charges</td>
<td>(44)</td>
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<td>+ FERC Charges</td>
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<td>+ Internal Capital/Labor</td>
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<td>= Subtotal Admin/Capital</td>
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<td><strong>SubTotal</strong></td>
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<tr>
<td>+ Transmission Cost Allocation</td>
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<td>Net Benefits</td>
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</table>

| **CLECO REGION IN MISO**                                     |                                        |           |               |
| Trade Benefits                                               |                                        |           |               |
| + Decrease in Adjusted Prod Costs                            | (5)                                    |           |               |
| + Lost T&D Trans Revenue                                     | (2)                                    |           |               |
| = Subtotal Trade Benefits                                    | (7)                                    |           |               |
| Administrative Costs                                         |                                        |           |               |
| + RTO Administrative Charges                                 | (4)                                    |           |               |
| + FERC Charges                                               | (1)                                    |           |               |
| + Internal Capital/Labor                                     | (1)                                    |           |               |
| = Subtotal Admin/Capital                                     | (6)                                    |           |               |
| **SubTotal**                                                 | (12)                                   |           |               |
| + Transmission Cost Allocation                                | (0)                                    |           |               |
| Net Benefits                                                 | (12)                                   |           |               |

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### A.3 EAI in SPP RTO

#### Table 31: Net Benefit to Entergy-Cleco Regions of EAI Joins SPP Case

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<th>Benefits are shown as positive figures, costs as negative figures</th>
<th>In Millions of Nominal Annual Dollars (2011)</th>
<th>Discount Rates (8.0%)</th>
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A.4 EAI IN THE MIDWEST ISO

Table 32: Net Benefit to Entergy-Cleco Regions of EAI Joins MISO Case

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<th>In Millions of Nominal As-spent Dollars</th>
<th>Inflation Discount Rate 2.5%</th>
<th>8.0%</th>
<th>2010</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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APPENDIX B: TRADE BENEFITS IN GE MAPS CASES

B.1 ENTERGY/CLECO IN RTO CASES

Table 33: Trade Benefits In Entergy-Cleco Join RTO GE MAPS Cases

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<th>Entergy/Cleco Join RTO</th>
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<th>2016</th>
<th>2019</th>
<th>2022</th>
<th>Note</th>
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<td>Cie</td>
<td>Tot</td>
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<td>Join SPP; FERC CBA Base Scenario</td>
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<td>107</td>
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<td>1 Join SPP; &quot;Big&quot; Commitment Pool</td>
<td>(2) 145</td>
<td>(5) 137</td>
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<td>2 Join MISO; 1000 MW Combined PSH Method</td>
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<td>3 Join MISO; Interface Method</td>
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<td>111</td>
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</table>

A: September 30, 2010 FERC CBA Results

B: MISO included in the SPP/Entergy commitment pool in both the Status Quo Case and Join SPP Case, additional MISO demand and wind capacity in out years. 2019 and 2022 runs include new load flow for MISO transmission expansion

C: Same as B, except same load flow for 2019 and 2022 as original CBA

D: Removal of Ameren/AEG Entergy tie-line commitment and dispatch hurdles in Join MISO Case. MISO included in the SPP/Entergy commitment pool in both the Status Quo Case and Join MISO Case. Post processing adjustment to eliminate wheeling charges from up to 1000 MW of flow between Ameren and Entergy. Calculation of reduced MISO-Entergy-Cleco wheeling revenues and costs using historical data, and sharing of wheeling revenue with MISO in Join MISO Case. 2019 and 2022 runs include new load flow for MISO transmission expansion

D: Removal of Ameren/AEG Entergy tie-line commitment and dispatch hurdles in Join MISO Case. MISO included in the SPP/Entergy commitment pool in both the Status Quo Case and Join MISO Case. Removal of dispatch hurdles on interface comprised of selected lines between MISO and Entergy for net flow from MISO to Entergy. Calculation of reduced MISO-Entergy-Cleco wheeling revenues and costs using historical data, and sharing of wheeling revenue with MISO in Join MISO Case

E: Instead of 19.4 GW of wind, 10 GW of wind is in the current MISO footprint in 2022
B.2 EAI in RTO Cases

Table 34: Trade Benefits in EAI Joins RTO GE MAPS Cases

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<td>9 (17)</td>
<td>12 (1)</td>
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<td>7 (1)</td>
<td>1 (1)</td>
<td>2 (1)</td>
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* Preliminary
A: October 27, 2010 EAI Only CBA Results
B: Same as A, except same load factor for 2019 and 2020 as original CBA
C: Removal of Abnew/ACEI Energy-In-line commitment and dispatch hurdles in Join MISO Case
MISO Included in the SPP/ERC Energy commitment paid in both the EAI Standalone Case and Join MISO Case
C: Post-processing adjustment to eliminate wheeling charges from 1980 MW Sold between Abnew and Energy
Calculation of reduced MISO-ERC Energy wheeling revenues and costs using historical data, and sharing of wheeling revenue with MISO in Join MISO Case
2019 and 2022 rates include own load flow for MISO transmission expansion
D: Removal of Abnew/ACEI Energy In-line commitment and dispatch hurdles in Join MISO Case
MISO Included in the SPP/ERC Energy commitment paid in both the EAI Standalone Case and Join MISO Case
Removal of dispatch hurdles on interchange comprised of selected bars between MISO and EAI for each transmission MISO vs EAI
Calculation of reduced MISO-ERC wheeling revenues and costs using historical data, and sharing of wheeling revenue with MISO in Join MISO Case

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Join MISO CBA Addendum

March 10, 2011

Charles River Associates

APPENDIX C: FURTHER DETAIL 2019/2022 POWER FLOW

Table 35: 345 kV Lines Added in the 2019 and 2022 Power Flow Used in GE MAPS in this Join MISO CBA Addendum in comparison to prior CBAs

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<th>Area</th>
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<th>To</th>
<th>Line Voltage (kV, State)</th>
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<td>Ottumwa to Adair to Thomas Hill 345 kV</td>
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<td>Ottumwa</td>
<td>Thomas Hill</td>
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<td>Adair to Paimyr 345 kV</td>
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<td>West Adair</td>
<td>Paimyr Tap</td>
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<td>Big Stone to Brookings 345 kV</td>
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<td>Big Stone</td>
<td>Brookings</td>
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<td>Dubuque to Sping Green to Cardinal 345 kV, North</td>
<td>RGOS 4</td>
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<td>Spring Green</td>
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<td>Dubuque Co</td>
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<td>Webster</td>
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<td>Ipa to Meredosia 345 kV, Paimyr to Meredosia to</td>
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<tr>
<td>OTP, MOU</td>
<td>Big Stone to Elineisle 345 kV</td>
<td>MTEP 10  2220</td>
<td></td>
<td>Big Stone</td>
<td>Elineisle</td>
<td>1 345 ND/ND</td>
</tr>
<tr>
<td>American IL</td>
<td>Mt. Zion to Pana 345 kV</td>
<td>MTEP 10  2237</td>
<td></td>
<td>Mt. Zion</td>
<td>Pana</td>
<td>1 345 IL</td>
</tr>
<tr>
<td>American IL</td>
<td>Mt. Zion to Kansas 345 kV</td>
<td>MTEP 10  2238</td>
<td></td>
<td>Mt. Zion</td>
<td>Kansas</td>
<td>1 345 IL</td>
</tr>
<tr>
<td>American IL</td>
<td>Kansas to Sugar Creek 345 kV</td>
<td>MTEP 10  2240</td>
<td></td>
<td>Kansas</td>
<td>Sugar Creek</td>
<td>1 345 IL</td>
</tr>
<tr>
<td>ATE LLC</td>
<td>Radeka to Zon Energy Center 345 kV</td>
<td>MTEP 10  2844</td>
<td></td>
<td>Radeka</td>
<td>Zon Energy Center</td>
<td>1 345 WY/IL</td>
</tr>
<tr>
<td>American IL</td>
<td>MPG to Oak Grove 345 kV</td>
<td>MTEP 10  3022</td>
<td></td>
<td>MPG</td>
<td>Oak Grove</td>
<td>1 345 IL</td>
</tr>
<tr>
<td>MEC</td>
<td>New Sheldon throughway 345 kV Switching Station</td>
<td>MTEP 10  3205</td>
<td></td>
<td>Sheldon</td>
<td></td>
<td>1 345 IA</td>
</tr>
</tbody>
</table>
Summary of CBA Modeling Differences
SPP-Entergy CBA, SPP-EAI CBA and Join MISO CBA Addendum

The differences in modeling assumptions between the *SPP-Entergy CBA* and the *Join MISO CBA Addendum* are summarized in Table 4 of the Join MISO CBA Addendum (also shown below).

Table 4: Summary of Modeling Assumption Changes between the SPP-Entergy CBA and Join MISO CBA Addendum

<table>
<thead>
<tr>
<th></th>
<th>SPP-Entergy CBA</th>
<th>Join MISO CBA Addendum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPP Cases.</td>
<td></td>
</tr>
<tr>
<td>Commitment Pool</td>
<td>SPP/Entergy/Cleco region, with marginal losses in commitment step and</td>
<td>SPP/Entergy/Cleco/MISO region, with average losses in commitment step and marginal losses in dispatch step. $16/MWh commitment hurdle between SPP and MISO in all cases, and between Entergy/Cleco and MISO in Status Quo and Join SPP Cases.</td>
</tr>
<tr>
<td></td>
<td>dispatch step. Hold commitment optimization between MISO and Entergy/Cleco.</td>
<td></td>
</tr>
<tr>
<td>Midwest ISO Demand and New Wind Capacity</td>
<td>Frozen at 2013 levels</td>
<td>Increasing throughout study period. MISO wind capacity increases from 10 GW in 2013 to 19.4 GW in 2022.</td>
</tr>
<tr>
<td>Midwest ISO MVP</td>
<td>Not Included in GE MAPS runs</td>
<td>Included in 2019 and 2022 GE MAPS runs for all cases. MVP cost allocation to Entergy and Cleco assessed in Join MISO Case.</td>
</tr>
<tr>
<td>Transmission Expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Allocation</td>
<td>September 2010 estimate</td>
<td>February 2011 Estimate</td>
</tr>
</tbody>
</table>

Charles River Associates
The key differences between the modeling assumptions in the SPP-Entergy CBA issued in September 2010 and the SPP-EAI CBA issued in October 2010 are captured in Table 17 of the Join MISO CBA Addendum (also shown below).

Table 17: Summary of Modeling Differences between the SPP-Entergy CBA and SPP-EAI CBA

<table>
<thead>
<tr>
<th></th>
<th>SPP-Entergy CBA</th>
<th>SPP-EAI CBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regions Joining the SPP RTO</td>
<td>Entergy and Cleco</td>
<td>EAI</td>
</tr>
<tr>
<td>EAI and Rest of Entergy</td>
<td>Treated as one combined region</td>
<td>Treated as separate regions in Base Case; EAI joins SPP in Join SPP Case</td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment Seams Charges In</td>
<td>$10/MWh between SPP, Entergy and Cleco</td>
<td>$10/MWh between SPP, EAI, Rest of Entergy and Cleco</td>
</tr>
<tr>
<td>Base Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispatch Seams Charge In Base</td>
<td>Wheeling and trading friction charges between SPP, Entergy and Cleco.</td>
<td>Wheeling and trading friction charges between SPP, EAI, Rest of Entergy and Cleco, except the EAI and Rest of Entergy charge does not include a wheeling charge.</td>
</tr>
<tr>
<td>Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment Seams Charges In</td>
<td>$0/MWh between SPP, Entergy and Cleco</td>
<td>$0/MWh between SPP and EAI. $10/MWh between SPP/EAI, Rest of Entergy and Cleco.</td>
</tr>
<tr>
<td>Join SPP Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispatch Seams Charges In Join</td>
<td>No wheeling or trading friction charges between SPP, Entergy and Cleco.</td>
<td>No wheeling or trading friction charges between SPP and EAI. Wheeling and trading friction charges between SPP/EAI and Rest of Entergy and Cleco.</td>
</tr>
<tr>
<td>SPP Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entergy QF Treatment In Base</td>
<td>Non-firm resources</td>
<td>Non-firm resources</td>
</tr>
<tr>
<td>Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entergy QF Treatment In Join</td>
<td>Film resources</td>
<td>Film resources for IPPs in EAI region; non-firm resources for IPPs in Rest of Entergy region</td>
</tr>
<tr>
<td>SPP Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost Transmission Revenue from</td>
<td>Historical transmission data analysis for SPP-Entergy-Cleo transactions. Change in wheeling charges on GE MAPS physical flows for other neighboring regions</td>
<td>Change in wheeling charges on GE MAPS physical flows for all regions.</td>
</tr>
<tr>
<td>Joining SPP RTO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission Expansion Cost</td>
<td>Allocated to Entergy and Cleco</td>
<td>Allocated to EAI only</td>
</tr>
<tr>
<td>Allocation In Join SPP Case</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The modeling and assumption changes between the SPP-EAI CBA and the Join MISO CBA Addendum discussed above are summarized in Table 20 of the Join MISO CBA Addendum (also shown below):

Table 20: Summary of EAI Modeling Assumption Changes between the SPP-EAI CBA and the Join MISO CBA Addendum

