

178 FERC ¶ 61,141  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Richard Glick, Chairman;  
James P. Danly, Allison Clements,  
Mark C. Christie, and Willie L. Phillips.

Midcontinent Independent System Operator, Inc.

Docket No. ER22-661-000

ORDER ACCEPTING TARIFF REVISIONS

(Issued March 14, 2022)

1. On December 15, 2021, Midcontinent Independent System Operator, Inc. (MISO) filed, pursuant to section 205 of the Federal Power Act (FPA)<sup>1</sup> and section 35.13 of the Commission's regulations,<sup>2</sup> proposed revisions to the generator interconnection procedures (GIP) contained in Attachment X of the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff).<sup>3</sup> In this order, we accept MISO's proposed Tariff revisions, effective March 15, 2022, as requested, as discussed below.<sup>4</sup>

**I. Background**

2. In Order No. 2003,<sup>5</sup> the Commission required public utilities that own, control, or operate transmission facilities to file standard generator interconnection procedures and a

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<sup>1</sup> 16 U.S.C. § 824d.

<sup>2</sup> 18 C.F.R. § 35.13 (2021).

<sup>3</sup> Midcontinent Independent System Operator, Inc., FERC Electric Tariff, attach. X, Generator Interconnection Procedures (GIP) (155.0.0) & [attach. X, app. 6, Generator Interconnection Agreement \(GIA\) \(90.0.0\)](#).

<sup>4</sup> MISO's filing includes highlighted Tariff language that, at the time of filing, was pending before the Commission in Docket No. ER22-298-000. MISO requested that the Commission treat this highlighted language as subject to the outcome of Docket No. ER22-298-000. MISO Filing, Transmittal at 15 n.72. The Commission accepted the proposed Tariff revisions in Docket No. ER22-298-000 in a December 30, 2021 order, effective January 1, 2022. *Midcontinent Indep. Sys. Operator, Inc.*, 177 FERC ¶ 61,234 (2021).

<sup>5</sup> *Standardization of Generator Interconnection Agreements and Procedures*,

standard agreement to provide interconnection service to generating facilities with a capacity greater than 20 megawatts (MW). To this end, the Commission adopted the *pro forma* Large Generator Interconnection Procedures (LGIP) and *pro forma* Large Generator Interconnection Agreement (LGIA) and required all public utilities subject to Order No. 2003 to modify their tariffs to incorporate the *pro forma* LGIP and LGIA.<sup>6</sup>

3. The Commission permitted transmission providers to seek variations from the *pro forma* LGIP and LGIA if those variations were “consistent with or superior to” the terms of the *pro forma* LGIP and LGIA.<sup>7</sup> In addition, the Commission indicated that it would allow regional transmission organizations and independent system operators (RTO/ISO) to propose independent entity variations for pricing and non-pricing provisions, stating that RTOs/ISOs have different operating characteristics due to their sizes and locations and that an RTO/ISO is less likely to act in an unduly discriminatory manner than a transmission provider that is also a market participant.<sup>8</sup> The Commission found that RTOs/ISOs “shall therefore have greater flexibility to customize [their] interconnection procedures and agreements to fit regional needs.”<sup>9</sup>

**A. MISO’s Current Generator Interconnection Study Process**

4. Since the issuance of Order No. 2003, MISO has submitted several queue reform proposals to improve its GIP and address the needs of its customers and stakeholders. In 2016, MISO proposed its current three-phase Definitive Planning Phase (DPP) process to study and review interconnection requests. The DPP is a sequential review process that facilitates a structured study and restudy of proposed generation projects to determine whether there is available transmission capacity to accommodate their interconnection or

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Order No. 2003, 104 FERC ¶ 61,103 (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).

<sup>6</sup> Order No. 2003, 104 FERC ¶ 61,103 at PP 1-2.

<sup>7</sup> *Id.* PP 825-826. The Commission also permitted transmission providers to justify a variation from the *pro forma* LGIP or LGIA based on regional reliability requirements and required transmission providers to submit these regional reliability variations to the Commission for approval under the relevant reliability standard. *Id.* PP 824, 826.

