171 FERC ¶ 61,071
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick, Bernard L. McNamee,
and James P. Danly.

EDF Renewable Energy, Inc. Docket Nos. EL18-26-001

v.

Midcontinent Independent System Operator, Inc.,
Southwest Power Pool, Inc., and
PJM Interconnection, L.L.C.

Reform of Affected System Coordination in the Generator Interconnection Process AD18-8-001

ORDER ON REHEARING AND CLARIFICATION

(Issued April 24, 2020)

1. On September 19, 2019, the Commission issued an order on a complaint filed by EDF Renewable Energy, Inc. (EDF)[1] (Complaint) and a related technical conference, granting the Complaint in part, denying the Complaint in part, and directing Midcontinent Independent System Operator, Inc. (MISO), Southwest Power Pool, Inc. (SPP), and PJM Interconnection, L.L.C. (PJM) to make compliance filings.[2] Invenergy Wind Development North America LLC, Invenergy Solar Development North America LLC, Invenergy Thermal Development LLC, and Invenergy Storage Development LLC (collectively, Invenergy) sought rehearing. RTO Generation Developers[3] sought

[1] EDF has since changed its name to EDF Renewables, Inc.

[2] *EDF Renewable Energy, Inc. v. Midcontinent Indep. Sys. Operator, Inc.*, 168 FERC ¶ 61,173 (2019) (September 2019 Order). The Commission also declined to initiate a generic proceeding on the broader issues raised in the technical conference and, therefore, terminated Docket No. AD18-8-000. *Id*. PP 2, 22.

[3] RTO Generation Developers is comprised of EDF, Enel Green Power North America, Inc., Renewable Energy Systems Americas Inc., and RWE Renewables Americas, LLC.

rehearing and clarification. For the reasons discussed below, we grant RTO Generation Developers' requests for clarification, dismiss their alternative rehearing request of the issue granted clarification as moot, and deny the remainder of their rehearing request. We further dismiss Invenergy's rehearing request as premature.

I. Background

2. In Order No. 2003, the Commission required each public utility that owns, controls, or operates facilities used for transmitting electric energy in interstate commerce to amend its tariff to include interconnection procedures and an interconnection agreement for electric generating facilities having a capacity of more than 20 megawatts.[4] The Commission also found that:

> When a Transmission Provider adds its own new generation to its system, this may have a reliability effect on other systems, requiring coordination among systems. Such coordination must extend to new generation of any Interconnection Customer because, as stated in this provision, a Transmission Provider must offer all generators service that is comparable to the service that it provides to its own generation or that of its Affiliates.[5]

3. In Order No. 2003, the Commission concluded that there was a pressing need for a single, uniformly applicable set of procedures and agreements to govern the process of interconnecting large generators to a transmission provider's transmission system, and the Commission required transmission providers[6] to coordinate interconnection studies and planning meetings with Affected Systems.[7] In Order No. 2003-A, the Commission

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[4] *See Standardization of Generator Interconnection Agreements and Procedures,* Order No. 2003, 104 FERC ¶ 61,103, at P 1 (2003), *order on reh'g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh'g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh'g,* Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff'd sub nom. Nat'l Ass'n of Regulator Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

[5] Order No. 2003, 104 FERC ¶ 61,103 at P 122.

[6] The transmission provider is the entity with which an interconnection customer seeks to connect a generating facility. September 2019 Order, 168 FERC ¶ 61,173 at n.7.

[7] An Affected System is an electric system other than the transmission provider's transmission system that may be affected by a proposed interconnection. Order No. 2003, 104 FERC ¶ 61,103 at P 29 n.32. *See pro forma* Large Generator Interconnection Procedures (LGIP) § 3.5, (Coordination with Affected Systems) ("The Transmission

required that the results of any study of the effect of an interconnection on any Affected System be included in the applicable interconnection study within the time frame specified by the host transmission provider's Large Generator Interconnection Procedures (LGIP), only "if available."[8] The Commission recognized that Affected System studies may not be completed within the time frame specified in the LGIP and that a flexible standard would permit the interconnection process to proceed in face of delays or non-response by an Affected System.[9]

4. MISO, SPP, and PJM are Commission-approved regional transmission organizations (RTO) and transmission providers. Each RTO's tariff identifies the requirement for the host RTO to coordinate with neighboring RTOs that are Affected Systems. The RTOs also maintain Business Practice Manuals (BPM) and have entered into Joint Operating Agreements (JOA) (the MISO-SPP JOA and MISO-PJM JOA), which outline the RTOs' processes for Affected System coordination and exchange of data and information between the RTOs.[10]

5. On October 30, 2017, EDF filed the Complaint with the Commission. In the Complaint, EDF argued that the MISO, SPP, and PJM tariffs, as well as the MISO-SPP JOA and MISO-PJM JOA, were not sufficiently detailed regarding the coordination that occurs between a host RTO and an Affected System RTO.

