

171 FERC ¶ 61,203
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Midcontinent Independent System Operator, Inc.

Docket Nos. ER20-595-000
ER20-595-001

ORDER ACCEPTING TARIFF FILING

(Issued June 9, 2020)

1. On December 13, 2019, as amended on April 10, 2020, Midcontinent Independent System Operator, Inc. (MISO) submitted, pursuant to section 205 of the Federal Power Act (FPA)¹ and part 35 of the Commission's regulations,² proposed revisions to its Open Access Transmission, Energy, and Operating Reserve Markets Tariff (Tariff) to require that certain solar Generating Resources register as Dispatchable Intermittent Resources (DIRs). As discussed below, we accept MISO's filing, effective March 15, 2020, as requested.

I. Background

2. On February 28, 2011 the Commission conditionally accepted MISO's proposal to create a new subset of Generation Resources called DIRs that would be treated in a manner similar to other Generation Resources in MISO's real-time energy market.³ MISO explains that the DIR Order limited the DIR registration requirements to those variable resources fueled by wind.⁴ MISO explains that in 2008 and 2009 it began to experience significant challenges associated with non-dispatchable wind resources, with approximately four to nine GW of wind generation on its system. MISO states that prior

¹ 16 U.S.C. § 824d (2018).

² 18 C.F.R. § 35.1, *et seq.* (2019).

³ Transmittal at 2 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 134 FERC ¶ 61,141 (2011) (DIR Order)).

⁴ *Id.*

to the tariff revisions accepted in the DIR Order, MISO had to manually curtail all wind resources' output to manage congestion, over-supply, or minimum load conditions because these resources did not receive dispatch instructions. According to MISO, as a result of requiring the wind resources to become DIRs, such resources now participate in MISO's Security-Constrained Economic Dispatch. MISO now predicts that, as soon as 2021, solar penetration will cause similar challenges and that this expected increase in otherwise non-dispatchable solar resources raises issues that are comparable to those raised prior to the implementation of the wind DIR requirements.

II. Filing

3. MISO proposes to require certain solar resources to become DIRs.⁵ The proposal would require all solar resources that enter commercial operation on or after March 15, 2020 to register and become dispatchable by March 15, 2022, and solar resources in commercial operation prior to March 15, 2020 have the option to become DIRs, but are not required to do so. Additionally, MISO proposes to revise the *pro forma* Generator Interconnection Agreement (GIA) in Attachment X to require that Interconnection Customers constructing solar resources must install equipment to make such resources capable of responding to appropriate dispatch signals under the Tariff.⁶ MISO explains that this will effectively require all solar-fueled resources that interconnect to the MISO Transmission System on or after March 15, 2020 to register as DIRs.⁷

III. Notices and Responsive Pleadings

4. Notice of the December 13, 2019 filing was published in the Federal Register, 84 *Fed. Reg.* 70,181 (Dec. 20, 2020), with interventions and protests due on or before January 3, 2020. On December 18, 2019, an errata notice was issued extending the date for filing comments to January 13, 2020. Timely motions to intervene were filed by Ameren Services Company, American Transmission Company LLC, Calpine Corporation, Consumers Energy, Cooperative Energy, DEPCOM Power, Inc., D.E. Shaw Renewable Investments, MidAmerican Energy Company, NextEra Energy Resources. LLC, WEC Energy Group, Inc., and Xcel Energy Services Inc. Entergy Services, LLC (Entergy) filed

⁵ *Id.* MISO states that this proposal is consistent with guidance provided by the North American Electric Reliability Corporation (NERC) suggesting that Transmission Providers consider requiring inverter-based generators to be dispatchable for reliability purposes. *Id.* at 3 (citing *NERC Reliability Guideline – BPS-Connected Inverter-Based Resource Performance* (September 2018): https://www.nerc.com/comm/PC_Reliability_Guidelines_DL/Inverter-Based_Resource_Performance_Guideline.pdf).

⁶ *Id.* at 3.

⁷ *Id.*

a timely motion to intervene and protest on behalf of each of the Entergy Operating Companies. Leeward Renewable Energy Development, LLC (Leeward Energy) filed a timely motion to intervene and comments in support of the filing. On February 6, 2020, MISO filed an answer to Entergy's protest. On February 11, 2020, DTE Electric Company (DTE) filed a motion to intervene out-of-time.

