MIDWEST ISO SEAMS AGREEMENTS

Joint Operating Agreement Between the Midwest Independent Transmission System Operator, Inc. And PJM Interconnection, L.L.C. December 30, 2003

Interim Coordination Agreement by and between Midwest Independent Transmission System Operator Inc. (Midwest ISO) and Independent Electricity Market Operator (IMO) June 30, 2004

Joint Operating Agreement Between the Midwest Independent Transmission System Operator, Inc. And Southwest Power Pool, Inc. December 1, 2004

Seams Operating Agreement Between the Midwest Independent Transmission System Operator, Inc. And MAPPCOR February 1, 2005

Joint Reliability Coordination Agreement Among And Between Midwest Independent Transmission System Operator, Inc., PJM Interconnection, L.L.C., And Tennessee Valley Authority April 22, 2005

Seams Operating Agreement Between the Midwest Independent Transmission System Operator, Inc. and Manitoba Hydro September 25, 2006

Typical Midwest ISO Seams Agreement Provisions:

1) Definition of key terms and acronyms
2) Define Phases:
   a) Non-Market to Non-Market
   b) Market to Non-Market
   c) Market to Market
3) Exchange Operating Data, SCADA, Models, Planning Data
4) Exchange ATC/AFC methodologies, and data inputs
5) Define and agree to manage Reciprocal Coordinated Flowgates
6) Outage Coordination
7) Joint Operations in Emergencies
8) Coordination of Transmission Planning
9) Joint Scheduling Checkout Procedures
10) Voltage Control and Reactive Power Coordination
11) Dispute Resolution
12) Boilerplate Terms: Indemnity, Accounting for Costs, Confidentiality of Data, Intellectual Property, Termination, Choice of Law, etc.
13) The Congestion Management Process (CMP): Detailed attachment to each seams agreement containing technical requirements for managing market-to-non market congestion using RCFs.
14) The Interregional Coordination Process (ICP): Detailed attachment to Midwest ISO-PJM seams agreement containing technical requirements for managing market-to-market congestion using RCFs but allowing each RTO to "buy through" its

congestion relief obligation by paying the other RTO to redispatch when that is the cost effective solution.

PJM

In accordance with the Commission's March 18, 2004 and August 5, 2004 orders in Docket No. ER04-375, 106 FERC ¶ 61,251 ("March 18 Order") and 108 FERC ¶ 61,143 at PP 58, 59 (2004) ("August 5 Order"), and July 31, 2002 order in Docket No. EL02-65-000, et al., 100 FERC ¶ 61,137 ("July 31 Order"), a Joint Operating Agreement ("JOA") was executed by Midwest ISO and PJM, and filed with the Commission. The provisions of the JOA and the Congestion Management Process ("CMP") incorporated into the JOA, have now been implemented.

The JOA obligates the two RTOs to exchange real-time and day ahead operating information, and planning information, to increase reliability coordination. The JOA spells out how outage coordination, voltage control, and emergency operations will be handled between the two entities, and adopted the highly detailed CMP to govern congestion management during the period when PJM operated energy markets, but MISO did not.

Without the CMP, the Midwest ISO and PJM would have used TLRs to address loop flow congestion. This is generally undesirable for non-market areas because market flows are not tagged transactions, and would not otherwise show up in the NERC IDC. This could unfairly burden non-market areas by requiring them to curtail transactions to achieve reductions when congestion occurs on certain flowgates. With the CMP, the non-firm portion of market flows will not have a higher priority than the non-firm point-to-point transactions that might have been reduced in the non-market area, making congestion management more equitable on designated flowgates, called "Reciprocal Coordinated Flowgates" or RCFs. (Although market flows are still not "tagged" those flows are now reported to the IDC using a gen-to-load methodology set forth in the seams agreements).

After Midwest ISO started its own energy markets, Midwest ISO and PJM implemented a "market-to-market" congestion management process called the "Interregional Coordination Process" (ICP). The ICP builds on the CMP and moves to a financial system allowing one RTO to compensate the other when the second RTO redispatches internal generation to solve a congestion problem occurring in the first RTO's system. This occurs when the economics of the congestion are more reasonably addressed by redispatch than by having the first RTO attempt to reduce its own flows to relieve congestion.

MAPP

The MAPP Seams Operating Agreement ("SOA") is structured as an agreement between Midwest ISO and MAPPCOR (the contractor created by the MAPP Restated Agreement to perform reliability coordination and other tasks). The SOA is patterned

after the PJM JOA, although modified to reflect that there is no RTO-to-RTO relationship as there is with PJM and that Reliability Coordination is already provided by Midwest ISO under an existing subcontracting agreement between the Midwest ISO and MAPPCOR. The SOA contains assurances of operating and planning data transfers, confirms that the Midwest ISO will continue the reliability coordination service it performs for the non-MISO members of MAPP, and that Midwest ISO will administer MAPP Schedule F.

The SOA consists of the Agreement itself, plus Attachment A (regarding ATC calculations) and Attachment B (the Congestion Management Process used in the PJM JOA). As in the PJM CMP, the MAPP agreement implements a "market to non-market" congestion management scheme that provides that Midwest ISO will use Reciprocal Coordinated Flowgates ("RCFs") with forward-looking allocations to manage congestion between the Midwest ISO energy markets and the MAPP Schedule F (non-market) transactions, as described above.

The MAPP SOA contains certain unique provisions not found in other Midwest ISO seams agreements, such as the requirement to begin holding market flows at calculated levels as a flowgate approaches its limit ("TLR Avoidance Procedure"). This keeps a "cushion" on the flowgate that limits efficient use of the transmission system and provides additional protection to non-market entities that rely on curtailment rather than centralized redispatch to manage congestion.