6. On February 2, 2018, the Commission issued an order finding that EDF raised a number of issues that warranted further examination and directed Commission staff to convene a technical conference,[11] which was held on April 3-4, 2018. The technical conference explored the issues raised in the Complaint, in addition to broader Affected Systems coordination issues raised in the Notice of Proposed Rulemaking issued in Docket No. RM17-8-000[12]; together, these proceedings were assigned Docket No. AD18-

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Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators.").

[8] Order No. 2003-A, 106 FERC ¶ 61,220 at P 115.

[9] *Id.*

[10] September 2019 Order, 168 FERC ¶ 61,173 at PP 7-10.

[11] *EDF Renewable Energy, Inc. v. Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,085 (2018) (Tech Conference Order).

[12] Docket No. RM17-8-000 culminated in the issuance of Order No. 845, in which the Commission amended the *pro forma* LGIP and the *pro forma* Large Generator Interconnection Agreement (LGIA) to improve certainty, promote more informed

8-000.[13] Parties submitted comments following the technical conference. In the September 2019 Order, the Commission granted the Complaint in part and denied the Complaint in part, finding that certain tariff and JOA revisions to memorialize the Affected System coordination processes between MISO, SPP, and PJM were necessary to bring additional clarity and transparency to interconnection customers. The Commission directed MISO, SPP, and PJM to make compliance filings within 60 days of the issuance date of the order.[14] RTO Generation Developers sought rehearing and clarification. Invenergy sought rehearing.

II. Discussion

A. Affected System Study Modeling Standards

1. NRIS and ERIS Modeling Standards

a. Background

7. In the Complaint, EDF alleged that there was no information in the RTOs' tariffs or JOAs regarding the modeling standard each RTO used to determine Affected System impacts. Specifically, EDF alleged that the RTOs applied different modeling standards

interconnection, and enhance interconnection study processes. *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *errata notice*, 167 FERC ¶ 61,123, *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019), *errata notice*, 167 FERC ¶ 61,124, *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

[13] Tech Conference Order, 162 FERC ¶ 61,085 at PP 68-70. In the September 2019 Order, the Commission found that there was insufficient evidence in the record developed in the Docket No. AD18-8-000 proceeding to address broader Affected Systems coordination issues in regions beyond those identified in the Complaint, and therefore, as noted above, the Commission declined to initiate a generic Affected System rulemaking proceeding and terminated Docket No. AD18-8-000. September 2019 Order, 168 FERC ¶ 61,173 at PP 2, 22.

[14] September 2019 Order, 168 FERC ¶ 61,173 at P 2. On October 31, 2019, the Commission granted an extension of time for the RTOs to submit their respective compliance filings. MISO, PJM, and SPP filed compliance filings on February 3, 2020, and matters raised therein will be addressed in future orders.

(either Network Resource Interconnection Service (NRIS)[15] or Energy Resource Interconnection Service (ERIS))[16] when studying Affected System impacts, which could affect the extent of upgrades identified on an Affected System needed to accommodate an interconnection request. As an example, EDF noted that MISO always applies the ERIS modeling standard when studying, as an Affected System, impacts to its system caused by interconnection requests on neighboring systems, regardless of the level of service (ERIS or NRIS) the interconnection customer requested on the neighboring system.[17] Conversely, EDF indicated that SPP and PJM study interconnection requests, as Affected Systems, based on the level of service (ERIS or NRIS) requested by the interconnection customer on the neighboring system.[18] EDF claimed that SPP's and PJM's application of the NRIS standard when an interconnection customer is only seeking NRIS in the host RTO, and not in SPP or PJM as an Affected System, results in costly and unnecessary network upgrades because the customer is not seeking the higher-level service of NRIS on the Affected System.[19] Rather, EDF asserts that as an Affected System, all RTOs

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[15] The *pro forma* LGIA defines NRIS as follows:

> [NRIS] shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or [independent system operator] with market based congestion management, in the same manner as Network Resources. [NRIS] in and of itself does not convey transmission service.

