166 FERC ¶ 61,159
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur, Richard Glick,
and Bernard L. McNamee.

Coalition of Midwest Power Producers, Inc. Docket No. EL19-28-000

v.

Midcontinent Independent System Operator, Inc.

ORDER ON COMPLAINT

(Issued February 28, 2019)

1. On December 31, 2018, pursuant to sections 206, 306, and 309 of the Federal Power Act (FPA)[1] and Rule 206 of the Commission's Rules of Practice and Procedure,[2] Coalition of Midwest Power Producers, Inc. (Power Producers)[3] filed a complaint (Complaint) against Midcontinent Independent System Operator, Inc. (MISO) alleging, among other things, that MISO has been violating its Open Access Transmission, Energy, and Operating Reserve Markets Tariff (Tariff) by failing to require all Capacity

---

[1] 16 U.S.C. §§ 824e, 825e, 825h (2012).

[2] 18 C.F.R § 385.206 (2018).

[3] Coalition of Midwest Power Producers, Inc. is a non-profit trade association whose members include Vistra Energy Corp. (formerly the Dynegy Companies), Main Line Generation, LLC, and Midland Cogeneration Venture Limited Partnership that collectively own and operate over 9,000 MWs of generation assets within MISO.

Resources[4] to be deliverable up to their Installed Capacity levels.[5] As discussed below, we deny the Complaint.

I. Background

2. The Complaint concerns how certain provisions of MISO's resource adequacy construct are implemented. Pursuant to Module E-1 of its Tariff, MISO establishes annual resource adequacy requirements to ensure that Load Serving Entities (LSE) in its footprint have access to deliverable, reliable, and adequate Planning Resources.[6] For the purpose of ensuring resource adequacy, MISO divides its footprint into ten Local Resource Zones (Zones).[7]

3. The Tariff requires that MISO establish annually a system-wide Planning Reserve Margin (Reserve Margin), which the Tariff states is the percentage above forecasted Coincident Peak Demand of Planning Resources that is required to meet the Loss of Load Expectation (LOLE).[8] The Tariff requires that the Reserve Margin be based on a LOLE study, which assumes a LOLE of one day in ten years (0.1 day per year),[9] and is

---

[4] Capacity Resources are "[t]he Generation Resources, Demand Response Resource- Type I, Demand Response Resource-Type II, Dispatchable Intermittent Resources, External Resources, Intermittent Generation, or Stored Energy Resources – Type II that are available to meet Demand." MISO, FERC Electric Tariff, Module A, § 1.C (61.0.0). Capitalized terms not otherwise defined herein have the meanings ascribed to them in the Tariff.

[5] Installed Capacity is the lesser of a Capacity Resource's annual, seasonal, or monthly net demonstrated capability and the net output identified in its interconnection and operating agreement. MISO, FERC Electric Tariff, Module A, § 1.I (41.0.0).

[6] MISO, FERC Electric Tariff, Module E-1, § 68A (33.0.0). Planning Resource is defined as "[a] Capacity Resource, Energy Efficiency Resource, or Load Modifying Resource that can be used to satisfy the [Planning Reserve Margin Requirement]." MISO, FERC Electric Tariff, Module A, § 1.P (59.0.0).

[7] MISO, FERC Electric Tariff, Attachment VV (37.0.0).

[8] MISO, FERC Electric Tariff, Module A, § 1.P (59.0.0). MISO's Planning Year begins on June 1 and ends on May 31 of the following year. MISO, FERC Electric Tariff, Module A, § 1.P (59.0.0).

[9] MISO, FERC Electric Tariff, Module E-1, § 68A.2.1 (32.0.0). The LOLE study also assumes that there are no internal transmission limitations within MISO. *Id.*

calculated on the basis of a Planning Resource's Unforced Capacity, defined as a Planning Resource's capacity after accounting for its forced outage rate or historic availability.[10] The Reserve Margin analysis is required to consider factors including, but not limited to: the Generator Forced Outage rates of Capacity Resources, Generator Planned Outages, expected performance of Load Modifying Resources and Energy Efficiency Resources, load forecast uncertainty, and the Transmission System's import and export capability with external systems.[11]

4. The Tariff also requires that MISO establish a Planning Reserve Margin Requirement (Reserve Requirement) for each LSE in each Zone,[12] which is defined as the amount of Zonal Resource Credits (ZRC) required of each LSE with Coincident Peak Demand in a Zone to meet the LSE's Resource Adequacy Requirements,[13] and an ZRC is equal to a MW of Unforced Capacity each LSE needs to procure for the Planning Year to meet its Coincident Peak Demand plus the Reserve Margin.[14]

5. Pursuant to the Tariff, MISO determines whether resources eligible to be Capacity Resources are fully deliverable to load by requiring resources to demonstrate that they have Network Resource Interconnection Service (NRIS) or Energy Resource Interconnection Service (ERIS) with firm transmission service.[15] The Tariff states that NRIS allows an Interconnection Customer to connect its Generating Facility to the Transmission System or distribution system, as applicable, and integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource. NRIS does not convey transmission service.[16] The Tariff also states that ERIS allows an Interconnection Customer to connect its Generating Facility to the Transmission System or distribution system, as applicable, and to deliver the Generating Facility's electric output using the existing firm or non-firm

---

[10] MISO, FERC Electric Tariff, Module A, § 1.U (34.0.0).

