

January 29, 2020

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: Southwest Power Pool, Inc., Docket No. ER20-____-000
Revisions to SPP-MISO Joint Operating Agreement to Enhance the
Pseudo-Tie Coordination**

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, and Part 35 of the regulations of the Federal Energy Regulatory Commission (“FERC” or “Commission”), 18 C.F.R. § 35, *et seq.*, Southwest Power Pool, Inc. (“SPP”) hereby submits for filing revisions to Articles II, IV, V and XII of the Joint Operating Agreement (“JOA”)¹ between SPP and the Midcontinent Independent System Operator, Inc. (“MISO”) (jointly, “the RTOs”). As more fully described in Section II below, by submitting this filing, SPP seeks to implement revisions to improve pseudo-tie coordination requirements between MISO and SPP by incorporating these requirements into the JOA.²

SPP respectfully requests that the Commission accept the proposed revisions to the JOA as just and reasonable to be effective March 30, 2020.

¹ The formal name of the SPP-MISO JOA is the “Joint Operating Agreement between the Midcontinent Independent System Operator, Inc. and Southwest Power Pool, Inc.” The JOA is a FERC-filed rate schedule of both SPP and MISO. The JOA is designated as MISO’s Second Revised Rate Schedule FERC No. 6 and is available on MISO’s website at: <https://www.misoenergy.org/legal/tariff/>. The JOA is designated as SPP’s Rate Schedule FERC No. 9 and is available on SPP’s website at: <https://www.spp.org/spp-documents-filings/?id=18418>. Although SPP and MISO have agreed to these revisions to the JOA, each maintains its own version of the JOA in its respective eTariff database at the Commission. Accordingly, SPP and MISO each must separately file the proposed revisions. Other than modifications to reflect each respective party’s tariff, SPP and MISO intend for its transmittal letters to be substantively identical.

² MISO is making a simultaneous filing to incorporate identical changes in its own version of the JOA. Although SPP and MISO have agreed to these revisions to the JOA, each maintains its own version of the JOA in its respective e-Tariff database at the Commission. Accordingly, SPP and MISO each must separately file the agreed upon proposed revisions.

I. BACKGROUND

A. Pseudo-Ties

“A pseudo-tie involves the real-time transfer of control of a generating resource or load from the Native Balancing Authority, in whose area that resource or load is physically located, to an Attaining Balancing Authority that is responsible for operating the grid in a different geographic location.”³ Attachment AO (Agreement Establishing a Pseudo-Tie Electrical Interconnection Agreement) of the SPP Open Access Transmission Tariff⁴ (“Pseudo-Tie Agreement”) permits: (1) load and generating resources external to SPP Balancing Authority to be served by SPP Balancing Authority and (2) load and generating resources internal to SPP to function as part of an External Balancing Authority. The Pseudo-tie Agreement establishes a pseudo-tie electrical interconnection point between the SPP Balancing Authority and the External Balancing Authority and obligates SPP, the External Balancing Authority, and the Market Participant to perform certain functions relating to modeling, transmission interchange scheduling, and coordination to facilitate the operation of the pseudo-tied electrical point.

As the Commission is aware, the JOA helps to ensure coordinated reliable and efficient operation of the transmission system along the MISO and SPP seam. Maintaining a high degree of reliability is of the utmost importance to the RTOs and coordinated planning and operations is a fundamental requirement of the North American Electric Reliability Corporation’s (“NERC”) Reliability Standards⁵ that apply to the functions performed by MISO and SPP. As requested by this filing, it would be beneficial to the efficient operation of the transmission system along the MISO and SPP seam to include in the JOA the obligations currently included in Pseudo-Tie Agreements, where MISO is the External Balancing Authority.⁶

B. MISO-SPP Collaboration

The proposed JOA revisions address definitions, requirements, modeling,

³ *PJM Interconnection, L.L.C. and Midcontinent Indep. Sys. Operator, Inc.*, 169 FERC ¶ 61,038, at P 2 (2019).

⁴ Southwest Power Pool, Inc., Open Access Transmission Tariff, Sixth Revised Volume No. 1 (“SPP Tariff”).

⁵ The RTOs ensure coordination on the seams through compliance with a number of existing NERC Reliability Standards, as well as the JOA, which encompasses processes and procedures for how the parties coordinate as neighboring Reliability Coordinators, Balancing Authorities, and transmission Planning Coordinators, among others.

⁶ Concurrently with the filing of the proposed JOA revisions included herein, SPP is submitting revisions to Attachment AO of the SPP Tariff to remove any obligations for MISO, as the External Balancing Authority, required by Pseudo-Tie Agreements executed after the effective date for the proposed revisions.

interchange schedules, and general pseudo-tie coordination. This set of proposed revisions is one part of a comprehensive effort to address market and reliability challenges posed by pseudo-ties and complements the separate, but parallel efforts to implement tariff provisions for new pseudo-ties and respond to the congestion overlap complaints from MISO, PJM, and SPP stakeholders. Within the context of the overall effort, MISO and SPP have collaborated to address very specific aspects of administering pseudo-ties, such as generation commitment and dispatch, with a focus on reliability assurance. These proposed JOA revisions are the result of that collaboration and provide greater clarity on the roles between the two RTOs and the specific actions that should or may be taken to ensure reliability. Further, these JOA revisions largely mirror similar edits made to the MISO-PJM JOA that the Commission approved in December 2017.⁷

II. DISCUSSION OF PROPOSED JOA REVISIONS

The proposed changes to the JOA outline the responsibilities of SPP and MISO as it relates to facilitating the operation of pseudo-tied assets between the RTOs. The proposed additions to the JOA detail how SPP and MISO will model pseudo-tied resources and loads. The proposed additions to the JOA also detail the requirement that the Attaining Balancing Authority will include the market flow impacts of the pseudo-tie for purposes of congestion management procedures. Lastly, the proposed additions to the JOA adds specific coordination requirements between SPP and MISO to facilitate the coordinated, reliable, and efficient operation of pseudo-tied resources.

SPP and MISO propose to revise the JOA to add new provisions related to pseudo-ties and make other minor revisions to maintain the accuracy of the JOA, as described below.

A. Revisions to Section 2.2 Definitions

SPP proposes to add the following language:⁸

2.2.4 “Attaining Balancing Authority” or “Attaining BA” shall have the same meaning set forth in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time.

