136 FERC ¶ 61,152
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

Midwest Independent Transmission System Operator, Inc. Docket No. ER11-3280-000

ORDER CONDITIONALLY ACCEPTING COMPLIANCE FILING

(Issued August 31, 2011)

1. On April 1, 2011, pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Part 35 of the Commission's Regulations, 18 C.F.R. Part 35, Midwest Independent Transmission System Operator, Inc. (MISO) submitted revisions to Module F, Part II of its Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff) regarding the treatment of the North Dakota Export flowgate (NDEX). MISO made the filing to comply with the Commission's directives in an order issued on June 13, 2008.[1] In this order, we conditionally accept MISO's filing and direct MISO to make a compliance filing specifying the effective date, as discussed below.

I. Background

2. MISO offers Congestion Management Coordination Service (Seams Service) under Module F, Part II of its Tariff.[2] Generally, Seams Service provides a mechanism to manage market-to-non-market interfaces and specifies an array of congestion

[1] *Midwest Indep. Transmission Sys. Operator, Inc.*, 123 FERC ¶ 61,265 (2008) (Seams Service Order).

[2] MISO currently has three Seams Service customers: (1) Western Area Power Administration, Upper Great Plains Region (WAPA); (2) The City of Rochester, Minnesota; and (3) Corn Belt Power Cooperative. The transmission facilities covered by WAPA's agreement with MISO for Seams Service include all transmission facilities in the WAPA/Basin Electric Power Cooperative/Heartland Consumers Power District Integrated System (IS).

management tools that are utilized for that purpose, including a standardized Congestion Management Process.[3] Under the Congestion Management Process, MISO and a Seams Service customer establish agreed-upon coordinated flowgates,[4] called Reciprocal Coordinated Flowgates, for which they coordinate congestion management. MISO and a Seams Service customer agree, among other things, to respect each other's flowgate limitations on Reciprocal Coordinated Flowgates during the determination of Available Transfer Capability (ATC)/Available Flowgate Capability (AFC) and the calculation of firm capacity during real-time operations.[5]

3. NDEX is a stability limited flowgate consisting of several alternating current transmission lines owned by various entities. Unlike other Reciprocal Coordinated Flowgates covered by the Congestion Management Process, MISO and a Seams Service customer manage congestion on NDEX consistent with existing agreements.[6] In the Seams Service Order, the Commission accepted the non-standard NDEX treatment for an interim period of three years.[7] The Commission also directed MISO to work with affected parties to explore a longer-term solution for NDEX and to file, at least 60 days prior to June 1, 2011, a compliance filing providing a detailed justification as to why the special treatment of NDEX should be permitted to continue beyond that date or, alternatively, a new proposal for the treatment of NDEX. The Commission stated that it would evaluate at that time any proposals to extend the non-standard treatment of NDEX or to modify its treatment.[8]

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[3] The Congestion Management Process is Attachment LL to MISO's Tariff.

[4] "Flowgates" are facilities or groups of facilities that may act as significant constraint points on the system. Congestion Management Process at section 3.1. "Coordinated Flowgates" are those flowgates that MISO or a Seams Service customer has subjected to four specific tests (specified in section 3.2.1 of the Congestion Management Process) and thereby determined the impact of the flows that MISO's and the Seams Service customer's operations place on the flowgates. Congestion Management Process, section 7.

[5] Tariff Attachment LL, Congestion Management Process, at section 6.1.

[6] Tariff Module F, Part II, at section 82.5.

[7] Seams Service Order, 123 FERC ¶ 61,265 at P 107.

[8] *Id.*

II. NDEX Filing

4. On April 1, 2011, MISO submitted a filing to comply with the Commission's directive in the Seams Service Order. MISO proposes to eliminate the special treatment for NDEX as of September 1, 2011 and to instead treat NDEX like all other flowgates covered by the Congestion Management Process. To accomplish this, MISO proposes to delete section 82.5 from Module F, Part II of its Tariff, which outlines the special treatment for NDEX. MISO states that eliminating the special treatment for NDEX will enhance reliability and economic efficiency.

5. MISO states that it is requesting a September 1, 2011 effective date to allow sufficient time to complete the Western Interface Study. MISO states that the Western Interface Study project was established through the West Technical Study Task Force to work with stakeholders to develop a methodology for determining system dynamic limits in the MISO West Planning Region, which includes NDEX.[9] MISO states that the Western Interface Study will also identify specific flowgates that can be used to implement the standard Congestion Management Process for NDEX, as proposed in this filing.

6. MISO explains that NDEX is defined by 19 transmission lines that capture the total export of all generators within the region bounded by those lines. The 19 transmission lines are owned solely or jointly by WAPA, Basin Electric Power Cooperative (Basin), certain MISO transmission owners, or Minnkota Power Cooperative (Minnkota). Under the existing NDEX operating guides, the NDEX total transfer capability of 2,150 MW is allocated approximately 70 percent to WAPA and Basin, 17.1 percent to MISO transmission owners, 6.1 percent to Minnkota, and 6.8 percent to NorthWestern Energy.

7. MISO states that currently, congestion on the NDEX flowgate is managed by using the existing NDEX operating guides, rather than by using the standard Congestion Management Process and Reciprocal Coordinated Flowgates. MISO states that, under the NDEX operating guides, all parallel flows are internalized, which results in NDEX being considered a contract path for congestion management purposes. MISO states that the contract path congestion management procedures require specific generators within the NDEX region to reduce their output to relieve congestion, and a North American

[9] MISO states that the West Technical Study Task Force is a subgroup to the MISO West Sub-regional Planning Meeting process focusing on performing technical transmission studies. The West Sub-regional Planning Meeting process is a stakeholder forum used for open and transparent participation in the development of the MISO Transmission Expansion Plan. Transmittal at 3.