[11] MISO, FERC Electric Tariff, Module E-1, § 68A.2 (32.0.0).

[12] MISO, FERC Electric Tariff, Module E-1, § 68A.7 (32.0.0).

[13] MISO, FERC Electric Tariff, Module A, § 1.P (59.0.0).

[14] MISO, FERC Electric Tariff, Module A, § 1.Z (56.0.0).

[15] MISO, FERC Electric Tariff, Module E-1, § 69A.3.1.g (33.0.0).

[16] MISO, FERC Electric Tariff, Attachment X, § 1 (100.0.0).

capacity of the Transmission System on an as-available basis. ERIS also does not convey transmission service.[17]

6. The Tariff requires MISO to conduct a Planning Resource Auction (Auction) each year during the first ten business days of April.[18] The Tariff provides that an Auction Clearing Price will be determined for each Zone,[19] and that the Auction Clearing Price for each Zone is the marginal cost of serving the Demand in that Zone.[20] The Tariff stipulates that Capacity Resources used to satisfy Reserve Requirements "must submit Self-Schedules or Offers for Energy, and Contingency Reserve if qualified, for the Installed Capacity value of the Capacity Resources . . . for each Hour of each day during the Planning Year, in the Day-Ahead Energy Market . . . ."[21]

II. Complaint

A. Power Producers' Statement of the Problem

7. Power Producers argue that the methodology used by MISO in accrediting capacity for certain Capacity Resources deviates from Tariff requirements regarding deliverability of Capacity Resources to meet the Reserve Margin. According to Power Producers, the LOLE study that establishes the Reserve Margin assumes that all Capacity Resources are fully deliverable on an Installed Capacity basis, unless on outage. Power Producers assert that, consistent with this assumption, the Tariff requires Capacity Resources to either demonstrate (1) NRIS or (2) ERIS coupled with firm transmission service up to a resource's Installed Capacity level.[22]

8. Power Producers argue, however, that in practice, MISO allows certain resources to demonstrate deliverability only up to their Unforced Capacity level rather than their Installed Capacity level. According to Power Producers, this failure to ensure deliverability on an Installed Capacity basis for all resources is contrary to the LOLE

[17] MISO, FERC Electric Tariff, Attachment X, § 1 (100.0.0).

[18] MISO, FERC Electric Tariff, Module E-1, § 69A.7 (34.0.0).

[19] MISO, FERC Electric Tariff, Module E-1, § 69A (35.0.0).

[20] MISO, FERC Electric Tariff, Module E-1, § 69A.7.1 (42.0.0).

[21] MISO, FERC Electric Tariff, Module E-1, § 69A.5 (32.0.0).

[22] Complaint at 1-2.

assumptions and prevents MISO from procuring enough fully deliverable resources to meet its Reserve Margin as required by the Tariff.[23]

9. Power Producers state that MISO's Independent Market Monitor, Potomac Economics (Market Monitor), presented these concerns regarding deliverability of Capacity Resources to MISO's Resource Adequacy Subcommittee on October 11, 2018. In that presentation, Power Producers state that the Market Monitor explained that MISO's methodology required ERIS resources to only guarantee deliverability up to their Unforced Capacity level when purchasing firm transmission service. Power Producers state that the Market Monitor indicated that as much as 1,400 MW of Capacity Resources relied upon by MISO to meet Reserve Requirements for the 2018/19 Planning Year may not have been deliverable.[24] Power Producers also observe that, in the 2017 State of the Market Report, the Market Monitor stated that "the Tariff requires that all types of resources be deliverable to load in order to be capacity resources,"[25] and it recommended that MISO determine deliverability for all resources (both NRIS and ERIS) on an Installed Capacity basis.[26] Power Producers assert that, although MISO appears to be in agreement with the Market Monitor about this concern, MISO considers this to be a low priority and is only targeting corrective action for the 2020/21 Auction.[27]

B. Power Producers' Arguments Supporting Their Requested Relief

10. Based on this alleged failure of MISO to require resources to be deliverable to their full Installed Capacity level, Power Producers argue that MISO has (1) violated its Tariff, (2) failed to procure capacity consistent with its LOLE study, and (3) unduly

---

[23] *Id.* at 1-3.

[24] *Id.* at 2-3 (citing Potomac Economics, *Full Deliverability of Capacity Resources* at 2 (presented to MISO Resource Adequacy Subcommittee Oct. 11, 2018, as corrected Oct. 22, 2018), https://cdn.misoenergy.org/20181011%20RASC%20Item%2004a%20IMM%20Deliverability282958.pdf).

[25] *Id.* at 9 (citing Potomac Economics, *2017 State of the Market Report for the MISO Electricity Markets*, at 98 (June 2018)).