2.2.5 “Attaining Balancing Authority Area” or “Attaining BAA” shall mean the Balancing Authority Area, as that term is defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, of the Attaining Balancing Authority.

⁷ *Midcontinent Ind. Sys. Op., Inc.*, 161 FERC ¶ 61,313 (2017) (“December 2017 Order”).

⁸ SPP re-numbers the remainder of this section to accommodate the addition of the new definitions. SPP also removes the words “be defined as” from the definition of Extra High Voltage in Section 2.2.18.

2.2.6 “Attaining Reliability Coordinator” or “Attaining RC” is the entity that is responsible for Reliable Operation of the Bulk Electric System, as those terms are defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, for the Attaining Balancing Authority.

2.2.40 “Native Balancing Authority” or “Native BA” shall have the same meaning set forth in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time.

2.2.41 “Native Balancing Authority Area” or “Native BAA” shall mean the Balancing Authority Area, as that term is defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, of the Native Balancing Authority.

2.2.42 “Native Reliability Coordinator” or “Native RC” is the entity that is responsible for Reliable Operation of the Bulk Electric System, as those terms are defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, where the pseudo-tie is physically located.

B. Revisions to Section 4.1.3 Models

SPP proposes to add the following language:

Pseudo-Tie Modeling Requirements: The Native BA and the Attaining BA shall coordinate modeling in accordance with the rules of the Native BA and Attaining BA, respectively, for modeling the pseudo-tie. If either the Native BA or Attaining BA do not have the necessary information to support modeling the pseudo-tie, modeling data will be requested from the entity seeking to pseudo-tie. This includes coordination of specific technical details for each pseudo-tie. Section 12.2 provides more detail on pseudo-tie requirements.

C. Revisions to Section 5.1.4 Transmission Interchange Schedules/Net Scheduled Interchange

SPP proposes to add the following language under the existing “Requirements” description:

The impacts of pseudo-ties will be included in the Attaining BA’s market flow impacts for purposes of congestion management procedures. Neither MISO, nor SPP nor the entity seeking to pseudo-tie shall tag or request to tag the energy flows from a pseudo-tie into the Attaining BAA.

D. Revisions to Section 12.2 Pseudo-Tie Coordination

SPP proposes to add this new Section 12.2 to the JOA, which contains the

following new subsections:

12.2.1 Authorities for Pseudo-Ties From MISO into SPP.

MISO will be the Native RC and the Native BA. MISO will be responsible for monitoring transmission related congestion (SOLs and IROLs) on its transmission system. SPP will be the Attaining RC and the Attaining BA. SPP will be responsible for the commitment and dispatch of the resources that are physically located within the MISO BAA and that are pseudo-tied into the SPP BAA. SPP will include the impacts of such pseudo-ties in its congestion management procedures.

12.2.2 Authorities for Pseudo-Ties From SPP into MISO.

SPP will be the Native RC and the Native BA. SPP will be responsible for monitoring transmission related congestion (SOLs and IROLs) on its transmission system. MISO will be the Attaining RC and the Attaining BA. MISO will be responsible for the commitment and dispatch of the resources that are physically located within the SPP BAA and that are pseudo-tied into the MISO BAA. MISO will include the impacts of such pseudo-ties in its congestion management procedures.

12.2.3 Partial Pseudo-Tied Resources.

If only a portion of the installed capacity of a resource is pseudo-tied out of the Native BAA and into the Attaining BAA such that a unique share resides in each Balancing Authority Area, the Attaining BA will be responsible for sending commitment and dispatch instructions to that portion of the resource pseudo-tied into the Attaining BA. The Native BA will be responsible for sending commitment and dispatch instructions to the portion of the resource that remains in the Native BA.

The sum of the shares residing separately in the respective BAA shall not exceed the nameplate capability of the entire resource. The individual portions of the resource shall not exceed the modeled capacity in their respective BAA.

12.2.4 Transmission Service.

SPP and MISO agree that each Party's respective OATT outlines the transmission service requirements related to the delivery of energy from pseudo-tied resources or the delivery of energy to pseudo-tied load.

12.2.5 Station Service.

SPP and MISO agree that the entity pseudo-tying the resource from the Native BAA to the Attaining BAA will obtain station service for the pseudo-tied resource in accordance with the rules of the Native BA.

12.2.6 Non-recallability.

SPP and MISO agree that the pseudo-tied resource is non-recallable by the Native RC and Native BA.

SPP and MISO agree that in the event either Party declares a system emergency with respect to its system, the Parties will coordinate in accordance with Section 8.1 of this Agreement.

12.2.7 Losses.

SPP and MISO agree that each Party's respective OATT outlines the requirements for losses related to the delivery of energy from pseudo-tied resources or the delivery of energy to pseudo-tied load.

12.2.8 Loss of Communication.

SPP and MISO agree that in the event communication is lost between any of the Parties (including communication between the Native BA or the Attaining BA and the pseudo-tie), the Native BA and the Attaining BA will freeze at the last known output value and it is the responsibility of the pseudo-tie to verbally communicate changes of the real time pseudo-tie output values with the other Parties.

12.2.9 Suspension.

SPP and MISO shall each have the right to suspend a pseudo-tie between their respective BAs in accordance with their respective OATT. SPP and MISO shall coordinate the change to the status of the pseudo-tie.

12.2.10 Termination.

SPP and MISO shall each have the right to terminate a pseudo-tie between their respective BAs in accordance with their respective OATT and the notice provisions below. SPP and MISO shall coordinate the change to the status of the pseudo-tie.

12.2.11 Notice of Termination.

The BA seeking to suspend or terminate the pseudo-tie in accordance with their respective OATT shall give the other BA at least sixty days (60) days written notice prior to the effective date of such termination, subject to receiving all necessary regulatory approvals.

E. The Proposed JOA Revisions are Just and Reasonable

The proposed revisions were developed to incorporate clear and specific rules in the JOA addressing how pseudo-ties between the SPP Balancing Authority Area and the MISO Balancing Authority Area will be implemented and operated, and for which applicable NERC Reliability Standards require Native and Attaining Balancing Authorities to coordinate and agree on.⁹ NERC Reliability Standard INT-004-3.1

⁹ NERC Reliability Standard INT-004-3.1, available at: <https://www.nerc.com/files/INT-004-3.1.pdf>.

specifically indicates that some of the information included therein are merely guidelines and historical ways of handling the roles and responsibilities for certain obligations, but that Native and Attaining Balancing Authorities can agree to different arrangements if they so choose. The proposed revisions are SPP's and MISO's agreement on which of the RTOs will be responsible for certain specific roles and responsibilities with regard to the implementation and operation of pseudo-ties, some of which to date have not been formally agreed to in the JOA, joint operating guide, or any other agreement.