<table>
<thead>
<tr>
<th>SPP-EAI CBA</th>
<th>Join MISO CBA Addendum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1000 MW Contract Path</strong></td>
<td>Hurdles between EAI-AECI and AECl-Ameren in Status Quo and Join SPP Cases.</td>
</tr>
<tr>
<td>Commitment Pool</td>
<td>Same for Status Quo and Join SPP Cases, Hurdles between EAI-AECI and AECl-Ameren removed in Join MISO Case.</td>
</tr>
<tr>
<td>SPP-Energy-Cleco region, with marginal losses in commitment step and dispatch step, no commitment optimization between MISO and SPP/Energy/Cleco.</td>
<td>SPP-Energy-Cleco-MISO region, with average losses in commitment step, and marginal losses in dispatch step. $10/MWh commitment hurdle between SPP/Rest of Entergy/Cleco and MISO in all cases, and between EAI and MISO in Status Quo and Join SPP Cases.</td>
</tr>
<tr>
<td>Midwest ISO Demand and New Wind Capacity</td>
<td>Frozen at 2013 levels</td>
</tr>
<tr>
<td>Increasing throughout study period. 10 GW of MISO wind capacity in 2013 increasing to 19.4GW in 2022</td>
<td></td>
</tr>
<tr>
<td>Midwest ISO MVP Transmission Expansion</td>
<td>Not included</td>
</tr>
<tr>
<td>Included in 2018 and 2022 GE MAPS runs. MVP cost allocated to EAI in EAI joins MISO Case</td>
<td></td>
</tr>
<tr>
<td>EAI Transmission Revenue and Cost Sharing in Standalone Case</td>
<td>EAI and Rest of Entergy wheeling revenues and wheeling costs shared on a load ratio basis. Wheeling costs kept by region that incurred them</td>
</tr>
<tr>
<td>EAI and Rest of Entergy wheeling revenues shared on a load ratio basis.</td>
<td>EAI and Rest of Entergy wheeling revenues shared on a load ratio basis. Wheeling costs kept by region that incurred them</td>
</tr>
<tr>
<td>EAI transmission revenues shared with RTO (keep 55% in SPP, keep 52% in MISO). Existing SPP (5.6%) and MISO (2.5%) wheel revenues shared with EAI</td>
<td></td>
</tr>
<tr>
<td>EAI Transmission Revenue and Cost Sharing in Join RTO Case</td>
<td>EAI wheeling costs and wheeling revenues not shared.</td>
</tr>
<tr>
<td>EAI wheeling costs and wheeling revenues not shared.</td>
<td>EAI wheeling costs not shared. EAI transmission revenues shared with RTO (keep 55% in SPP, keep 52% in MISO). Existing SPP (5.6%) and MISO (2.5%) wheel revenues shared with EAI</td>
</tr>
<tr>
<td>1000 MW Contract Path Transmission Costs</td>
<td>Wheeling costs included for EAI on EAI-AECI leg for EAI Standalone Case and Join SPP Case.</td>
</tr>
<tr>
<td>Wheeling costs included for EAI on both EAI-AECI and AECl-Ameren leg for EAI Standalone Case and Join SPP Case in post-processing of trade benefits.</td>
<td></td>
</tr>
<tr>
<td>Join SPP Transmission Expansion Cost Allocation</td>
<td>September 2010 estimate</td>
</tr>
<tr>
<td>February 2011 Estimate</td>
<td></td>
</tr>
</tbody>
</table>
EXHIBIT C
BEFORE THE
PUBLIC SERVICE COMMISSION OF ARKANSAS

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 SUCCESSOR
AGREEMENT THERETO, AND REGARDING
THE FUTURE OPERATION AND CONTROL
OF ITS TRANSMISSION ASSETS

______________________________
DIRECT TESTIMONY OF
RICHARD DOYING
VICE PRESIDENT OF OPERATIONS
MIDWEST ISO

ON BEHALF OF
MISO, INTERVENORS
March 18, 2011
DIRECT TESTIMONY
OF RICHARD DOYING

Q-1. PLEASE STATE YOUR NAME, CURRENT POSITION AND YOUR BUSINESS ADDRESS.

A-1. My name is Richard Doying. I am the Vice President of Operations for the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO" or "MISO"). My business address is 701 City Center Drive, Carmel, Indiana 46032.

Q-2. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A-2. I received my Bachelor of Arts in Geography from the University of California, Los Angeles in 1991 and my Masters of Arts of Public Affairs in Policy Analysis, Energy and Environmental Policy from the University of Minnesota in 1993. Starting in 1993, I was an Associate with ICF Resources Incorporated, becoming a Senior Associate in 1995. In 1997, I was made a Project Manager for ICF Resources Incorporated. In 1997, I became a manager in the Market Assessment division of PG&E National Energy Group, where I was made Director of the same division in 1999. In 2001, I was named the Director of the Strategy and New Initiatives division of PG&E National Energy Group. In December 2003, I became Director of the Market Analysis and Development department of the MISO. In October 2005, I was made Director of the Forward Markets department of the MISO and I was
promoted to Executive Director Forward Markets in 2006. In September 2006 I was promoted to Vice President of Market Operations and have occupied my current position as Vice President of Operations since May 2010.

Q-3. PLEASE DESCRIBE YOUR JOB RESPONSIBILITIES WITH THE MISO AS THEY RELATE TO THIS PROCEEDING.

A-3. My primary responsibility at the MISO is oversight of operations of the reliability, market and associated supporting functions. Those functions include the Real Time Market, Day Ahead Market, Reliability Assessment Commitment, Financial Transmission Rights ("FTR") Market, Resource Adequacy, Outage Coordination, Tariff and Scheduling, Market and Tariff Settlements, and Application Information Services. I am also responsible for the MISO's market analysis and development functions. I have actively participated in the development of all the MISO markets, from the conceptual design through delivery of market systems for implementation. I am also responsible for oversight of the MISO stakeholder process as it relates to reliability and market issues. I also participated in the development of the MISO's Open Access Transmission, and Operating Reserves Market Tariff ("Tariff").

Q-4. HAVE YOU SPONSORED ANY OTHER TESTIMONY BEFORE REGULATORY COMMISSIONS?

A-4. I have submitted prepared testimony before the Federal Energy Regulatory Commission ("FERC") involving matters specific to the MISO as well as
testimony before the Missouri Public Service Commission and recently before the Kentucky Public Service Commission.

Q-5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A-5. I will respond to the Charles River Associates ("CRA") "Cost-Benefit Analysis of Entergy/Cleco Power or Entergy Arkansas Joining the MISO Addendum Study" ("Addendum Study"), filed with the Arkansas Public Service Commission ("AR PSC" or "Commission"), on March 11, 2011. I will review the following four specific areas discussed and raised in the CRA Addendum Study: (1) Addendum Study's presumptions regarding energy markets; (2), the Addendum Study's flawed assumption that a cost/benefit analysis is limited to only production costs and trade benefits; (3) the illusory concerns surrounding the Joint Operating Agreement and Interconnectivity; and (4) the confusing comparison of and handling of certain transmission expansion costs allocations.

Q-6. ARE YOU AWARE OF THE COMMISSION'S MARCH 11, 2011 ORDER NO. 31 AND THE DIRECTIVES TO LIMIT THE SCOPE OF YOUR REVIEW?

A-6. Yes, I am generally familiar with that Order and appreciate the Commission granting our request to participate and allowing us the limited opportunity to critique the fine efforts of CRA on these very complicated matters.

Q-7. HAVE YOU HAD AN OPPORTUNITY TO REVIEW CHARLES RIVER ASSOCIATES STUDY FILED IN THIS DOCKET?
A-7. Yes. I have reviewed the Addendum Study that was filed March 11, 2011, but due to time limitations I have not reviewed any of the prior CRA analyses in this docket.

Q-8. WHAT ARE YOUR OVERALL IMPRESSIONS OF THE ADDENDUM STUDY, GIVEN YOUR EXTENSIVE EXPERIENCE IN THIS AREA?

A-8. My initial impression is that CRA did an admirable job analyzing trade benefit impacts which show that there are significant benefits in joining an RTO. They did recognize certain limitations both in time and GE MAPS modeling constraints that I will discuss further below. However, there is one fundamental assumption that drives the entire CRA analysis that bears highlighting.

Q-9. PLEASE EXPLAIN.

A-9. The stated directives for CRA in this Addendum Study was to pursue and present a cost/benefit study focused on Entergy Arkansas, Inc. ("EAI") as a standalone member of MISO and a cost/benefit study of all of the Entergy Op Cos as members of MISO. CRA was further directed to file a "...document providing the differences in modeling and assumptions between the cost/benefit studies of EAI as a stand-alone member of MISO versus all Entergy Op Cos as members of MISO; the differences in modeling assumptions between the cost/benefit studies of EAI as a stand-alone member of SPP RTO vs. all Entergy Op Cos as members of the SPP RTO, and; the differences in modeling and assumptions between the MISO vs. SPP RTO
cost/benefit studies. (Order No. 30, at 2).” Although the filing of the
Addendum Study did indeed review and address the various scenarios
described above, there are certain study assumptions and details that require
further discussion and that must be pointed out for the Commission’s
consideration. The topic and examination of costs and benefits are central to
the directives to CRA in this portion of the docket. Discussion and
consideration of the cost/benefit assumptions and factors raised and touched
upon by CRA in its analysis of necessity require a discussion and
consideration to allow the Commission a more complete view of the customer
benefits that are undeniably available.

Q-10. WHAT IS THIS FUNDAMENTAL ISSUE YOU BELIEVE NEEDS TO
BE BROUGHT TO THE COMMISSION’S ATTENTION?

A-10. CRA recognizes that the MISO has a fully functioning Day 2 energy market
that has been operational since 2005, which is often referred to as a “Day 2”
energy market\(^1\). The MISO and its membership developed and implemented
additional enhancements to that energy market to also include ancillary
services. The new “Day 2+” market began in January 2009. CRA assumes,
for comparison, that SPP has a similar fully functioning energy market in all
years of the ten-year study period. However, SPP does not yet have a fully
functioning Day 2+ energy market, nor does it plan to have until late 2014.
MISO is in full support of SPP’s efforts to develop and implement a full Day
2+ market, but the fact remains that SPP does not yet have that market.

\(^1\) See CRA Addendum Study, Section 2.1 Study Methodology, at 3.

Absent a fully functioning Day 2+ energy market, the trade benefits identified for the SPP option in the Addendum Study cannot be realized. Further, the Addendum Study does not consider potential cost overruns or market implementation delays. As such, the study's findings of net present value benefit of Entergy's participation in the SPP RTO are overstated.

The MISO Day 2+ energy market is, in fact, up and running today and the benefits are flowing to MISO customers day in and day out. As the Addendum Study reveals, these customer benefits alone translate into hundreds of millions of dollars available to EAI/Entergy and its customers right now and are not hypothetical in the case of MISO. Assuming instead, SPP's currently announced market start date would largely eliminate any financial advantage estimated in Entergy as member of SPP scenario.

Q-11. PLEASE DESCRIBE YOUR ADDITIONAL IMPRESSIONS OF THE ADDENDUM STUDY MODEL ASSUMPTIONS.

A-11. The Addendum Study is necessarily based on forecast assumptions and production cost simulations. Production cost models are designed to simulate the commitment and dispatch of generating units. They have inherent limitations due to the very nature of how the simulation is performed internal to the model. Given the sheer amount of data to be analyzed by the model of the various generation and transmission assets, trade-offs must be made in order for the model's optimization algorithm to solve within a reasonable period of time. As one example, CRA noted that it was unable to
get the model to solve for the scenario where Entergy joins the MISO without combining the MISO, SPP and Entergy generation and transmission into a single commitment pool. This, of course, is not how the actual unit commitment and dispatch would work in the real world. In the real world, generating units in the SPP region would not be committed to meet load in the MISO region or vice versa.

CRA was also unable to get the model to solve for the scenario where Entergy joins the MISO using marginal losses for the commitment process and was forced to use average losses for the commitment process instead. Again, this is not how the actual commitment process would or should work in the real world. Further, the results of any production cost modeling can be very sensitive to the assumptions regarding commitment hurdle rates and dispatch hurdle rates. The Addendum Study assumed a higher dispatch hurdle rate for Entergy joining the MISO than for Entergy joining SPP. This assumption difference has no apparent justification but does act to limit the exchange of power produced by Entergy generation with systems outside the MISO to a greater degree than it does in the scenario where Entergy joins SPP, thereby building in a modeling bias that will overstate benefits in the Entergy joining SPP scenario.

In addition, all production cost simulations suffer from the ailment of assumed perfect information. The data used to make decisions on unit commitment and dispatch in the modeling context is perfect, meaning the
forecast of tomorrow's load and the availability of transmission and
generation is always equal to the actual load and availability of transmission
and generation in the simulation. In the real world operational decisions on
unit commitment and dispatch are based on day-ahead forecasts which rarely
match the actual load and availability in real time. The effect of this is that
the model tends to understate the benefits to be obtained from pooling of
generation in the real world because the modeling “pooling scenario” is over
optimized relative to what actually happens.

Notwithstanding the foregoing modeling limitations, the Addendum
Study still identifies the Entergy Region benefits ranging from a low of $139
million in 2019 to a high of $163 million in 2016 in of benefits by joining
MISO. For comparison, MISO’s own PROMOD production cost simulations²
for a single year show similar benefits on the order of $134 million per year.

