

173 FERC ¶ 61,036  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

Midcontinent Independent System Operator, Inc.	Docket Nos. ER20-938-002
Midcontinent Independent System Operator, Inc.	ER20-940-001
Southwest Power Pool, Inc.	ER20-941-002
Southwest Power Pool, Inc.	ER20-943-001 (not consolidated)

ORDER ADDRESSING ARGUMENTS RAISED ON REHEARING AND SETTING  
ASIDE PRIOR ORDER, IN PART

(Issued October 15, 2020)

1. On June 30, 2020, the Commission issued an order finding, among other things, that Midcontinent Independent System Operator, Inc. (MISO) and Southwest Power Pool, Inc. (SPP) partially complied with the requirements of the Commission's

September 19, 2019 order<sup>1</sup> regarding Affected System<sup>2</sup> generator interconnection coordination procedures.<sup>3</sup> MISO and SPP sought rehearing.

2. Pursuant to *Allegheny Defense Project v. FERC*,<sup>4</sup> the rehearing request filed in this proceeding may be deemed denied by operation of law. However, as permitted by section 313(a) of the Federal Power Act,<sup>5</sup> we are modifying the discussion in the June 2020 Order and setting aside the order, in part, as discussed below.<sup>6</sup>

## **I. Background**

3. 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.<sup>7</sup>

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<sup>1</sup> *EDF Renewable Energy, Inc. v. Midcontinent Indep. Sys. Operator, Inc.*, 168 FERC ¶ 61,173 (2019) (September 2019 Order).

<sup>2</sup> An Affected System is an electric system other than the transmission provider's transmission system that may be affected by a proposed interconnection. The transmission provider is the entity with which an interconnection customer seeks to connect a generating facility (sometimes referred to as the host transmission provider). *See Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103, at P 3 n.3, P 29 n.32 (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 Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

<sup>3</sup> *Midcontinent Indep. Sys. Operator, Inc.*, 171 FERC ¶ 61,275 (2020) (June 2020 Order).

<sup>4</sup> 964 F.3d 1 (D.C. Cir. 2020) (en banc).

<sup>5</sup> 16 U.S.C. § 825l(a) ("Until the record in a proceeding shall have been filed in a court of appeals, as provided in subsection (b), the Commission may at any time, upon reasonable notice and in such manner as it shall deem proper, modify or set aside, in whole or in part, any finding or order made or issued by it under the provisions of this chapter.").

<sup>6</sup> 964 F.3d at 16-17.

<sup>7</sup> Order No. 2003, 104 FERC ¶ 61,103 at P 1.

Order No. 2003 also required the transmission provider to coordinate interconnection studies and planning meetings with Affected Systems.<sup>8</sup> The Commission stated 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. The Commission explained that such coordination must extend to new generation of any interconnection customer because 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.<sup>9</sup>

4. The Commission found that the transmission provider must allow any Affected System to participate in the process when conducting interconnection studies and incorporate the legitimate safety and reliability needs of the Affected System. The Commission also stated that the Affected System is not required to participate in that process, and if the Affected System declines to work with the transmission provider, or fails to provide information in a timely manner, the transmission provider may proceed in the interconnection process without taking into account the information that could have been provided by the Affected System.<sup>10</sup> In Order No. 2003-A, the Commission further required that the results of any study of the effect of the interconnection on any Affected System be included in the host transmission provider's (i.e., the transmission provider to whose system an interconnection customer is seeking to interconnect) interconnection study within the time frame specified by the host transmission provider's LGIP "if available," which allows the interconnection process to proceed even in the face of delays or non-response by the Affected System.<sup>11</sup>

5. MISO and SPP are Commission-approved regional transmission organizations (RTO) and, as such, are also transmission providers. MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff (MISO Tariff) contains provisions regarding Affected Systems coordination that are in addition to those contained in the Commission's *pro forma* LGIP.<sup>12</sup> SPP's provisions concerning Affected Systems, contained in Attachment V of SPP's Open Access Transmission Tariff (SPP

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<sup>8</sup> *Id.* PP 36, 116, 122.

<sup>9</sup> *Id.* P 122

<sup>10</sup> *Id.* P 121.

<sup>11</sup> Order No. 2003-A, 106 FERC ¶ 61,220 at P 115.

<sup>12</sup> See MISO Tariff, Attachment X, GIP § 3.5 (Coordination with Affected Systems) (127.0.0).