5. On March 11, 2020, Commission staff issued a letter informing MISO that its filing was deficient and requesting additional information (Deficiency Letter). MISO submitted its response on April 10, 2020 (Deficiency Response). Notice of MISO's Deficiency Response was published in the Federal Register, 85 *Fed. Reg.* 21,228 (April 16, 2020), with interventions and protests due on or before May 1, 2020. None was filed.

IV. Discussion

A. Procedural Matters

6. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

7. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d), we grant DTE's late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

8. Rule 213(a)(2) of the Commission's Rule of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept the answer filed by MISO as it has provided information that assisted us in our decision-making process.

B. Substantive Matters

1. Protest and Comment

9. Entergy states that it does not oppose the principle that forecast-driven variable resources like solar resources should be subject to dispatch by MISO to maintain reliability.⁸ Entergy states, however, that MISO's filing, is unjust and unreasonable because it would cause an undue burden on planned Entergy Operating Companies' solar resources in an advanced stage of development. In particular, Entergy states that the Entergy Operating Companies will purchase the output from, or own, six solar generating

⁸ Entergy Protest at 2.

facilities with a combined capacity of 420 MW that currently are under development.⁹ Entergy states that each resource already has in place an executed non-provisional or provisional GIA with MISO and that it expects the resources to begin commercial operation after March 15 in 2020 and in 2021.¹⁰

10. Entergy states that MISO's proposal would unfairly change a Tariff rule that Entergy and other generation developers may have relied upon when planning and making arrangements pertaining to such facilities and that MISO's proposal is unjust and unreasonable.¹¹ Entergy asserts that, as a consequence of MISO's proposal, Entergy's solar resources would have to register as DIRs, a significant change from the requirements that were in place when the Entergy Operating Companies entered into the aforementioned power purchasing agreements.¹² Entergy also states that, if the Commission accepts MISO's revisions, potential disputes may arise between the Entergy Operating Companies and sellers of solar power with which the Entergy Operating Companies have entered into power purchase arrangements.¹³ Furthermore, Entergy states that MISO has not demonstrated that the forecasted growth of solar generation in MISO creates a near-term reliability issue that necessitates the proposed changes.¹⁴

11. Entergy states that MISO's proposal would not subject solar resources in commercial operation as of March 15, 2020 to register as DIRs while Entergy's planned facilities, which will reach commercial operation shortly after that date would have to do so.¹⁵ For this reason, Entergy concludes that the proposal is unduly discriminatory because it provides different dispatch rules for similarly-situated classes of resources.¹⁶

⁹ *Id.*

¹⁰ *Id.* at 2-3.

¹¹ *Id.* at 1-2.

¹² *Id.* at 3.

¹³ *Id.* at 2.

¹⁴ *Id.* at 2, 6-7.

¹⁵ *Id.* at 4.

¹⁶ *Id.* at 4-5.

Entergy suggests, however, that MISO could remedy its proposal by exempting solar resources that have a GIA executed by March 15, 2020 from the requirement to register as a DIR even if they are not in commercial operation by that date.¹⁷

12. Leeward Energy states that, from a market perspective, wind and solar are similar, and MISO's proposal is a logical step for the two types of resources.¹⁸

2. Answer

13. MISO states that the forecast it provided in its filing projects solar growth at a level comparable to the level of wind penetration that motivated MISO's 2011 DIR proposal.¹⁹ MISO also states that this forecast was presented to stakeholders in September 2019. MISO notes that there are 46 GW of solar resources pending in the MISO queue. MISO states that, even if there were no imminent reliability threat, MISO's proposal follows NERC's suggestions for how MISO as a transmission provider should dispatch inverter-based resources.²⁰ MISO also notes that the DIR Order highlighted the efficiencies for MISO and the benefits to the resources themselves by becoming DIRs.²¹ MISO also states that equitable considerations were taken into account to ensure proper treatment of solar resources in the filing.²² MISO states that it recognizes that an executed GIA demonstrates a certain level of readiness and project certainty, but it does not believe that this level of certainty compares to that of units that have already been placed in service.²³ MISO states that the two-year transition period, which allows solar resources with a GIA as of March 15, 2020 until March 15, 2022 to register as DIRs, allows Entergy a reasonable amount of time to comply with the Tariff

¹⁷ *Id.* at 5-6.

¹⁸ Leeward Energy Comments at 3.

¹⁹ MISO Answer at 2.

²⁰ *Id.* at 3. (citing NERC Reliability Guideline – BPS-Connected Inverter-Based Resource Performance, (September 2018): https://www.nerc.com/comm/OC_Reliability_Guidelines_DL/Inverter-Based_Resource_Performance_Guideline.pdf).