Electric Reliability Corporation (NERC) Transmission Loading Relief (TLR) is called only after the generator reductions have occurred and the flow on NDEX is within 25 MW of the limit. MISO states that this method does not capture impacts from parallel flow, which means parallel flows do not participate in congestion management and the burden is placed primarily on the coal and hydro-electric generating plants within the NDEX region for relief when, in fact, high simultaneous transfers may be causing a dynamic stability issue.

8. MISO states that, under its proposal, it will use the results of the Western Interface Study to define new Reciprocal Coordinated Flowgates where congestion occurs on NDEX.[10] MISO will then follow the standard Congestion Management Process to allocate transfer capability on the Reciprocal Coordinated Flowgates to WAPA, Basin, Minnkota and MISO transmission owners based on their historic firm use of the Reciprocal Coordinated Flowgates, rather than by using the allocation in NDEX operating guides. In addition, MISO states that, by using the standard Congestion Management Process, parallel flows, such as those from NERC E-tags that significantly impact a Reciprocal Coordinated Flowgate, will participate in congestion management through NERC TLR, rather than the existing process under which the congestion management burden is placed on specific generators in the NDEX region. MISO notes that these generators will still need to reduce their output, but the amount of reduction will be less because parallel flow that significantly impacts the flowgate will also be reduced.

9. MISO asserts that its proposal will enhance reliability. MISO states that, in addition to the existing capability to reduce the output of specific generators, the standard Congestion Management Process will provide the Reliability Coordinator with more granular Reciprocal Coordinated Flowgates that target the congestion and identify the quantity of relief necessary from NERC E-tags and MISO Market Flow that are causing the congestion. MISO also states that the preliminary results of the Western Interface Study demonstrate that some operating guides or tripping schemes may no longer be required because a safe limit can be determined by the Real-Time Dynamics Tool. Therefore, according to MISO, its proposal should simplify operating requirements and reduce the number of guides operators must manage.

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[10] MISO states that it is not proposing to make NDEX (which is comprised of multiple facilities) a single Reciprocal Coordinated Flowgate but rather to use the results of the Western Interface Study to define new Reciprocal Coordinated Flowgates where congestion occurs on the individual transmission lines that make up NDEX. (Transmittal at 7, 9).

10. MISO also asserts that the use of Reciprocal Coordinated Flowgates will maximize transmission system utilization for all parties because the parties are allowed reciprocal use of each other's allocation on Reciprocal Coordinated Flowgates up until congestion occurs. MISO states that the preliminary results of the Western Interface Study indicate that the number of hours in which NDEX, if treated like other Reciprocal Coordinated Flowgates, would not be fully available to the owners as it is today is statistically insignificant. In return, by treating individual transmission lines within NDEX as Reciprocal Coordinated Flowgates, MISO states the number of hours during which all owners of NDEX facilities would have access to more transmission is substantially increased. In addition, MISO states that if there is unused allocation available, one party may request allocation sharing in order to grant firm transmission service under its respective tariff.

11. MISO states that as part of its effort to resolve the dispute regarding NDEX, it contacted technical experts of WAPA, Basin, and MISO transmission owners who own transmission facilities that are used to monitor dynamic stability limits to participate and work collaboratively on the Western Interface Study. MISO states that WAPA, Basin, Minnkota, and the MISO transmission owners have representatives participating in this study and its stakeholder meetings.[11] MISO held West Technical Study Task Force meetings on September 16, 2010, November 4, 2010, December 20, 2010, and March 10, 2011 at MISO's offices in St. Paul, Minnesota.

12. MISO states that it also met twice with representatives of WAPA, Basin and Minnkota to discuss the scope of the Western Interface Study and MISO's proposal to use the standard Congestion Management Process for specific flowgates identified through the Western Interface Study rather than using the current NDEX contract path congestion management.[12] MISO states that the parties did not reach mutual agreement at these meetings because of philosophical differences on the definition of parallel flow, and because WAPA and Basin questioned whether the standard Congestion Management Process would be mutually beneficial to their customers. MISO states that WAPA and Basin argued that the MISO market would be able to redispatch into the available export capability, whereas WAPA's and Basin's customers are required to reserve transmission

[11] MISO states that WAPA, Basin, and Minnkota oppose changing the current treatment of NDEX. Transmittal at 3.

[12] MISO states that it met with the parties on December 8, 2010 at Basin's offices in Bismarck, North Dakota and again with WAPA and Basin representatives at MISO's offices in St. Paul, Minnesota, on March 25, 2011. Minnkota representatives participated via phone. Transmittal at 4.

service on the WAPA and Basin systems and then ultimately tag the service for those transactions.

III. Notice of Filing and Responsive Pleadings

13. Notice of MISO's filing was published in the *Federal Register*, 76 Fed. Reg. 19,986 (2011), with interventions and protests due on or before April 22, 2011. On April 18, 2011, a notice was issued extending the comment date to May 31, 2011. Timely motions to intervene were filed by Consumers Energy Company, Duke Energy Corporation, Minnkota, Iberdrola Renewables, Inc., Organization of MISO States, and Wisconsin Electric Power Company.

14. Basin, WAPA, and Heartland Consumers Power District (Heartland) (collectively, IS Parties) filed timely motions to intervene and a joint protest. MISO Transmission Owners (MISO TOs) filed a timely motion to intervene and comments.[13] Manitoba Hydro filed timely comments.

15. On May 31, 2011, MISO, MISO TOs, and Manitoba Hydro filed motions to answer and answers to IS Parties' protest. On June 24, 2011, IS Parties filed a motion to answer and answer. On August 3, 2011, Manitoba Hydro filed a motion for leave to answer and answer to IS Parties' answer.