Q-12 DO YOU HAVE ADDITIONAL CONCERNS WITH THE ADDENDUM
STUDY ASSUMPTIONS?

A-12. Yes. Transmission service revenue has not been included in the MISO
analysis, nor has the additional value available under the MISO-SPP Joint
Operating Agreement been fully analyzed and captured. I will address each
of these in turn, below.

Q-13. PLEASE REVIEW YOUR OBSERVATION REGARDING MISO
TRANSMISSION SERVICE REVENUE.

² See Footnote 3, above.
A-13. The Addendum Study attempts to quantify the magnitude of transmission wheeling revenue lost by Entergy when it joins either MISO or SPP. The potential loss of transmission wheeling revenue is due to the elimination of pancaked transmission charges under an RTO tariff such as the MISO's. However, Entergy would be allocated a share of transmission revenue from all out and through transactions under the MISO tariff. No forecast of this additional source of revenue has been included in the Addendum Study.

Joint Operating Agreement

Q-14. PLEASE DISCUSS YOUR CONCERNS REGARDING THE MISO-SPP JOINT OPERATING AGREEMENT ("JOA").

A-14. CRA recognizes in Section 2.1.1 that there is a contract path interconnection between MISO and Entergy. However, the production cost modeling work performed by CRA limits the flow of economic energy between MISO and Entergy through the use of a dispatch hurdle rate applicable to the transmission lines connecting Ameren to AECI and AECI to Entergy. The model used by CRA is not incapable of modeling a dispatch hurdle rate on transactions between commercial entities such as MISO and Entergy. While much work has been done in the post-processing to attempt to correct for or remove wheeling charges on flows across these lines, the effect is that the unit commitment and dispatch is distorted by the artificial presence of the dispatch hurdle rate on the lines themselves as opposed to on transactions

that might flow across the lines. This is another example of a modeling bias
that will tend to overstate benefits in Entergy joining SPP scenario.

We commend CRA for acknowledging this concern on page 10 of the
Addendum Study, where it noted that it was not feasible to complete certain
production cost simulations within the time available. These production cost
simulations attempted to represent the flow of energy under the JOA. CRA
did, however, provide summaries of notably positive information in Appendix
B of the Addendum Study. Although we know and appreciate all too well the
time constraints CRA was working under, we also believe the Commission
should be made aware that a full and accurate review of the JOA would yield
significant additional benefits, as the summary results in Appendix B
suggest. Regardless, an important point to note is that even under the more
restricted view of how much transfer capability is available: the Addendum
Study still shows a significant decrease in production costs for the Entergy
region ranging from a low of $139 million in 2019 to a high of $163 million in
2016. The annual average across the entire ten year period 2013 to 2022 is
$150.7 million[1].

Q-15. DO YOU HAVE AN OPINION REGARDING CRA'S PRESENTATION
OF THE JOA INTERPRETATION IN THE ADDENDUM STUDY?

A-15. Yes. While CRA recognizes that there is a legitimate dispute over the effect
and operation under the JOA, the analysis does not carry this through the
analysis for consideration. The Addendum Study does note in Section 2.1.4,


page 10, that it started to pursue the “interface” methodology (discussed
further below in Q&A 18), but then indicated it ran out of time to complete
the modeling work. Therefore, the Addendum Study does not appropriately
capture all of the benefits of MISO membership in the figures presented. The
figures in Appendix B were premised on a simulation that attempts to use
the correct assumption that the MISO and SPP would fully utilize the
transmission facilities on the interconnections, as well as the exiting
1000MW contract path, to enable transactions between Entergy and the rest
of the MISO footprint. As noted above, the CRA summary figures found in
their Appendix B suggest that there are significant additional, available
customer benefits that the Commission should consider.

Q-16. DOES THE MISO TRANSMISSION OWNERS AGREEMENT IMPOSE
ANY CONDITIONS ON THE PHYSICAL LOCATION OF ITS MEMBER
SYSTEMS?

A-16. The MISO Transmission Owners Agreement (“TOA”) requires that an
applicant desiring to integrate its facilities with the MISO must be physically
connected with the MISO Transmission System. However, the TOA allows
the Board of Directors to approve a non-contiguous system as a member in
limited circumstances. Although we currently have no such arrangements, it
is physically possible to provide RTO services, including security constrained
economic dispatch, to a non-contiguous member. We believe, however, that a
physical interconnection of the systems is preferable as it ensures the full

realization of benefits available due the larger scale of the combined MISO
and Entergy region.

Q-17. HOW MUCH TRANSFER CAPABILITY IN A TRANSMISSION
INTERCONNECTION IS REQUIRED TO DEEM A SYSTEM
"CONTIGUOUS" WITH THE MISO?

A-17. There is no fixed number or bright line test. Each situation must be analyzed
to determine whether, under all the facts and circumstances, the MISO is
able to perform its RTO functions for the new member in a safe, reliable, and
efficient manner.

Q-18. IN YOUR OPINION, IS THE EXISTING 1,000 MVA TRANSMISSION
INTERCONNECTION FROM ENTERGY TO AMEREN SUFFICIENT
TO MEET THE CONTIGUITY REQUIREMENT?

A-18. Yes, it is. Even aside from the SPP transmission capacity available under
the Joint Operating Agreement, the single direct interconnection with
Ameren, an existing MISO transmission owner, is sufficient to reliably and
efficiently balance Entergy resources and loads in the MISO markets, and to
transfer energy for both emergency and economic reasons throughout the
combined transmission systems.

Q-19. PLEASE EXPLAIN YOUR REFERENCE TO THE SPP
TRANSMISSION CAPACITY AND THE JOINT OPERATING
AGREEMENT.
A-19. The MISO and SPP are parties to a Joint Operating Agreement. This agreement is patterned on the earlier Joint Operating Agreement between the MISO and PJM. These agreements by and among the RTOs are a requirement imposed by orders of the Federal Energy Regulatory Commission. Among other things, they require close cooperation and the sharing of operating data to improve regional reliability. They also establish a very detailed mechanism to identify and manage congestion on the interconnected networks of each RTO and its neighbors.

One of the elements present in both the 2003 PJM agreement and the 2004 SPP agreement is a commitment to “share” physical paths between the RTOs to a common operating entity. This provision has been the subject of much discussion lately, not all of it well understood. The purpose of this element of the agreements is threefold: to ensure that the contiguity requirement I discussed earlier is maintained in the event of a transmission outage, whether due to planned maintenance or natural disasters, to internalize regional loop flows between the RTOs, and to maximize market efficiency by ensuring maximum utilization of the actual physical capabilities of the transmission system. It was inserted as part of the PJM agreement because FERC was concerned that our Michigan utilities could become “islanded” from the rest of the MISO footprint if the limited Michigan-Indiana transmission interconnections were out of service, and because the limited interconnections could result in reduced benefits for the Michigan and

Wisconsin companies if transmission usage was restricted to contract path limits rather than physical transmission operating limits after Commonwealth Edison joined PJM. The solution was the capacity "sharing" concept that allows each RTO to backstop the other during outage situations and to maximize the efficient use of the transmission system. The current agreement between SPP and the MISO reads as follows:

Section 5.2 Sharing Contract Path Capacity. If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically or contractually interconnect and the MISO will not be able to deal directly with companies with which it does not physically or contractually interconnect.

In a slide presentation to the ERSC dated October 27, 2010, SPP acknowledged that this sharing provision is available to Entergy today but claimed it will not be available if Entergy joins the Midwest ISO, because Entergy will no longer be a "third party". We respectfully disagree and would note that nowhere does the language refer to "third party," which is in fact a defined term under the JOA. Such a limited interpretation would have prevented capacity sharing in the Michigan situation, discussed above, even

though it was put into the JOAs precisely for the purpose of maintaining
intra-RTO connectivity. Obviously, the actual Michigan operating situation
illustrates the appropriate interpretation of the language. The necessity of
such a provision stems from FERC's policy that RTO membership is
voluntary, and the preferences of transmission owners to join a particular
RTO should be accommodated to the extent possible. The FERC's policy is to
eliminate barriers to transfers across RTO seams as much as possible, and
sharing unused transmission capacity permits far more efficient use of
transmission at a lower cost, reducing ultimate energy costs to consumers.
The MISO and SPP JOA embraces this policy – especially as it relates to
reducing cost, thereby enhancing the customer benefits.

Transmission Expansion Cost Allocation

Q-20. DO YOU HAVE ADDITIONAL CONCERNS WITH THE CRA

ADDENDUM STUDY?

A-20. I do. The Addendum Study results are not presented in a directly
comparable manner regarding the issue of transmission expansion cost
allocation. The Addendum Study shows a range of potential cost allocations
for new transmission under the Join SPP RTO scenarios. The range in Table
5 for Entergy Join SPP RTO is between a cost of $937 million and a benefit of
$23 million depending on the assumptions used for transmission cost
allocation. However, in Table 6 for Entergy Join MISO, a single cost of $782
million is shown. This representation could leave the reader with the view

that this cost is a known and certain number. To the contrary, it certainly is not. An equally, and more correct representation, would be a $0 cost for two basic reasons. First, with the exception of what has been termed the "Michigan Thumb" project, none of the transmission projects presented in the Addendum Study have been reviewed or approved by the MISO Board. Secondly and more importantly, the threshold criterion for such possible MISO Board approval and any basis for Addendum Study inclusion, is that the expected benefits for the combined current and future set of Candidate Multi Value Projects must justify their costs and be widely distributed across the zones of those who pay the cost. Accordingly, CRA presents a hypothetical scenario that is a worst case scenario and completely fails to recognize that the projects will never be approved, much less allocated to Entergy unless the MISO Board is convinced that there are broad benefits to justify the costs.

Q-21. YOU HAVE NOTED A NUMBER OF AREAS OF CONCERN WITH THE ADDENDUM STUDY. ARE THESE CONCERNS OF SUCH A MAGNITUDE TO SUGGEST THAT THE ADDENDUM STUDY ITSELF CANNOT BE RELIED UPON?

A-21. No, not at all. When considered in the appropriate context, the Addendum Study provides the Commission useful and valuable guidance. We compliment CRA on a commendable job with this very complex production costs and trade benefits assessment under short time constraints. The

Addendum Study certainly does provide insight and directional guidance revealing strong positive customer benefits are accessible and available from both EAI's participation in MISO as well as Entergy as a whole participating in MISO. CRA notes that RTOs do provide significant benefits in the Addendum Study³. However, the production cost modeling alone cannot be and should not be relied upon as definitive on the issue and extent of available customer costs/benefits. As CRA implicitly acknowledges, there are other factors which come into play and should be considered. One factor that CRA chose to look at is transmission expansion costs. CRA openly acknowledges that it did not attempt to assess the benefits that come from such expansions⁴. As discussed above, those transmission expansion benefits are the starting place for any of the projected projects' approval – at least in the case of MISO. Much like the case of missing benefits for future transmission expansions, there are other missing benefits that must be taken into account.

The Addendum Study focused on and quantified only one of the many customer benefits that are available immediately to EAI/Entergy by joining MISO. The lone benefit looked at by CRA is what corresponds to the bar in Figure 1 below labeled "Dispatch of Energy". As can be seen, this lone category is within the broader category that contains three (3) discrete components that make up Market – Commitment and Dispatch. The

³ See CRA Addendum Study, Section 1, at 3; Section 2.2.1, at 11.
⁴ See CRA Addendum Study, Section 2.2.4, at 18.
Addendum Study also did not analyze and attempt to capture the benefits obtainable due to a market for ancillary services. As such, the Addendum Study conservatively presents ~ 40% of the benefits associated within the broader benefits category: Market - Commitment and Dispatch. Further, the Addendum Study, being a production cost based model, failed to assess the benefits to be obtained by Entergy and its customers under the categories of Improved Reliability, Footprint Diversity, and Generation Availability Improvement. For the current MISO footprint energy production cost savings only account for about 16% of the total quantified benefits delivered by MISO.

The MISO has estimated the additional value to be created if Entergy were to join the MISO to be on the order of $524 million per year as shown in Figure 1 below. Of this annual amount, about $420 million would flow to the Entergy region.
Figure 1 – Additional Value Due To Entergy Joining MISO

Annual benefits from addition of Entergy Corp to MISO
Preliminary ($ millions)

Of this $524 million shown above, only the value for the dispatch of energy (bar #2) is evaluated in the Addendum Study. As shown, the MISO’s corresponding estimate for the savings due to a better dispatch of energy is $134 million\(^6\), which is comparable to the results in the Addendum Study. Both sets of results are within the realm of reasonableness for production cost modeling simulation analysis.

Q-22. ON PAGE 17 OF THE ADDENDUM STUDY, CRA NOTES THAT THE ADMINISTRATIVE COSTS MAY BE IMPACTED BY MEMBERS

\(^6\) Based on a PROMOD simulation of a single year.

LEAVING OR ENTERING THE MISO'S FOOTPRINT. DO YOU HAVE ANY RESPONSE TO THAT OBSERVATION?

A-22. I agree with CRA regarding its point relative to administrative charges. This is truly a case where size does indeed matter. The MISO membership has seen many changes since the Day 2 market started in 2005. Those changes are summarized on the attached Exhibit RD-1.

Q-23. IS THERE ANYTHING ELSE YOU BELIEVE THE COMMISSION SHOULD BE AWARE OF AS IT MAKES THIS VERY IMPORTANT DECISION?

