

## **Memorandum of Understanding**

This Memorandum of Understanding (“MOU”) entered into the 10th day of August, 2015, by and between the Midcontinent Independent System Operator, Inc., (“MISO”), PJM Interconnection, LLC (“PJM”) and Southwest Power Pool, Inc. (“SPP”) (hereinafter collectively the “Parties”).

**Whereas**, the Parties are Regional Transmission Organizations approved by the Federal Energy Regulatory Commission (“FERC” or “Commission”); and

**Whereas**, each Party is a signatory to a Joint Operating Agreement (“JOA”) with one or both of the other Parties, and thereby each Party is a Reciprocal Entity as defined in its JOA; and

**Whereas**, the JOA by and between PJM and MISO was accepted for filing by FERC and is designated as MISO Rate Schedule No. 5 and PJM Rate Schedule No. 38, and the JOA by and between SPP and MISO was accepted for filing by FERC and is designated as MISO Rate Schedule No. 6 and SPP Rate Schedule No. 9; and

**Whereas**, each JOA by and between the Parties incorporates the Congestion Management Process (CMP), and thereby each Party is a member of the Congestion Management Process Council (CMPC); and

**Whereas**, the representatives of the Parties have been engaged in discussions in the CMP Council and its CMP Working Group regarding implementation matters under the CMP; and

**Whereas**, Minnkota Power Cooperative, Inc. (“Minnkota”) is a member owned transmission cooperative that has not signed the MISO membership agreement but whose transmission system, load, and generation are embedded within a MISO Local Balancing Authority Area; and

**Whereas**, External Asynchronous Resource is a bi-directional dispatchable dynamic schedule between MISO and Manitoba Hydro (“Manitoba”) whose impact of the tagged transaction is ignored by the IDC and is included in the MISO market flow calculation as the Market Based Operating Entity responsible for dispatch of the dynamic schedule; and

**Whereas**, the Parties wish to document their agreement regarding certain operating and market practices, affecting application of the terms of the CMP, such as practices regarding the treatment of the External Asynchronous Resource and Minnkota, including certain modifications to the CMP Council Charter.

**Now Therefore** the Parties agree as follows:

**1. Minnkota Power Cooperative – Coordination Agreement**

1.1 MISO has executed, and filed with FERC, a Coordination Agreement between MISO and Minnkota. By signing the Coordination Agreement, which incorporates the CMP, Minnkota will become a member of the CMP Council pursuant to the CMP Council Charter.

1.2 The MISO-Minnkota Coordination Agreement formalizes the relationship between Minnkota and MISO while recognizing Minnkota has sufficient generation and transmission capacity to serve its load without the use of the MISO Transmission System. In recognition of settlement agreements in place between MISO and Minnkota that allow Minnkota generation and load to be balanced within the MISO Balancing Authority Area, MISO had previously sought CMP Working Group approval in 2010 to combine the Minnkota generation to load flows and MISO market flows for purposes of calculating MISO market flows and had previously sought CMP Working Group approval in 2011 to combine Minnkota historic impacts and MISO historic impacts in the flowgate allocation process. Both of these requests were subsequently approved by the CMP Working Group.

1.3 While PJM and SPP do not waive their rights under section 206 of the Federal Power Act, PJM and SPP agree not to protest the Minnkota agreement at FERC in the proceeding in which the Minnkota agreement is initially filed in consideration of the following commitments by MISO. Further, MISO's obligations or commitments pursuant to this MOU are conditional upon FERC acceptance of the MISO-Minnkota Coordination Agreement (pending in Docket No. ER15-2227-000), as filed and without material modification to the following subject areas contained in the MISO-Minnkota Coordination Agreement: (i) market flows (as generally recognized throughout the MISO-Minnkota Coordination Agreement); (ii) allocations (as generally recognized throughout the MISO-Minnkota Coordination Agreement); (iii) transmission capacity sharing (sections 5.2 and 10.6 of the MISO-Minnkota Coordination Agreement); (iv) treatment of the MHEX flowgate (section 6.3 of the MISO-Minnkota Coordination Agreement); and (v) treatment of Minnkota under Module E of MISO's Tariff (section 12.3 of the MISO-Minnkota Coordination Agreement). FERC modification to other provisions of the MISO-Minnkota Coordination Agreement will not amend or negate MISO's obligations or commitments pursuant to this MOU.

