

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Midcontinent Independent)	Docket No. ER20-588
System Operator, Inc.)	

**MOTION TO INTERVENE AND COMMENTS
OF PUBLIC INTEREST ORGANIZATIONS**

Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (FERC or the Commission), 18 C.F.R. §§ 385.212, 385.214, the Environmental Law & Policy Center (“ELPC”) and the Center for Renewables Integration (“CRI”) (collectively “Public Interest Organizations” or “PIOs”) hereby file this motion to intervene and comment in the above-captioned proceeding in response to the Midcontinent Independent System Operator’s (MISO) proposed revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff (“Tariff”) to allow for the selection of a storage facility as a transmission-only asset (“SATO”) in the MISO Transmission Expansion Plan (“MTEP”).

The PIOs believe it is important for MISO to begin taking steps to integrate energy storage resources (“ESRs”) into the MISO transmission planning process. However, by limiting this opportunity to incumbent transmission owners, MISO’s proposal here is a step in the wrong direction. For the reasons discussed below, the Commission should reject MISO’s proposal and direct MISO to come back with a proposal that enables the consideration of advanced transmission technologies, including ESRs, from all parties on an equal footing. Transmission projects should be evaluated and studied based on the services they provide, not based on who owns them.

I. MOTION TO INTERVENE

A. PIOs represent interests that will be directly affected by the outcome of this proceeding (18 C.F.R. § 385.214(b)(2)(iii))

ELPC is a regional sustainable energy and environmental organization based in Chicago, Illinois with members, contributors, and offices throughout the Midwest. Among other things, ELPC advocates for the reliable integration of storage and other advanced transmission technologies into the MISO planning process.

CRI's mission is supporting the development of effective energy policy to enable a high percentage of renewable generation, while maintaining reliability, at the lowest cost. This includes working on policies to use advanced transmission technologies¹ to increase the effectiveness of the existing transmission system in order to interconnect renewable generation quicker and frequently at lower cost. CRI is a 501c(3) headquartered in Alexandria, VA.

PIOs represent consumer and other interests in the MISO footprint. ELPC has actively participated in MISO's stakeholder process and in other forums for the need to allow storage and other advanced transmission technologies to be a part of the MISO planning process. CRI was an active participant in CAISO's Storage As a Transmission Asset (SATA) stakeholder process, other forums at MISO, FERC's technical workshop on Grid Enhancing Technologies,² and has extensively researched and published on relevant FPA and FERC regulations governing the evaluation and selection of advanced transmission technologies.³

PIOs seek to intervene in this matter because of their concern with MISO's proposal to

¹ Advanced transmission technologies is a term defined in Section 1223 of EPAct 2005, when Congress amended the Federal Power Act to expand the list of technologies that can be considered transmission assets. See Pub. L. 109–58, title XII, § 1223, Aug. 8, 2005, 119 Stat. 953.

² Jon Wellinghoff, "Proposal for Compensating Grid-Enhancing Technologies (GET)" *available at*, <https://www.ferc.gov/CalendarFiles/20191112135539-Wellinghoff,%20WATT%20UPDATE.pdf>

³ Supporting research *available at*, <https://www.center4ri.org/publications>

limit SATOA projects only to incumbent transmission owners, which will significantly limit the number and kinds of storage projects available to provide transmission service in the MISO footprint.

B. PIOs' Participation is in the Public Interest (18 C.F.R. 385.214(b)(2)(iii))

As nonprofit environmental organizations, PIOs' mission is to protect the public's interest in promoting, among other things, clean air, clean water, reductions in carbon emissions, and protection of wildlife and wild habitats. PIOs' participation as intervenors in this proceeding will help ensure the public's interest in environmental protections is sufficiently represented while helping to assure a reliable electric system with just and reasonable rates.

In general terms, the transmission system, similar to electricity generation, is built to accommodate load or generation peaks, which in some cases may only be a few hours long. Historically, the only solution to a transmission need has been to build a new line. Today, transmission lines cover much of the United States, and solutions exist that can increase the efficiency and effectiveness of the existing transmission by shaping load, modifying power flows, and increasing line ratings. Yet, except for few examples in the U.S., more internationally, the predominant solution to any transmission need remains building a new transmission line, frequently at the cost of environmental considerations.