<sup>8</sup> *Id.* P 827.

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

whether network upgrades are needed. The Commission accepted MISO's three-phase DPP on January 3, 2017.<sup>10</sup>

5. Under the current procedures, MISO conducts one system impact study in each of the three DPP phases (i.e., a preliminary system impact study in DPP Phase I, a revised system impact study in DPP Phase II, and a final system impact study in DPP Phase III) to account for project withdrawals and to refine and update the analysis.<sup>11</sup> In addition, each DPP phase provides for model building and review and is separated from the next DPP phase by an interconnection customer decision point (Decision Point).<sup>12</sup> The Decision Points allow interconnection customers to evaluate study results and decide whether to proceed to the next phase of the study process or to withdraw their interconnection requests.

6. In addition, under the DPP process, MISO conducts a facilities study in two parts. The first portion of the facilities study estimates the cost and time required to construct the interconnection facilities needed to interconnect the proposed generating facility near the requested point of interconnection. This first portion of the facilities study begins on the first day of DPP Phase II, and MISO must complete the study, using Reasonable Efforts, within 90 calendar days.<sup>13</sup> The second portion of the facilities study (network upgrade facilities study) estimates the cost and time required to build the necessary network upgrades that are identified in the final system impact study. This second portion of the facilities study begins after MISO issues the final system impact study report in DPP Phase III, and MISO must complete the study, using Reasonable Efforts, within 90 calendar days.<sup>14</sup>

7. After MISO completes all required interconnection studies, interconnection customers may proceed to negotiation and execution of a generator interconnection agreement (GIA) and, as applicable, facilities construction agreement(s) (FCA) and/or

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<sup>10</sup> *Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,003, *order on reh'g*, 161 FERC ¶ 61,137 (2017).

<sup>11</sup> MISO, Tariff, attach. X, §§ 7.3.1, 7.3.2, & 7.3.3.

<sup>12</sup> *Id.* §§ 7.3.1, 7.3.1.4, 7.3.2, 7.3.2.4, & 7.3.3.

<sup>13</sup> *Id.* § 7.3.2.5. The GIP defines Reasonable Efforts as, "with respect to an action required to be attempted or taken by a Party under the Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests." *Id.* § 1.

<sup>14</sup> *Id.* § 7.3.3.4.

multi-party facilities construction agreement(s) (MPFCA). The Tariff requires MISO to use Reasonable Efforts to complete the DPP and GIA execution process within 505 calendar days. Under the current procedures, the GIA negotiation period cannot commence until all facilities studies are complete and the draft facilities study report is issued at the end of DPP Phase III, or upon agreement by all the parties that a facilities study is not required.<sup>15</sup> The parties to the draft GIA and, as applicable, draft FCA(s) and/or draft MPFCA(s), have 60 calendar days to negotiate the agreement(s). Following the negotiation period, the interconnection customer and the transmission owner have approximately 60 and 30 calendar days, respectively, to sequentially execute the GIA and, as applicable, FCA(s) and/or MPFCA(s), or direct MISO to file the agreement(s) with the Commission unexecuted.<sup>16</sup>

## II. MISO's Filing

8. MISO states that, although its current DPP process has performed reasonably well since its adoption in 2017, the overall length of the process has become an issue. MISO explains that the lengthy timeline to complete the DPP and GIA execution process has created challenges for MISO and its interconnection customers. While acknowledging that delays and uncertainties are often an unavoidable feature of the generator interconnection study process, MISO asserts that there are still ways to improve the process and make it more efficient.<sup>17</sup>

9. MISO states that it designed its proposal to solve challenges involving misalignments and inefficiencies in the current GIP timeline. For example, MISO states that the current sequential GIP process does not allow interconnection customers that are ready and willing to proceed to GIA negotiation to do so until all required facilities studies are complete.<sup>18</sup> MISO asserts that interconnection customers should be able to initiate these tasks earlier in the process, provided they are willing to accept the resulting risks and uncertainties.