1.3.1 MISO agrees to support amendments to the CMP Council Charter that will restrict voting rights of Council members when the member's interests are so closely aligned with those of an existing member with whom they have entered into a JOA or Coordination Agreement (such as wholly participating in a Market Entity's market or an Operating Entity's BA), that they have no incentive, financially or operationally, to vote against that existing member in the CMP Working Group or Council proceedings. Likewise, when a Council member does not have Reciprocal Coordinated Flowgates or does not have an open access tariff (which effectively prevents them from honoring allocations when providing transmission service), their voting rights will be restricted. It is the intent of the original CMP Council Charter that the proceedings encourage good faith debate and discussion of issues of importance to each of the members, representing

their individual view points, and that beneficial proposals to improve the CMP not be discouraged by block voting alignment.

1.3.2 MISO agrees, with Minnkota's consent, that Minnkota will be subject to the amendments described in Section 1.3.1 of this MOU, and Minnkota will have all rights of participation as a member of the CMP Council, but will not vote separately from MISO.

1.3.3 The Parties agree to support amendments of the CMP Council Charter and/or the baseline CMP, such that there will be no combining of allocations between Reciprocal Entities (parties to seams agreements that have a CMP) without prior discussion and approval by the CMP Council.

1.3.4 The Parties agree that a Reciprocal Entity wishing to combine allocations with a non-reciprocal entity must adhere to criteria set forth in new CMP section 6.10, to be proposed jointly by the Parties to the CMP Working Group and CMP Council. Unless otherwise agreed to by the Parties, proposed CMP language for new section 6.10 shall state the criteria by which allocations between a non-reciprocal entity and a Reciprocal Entity can be combined. The proposed criteria will include all of the following:

1. The Entity's<sup>1</sup> load and associated generation participates in the market of a Combining Entity<sup>2</sup>, pursuant to Commission accepted agreement(s).
2. The Entity has not placed its transmission facilities under the Open Access Transmission Tariff of the Combining Entity nor has the Entity executed the TO/Membership Agreement of the Combining Entity.
3. The Entity is 100% embedded (as applied to the load and associated generation being included in allocations and market flows) into the Combining Entity's footprint in accordance with the Congestion Management Process.
4. The Combining Entity must consistently treat the Entity's impacts in the IDC, market flow, and firm flow limit/entitlement calculations as it does its own impacts in accordance with the Congestion Management Process.
  - a. The Entity's load and associated generation otherwise needs to be eligible for inclusion in firm allocations, firm flow limit, and firm flow entitlement under the terms of the CMP.
5. Any transmission facilities owned by the Entity must be treated comparably to the transmission facilities of other Reciprocal Entities consistent with all other terms of the CMP.
6. The Combining Entity must give notice to the other Reciprocal Entities of its plans to combine allocations within sixty (60) days of making a filing at the Commission that

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1 "Entity" is used to denote non-reciprocal entity whose load and associated generation are being combined with an existing Reciprocal Entity's generation and load for purposes of allocations and congestion management under the CMP.

2 "Combining Entity" is used to denote Reciprocal Entity who is receiving the load and associated generation from a non-reciprocal entity for purposes of allocations and congestion management under the CMP.

would result in an Entity's load and associated generation being combined with the Combining Entity or upon combining allocations (whichever occurs first). Even though a situation in which a Combining Entity has proposed to combine allocations with an Entity may satisfy criteria items 1 through 5, this does not preclude other Reciprocal Entities from raising any objection either through the JOA Alternative Dispute Resolution process or by filing a Section 206 complaint with the Commission if the proposed combination of allocations would be inconsistent with the CMP or produces a result that is unjust and unreasonable.

1.4 PJM and SPP agree to support MISO's continued combination of Minnkota and MISO market flows and flowgate allocations in the calculation of MISO market flows and flowgate allocations at the CMP Working Group, the CMP Council, the IDC Working Group, and to the extent approval of such combined allocations is deemed to require the consent of either PJM or SPP under their respective JOAs with MISO, both SPP and PJM agree to such treatment.

## **2. Manitoba Hydro - MISO Agreement**

2.1 MISO has an agreement with Manitoba Hydro ("Manitoba") pursuant to which most Manitoba generation and loads do not participate directly in the dispatch of the MISO markets. Manitoba and MISO utilize the Market to non-Market coordination provisions of the CMP to a limited extent. To resolve certain market flow calculation and operational issues, the Parties agree to the following terms for implementing MISO and Manitoba Hydro operations under the CMP.