The United States is undergoing a change in its electricity generation mix to take advantage of low cost, clean wind and solar, which is creating a need for transmission to support new facilities. A 2016 study compared the cost of two transmission upgrade scenarios required to accommodate 30% renewables in PJM – the first a standard transmission upgrade scenario and the second includes power flow technologies. The conclusion of the study is that adding power

technologies saves \$890M annually.⁴ In short, for both environmental and cost reasons, transmission in the United States needs to expand beyond a traditional “poles and wires” approach.

FERC coined a new term in its recent technical conference exploring solutions to increase the efficiency of the existing transmission grid,⁵ Grid Enhancing Technologies (GET). Congress used the term advanced transmission technologies (ATT) in Section 1223 of EPAct 2005. Regardless of name, solutions designed to increase the effectiveness of existing transmission lines frequently cost significantly less than a new transmission line. As noted by a few Market Monitors⁶ at the Grid Enhancing Technologies technical conference, the Return on Equity (ROE) model is an economic barrier to incumbent transmission owners considering or proposing a lower cost GET or ATT. Indeed, in the most recent competitive solicitation resulting from CAISO’s transmission planning process, where CAISO identified a need to increase reactive power at a PG&E substation, PG&E did not submit a solution.⁷ CAISO ultimately

⁴ DNV GL, “Assessment of Applicability and Cost Savings of Deploying Smart Wires Power Flow Controls to Integrated Renewables Energy in PJM” (June, 2016), *available at*, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=211976&DocumentContentId=22964>

⁵ FERC Docket No. AD19-19-000, Workshop regarding Grid-Enhancing Technologies, agenda and presentations *available at*, <https://ferc.gov/EventCalendar/EventDetails.aspx?ID=13554&CalType=>

⁶ See FERC Docket No. AD19-19-000, Monitoring Analytics, “Grid Enhancing Technologies” (Nov. 6, 2019) *available at*, <https://www.ferc.gov/CalendarFiles/20191104100751-Bowring,%20Monitoring%20Analytics.pdf>; FERC Docket No. AD19-19-000, Potomac Economics and Monitoring Analytics, “Efficient Incentives for Grid-Enhancing Technologies” (Nov. 5-6, 2019) *available at*, <https://www.ferc.gov/CalendarFiles/20191104100839-Patton,%20Potomac%20Economics.pdf>

⁷ CAISO received proposals from (1) Horizon West Transmission, LLC (HWT), an affiliate of NextEra Energy, Inc., which submitted seven proposals, (2) LS Power Grid California (LSPGC), a wholly-owned subsidiary of LS Power Associates, L.P., (3) Starwood Energy Group Global Inc. (SEGG), which proposes to form a special purpose entity to own and operate the project, and (4) TransCanyon Gates, LLC, an affiliate of Berkshire Hathaway Energy Company and Pinnacle West Capital Corporation (TransCanyon). See California ISO, “Gates 500 kV Dynamic Reactive Support Project Project Sponsor Selection Report” (Jan. 17, 2020) *available*

selected LS Power to finance, own, and operate the project. Competition is the key that drives the adoption of new technologies and solutions and the U.S. cannot rely on companies motivated by the ROE model to offer lower cost solutions.

Therefore, PIOs have a direct and substantial interest in this proceeding and PIOs' interests are not adequately represented by any other party. Further, PIOs' participation in this matter is in the public interest. For the foregoing reasons, PIOs respectfully request that the Commission grant this motion to intervene.

II. COMMENTS

PIOs agree with MISO that there is a need to integrate ESRs into the MISO transmission planning process. As the Commission recognized in its ESR Cost-Based Recovery Policy Statement, ESRs have the ability to provide "a variety of grid resources," including transmission services.⁸ MISO itself recognizes that ESRs and other new technologies have improved MISO's ability to optimize grid performance at reduced costs."⁹ PIOs also agree with MISO that the Commission established energy storage assets are transmission assets and can be included in the ISO's plan for cost recovery and allocation purposes in the Western Grid Declaratory Order.¹⁰ As the Commission recognized by exploring Grid Enhancing Technologies in a workshop, storage and other technologies have tremendous potential to increase capacity, efficiency, or reliability of transmission facilities and provide transmission services at costs below traditional

at, <http://www.caiso.com/Documents/Gates500kVDynamicReactiveSupport-ProjectSponsorSelectionReport.pdf>

⁸ ESR Cost-Based Recovery Policy Statement at 2.

⁹ SATOA Proposal at 2.

¹⁰ *Western Grid Development, LLC*, 130 F.E.R.C. ¶ 61,056 (2010.)

wires solutions.¹¹ Yet these technologies, including ESRs, have yet to be adequately integrated into the MISO planning process.