SPP respectfully submits that the proposed JOA revisions are just and reasonable and should be accepted by the Commission. These additions to the JOA provide needed clarity and flexibility that enable SPP and MISO to effectively respond to varying operational conditions, and they ensure consistency with applicable NERC Reliability Standards.¹⁰ Further, the revisions are similar to those already accepted by the Commission in the MISO-PJM JOA and are intended achieve the same aim.¹¹ These revisions, while they stand on their own, do complement SPP's proposed future filing to incorporate changes to Attachment AO of the SPP Tariff.

III. STAKEHOLDER PROCESS

The proposed revisions were reviewed through the SPP stakeholder process, including: (1) a meeting of the Seams Steering Committee ("SSC") on November 6, 2019; and (2) a meeting of the Operating Reliability Working Group ("ORWG") on December 3, 2019.

IV. DOCUMENTS SUBMITTED IN THIS FILING

In addition to this transmittal letter, the documents submitted in this filing are:

Clean and Redline Proposed JOA Revisions, Rate Schedule FERC No. 9.¹²

V. EFFECTIVE DATE

SPP requests that the proposed revisions be made effective on March 30, 2020, which is not less than 60 days or more than 120 days after the filing date.

¹⁰ See NERC Reliability Standards BAL-005-0.2b, BAL-005-1, INT-004-3.1, IRO-001-1.1, IRO-001-4, and TOP-001-1a, available at: <http://www.nerc.com/pa/Stand/Reliability%20Standards%20Complete%20Set/RSCCompleteSet.pdf>.

¹¹ See December 2017 Order.

¹² In addition to the revisions described herein, tariff section Rate Schedule 9 Article XIII is attached to this filing in order to modify the collation value for this tariff record. Prior to submittal of this filing, SPP found that it would be necessary to modify the collation value for this tariff record in order to allow SPP to insert the new proposed tariff records included in this filing.

VI. COMMUNICATIONS AND SERVICE

All communications with respect to this submission should be directed to the following individuals:

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SPP has electronically served a copy of this filing on all its Members, Transmission Customers, and Market Participants. A complete copy of this filing will be posted on the SPP web site, www.spp.org, and is also being served on all affected state commissions.

VII. CONCLUSION

For all of the foregoing reasons, SPP respectfully requests that: (1) the Commission accept for filing the enclosed JOA revisions as set forth herein; and (2) waive any regulations or Tariff requirements it may deem applicable in this instance, including any not specifically identified herein, and grant an effective date of March 30, 2020.

Respectfully submitted,

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Section 2.2 Definitions.

2.2.1 “a & b multipliers” shall mean the multipliers that are applied to TRM in the planning horizon and in the operating horizon to determine non-firm AFC. The “a” multiplier is applied to TRM in the planning horizon to determine non-firm AFC. The “b” multiplier is applied to TRM in the operating horizon to determine non-firm AFC. The “a & b” multipliers can vary between 0 and 1, inclusive. They are determined by individual transmission providers based on network reliability concerns.

2.2.2 “Affected System” shall mean the electric system of the Party other than the Party to which a request for interconnection or long-term firm delivery service is made and that may be affected by the proposed service.

2.2.3 “Agreement” shall mean this document, as amended from time to time, including all attachments, appendices, and schedules.

2.2.4 “Attaining Balancing Authority” or “Attaining BA” shall have the same meaning set forth in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time.

2.2.5 “Attaining Balancing Authority Area” or “Attaining BAA” shall mean the Balancing Authority Area, as that term is defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, of the Attaining Balancing Authority.

2.2.6 “Attaining Reliability Coordinator” or “Attaining RC” is the entity that is responsible for Reliable Operation of the Bulk Electric System, as those terms are defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, for the Attaining Balancing Authority.

2.2.7 “Available Flowgate Capability” shall mean the rating of the applicable Flowgate less the projected loading across the applicable Flowgate less TRM and CBM. The firm AFC is calculated with only the appropriate Firm Transmission Service reservations (or interchange schedules) in the model, including recognition of all roll-over Transmission Service rights. Non-firm AFC is determined with appropriate firm and non-firm reservations (or interchange schedules) modeled.

2.2.8 “Balancing Authority” shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports interconnection frequency in real time. For MISO references to BA may be applicable to a BA and/or an LBA.

2.2.9 “Balancing Authority Area” shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area. For MISO references to BA may be applicable to a BAA and/or an LBAA.

2.2.10 “Bulk Electric System” shall mean the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving load with only one transmission source are generally not included in this definition.

2.2.11 “Confidential Information” shall have the meaning stated in Section 18.1.

2.2.12 “Congestion Management Process” means that document which is Attachment 1 to this Agreement as it exists on the Effective Date and as it may be amended or revised from time to time.

2.2.13 “Coordinated Flowgate(s)” shall mean a Flowgate impacted by an Operating Entity as determined by one of the five studies detailed in Section 3 of the attached document entitled “Congestion Management Process.” For a Market-Based Operating Entity, these Flowgates will be subject to the requirements under the Congestion Management portion of the Congestion Management Process (Sections 4 and 5). A Coordinated Flowgate may be under the operational control of a Third Party.

2.2.14 “Coordinated Operations” means all activities that will be undertaken by the Parties pursuant to this Agreement.

2.2.15 “Coordinated System Plan” shall have the meaning stated in Section 9.3.

2.2.16 “Economic Dispatch” shall mean the sending of dispatch instructions to generation units to minimize the cost of reliably meeting load demands.

2.2.17 “Effective Date” shall have the meaning stated in Section 13.1.

2.2.18 “Extra High Voltage” shall mean 230 KV facilities and above.

2.2.19 “Facilities Study” shall mean a study conducted by the Transmission Service Provider, or its agent, for the interconnection customer to determine a list of facilities, the cost of those facilities, and the time required to interconnect a generating facility with the transmission system or enable the sale of firm transmission service.

2.2.20 “Feasibility Study” shall mean a preliminary evaluation of the system impact of interconnecting a generating facility to the transmission system or the initial review of a transmission service request.