[16] The *pro forma* LGIA defines ERIS as follows:

> [ERIS] shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an as available basis. [ERIS] in and of itself does not convey transmission service.

[17] Complaint at 19.

[18] September 2019 Order, 168 FERC ¶ 61,173 at PP 75-76.

[19] Complaint at 20.

should study impacts under an ERIS standard, which is MISO's approach. EDF claimed that the disparate applications of ERIS and NRIS modeling standards could impact generator location decisions because the ERIS standard used to study Affected System impacts is a less strict modeling standard that results in lower network upgrade costs. EDF also claimed that none of the Affected System modeling practices had been shown to be just and reasonable and not unduly discriminatory or preferential because they had not been filed with the Commission.[20]

8. In the September 2019 Order, the Commission found that there was insufficient evidence to demonstrate that the modeling practices in MISO, SPP, and PJM were unjust and unreasonable.[21] The Commission also found that there was no need for MISO, SPP, and PJM to use the same modeling standards.[22] Specifically, the Commission stated:

> [T]he differences in market structures across MISO, SPP, and PJM may justify each RTO using its own approach, such as an NRIS or ERIS modeling standard, to evaluate the impacts to it as an Affected System regardless of the level of service that an interconnection customer is requesting in the host RTO. Thus, we find that MISO, SPP, and PJM should be permitted to evaluate Affected System impacts in accordance with their existing processes as described in the record of this proceeding, assuming they apply such criteria and procedures consistently and on a not unduly discriminatory basis among all interconnection requests. Accordingly, we deny the Complaint in part, and do not require MISO, SPP, and PJM to unify their modeling standards for Affected System analysis.[23]

9. However, the Commission also granted the Complaint, in part, with regard to modeling standards and found that the lack of transparency surrounding whether MISO, SPP, and PJM use the NRIS or ERIS modeling standards when conducting Affected System studies is unjust and unreasonable.[24] The Commission explained that the Affected System RTO's choice to study interconnection customers under the ERIS versus

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[20] *Id*. at 16-21.

[21] September 2019 Order, 168 FERC ¶ 61,173 at P 86.

[22] *Id.*

[23] *Id.*

[24] *Id.* P 87.

the NRIS modeling standard has the potential to significantly affect interconnection costs, and should be part of each RTO's JOA filed with the Commission. The Commission therefore directed MISO, SPP, and PJM to submit compliance filings to revise their JOAs to describe the modeling standard (i.e., ERIS or NRIS) they use, as the Affected System RTO, to study interconnection customers that request NRIS or ERIS in the host RTO.[25] The Commission stated that it will evaluate whether the revisions that MISO, SPP, and PJM make to comply with the directives in the September 2019 Order are just and reasonable in the proceedings addressing the compliance filings.[26]

b. Requests for Rehearing and Clarification

10. RTO Generation Developers seek clarification as to whether the Commission made a determination in the September 2019 Order regarding the application of ERIS and NRIS criteria.[27] Specifically, RTO Generation Developers request clarification as to whether the Commission will assess the justness and reasonableness of the impact standards that SPP and PJM apply in Affected System studies (i.e., ERIS and NRIS) when they submit their compliance filings, which should include such information.[28] Alternatively, RTO Generation Developers request rehearing and argue that the Commission should have determined that the use of ERIS, compared to NRIS, results in determining the correct financial impacts to the SPP or PJM system as an Affected System.[29]

11. Invenergy also seeks rehearing on this issue, arguing that the Commission erred by failing to determine that it is not just and reasonable for an Affected System RTO to apply the NRIS study criteria in evaluating whether the interconnection of a generator to a neighboring transmission system would have any effect on the reliability of the Affected System's transmission system.[30] Invenergy claims that regardless of differences in RTO market structures, PJM and SPP should not be allowed to use NRIS study criteria for their Affected System studies and that using NRIS study criteria for Affected System

[25] *Id.*

[26] *Id.* P 21.