A-23. Yes. What I believe is most relevant for the Commission to consider is the ability that the MISO offers today, namely a fully operational energy market that can and does provide known and certain immediate benefits to its customers. The MISO has been operating a Day 2 energy market since April 2005.

The participating members of MISO invested over $250 million to develop the energy market operations that were placed into service in 2005. There was an additional $80 million invested to add the capability to co-optimize the procurement of energy and ancillary services beginning in 2009. The initial market start-up costs will be fully depreciated by March 2012 and the cost to implement the market for ancillary services will be fully depreciated by January 2016. By joining the MISO, Entergy can immediately begin to derive value from the MISO's proven, mature market
operations for a fraction of the cost it could incur given the cost, time and
complexity of developing and implementing a full suite of energy and
ancillary service markets. The MISO option provides certainty of cost and
certainty of performance benefits now without the risk of potential
development cost overruns or start day delays.

Cost overruns of hundreds of millions of dollars and schedule delays
measuring in years have been the experience for other recent market start-
ups such as the ERCOT Nodal Market and the California ISO market. The
customer benefits of a proven, mature energy market are available now
versus a potential lost opportunity that could amount to hundreds of millions
of dollars per year.

Even if one believed that Entergy’s participation in SPP could yield
somewhat larger dispatch of energy benefits, every year that goes by without
Entergy participating in a fully functioning Day 2 market results in the loss
of hundreds of millions of dollars in benefits to Entergy and its customers.
This lost opportunity cost\(^6\) can never be recovered.

Q-24. HOW CAN THIS COMMISSION BE ASSURED THAT THE MISO
MARKETS ARE AND WILL REMAIN COMPETITIVE?

A-24. The MISO energy markets include safeguards to ensure they remain
competitive under all conditions. The MISO has an independent Market

\(^6\) In March 2007, CRA performed a similar analysis of the relative costs/benefits of the former Aquila operating
companies (St. Joseph Power & Light, now part of Great Plains Energy) joining either the MISO or SPP in a
docket before the Missouri Public Service Commission. That study assumed that SPP would have market
capabilities similar to those already in operation in the MISO over the study period (2008-2017). That
assumption has proven to be false and anticipated SPP market benefits are not yet available to those
customers. As a result, tens of millions of dollars of savings have been foregone.

Monitor ("IMM"), that monitors, reports and mitigates potential or actual attempts to exercise market power, or any inappropriate manipulation, gaming or abuse of the energy markets. The IMM has the authority to limit maximum allowable offers and therefore limit the maximum price in such local constraint areas. The market monitoring and mitigation measures in the MISO energy market include constant monitoring and immediate mitigation when warranted, thereby removing the ability to exercise market power and assuring that the market remains competitive. Further, the MISO's tariff requires the IMM to not only monitor and mitigate, but also to report instances of potential market power abuse to the FERC, which may refer, either based on the IMM's reports or upon complaint by other market participants, this conduct to the FERC's enforcement staff for further investigation and punitive action.

In addition, the IMM and the MISO analysts, in concert with stakeholder efforts, continually analyze the various markets in ongoing support of competitive markets. The MISO makes FERC filings to increase market efficiency when enhancement opportunities are identified during those multiple, ongoing evaluations.

Q-25. WILL THE MISO MARKET BENEFIT ENTERGY'S MEMBERS AND CUSTOMERS?

A-25. The broader regional scope of MISO's transmission system and energy market operations provides market participants with a wider range of

options for buying or selling power than previously existed. The MISO continually seeks to enhance its market services and the value those services bring to the region. The MISO's market participants include traditional integrated utilities, municipalities, cooperatives and other public entities, alternative retail suppliers, independent power producers, energy marketers and others. The competitive energy markets operated by the MISO ensure that those serving load can cost-effectively procure wholesale power and pass on resulting savings to their customers. Accordingly, the MISO energy markets will help enhance the value of Arkansas's retail electric energy service.

Q-26. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A-26. Yes, it does.
Attachment RD-1

MISO membership has expanded significantly since 2005 Market Start. However, a small number of members have voluntarily exited.

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<thead>
<tr>
<th>Member Additions</th>
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<th>Member Departures</th>
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<td>Great River Energy</td>
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CERTIFICATE OF SERVICE

I hereby certify that on March 18, 2011 I electronically filed the foregoing with the Commission using the EFT system and I will provide a copy of the filing to the following at the indicated email address.

Valerie Boyce - valerie_boyce@psc.state.ar.us
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/s/ Nate Coulter
UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Midwest Independent Transmission System Operator, Inc. Docket No. EL11-____-000

AFFIDAVIT OF THOMAS J. MALLINGER
ON BEHALF OF THE MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, INC.

I. QUALIFICATIONS AND PURPOSE

1. My name is Thomas J. Mallinger. I am a Consulting Advisor, Real-Time Operations for the Midwest Independent Transmission System Operator, Inc. ("MISO"). My business address is 701 City Center Drive, Carmel, Indiana 46032.

2. My duties include responsibility for the coordination of "seams" agreements between MISO and other parties, including the Joint Operating Agreement between MISO and Southwest Power Pool, Inc. ("SPP") and the Joint Operating Agreement between MISO and PJM Interconnection, L.L.C. ("PJM"),\(^1\) providing oversight on the implementation and monitoring of various aspects of seams agreements, and addressing real-time issues associated with the market-to-market process between MISO and PJM.

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\(^1\) The MISO-SPP Joint Operating Agreement ("SPP JOA") is designated as "Midwest ISO Second Revised Rate Schedule FERC No. 6" and "Southwest Power Pool, Inc. Second Revised Rate Schedule FERC No. 9." The MISO-PJM Joint Operating Agreement ("PJM JOA") is designated as "Midwest ISO Second Revised Rate Schedule FERC No. 5" and "PJM Interconnection, L.L.C. Second Revised Rate Schedule FERC No. 38."
3. I hold B.S. and M.S. degrees in electrical engineering from Iowa State University (1975) and University of Missouri-Columbia (1980), respectively. I have an M.B.A. from the University of Missouri-Kansas City (1983). I am a registered professional engineer in Missouri. I have held positions in various capacities involving the engineering, planning and operation of transmission systems during the past thirty-five (35) years. Prior to joining MISO in March 2000, I was Manager of Coordinated Operations for SPP. I was responsible for implementation of the SPP Security Center and responsible for implementation details of the SPP regional tariff. Prior to joining SPP in March 1997, I worked at Kansas City Power & Light ("KCP&L") in various capacities associated with transmission and generation planning. When I left KCP&L to join SPP, my title was Supervisor of Transmission Planning, and I was responsible for transmission planning, operations planning, fuel budgets, ATC calculation and OASIS oversight at KCP&L.

4. I am the MISO representative on the Congestion Management Process Working Group, which is a technical group composed of seams agreement participants to review implementation issues and proposed changes for the reciprocal seams operating agreements. I led a NERC task force assigned to develop a market flow threshold for use during transmission loading relief ("TLR") curtailments ("Market Flow Threshold Task Force"). I am a member of the NERC TLR Standards Drafting Team and a member of the NAESB Business Practices Subcommittee. I have previously chaired the MISO Reliability Subcommittee, the SPP Engineering Subcommittee and the SPP Transmission Assessment Working Group. I previously testified before the Kansas Corporation Commission on a 345 kV line
associated with the Wolf Creek nuclear station and submitted affidavits and testimony in proceedings relating to various MISO matters at the Federal Energy Regulatory Commission ("FERC" or "Commission").

5. The purpose of my Affidavit is to support the Petition for Declaratory Order filed by MISO in this proceeding to clarify the meaning of Section 5.2 of the SPP JOA.

II. BACKGROUND OF THE PJM JOA AND THE SPP JOA

6. The PJM JOA was the first seams agreement between MISO and PJM accepted by the Commission in March 2004.\(^2\) It was created in response to the Commission’s express directive to address the “seam” between MISO and PJM that arose as the result of the election to join PJM by certain transmission-owning companies that previously had comprised the proposed Alliance Regional Transmission Organization.\(^3\) The PJM JOA consists of the agreement itself and two key attachments: the Congestion Management Process ("CMP") and the Interregional Coordination Process ("ICP"). The PJM JOA also contains definitions of technical terms, and certain obligations with regard to the exchange of critical data and coordination of operations under normal and emergency conditions.

7. Section 6.5 of the PJM JOA contains a provision allowing either RTO to share the transmission capacity of the other, so long as an entity requiring the use of that capacity has a physical path to both MISO and PJM. This provision was inserted in the PJM JOA in response to a Commission order directing the RTOs to develop a solution to prevent the islanding of Michigan and Wisconsin loads with limited

\(^3\) See Alliance Cos., 100 FERC ¶ 61,137 (2002). The Alliance proposal was rejected by the Commission, with the Alliance members directed to elect between MISO and PJM.
interconnections to the rest of MISO. Although the precise text of this provision has changed somewhat to reflect the passing of the Joint and Common Market concept, the substantive meaning of the capacity sharing language has remained unchanged.

8. The SPP JOA was intended to follow in the footsteps of the PJM JOA. In a series of orders, the Commission eventually compelled SPP to file an agreement with MISO that was substantively similar to the PJM JOA.\(^4\) The Commission emphasized that “the substantive components of the PJM JOA . . . are appropriate for use in the market-to-non-market circumstances under which SPP and [MISO] will operate” and rejected SPP’s arguments to the contrary.\(^5\)

9. Accordingly, the SPP JOA also contains a transmission capacity sharing provision, found in Section 5.2 of that JOA, which states as follows:

**Section 5.2 Sharing Contract Path Capacity.** If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically or contractually interconnect and [MISO] will not be able to deal directly with companies with which it does not physically or contractually interconnect.

This language is nearly identical to that found in Section 6.5 of the PJM JOA in the words used to describe the sharing obligation.

10. The CMP is contained in Attachment 2 to both the PJM and SPP JOA. The CMP produces modeling results used to determine how much transmission can be sold, to determine the curtailment priority of generation-to-load impacts, and to populate

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the data base of the NERC Interchange Distribution Calculator ("IDC") with those curtailment priorities. The IDC is used to allocate TLR curtailments or other responses necessary to reduce congestion in real time. The CMP does this by using a detailed methodology to calculate firm entitlements or rights on flowgates for market and non-market operating entities as well as generation-to-load impacts for market operating entities only. For operating entities that administer energy markets, these generation-to-load impacts are called "Market Flows."

III. PAST PRACTICE OF CAPACITY SHARING WITH PJM

11. MISO is aware of three situations where PJM JOA Section 6.5, Sharing Contract Path Capacity, has been used to address limited contract path capacity. First, prior to the addition of the Arrowhead-Stone Lake-Gardner Park 345 kV line in January 2008 between Minnesota and Wisconsin, MISO had a situation where a maintenance outage of the Eau Claire-Arpin 345 kV line required opening all under-voltage transmission lines on the Minnesota-Wisconsin border to prevent cascading outages. With these lines open, the remaining transmission paths into Wisconsin were via transmission lines to the south that connected Wisconsin to ComEd in Illinois. American Transmission Company is the MISO Transmission Owner in Wisconsin that serves Wisconsin load with a peak in excess of 12,000 MW. By having the ability to share contract path capacity between MISO and PJM, a maintenance outage on the Eau Claire-Arpin 345 kV line did not isolate Wisconsin load from the remainder of the MISO. Second, MISO’s ability to serve its load in Michigan is dependent on the contract path sharing provisions in PJM JOA Section 6.5. MISO has limited transmission capacity between Indiana and
Michigan. The MISO Transmission Owners serving load within Michigan are International Transmission Company, Michigan Electric Transmission Company, Wolverine Power Supply Cooperative and Central Michigan Municipal Power Agency with a peak load over 20,000 MW. This situation differs from the first in that it exists all the time and is not dependent on a prior transmission line outage. This is not a reliability issue in that there are an adequate number of transmission lines connecting Michigan to the rest of the Eastern Interconnection to maintain reliability. By having access to PJM JOA Section 6.5, MISO is able to meet its contract path obligations to continuously serve Michigan load. Third, MISO is aware that when PJM is making large exports from ComEd simultaneous with the Wilton Center-Dumont 765 kV line being out of service, PJM is relying on PJM JOA Section 6.5 to meet its contract path obligations for exports out of the ComEd system to other importing PJM Transmission Owner systems.

12. SPP has stated that SPP JOA Section 5.2 is applicable as long as the "entity" is a "third-party," i.e., not a transmission owning member of either RTO. This statement is not consistent with the application of PJM JOA Section 6.5, which was the basis for SPP JOA Section 5.2. In each of the situations where PJM JOA Section 6.5 has been used to establish a contract path, MISO and PJM shared contract path capacity to serve load on a transmission owning system of that RTO.

III. PAST PRACTICE OF CAPACITY SHARING WITH SPP

13. MISO has held previous discussions with SPP on the use of SPP JOA Section 5.2, Sharing Contract Path Capacity to address flows when the AMRN-Entergy interface is out of service. Ameren has load within the MISO market that is served
radially off the Entergy transmission system. Ameren has acquired network service from Entergy to serve its radial load, but must have a contract path to the Entergy border in order to use the network service. As long as the AMRN-Entergy interface is in service, the contract path requirements are met. When the AMRN-Entergy interface is open, other contract path arrangements are needed. Both MISO and Ameren held discussions with SPP in the second half of 2009 and the first half of 2010 on the applicability of Section 5.2 to maintain flows that would allow Ameren to continue to serve its radial load on the Entergy transmission system even with the AMRN-Entergy interface open. These discussions were triggered following an ice storm in the spring of 2009 which resulted in AECI’s New Madrid-Essex 345 kV line being out-of-service for 122 days. At no time during these discussions did SPP question the validity of Section 5.2 or place any kind of restrictions on how it could be used. The main issue raised by SPP at the time was to make sure Entergy would recognize this section of the SPP JOA and would agree to implement schedules between Ameren and Entergy even during times when the AMRN-Entergy interface is open.