2.2.21 “Firm Flow” shall mean the estimated impacts of Firm Transmission Service on a particular Coordinated Flowgate.

2.2.22 “Firm Flow Limit” shall mean the maximum value of Firm Flows an entity can have on a Coordinated Flowgate based on procedures defined in Sections 4 and 5 of the Congestion Management Process (Attachment 1 of the Joint Operating Agreement).

2.2.23 “Flowgate” shall mean a representative modeling of facilities or group of facilities that may act as significant constraint points on the regional system.

2.2.24 “Intellectual Property” shall mean (i) ideas, designs, concepts, techniques, inventions, discoveries, or improvements, regardless of patentability, but including without limitation patents, patent applications, mask works, trade secrets, and know-how; (ii) works of authorship, regardless of copyright ability, including without limitation copyrights and any moral rights recognized by law; and (iii) any other similar rights, in each case on a worldwide basis.

2.2.25 “Interconnection Service” shall mean the service provided by the Transmission Service Provider associated with interconnecting the generating facility to the transmission system and enabling it to receive electric energy and capacity from the generating facility at the point of interconnection, pursuant to the terms of the generator interconnection agreement and, if applicable, the tariff.

2.2.26 “Interconnection Study” shall mean any of the following studies: the interconnection Feasibility Study, the interconnection System Impact Study, and the interconnection Facilities Study, or the restudy of any of the above, described in the generator interconnection procedures.

2.2.27 “Interconnected Reliability Operating Limit” shall mean a System Operating Limit that if violated could lead to instability, uncontrolled separation(s) or cascading outages that adversely impact the reliability of the Bulk Electric System.

2.2.28 “Intermittent Generation” shall mean a resource that cannot be scheduled and controlled to produce the anticipated energy.

2.2.29 “Interregional Coordination Process” shall mean the market-to-market coordination document incorporated herein as Attachment 2 to this Agreement, as it exists on the Effective Date and as it may be amended or revised from time to time.

2.2.30 “Interregional Planning Stakeholder Advisory Committee” shall have the meaning given under Section 9.1.2.

2.2.31 “Interregional Project” shall have the meaning given under Section 9.6.3.1.

2.2.32 “Local Balancing Authority” shall mean an operational entity which is: (i) responsible for compliance to NERC for the subset of NERC Balancing Authority reliability standards defined for its local area within the MISO Balancing Authority Area, and (ii) a party (other than MISO) to the Balancing Authority Amended Agreement which, among other things, establishes the subset of NERC Balancing Authority reliability standards for which the LBA is responsible.

2.2.33 “Local Balancing Authority Area” shall mean the collection of generation,

transmission, and loads that are within the metered boundaries of an LBA.

2.2.34 “Market” shall mean the energy and/or ancillary services market facilitated by the Parties pursuant to FERC Order No. 2000.

2.2.35 “Market-Based Operating Entity” shall mean an Operating Entity that operates a security constrained, bid-based economic dispatch bounded by a clearly defined market area.

2.2.36 “Market Flows” shall mean the calculated energy flows on a specified Flowgate as a result of dispatch of generating resources serving market load within a Market-Based Operating Entity’s market.

2.2.37 “Market Monitor” shall monitor market power and other competitive conditions in the Markets and make reports and recommendations as appropriate.

2.2.38 “Memorandum of Understanding” shall mean that certain predecessor agreement between the Parties to develop this Joint Operating Agreement dated February 27, 2004.

2.2.39 “MISO” has the meaning stated in the preamble of this Agreement.

2.2.40 “Native Balancing Authority” or “Native BA” shall have the same meaning set forth in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time.

2.2.41 “Native Balancing Authority Area” or “Native BAA” shall mean the Balancing Authority Area, as that term is defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, of the Native Balancing Authority.

2.2.42 “Native Reliability Coordinator” or “Native RC” is the entity that is responsible for Reliable Operation of the Bulk Electric System, as those terms are defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, where the pseudo-tie is physically located.

2.2.43 “Network Upgrades” shall have the meaning as defined in the MISO and SPP tariffs.

2.2.44 “NERC Compliance Registry” shall mean a listing of all organizations subject to compliance with the approved reliability standards.

2.2.45 “Notice” shall have the meaning stated in Section 18.10.

2.2.46 “Operating Entity” shall mean an entity that operates and controls a portion of the bulk transmission system with the goal of ensuring reliable energy interchange between generators, loads, and other operating entities.

2.2.47 “Outages” shall mean the planned unavailability of transmission and/or generation facilities operated by the Parties, as described in Article VII of this Agreement.

2.2.48 “Party” or “Parties” refers to each party to this Agreement or both, as applicable.

2.2.49 “Purchasing-Selling Entity” shall mean the entity that purchases or sells, and takes title to, energy, capacity, and interconnected operations services.

2.2.50 “Reciprocal Coordination Agreement” shall mean an agreement between Operating Entities to implement the reciprocal coordination procedures defined in the Congestion Management Process.

2.2.51 “Reciprocal Coordinated Flowgate(s)” shall mean a Flowgate that is subject to reciprocal coordination by Operating Entities, under either this Agreement (with respect to Parties only) or a Reciprocal Coordination Agreement between one or more Parties and one or more Third Party Operating Entities. A RCF is:

- A Coordinated Flowgate that is (a) (i) within the operational control of a Reciprocal Entity or (ii) may be subject to the supervision of a Reciprocal Entity as RC, and (b) affected by the transmission of energy by the Parties or by either Party or both Parties and one or more Reciprocal Entities; or
- A Coordinated Flowgate that is (a) affected by the transmission of energy by one or more Parties and one or more Third Party Operating Entities, and (b) expressly made subject to Congestion Management Process reciprocal coordination procedures under a Reciprocal Coordination Agreement between or among such Parties and Third Party Operating Entities; or
- A Coordinated Flowgate that is designated by agreement of both Parties as a RCF.

2.2.52 “Reciprocal Entity” shall mean any entity that coordinates the future-looking management of Flowgate capability in accordance with a reciprocal agreement as described in the Congestion Management Process.

2.2.53 “Reliability Coordinator” shall mean that party approved by NERC to be responsible for reliability for a RC Area.

2.2.54 “Reliability Coordinator Area” (“RC Area”) shall mean the collection of generation, transmission, and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.

2.2.55 “SCADA Data” shall mean the electric system security data that is used to monitor the electrical state of facilities, as specified in NERC Standard TOP-005.