A. MISO TOs' Comments

16. MISO TOs state that they support MISO's proposal to eliminate the existing, outdated contract path allocations used to manage congestion on the NDEX flowgate.

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[13] For purposes of this filing, MISO TOs are: Ameren Services Company, as agent for Union Electric Company, Ameren Illinois Company and Ameren Transmission Company of Illinois; City Water, Light & Power (Springfield, IL); Dairyland Power Cooperative; Duke Energy Corporation for Duke Energy Ohio, Inc., Duke Energy Indiana, Inc., and Duke Energy Kentucky, Inc.; Great River Energy; Hoosier Energy Rural Electric Cooperative, Inc.; Indiana Municipal Power Agency; Indianapolis Power & Light Company; Manitoba Hydro; Michigan Public Power Agency; Minnesota Power (and its subsidiary Superior Water, L&P); Montana-Dakota Utilities Company; Northern Indiana Public Service Company; Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation, subsidiaries of Xcel Energy Inc.; Northwestern Wisconsin Electric Company; Otter Tail Power Company; Southern Illinois Power Cooperative; Southern Indiana Gas & Electric Company Southern Minnesota Municipal Power Agency; Wabash Valley Power Association, Inc.; and Wolverine Power Supply Cooperative, Inc.

MISO TOs state that the proposal ensures comparable treatment for NDEX that is similar to other seam arrangements for neighboring transmission systems. Further, MISO TOs note that the proposed use of flowgates, instead of a single static limit based on a single operating condition and contract path, will create a more efficient use of the transmission system, and thereby allow wind, renewable, and other generation that was previously constrained by NDEX limitations to be delivered to loads in the region (both within and outside of MISO). MISO TOs also contend that the proposal enhances efficiency and maintains reliability through improved congestion management and the use of a standard process. MISO TOs argue that a single standard congestion management process will also provide simplified operating requirements and require less operating guides. Further, MISO TOs state that the use of dynamic limits will provide more granular Reciprocal Coordinated Flowgates and recognize changes in limiting facilities, the transmission system, and generation and load patterns.

B. Manitoba Hydro's Comments

17. Manitoba Hydro supports MISO's proposal to discontinue the unique treatment of NDEX and to treat the facilities comprising NDEX in a manner comparable to all other coordinated flowgates between MISO and its adjoining regions. Manitoba Hydro notes that it objected to the special treatment of NDEX dating back to 2005, when the Seams Operating Agreement between MAPPCOR and MISO was submitted to the Commission for filing.[14] Manitoba Hydro states that it protested the non-standard treatment of NDEX because allocations based on operating guides, rather than historic use, were unreasonable. Manitoba Hydro also notes that it again protested the continued non-comparable treatment of NDEX in 2008 when MISO filed its Seams Service proposal. Manitoba Hydro argues that MISO's proposal in the instant proceeding provides ample justification to now use the standard Congestion Management Process for NDEX, based on the Western Interface Study.

C. IS Parties' Protest

18. In their joint protest, IS Parties argue that the Commission should reject MISO's proposal to eliminate the existing treatment of NDEX for three main reasons. First, IS Parties claim that MISO has failed to comply with the Commission's directive in the Seams Service Order to work with IS Parties to explore a long-term solution for NDEX. Second, IS Parties claim that MISO's proposal is inconsistent with NERC reliability requirements and Good Utility Practice. Third, IS Parties claim that MISO's proposal does not respect the ownership rights of the owners of the NDEX transmission facilities

[14] Manitoba Hydro Comments at 4 (citing its Protest in Docket No. ER04-104-022, *et al.*).

and is part of MISO's comprehensive attempt to use its neighbor's transmission facilities without compensation.

1. Compliance

19. IS Parties argue that MISO has failed to comply with the Commission's directive "to work with affected parties to explore a longer term solution for NDEX."[15] Specifically, IS Parties claim that MISO has not worked with them to explore acceptable alternatives to the current treatment of NDEX even though IS Parties own 70 percent of the transfer capability of NDEX and are the parties most affected by the proposal. Instead of including non-MISO NDEX owners in the development and evaluation of alternatives, IS Parties argue that MISO simply invited them to stakeholder meetings where MISO presented its proposals and allowed them to comment.

20. IS Parties state that they have always been willing to work collaboratively with the other owners or operators of NDEX to determine whether the NDEX transfer limits can be adjusted in order to maximize transmission system utilization, and that collaboration has worked well in the past. IS Parties claim, however, that MISO and the MISO TOs appear to be resisting efforts to work collaboratively. IS Parties contend that MISO's description of the six meetings it conducted before it made the instant filing misrepresents its interaction with the NDEX owners. According to IS Parties, MISO failed to provide any details regarding its proposed treatment of NDEX during the meetings and included all stakeholders rather than just the NDEX owners. IS Parties note that in the March 10, 2011 meeting, MISO provided some preliminary dynamic results of the study regarding the interaction between NDEX and Minnesota Wisconsin Export Flowgate (MWEX) and invited stakeholder comments. IS Parties state that they provided comments via email, but did not receive any substantive feedback from MISO. IS Parties further note that MISO has met twice separately with the NDEX owners, but again failed to provide any details as to its proposed treatment of NDEX during either meeting. IS Parties claim that MISO provided them with a revised version of its document describing the methodology for the Western Interface Study twenty-eight days after MISO made the instant filing proposing to eliminate NDEX.