10. Further, MISO states that the current GIP timeline does not align with its annual MISO Transmission Expansion Plan (MTEP) process.<sup>19</sup> MISO explains that this creates uncertainty in the assumptions used for its MTEP models because pending DPP projects

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<sup>15</sup> *Id.* § 11.2.

<sup>16</sup> *Id.* §§ 11.2 & 11.3.

<sup>17</sup> MISO Filing, Transmittal at 3.

<sup>18</sup> MISO Filing, Witmeier Testimony at 6-8.

<sup>19</sup> *Id.* at 6.

are not incorporated into the models until they are memorialized in a GIA. MISO further explains that if projects move faster through the DPP process, more projects and associated network upgrades will be included in the latest MTEP models, thereby improving their accuracy for MISO and its stakeholders who rely on the models.<sup>20</sup>

11. In addition, MISO states that the current GIP timelines do not always account for changes that have impacted, or have been introduced to, its generator interconnection study process over the years.<sup>21</sup> MISO states that, as a result, some of its GIP timelines no longer reflect the time required to complete the process. For example, MISO states that there is a lack of flexibility in its model building and updating process. MISO explains that, because that process relies upon data provided in the interconnection customer model review, the size and scope of the model updates may vary dramatically across different DPP phases and study cycles. As a result, MISO indicates that the current, inflexible time limits for model building are impractical.

12. According to MISO, its stakeholders have raised concerns about the length of the current GIP timeline on several occasions.<sup>22</sup> MISO states that it has developed its proposal to address stakeholder concerns by harmonizing the current GIP timeline and process while preserving the overall efficiency and accuracy of the study process. MISO asserts that the proposed Tariff revisions are broadly supported by stakeholders and incorporate many proposals and improvements recommended by its stakeholders.

13. MISO explains that the proposed Tariff revisions create two different “paths” that interconnection customers could follow during DPP Phase III: a default option (Default Path) and a second, alternate option (Optional Path). According to MISO, the Default Path substantially expedites the interconnection process, resulting in a GIP timeline of approximately 373 calendar days, while the Optional Path achieves some timing efficiencies, resulting in a timeline of approximately 463 days.<sup>23</sup>

14. MISO proposes that, under the Default Path, it will tender a draft GIA (and, if applicable, a draft FCA and/or MPFCA), together with draft appendices completed to the extent practicable, within five business days after the issuance of the first portion of the facilities study and the final system impact study.<sup>24</sup> MISO proposes that it will perform

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<sup>20</sup> *Id.* at 9.

<sup>21</sup> MISO Filing, Transmittal at 4; MISO Filing, Witmeier Testimony at 7.

<sup>22</sup> MISO Filing, Transmittal at 4; MISO Filing, Witmeier Testimony at 7.

<sup>23</sup> MISO Filing, Transmittal at 7.

<sup>24</sup> Proposed MISO, Tariff, attach. X, § 11.1.

the second portion of the facilities study (i.e., the network upgrade facilities study) in parallel with GIA negotiation and execution.<sup>25</sup> MISO also proposes that at the request of any party, it will tender a draft GIA (and, if applicable, a draft FCA) within 10 calendar days of receiving the request, provided that the request is made after the completion of Decision Point II and issuance of the draft first portion of the facilities study.<sup>26</sup>

15. MISO also proposes Tariff revisions to accommodate GIA amendments under the Default Option.<sup>27</sup> MISO states that such amendments only would become necessary if a network upgrade on the transmission system of the interconnection customer's interconnecting transmission owner were to be assigned to a single interconnection customer in a study cycle. According to MISO, in other circumstances, any network upgrade identified in the second portion of the facilities study would be included in an FCA or MPFCA, and therefore no GIA amendment would be required.<sup>28</sup>

16. MISO states that it proposed the Optional Path to accommodate customers that do not want to execute a GIA without having received the network upgrade facilities study. MISO explains that the Optional Path generally follows the current GIP sequence while achieving certain timing efficiencies.<sup>29</sup> MISO states that each interconnection customer will have the ability to choose between the Default and Optional Paths without undue discrimination or preference.<sup>30</sup>

17. MISO proposes several other timeline adjustments that apply to both the Default and Optional Paths. MISO proposes replacing the unified model building and review deadline with only a model review deadline in each DPP phase.<sup>31</sup> MISO explains that

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<sup>25</sup> MISO Filing, Transmittal at 7.