2.2.56 “SPP” Has the meaning stated in the preamble of this Agreement.

2.2.57 “State Estimator” shall mean that computer model that computes the state (voltage magnitudes and angles) of the transmission system using the network model and real-time measurements. Line flows, transformer flows, and injections at the buses are calculated from the known state and the transmission line parameters. The state estimator has the capability to detect and identify bad measurements.

2.2.58 “System Impact Study” shall mean an engineering study that evaluates the impact of a proposed interconnection or transmission service request on the safety and reliability of transmission system and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the generating facility were interconnected or transmission service commenced without project modifications or system modifications.

2.2.59 “System Operating Limit” shall mean the value (such as MW, MVAR, amperes, frequency, or volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.

2.2.60 “Third Party” refers to any entity other than a Party to this Agreement.

2.2.61 “Third Party Operating Entity” shall refer to a Third Party entity that operates and controls a portion of the bulk transmission system with the goal of ensuring reliable energy interchange between generators, loads, and other operating entities.

2.2.62 “Total Flowgate Capability” shall mean the maximum amount of power that can flow across that interface without overloading (either on an actual or contingency basis) any element of the Flowgate. The Flowgate capability is in units of megawatts. If the Flowgate is voltage or stability limited, a megawatt proxy is determined to ensure adequate voltages and stability conditions.

2.2.63 “Transmission Issue” shall mean transmission needs driven by reliability, economic, and/or public policy requirements.

2.2.64 “Transmission Loading Relief” shall mean the procedures used in the Eastern Interconnection as specified in NERC Standards IRO-006 and the NAESB Business Practices WEQ-008.

2.2.65 “Transmission Operator” shall mean the entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission facilities.

2.2.66 “Transmission Owner” shall mean a Transmission Owner as defined under the Parties’ respective tariffs.

2.2.67 “Transmission Reliability Margin” shall mean that amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

2.2.68 “Transmission Service Provider” shall mean the entity that administers the transmission tariff and provides transmission service to transmission customers under applicable transmission service agreements.

2.2.69 “Transmission System Emergencies” are conditions that have the potential to exceed or would exceed an IROL.

2.2.70 “Voltage and Reactive Power Coordination Procedure” are the procedures under Article XI for coordination of voltage control and reactive power requirements.

Section 4.1.3 Models.

Purpose: EMS models contain detailed representations of the transmission and generation configurations within each RTO and neighboring systems. The Parties depend upon EMS models for reliability coordination and market operations. The regular exchange of models is to ensure that each Party is using current and up-to-date representations of the other Party.

Requirements: The Parties will exchange their detailed EMS models once a year in CIM or another mutually agreed-upon electronic format, but shall provide each other with updates of the model information in an agreed-upon electronic format as new data becomes available. This yearly exchange will include the ICCP/ISN mapping files, identification of individual bus loads, seasonal equipment ratings and one-line drawings that will be used to expedite the model conversion process. The Parties will also exchange updates that represent the incremental changes that have occurred to the EMS model since the most recent update.

Pseudo-Tie Modeling Requirements: The Native BA and the Attaining BA shall coordinate modeling in accordance with the rules of the Native BA and Attaining BA, respectively, for modeling the pseudo-tie. If either the Native BA or Attaining BA do not have the necessary information to support modeling the pseudo-tie, modeling data will be requested from the entity seeking to pseudo-tie. This includes coordination of specific technical details for each pseudo-tie. Section 12.2 provides more detail on pseudo-tie requirements.

Section 5.1.4 Transmission Interchange Schedules/Net Scheduled Interchange

Purpose: Because interchange schedules impact the short-term use of the transmission system, exchange of schedule data is necessary to determine the remaining capability of the transmission system as well as to determine the net impact of loop flow.

Requirements: Each Party will make available to the other its interchange schedules/NSI, as required to permit accurate calculation of AFC values. Due to the high volume of this data, the Parties shall either post this data to a mutually agreed upon site for downloading or utilize tag dump information by the other Party as required by its own process and timing requirements.

The impacts of pseudo-ties will be included in the Attaining BA's market flow impacts for purposes of congestion management procedures. Neither MISO, nor SPP nor the entity seeking to pseudo-tie shall tag or request to tag the energy flows from a pseudo-tie into the Attaining BAA.

Section 12.2 Pseudo-Tie Coordination.

Section 12.2.1 Authorities for Pseudo-Ties From MISO into SPP.

MISO will be the Native RC and the Native BA. MISO will be responsible for monitoring transmission related congestion (SOLs and IROLs) on its transmission system. SPP will be the Attaining RC and the Attaining BA. SPP will be responsible for the commitment and dispatch of the resources that are physically located within the MISO BAA and that are pseudo-tied into the SPP BAA. SPP will include the impacts of such pseudo-ties in its congestion management procedures.

Section 12.2.2 Authorities for Pseudo-Ties From SPP into MISO.

SPP will be the Native RC and the Native BA. SPP will be responsible for monitoring transmission related congestion (SOLs and IROLs) on its transmission system. MISO will be the Attaining RC and the Attaining BA. MISO will be responsible for the commitment and dispatch of the resources that are physically located within the SPP BAA and that are pseudo-tied into the MISO BAA. MISO will include the impacts of such pseudo-ties in its congestion management procedures.

Section 12.2.3 Partial Pseudo-Tied Resources.

If only a portion of the installed capacity of a resource is pseudo-tied out of the Native BAA and into the Attaining BAA such that a unique share resides in each Balancing Authority Area, the Attaining BA will be responsible for sending commitment and dispatch instructions to that portion of the resource pseudo-tied into the Attaining BA. The Native BA will be responsible for sending commitment and dispatch instructions to the portion of the resource that remains in the Native BA.

The sum of the shares residing separately in the respective BAA shall not exceed the nameplate capability of the entire resource. The individual portions of the resource shall not exceed the modeled capacity in their respective BAA.

Section 12.2.4 Transmission Service.

SPP and MISO agree that each Party's respective OATT outlines the transmission service requirements related to the delivery of energy from pseudo-tied resources or the delivery of energy to pseudo-tied load.

Section 12.2.5 Station Service.

SPP and MISO agree that the entity pseudo-tying the resource from the Native BAA to the Attaining BAA will obtain station service for the pseudo-tied resource in accordance with the rules of the Native BA.

Section 12.2.6 Non-recallability.