[27] RTO Generation Developers Rehearing Request at 18.

[28] *Id.*

[29] *Id.* at 19.

[30] Invenergy Rehearing Request at 1-2.

studies is facially unjust and unreasonable.[31] Invenergy claims that the NRIS study criteria are more stringent than the ERIS criteria. Invenergy asserts that ERIS criteria determine the reliability impacts of *any* interconnection request on a system, whereas NRIS criteria serve the exclusive purpose of allowing the generator to be designated as a network resource in connection with Network Integration Transmission Service.[32] Invenergy argues that a generator that is not interconnecting to the Affected System, and is neither requesting nor receiving the right to be designated a network resource by the Affected System, should not be required to fund upgrades as though it were making a request to interconnect to the Affected System.[33]

12. Invenergy contends that permitting Affected System RTOs to continue studying interconnection requests under NRIS standards is contrary to Order No. 2003, which, Invenergy claims, finds that unless the interconnection alone would endanger reliability, holding a customer responsible for network upgrades on Affected Systems would generally pose an unreasonable obstacle to the construction of new generation.[34]

c. Commission Determination

13. We grant RTO Generation Developers' request for clarification. We clarify that the Commission will evaluate whether the modeling standards applied by MISO, PJM, and SPP in Affected System studies are just and reasonable in the proceedings addressing the compliance filings.[35]

14. Accordingly, RTO Generation Developers' alternative request for rehearing on this issue is dismissed as moot. As to Invenergy's request for rehearing on this matter, we note that Rule 713(b) of the Commission's Rules of Practice and Procedure permits requests for rehearing "of any final decision or other final order in a proceeding."[36] A final order is one that imposes an obligation, denies a right, or fixes some legal

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[31] *Id.* at 5.

[32] *Id.* at 3.

[33] *Id.* at 3, 8.

[34] *Id.* at 9 (citing Order No. 2003, 104 FERC ¶ 61,103 at P 120).

[35] September 2019 Order, 168 FERC ¶ 61,173 at PP 21, 86.

[36] 18 C.F.R. § 385.713(b) (2019); *see also* 16 U.S.C. § 825*l* (a) (parties "aggrieved by an order issued by the Commission in a proceeding ... may apply for a rehearing within thirty days after the issuance of such order").

relationship as a consummation of the administrative process.[37] The September 2019 Order, by contrast, did not make a final determination as to the justness and reasonableness of the use of either an ERIS or NRIS modeling standard to study impacts as an Affected System by any RTO. Consequently, we dismiss as premature Invenergy's rehearing arguments as to the RTOs' use of an ERIS or NRIS modeling standard to study impacts as an Affected System.

2. Timing of Receipt of Affected System Model

a. Background

15. In its Complaint, EDF requested that the Commission require the Affected System RTO to provide the Affected System model (on which its Affected System study results are based) to the host RTO at the time the Affected System RTO provides the study results.[38] EDF explained that the models are necessary to ensure that the host RTO and Affected System are using the same base case model, which will further ensure accuracy of the study results.[39]

16. In the September 2019 Order, the Commission found EDF's request to be sufficiently addressed by Order No. 845, which requires that transmission providers maintain network models, including all underlying assumptions, on either their Open Access Same-Time Information System (OASIS) sites or password-protected websites.[40] As in Order No. 845, the Commission found that the requirement to maintain network models should reasonably represent those models used during the most recent interconnection study and be representative of current system conditions.[41]

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[37] *Reliable Automatic Sprinkler Co. v. Consumer Prod. Safety Comm'n*, 324 F.3d 726, 731 (D.C. Cir. 2003) ("Final agency action 'mark[s] the consummation of the agency's decision making process' and is 'one by which rights or obligations have been determined, or from which legal consequences will flow.'") (quoting *Bennett v. Spear*, 520 U.S. 154, 178 (1997)).

[38] Complaint at 36.

[39] *Id.* at 8-9.

[40] September 2019 Order, 168 FERC ¶ 61,173 at P 90.