14. This concludes my Affidavit on behalf of the MISO.

Dated this 7th day of April, 2011.
AFFIDAVIT VERIFICATION

County of Hamilton

State of Indiana

THOMAS J. MALLINGER, being duly sworn, deposes and states: that he prepared the Affidavit of Thomas J. Mallinger and the statements contained therein are true and correct to the best of his knowledge and belief.

[Signature]
Thomas J. Mallinger

SUBSCRIBED AND SWORN BEFORE ME, this \( \frac{7}{11} \) day of April, 2011.

[Signature]
Christi I. Tinch
Notary Public, Marion County
State of Indiana

Commission Expires: August 15, 2013
EXHIBIT E
DATE: October 13, 2010

TO: Wayne Schug
    Gregory A. Troxell

FROM: Stephen L. Teichler
    Ilia Levitine

RE: Sharing Contract Path Capacity Under the Midwest ISO/SPP Joint Operating Agreement

This memorandum responds to your request for research into the meaning of Section 5.2 of the Joint Operating Agreement between the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") and Southwest Power Pool, Inc. ("SPP") ("SPP JOA") in the event that Entergy Corporation ("Entergy")\(^1\) elects to become a transmission-owning member of the Midwest ISO. Section 5.2 provides for the sharing of contract path capacity between SPP and the Midwest ISO, and various versions of this provision have been in effect since the permanent SPP JOA was executed by the parties and accepted by the Federal Energy Regulatory Commission ("FERC" or "Commission") effective December 1, 2004.\(^2\)

\(^1\) In this memo, the term "Entergy" also is used to denote any of Entergy Corporation's operating utility subsidiary companies, as may be applicable.

\(^2\) See *Southwest Power Pool, Inc.*, 110 FERC ¶ 61,031 (2005). The SPP JOA provisions have been renumbered on several occasions and the language currently set forth in Section 5.2 originally was included in certain other sections or articles of the SPP JOA. These revisions are discussed in Section II.A, *infra.*
It is our understanding that the applicability of Section 5.2 has been questioned in the event Entergy becomes a Midwest ISO Transmission Owner.\(^3\) While Entergy has a direct interconnection with the Midwest ISO Transmission System, concerns have been raised as to whether the Midwest ISO would be able to invoke the contract path sharing provisions of Section 5.2 to obtain access to SPP’s connections with the Entergy transmission system.

Based on our review of the SPP JOA, certain other Midwest ISO joint operating agreements (“JOAs”) and pertinent FERC precedent, we believe that the transmission-sharing provisions of Section 5.2 would be applicable to the Entergy interconnection after Entergy becomes a Midwest ISO Transmission Owner and should be interpreted to allow the Midwest ISO to utilize the combined transmission capacity of the existing SPP interconnections with Entergy and the Midwest ISO. Our conclusion is contingent, however, on the current configuration and transmission owner membership in both RTOs and is based on the factual assumptions and currently-effective contractual arrangements described in Section I of this memo.

I. FACTUAL PREDICATE

The Midwest ISO Transmission System currently has several direct interconnections with Entergy’s transmission facilities. The principal connection is located at New Madrid, Missouri, where Ameren Corporation (“Ameren”), Associated Electric Cooperative, Inc. (“AECI”), and Entergy share the capacity of the 500/345 kilovolts (“kV”) transformers (“AMMO-EES”), with direct contiguous tie capability approximately 1,000 megawatts (“MWs”). Ameren is a Midwest ISO Transmission Owner and its Missouri transmission facilities, including its portion of the AMMO-EES interface, are under the Midwest ISO’s functional control.\(^4\)

The interconnection between Ameren, Entergy and AECI is governed by a 1977 “Interchange Agreement between Arkansas-Missouri Power Company, Associated Electric Cooperative, Inc. and Union Electric Company”\(^5\) for the Missouri-Arkansas EHV

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\(^3\) Capitalized terms not specifically defined herein shall have the meaning as set forth in the SPP JOA or the Open Access Transmission, Energy and Operating Reserve Markets Tariff for the Midwest Independent Transmission System Operator, Inc. (“Midwest ISO Tariff”), as applicable.

\(^4\) In addition, there are other interconnections between Midwest ISO-controlled Ameren facilities and the Entergy system that are located at Hayti, Portageville and Jim Hill, Missouri, but these connections are 34 kV ties.

\(^5\) Entergy and Ameren are successors in interest to, respectively, Arkansas-Missouri Power Company and Union Electric Company.
Interconnection” (“Interchange Agreement”). Under a 1996 amendment to the Interchange Agreement, which was filed by the parties to comply with the open access requirements of FERC Order No. 888, the parties agreed to provide open access over the entire interconnection and removed all contractual restrictions on third-party use. The joint filing described the use arrangements under the Interchange Agreement as follows:

... the transmission facilities which comprise the Interconnection are not jointly-owned; rather, each company owns its own facilities but provides access to those facilities as if they were jointly owned. In other words, the facilities included in the Interconnection under the ... Interchange Agreement are treated as a single point, to which each of the Parties have access. 8

Accordingly, the 1996 amendment provided in pertinent part:

Each Party shall have the capacity in the EHV Interconnection for use in delivering and receiving power and energy through the Interconnection. The EHV rated capability, in each direction respectively, shall be divided among the Parties, with one-third of the rated capability allocated to each Party. Any two Parties may use the sum of their shares of the rated capability of the EHV Interconnection.

Each Party shall make its share of the rated capability available for use by itself and other parties in accordance with the terms and conditions of its then in effect open access transmission tariff, if applicable, and pursuant to the terms and conditions herein. Any party desiring to use the EHV Interconnection for itself or for its transmission customers may do so at its discretion, subject to the provisions herein. 9

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6 The initial term of the Interchange Agreement expires in June 2013, after which the agreement remains in effect on a yearly basis, subject to cancellation by any party upon 4-year notice. It is our understanding that the parties to the Interchange Agreement are in negotiations concerning its extension beyond the initial term.

7 Entergy Services, Inc., OA97-285-000 (December 31, 1996). The amendment was accepted by the Commission by a letter order issued on November 5, 1998.


The 1996 amendment also described three contract paths comprising the interconnection: (1) between AECI and Entergy; (2) between AECI and Ameren; and (3) between Entergy and Ameren.\textsuperscript{10}

Entergy also has a number of direct interconnections with the SPP transmission system, whose combined transfer capability is about 8,818 MW.\textsuperscript{11} The SPP transmission system is directly interconnected to the Midwest ISO-controlled Ameren transmission facilities, with a combined transfer capability of approximately 1,800 MW. In addition, the SPP transmission system is interconnected with the transmission facilities of another Midwest ISO Transmission Owner – MidAmerican Energy Company (“MEC”). The combined transfer capability of the SPP/MEC tie is approximately 4,900 MW.

II. LEGAL ANALYSIS

Section 5.2 of the SPP JOA provides as follows:

Sharing Contract Path Capacity. If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically or contractually interconnect and the Midwest ISO will not be able to deal directly with companies with which it does not physically or contractually interconnect.

The foregoing language is virtually identical to similar provisions currently in effect in the JOA between the Midwest ISO and PJM Interconnection, L.L.C. (“PJM”).\textsuperscript{12} As detailed below, this language did not spring uniquely from the SPP JOA, but originated in the PJM JOA, which was the first seams operating agreement between two regional transmission organizations (“RTOs”). Although SPP initially declined to include this provision in its JOA compliance filing, the Commission directed that the SPP JOA contain terms and conditions similar to those expressed in the PJM JOA. As a result, both provisions should be accorded a similar interpretation. Whereas the scope of Section 5.2 has not previously been tested, the history of this provision in the PJM JOA and the course of performance thereunder are highly relevant to ascertaining its meaning.

\textsuperscript{10} Id. at 3-4 (amending First Revised Exhibit I to the Interchange Agreement).


A. The Origin of Contract Path Sharing Provisions in Midwest ISO JOAs

The PJM JOA was a FERC-directed remedy to address "a void at the center of Midwest ISO" and "a seam at the southern interface of the already constrained Wisconsin Upper Michigan System (WUMS)," which resulted from the decision of some former Alliance RTO members to join PJM rather than the Midwest ISO.\textsuperscript{13} The Commission also acknowledged "the partial electrical stranding of Wisconsin and Michigan" that would result from the proposed realignment due to the weakness of the existing WUMS connections to the Midwest ISO.\textsuperscript{14} The Commission then directed the two RTOs and the affected utilities "to propose a solution which will effectively hold harmless utilities in Wisconsin and Michigan from any loop flows or congestion that results from the proposed configuration" and which would be "part of an overall joint operational plan to be filed by Midwest ISO and PJM under which both organizations will manage seams and any reliability or operational issues thereunder."\textsuperscript{15}

The resulting solution was Section 6.5 of the PJM JOA, providing for sharing of capacity across the seam, and it read as follows:

6.5 Sharing Contract Path Capacity. In recognition that the Joint and Common Market is expected to eliminate distinct MIDWEST ISO contract path limits versus PJM contract path limits and in recognition that the sharing of flowgate capacity on a historical usage basis is the first step toward the elimination of distinct contract path limits, the MIDWEST ISO and PJM have agreed to the following phased approach to the elimination of such contract path limits:

(a) When PJM expands its market to include Commonwealth Edison, there will be a sharing of contract path capacity that existed on a historical basis (i.e., a sharing of the combined contract path capacity where both RTOs have contract paths to the same entity). The combined contract path capacity will be made available for use by both Parties. This will not open up new paths that have not existed previously. PJM will not be able to deal directly with companies with which it does not physically interconnect and the MIDWEST ISO will not be able to deal directly with companies with which it does not physically interconnect.

\textsuperscript{13} \textit{Alliance Cas.}, 100 FERC ¶ 61,137, at P 53 (2002).

\textsuperscript{14} \textit{Id.}

\textsuperscript{15} \textit{Id.}
(b) When the MIDWEST ISO commences operation of energy markets, the sharing of contract path capacity where the MIDWEST ISO and PJM have existing contract path capacity to the same entity will continue to exist. The MIDWEST ISO and PJM may need to resolve any coordination issues such that the combined contract capacity is not exceeded by the operation of the two markets. This phase will still not open up any new paths for the Parties.

(c) When a Joint and Common Market exists between the MIDWEST ISO and PJM as is expected, the sharing of contract path capacity between the MIDWEST ISO and PJM will occur on a complete basis. All physical connections to the combined MIDWEST ISO and PJM RTOs will be available for use by the market. Whether the physical path connections are within the MIDWEST ISO or PJM will not affect a customer’s participation in the market. Only actual physical limitations will impact how the customer is able to use these connections to the market.

In their joint filing letter, the two RTOs explained the purpose of Section 6.5 as follows:

The parties expect that the joint and common market will yield a higher degree of flowgate coordination because it will, eventually, eliminate distinct Midwest ISO or PJM contract paths. The sharing of flowgate capacity is a first step to achieve this result. Toward this goal, when PJM expands to include Commonwealth Edison there will be sharing of contract path capacity measured on a historic basis. JOA § 6.5. Additional contract path sharing will occur when the Midwest ISO opens its markets. When the joint and common market is underway, capacity sharing will become complete. All physical connections of the combined grids will be available for use by the markets. Id.\(^\text{16}\)

The Commission accepted the PJM JOA, subject to certain modifications, but no changes were directed to Section 6.5.\(^\text{17}\)

At the time the Commission issued its Alliance orders, the Midwest ISO and SPP were planning a merger. After that plan was abandoned, SPP applied for RTO approval and in a 2004 order the Commission accepted the proposal subject to the following condition:


Once SPP has achieved RTO status, SPP must subsequently address the Commission’s remaining requirements identified in this order. In this regard, SPP must fulfill its commitment to: (1) complete its proposed plan for congestion management and an energy imbalance market, (2) participate in the Joint and Common Market with Midwest ISO and PJM Interconnection, LLC (PJM), and (3) develop and file a transmission cost allocation plan.\(^8\)

The Commission’s order also directed SPP to address “seams” issues between SPP and the Midwest ISO through a seams agreement that is “compatible” with other similar agreements, which, at the time, meant the PJM JOA. The Commission stated:

We expect SPP to address concerns raised by intervenors herein in negotiating seams agreements with Midwest ISO and other entities. We offer the following as additional guidance to SPP in developing seams agreements. We do not require that all RTOs necessarily must have a uniform practice, but that RTO reliability and market interface practices must be compatible. RTOs must coordinate their practices with neighboring regions to ensure that market activity is not limited because of different regional practices.\(^9\)

In its first compliance filing following the initial order, SPP stated that it was “pursuing a broader joint operating agreement with the Midwest ISO, which is expected to be based upon the Midwest ISO/PJM JOA.”\(^10\) SPP further stated that its progress on this issue was “comparable to, or exceeds, the progress achieved by the Midwest ISO and PJM at the time they were formally recognized as RTOs.”\(^11\) While the compliance filing included no JOA, it contained a Memorandum of Understanding between the SPP and the Midwest ISO, which expressly committed the parties to “explore the possibility of sharing the contract tie capacity available within each party’s transmission facilities with each other.”\(^12\) The Commission acknowledged SPP’s commitment to file a fully-fledged JOA and provided additional guidance as to its generic components.\(^13\)

Subsequently, it turned out, however, that the Midwest ISO and SPP could not reach agreement on a JOA. As a result, SPP unilaterally filed its proposed JOA in August 2004, which omitted a number of crucial provisions that were in the PJM JOA. The Midwest ISO protested the truncated JOA and included its own, fuller version in its


\(^9\) *Id.* at P 202.