SPP and MISO agree that the pseudo-tied resource is non-recallable by the Native RC and Native BA.

SPP and MISO agree that in the event either Party declares a system emergency with respect to its system, the Parties will coordinate in accordance with Section 8.1 of this Agreement.

Section 12.2.7 Losses.

SPP and MISO agree that each Party's respective OATT outlines the requirements for losses related to the delivery of energy from pseudo-tied resources or the delivery of energy to pseudo-tied load.

Section 12.2.8 Loss of Communication.

SPP and MISO agree that in the event communication is lost between any of the Parties (including communication between the Native BA or the Attaining BA and the pseudo-tie), the Native BA and the Attaining BA will freeze at the last known output value and it is the responsibility of the pseudo-tie to verbally communicate changes of the real time pseudo-tie output values with the other Parties.

Section 12.2.9 Suspension.

SPP and MISO shall each have the right to suspend a pseudo-tie between their respective BAs in accordance with their respective OATT. SPP and MISO shall coordinate the change to the status of the pseudo-tie.

Section 12.2.10 Termination.

SPP and MISO shall each have the right to terminate a pseudo-tie between their respective BAs in accordance with their respective OATT and the notice provisions below. SPP and MISO shall coordinate the change to the status of the pseudo-tie.

Section 12.2.11 Notice of Termination.

The BA seeking to suspend or terminate the pseudo-tie in accordance with their respective OATT shall give the other BA at least sixty days (60) days written notice prior to the effective date of such termination, subject to receiving all necessary regulatory approvals.

ARTICLE XIII EFFECTIVE DATE

Section 2.2 Definitions.

2.2.1 “a & b multipliers” shall mean the multipliers that are applied to TRM in the planning horizon and in the operating horizon to determine non-firm AFC. The “a” multiplier is applied to TRM in the planning horizon to determine non-firm AFC. The “b” multiplier is applied to TRM in the operating horizon to determine non-firm AFC. The “a & b” multipliers can vary between 0 and 1, inclusive. They are determined by individual transmission providers based on network reliability concerns.

2.2.2 “Affected System” shall mean the electric system of the Party other than the Party to which a request for interconnection or long-term firm delivery service is made and that may be affected by the proposed service.

2.2.3 “Agreement” shall mean this document, as amended from time to time, including all attachments, appendices, and schedules.

2.2.4 “Attaining Balancing Authority” or “Attaining BA” shall have the same meaning set forth in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time.

2.2.5 “Attaining Balancing Authority Area” or “Attaining BAA” shall mean the Balancing Authority Area, as that term is defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, of the Attaining Balancing Authority.

2.2.6 “Attaining Reliability Coordinator” or “Attaining RC” is the entity that is responsible for Reliable Operation of the Bulk Electric System, as those terms are defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, for the Attaining Balancing Authority.

2.2.47 “Available Flowgate Capability” shall mean the rating of the applicable Flowgate less the projected loading across the applicable Flowgate less TRM and CBM. The firm AFC is calculated with only the appropriate Firm Transmission Service reservations (or interchange schedules) in the model, including recognition of all roll-over Transmission Service rights. Non-firm AFC is determined with appropriate firm and non-firm reservations (or interchange schedules) modeled.

2.2.58 “Balancing Authority” shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports interconnection frequency in real time. For MISO references to BA may be applicable to a BA and/or an LBA.

2.2.69 “Balancing Authority Area” shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area. For MISO references to BA may be applicable to a BAA and/or an LBAA.

2.2.710 “Bulk Electric System” shall mean the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving load with only one transmission source are generally not included in this definition.

2.2.811 “Confidential Information” shall have the meaning stated in Section 18.1.

2.2.912 “Congestion Management Process” means that document which is Attachment 1 to this Agreement as it exists on the Effective Date and as it may be amended or revised from time to time.

2.2.103 “Coordinated Flowgate(s)” shall mean a Flowgate impacted by an Operating Entity as determined by one of the five studies detailed in Section 3 of the attached document entitled “Congestion Management Process.” For a Market-Based Operating Entity, these Flowgates will be subject to the requirements under the Congestion Management portion of the Congestion Management Process (Sections 4 and 5). A Coordinated Flowgate may be under the operational control of a Third Party.

2.2.114 “Coordinated Operations” means all activities that will be undertaken by the Parties pursuant to this Agreement.

2.2.125 “Coordinated System Plan” shall have the meaning stated in Section 9.3.

2.2.136 “Economic Dispatch” shall mean the sending of dispatch instructions to generation units to minimize the cost of reliably meeting load demands.

2.2.147 “Effective Date” shall have the meaning stated in Section 13.1.

2.2.158 “Extra High Voltage” shall mean ~~be defined as~~ 230 KV facilities and above.

2.2.169 “Facilities Study” shall mean a study conducted by the Transmission Service Provider, or its agent, for the interconnection customer to determine a list of facilities, the cost of those facilities, and the time required to interconnect a generating facility with the transmission system or enable the sale of firm transmission service.

2.2.1720 “Feasibility Study” shall mean a preliminary evaluation of the system impact of interconnecting a generating facility to the transmission system or the initial review of a transmission service request.

2.2.1821 “Firm Flow” shall mean the estimated impacts of Firm Transmission Service on a particular Coordinated Flowgate.

2.2.1922 “Firm Flow Limit” shall mean the maximum value of Firm Flows an entity can have on a Coordinated Flowgate based on procedures defined in Sections 4 and

5 of the Congestion Management Process (Attachment 1 of the Joint Operating Agreement).

2.2.203 “Flowgate” shall mean a representative modeling of facilities or group of facilities that may act as significant constraint points on the regional system.

2.2.214 “Intellectual Property” shall mean (i) ideas, designs, concepts, techniques, inventions, discoveries, or improvements, regardless of patentability, but including without limitation patents, patent applications, mask works, trade secrets, and know-how; (ii) works of authorship, regardless of copyright ability, including without limitation copyrights and any moral rights recognized by law; and (iii) any other similar rights, in each case on a worldwide basis.

2.2.225 “Interconnection Service” shall mean the service provided by the Transmission Service Provider associated with interconnecting the generating facility to the transmission system and enabling it to receive electric energy and capacity from the generating facility at the point of interconnection, pursuant to the terms of the generator interconnection agreement and, if applicable, the tariff.