<sup>26</sup> Proposed MISO, Tariff, attach. X, § 11.1.

<sup>27</sup> MISO Filing, Transmittal at 8-9; *see also* Proposed MISO Tariff, attach. X, app. 6, § 11.3.1 (providing that network upgrade, system protection facilities, and distribution upgrades included in the GIA may be modified in the event that the network upgrades facilities study is completed after execution of the GIA).

<sup>28</sup> MISO Filing, Transmittal at 8.

<sup>29</sup> *See, e.g.*, Proposed MISO, Tariff, attach. X, § 11.3 (reducing overall timeline by providing for concurrent rather than sequential execution of the GIA by the parties).

<sup>30</sup> MISO Filing, Transmittal at 7. *See, e.g.*, Proposed MISO, Tariff, attach. X, § 11.2.1 (providing interconnection customers the option to postpone the start of the GIA negotiation period until the issuance of the network upgrade facilities study).

<sup>31</sup> Proposed MISO, Tariff, attach. X, §§ 3.4.2.1, 3.4.2.2, 3.4.2.3, 7.3.1, 7.3.2, &

these changes address the current lack of flexibility regarding the model building and updating process while providing a shorter overall GIP timeline.<sup>32</sup> MISO also proposes revisions that modify the number of days it has to complete the system impact studies that it performs in each DPP phase.<sup>33</sup> Further, MISO proposes revisions that allow the interconnection customer to request that the facilities studies be commenced earlier in the study process and proposes that the first portion of the facilities study will start no later than the first day of DPP Phase II.<sup>34</sup> MISO asserts that these revisions will streamline the GIP process and provide greater flexibility.

18. In addition, MISO proposes to revise the timelines for the negotiation and execution of a GIA and, as applicable, FCA(s) and/or MPFCA(s) for both the Default and Optional Paths. Specifically, MISO proposes to shorten the negotiation period for the agreement(s) from 60 calendar days to 40 business days.<sup>35</sup> MISO also proposes that the interconnection customer and transmission owner execute the final GIA and, if applicable, final FCA(s) and/or final MPFCA(s), concurrently within 45 calendar days, rather than sequentially.<sup>36</sup> As a result, the proposed revisions compress the timelines for

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7.3.3; MISO Filing, Witmeier Testimony at 15.

<sup>32</sup> MISO Filing, Transmittal at 9; MISO Filing, Witmeier Testimony at 15.

<sup>33</sup> Proposed MISO, Tariff, attach. X, §§ 3.4.2.1, 3.4.2.2, 3.4.2.3, 7.3.1, 7.3.2, & 7.3.3.

<sup>34</sup> *Id.* §§ 7.3.1 (providing that the interconnection customer may request that MISO begin the first portion of the facilities study during DPP Phase I), 7.3.3.4 (providing that the interconnection customer may request that MISO begin the second portion of the facilities study after completion of Decision Point II and prior to the completion of the final system impact study, and requiring MISO to start the second portion of the facilities study no later than the day following the posting of the final system impact study), & 7.3.2.5 (providing that the first portion of the facilities study will start no later than the first day of DPP Phase II); MISO Filing, Witmeier Testimony at 15-16.

<sup>35</sup> Proposed MISO, Tariff, attach. X, § 11.2.