While PIOs appreciate MISO's efforts to take steps toward realizing the potential of storage to compete with traditional wires solutions in providing transmission services, we believe that MISO's SATOA proposal does not go far enough toward integrating ESRs into the transmission planning process to allow for these resources to provide transmission services and sets a bad precedent for how other advanced transmission technologies can meet the grid needs of the region. In preferencing Transmission Owners ("TOs") over other non-TOs in the MTEP process, MISO's proposal is unduly discriminatory and preferential and will result in unjust and unreasonable rates.¹²

Under MISO's SATOA proposal, TO ESR projects will receive unwarranted preference over identical or equivalent non-TO ESR projects. This unwarranted preference is contrary to the requirements the Commission defined for transmission planning in Order 890 which are, "... coordination, openness, transparency, information exchange, comparability, dispute resolution, regional participation, economic planning studies, and cost allocation for new projects."¹³ In Order 1000, the Commission determined the right of first refusal for incumbent transmission providers undermines the identification and evaluation of more efficient or cost-effective solutions.¹⁴ By limiting SATOA projects to incumbent TOs, MISO's proposal will dissuade non-TOs from proposing innovative storage projects in the MTEP process and acts as a de facto guarantee the project will be awarded to the incumbent TO. This will lead to unjust and

¹¹ Docket No. AD19-19-000

¹² FPA 824d(a)-(b).

¹³ *Preventing Undue Discrimination and Preference in Transmission Service*, FERC Order 890, Attachment K: *Transmission Planning Process* (2007)

¹⁴ Order No. 1000, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, 136 FERC ¶ 61,051 at P 200 (2011).

unreasonable rates by reducing competition for energy storage resources that provide transmission services.

A. Background

In mid-2018, MISO received significant support for allowing storage to provide transmission services through the MTEP process.¹⁵ MISO’s strawman proposal on September 26, 2018, allowed non-TO ESR projects to compete on a level playing field with equivalent TO projects to meet transmission needs in the MTEP process. MISO proposed that ESR projects that provide only a transmission function (i.e., do not provide market services) could be proposed in the MTEP process and would not be required to go through the generator interconnection process (“GIP”).¹⁶ In subsequent stakeholder meetings beginning in January 2019, however, MISO changed its plan for integrating storage into the planning process by requiring any non-TO ESR projects to go through the GIP and let TO ESR projects continue to go through the faster MTEP process.¹⁷ This change meant that identical ESR projects proposed to resolve a transmission solution would be subject to different levels of interconnection requirements. In April 2019, the MISO Planning Advisory Committee (“PAC”) recommended that MISO resolve the SATOA proposal’s discrimination against non-TO projects by allowing those projects to bypass the GIP

¹⁵ See Planning Advisory Committee, “PAC Supplemental Stakeholder Comments on Energy Storage as Transmission Reliability Assets” (Aug. 8, 2018) *available at*, <https://cdn.misoenergy.org/20180817%20PAC%20Supplemental%20Stakeholder%20Comments%20on%20Energy%20Storage%20as%20Transmission%20Reliability%20Assets272611.zip>

¹⁶ MISO Planning Advisory Committee, “Electric Storage as a Transmission Solution in MTEP Reliability Planning Process” (Sept. 26, 2018) *available at*, <https://cdn.misoenergy.org/20180926%20PAC%20Item%2004e%20Energy%20Storage%20as%20Transmission%20Reliability%20Asset277718.pdf>

¹⁷ MISO Planning Advisory Committee, “Electric Storage as a Transmission Solution in the MTEP Reliability Planning Process” (Jan. 9, 2019) *available at*, [https://cdn.misoenergy.org/20190109%20PAC%20Item%2003c%20Storage%20as%20a%20Transmission%20Asset%20Phase%20I%20Proposal%20\(PAC%20004\)307822.pdf](https://cdn.misoenergy.org/20190109%20PAC%20Item%2003c%20Storage%20as%20a%20Transmission%20Asset%20Phase%20I%20Proposal%20(PAC%20004)307822.pdf)

and connect to the MISO transmission system via new Storage Interconnection Agreements, which would allow the non-TO projects to get interconnection approval in a timely manner.¹⁸