Tariff), are substantively similar to those in the Commission's *pro forma* LGIP.<sup>13</sup> Each RTO's tariff also identifies the requirement for the host RTO to coordinate with neighboring RTOs that are Affected Systems. In addition, the RTOs have entered into a Joint Operating Agreement (JOA),<sup>14</sup> which outlines the RTOs' processes for Affected System coordination and exchange of data and information between them. MISO's Generator Interconnection business practice manual provides additional information on MISO's Affected System coordination procedures.<sup>15</sup>

6. On October 30, 2017, EDF Renewable Energy, Inc. (EDF)<sup>16</sup> filed a complaint with the Commission in Docket No. EL18-26-000. In the complaint, EDF argued, among other things, that the MISO and SPP tariffs, as well as the MISO-SPP JOA, were not sufficiently detailed regarding the coordination that occurs between a host RTO and an Affected System RTO.<sup>17</sup>

7. On September 19, 2019, the Commission granted the EDF complaint in part, denied the complaint in part, and directed MISO and SPP to make compliance filings.<sup>18</sup> The Commission found that the lack of transparency surrounding whether MISO and SPP used the Network Resource Interconnection Service (NRIS) or Energy Resource Interconnection Service (ERIS)<sup>19</sup> modeling standards when conducting Affected System

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<sup>13</sup> SPP Tariff, Attachment V, GIP § 3.5 (Coordination with Affected Systems) (3.0.0).

<sup>14</sup> MISO, FERC Electric Tariff, MISO Rate Schedules, Joint Operating Agreement MISO and SPP (31.0.0); SPP, FERC Electric Tariff, Rate Schedules and Seams Agreements, Rate Schedule No. 9 MISO-SPP Joint Operating Agreement (1.0.0) (MISO-SPP JOA). MISO and SPP each maintain their own versions of the MISO-SPP JOA in their respective eTariff databases at the Commission.

<sup>15</sup> See MISO BPM-015, § 6.1.1.1.3.

<sup>16</sup> EDF has since changed its name to EDF Renewables, Inc.

<sup>17</sup> In the complaint, EDF made similar arguments about the PJM Interconnection, L.L.C. (PJM) tariff and MISO-PJM JOA.

<sup>18</sup> September 2019 Order, 168 FERC ¶ 61,173.

<sup>19</sup> The Commission's *pro forma* LGIA defines ERIS and NRIS 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

studies was unjust and unreasonable.<sup>20</sup> The Commission explained that the Affected System RTO's choice to study interconnection customers under the ERIS versus the NRIS modeling standard had the potential to significantly affect interconnection costs and should be part of the MISO-SPP JOA filed with the Commission. The Commission directed MISO and SPP to submit compliance filings to revise their JOA 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.<sup>21</sup> The Commission stated that it would evaluate whether the revisions that MISO and SPP proposed to comply with the directives in the September 2019 Order were just and reasonable in the proceedings addressing the compliance filings.<sup>22</sup>

8. In the June 2020 Order, the Commission accepted, in part, MISO and SPP's compliance filings to the September 2019 Order and directed MISO and SPP to submit further compliance filings.<sup>23</sup> The Commission found that MISO and SPP complied with the directive to describe the modeling standard (i.e., ERIS or NRIS) that they use to study, as the Affected System RTO, interconnection customers that request NRIS in the host RTO and interconnection customers that request ERIS in the host RTO. However,

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using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an available basis. [ERIS] in and of itself does not convey transmission service.

[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 ISO with market based congestion management, in the same manner as Network Resources. [NRIS] in and of itself does not convey transmission service.

<sup>20</sup> September 2019 Order, 168 FERC ¶ 61,173 at P 87.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* P 21.

<sup>23</sup> June 2020 Order, 171 FERC ¶ 61,275 at PP 57-58.

the Commission found that there was insufficient detail in the proposed revisions to the MISO-SPP JOA regarding sink and dispatch assumptions.<sup>24</sup>

9. With respect to dispatch assumptions, the Commission found that when conducting a study of the impact of an interconnection request in the host RTO, the Affected System should use the dispatch assumptions of the host RTO, as those assumptions most closely reflect how the generator would actually be dispatched.<sup>25</sup> The Commission found that an Affected System study using a different set of dispatch assumptions than the host RTO in which the generator is requesting interconnection may lead to unjust and unreasonable rates through assignment of network upgrade costs. The Commission stated that, for example, if an Affected System study's dispatch assumptions model a certain type of generator at a higher capacity factor than the host RTO (e.g., 40% vs. 15%), the study will overstate the impact of that type of generator, which may lead to assignment of network upgrade costs that would have otherwise been avoided had the Affected System study used the dispatch assumptions of the host RTO. The Commission therefore directed MISO and SPP to file a further compliance filing revising the MISO-SPP JOA to specify that MISO's and SPP's Affected System studies will model interconnection requests using the fuel-based dispatch assumptions of the host RTO.<sup>26</sup>