21. IS Parties argue that the Commission should order MISO to take very specific steps with respect to the evaluation of NDEX. IS Parties request that the Commission reject MISO's filing and direct MISO to: (1) work collaboratively with the other NDEX owners to try to develop an alternative to NDEX, if necessary, rather than simply involving the NDEX owners as stakeholders in a process controlled by MISO; (2) include

[15] IS Parties Protest at 1 (citing Seams Service Order, 123 FERC ¶ 61,265 at P 107).

the other NDEX owners in each stage of preparing and conducting the studies that evaluate the alternatives to NDEX and in the development of the new software tool that manages the interface and the development of the studies that evaluate the alternatives to NDEX; (3) file progress reports with the Commission every 3 months, and provide IS Parties opportunity to comment on those reports, until MISO has completed the collaborative process; (4) file a final report that either presents the results of the collaborative process or that explains why the collaborative process was not successful and its own unilateral alternative by not later than December 31, 2012; (5) not make a section 205 filing to propose an alternative to the current treatment of NDEX until the Commission issues an order on MISO's report; (6) explain its intentions regarding the future use of the Congestion Management Process, particularly in light of its assertions in this docket that the use of the Congestion Management Process would improve the operation of the North Dakota stability-limited region; and (7) continue to implement the NDEX operating guides until MISO completes all of the steps set out above.

2. Reliability Standard and Good Utility Practice

22. IS Parties claim that MISO's proposal is contrary to NERC Reliability Standard TOP-002-2a (R4), which requires that "[e]ach Balancing Authority and Transmission Operator shall coordinate (where confidentiality agreements allow) its current-day, next-day, and seasonal planning and operations with neighboring Balancing Authorities and Transmission Operators and with its Reliability Coordinator, so that normal Interconnection operation will proceed in an orderly and consistent manner."[16] The IS Parties argue that MISO's practice of simply informing the IS Parties of the results of its operations studies at the seams and then unilaterally proposing changes to the operation of NDEX are inconsistent with that standard because MISO is not coordinating its operations with them. The IS Parties also contend that MISO's proposal is inconsistent with Good Utility Practice because MISO apparently intends to dictate new flowgates and procedures to be used in the North Dakota region without properly coordinating and collaborating with the owners of the majority of the transmission facilities in the region.

23. IS Parties also claim that MISO's proposal is inconsistent with Good Utility Practice because MISO is proposing to largely or completely eliminate reliance on the existing NDEX operating guides, which IS Parties contend provide for precise and targeted reductions in generator output to address potential reliability problems in coordination with NERC TLR procedures. IS Parties state that MISO intends to replace NDEX and NDEX operating guides with yet-undefined Reciprocal Coordinated Flowgates and to use the Congestion Management Process and TLR procedures to manage stability limitations in the North Dakota region. IS Parties also state that MISO

[16] IS Parties Protest at 31.

has informed them that if IS Parties cancel their Seams Service, then MISO, as a Reliability Coordinator, intends to use only TLR procedures on these new Reciprocal Coordinated Flowgates. IS Parties claim either outcome is inconsistent with Good Utility Practice because MISO will use TLR procedures without coordinating them with other measures set out in the NDEX operating guides.

24. In addition, IS Parties argue that MISO is acting inconsistently with Good Utility Practice by proposing to eliminate the current Power System Simulator for Engineering (PSS/E)[17] software tool for management of NDEX without having first determined, through broad industry acceptance and/or open dialog and peer review with its neighboring utilities' engineering staffs, that its replacement Transient Security Assessment Tool (TSAT)-based[18] software tool will maintain reliability of the bulk electric system. The IS Parties claim that MISO's proposal will replace the existing stability study software tool that was developed, thoroughly tested and utilized by all the area utilities for decades with a TSAT-based tool that has no proven track record for accuracy and effectiveness. IS Parties state, however, that even if owners of NDEX transmission facilities agree on the use of MISO's TSAT-based software tool, that would not justify MISO's proposal to eliminate the existing treatment for NDEX.

25. IS Parties also assert that Good Utility Practice requires that the owners of NDEX do far more work before they adopt alternatives to the current operation of NDEX. IS Parties contend that significant study work must be completed before MISO, the IS Parties and the Commission can adequately determine whether NDEX should be terminated and replaced. The IS Parties further state that several important technical issues must be addressed in the study, including: 1) flowgates; 2) coordination between NDEX and the Manitoba Hydro Export Flowgate (MHEX) and MWEX; 3) the effectiveness of an unbounded interface in addressing North Dakota stability limitation; and 4) the impacts of two High Voltage Direct Current lines from the North Dakota region to Minnesota on the stability limits and how those lines would be captured on unbounded Reciprocal Coordinated Flowgates.

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[17] PSS/E is a power systems software for studies of power system transmission network and generation performance in both steady-state and dynamic conditions. At present two primary simulators, one for steady-state analysis and one for dynamic simulation, facilitate calculations for a variety of analyses.

[18] TSAT is a simulation tool designed for comprehensive assessment of dynamic behavior of complex power systems. This tool can perform off-line, or on-line assessments where the software is connected directly to a power system's energy management system and assesses the system security in continuous cycles.

3. Compensation Issues

26. IS Parties contend that MISO's proposal is intended to expropriate the IS Parties' contract path rights on NDEX. IS Parties claim that MISO's attempt to eliminate the special treatment for NDEX, in combination with its attempt in Docket No. ER11-3281-000 to use its Seams Service customers' transmission facilities on a contract path basis without compensation, will, if successful, wrest the IS Parties' control over their own facilities and give it to MISO. IS Parties argue that the Commission simply cannot allow that to happen.