[41] *Id.*

b. Request for Rehearing

17. In their request for rehearing, RTO Generation Developers contend that the Commission erred by failing to require the Affected System RTO to provide the model on which the Affected System study results are based when it provides the study results to the host RTO.[42] Specifically, RTO Generation Developers state that the Commission's response that Order No. 845 requires transmission providers to maintain network models and assumptions on their websites is ineffectual.[43] RTO Generation Developers explain that interconnection customers need access to the models supporting the Affected System study results provided to them.[44]

18. Moreover, RTO Generation Developers assert that Order No. 845 does not require the transmission provider to provide access to study models *when* results are provided. Rather, RTO Generation Developers contend that the directive in Order No. 845 merely requires transmission providers to make such models available, and that Order No. 845 does not specify a time when those models must be available.[45]

19. RTO Generation Developers also contend that access to Affected System models from prior cycles does not provide directly relevant information about the Affected System study results that the interconnection customer receives.[46] RTO Generation Developers argue that this information is needed because, under MISO and SPP's interconnection study processes, decisions with financial consequences must be made at certain "Decision Points," which are points in time during the interconnection process where companies may subject posted sums of money to potential forfeiture in order to continue in the interconnection process.[47] RTO Generation Developers argue that it is unjust and unreasonable to require interconnection customers to make such decisions when they do not have the model to test whether the Affected System study results are just and accurate.[48]

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[42] RTO Generation Developers Rehearing Request at 21.

[43] *Id.* (citing September 2019 Order, 168 FERC ¶ 61,173 at P 90).

[44] *Id.*

[45] *Id.* at 22.

[46] *Id.* at 21-22.

[47] *Id.*

[48] *Id.* at 22.

c. Commission Determination

20. We deny rehearing. We decline to adopt a specific date or timeline at or during which Affected System modeling should be made available, and affirm the finding that this request is appropriately addressed by Order No. 845, which requires that transmission providers maintain network models, including all underlying assumptions, on either their OASIS sites or password protected websites.[49] In Order No. 845, the Commission revised Section 2.3 of the *pro forma* LGIP to state:

> Transmission Provider shall maintain base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on either its OASIS site or a password-protected website, subject to confidentiality provisions in LGIP Section 13.1. In addition, Transmission Provider shall maintain network models and underlying assumptions on either its OASIS site or a password-protected website. Such network models and underlying assumptions should reasonably represent those used during the most recent interconnection study and be representative of current system conditions.[50]

21. Thus, the transmission provider is responsible for maintaining either a password-protected website or OASIS site that includes network models representing current system conditions used during the most recent interconnection study.[51] The Commission clarified this language in Order No. 845-A by explaining that the "network model information should reflect the system conditions currently used in interconnection studies."[52] As such, we affirm that this requirement will provide sufficient transparency about the Affected System study model a transmission provider uses to evaluate interconnection requests and allow an interconnection customers to reasonably rely on the transmission provider's website or OASIS to provide current information on Affected System study models.[53]

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[49] September 2019 Order, 168 FERC ¶ 61,173 at P 90.

[50] *Pro forma* LGIP § 2.3 (Base Case Data).

[51] September 2019 Order, 168 FERC ¶ 61,173 at P 90.

[52] Order No. 845-A, 166 FERC ¶ 61,137 at P 88.

[53] September 2019 Order, 168 FERC ¶ 61,173 at P 90 (citing Order No. 845, 163 FERC ¶ 61,043 at P 236).

B. Affected System Coordination & Process

1. Specific Exchange Dates in the MISO-PJM JOA

a. Background

22. In its Complaint, EDF argued that there is no information in the RTOs' tariffs or JOAs about the timing for neighboring and host RTOs to complete an Affected System analysis.[54] EDF also claimed that there is a timing mismatch between the three phases of MISO's interconnection study process and the fact that the MISO-SPP JOA and the MISO-PJM JOA require Affected System study results to be provided to MISO twice per year.[55] EDF requested that the Commission direct MISO, SPP, and PJM to amend their tariffs and respective JOAs such that they would require Affected Systems RTO studies to occur, be completed, and delivered in time for the host RTO to meet the study delivery timing requirements in its tariff.[56]

23. In the September 2019 Order, the Commission found that, in many instances, the details that the RTOs provided about their coordination processes were not included in the RTOs' tariffs or JOAs.[57] Specifically, the Commission found that this uncertainty in the interconnection study process could be reduced by requiring MISO and SPP to provide more detail about their Affected Systems coordination processes in the MISO-SPP JOA.[58] However, the Commission declined to require the same reform for the MISO-PJM JOA.[59] The Commission found that generally, the MISO-PJM JOA included more detail than the MISO-SPP JOA, including the dates by which MISO and PJM must exchange Affected System information and provide study results.[60] Additionally, the Commission stated that EDF's proposals would effectively require the RTOs to align their interconnection study deadlines, which the Commission found was not necessary to

[54] Complaint at 2.