## II. Discussion

### A. Request for Rehearing

10. MISO and SPP argue on rehearing that the Commission's finding that the dispatch assumptions of the host RTO most closely reflect how the generator would actually be dispatched is unsupported by the record.<sup>27</sup> MISO and SPP assert that the purpose of the Affected System analysis is to identify required system upgrades caused by both SPP interconnection customers and MISO interconnection customers so that SPP, for example, may allocate the costs of system upgrades to the interconnection customer driving the need for the upgrade. MISO and SPP contend that the only way to fairly identify required system upgrades when evaluating interconnection customers is to subject the MISO generation to the same SPP planning criteria, planning tests, and dispatch assumptions that SPP applies to its own interconnection customers when analyzing the impacts to the SPP system. Similarly, according to the RTOs, SPP

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<sup>24</sup> *Id.* P 61.

<sup>25</sup> *Id.* P 62.

<sup>26</sup> *Id.*

<sup>27</sup> MISO and SPP Request for Rehearing at 7-8 (citing June 2020 Order, 171 FERC ¶ 61,275 at P 62).

generation should be subjected to the same MISO planning criteria, planning tests, and dispatch assumptions that MISO applies to its interconnection customers when analyzing the impacts to the MISO system.<sup>28</sup>

11. MISO and SPP also argue that the Commission's finding that an Affected System study using a different set of dispatch assumptions than the host RTO may lead to unjust and unreasonable rates through assignment of network upgrade costs is not supported by any evidence in the record.<sup>29</sup> MISO and SPP maintain that in order to assign upgrade responsibility and allocate costs among MISO and SPP wind generators, the more equitable approach is to treat them similarly by applying the same test, criteria, or similar dispatch assumptions of the specific RTO whose system is being studied for impacts.<sup>30</sup>

12. MISO and SPP also argue that the Commission's finding that Affected System RTOs may use their own modeling criteria (i.e., NRIS and ERIS) for all interconnection requests, including Affected System studies, but cannot use their own fuel-based dispatch assumptions when conducting an Affected System study, results in contradictory rulings without adequate explanation.<sup>31</sup>

13. Further, MISO and SPP state that each RTO's fuel-based dispatch assumptions are an integrated component of their larger interconnection and planning models that were customized to work with the rest of the RTO's models and study processes, and in many cases, are not compatible with the Affected System RTO's processes.<sup>32</sup>

14. More specifically, MISO and SPP state that each RTO uses base cases as part of its interconnection studies that are different from those of its neighbor. For example, MISO states that it uses summer peak and shoulder peak scenarios. SPP states that, by contrast, it uses seven different cases. MISO and SPP explain that the load in the MISO shoulder peak scenario is assumed to be 70-80% of summer peak load, while the load in the light load scenario that SPP uses is assumed to be 40-60% of summer peak load.

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<sup>28</sup> *Id.* at 7-10.

<sup>29</sup> *Id.* at 7 (citing June 2020 Order, 171 FERC ¶ 61,275 at P 62).

<sup>30</sup> *Id.* at 9-10.

<sup>31</sup> *Id.* at 10-12 (citing September 2019 Order, 168 FERC ¶ 61,173 at P 86 (stating that “differences in the market structures across [the RTOs] 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.”)).

<sup>32</sup> *Id.* at 12-16.

MISO and SPP contend that, as an example, when MISO's fuel-based dispatch assumption for solar is listed at 50% in the shoulder peak case,<sup>33</sup> that 50% assumption is a product of the MISO shoulder peak case and keyed to the parameters of that case.<sup>34</sup> MISO and SPP maintain that because they do not use the same base cases, inserting the fuel-based dispatch assumption that SPP uses in its light load case for solar, which is 100%, into MISO's shoulder peak case would result in a study model that reflected neither SPP's dispatch nor MISO's. MISO and SPP explain that the 100% assumption used in SPP's light load case is not equivalent to a 100% assumption used in MISO's shoulder peak case. Similarly, MISO states that, unlike SPP, it does not use light load, winter, or spring cases. MISO states that, because it does not use these types of cases, it does not have dispatch assumptions developed for interconnection requests in those cases, and therefore, it is not clear what dispatch assumptions the Commission would have SPP make for the MISO requests when evaluating their impacts on SPP's system if SPP is required to use MISO's assumptions.<sup>35</sup>

15. Further, MISO and SPP argue that MISO's interconnection study procedures and modeling rules are inextricably linked with other MISO processes.<sup>36</sup> They explain that this applies to MISO's dispatch assumptions as well, which are part of MISO's planning criteria and linked with MISO's regional transmission plan. MISO and SPP argue that MISO cannot simply adopt SPP's cases for studying Affected System interconnection customers in order to apply their fuel-based dispatch assumptions, because this would decouple and create incongruities between MISO's planning and interconnection studies. They assert that, in effect, this directive would impose a partially unified planning criteria on the RTOs that is inconsistent with what either currently uses.<sup>37</sup>