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

[27] *Id.* at 3-4.

discriminated against NRIS resources in favor of ERIS resources by violating the Resource Adequacy Business Practices Manual.[28]

1. Tariff Violation

11. Power Producers allege that MISO has violated Tariff sections 69A.3.1 and 69A.5.[29] Power Producers observe that section 69A.3.1 states that "[MISO] shall be responsible for determining whether Generation Resources, Intermittent Generation, Dispatchable Intermittent Resources, and External Resources eligible to be Capacity Resources are deliverable to Load."[30] Power Producers assert that there is no interpretation of this language that would allow MISO to find that a resource has satisfied deliverability requirements if an ERIS resource has firm transmission service for an amount less than that resource's Installed Capacity level. Power Producers state that, although the Market Monitor notes that the Tariff does not discuss Installed Capacity levels in section 69A.3.1.g, the requirement to use Installed Capacity levels is clear based on the fact that the LOLE study and MISO's Resource Adequacy Business Practices Manual each contemplate that ERIS resources have firm point-to-point transmission service at Installed Capacity levels.[31]

2. Inconsistent with LOLE Study

12. Power Producers allege that MISO has failed to comply with sections 68A.1, 68A.2, and 68A.2.1 of the Tariff, which address the establishment of Reserve Margins, Reserve Margin analysis, and LOLE analysis, respectively. In particular, Power Producers allege that MISO has failed to procure capacity consistent with its LOLE study. Power Producers state that, according to the Market Monitor, resources must be deliverable to their Installed Capacity levels in order to meet the required LOLE.[32] Further, Power Producers assert that the 2019 LOLE study and Reserve Margin

---

[28] *Id.* at 14.

[29] *Id.*

[30] *Id.* at 7-8.

[31] *Id.* at 7-9.

[32] *Id.* at 10 (citing Potomac Economics, *Full Deliverability of Capacity Resources* at 2 (presented to MISO Resource Adequacy Subcommittee Oct. 11, 2018, as corrected Oct. 22, 2018), https://cdn.misoenergy.org/20181011%20RASC%20Item%2004a%20IMM%20Deliverability282958.pdf).

determinations explicitly rely on Installed Capacity in its modeling assumptions. Specifically, Power Producers state that the 2019 LOLE study indicates that it is based on an annual determination of a Reserve Margin on an Installed Capacity basis, and that the Reserve Margin for each resource is modeled as if it is fully deliverable. Power Producers also note that in the Reserve Margin calculations, Installed Capacity is converted to Unforced Capacity to account for forced outages, not to account for resources that are not fully deliverable to their Installed Capacity levels.[33]

3. Undue Discrimination

13. Power Producers argue that not requiring an ERIS resource to have firm transmission service up to its Installed Capacity level in order to qualify as a Capacity Resource is unduly discriminatory as compared to NRIS resources. According to Power Producers, resources participating in the Auction as qualified Capacity Resources with NRIS must undergo costly system impact studies, the results of which may require a significant investment in network upgrades in order for the full Installed Capacity to be deemed "network deliverable." Power Producers assert that this is why some generation resources make the business decision to interconnect to the grid using ERIS, a lower deliverability standard than NRIS. Power Producers maintain that treating ERIS resources as universally deliverable to their full Installed Capacity levels when they have only procured firm transmission service up to their Unforced Capacity levels holds these resources to a lower standard than Capacity Resources which have invested in network facilities to support NRIS, and is consequently a violation of FPA section 206's prohibition on undue discrimination. Further, Power Producers argue that this current practice of allowing some resources using ERIS to only procure firm transmission service up to their Unforced Capacity jeopardizes system reliability.[34]

14. Power Producers also allege that MISO has unduly discriminated against NRIS resources compared to ERIS resources by violating Tariff clarifications provided in the Resource Adequacy Business Practices Manual.[35] Power Producers argue that, although Business Practices Manuals are not legally binding, they are intended to supplement and provide guidance on Tariff implementation. For example, Power Producers assert that the Resource Adequacy Business Practices Manual addresses the requirement in section 69A.3.1.g of the Tariff when it states that "[e]ach LSE shall document…to MISO that the LSE has obtained sufficient firm Transmission Service for the entire Planning

---

[33] *Id.* at 1, 10-11.

[34] *Id.* at 12-13.

[35] *Id.* at 14.

year for its Load to be served."[36] Power Producers explain that, although the Resource Adequacy Business Practices Manual does not explicitly state that this firm transmission service must be at the Installed Capacity level, this is clearly what was intended by the term "sufficient." Power Producers assert that this is consistent with the LOLE study as discussed above, and the Tariff requires that all resources that clear the Auction be subject to a day-ahead must-offer requirement at their full Installed Capacity levels.[37]

C. Requested Relief

15. Power Producers ask the Commission to find that MISO has violated its Tariff by not requiring Capacity Resources using ERIS to procure sufficient firm transmission service to allow them to be fully deliverable at their Installed Capacity level. Power Producers further ask the Commission to direct MISO to comply immediately and implement a deliverability standard for all ERIS resources that would require firm transmission service up to their Installed Capacity level. Power Producers argue that MISO's plan to delay addressing this concern until the 2020/21 Auction is contrary to the requirements of FPA section 206. Power Producers also observe that MISO plans to defer implementing a solution to this concern until it has also addressed a related problem with Intermittent Resources that will take more time to develop. However, Power Producers argue that MISO should not delay action because the concerns discussed in the Complaint can and should be addressed immediately.[38]

16. If MISO disputes its obligations under the Tariff, Power Producers ask the Commission to find that such an interpretation lacks a reasonable basis. If the Commission finds that the Tariff lacks sufficient clarity on the Installed Capacity requirement, Power Producers alternatively ask the Commission to consider their proposed Tariff revisions, which specify that the LOLE study and the establishment of the Reserve Margin assume that resources are deliverable on an Installed Capacity basis and that Capacity Resource eligibility is determined by the amount of Installed Capacity demonstrated as deliverable to load.[39] Further, should MISO need more time to propose such Tariff revisions before it conducts the 2019/20 Auction, Power Producers ask the

---

[36] *Id.* at 12 (citing MISO, Business Practices Manual No. 011, Resource Adequacy, BPM-011-r19, at § 3.1.2).