2.2.236 “Interconnection Study” shall mean any of the following studies: the interconnection Feasibility Study, the interconnection System Impact Study, and the interconnection Facilities Study, or the restudy of any of the above, described in the generator interconnection procedures.

2.2.247 “Interconnected Reliability Operating Limit” shall mean a System Operating Limit that if violated could lead to instability, uncontrolled separation(s) or cascading outages that adversely impact the reliability of the Bulk Electric System.

2.2.258 “Intermittent Generation” shall mean a resource that cannot be scheduled and controlled to produce the anticipated energy.

2.2.269 “Interregional Coordination Process” shall mean the market-to-market coordination document incorporated herein as Attachment 2 to this Agreement, as it exists on the Effective Date and as it may be amended or revised from time to time.

2.2.2730 “Interregional Planning Stakeholder Advisory Committee” shall have the meaning given under Section 9.1.2.

2.2.2831 “Interregional Project” shall have the meaning given under Section 9.6.3.1.

2.2.2932 “Local Balancing Authority” shall mean an operational entity which is: (i) responsible for compliance to NERC for the subset of NERC Balancing Authority reliability standards defined for its local area within the MISO Balancing Authority Area, and (ii) a party (other than MISO) to the Balancing Authority Amended Agreement which, among other things, establishes the subset of NERC Balancing Authority

reliability standards for which the LBA is responsible.

2.2.303 “Local Balancing Authority Area” shall mean the collection of generation, transmission, and loads that are within the metered boundaries of an LBA.

2.2.314 “Market” shall mean the energy and/or ancillary services market facilitated by the Parties pursuant to FERC Order No. 2000.

2.2.325 “Market-Based Operating Entity” shall mean an Operating Entity that operates a security constrained, bid-based economic dispatch bounded by a clearly defined market area.

2.2.336 “Market Flows” shall mean the calculated energy flows on a specified Flowgate as a result of dispatch of generating resources serving market load within a Market-Based Operating Entity’s market.

2.2.347 “Market Monitor” shall monitor market power and other competitive conditions in the Markets and make reports and recommendations as appropriate.

2.2.358 “Memorandum of Understanding” shall mean that certain predecessor agreement between the Parties to develop this Joint Operating Agreement dated February 27, 2004.

2.2.369 “MISO” has the meaning stated in the preamble of this Agreement.

2.2.40 “Native Balancing Authority” or “Native BA” shall have the same meaning set forth in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time.

2.2.41 “Native Balancing Authority Area” or “Native BAA” shall mean the Balancing Authority Area, as that term is defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, of the Native Balancing Authority.

2.2.42 “Native Reliability Coordinator” or “Native RC” is the entity that is responsible for Reliable Operation of the Bulk Electric System, as those terms are defined in the NERC Glossary of Terms Used in NERC Reliability Standards as may be amended from time to time, where the pseudo-tie is physically located.

2.2.3743 “Network Upgrades” shall have the meaning as defined in the MISO and SPP tariffs.

2.2.3844 “NERC Compliance Registry” shall mean a listing of all organizations subject to compliance with the approved reliability standards.

2.2.3945 “Notice” shall have the meaning stated in Section 18.10.

2.2.406 “Operating Entity” shall mean an entity that operates and controls a portion of the bulk transmission system with the goal of ensuring reliable energy interchange between generators, loads, and other operating entities.

2.2.417 “Outages” shall mean the planned unavailability of transmission and/or generation facilities operated by the Parties, as described in Article VII of this Agreement.

2.2.428 “Party” or “Parties” refers to each party to this Agreement or both, as applicable.

2.2.439 “Purchasing-Selling Entity” shall mean the entity that purchases or sells, and takes title to, energy, capacity, and interconnected operations services.

2.2.4450 “Reciprocal Coordination Agreement” shall mean an agreement between Operating Entities to implement the reciprocal coordination procedures defined in the Congestion Management Process.

2.2.4551 “Reciprocal Coordinated Flowgate(s)” shall mean a Flowgate that is subject to reciprocal coordination by Operating Entities, under either this Agreement (with respect to Parties only) or a Reciprocal Coordination Agreement between one or more Parties and one or more Third Party Operating Entities. A RCF is:

- A Coordinated Flowgate that is (a) (i) within the operational control of a Reciprocal Entity or (ii) may be subject to the supervision of a Reciprocal Entity as RC, and (b) affected by the transmission of energy by the Parties or by either Party or both Parties and one or more Reciprocal Entities; or
- A Coordinated Flowgate that is (a) affected by the transmission of energy by one or more Parties and one or more Third Party Operating Entities, and (b) expressly made subject to Congestion Management Process reciprocal coordination procedures under a Reciprocal Coordination Agreement between or among such Parties and Third Party Operating Entities; or
- A Coordinated Flowgate that is designated by agreement of both Parties as a RCF.

2.2.4652 “Reciprocal Entity” shall mean any entity that coordinates the future-looking management of Flowgate capability in accordance with a reciprocal agreement as described in the Congestion Management Process.

2.2.4753 “Reliability Coordinator” shall mean that party approved by NERC to be responsible for reliability for a RC Area.

2.2.4854 “Reliability Coordinator Area” (“RC Area”) shall mean the collection of generation, transmission, and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.

2.2.4955 “SCADA Data” shall mean the electric system security data that is used to monitor the electrical state of facilities, as specified in NERC Standard TOP-005.

2.2.506 “SPP” Has the meaning stated in the preamble of this Agreement.

2.2.517 “State Estimator” shall mean that computer model that computes the state (voltage magnitudes and angles) of the transmission system using the network model and real-time measurements. Line flows, transformer flows, and injections at the buses are calculated from the known state and the transmission line parameters. The state estimator has the capability to detect and identify bad measurements.

2.2.528 “System Impact Study” shall mean an engineering study that evaluates the impact of a proposed interconnection or transmission service request on the safety and reliability of transmission system and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the generating facility were interconnected or transmission service commenced without project modifications or system modifications.

2.2.5359 “System Operating Limit” shall mean the value (such as MW, MVAR, amperes, frequency, or volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.

2.2.5460 “Third Party” refers to any entity other than a Party to this Agreement.

2.2.5561 “Third Party Operating Entity” shall refer to a Third Party entity that operates and controls a portion of the bulk transmission system with the goal of ensuring reliable energy interchange between generators, loads, and other operating entities.