²¹ *Id.* at 3-4 (citing DIR Order, 134 FERC ¶ 61,141 at P 11).

²² *Id.* at 4.

²³ *Id.* at 5.

revisions.²⁴ Additionally, MISO asserts that its public queue data shows over 4.5 GW of solar generation has already received a non-provisional GIA, and another 0.4 GW has received a provisional GIA. MISO thus contends that allowing this entire amount of not yet developed solar generation to remain as Intermittent Resources “poses a threat” to MISO’s market efficiency and reliability.²⁵

3. Deficiency Letter

14. On March 11, 2020, Commission staff issued the Deficiency Letter informing MISO that its filing was deficient and additional information would be necessary to evaluate its submission. Because of ambiguity in MISO’s transmittal letter description of its proposal and MISO’s proposed Tariff revisions, staff asked whether MISO intends that any solar resource in commercial operation on or after March 15, 2020 must register as a DIR by March 15, 2022.²⁶

4. Deficiency Response

15. On April 10, 2020, MISO filed the Deficiency Response. MISO states that the Tariff language reflects MISO’s intentions when filing, and that all solar resources that enter commercial operation on or after March 15, 2020 must register as DIRs by March 15, 2022. MISO further explains that the revisions to Tariff Section 40.3.4 effectuate the proposed transition period by giving those solar projects that have a GIA “but without the new communications equipment requirement the ability to register as an Intermittent Resource, but only until March 15, 2022.”²⁷ MISO states that this transition period should minimize disruptions to the construction schedule of resources that already have entered into a GIA.²⁸ MISO states, for example, that it heard from at least one solar developer with a project scheduled to go into commercial operation this summer that imposing the communication equipment requirement now would delay the commercial

²⁴ *Id.* at 4- 6.

²⁵ *Id.* at 5.

²⁶ Deficiency Letter at 2.

²⁷ *Id.* at 3.

²⁸ MISO states that “projects with executed GIAs as well as those an interconnection customer has asked to be filed with the Commission unexecuted” may take advantage of the proposed transition period, but those “still in the queue that do not have a GIA yet (either still being studied or still negotiating their GIA)” may not. *Id.*

operation date.²⁹ MISO also states that GIAs filed with the Commission after March 15, 2020 contain the revised requirement that solar resources install equipment to make the resources able to respond to appropriate dispatch signals, thereby making those resources required to register as DIRs.³⁰

5. Commission Determination

16. We find MISO's proposal to require certain solar resources to register as DIRs to be just and reasonable and not unduly discriminatory or preferential, and therefore, we accept MISO's filing, effective March 15, 2020, as requested. We also find that it is reasonable for MISO to propose these revisions without waiting until solar penetration has reached a point when its lack of dispatchability may significantly affect reliability.³¹

17. We disagree with Entergy's assertion that it is unjust and unreasonable and unduly discriminatory for MISO's proposal to exempt solar resources in commercial operation prior to March 15, 2020, from the requirement to register as DIRs, while Entergy's planned facilities, which will reach commercial operation shortly after that date, would be required to do so. As such, we also disagree with Entergy's suggestion that MISO should exempt solar resources that have a GIA executed by March 15, 2020, from the requirement to register as a DIR even if they are not in commercial operation by that date. We agree with MISO that, for purposes of registering as a DIR, entities with executed GIAs are not similarly situated to units that have already been placed in service. In addition, the two-year transition period allows Entergy's solar resources that have a GIA but without the new communications equipment to meet this requirement a reasonable amount of time to comply with the Tariff revisions.

²⁹ *Id.*

³⁰ *Id.* at 2-3.

³¹ See *Reactive Power Requirements for Non-Synchronous Generation*, Order No. 827, 155 FERC ¶ 61,277, at P 25 (2016) (“[t]he Commission . . . is concerned that, as the penetration of non-synchronous generators continues to grow, exempting a class of generations from [certain requirements] could create reliability concerns); see also *Requirements for Frequency and Voltage Ride Through Capability of Small Generating Facilities*, Order No. 828, 156 FERC ¶ 61,062, at PP 21-22 (2016) (“we acknowledge that some areas have a greater penetration . . . than others at this time. Nevertheless, we believe that . . . deferred action would not be appropriate. . . . there is a pressing need to establish . . . requirements at this time because we expect a continuing increase in penetration”).

The Commission orders:

MISO's filing is hereby accepted, effective March 15, 2020, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.