Another fundamental distinction is that the MAPP agreement was executed by MAPPCOR, not another RTO or corresponding non-market transmission owner/operator. This has led to difficulties, not experienced with the other seams agreements, in resolving operating issues, including at least one MAPP entity stating that because it had not signed the agreement it was not bound by terms and conditions of which it did not approve. Because the parties were unable to reach agreement to amend the SOA to change the threshold impact that determines when the Midwest ISO must redispatch market flows to unload a Reciprocal Coordinated Flowgate, the Midwest ISO notified MAPPCOR in January 2007 that it would terminate the SOA at the end of its initial term in 2008. The parties are currently discussing a successor agreement to replace the SOA.

TVA

A Joint Reliability Coordination Agreement (JRCA) patterned after the PJM JOA, was signed on April 22, 2005. The new JRCA incorporates the same data exchange requirements as the other seams agreements, and provides for coordination of flowgates among the three parties on RCFs, as described above. TVA is a "non-market" area, so the provisions of the CMP that govern market to non-market congestion management will be used by Midwest ISO and by PJM with regard to their respective operations with TVA. (Because TVA is non-jurisdictional, and because the original PJM-Midwest ISO JOA controls the two entities that are jurisdictional, the JRCA was not initially filed with

the FERC, but was filed in 2006 by LG&E as a part of its Midwest ISO withdrawal proceeding.)

TVA is restricted by statute from selling energy into the organized markets or from redispatching its own units (even to beneficially unload flow gates) if such redispatch would cause TVA to be a source of power contrary to such statutory restrictions. For this reason, the TVA agreement differs from the other seams agreements in that it contains no general provision to pay TVA for redispatch service or for TVA to provide emergency energy to the other parties. Nevertheless, under pre-existing exchange power arrangements with certain utilities in the two organized markets, TVA can sell surplus power and energy, provide emergency power, and engage in other types of exchange transactions within its statutory restrictions.

IMO

On July 1, 2004 the Midwest ISO and the Ontario Independent Market Operator (now renamed the Independent Electricity System Operator, "IESO") executed an Interim Coordination Agreement ("ICA") to address seams operating issues. The Agreement establishes a framework to resolve operating issues across the international interconnections in Michigan, Minnesota and Manitoba, and provides for the exchange of critical operating data, including outages.

A "Coordination Committee" was created to implement details of the agreement and to address future operating issues, including:

(a) Data exchange requirements, formats, and methodologies;
(b) Developing and issuing Operating Instructions and Security Limits;
(c) Implementing the respective requirements of each of NERC and appropriate regional coordinating council with respect to the Midwest ISO Transmission System and Ontario Transmission System;
(d) Providing assistance in an Emergency, and system restoration.

Although discussions continue regarding an expanded agreement to include congestion management for a market-to-market process similar to that used between PJM and Midwest ISO, thus far no agreement has been reached to use the congestion management requirements of the CMP.

SPP

Midwest ISO and SPP executed a JOA with a CMP on December 1, 2004. While not identical, the terms of this agreement regarding data exchange and congestion management are essentially the same as described above for the MAPP and TVA agreements. Originally implemented as a Midwest ISO market to SPP non-market seams agreement, the JOA may become a market-to-market seams agreement. SPP became a market area when its balancing market began operation in February 2007. After SPP has gained several months' experience at operating its balancing market, the parties plan to

explore opportunities to explore the use of redispatch or market-to-market congestion practices between the two different markets.

As with the PJM and MAPP agreements, the SPP agreement has been filed with and approved by FERC. SPP later reviewed and accepted proposed changes to the JOA and CMP document, which are similar to the final versions of the MAPP SOA and the TVA, PJM, MISO JRCA, and updated versions of the documents were filed with and accepted by FERC. For all practical purposes, the SPP, PJM and TVA agreements are operationally identical with regard to data exchange and coordination of operating practices, differing only to the extent that market-to-market congestion management using the ICP has been, or can be, implemented.

Manitoba Hydro

Filed with the Commission on September 27, 2006, this seams agreement filing was protested by MAPPCOR and one of the interconnected MAPP operating companies. Following settlement discussions, an agreement was reached by the parties and supported by FERC staff, and is now awaiting Commission action.

The Manitoba Agreement was closely patterned on the MAPP Seams Operating Agreement to reduce the potential for conflicting requirements, given Manitoba's interconnection into and through the MAPP region. It contains the standard requirements including data sharing, close coordination of operations, and the critical Congestion Management Process governing market to non-market operations and the control of flows on Reciprocal Coordinated Flowgates. (Manitoba Hydro is a coordinating member of the Midwest ISO, and participates in the Midwest ISO energy market as a registered Market Participant, but its load is served with its own local generation in Canada and off-system purchases as a non-market entity).

CMP Council

Each entity that signs a standard form of seams agreement to manage congestion using the CMP and Reciprocal Coordinated Flowgates becomes a "Reciprocal Entity" as defined in those agreements. This means that each Reciprocal Entity must manage its flows on the RCFs that are common to one or more other Reciprocal Entities, thereby benefiting all.

The Reciprocal Entities from the MISO seams agreements formed a steering committee to address common technical issues that may arise during implementation of the agreements, as the parties gain experience with the modeling of the systems and the operational requirements of the contracts, and to discuss possible improvements in the CMP process itself. Before procedures can be changed or new ones adopted, (including any contract amendments that require FERC approval) the Council must vote unanimously.