2.2.562 “Total Flowgate Capability” shall mean the maximum amount of power that can flow across that interface without overloading (either on an actual or contingency basis) any element of the Flowgate. The Flowgate capability is in units of megawatts. If the Flowgate is voltage or stability limited, a megawatt proxy is determined to ensure adequate voltages and stability conditions.

2.2.5763 “Transmission Issue” shall mean transmission needs driven by reliability, economic, and/or public policy requirements.

2.2.5864 “Transmission Loading Relief” shall mean the procedures used in the Eastern Interconnection as specified in NERC Standards IRO-006 and the NAESB Business Practices WEQ-008.

2.2.5965 “Transmission Operator” shall mean the entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission facilities.

| **2.2.606** “Transmission Owner” shall mean a Transmission Owner as defined under the Parties’ respective tariffs.

| **2.2.617** “Transmission Reliability Margin” shall mean that amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

| **2.2.628** “Transmission Service Provider” shall mean the entity that administers the transmission tariff and provides transmission service to transmission customers under applicable transmission service agreements.

| **2.2.639** “Transmission System Emergencies” are conditions that have the potential to exceed or would exceed an IROL.

| **2.2.6470** “Voltage and Reactive Power Coordination Procedure” are the procedures under Article XI for coordination of voltage control and reactive power requirements.

Section 4.1.3 Models.

Purpose: EMS models contain detailed representations of the transmission and generation configurations within each RTO and neighboring systems. The Parties depend upon EMS models for reliability coordination and market operations. The regular exchange of models is to ensure that each Party is using current and up-to-date representations of the other Party.

Requirements: The Parties will exchange their detailed EMS models once a year in CIM or another mutually agreed-upon electronic format, but shall provide each other with updates of the model information in an agreed-upon electronic format as new data becomes available. This yearly exchange will include the ICCP/ISN mapping files, identification of individual bus loads, seasonal equipment ratings and one-line drawings that will be used to expedite the model conversion process. The Parties will also exchange updates that represent the incremental changes that have occurred to the EMS model since the most recent update.

Pseudo-Tie Modeling Requirements: The Native BA and the Attaining BA shall coordinate modeling in accordance with the rules of the Native BA and Attaining BA, respectively, for modeling the pseudo-tie. If either the Native BA or Attaining BA do not have the necessary information to support modeling the pseudo-tie, modeling data will be requested from the entity seeking to pseudo-tie. This includes coordination of specific technical details for each pseudo-tie. Section 12.2 provides more detail on pseudo-tie requirements.

Section 5.1.4 Transmission Interchange Schedules/Net Scheduled Interchange

Purpose: Because interchange schedules impact the short-term use of the transmission system, exchange of schedule data is necessary to determine the remaining capability of the transmission system as well as to determine the net impact of loop flow.

Requirements: Each Party will make available to the other its interchange schedules/NSI, as required to permit accurate calculation of AFC values. Due to the high volume of this data, the Parties shall either post this data to a mutually agreed upon site for downloading or utilize tag dump information by the other Party as required by its own process and timing requirements.

The impacts of pseudo-ties will be included in the Attaining BA's market flow impacts for purposes of congestion management procedures. Neither MISO, nor SPP nor the entity seeking to pseudo-tie shall tag or request to tag the energy flows from a pseudo-tie into the Attaining BAA.

Section 12.2 Pseudo-Tie Coordination.

Section 12.2.1 Authorities for Pseudo-Ties From MISO into SPP.

MISO will be the Native RC and the Native BA. MISO will be responsible for monitoring transmission related congestion (SOLs and IROLs) on its transmission system. SPP will be the Attaining RC and the Attaining BA. SPP will be responsible for the commitment and dispatch of the resources that are physically located within the MISO BAA and that are pseudo-tied into the SPP BAA. SPP will include the impacts of such pseudo-ties in its congestion management procedures.

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Section 12.2.3 Partial Pseudo-Tied Resources.

If only a portion of the installed capacity of a resource is pseudo-tied out of the Native BAA and into the Attaining BAA such that a unique share resides in each Balancing Authority Area, the Attaining BA will be responsible for sending commitment and dispatch instructions to that portion of the resource pseudo-tied into the Attaining BA. The Native BA will be responsible for sending commitment and dispatch instructions to the portion of the resource that remains in the Native BA.

The sum of the shares residing separately in the respective BAA shall not exceed the nameplate capability of the entire resource. The individual portions of the resource shall not exceed the modeled capacity in their respective BAA.

Section 12.2.4 Transmission Service.

SPP and MISO agree that each Party's respective OATT outlines the transmission service requirements related to the delivery of energy from pseudo-tied resources or the delivery of energy to pseudo-tied load.

Section 12.2.5 Station Service.

SPP and MISO agree that the entity pseudo-tying the resource from the Native BAA to the Attaining BAA will obtain station service for the pseudo-tied resource in accordance with the rules of the Native BA.

Section 12.2.6 Non-recallability.

SPP and MISO agree that the pseudo-tied resource is non-recallable by the Native RC and Native BA.

SPP and MISO agree that in the event either Party declares a system emergency with respect to its system, the Parties will coordinate in accordance with Section 8.1 of this Agreement.

Section 12.2.7 Losses.

SPP and MISO agree that each Party's respective OATT outlines the requirements for losses related to the delivery of energy from pseudo-tied resources or the delivery of energy to pseudo-tied load.

Section 12.2.8 Loss of Communication.

SPP and MISO agree that in the event communication is lost between any of the Parties (including communication between the Native BA or the Attaining BA and the pseudo-tie), the Native BA and the Attaining BA will freeze at the last known output value and it is the responsibility of the pseudo-tie to verbally communicate changes of the real time pseudo-tie output values with the other Parties.

Section 12.2.9 Suspension.

SPP and MISO shall each have the right to suspend a pseudo-tie between their respective BAs in accordance with their respective OATT. SPP and MISO shall coordinate the change to the status of the pseudo-tie.

Section 12.2.10 Termination.

SPP and MISO shall each have the right to terminate a pseudo-tie between their respective BAs in accordance with their respective OATT and the notice provisions below. SPP and MISO shall coordinate the change to the status of the pseudo-tie.

Section 12.2.11 Notice of Termination.

The BA seeking to suspend or terminate the pseudo-tie in accordance with their respective OATT shall give the other BA at least sixty days (60) days written notice prior to the effective date of such termination, subject to receiving all necessary regulatory approvals.

ARTICLE XIII EFFECTIVE DATE