[37] *Id.* (citing MISO, FERC Electric Tariff, Module E-1, § 69A.5 (32.0.0)).

[38] *Id.* at 16-18.

[39] *Id.* at 17-19, Tab B (Proposed Tariff Revisions).

Commission to order MISO to procure an additional 1,400 MW of capacity on a provisional basis for the 2019/20 Auction.[40]

17. Power Producers ask the Commission to issue an order by March 1, 2019, in order to allow Tariff changes to be implemented for the 2019/20 Auction.[41] They contend that this matter is urgent given 19 Emergency events in MISO since the start of the 2016/2017 Planning Year.[42]

III. Notice of Filing and Responsive Pleadings

18. Notice of the Complaint was issued by the Commission, with interventions and protests due on or before January 22, 2019. Motions to intervene were filed by Coalition of MISO Transmission Customers, Main Line Generation, LLC, Cooperative Energy, Electric Power Supply Association (EPSA), Ameren Services Company,[43] Consumers Energy Company, Entergy Services, LLC,[44] Alliant Energy Corporate Services, Inc., Michigan Public Power Agency, Exelon Corporation, NRG Power Marketing, DTE Electric Company, American Wind Energy Association (AWEA), Clean Grid Alliance (CGA), American Municipal Power, Inc., WPPI Energy, Southern Minnesota Municipal Power Agency, and American Petroleum Institute. Missouri Joint Municipal Electric Utility Commission filed a motion to intervene out-of-time. Notices of intervention were filed by the Mississippi Public Service Commission and Mississippi Public Utilities Staff, the Missouri Public Service Commission, the Illinois Commerce Commission, the Michigan Public Service Commission, and the Public Utility Commission of Texas. MidAmerican Energy Company (MidAmerican) and Potomac Economics, Ltd. (Market Monitor) each filed motions to intervene and comments. Organization of MISO States (OMS) filed a notice of intervention and protest. CGA/AWEA filed joint comments. EPSA filed comments.

---

[40] *Id.* at 21.

[41] *Id.*

[42] *Id.* at 4.

[43] For purposes of this filing, Ameren Services Company is filing on behalf of its affiliated public utility operating companies: Ameren Illinois Company, Ameren Transmission Company of Illinois, and Union Electric Company.

[44] Entergy Services, LLC is filing on behalf of the Entergy Operating Companies: Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, and Entergy Texas, Inc.

19. On January 22, 2019, MISO filed an answer to the Complaint. On January 30, 2019, Power Producers filed a motion for leave to answer and an answer to MISO's answer.

A. Comments and Protests

20. EPSA requests that the Commission grant the Complaint and direct MISO to comply with its Tariff in advance of the 2019/20 Auction. Citing both the Complaint and the Market Monitor's 2017 State of the Market Report, EPSA agrees that MISO is violating its Tariff by allowing undeliverable resources to clear the Auction and discriminating against resources that have procured firm transmission service up to their Installed Capacity levels. EPSA points out that there have been 19 Emergency actions since the start of the 2016/17 Planning Year, that the issue identified by the Complainants undermines reliability, and therefore the Commission should require MISO to remedy the issue before the 2019/20 Auction. According to EPSA, MISO's practice of improperly counting these 1,400 MW of generation also skews price signals from an already flawed capacity construct, further diluting entry and exit signals. EPSA argues that, if MISO needs additional time to make Tariff adjustments, the Commission could direct MISO to procure an additional 1,400 MW of capacity on a provisional basis for the 2019/20 Auction.[45]

21. The Market Monitor states that it agrees with Power Producers that the terms of the Tariff result in a mismatch for some ERIS resources between the capacity assumed to be available in the LOLE studies and the capacity those suppliers can actually deliver.[46] As a result, when ERIS resources that are not deliverable above their Unforced Capacity level are identified or cleared as Planning Resources, the Market Monitor explains that the expected aggregate deliverable capacity will be less than the aggregate Unforced Capacity, and the Reserve Margin will not be met.[47] The Market Monitor recommends that the Commission grant the Complaint's requested relief to direct MISO to amend its Tariff to determine Planning Resource eligibility based on the amount of Installed Capacity that is deliverable to load, and contends that this relief could be implemented in time for the upcoming 2019/20 Auction.[48]

---

[45] EPSA Comments at 2-5.

[46] Market Monitor Comments at 3, 6.

[47] *Id.* at 4.

[48] *Id.* at 1, 6.