[55] *Id.* at 30.

[56] *Id.* at 36.

[57] September 2019 Order, 168 FERC ¶ 61,173 at P 44.

[58] *Id.*

[59] *Id.* P 45.

[60] *Id.*

ensure transparent Affected Systems coordination processes.[61] The Commission declined to prescribe a specific approach to which all three RTOs must adhere and instead permitted each individual RTO and its respective stakeholder process to develop an interconnection queue process that worked best for their region.[62]

b. Request for Rehearing

24. In their request for rehearing, RTO Generation Developers contend that the Commission should have directed the same reform for the MISO-PJM JOA as it did for the MISO-SPP JOA.[63] RTO Generation Developers contend that the dates listed in the MISO-PJM JOA are out of alignment with MISO's new three-phase study process, which they argue leads to the same uncertainty and confusion in the interconnection study process that the Commission found for MISO and SPP.[64] RTO Generation Developers contend that MISO is required to exchange queue information with PJM at least four times per year and that PJM is required to provide Affected System study results to MISO at least four times per year; however, RTO Generation Developers indicate that certain exchange dates are outdated.[65]

25. RTO Generation Developers further challenge the Commission's determination to not require the RTOs to make tariff and JOA revisions that would necessitate Affected System studies be provided when needed to meet the host RTO tariff study deadlines.[66]

26. RTO Generation Developers contend that there is no evidence in the record that these requests would effectively require the RTOs to align their interconnection study deadlines.[67] RTO Generation Developers assert that the Commission's determination is contrary to the record evidence that the RTOs fail to provide Affected System study results by the time needed for the host RTO to comply with the interconnection study deadlines in its tariff, which RTO Generation Developers contend is harming

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[61] *Id.* P 47.

[62] *Id.*

[63] RTO Generation Developers Rehearing Request at 5-6.

[64] *Id.* at 7.

[65] *Id.*

[66] *Id.* at 8.

[67] *Id.*

interconnection customers.[68] RTO Generation Developers argue that, without an affirmative obligation for the Affected System RTO to deliver Affected System study results in the time needed for the host RTO to meet the study delivery timing requirements in its tariff, the interconnection delays that are documented in the record will remain.[69] RTO Generation Developers state that Order No. 2003 required the transmission provider to provide interconnection studies by specific dates.[70] RTO Generation Developers assert that without a similar requirement for Affected Systems, an RTO will dedicate its resources to ensuring that interconnection studies are timely issued but will release Affected System studies with secondary importance.[71] RTO Generation Developers contend that this is unduly discriminatory and preferential.[72]

c. Commission Determination

27. We deny rehearing on RTO Generation Developers' requested date changes to the MISO-PJM JOA. As stated in the September 2019 Order, the Commission required modification of the MISO-SPP JOA to meet the goal of transparency, and thus directed parties to modify the MISO-SPP JOA to include timelines for the sharing of Affected System information.[73] The Commission found that the MISO-PJM JOA met the goal of transparency because it detailed the process, including target dates for information exchange, and consequently did not warrant further modification.[74] RTO Generation Developers do not argue with the Commission's finding that the MISO-PJM JOA already adequately details the timelines for the sharing of Affected System information; rather, they are seeking additional changes beyond what the Commission required in asserting that the MISO-PJM JOA's existing dates of exchange for Affected System information in

[68] *Id.* at 9.

[69] *Id.* at 10.

[70] *Id.* at 11.

[71] *Id.*

[72] *Id.*

[73] September 2019 Order, 168 FERC ¶ 61,173 at P 45.