<sup>36</sup> *Id.* § 11.3. The current GIP provides a sequential timeline in which the interconnection customer has 60 calendar days to execute the agreements, followed by a 30-calendar day period for the transmission owner to execute the agreements. MISO Tariff, attach. X, §§ 11.2 & 11.3.

the negotiation and execution of a GIA and, as applicable, FCA(s) and/or MPFCA(s), from approximately 150 to 108 calendar days.<sup>37</sup>

19. MISO also proposes a transition plan. Under the proposed transition plan, the new GIP provisions will apply to all interconnection requests in MISO's interconnection queue that have not started the final system impact study in DPP Phase III as of the effective date of the revised GIP.<sup>38</sup> MISO asserts that this provision is just and reasonable because it appropriately protects interconnection customers' expectations and is consistent with transition procedures previously accepted by the Commission in MISO's prior queue reform efforts.<sup>39</sup>

20. MISO requests an effective date of March 15, 2022 for the proposed Tariff revisions.<sup>40</sup>

21. MISO asserts that its proposal meets the independent entity variation standard outlined in Order No. 2003.<sup>41</sup> MISO asserts that its proposal addresses a concrete need that has been identified and confirmed in the MISO stakeholder process. MISO contends that the supporting evidence demonstrates that the GIP process could be completed more expeditiously to unlock various efficiencies and to achieve important objectives, such as improved alignment with the MTEP process. MISO asserts that its proposal achieves these objectives by offering a carefully calibrated package of targeted timeline improvements to the current GIP process while maintaining the accuracy of interconnection study results.<sup>42</sup> MISO affirms that, under the proposed procedures, all interconnection customers will be treated fairly, without undue discrimination or preference. MISO asserts that, accordingly, the Commission should find the proposed Tariff revisions just and reasonable and consistent with the goals of Order No. 2003.

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<sup>37</sup> MISO Filing, Witmeier Testimony, attach. 2.

<sup>38</sup> Proposed MISO, Tariff, attach. X, § 5.9.

<sup>39</sup> MISO Filing, Transmittal at 9 (citing *Midcontinent Indep. Sys. Operator, Inc.*, 169 FERC ¶ 61,173, at P 82 (2019)).

<sup>40</sup> *Id.* at 1, 15.

<sup>41</sup> *Id.* at 6; MISO Filing, Witmeier Testimony at 5-9.

<sup>42</sup> MISO Filing, Transmittal at 7; MISO Filing, Witmeier Testimony at 3.

### III. Notice of Filing and Responsive Pleadings

22. Notice of MISO's filing was published in the *Federal Register*, 86 Fed. Reg. 72,596 (Dec. 22, 2021), with interventions and protests due on or before January 14, 2022.<sup>43</sup> Timely motions to intervene were filed by: NextEra Energy Resources, LLC (NextEra); Alliant Energy Corporate Services, Inc.; American Electric Power Service Corporation, on behalf of its affiliate AEP Indiana Michigan Transmission Company, Inc.; Entergy Services, LLC, on behalf of Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, and Entergy Texas, Inc.; Cooperative Energy; DTE Electric Company; EDF Renewables, Inc. (EDF); Ameren Services Company, on behalf of its affiliates Ameren Illinois Company, Ameren Transmission Company of Illinois, and Union Electric Company; Solar Energy Industries Association; Consumers Energy Company; and American Municipal Power, Inc. On January 14, 2022, NextEra and EDF jointly filed comments in support of MISO's filing.

#### A. Comments

23. EDF and NextEra state that they have long advocated that MISO's GIP timeline be shortened to one year.<sup>44</sup> EDF and NextEra assert that MISO's proposal establishing two, alternative paths to a GIA will benefit interconnection customers and help foster the development of new generation.<sup>45</sup> Further, EDF and NextEra state that they support the proposed revisions to sections 3.4.2.1, 3.4.2.2, and 3.4.2.3 in the GIP that will shorten the timeline to receive a GIA. EDF and NextEra explain that, because the MTEP and GIP processes are currently misaligned, the MTEP can lag in accounting for upcoming viable generation that has reached or will reach the GIA execution stage. As a result, EDF and NextEra assert that interconnection customers can be assigned network upgrade costs in successive GIP queue cycles that may not be necessary. EDF and NextEra contend that MISO's proposed revisions will lead to just and reasonable network upgrade costs in the MTEP and generator interconnection study processes.