16. MISO and SPP also state that they use different study sub-groups in their interconnection studies. They explain that SPP's study process divides the SPP footprint into 18 study sub-groups based on geographic and electrical commonalities. MISO and SPP explain that as part of SPP's customized automation tool for the study process, SPP

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<sup>33</sup> *Id.* at 13 (citing MISO BPM-015 at Table 6-1). Table 6-1 provides that "Dispatch level for solar resources will be aligned with solar dispatch in the MTEP shoulder peak case. It was 50% in 2017 MTEP shoulder peak case. This value is subject to change based on the solar capacity credit which is calculated annually."

<sup>34</sup> MISO and SPP state that this same solar facility would be modeled at 100% dispatch in MISO's summer peak case. *Id.*

<sup>35</sup> *Id.* at 13.

<sup>36</sup> *Id.* (citing September 2019 Order, 168 FERC ¶ 61,173 at P 86).

<sup>37</sup> *Id.*

dispatches generators inside a sub-group differently from those outside the sub-group. MISO and SPP state that MISO's study process dispatches SPP generators as a single large group. They further state that for MISO to replicate SPP's dispatch process, MISO would be required to develop its own automation tool to replicate SPP dispatch.<sup>38</sup>

17. Additionally, MISO and SPP argue that each RTO makes different assumptions about how to dispatch prior-queued requests when conducting interconnection studies. They state that, for instance, when studying a new wind generator interconnection request, MISO dispatches prior-queued wind generator interconnection requests at 15.6% of the requested capacity. MISO and SPP state that SPP's practice is to dispatch its prior-queued wind generator interconnection requests at 100% of the requested capacity. MISO and SPP note that in certain areas of the system, MISO and SPP generators are electrically side-by-side. They argue that if SPP must use MISO's dispatch assumption for prior-queued requests in its studies, it will result in an SPP prior-queued generator being dispatched at 100% while an electrically nearby MISO prior-queued generator is dispatched at 15.6%. They contend that this has the potential to skew the impacts and resulting cost responsibility in a way that is contrary to the Commission's intent with this directive.<sup>39</sup>

18. Finally, MISO and SPP argue that requiring the Affected System RTO to use the dispatch assumptions of the host RTO would be unduly discriminatory and preferential. MISO and SPP state that the Commission held that "MISO [and] SPP... should be permitted to evaluate Affected System impacts in accordance with their existing practices,"<sup>40</sup> and that the Commission has not provided a reasoned explanation for its departure from this principle. They further maintain that this requirement is unduly discriminatory and preferential because the Affected System RTO would be required to study similarly-situated interconnection requests under different dispatch assumptions.<sup>41</sup>

## **B. Commission Determination**

19. Upon reconsideration, we are persuaded by the arguments raised on rehearing that the Commission should not have directed the Affected System RTO to use the dispatch

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<sup>38</sup> *Id.* at 14-15.

<sup>39</sup> *Id.* at 15.

<sup>40</sup> *Id.* at 16 (citing September 2019 Order, 168 FERC ¶ 61,173 at P 86).

<sup>41</sup> *Id.* (citing *Dynegy Midwest Generation, Inc. v. FERC*, 633 F.3d 1122, 1127 (D.C. Cir. 2011) (generators located in different zones are similarly-situated for purposes of receiving reactive power compensation)).

assumptions of the host RTO when it conducts Affected System studies. Thus, we set aside the June 2020 Order, in part.

20. In the June 2020 Order, the Commission found that when conducting a study of the impact of an interconnection request in the host RTO, the Affected System should use the dispatch assumptions of the host RTO. The Commission found that an Affected System study using a different set of dispatch assumptions than the host RTO in which the generator is requesting interconnection may lead to unjust and unreasonable rates through assignment of network upgrade costs.

21. We are persuaded by the arguments raised on rehearing that each RTO's fuel-based dispatch assumptions are an integrated component of their larger interconnection and planning models, and more specifically, their corresponding base cases, which are different for each RTO, and in some cases use different load assumptions. We agree with MISO and SPP that these fuel-based dispatch assumptions are not logically severable from the framework in which they were developed, and in many cases, are not compatible with the Affected System RTO's processes. We further agree that requiring MISO and SPP to use each other's fuel-based dispatch assumptions as part of their own model when conducting Affected Systems analysis has the potential to result in unjust, unreasonable, and unduly discriminatory rates, terms, and conditions of service under the RTOs' tariffs.

The Commission orders:

In response to MISO and SPP's request for rehearing, the June 2020 Order is hereby modified and set aside, in part, as discussed in the body of this order.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.