\(^11\) *Id.*

\(^12\) *Southwest Power Pool, Inc.*, Docket Nos. RT04-1-002 and ER04-48-002, App. 4, Memorandum of Understanding, Section 2.2(d) (May 3, 2004).

protest. The chief difference between the two versions was the lack of a Congestion Management Process ("CMP") protocol for market-to-non-market congestion management in the SPP version, but the language regarding contract path sharing had also been omitted. In contrast, the Midwest ISO version included the CMP and the missing contract path sharing language, which was included in Section 6.4.

In its order on the proposed JOA, the Commission conditionally accepted the SPP version only as a limited interim solution, and required SPP to file, within 60 days, a revised version addressing the CMP and market-to-non-market issues identified by the Midwest ISO. The Commission further stated:

[W]hile some minor adjustments may be necessary, we do not believe that the market-to-non-market provisions in the SPP JOA must significantly differ from those in the PJM JOA, which we have determined to be just and reasonable. This is particularly true, given SPP's commitment to participate in the Joint and Common Market, which would necessitate a common form of coordinated operations across all three RTOs. Therefore, we see no reason to allow the negotiations to continue on an open-ended basis, which could result in the Midwest ISO commencing its markets without a market-to-non-market JOA with SPP. Indeed, based on the record here, it would appear that both sides are approaching the negotiations with a common end-state in mind, namely, an agreement consistent with the PJM JOA. We note that the draft JOA contains market-to-non-market provisions that are consistent with those in the PJM JOA that is on file. We believe that the substantive components of the PJM JOA, which we have accepted, are appropriate for use in the market-to-non-market circumstances under which SPP and the Midwest ISO will operate.

In conformity with this directive, SPP made a filing on December 2, 2004, which contained an executed JOA closely paralleling the version that the parties had previously agreed to in July 2004 and that the Midwest ISO attached to its protest. Consistent with the PJM JOA, Section 5.3 of the executed document stated as follows:

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24 See Motion to Intervene, Motion to Reject Compliance Filing, Protest and Request for Hearing of the Midwest Independent Transmission System Operator, Inc., Docket No. ER04-1096-000 (August 23, 2004).


27 Id., P 32.

Section 5.3  Sharing Contract Path Capacity – All Phases. The Parties have agreed to the following phased approach to the elimination of such contract path limits:

(a) If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically interconnect and the MIDWEST ISO will not be able to deal directly with companies with which it does not physically interconnect.

(b) When the MIDWEST ISO and SPP commence operation of energy markets, the sharing of contract path capacity where the MIDWEST ISO and SPP have existing contract path capacity to the same entity will continue to exist. The MIDWEST ISO and SPP may need to resolve any coordination issues such that the combined contract capacity is not exceeded by the operation of the two markets. This phase will still not create new contract paths for the Parties.

(c) When a Joint and Common Market exists between the MIDWEST ISO and SPP as is expected, the sharing of contract path capacity between the MIDWEST ISO and SPP will occur on a complete basis. All physical connections to the combined MIDWEST ISO and SPP RTOs will be available for use by the market. Whether the physical path connections are within the MIDWEST ISO or SPP will not affect a customer’s participation in the market. Only actual physical limitations will impact how the customer is able to use these connections to the market.

Despite its filing, SPP also sought rehearing of the Commission's directive to file a JOA that is consistent with the PJM document. The Commission, however, rejected the SPP arguments and the executed SPP JOA was accepted with a minor non-substantive modification.\textsuperscript{29} The Commission stated:

As for the substance of the option we provided to SPP, SPP has raised no operational problems with the PJM JOA, nor has it argued that a market-to-non-market JOA is not necessary. SPP acknowledges the need to have coordinated operations, especially in light of its commitment to participate in the Joint and Common Market, which would necessitate a common form of coordinated operations across all three RTOs. While we have not found that the PJM JOA is the only satisfactory approach, the JOA proposed by the Midwest ISO does adopt procedures to address these loops flows, providing certainty of inter-RTO transmission rights for both economic and reliability purposes. While we

\textsuperscript{29} Southwest Power Pool, Inc., 110 FERC ¶ 61,031(2005).
encourage the parties to jointly develop enhancements to the SPP-Midwest ISO JOA, we have further found, and reiterate here, that the market-to-non-market JOA must provide for coordinated flowgates in order to maintain reliability and for SPP to qualify as an RTO.\textsuperscript{30}

After it became clear that SPP was not going to be a part of the Joint and Common Market in the foreseeable future, the sharing language was changed to eliminate references to the Joint and Common Market, and was renumbered to the present version as part of other JOA changes in December 2008.\textsuperscript{31} The revisions were accepted by a Commission letter order issued on February 12, 2009. Similar changes to the contract path sharing language were made to the PJM JOA.

B. Course of Performance

Although Section 5.2 of the SPP JOA has not been utilized to date, its sister provision in the PJM JOA has been used on a number of occasions. This provision currently states as follows:

6.5 Sharing Contract Path Capacity. If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. PJM will not be able to deal directly with companies with which it does not physically or contractually interconnect and the Midwest ISO will not be able to deal directly with companies with which it does not physically or contractually interconnect.

As noted supra, this language is identical to that used in Section 5.2 of the SPP JOA and the predecessors provisions in both JOAs were similarly consistent. It is our understanding that, since the Commission's acceptance of the PJM JOA, the Midwest ISO has provided transmission service, and operated its centrally dispatched energy markets for its Michigan Zone using capacity sharing under Section 6.5 of the PJM JOA. Although the Michigan Zone is directly connected to the rest of the Midwest ISO Transmission System, the PJM interconnections into Michigan have substantially more capacity than do the Midwest ISO interconnections.

C. Review and Conclusions

The express language and background of Section 5.2 of the SPP JOA, as well as the course of performance under the similar contract path capacity sharing provision of the PJM JOA, support the conclusion that Entergy and its customers should be entitled to share and utilize

\textsuperscript{30} Id., P 24 (emphasis added).

the combined transmission capacity of existing interconnections between Entergy, SPP and the Midwest ISO.

The language of Section 5.2 is rather straightforward and appears to fit well with the presented factual scenario. Upon Entergy’s accession to the Midwest ISO, the “Parties” (i.e., SPP and the Midwest ISO) will have “contract paths to the same entity” (i.e., Entergy). The Midwest ISO’s contract path to Entergy is through the AMMO-EES interconnection while the SPP path to Entergy is through the existing interconnections between the SPP and Entergy transmission systems. Under Section 5.2, the combined capacity of these paths must be made available for use by both SPP and the Midwest ISO. The limitations set forth in Section 5.2 are also observed. The sharing would not “create new contract paths for either Party that did not previously exist.” The paths that are at issue would be all existing paths at the time of Entergy’s integration into the Midwest ISO. Further, upon Entergy’s accession, both SPP and the Midwest ISO would “physically or contractually interconnect” with Entergy, as they do today.

Questions have arisen whether the PJM precedent is relevant to the SPP JOA since Section 5.2 appears in the “ATC/AFC Calculations” section of the SPP JOA, whereas the sister provision appears in the “Reciprocal Coordination of Flowgates” section of the PJM JOA. We do not see this as a distinction with a difference. The history and background of Section 5.2, as discussed in Section II.A of this memo, make it clear that the capacity sharing provision is one of the key features of a just and reasonable “seams” agreement, such as the SPP JOA, and should be interpreted consistently across the board. The Commission expressly directed that the parties file a version patterned on the PJM JOA, which included, and continues to include, a sharing provision. The compliance filing made by SPP, as accepted by the Commission, included the sharing language that was taken almost verbatim from Section 6.5 of the PJM JOA. Moreover, synchronized revisions to the sharing language were made in 2008 to reflect the passing of the Joint and Common Market concept. The current operative language in the SPP JOA and the PJM JOA is identical. In such circumstances, these provisions should be interpreted consistently with each other.

Finally, the course of performance under the PJM JOA supports the proffered interpretation. As described supra, the Midwest ISO has used the capacity sharing provision of the PJM JOA for transmission service in and out of the Michigan Zone. While the Michigan Zone is directly interconnected with the rest of the Midwest ISO Transmission System, those connections are often constrained or limited by planned and unplanned outages, and the use of the combined PJM and Midwest ISO path capacity to the Michigan Zone is required. The combined path provisions of the SPP JOA should be interpreted accordingly.
EXHIBIT F
Memorandum

To: Entergy Regional State Committee Working Group
Date: January 11, 2011
Re: Limitations on Midwest ISO use of SPP Transmission Capacity to Integrate Entergy into the Midwest ISO System

Introduction
Southwest Power Pool, Inc. ("SPP") has prepared this whitepaper to set forth its views concerning the Midwest Independent Transmission System Operator, Inc.'s ("Midwest ISO") use of SPP's transmission system to effectuate the potential integration of operating companies of Entergy Corporation ("Entergy") into the Midwest ISO. Recently, Midwest ISO has put forth publicly its assessment that, under the terms of the Joint Operating Agreement between the Midwest Independent Transmission System Operator, Inc. and Southwest Power Pool, Inc. ("SPP JOA"), it is entitled to use the "contract path" capacity between Midwest ISO and SPP, and between SPP and Entergy, to integrate Entergy into the Midwest ISO markets.

First, SPP would like to assure the ERSC and ERSC Working Group that seams agreements (JOAs) are important to the effective and efficient operation and planning of the bulk electric system. SPP and its members gain value from having agreements that facilitate information sharing and coordinated planning and operations with other entities on the SPP seams, including the Midwest ISO. SPP will continue to press for seams agreements that provide value to its members and the industry.

However, the Midwest ISO's positions on the items highlighted in its assessment are inconsistent with the plain meaning of the terms of the SPP JOA. Its positions ignore limitations on the use of flowgates under the SPP JOA and pay no heed to the parties' recognition that the SPP JOA applies only to the current configuration of the Midwest ISO, not to the expanded system that would exist if Entergy were a part of either organization. The parties also must ensure that the implementation of their seams agreement does not create burdens on neighbors, including in the case of SPP: Associated Electric Cooperative, Inc., the Tennessee Valley Authority, and Southern Company. SPP also must assess whether the integration of Entergy into the Midwest ISO market creates material burdens on SPP's members.

The Single High-Voltage Connection between Midwest ISO and Entergy
Interconnection capacity between Midwest ISO and Entergy is a critical component of determining the allowable interchange between the two. Generally, there are two conditions that have to be met to facilitate interchange directly between two utilities. First, the two utilities have to be contractually interconnected with sufficient interconnection capacity to validate the contractual arrangement. Second, sufficient transmission system capacity must exist to reliably facilitate the interchange. Limitations in either interconnection capacity or Available Transfer Capacity (ATC) would impose limitations on the amount of energy that could be exchanged directly between the two parties.
The only high voltage connection between Midwest ISO and Entergy is via certain transmission arrangements contained in the “Interchange Agreement between Arkansas-Missouri Power Company, Associated Electric Cooperative, Inc. and Union Electric Company for the Missouri-Arkansas EHV Interconnection (“Interchange Agreement”). This agreement provides a “contract path” between Ameren Corporation (“Ameren”), a Midwest ISO transmission owner, and Entergy through the use of Ameren, Entergy, and Associated Electric Cooperative, Inc.’s (“AECI”) facilities that are subject to the agreement. The total capacity of the interconnection facilities associated with the Interchange Agreement is approximately 1500 megawatts, divided equally among the three parties. As a result of this contractual arrangement, Midwest ISO and Entergy combined currently have a contractual interconnection between them of approximately 1000 megawatts.

SPP has been informed that AECI has given notice to the other parties that it is canceling this agreement as of its expiration date in June 2013. Absent a replacement arrangement, the cancellation of the Interchange Agreement will eliminate any high-voltage connection between Midwest ISO and Entergy.

In addition, if this contract is relied upon to integrate Entergy into the Midwest ISO market, provisions for at least some contract path between Entergy and Midwest ISO would have to be in place whenever the interconnection facilities are out of service to continue the integrated operation of the Entergy and Midwest ISO systems.

Midwest ISO and SPP currently have interconnections between their systems totaling approximately 6,900 megawatts. Note also that most (74%) of the contract path capability between SPP and the Midwest ISO is between Nebraska and Iowa. This is remote from the transmission connection between Midwest ISO and Entergy and, even if appropriate contractual arrangements were put in place, would be of very limited use for the integration of Entergy in the Midwest ISO market. The physical connection from these contract path capabilities to the remainder of SPP is one of the most constrained portions of the SPP region; this would likely be exacerbated if Entergy were part of the Midwest ISO market and were using this path. As discussed below, Midwest ISO’s rights to use this capacity are limited.