22. According to the Market Monitor, for the 2018/19 Auction, 1,400 MW of conventional (non-intermittent) ERIS capacity was counted as committed Planning Resources, but the associated capacity did not have firm transmission service reservations. The Market Monitor states that accordingly, MISO would have needed to procure up to an additional 1,400 MW of capacity in order to meet the Reserve Margin and attain the LOLE reliability criteria, depending on the amount of additional firm transmission service that would have been available for those suppliers to reserve and whether they would have chosen to reserve it.[49]

23. The Market Monitor maintains that the modeling of intermittent ERIS resources in LOLE studies has a smaller impact than the ERIS resource mismatch for conventional resources, and recommends that the Commission grant additional time for MISO to address this issue. The Market Monitor explains that wind resources in MISO are assumed to produce at Unforced Capacity in LOLE studies, and because firm transmission service for these resources is only required to the Unforced Capacity level, the deliverability requirements for wind resources are relatively consistent with their treatment in the LOLE studies.[50]

24. CGA/AWEA state that they do not take a position on the Complaint but request that if the Commission grants the Complaint, the ruling should not apply to the treatment of Intermittent Resources.[51] CGA/AWEA explain that the Tariff distinguishes between non-intermittent resources and Intermittent Resources by providing a different method to calculate Unforced Capacity for each resource type.[52] For Intermittent Resources, CGA/AWEA explain that the LOLE study uses an Unforced Capacity level based on average historical summer output data, resulting in an average capacity credit for wind resources of around 15 percent. CGA/AWEA state that the Tariff does not explicitly state that Intermittent Resources are required to be deliverable to their Installed Capacity level, and thus this 15 percent capacity credit does not correspond to an expected delivery of 100 percent of Installed Capacity.[53]

---

[49] *Id.* at 5.

[50] *Id.* at 5-6.

[51] CGA/AWEA Comments at 1, 3.

[52] *Id.* at 4 (citing MISO, FERC Electric Tariff, Module E-1, §§ 69A.4.1.a (32.0.0), 69A.4.1.e (32.0.0)).

[53] *Id.* at 3, 5-7.

25. Furthermore, CGA/AWEA state that it appears that the Complaint is intended to focus on deliverability for thermal generators. CGA/AWEA cite the fact that Power Producers included presentation slides that indicate that both MISO and the Market Monitor state that a different solution would be appropriate for Intermittent Resources. CGA/AWEA note that the Market Monitor states that further work is necessary to develop a reasonable deliverability requirement, and MISO indicates that the treatment of Intermittent Resources will be developed with stakeholder feedback. CGA/AWEA agrees with MISO that any change to MISO's deliverability requirement for Intermittent Resources should be determined through the stakeholder process.[54]

26. OMS states that it opposes the Complaint and requests that the Commission reject Power Producers' request for fast-track processing. OMS argues that the issues raised in the Complaint would be better addressed through the ongoing stakeholder process that is already considering a proposal that would require all resources considered for the Auction to be deliverable up to Installed Capacity levels, with changes made in time for the 2020/21 Auction. OMS further argues that making this change for the 2019/20 Auction would not be workable under MISO's Auction timeline requirements, and thus could inappropriately force some capacity out of the market by requiring generators to procure transmission service to meet more stringent requirements after registration processes are already underway. In response to Power Producers' concerns about long-term resource adequacy supply, OMS cites the June 2018 OMS-MISO Survey, which OMS states projected that MISO will have adequate resources to meet its Reserve Margin in 2019, and thus delaying action on the issue identified in the Complaint will not cause reliability issue for the 2019/20 Planning Year.[55]

27. MidAmerican argues that the Complaint fails to demonstrate a Tariff violation, explaining that instead, the Complaint maintains that MISO's current practice is an unjust and unreasonable departure from the tariff. According to MidAmerican, any inconsistency alleged by the Complainant between the LOLE study and the LOLE's procedures for determining deliverability are only relevant to the extent the inconsistency reflects a Tariff violation. However, after quoting the Tariff sections identified by the Complainant, MidAmerican points out that the relevant Tariff language does not mention Installed Capacity or Unforced Capacity at all, "let alone establish a clear provision with which MISO fails to comply."[56]

---

[54] *Id.* at 2-3, 7.

[55] OMS Comments at 1, 3-4.

[56] MidAmerican Comments at 5-7.

28. MidAmerican further contends that neither the Market Monitor's recommendation nor the existence of a stakeholder process is evidence that a Tariff violation has occurred. Rather, according to MidAmerican, the Market Monitor specifically states that a Tariff violation has not occurred and has instead flagged this as an area for improvement, not non-compliance. MidAmerican explains that current practice differing from the intent of the Tariff is not a Tariff violation.[57]

29. MidAmerican further argues that, even if the Commission were to find merit in the Complaint, the Commission should reject the requested relief as it applies to intermittent resources. As MidAmerican explains, whereas the Complainant argues that MISO does not impose the LOLE study assumption of full deliverability up to Installed Capacity levels for conventional generation, the LOLE study clearly does not make this assumption for intermittent generators. Quoting the LOLE study, MidAmerican explains that the LOLE study models intermittent resources at a derated value reflecting historic performance. MidAmerican further points out that the Market Monitor also distinguishes between intermittent resources and conventional generators to justify its contention that the requested relief, applied to intermittent resources, is not justified. Consequently, MidAmerican contends that the Commission should reject the Complainant's proposed Tariff revisions to section 68A.2.1 and 69A.3.1.g because the proposed revisions would include intermittent resources in a manner comparable to conventional generators, despite the differences between the resources which it identifies.[58]