27. IS Parties argue that the instant proceeding is only one aspect of MISO's concerted effort to take over the transmission capacity of its neighboring transmission providers so that it can integrate MISO loads and generation without compensation to the neighboring transmission providers. IS Parties claim that MISO began this process in 2008 when it forced non-MISO members of the Mid-Continent Area Power Pool (MAPP) to take seams service under its unilaterally filed tariff, instead of using bilateral seams agreements. IS Parties argue that MISO has also attempted to take over the transmission capacity of Tennessee Valley Authority and Southwest Power Pool when it asserted that the language in its joint operating agreements with those entities allowed MISO to provide transmission service over those entities' systems on a contract path basis without compensation.

28. IS Parties also state that MISO's claim that it is necessary to convert NDEX to Reciprocal Coordinated Flowgates under the Congestion Management Process is misleading because MISO intends to terminate the Congestion Management Process through its current efforts at the North American Energy Standards Board (NAESB). IS Parties claim that MISO plans to replace the Congestion Management Process with a new method of using flowgates and prioritizing market flows called the "Flowgate Allocation Option." IS Parties contend that MISO's proposal would put non-market entities, like IS Parties, at a disadvantage because they must follow their OATT procedures to reserve and schedule transmission service. IS Parties request that the Commission direct MISO to explain its intentions regarding the use of the Congestion Management Process, particularly in light of its assertions that the use of the Congestion Management Process would improve the operation of the North Dakota stability-limited region.

D. MISO's Answer

29. MISO disputes the factual premise of each of IS Parties' arguments and objects to IS Parties' implication that MISO would propose, much less implement, a congestion management practice for NDEX or any other flowgate that would degrade, impair, or otherwise threaten the reliable operation of the facilities in question. MISO states that, as a NERC registered Reliability Coordinator and Balancing Authority, it is subject to the strict, and enforceable, reliability standards obligating it to protect the bulk electric

system in its area of authority. MISO argues that there is no basis for the IS Parties generalized allegations that reliability will be degraded by the MISO proposal.

30. MISO contends that, contrary to IS Parties' claim, it has complied with the Commission's directive in the Seams Service Order for MISO to work with affected parties to explore a longer-term solution for NDEX. MISO states that it did exactly what the Commission expected it to do. As it outlined in its April 1, 2011 Transmittal Letter, MISO states that it held a number of open meetings to discuss NDEX with all affected parties, as well as discussions with IS Parties alone. MISO also notes that it developed the West Technical Study Task Force, which invited proposals by all participants, including IS Parties. MISO states that IS Parties do not dispute that the meetings occurred, but argue instead that they were insufficient to change their views, and thus failed to meet the requirements of the Seams Service Order. MISO claims, however, that the test for compliance is not that one or both sides to this dispute are unhappy with the outcome. MISO asserts that the Seams Service Order clearly anticipated this impasse in requiring that MISO be prepared to articulate why the special treatment for NDEX should continue, or to present an alternative.

31. In addition, MISO argues that IS Parties are wrong to allege general violations of NERC standards and Good Utility Practice. This charge is based on the perception that MISO has acted unilaterally, and therefore has failed to "coordinate" various activities. However, MISO states that it continues to coordinate, as it always has, with its neighbors in real time, and in the planning horizon, consistent with its obligations under the NERC standards, and with the obligations found in written agreements between neighboring Balancing Authorities. MISO states that, before and after the Congestion Management Process is applied to the NDEX facilities, MISO will be coordinating with IS Parties, MISO transmission owners, and others as required by NERC standards and Good Utility Practice. MISO states that it expects that the MISO transmission owners and Seams Service customers will continue to peer review the Western Interface Study results and their implementation to insure there is no adverse impact on reliability.

32. MISO also states that the allegation that it is eliminating the current NDEX operating guides is wrong. MISO states that it will retain the methodology currently in use for those few occasions when an angular stability limit requires it, since the most efficient methodology to mitigate this type of limit is to reduce a specific generator or group of generators affecting the angular stability. MISO states, however, that by using individual transmission elements as Reciprocal Coordinated Flowgates, the more efficient Congestion Management Process will provide safe and adequate congestion management in the larger majority of hours studied. MISO states that the current NDEX operating guides may be revised and updated, but they are not being discarded. MISO states that, in addition, there will be new operating guides in place to address the Reciprocal Coordinated Flowgates identified in the study process.

33. MISO also contends that it is proposing for NDEX the same standard Congestion Management Process treatment already used with MWEX and MHEX, two other stability limited flowgates in its region. MISO states that it is thus disingenuous for IS Parties to argue that treating NDEX as a Reciprocal Coordinated Flowgate is dramatic and untested.

34. In addition, MISO argues that IS Parties incorrectly claim that reliability will be threatened because the TSAT-based software tool MISO will use is untested. In fact, MISO states that TSAT-based software is used by many utilities and operating companies in North America. MISO explains that it has made a decision to switch to TSAT-based software to improve system reliability, regardless of whether the treatment of NDEX is changed or not. MISO states, furthermore, that it is not proposing to eliminate the use of existing software tools and that users are not required to migrate to the TSAT-based software tool.

35. Finally, MISO contends that IS Parties simply repeat their charges from other pleadings that the NDEX alternative is linked to a broader MISO plot to seize the transmission capacity of its neighbors. MISO states that IS Parties raise no new arguments on this issue and MISO therefore incorporates its previous response to those baseless allegations.[19] MISO also notes that IS Parties have submitted a notice to terminate their agreement for Seams Service, and MISO states that it will mutually agree to terminate that agreement even sooner than the one year notice period if IS Parties so desire.[20] MISO acknowledges that, if the Commission approves MISO's proposal to strike the NDEX exemption from its seams coordination service, and IS Parties choose not to take that service under those terms and conditions, the interconnected systems will continue to coordinate their transmission operations as required by the NERC standards, and will manage congestion using TLRs, as all MAPP participants did pre-MISO. MISO asserts, therefore, that IS Parties cannot be harmed by the Commission's acceptance of the instant filing.