Finally, even if contractual arrangements existed for the use of SPP capacity, SPP has interconnections with Entergy totaling only approximately 4,500 megawatts (not the 8818 megawatts identified in the Midwest ISO’s analysis).

Sharing “Contract Path” Capacity

Midwest ISO has stated that it may “share” SPP’s interconnection capacity to Entergy under the terms of the SPP JOA. Midwest ISO relies on section 5.2 of the SPP JOA, which provides that:

Section 5.2 Sharing Contract Path Capacity. If the Parties have contract paths to the same entity, the combined contract path capacity will be made available for use by both Parties. This will not create new contract paths for either Party that did not previously exist. SPP will not be able to deal directly with companies with which it does not physically or contractually interconnect and the Midwest
ISO will not be able to deal directly with companies with which it does not physically or contractually interconnect.

Section 5.2 applies when each of the two parties, Midwest ISO and SPP, have “contract paths to the same entity.” If Entergy were a part of the Midwest ISO system, then neither Midwest ISO nor SPP would have a contract path “to” the same entity. Entergy would now be a part of the Midwest ISO system as a whole; Midwest ISO does not have contract paths “to” itself. Similarly, if Entergy were a part of the Midwest ISO system, SPP would no longer have a contract path “to” Entergy. All of SPP’s existing paths to Entergy would become paths “to” Midwest ISO. Thus, section 5.2 is inapplicable because Midwest ISO and SPP would not have “contracts paths to the same entity.”

Section 5.2, by its plain terms, applies when Midwest ISO and SPP have contract paths to the same third-party system. For example, Entergy today is a third party system, not a part of either Midwest ISO or SPP, and “the Parties [Midwest ISO and SPP] have contract paths to the same entity [Entergy].” TVA is another example of a third party to which both Midwest ISO and SPP currently have contract paths by virtue of their separate interconnections to TVA. Under section 5.2, the parties agreed to share their contract path capacity to these third parties.

That this is Midwest ISO’s and SPP’s understanding of section 5.2 of the SPP JOA is confirmed by a recent request by Midwest ISO to use the SPP connections to Entergy under section 5.2 for transfers to Entergy that occur today. Midwest ISO had been making transfers to Entergy using its share of the capacity under the Interchange Agreement, discussed above, and governing the interconnection facilities connecting Midwest ISO and Entergy. See section II, above. However, as result of an outage of the facility comprising the contractual interconnection between Midwest ISO and Entergy, transfers between Midwest ISO and Entergy were being interrupted. Midwest ISO therefore contacted SPP and, relying on section 5.2 of the SPP JOA, asked to use the SPP-Entergy interconnections during that system condition.

This recent incident confirms SPP’s view of the meaning of section 5.2 of the SPP JOA. It is clear that both parties understood that the provision concerns transfers to third parties. Entergy would not be such a third party if it was a part of either SPP or Midwest ISO, and section 5.2 would be inapplicable.

The JOA’s Congestion Management Process identifies the limits for Midwest ISO’s use of SPP Flowgates

In any event, the provisions of the SPP JOA must be read as a whole. Regardless of any sharing of contract path capacity, even if under section 5.2 of the SPP JOA, the Parties agreed to other restrictions on the flow of a party’s energy over the other party’s system as a result of the operations of the parties’ respective markets.

At the same time that the Federal Energy Regulatory Commission (“FERC”) approved section 5.2 of the SPP JOA, it also approved a comprehensive set of rules concerning the flow of energy across the Midwest ISO and SPP systems. These rules are set forth in an Attachment to the JOA
called the Congestion Management Process. The Parties agreed to allocate the transmission capacity on flowgates for purposes of coordinating flowgate capacity, transmission sales, and dispatch of generation. The allocation is based on the Parties’ uses of the regional systems as of April 1, 2004, which is known as the Historic Firm Flow. In real time, the Parties agreed to determine the firm and non-firm market flows occurring from their market operations “and constrain their operations to limit Firm Market Flows on the Coordinated Flowgates to no more than the calculated Firm Flow Limit.” The “Firm Flow Limit” is “the maximum value of Firm Flows that an entity can have on a Coordinated Flowgate.” Section 6.1 of the JOA expressly states that “each Party agrees to respect the allocations defined by the allocation process set forth in the Congestion Management Process,” and all real time activities “shall be governed by and in accordance with the Congestion Management Process.”

Consequently, Midwest ISO and Entergy would be constrained in the amount of firm energy flow they could place on SPP flowgates to the allocations derived from the share of the firm “rights” they possessed on these flowgates in 2004. Given the limited ties between Midwest ISO and Entergy at that time (and today) and based upon SPP’s initial assessment, it does not appear that significant firm “rights” exist to provide Midwest ISO the allocations needed to reliably serve the loads of Midwest ISO and Entergy using the flowgates of SPP, or other neighboring transmission systems, much less gain the benefit of joint operations of the combined facilities. The SPP JOA would limit Midwest ISO’s use of SPP flowgates based on historic firm “rights.”

In other words the sharing of contract path capacity must be read in conjunction with the explicit limitations in the Congestion Management Process on the use of flowgate capacity. The parties agreed to respect these limitations.

**Obligation to Renegotiate**

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1 SPP JOA, Attachment 1.

2 A flowgate is a facility or group of facilities that may act as a significant constraint point on the regional system. SPP JOA § 2.2.20.

3 See SPP JOA, Attachment 1, Appendix A (definition of “Allocation”).

4 SPP JOA, Attachment 1 § 6.4. The date of the measurement of historic flows is called the “Freeze Date” in the SPP JOA, and is set at April 1, 2004. Id.

5 SPP JOA, Attachment 1, Executive Summary.

6 SPP JOA § 2.2.19.

7 SPP JOA § 6.1.

8 There also are provisions in the SPP JOA for the sharing of unused flowgate capacity, if any.
Finally, even if the JOA by its existing terms permitted the types of flows that Midwest ISO apparently contemplates if it were to integrate Entergy into its system, the parties expressly agreed that the current SPP JOA terms were only applicable to the parties’ systems as they existed at the time. Section 3.1 of the SPP JOA provides that the parties agreed to the specified coordination “to ensure system reliability and efficient market operations as systems exist and are contemplated as of the Effective Date.”

The parties agreed to renegotiate the SPP JOA in the event of system expansions:

The Parties expect that these systems . . . will change from time to time throughout the term of this Agreement. The Parties agree that the objectives of this Agreement can be fulfilled efficiently and economically only if the Parties, from time to time, review and as appropriate revise the requirements stated herein in response to such changes, including deleting, adding, or revising requirements and protocols. Each Party will negotiate in good faith in response to such revisions the other Party may propose from time to time.

In submitting the Midwest ISO-PJM JOA to the FERC, the parties to that agreement explained the purpose of this renegotiation clause, which also appears in that agreement and was adopted and included in the SPP JOA:

The JOA provisions are predicated upon the current configurations of the parties’ systems. In order to respond to continued evolution of these systems and applicable technology, the JOA provides that the parties will review and revise its terms from time to time to respond to these developments and to remain up to date in all respects. Events precipitating review and revision also include changes to a party’s boundaries as RTO . . .

Whatever the parties may have agreed with respect to the use of each other’s facilities was in the context of the existing configuration of their systems. The expansion of Midwest ISO to include Entergy plainly was not “contemplated as of the Effective Date.” Given the limited direct connections between Midwest ISO and Entergy, the integration of Entergy into the Midwest ISO dispatch would produce significantly different energy flows in the region and on SPP’s system than were contemplated at the time the SPP JOA became effective. The parties agreed to revisit, and to delete from, add to, or revise the requirements and protocols of, the SPP JOA, in the event of a system reconfiguration of the nature that the addition of Entergy to either SPP or the Midwest ISO system would represent. Therefore, neither SPP nor the Midwest ISO can rely on

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9 SPP JOA § 3.1 (emphasis added).

10 SPP JOA § 3.1.

the existing provisions of the SPP JOA for the integration of Entergy, and the parties would have to renegotiate the SPP JOA if this integration were to occur.  

Conclusion

The evaluation of the merits of the integration of Entergy into the Midwest ISO and any resulting joint operations of the two systems must reflect the physical and contractual limitations that would be placed on Entergy and Midwest ISO. There is only a limited interconnection between the two systems, and the use of SPP’s system to effectuate power transfers between Midwest ISO and Entergy is restricted by the existing SPP JOA.

While additional evaluation of these limitations can be performed with sufficient time and resources, the SPP system’s ability to accommodate the flows that Midwest ISO and Entergy may contemplate necessarily must be evaluated based on the limited interconnection capabilities in the region, the contractual limitations that exist, and the impacts on the SPP and other systems on the Entergy seams. In addition, the impacts on SPP’s members and other neighboring transmission systems must be carefully considered. The SPP JOA would need to be renegotiated to address any adverse impacts.

SPP looks forward to working with Entergy and Midwest ISO and other stakeholders to accurately reflect the physical and contractual limitations in studies of the benefits, if any, of joint Midwest ISO/Entergy operations, and in renegotiating, as necessary, the terms of the seams agreement between Midwest ISO and SPP.

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12 Midwest ISO contends that it and PJM agreed to provisions substantially similar to section 5.2 of the SPP JOA, and Midwest ISO and PJM purportedly have used the provisions to enable Midwest ISO to share PJM transmission capacity to dispatch energy to the weakly connected Michigan portion of Midwest ISO’s internal system. Unlike the Midwest ISO-PJM border, SPP and Midwest ISO transmission systems are not intertwined in a way that provides the mutual benefits that Midwest ISO and PJM enjoy in sharing of contract path capacity for their joint operations. With the substantial system impacts SPP, and others, would experience if Entergy were to be integrated into Midwest ISO, SPP would not benefit and would likely suffer a greater burden. Therefore, the terms of any sharing of capacity renegotiated to accommodate Entergy would not be the same.
EXHIBIT G
Joint Operating Agreement Midwest ISO and SPP Version: 0.0.0 Effective: 3/25/2011

Joint Operating Agreement
Between the
Midwest Independent Transmission System Operator, Inc.
And
Southwest Power Pool, Inc.
(DECEMBER 11, 2008)
The SACC shall have the authority to make decisions on issues that arise during the performance of the Agreement based upon consensus of the Parties’ representatives thereto.

Section 14.2 Dispute Resolution Procedures. Version: 0.0.0 Effective: 3/25/2011

The Parties shall attempt in good faith to achieve consensus with respect to all matters arising under this Agreement and to use reasonable efforts through good faith discussion and negotiation to avoid and resolve disputes that could delay or impede either Party from receiving the benefits of this Agreement. These dispute resolution procedures apply to any dispute that arises from either Party’s performance of, or failure to perform, this Agreement and which the Parties are unable to resolve prior to invocation of these procedures.

Section 14.2.1 Step One. Version: 0.0.0 Effective: 3/25/2011

In the event a dispute arises, a Party shall give written notice of the dispute to the other Party. Within ten (10) days of such Notice, the SACC shall meet and the Parties will attempt to resolve the Dispute by reasonable efforts through good faith discussion and negotiation. Each Party shall also be permitted to bring no more than two (2) other individuals to Executive Committee meetings as subject matter experts; however, all representatives must be employees of the Party they represent. In addition, if the Parties agree that legal representation would be useful in connection with a meeting, each Party may bring two (2) attorneys (who need not be employees of the Party they represent). In the event the SACC is unable to resolve within twenty (20) days of such Notice, either Party shall be entitled to invoke Step 2.

Section 14.2.2 Step Two. Version: 0.0.0 Effective: 3/25/2011

A Party may invoke Step 2 by giving Notice thereof to the SACC. In the event a Party invokes Step 2, the SACC shall, in writing, and no later than five (5) days after the Notice, refer the dispute in writing to the Parties’ Presidents for consideration. The Parties’ Presidents shall meet in person no later than fourteen (14) days after such referral and shall make a good faith effort to resolve the dispute. The Parties shall serve upon each other, written position papers concerning the dispute, no later than forty-eight (48) hours in advance of such meeting. In the event the Parties’ Presidents fail to resolve the dispute, either Party shall be entitled to invoke Step Three.

Section 14.2.3 Step Three. Version: 0.0.0 Effective: 3/25/2011

Upon the demand of either Party, the dispute shall be referred to FERC’s Office of Dispute Resolution for mediation, and upon a Party’s determination at any point in the mediation that mediation has failed to resolve the dispute, either Party may seek formal resolution by initiating a proceeding before FERC.

Section 14.2.4 Exceptions. Version: 0.0.0 Effective: 3/25/2011
In the event of disputes involving Confidential Information, infringement or ownership of Intellectual Property or rights pertaining thereto, or any dispute where a Party seeks temporary or preliminary injunctive relief to avoid alleged immediate and irreparable harm, the procedures stated in Section 14.2 and its subparts shall apply but shall not preclude a Party from seeking such temporary or preliminary injunctive relief, provided, that if a Party seeks such judicial relief but fails to obtain it, the Party seeking such relief shall pay the reasonable attorneys' fees and costs of the other Party incurred with respect to opposing such relief.
EXHIBIT H
January 17, 2011

Nick Brown
Southwest Power Pool
415 N. McKinley, Suite 140
Little Rock, AR 72205

Re: Notice of Dispute Pursuant to Section 14.2 of the Joint Operating Agreement Between Midwest Independent Transmission System Operator, Inc. and Southwest Power Pool, Inc.