B. <u>MISO's Answer</u>

30. In its answer to the Complaint, MISO argues that it has applied the Tariff as accepted by the Commission, and the Commission should reject the inaccurate assertions in the Complaint. First, MISO argues that the Complaint contains inaccurate descriptions of its processes and practices. MISO explains that Power Producers' assertions that the LOLE study requires a certain level of deliverability are incorrect because the LOLE study assumes there to be no internal transmission constraints, meaning deliverability is outside the scope of the LOLE analysis. MISO also states that it does not hold ERIS resources with transmission service requests to a lower standard than NRIS resources or require deliverability to Installed Capacity levels to participate in the Auction. According to MISO, it does not differentiate between the two and requires both to demonstrate deliverability up to their Unforced Capacity levels.[59]

---

[57] *Id.* at 7-9.

[58] *Id.* at 10-12.

[59] MISO Answer at 4-5.

31. Second, MISO argues that the Complaint mischaracterizes MISO's discussions with the Market Monitor on process improvements as admissions of Tariff violations. MISO states that, although it has discussed planned changes to the deliverability requirements for Auction purposes with stakeholders, this does not imply that MISO is violating its Tariff. MISO adds that, even though there is broad agreement that the deliverability requirements can be improved, additional discussion is necessary to determine deliverability requirements for Intermittent Resources. MISO asserts that the stakeholder process should determine appropriate requirements. MISO also argues that the statement in the Complaint that the Market Monitor found MISO's processes had deviated from the Tariff is false, and that the Market Monitor stated the Tariff does not specify Installed Capacity level.[60]

32. Third, MISO argues that its execution of the Auction and related processes is consistent with the Tariff and Business Practices Manuals. MISO maintains that it has not violated Tariff sections 68A.1 and 68A.2, which address the establishment of a Planning Margin, and section 68A.2.1, which describes the LOLE study methodology for the Planning Margin. According to MISO, section 68A.2.1 also states that the Planning Margin is primarily established as an Unforced Capacity value for the Auction, and the establishment of an Installed Capacity requirement is irrelevant for the Auction. MISO asserts that it has not violated Tariff section 69A.3.1.g, which states that MISO must ensure deliverability of Capacity Resources by requiring either (1) NRIS, or (2) ERIS with firm transmission service. MISO observes that the Complaint does not refute that MISO establishes and abides by deliverability requirements, and other arguments on deliverability and reliability are not supported by evidence that MISO is not following its Tariff. MISO also states that the Complaint does not provide evidence that MISO has not followed Tariff section 69A.5 regarding the Capacity Resources "must-offer" and performance requirements.

33. MISO further asserts that it has not violated its Resource Adequacy Business Practices Manual and that Power Producers incorrectly assert that the Business Practices Manual does not specify the methodology to calculate Unforced Capacity. MISO explains that when it accredits resources, it converts a resource's Installed Capacity value into an Unforced Capacity value by applying the resource's forced outage rate. Next, MISO evaluates the deliverability for the Unforced Capacity value of the resource consistent with section 69A.3.1.g of its Tariff, typically by having the resource demonstrate either (1) NRIS or (2) ERIS with firm transmission service. According to MISO, a resource must have NRIS up to the Unforced Capacity value or have firm transmission service for any Unforced Capacity value that only has ERIS.[61]

[60] *Id.* at 5-8.

[61] *Id.* at 8-11.

34. Finally, MISO argues that the Complaint creates a false sense of urgency by referencing recent Emergency events in the MISO footprint. MISO asserts that Power Producers have failed to demonstrate that these Emergencies resulted from deliverability issues, noting that these events have been driven largely by correlated planned outages and the use of emergency only resources outside of the summer season. MISO states that it is currently evaluating process improvements through its Resource Availability and Need initiative to address the causes of these Emergency events.[62]

35. In addition to these arguments, MISO states that the Commission should not permit Power Producers to circumvent the MISO stakeholder process, adding that the Commission has discouraged parties from making unilateral filings that may impact other participants.[63] First, MISO states that Power Producers do not allege that they are being prevented from participating in the Auction or that they will suffer any direct harm from existing Tariff rules. MISO argues that the purpose of the Complaint is to disqualify 1,400 MW of generation owned by other Auction participants to gain a competitive advantage. Second, if the Commission were to implement Power Producers' requested changes less than a month before the Auction, MISO would deprive affected generators of the opportunity to adapt to these changes or make alternative arrangements to mitigate impacts of any last-minute disqualification. MISO adds that stakeholders have had several opportunities to provide feedback and prioritize questions around Capacity Resource deliverability issues, and in one of MISO's stakeholder groups with five members, the Market Monitor and one other member viewed these issues as a "Medium" priority, and the other three viewed them as a "Low" priority. In the Resource Adequacy Subcommittee, MISO explains that most stakeholders viewed these as medium or low priority issues, and only two viewed it as a high priority, with Power Producers not submitting feedback.[64]

36. MISO also asserts that the Complaint is procedurally flawed because Power Producers did not seek dispute resolution or adequately explain why they did not do so. Further, MISO states that Power Producers not only bypassed the stakeholder process, but they also failed to "make a good faith effort to quantify the financial impact or burden (if any) created for the complainant as a result of the action or inaction" pursuant to

---

[62] *Id.* at 11-12.