E. MISO TOs' Answer

36. In their answer to IS Parties' protest, MISO TOs contend that IS Parties overstate the potential impact of MISO's proposed revisions for the treatment of the NDEX interface. MISO TOs argue that IS Parties' request for further evaluation of the NDEX interface is unwarranted given the history of proceedings regarding the treatment of the

[19] MISO Answer at 12 (citing Motion for Leave to Answer and Answer of MISO, Docket No. ER11-3281-000, May 16, 2011 at 7-19).

[20] MISO Answer at 10, 16.

NDEX interface. MISO TOs again disagree with IS Parties and contend that MISO has had an open and transparent process for addressing alternatives to the current NDEX treatment. MISO TOs note that the West Technical Study Task Force and the Western Interface Study have been the relevant stakeholder forums regarding NDEX and, as stakeholders of MISO, IS Parties have had the opportunity to participate in the stakeholder process regarding NDEX. MISO TOs further contend that IS Parties' claims regarding reliability and good utility practice are unwarranted.

F. Manitoba Hydro's Answer

37. In its answer, Manitoba Hydro states that it believes the existing NDEX operating guides are no longer the optimum way to preserve system stability. Manitoba Hydro contends that the current NDEX operating guides are incomplete because they do not study the full range of operations of the NDEX interface. Specifically, Manitoba Hydro argues that the current NDEX operating guides only cover exports out of North Dakota and do not address operations under North Dakota import conditions. Manitoba Hydro states that MISO's proposal for defining flowgates in the NDEX region and using TSAT-based software to ensure stability will not only ensure the reliability of the bulk electric system, but will also optimize the use of the transmission system. Manitoba Hydro also states that MISO's proposed application of the real time TSAT-based software is consistent with good utility practice.

G. IS Parties' Answer

38. IS Parties argue that MISO did not comply with the Commission's order because it waited 27 months before beginning the process of evaluating NDEX and then it engaged in a "hurry up" process that failed to allow the parties to fully evaluate alternatives to the NDEX operating guides. Accordingly, IS Parties argue that MISO's proposal attempts to implement a new method of managing NDEX facilities without completely evaluating the reliability issues that might be affected. IS Parties also state that MISO's presentation to its West Technical Study Task Force further indicates that converting NDEX facilities to Reciprocal Coordinated Flowgates may not be very efficient and that using TLR instead of the NDEX operating guides to manage stability constraints may result in curtailments that are disproportionate to the congestion relief that the curtailments provide.

39. IS Parties clarify that their objection to MISO's proposal is that they did not have the opportunity to participate in the NDEX evaluation process as equals and as owners of the majority of the facilities that would be affected by any change in operation of the NDEX facilities. IS Parties argue that MISO's unilateral design and implementation of a last-minute study does not constitute collaborative efforts to address the long-term treatment of NDEX. IS Parties also clarify that their objection to the use of the TSAT-based software for NDEX is that it has not been fully tested and benchmarked to the transmission system in North Dakota.

40. IS Parties further argue that MISO has failed to explain how it proposes to operate the facilities that comprise the NDEX flowgate. IS Parties contend that MISO's assertion that it is retaining the current NDEX methodology "for those few occasions when an angular stability limit requires it" is incorrect as it has clearly not indicated in the stakeholder meetings how it intends to continue to use the NDEX operating guides. IS Parties claim that MISO has failed to explain how operations will be coordinated on the three interdependent interfaces of NDEX, MHEX and MWEX and has failed to provide a mechanism to coordinate flows on these three interdependent interfaces. IS Parties argue that this problem must be addressed in order to protect the reliability of the Bulk Electric System before any changes to the operating guides or a new TSAT-based tool can be implemented.

41. IS Parties also disagree with Manitoba Hydro's assertion that the NDEX operating guides are inadequate. Further, IS Parties claim that Manitoba Hydro's comments regarding how flows on one flowgate affect flows on other flowgates demonstrate why it is important to address seams coordination issues through bilateral discussions rather than through unilateral filings.

H. Manitoba Hydro's Answer

42. Manitoba Hydro maintains that the NDEX operating guides are inadequate and are therefore not a superior method to the standard congestion management process proposed by MISO. Manitoba Hydro argues that, because the scope for the NDEX operating guides is limited to stability conditions, it does not address North Dakota import conditions, which Manitoba Hydro states occur on a regular basis. Manitoba Hydro contends that it is the operation of the NDEX facilities under import conditions that negatively impacts the MHEX interface. Therefore, Manitoba Hydro states that it is willing to collaborate with the IS Parties and MISO to perform the operating study that identifies Reciprocal Coordinated Flowgates for North Dakota import conditions so that the standard Congestion Management Process can be applied.

IV. Discussion

A. Procedural Matters

43. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2011), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

44. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2011), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We will accept the answers because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

1. Compliance

45. We will accept MISO's proposal to revise its Tariff to eliminate the special treatment for NDEX and to instead use the standard Congestion Management Process in the Tariff, which the Commission previously accepted.[21] MISO has demonstrated that there is not sufficient justification to treat NDEX differently than all other Seams Service transmission facilities. It is therefore just and reasonable for MISO to establish Reciprocal Coordinated Flowgates on the NDEX transmission facilities and coordinate those facilities using the Congestion Management Process, as it does for facilities of all Seams Service customers.