[74] *Id.*

those timelines are outdated and could result in delays.[75] We find that these changes are not necessary to meet the goal of transparency addressed in the September 2019 Order.[76]

28. As to EDF's request to amend the RTOs' tariffs and JOAs to require that an Affected System RTO complete and deliver Affected System studies in the time needed for the host RTO to meet the study delivery timing requirements in its tariff, we find that the Commission did not err in declining to require such an amendment.[77] In the September 2019 Order, the Commission found that such an amendment would require the RTOs to align the timeline of their study processes, and we continue to find such an amendment unnecessary to ensure transparent Affected Systems coordination processes.[78] The RTOs' study processes and associated timelines are an integral part of each RTO's interconnection study process, which is developed through each RTO's stakeholder process, and each RTO should be allowed to develop an interconnection queue process that works best for its region.[79]

29. Finally, we decline to prescribe that SPP, MISO, and PJM align their Affected System study processes with the study delivery timing requirements in neighboring RTOs' generator interconnection study procedures. The Commission has accepted variations from the Commission's *pro forma* LGIP for independent entities such as RTOs based on their regional needs, and as a result, there are significant differences between the processes and study time frames used by the various RTOs. As such, an alignment of study processes would be difficult, if not impracticable, given the approved variations.[80]

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[75] RTO Generation Developers Rehearing Request at 8.

[76] However, we note that such changes to the MISO-PJM JOA were made on compliance. Renewable Generation Developers filed comments in support of these changes.

[77] *Id.*

[78] *Id.*

[79] September 2019 Order, 168 FERC ¶ 61,173 at P 47.

[80] *See, e.g.,* SPP Post-Conference Reply Comments at 7, 8, 25 (explaining that requiring study process schedules to be aligned could be counterproductive and would require RTOs to address differences in their planning and cost allocation processes, modeling assumptions, seasons and timeframes).

C. Affected System Impact Coordination

1. Detail of Affected System Study Criterion

a. Background

30. In the Complaint, EDF argued that there is no information in the MISO, SPP, and PJM tariffs or JOAs about how they determine whether an interconnection has Affected System impacts in a neighboring system in order for them to fulfill their requirement to coordinate with each other as Affected Systems.[81]

31. In the September 2019 Order, the Commission stated that the description in the MISO-SPP Coordination Document on how the RTOs study whether there is an impact on an Affected System RTO should provide a reasonable level of certainty and transparency as to what each RTO will do when studying Affected System impacts.[82] Accordingly, to help ensure transparency, the Commission found that the MISO-SPP JOA should be updated to also include the description found in the MISO-SPP Coordination Document of how MISO and SPP study impacts on the Affected System RTO.[83] However, the Commission determined that no further revisions were needed to the MISO-PJM JOA because the MISO-PJM JOA includes sufficient detail on how each RTO studies Affected System impacts.[84]

32. Additionally, the Commission directed MISO and SPP to "clarify that the SPP study criteria apply to SPP facilities and the MISO study criteria applies to MISO facilities."[85]

b. Request for Rehearing

33. In their request for rehearing, RTO Generation Developers contend that the Commission did not cite to any evidence to support the finding that no further revisions were needed to the MISO-PJM JOA because the MISO-PJM JOA includes sufficient

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[81] Complaint at 2.

[82] September 2019 Order, 168 FERC ¶ 61,173 at P 57.

[83] *Id.*

[84] *Id.*

[85] *Id.*

detail on how each RTO studies Affected System impacts.[86] RTO Generation Developers state that nearly identical language was used in the MISO-SPP JOA and the MISO-PJM JOA, but only MISO and SPP were required to revise their JOA.[87]

34. RTO Generation Developers also seek clarification as to the Commission's intent by stating that the MISO-SPP JOA "should also clarify that SPP study criteria apply to SPP facilities and MISO study criteria applies to MISO facilities."[88]

c. Commission Determination

35. We deny rehearing and continue to find that the MISO-PJM JOA includes sufficient detail on how each RTO studies Affected System impacts; therefore, we decline to require changes to the MISO-PJM JOA at this time for purposes of transparency.[89] Specifically, we find that Section 9.3.3 of the MISO-PJM JOA describes how MISO and PJM plan to study impacts on Affected Systems in more detail than Section 9.4.4 in the MISO-SPP JOA.[90] For example, Section 9.3.3(c) of the MISO-PJM JOA outlines the parameters of such Affected System studies.[91]

36. With regard to the statement in the September 2019 Order that the MISO-SPP JOA "should also clarify that SPP study criteria apply to SPP facilities and MISO study criteria applies to MISO facilities,"[92] we clarify that RTOs should apply their own criteria to their respective facilities when conducting Affected System studies.[93] In other words, MISO is not required to apply SPP's criteria to determine whether a MISO interconnection request has an impact on SPP as an Affected System, and SPP similarly is not required to apply MISO's study criteria to determine whether an SPP interconnection request has an impact on MISO as an Affected System. SPP should

[86] RTO Generation Developers Rehearing Request at 14.