[63] *Id.* at 13 (citing *Champion Energy Marketing LLC v. PJM Interconnection, L.L.C.*, 153 FERC ¶ 61,059, at P 31 (2015) (dismissing a complaint against certain cost allocation provisions of PJM's tariff, ruling that the complainant "should first raise its concerns and potential resolution through the PJM stakeholder process or in the Commission's ongoing price formation proceeding.")).

[64] *Id.* at 12-15.

Commission regulations.[65] MISO also argues that Power Producers' proposed solution of requiring MISO to procure 1,400 MW of capacity on a provisional basis is flawed. According to MISO, Power Producers failed to justify why 1,400 MW is an appropriate amount, and they also failed to consider performance requirements, payment, and tensions with states and Load Serving Entities with jurisdiction over resource adequacy, among other things.[66]

C. Power Producers' Answer

37. In their answer to MISO's answer, Power Producers argue that MISO confuses the issues identified in the Complaint. Power Producers state that their concern with ensuring the deliverability of Capacity Resources by procuring adequate "transmission interconnection service"[67] is entirely different than MISO's identification of transmission constraints through transfer analyses in the LOLE study. Power Producers assert that, according to MISO's argument, there would not be a requirement for the reservation of any firm point-to-point transmission service to allow an ERIS resource to be eligible. Power Producers reiterate that, while Tariff section 69A.3.1 does not state that firm transmission service must be at a resource's Installed Capacity level, such a requirement is inherent because the LOLE study assumes resources are deliverable to Installed Capacity levels when not in outage. Further, according to Power Producers, transmission limitations are ignored by the LOLE study because all resources are assumed to be deliverable to Installed Capacity levels when not in outage.[68]

38. Power Producers request that the Commission grant the Complaint and enforce proper deliverability for conventional resources up to full Installed Capacity levels, adding that the Market Monitor agrees this could be implemented in time for the 2019/20 Auction. Power Producers clarify that they did not intend to cover Intermittent Resources in their Complaint, and they provide revised proposed Tariff language to exclude Intermittent Resources from the proposed changes. Finally, Power Producers assert that the Complaint is not intended to circumvent the stakeholder process and is intended to require MISO to follow its current Tariff.[69]

---

[65] *Id.* at 16 (citing 18 C.F.R. § 385.206(b)(4) (2018)).

[66] *Id.* at 15-17.

[67] We understand Power Producers use of the phrase "transmission interconnection service" to only refer to transmission service and not interconnection service.

[68] Power Producers Answer at 2-4.

[69] *Id.* at 4-5.

IV. Discussion

A. Procedural Matters

39. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), we grant Missouri Joint Municipal Electric Utility Commission'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.

40. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to an answer unless otherwise ordered by the decisional authority. We accept Power Producers' answer because it has provided information that assisted us in our decision-making process.

B. Substantive Matters

41. As discussed below, we deny the Complaint.

42. We reject the argument raised by Power Producers that MISO violated section 69A.3.1.g of its Tariff. Section 69A.3.1.g of the Tariff provides that "[MISO] shall be responsible for determining whether . . . Capacity Resources are deliverable to Load." Although Power Producers contend that "deliverable to Load" should be read to mean that Capacity Resources must have firm transmission service up to their full Installed Capacity levels, Power Producers fail to identify any Tariff provisions that support this assertion. Power Producers argue that requiring Capacity Resources to have firm transmission service up to Installed Capacity levels is "inherent in the fact that the LOLE Study assumes resources are deliverable at their full [Installed Capacity] level when they are not in outage."[70] However, as discussed in more detail below, MISO's implementation of its Tariff requires Capacity Resources to demonstrate deliverability by either having NRIS or procuring firm transmission service up to their Unforced Capacity levels if they have ERIS.[71] This validation process is consistent with Module E-1 of the Tariff, which contains the rules governing MISO's resource adequacy construct. For example, Tariff section 68A.2.1 states that the LOLE study is used to determine the

---

[70] Power Producers Answer at 3.

[71] *See* MISO Answer at 4-5.

Reserve Margin, which is "established as an Unforced Capacity requirement."[72] Further, as discussed above, under the Tariff, MISO assigns capacity credits in the form of ZRCs, which are also based on Unforced Capacity values.[73] Given the consistent use of Unforced Capacity values for purposes of resource adequacy in Module E-1 of its Tariff, we find that MISO reasonably implemented section 69A.3.1.g by requiring Capacity Resources with ERIS to demonstrate deliverability up to their Unforced Capacity levels. For these reasons, we find that Power Producers have not met their burden of demonstrating that MISO has violated section 69A.3.1.g of its Tariff.