46. We also find that MISO has sufficiently complied with the Commission's direction to work with the affected parties to explore a long-term solution for NDEX.[22] MISO provided an open and transparent process for all affected parties to participate in the development of an alternative to the current NDEX treatment. Through the West Technical Study Task Force, MISO established the Western Interface Study project to work with stakeholders, including the IS Parties, to explore a method to determine system dynamic limits on NDEX. MISO contacted the technical experts of the IS Parties to participate and work collaboratively on the Western Interface Study. MISO held four stakeholder meetings that were open to all affected parties, including IS Parties, to review and comment on the progress of the Western Interface Study project. In addition, MISO met with the IS Parties twice to discuss the Western Interface Study and MISO's NDEX proposal. Through these actions, MISO fulfilled its obligation to work with affected parties to explore a long-term solution for NDEX.

47. We disagree with IS Parties' argument that, because four of the six meetings that MISO held were open to all stakeholders, and not limited only to owners of NDEX facilities, MISO did not meet the requirement to work with affected parties. The fact that some of the meetings to discuss NDEX were open to all stakeholders did not affect IS Parties' ability to fully participate in those meetings, including their ability to discuss issues related to NDEX with MISO staff at those meetings. We also disagree with IS Parties' assertion that, because the first meeting did not occur until September 16, 2010, MISO has not fulfilled its obligation to work with affected parties.[23] Although IS Parties

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[21] MISO Tariff, Attachment LL, Congestion Management Process.

[22] Seams Service Order, 123 FERC ¶ 61,265 at P 106.

[23] On May 7, 2009, IS Parties did request to meet with MISO, and MISO responded that it would be willing to do so. *See* IS Parties Protest at 22-23. While that

(continued…)

claim that MISO should have started holding meetings to discuss NDEX sooner, their underlying concern appears to be with the outcome of those meetings (i.e., the proposal to eliminate the special treatment for NDEX) rather than how soon those meetings were held. IS Parties may not agree with the proposed long-term solution for NDEX, but that does not mean that IS Parties were not given sufficient opportunity to participate in its development.

48. In addition, although IS Parties state that they wanted to explore alternatives to the existing treatment of NDEX other than the standard Congestion Management Process, they fail to provide a basis for allowing the existing special treatment of NDEX to continue, and do not present any alternatives that might be available were such disparate treatment justified. Given this, we find MISO's proposal to eliminate the special treatment for NDEX so that the standard Congestion Management Process applies equally to the transmission facilities of all Seams Service customers just and reasonable.

2. Reliability Standard and Good Utility Practice

49. We reject IS Parties' claim that MISO violated NERC standards. MISO's use of the Congestion Management Process on NDEX does not affect its obligation to continue to coordinate planning and operations with neighboring entities pursuant to requirement four of TOP-002-2a.[24] As MISO states in its answer, it will continue to coordinate with its neighbors in real time, and in the planning horizon, consistent with its obligations

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meeting did not occur, we note that MISO subsequently held the first of several meetings to discuss NDEX issues on September 16, 2010, but IS Parties did not provide comments to MISO in response to any of the meetings until March 28, 2011. *See* IS Parties Protest at 26. IS Parties claim that their delay was because the information MISO had provided at the first three stakeholder meetings lacked sufficient detail for them to provide any useful comments. However, IS Parties do not explain what information they needed in order to provide useful comments and do not assert that they asked MISO to provide any such information when given the opportunity at all of the stakeholder meetings.

[24] Citing requirement four of TOP-002-2a:

> Each Balancing Authority and Transmission Operator shall coordinate (where confidentiality agreements allow) its current-day, next-day, and seasonal planning and operations with neighboring Balancing Authorities and Transmission Operators and with its Reliability Coordinator, so that normal Interconnection operation will proceed in an orderly and consistent manner.

under the NERC standards and with its obligations in written agreements with neighboring Balancing Authorities. The coordination between MISO and neighboring entities is described in these agreements and will continue to be in place, regardless of whether the existing or new procedure for NDEX is used. Therefore, we find IS Parties' argument that eliminating the special treatment for NDEX will cause MISO to violate NERC standards to be unconvincing.

50. Additionally, we disagree with the IS Parties' argument that MISO has failed to follow Good Utility Practice. Good Utility Practice consists of engaging in acceptable practices, methods, or acts generally accepted in the electric utility industry, while using reasonable judgment to accomplish the desired result.[25] Here, MISO is performing those actions consistent with its Tariff and the Commission's directives in the Seams Service Order by presenting a long-term proposal for the remaining Seams Service flowgate that is not operated under the Congestion Management Process. Additionally, we note that MISO already treats the MWEX and the MHEX interfaces as Reciprocal Coordinated Flowgates under the Congestion Management Process, and these are stability limited flowgates that are similar to NDEX. MISO would merely treat NDEX the same way.

51. Therefore, we find that it is not inconsistent with Good Utility Practice for MISO to abandon the use of the NDEX operating guides and instead use the Congestion Management Process for NDEX, as it does for other flowgates. We recognize that the existing NDEX operating guides have been useful in managing congestion that exists across NDEX, and, as MISO stated in its answer, it intends to retain use of the NDEX operating guides for angular stability limitations since they are the most efficient at mitigating the limit. However, MISO will also have new operating guides in place to

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[25] MISO Tariff, Module A, Part II, section 1.274 defines Good Utility Practice as:

> Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision is made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather, intended to include acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act Section 215(a)(4).

address the Reciprocal Coordinated Flowgates on NDEX that will be implemented under the Congestion Management Process. The new operating guides will be based on the studies from the online Real-Time Dynamics Tool, rather than from studies based on an offline model currently performed.