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<sup>43</sup> MISO requested, and was granted, a 30-day comment period.

<sup>44</sup> EDF and NextEra Comments at 1.

<sup>45</sup> *Id.* at 2.

#### IV. Discussion

##### A. Procedural Matters

24. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2021), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

##### B. Substantive Issues

25. We accept MISO's proposed revisions to Attachment X in its Tariff, effective March 15, 2022, as requested. We find that MISO's proposed deviations from the Commission's *pro forma* LGIP, evaluated under the independent entity variation standard, accomplish the purposes of Order No. 2003 by fostering increased development of economic generation by reducing interconnection costs and time and by encouraging needed investment in generator and transmission infrastructure.<sup>46</sup> We also find that MISO's proposed Tariff revisions are just, reasonable, and not unduly discriminatory or preferential because they will shorten the length of MISO's GIP timeline, help increase the overall efficiency of MISO's generator interconnection study process, and improve the alignment between MISO's GIP and MTEP processes.

26. We find that MISO's proposal to create a Default Path and Optional Path to GIA execution is just and reasonable because it offers greater flexibility for projects in the DPP study cycle by providing each interconnection customer a choice between a more timely path to GIA negotiations with less cost certainty or a less timely path with more cost certainty entering into GIA negotiations, based on its preferences. Under the proposed Default Path, interconnection customers can accelerate the execution of GIAs to within approximately one year of starting the DPP study process, with the understanding that their assigned costs may be refined in the final interconnection facilities study report. MISO's proposal also allows interconnection customers to elect the Optional Path, which postpones the start of the GIA negotiation period until issuance of the final interconnection facilities study report. Accordingly, we find that MISO's proposal affords interconnection customers the ability to choose their own path among the paths presented in MISO's GIP to GIA execution, without undue discrimination or preference.

27. We find that MISO's other proposed changes are just and reasonable because they improve the efficiency of MISO's generator interconnection study process. In particular, the proposed revisions regarding the model building and updating process should provide

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<sup>46</sup> See Order No. 2003, 104 FERC ¶ 61,103 at P 12. The Commission applies an independent entity standard to evaluate RTO/ISO proposals for revisions to the procedures outlined in Order No. 2003. See *id.* PP 822, 827; Order No. 2003-A, 106 FERC ¶ 61,220 at P 759.

MISO adequate time to develop and update study models while retaining firm timelines for model review. We find that MISO's proposed revisions that modify the number of days it has to complete the system impact studies that it performs in each DPP phase are appropriate because they more accurately reflect the time required to complete those studies. We find that MISO's proposal to allow interconnection customers to request that the facilities studies be initiated earlier in the study process, under certain conditions, is just and reasonable because it provides additional flexibility to customers and allows interconnection customers to proceed through the interconnection process expeditiously.<sup>47</sup> Further, MISO's proposal to shorten the negotiation period for the draft GIA and, as applicable, draft FCA(s) and/or MPFCA(s) (from 60 calendar days to 40 business days) and to implement a concurrent, rather than sequential, agreement execution window (compressing the window from 90 to 45 calendar days) will enable interconnection customers to obtain executed agreements more expeditiously.

28. Finally, we find MISO's proposed transition procedures to be a just and reasonable method for transitioning from its current GIP to the revised GIP. MISO proposes that all interconnection requests will proceed under the revised GIP if the requests have not begun the final system impact study in DPP Phase III as of the effective date of the proposed Tariff revisions, i.e., March 15, 2022. We find that using this transition point is just and reasonable because it allows the majority of interconnection customers in MISO's queue to avail themselves of the new flexibilities without adverse disruptions to the study of their interconnection requests.

The Commission orders:

MISO's proposed Tariff revisions are hereby accepted, effective March 15, 2022, as requested, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

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<sup>47</sup> Proposed MISO, Tariff, attach. X, §§ 7.3.1 & 7.3.3.4.

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