43. We also reject Power Producers' claim that MISO violated section 69A.5 of its Tariff. The specific Tariff provisions Power Producers cite require that Capacity Resources without operational limitations that clear the Auction or that are used in a Fixed Resource Adequacy Plan must submit self-schedules or offers for energy and contingency reserve, if qualified, in the Day-Ahead Energy Market up to their Installed Capacity levels for every hour of each day of the Planning Year unless on forced or scheduled outage.[74] However, Power Producers fail to demonstrate how MISO violated a Tariff provision that imposes a must-offer requirement on Capacity Resources. To the extent Power Producers are implying that Capacity Resources are violating these Tariff provisions, Power Producers likewise provide no evidence to support for this implication. That is, there was no evidence submitted in the record that Capacity Resources that had no operational limitations were not submitting self-schedules or offers for energy, and contingency reserve if qualified, in the Day-Ahead Energy Market up to their Installed Capacity levels for every hour of each day of the Planning Year unless on forced or scheduled outage. Instead, Power Producers merely claim that Capacity Resources with ERIS may not be deliverable up to their Installed Capacity levels.[75] For these reasons, we find that Power Producers failed to demonstrate that MISO has violated section 69A.5 of its Tariff.

44. We also find that Power Producers' claims do not demonstrate that MISO's current practice jeopardizes reliability. MISO conducts a simultaneous feasibility test driven by the requirements in section 69A.7.1 of its Tariff to ensure that the Planning Resources that clear the Auction or are included in a Fixed Resource Adequacy Plan are

---

[72] MISO, FERC Electric Tariff, Module E-1, § 68A.2.1 (32.0.0).

[73] *See supra* P 4.

[74] The must-offer requirements will reflect resource operational limitations, including those related to Use Limited Resources, fuel limited, energy output limited or Intermittent Generation. MISO, FERC Electric Tariff, Module E-1, § 69A.5.a (32.0.0).

[75] Complaint at 1-3.

simultaneously feasible during MISO's coincident peak demand.[76] To the extent that the Planning Resources are not feasible (i.e., the test indicates at least one network violation), MISO adjusts Capacity Import Limits and Capacity Export Limits downward, as necessary, and runs subsequent iterations of the Auction to avoid network violations.[77] We find that this process reasonably mitigates the risk that the Planning Resources that clear MISO's Auction cannot be delivered to load. Additionally, Power Producers have not demonstrated any connection between the issues raised in the Complaint and the increased number of emergencies in MISO.[78] We also note that MISO is currently engaged in its Resource Availability and Need process[79] and has already submitted several filings that are currently pending before the Commission and that intend to address the Emergency events discussed in the Complaint.[80]

45. Finally, we reject arguments that MISO unduly discriminates against NRIS resources by requiring these resources to be deliverable to their Installed Capacity levels, whereas ERIS resources are required to be deliverable only to their Unforced Capacity levels. MISO's implementation of its Tariff requires all Capacity Resources, regardless of whether they have NRIS or ERIS, to be deliverable up to the Capacity Resource's Unforced Capacity level, not the Installed Capacity level.[81] Furthermore, the fact that NRIS "is an Interconnection Service that allows an Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource,"[82] and thus is considered to

---

[76] According to MISO's Business Practices Manuals, the base model used for the simultaneous feasibility test is the latest available model with expected generation and transmission topology (and associated transmission ratings) for start of Planning Year, which provides the best representation of the system and is a better representation than the LOLE model used for the same Planning Year. *See* MISO, Resource Adequacy Business Practices Manual, BPM-011-r20 at § 5.5.7.

[77] MISO, FERC Electric Tariff, Module E-1, § 69A.7.1 (42.0.0).

[78] *See* MISO Answer at 11-12.

[79] MISO Answer at 11-12; *see also supra* P 34.

[80] *See* MISO, Filings, Docket Nos. ER19-650-000 (filed Dec. 21, 2018), ER19-651-000 (filed Dec. 21, 2018), and ER19-915-000 (filed Jan. 30, 2019).

[81] *See* MISO Answer at 9-11; MISO, Resource Adequacy Business Practices Manual, BPM-011-r20 at Appendix H.

[82] MISO, FERC Electric Tariff, Module A, § 1.N (47.0.0).

be deliverable up to its Installed Capacity level, does not mean that MISO's Tariff requires NRIS resources to be deliverable up to their Installed Capacity levels for purposes of the Auction. As MISO explained in its answer[83] and as described in its Resource Adequacy Business Practices Manual,[84] MISO calculates the Unforced Capacity level of a resource by first determining its Installed Capacity level. Once the Installed Capacity value is determined, MISO applies the resource's forced outage rate, thereby converting the Installed Capacity level to a lower Unforced Capacity level. Next, MISO validates that the resource is deliverable by having the resource demonstrate deliverability up to its Unforced Capacity level. This requirement to be deliverable up to a resource's Unforced Capacity level applies equally to both NRIS resources and ERIS resources. Accordingly, we find that there is no undue discrimination.

46. For the reasons discussed above, we deny the Complaint. We also encourage MISO to continue working through its stakeholder process on these issues to ensure that any proposed Tariff changes that result from that process can be implemented in time for the 2020/21 Planning Year.[85]

The Commission orders:

The Complaint is hereby denied, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

---

[83] MISO Answer at 9-11.

[84] *See* MISO, Resource Adequacy Business Practices Manual, BPM-011-r20 at Appendix H.

[85] *See supra* P 31. Because Power Producers state in their answer that the Complaint was not intended to address Intermittent Resources, we make no findings as to the deliverability requirements for Intermittent Resources.

Document Content(s)