52. According to the preliminary analysis that was performed in the Western Interface Study, dynamic limits for exporting power from North Dakota are greater than the existing limit on NDEX for a significant number of conditions. MISO will also implement a Real-Time Dynamics Tool that monitors limits on the actual transmission elements that are identified as the most limiting, rather than aggregating the limit across the 19 transmission lines that make up NDEX.[26] As stated by MISO, preliminary analysis performed in the Western Interface Study indicated that dynamic limits for exporting power from North Dakota are greater than the existing limit for a significant number of conditions analyzed. Of 1,547 dynamic simulations performed for North Dakota export transfer, 207 had dynamic stability limits. Of those with dynamic limits, 171 of those limits were at or above the existing NDEX limit with 36 simulations having limits less than the NDEX limit. Some 1,340 simulations reached the available North Dakota generation limit before a dynamic stability limit was found.[27] We believe this evidence supports MISO's assertion that the system can be safely operated at higher export levels for many system conditions/prior outage/disturbance states. For this reason, the outcome from this implementation will provide better assessment of operating limits

[26] MISO explains in its answer that dynamic limits are caused by specific system conditions and events at multiple locations on the system. At this time, NDEX uses the most limiting system disturbance at a certain location, but it monitors aggregated power flows which are not necessarily associated with the event — electrically or geographically. A specific limit may be independent of remote flows within the aggregate NDEX interface. Because NDEX is a large area bounded interface, the current method does not specifically watch for what is causing the limit, but rather monitors a general system state of how much real power is leaving North Dakota. MISO, by contrast, proposes to monitor the specific system flows and limits via multiple flowgates in its wide area view, and specifically to monitor flows, both real and reactive known to cause dynamic limits. According to MISO, the aggregate flow on more than a dozen NDEX lines scattered across several states will not tell the Reliability Coordinator that there will be a transient voltage issue at, for example, a substation in central South Dakota. A majority of the flows being measured may be remote and not causing the limit. The transient voltage issue will be dependent on power flows associated with specific lines around that specific substation. MISO's May 31, 2011 Answer at 6-7.

[27] Transmittal at 6.

through examination of a more complete range of operating conditions, such that additional capacity on the system can be utilized when it is available. Therefore, we find that MISO has presented a convincing case that it will be more reliable and efficient to manage NDEX through dynamic software that was not readily available when the NDEX operating guides were first introduced.

3. Compensation Issues

53. IS Parties' claim that MISO's proposal is intended to expropriate the IS Parties' contract path rights in the NDEX Interface without compensation is unconvincing. Moreover, IS Parties' arguments on this issue are beyond the scope of this proceeding. Here, MISO is proposing to eliminate section 82.5 from Module F, Part II of its Tariff, which outlines the special treatment for NDEX, and is not proposing capacity sharing. IS Parties' concerns about compensation are related to a separate capacity sharing provision in the Tariff that MISO filed in Docket No. ER11-3281-000. IS Parties raised the same concerns about capacity sharing and compensation in that proceeding, and the Commission rejected those concerns in its May 31, 2011 order accepting the capacity sharing provision.[28]

54. We also decline IS Parties' request to direct MISO to "explain its intentions regarding the use of the Congestion Management Process." IS Parties' claim that MISO intends to terminate the Congestion Management Process and replace it with a new method of using flowgates and prioritizing market flows is beyond the scope of this proceeding. Additionally, to the extent MISO would seek in the future to amend its Tariff to replace the Congestion Management Process, the Commission would review any such proposal pursuant to section 205 of the Federal Power Act, and IS Parties would have an opportunity to raise any concerns at that time.

55. Finally, we note that Seams Service is a voluntary service that MISO offers under its Tariff on a non-discriminatory basis to all eligible customers. Like any Seams Service customer, if IS Parties no longer want Seams Service because they find that Seams Service would no longer benefit them given their particular situation, they can exercise their right to terminate their Seams Service agreement. In fact, IS Parties have given MISO notice to terminate their Seams Service agreement, and MISO stated in its answer that it will agree to termination of their Seams Service agreement sooner than the one year notice period if IS Parties desire. If IS Parties terminate Seams Service, the capacity sharing provision will not apply to NDEX and their interconnected systems will continue

[28] *See Midwest Indep. Transmission Sys. Operator, Inc.*, 135 FERC ¶ 61,205, at P 42 (2011).

to coordinate their transmission operations as required by the NERC standards, and will manage congestion using TLRs without also using the Congestion Management Process.

C. Effective Date

56. MISO requested that the proposed revisions to its Tariff to eliminate the special treatment for NDEX take effect on September 1, 2011. MISO states that it selected the September 1, 2011 effective date to allow sufficient time to complete the Western Interface Study and identify the specific limiting transmission elements as a result of the dynamic stability limits which are identified in the final study results. However, there is insufficient information in the record to determine whether the Western Interface Study has been completed. Therefore, we direct MISO to make a compliance filing prior to eliminating the special treatment for NDEX that informs the Commission that MISO has: (1) completed the Western Interface Study; (2) identified the new Reciprocal Coordinated Flowgates that will be used on the facilities that make up NDEX; and (3) established new operating guides to address the identified Reciprocal Coordinated Flowgates.[29] MISO has stated that these steps are necessary to transition NDEX from the existing treatment to the Congestion Management Process.[30] We direct MISO to make this compliance filing after all three steps have been completed and to specify therein an effective date for elimination of the special treatment for NDEX that occurs after these steps have been completed. MISO must make the compliance filing at least 10 days prior to the specified effective date.

The Commission orders:

(A) MISO's revisions to Module F, Part II, section 82.5 of its Tariff are hereby conditionally accepted for filing.

[29] We note that this filing is for informational purposes only. It will not be noticed nor require Commission action.

[30] Transmittal at 13 and MISO May 31, 2011 Answer at 4.

(B) MISO is directed to make a compliance filing, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.