[87] *Id.*

[88] *Id.* at 13.

[89] September 2019 Order, 168 FERC ¶ 61,173 at PP 45, 57.

[90] *Id.*

[91] *See id.* PP 10, 45 (citing MISO-PJM JOA § 9.3.3).

[92] *Id.* P 57.

[93] *Id.*

apply SPP's study criteria to SPP facilities when conducting Affected System studies,[94] and MISO should apply MISO's study criteria to MISO facilities when conducting Affected System studies.[95]

2. Inclusion of Affected System Study Results with Host RTO Studies

a. Background

37. In its Complaint, EDF requested that the Commission require that MISO, SPP, and PJM file tariff and JOA revisions that include an affirmative requirement for the host RTO to include Affected System RTO information with its own study results.[96]

38. In the September 2019 Order, the Commission found that it was unnecessary to direct the RTOs to file JOA revisions that would include an affirmative requirement to include Affected System RTO information with their own study results. The Commission found that this proposal would effectively require the RTOs to align their interconnection study deadlines, which the Commission found was not necessary to ensure transparent Affected System coordination processes.[97]

b. Request for Rehearing

39. In their request for rehearing, RTO Generation Developers argue that the Commission erred by not requiring PJM to include Affected System study results with its interconnection study results.[98] RTO Generation Developers argue that there is no record evidence that the RTOs' study processes would need to be aligned if Affected System study results are included with host RTO studies. RTO Generation Developers note that even though the MISO and SPP interconnection study processes are not aligned, both MISO and SPP's tariffs require each respective RTO to include Affected System study results with its interconnection study results.[99] RTO Generation Developers contend that the only RTO that does not have a tariff obligation to include Affected System results

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[94] *Id.*

[95] *Id.*

[96] Complaint at 3.

[97] September 2019 Order, 168 FERC ¶ 61,173 at P 69.

[98] RTO Generation Developers Rehearing Request at 12.

[99] *Id.* at 15.

with its interconnection studies is PJM and that record evidence shows that interconnection customers are harmed by this gap in PJM's process.[100]

c. Commission Determination

40. We deny rehearing on this matter. RTO Generation Developers' contention that PJM is the only RTO that does not have a tariff obligation to include Affected System results with its interconnection studies is incorrect, as MISO and SPP only require Affected System results to be included with their respective interconnection studies if they are available.[101] We reiterate that in order for the RTOs to include Affected System RTO information with their own study results, the cycles would essentially have to be aligned, as the Affected System RTO information would have to be available at the time the RTO's study results conclude.[102] As described above, there are significant differences between the processes and time frames used by the various RTOs, and we do not find that a realignment of these processes is necessary to ensure that interconnection customers have time to review Affected Systems studies before making further financial commitments.[103] MISO, SPP, and PJM each indicate that, as a mitigating measure, they provide the opportunity for an interconnection customer to review Affected System studies before the interconnection customer must post a financial milestone to ensure that Affected System impacts are addressed before the interconnection customer obtains full interconnection service.[104]

The Commission orders:

(A) RTO Generation Developers' requests for clarification are hereby granted, as discussed in the body of this order.

(B) RTO Generation Developers' alternative request for rehearing is hereby dismissed as moot, as discussed in the body of this order.

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[100] *Id.*

[101] SPP Open Access Transmission Tariff, attach. V, GIP § 3.5 (Coordination with Affected Systems) (3.0.0). MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff, attach. X, GIP § 7.3.3.4 (Scope of Interconnection Facilities Study).

[102] NextEra Technical Conference Reply Comments at 9.

[103] *See supra* n.28.

[104] September 2019 Order, 168 FERC ¶ 61,173 at PP 62-65.

(C) RTO Generation Developers' requests for rehearing are hereby denied, as discussed in the body of this order.

(D) Invenergy's request for rehearing is hereby dismissed, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.