2.1.1 Following execution of the MOU, MISO has the commitment from Manitoba to work together to remove the combined allocation language from the MISO-Manitoba Hydro Seams Operating Agreement. MISO will work with Manitoba to revise the MISO-Manitoba Hydro Seams Operating Agreement to remove Manitoba historic generation-to-load impacts and point-to-point impacts from the MISO historic generation-to-load impacts and point-to-point impacts used to determine MISO's flowgate allocations under the CMP.

2.1.2 The Parties agree not to protest, at FERC or any other venue, the filing at the Commission associated with effectuating the modifications described in Section 2.1.1. This commitment shall not prejudice any Party's rights to protest any other issue not specifically resolved through this MOU.

2.1.3 The Parties agree to approve the MISO proposal to include Manitoba's flows resulting from bi-directional External Asynchronous Resource transactions in the MISO market flow calculation under the CMP. For this purpose, MISO agrees to model the market flow impacts associated with the bi-directional External Asynchronous Resource using the Marginal Zone methodology consistent with how MISO calculates the impacts

of all other transactions in the determination of market flows reported to the IDC and utilized for market-to-market.

2.1.4 The Parties agree to propose and support new or revised provisions in the CMP or ICP to clarify the treatment of the External Asynchronous Resource transactions in market flows as a dispatchable dynamic schedule in accordance with Section 2.1.3. The Parties agree that a starting point for negotiations of the new or revised CMP provisions include a description that a dispatchable dynamic schedule is a mechanism that is utilized by a market entity using its Security Constrained Economic Dispatch 1) to dispatch another operating entity's generator or fleet of generators by establishing generator basepoints to meet its demand via an import dispatchable dynamic schedule that is associated with a NERC tagged transaction or 2) to dispatch its own generator or a fleet of generators by establishing generator basepoints to meet another operating entity's demand via an export dispatchable dynamic schedule that is associated with a NERC tagged transaction. As may be required, the Parties agree to further define or clarify the term dispatchable dynamic schedule in the CMP or ICP.

2.1.5 The Parties agree that any dispatchable dynamic schedule included in a Party's market flow that exists in which the transaction volume thereof will be determined by a Party's security constrained economic dispatch, then the affected Party(ies) will treat the schedule in a consistent manner (i.e. POR/POD, marginal zone, slice of system) with its treatment of all other import and export transactions for the purposes of determining market flows reported to the IDC and utilized for market-to-market. A Party must treat all dispatchable dynamic schedules between itself and another operating entity in the same manner; it must reach agreement with the other operating entity to include all dispatchable dynamic schedule impacts in the market flow between itself and the other operating entity. Otherwise, the Party must exclude from its market flow all impacts of all dispatchable dynamic schedules between itself and the other operating entity.

2.1.6 The Parties agree that no Market-to-Market resettlements will occur for events prior to October 1, 2015, related to MISO's treatment of Manitoba allocations or generation to load impacts.

### **3. Dispute Resolution**

3.1 Any dispute arising under this MOU shall be resolved as set forth in Article 14 of the JOA of the Party against whom the dispute is brought. If dispute is brought against two of the Parties by the remaining Party, the Party bringing the dispute shall use Article 14 of any JOA to which it is a party and the responding Parties consent and agree to use those dispute resolution provisions.

### **4. Term and Termination**

4.1 The MOU shall remain effective until terminated by mutual consent of all Parties.

**5. Miscellaneous**

5.1 Notice: Any notice required to be given pursuant to this MOU shall be given as provided in Section 18.10 of the JOA of the Party to whom notice is given.

5.2 Definitions: Any term not defined herein shall be as defined in the applicable JOA.


5.3 JOA: Except as provided in this MOU, the JOA shall control the implementation of this MOU, and any matter not addressed herein shall be resolved by reference to the appropriate provisions, if any, of the applicable JOA.



**IN WITNESS WHEREOF, the Parties have caused this MOU to be executed by their duly authorized officers as of the day and year first above written.**

MIDCONTINENT INDEPENDENT  
SYSTEM OPERATOR, INC.

PJM INTERCONNECTION, LLC.

By: 

By: 

Vice President, System Planning & Seams Coordination  
(Title)

Senior Vice President, Market Services  
(Title)

August 10, 2015  
(Date)

August 10, 2015  
(Date)

SOUTHWEST POWER POOL, INC.

By: 

Executive Vice President and COO  
(Title)

8/10/2015  
(Date)

**APPROVED**  
**MSK**