Dear Nick:

The Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") hereby gives this Notice of Dispute to Southwest Power Pool, Inc. ("SPP") and requests commencement of dispute resolution procedures pursuant to Section 14.2 of the Joint Operating Agreement Between Midwest Independent Transmission System Operator, Inc. and Southwest Power Pool, Inc. ("JOA").

On January 11, 2011, SPP distributed to the Entergy Regional State Committee Working Group a "white paper" entitled "Limitations on Midwest ISO use of SPP Transmission Capacity to Integrate Entergy into the Midwest ISO System" (hereinafter "White Paper"). In the White Paper, SPP responded to the Midwest ISO's earlier assessment of the contract path sharing requirements of Section 5.2 of the JOA in the event Entergy Corporation or its operating companies (collectively, "Entergy") choose to transfer their transmission facilities to the Midwest ISO's functional control. As reflected in its assessment, the Midwest ISO believes that Section 5.2 will continue to be applicable to Entergy after it becomes a Midwest ISO Transmission Owner and that it allows the Midwest ISO to utilize the combined transmission capacity of the existing SPP interconnections with Entergy and the Midwest ISO.

SPP's White Paper expressly disagrees with the Midwest ISO's conclusions and discusses several purported obstacles to the proposed contract path sharing. Thus, SPP contends that the current language of Section 5.2 does not permit the sharing of contract path capacity between SPP and the Midwest ISO in the event Entergy becomes a Midwest ISO Transmission Owner. SPP also asserts that no "significant firm rights exist to provide Midwest ISO the allocations needed to reliably serve the loads of Midwest ISO and Entergy using the flowgates of SPP, or other neighboring transmission systems, much less gain the benefit of joint operations of the combined facilities" and that the
Nick Brown  
January 17, 2011  
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"JOA would limit Midwest ISO’s use of SPP flowgates based on historic firm rights.” The Midwest ISO disagrees with the conclusions reached by SPP and believes that their public dissemination has created a dispute between the parties within the meaning of Section 14.2 of the JOA.

Because the Midwest ISO and SPP have already exchanged their position papers and the dispute has reached an advanced stage, the Midwest ISO believes that the requirements of Section 14.2.1 and Section 14.2.2 of the JOA dispute resolution process have been satisfied. If you agree, the Midwest ISO believes that it would be in the parties’ best interest to proceed directly to Step 3, mediation by the FERC’s Office of Dispute Resolution ("ODR"), as set forth in Section 14.2.3 of the JOA. We hope that, with the ODR’s assistance, the Midwest ISO and SPP will be able to achieve amicable resolution of this dispute. If you believe that Section 14.2.1 and Section 14.2.2 of the JOA dispute resolution process have not been satisfied by our discussions to this point, this letter should be considered a request to invoke Step 1 dispute resolution. We request that you respond to this Notice within five (5) days of its receipt.

Sincerely,

[Signature]

John R. Bear  
President & CEO

cc: Entergy Regional State Committee
EXHIBIT I
January 25, 2011

John Bear, President & CEO
Midwest ISO
701 City Center Drive
Carmel, Indiana 46032

Hello:

I am writing in response to your letter dated January 17, 2011, which I received by mail on January 19, 2011.

In your letter, you request commencement of dispute resolution procedures under section 14.2 of the Joint Operating Agreement Between Midwest Independent Transmission System Operator and Southwest Power Pool, Inc. ("JOA") regarding the parties' views of the contract path sharing requirements of section 5.2 of the JOA in the event that Entergy Corporation or its operating companies ("Entergy") choose to transfer their transmission facilities to the Midwest ISO’s functional control. You assert that a dispute exists because of Midwest ISO’s and SPP’s publication of certain papers to stakeholders in Entergy’s region concerning these rights and obligations pursuant to the JOA. You also request that SPP waive the required Steps 1 and 2 of the dispute resolution procedures and proceed directly to mediation by the FERC’s Office of Dispute Resolution.

While SPP is prepared to discuss the parties' respective rights and obligations under the JOA, SPP does not believe that there is a current dispute ripe for invocation of the dispute resolution procedures of the JOA. Section 14.2 of the JOA provides that the parties "shall attempt in good faith to achieve consensus with respect to all matters arising under this Agreement and to use reasonable efforts through good faith discussion and negotiation to avoid and resolve disputes that could delay or impede either Party from receiving the benefits of this Agreement." Further, section 14.2 provides that "[t]hese dispute resolution procedures apply to any dispute that arises from either Party’s performance of, or failure to perform, this Agreement and which the Parties are unable to resolve prior to invocation of these procedures."

To date, there have been no efforts pursued by Midwest ISO and SPP "through good faith discussion and negotiation" to address this issue. The dispute resolution procedures are designed for use only when such discussion and negotiation has failed. Moreover, there has been no "failure to perform" that the parties have been "unable to resolve prior to invocation of these procedures." At best, the parties are at the preliminary stage of discussing (and have not yet even started discussing) potential operations in accordance with the JOA provisions, if Entergy were to join either Midwest ISO or SPP. At such time as Entergy were actually to decide to join one of our organizations, and if our discussions have not led us to a mutually satisfactory result, then it is
possible that a dispute could arise regarding "performance of, or a failure to perform," under the JOA. At this time, no such dispute exists.

At this stage, SPP believes that the best course of action is to have discussions between the subject matter experts of both our organizations rather than embarking on regulatory claims and litigation before the FERC. Additionally, as the JOA directs, we should attempt in good faith to achieve consensus and use reasonable efforts through good faith discussion and negotiation to avoid and resolve these kinds of matters. We have worked well together in the past and see no reason why frank and open dialogue between our organizations cannot successfully resolve any differences here, without the unnecessary involvement of regulators via litigation.

As an initial step, SPP suggests that we have an informal meeting of our subject experts at a mutually convenient location during early February. While we think this would be most productive, if you prefer we can request a special meeting of the Seams Agreement Coordinating Committee (SAAC) to discuss the matter, as contemplated by section 14.1(b) of the JOA, prior to the invocation to any of the steps of the dispute resolution procedures. If you prefer that route, please consider this SPP's notice requesting such a meeting pursuant to section 14.1(b).

Take care,

[Signature]

cc: Entergy Regional State Committee
February 9, 2011

Nick Brown
Southwest Power Pool
415 N. McKinley, Suite 140
Little Rock, AR 72205

Dear Nick:

Thank you for your prompt response to my January 17th letter. I agree wholeheartedly with your observation that our two organizations have worked constructively and cooperatively since their respective formations. I do, however, have to disagree with your conclusion that there is no dispute ripe for dispute resolution. We do not have a disagreement over technical operating matters in the determination of market flows or setting facility ratings. The views of the two organizations published to date indicate a fundamental difference over what Section 5.2 of the JOA is intended to accomplish. This subject is not amenable to resolution by a committee of engineers.

This is a matter that needs to be resolved quickly. I do not agree that it can wait until after Entergy may choose to join either SPP or the Midwest ISO. It is not amenable to resolution once actual performance under Section 5.2 begins. We currently have energy flowing into and out of the Midwest ISO today across the Ameren-AECI-Entergy interconnection and any outage of those facilities would immediately bring the application of 5.2 into play. Moreover, we need to have a clear and reliable definition of the scope of Section 5.2 to assist currently unaffiliated entities to make RTO choices. To leave the issue for future contested determinations will impede RTO choices contrary to the express desires of FERC and state regulatory bodies.

Quicker action on this matter will help both of our organizations. I know SPP is investing time and resources in planning for and making design choices for its announced Day 2 Market. The Midwest ISO likewise has much to attend to in supporting delivery of value to its stakeholders. I think that both our organizations view the FERC to be fair and unbiased and possessing the capabilities to facilitate the resolution of both factual and policy differences. We are both well versed in dealing within that forum. While the Midwest ISO disagrees with the conclusions reached in your memorandum to the ERSC Work Group, we do agree that the dispute involves significant issues that must be resolved as soon as possible. A resolution under the FERC’s auspices would likely be fair and expeditious. I believe delaying clear resolution of this issue would do a disservice to all involved.
Accordingly, I ask you to join with me and ask the FERC for its assistance in resolving a dispute that has immediate and material impact. I believe jointly seeking the Commission’s assistance would be the most efficient approach to resolving this matter. Given the importance of this issue, I ask that you indicate your agreement no later than ten days from the receipt of this letter.

Very truly yours,

John R. Bear  
President & CEO  
Midwest ISO
EXHIBIT K
February 15, 2011

John Bear, President & CEO
Midwest ISO
720 City Center Drive
Carmel IN 46032

Hello John:

Thanks for your February 9, 2011 letter and observations regarding our Joint Operating Agreement ("JOA"). I agree that we should strive to resolve quickly our understandings of the JOA’s requirements. Reaching a mutual understanding of these requirements is exactly what I have in mind, and, toward that end, I suggested that our organizations meet promptly in early February to discuss the matter.

I strongly believe that it would be beneficial to both Midwest ISO and SPP to discuss this matter informally before more formal dispute resolution is commenced. That would give SPP a better understanding of Midwest ISO’s views of the JOA’s requirements regarding any integration of Entergy into an RTO, and likewise would give Midwest ISO a better understanding of SPP’s views. With a good faith dialogue, we can strive to avoid unnecessary litigation. We do not think litigation of these matters is in anyone’s best interest.

We also believe this is exactly what the JOA requires before commencing formal dispute resolution. As you know, section 14.2 of the JOA provides that the parties “shall attempt in good faith to achieve consensus” and “to use reasonable efforts through good faith discussion and negotiation to avoid and resolve disputes.” There has been no such relevant discussion to date since this interpretational difference surfaced, and we do not think we should disregard this requirement, which is specifically designed to achieve, at a minimum, improved understanding of the parties’ positions, and avoid litigation while achieving the best solutions.

While you reference the publication of the organizations’ views as giving rise to a dispute ripe for litigation, we disagree. Unfortunately, without any relevant discussion of the matter, Midwest ISO unilaterally took it upon itself to engage counsel to publish a legal opinion about its views of the JOA. This placed SPP in the position of having to respond to the ERSC with its own views. Although SPP provided MISO the opportunity to review that position before publishing it, appropriate discussion has not occurred. I believe that we should not ignore our mutual obligations to discuss the matter in good faith before proceeding with formal dispute resolution processes.

As you stated in your letter, we need to have a clear and reliable definition of the scope of Section 5.2. I couldn’t agree more. That definition also needs to provide mutual benefits to SPP and MISO. Both aspects need to be discussed by the executives that comprise the Seams Agreement Coordinating Committee ("SACC") as they best understand and have experience with how to achieve what should be a goal common to both organizations.
Further, I am sure you are aware, section 3.1 of the JOA states that its provisions for coordination were designed only “to ensure system reliability and efficient market operations as systems exist and are contemplated as of the Effective Date.” The parties agreed to revise the requirements of the JOA in the event of system expansions, and agreed to “negotiate in good faith” concerning such revisions. When Midwest ISO filed with the FERC a similar provision concerning the PJM-Midwest ISO JOA, it told FERC that “events precipitating review and revision . . . include changes to a party’s boundaries as RTO.”

Accordingly, I have asked Lanny Nickell, SPP Vice President of Engineering, to call a meeting of the SACC to discuss proper interpretation of and potential changes to the JOA that would be necessary upon Entergy’s integration into either organization as well as a number of related issues on market flow and cost allocation. Given the limited direct connections between Midwest ISO and Entergy, the integration of Entergy into the Midwest ISO dispatch would produce significantly different energy flows in the region and on SPP’s and others’ systems than were contemplated at the time the JOA became effective. As both of our organizations goals is to protect the reliable operation of the transmission system, the requirements and protocols of the JOA must be revisited to address any such changed system configurations. I also would like them to discuss how to engage the others affected by these issues in this dialog at an early stage to enrich the solutions that our organizations promote.

In summary, our organizations have not had relevant discussion about any of these matters. I do not think our regulators or our stakeholders would understand our rushing to litigation without our organizations ever having discussed their views. From my perspective, and I hope yours, SPP and Midwest ISO have an obligation to encourage our organizations to reach consensus on these matters through good faith discussions. Our stakeholders expect that of us. As is consistent with SPP’s value proposition, I trust this process to bring better and quicker results, than a process that proceeds directly to FERC for resolution.

Therefore I look forward to a meeting of the SACC as quickly as possible to discuss these matters and try to avoid litigation.

Take Care,

[Signature]
EXHIBIT L
Helping our members work together to keep the lights on... today and in the future

Updated 10/27/2010
Language thoughts

- Most logically refers to contract paths to a third party to which they are both connected.
- Entergy today, is a good example of an "entity" to which both MISO and SPP have a contract path.
  - Has been interpreted this way recently by SPP and MISO
  - MISO could schedule 300 MW to Entergy, for example, and if the contract capacity on MISO-Entergy ties were limited, the contract capacity over SPP would be available (absent congestion dealt with in the CMP section).
Language thoughts – 2

- If Entergy joined MISO, it would become part of MISO and no longer be a third-party entity to which MISO and SPP are both connected.

- Since there would no longer be a third-party entity involved, section 5.2 of the JOA would be irrelevant.
MISO_Petition_for_Declaratory_Order.PDF...............................1-29
Exhibits_MISO_Petition.PDF............................................30-153