The PAC's recommendation used a framework that built on existing tariff provisions and therefore relied on the language of ESR projects, which in MISO have been traditionally considered "non-transmission assets." MISO rejected the PAC's recommendation, stating that it had a "fundamental disagreement with the position that an asset that is used exclusively to address a transmission issue and that is connected to the transmission system is a non-transmission asset – it is a transmission asset."¹⁹ The PIOs agree that the term non-transmission asset is problematic when discussing ESR projects that are put in place specifically to resolve transmission constraints; these are transmission assets and should be classified as such. However, MISO's reliance on this deficient terminology to keep non-TO ESR projects out of the SATOA process is incorrect. The proposal by the PAC was an effort to work within the bounds of MISO's tariff to allow identical resources to compete. It does not suffice for MISO to simply note that their existing framework is inflexible and then use that as a justification to create a process that stifles competition. By rejecting the PAC proposal and failing to find a viable alternative that would keep non-TOs and TOs on a level playing field, MISO's proposal will lead to discrimination against identical storage projects based merely on whether the proposing entity is a TO or a non-TO. This unduly discriminatory proposal will lead to unjust and unreasonable

¹⁸ MISO Planning Advisory Committee, "Storage as NTA Voting Results" (May 2, 2019) *available at*, <https://cdn.misoenergy.org/Storage%20as%20NTA%20-%20Voting%20Results341788.zip>

¹⁹ MISO Planning Advisory Committee, "Electric Storage as a Transmission-Only Asset (SATOA Phase I Policy Proposal)" (May 13, 2019), *available at*, [https://cdn.misoenergy.org/20190515%20PAC%20Item%2005%20SATOA%20\(PAC004\)344407.pdf](https://cdn.misoenergy.org/20190515%20PAC%20Item%2005%20SATOA%20(PAC004)344407.pdf)

rates for transmission service and serves to stifle innovation of storage and other advanced transmission technologies in the MISO footprint.

B. MISO’s Proposed Requirement That Only non-TO Storage as Transmission Projects Go Through the Generator Interconnection Procedures Unduly Discriminates Against Non-TO ESR Projects and Gives Undue Preference to TO ESR Projects.

MISO’s SATOA proposal will result in a bifurcated process for interconnecting ESR projects that provide transmission services. On the one hand, TO projects will not be subjected to the lengthy GIP. On the other hand, an identical non-TO project capable of resolving the same transmission issues as the TO project will be required to go through the GIP before it can even be considered in the MTEP process.²⁰

The lengthy GIP is simply not workable for participation in the MTEP process. The generator interconnection queue is notoriously long. MISO currently estimates that the GIP process takes more than 500 days.²¹ In fact, the TOs argued in favor of eliminating the queue process for their own ESR projects because “[d]elays in the queue process could eliminate SATA [Storage As Transmission Asset] usefulness as reliability solutions to an issue in any MTEP.”²² The same logic applies to non-TO projects. Requiring a non-TO to go through the GIP process for ESR projects providing transmission solutions creates an insurmountable hurdle for these projects and effectively carves out ESR projects approved in the MTEP process for TOs only.

²⁰ Proposed Attachment FF Section G.1a.

²¹ “Generator Interconnection Process”, *available at*, <https://cdn.misoenergy.org/Definitive%20Planning%20Phase%20Estimated%20Schedule106547.pdf>

²² “Electric Storage as a Transmission Asset (SATA)” presentation by MISO to the PAC at Nov. 14, 2018, available at slide 4 (Nov. 14, 2018), *available at*, <https://cdn.misoenergy.org/20181114%20PAC%20Item%2004c%20Electric%20Storage%20as%20a%20Transmission%20Asset%20SATA%20Presentation292116.pdf>

This de facto removal of identical non-TO storage projects from the MTEP process violates the FPA's prohibition of unjust and reasonable rates by reducing competition for reliability and economic transmission projects. This is in clear opposition of FERC Orders 2000, 890, and 1000. Those orders eroded the priority given to incumbent TOs in favor of supporting competition in the transmission planning process. By keeping non-TO ESR projects out of the transmission planning process, MISO is eliminating competition from these potentially lower cost projects. This will undoubtedly lead to higher rates due to a lack of competitive projects being submitted by non-TOs. Further, to the extent that TOs propose storage projects that compete with traditional wires solutions, making non-TOs go through the GIP for identical storage projects is unduly discriminatory and preferential.

C. MISO's Proposal Unduly Discriminates Against Non-TO ESR Projects By Allowing TO Projects To Seek Cost Recovery While Non-TO Projects Must Rely on Market Revenues

Under the SATOA proposal, TO ESR projects get cost-based recovery through Attachment O to MISO's tariff. This means that the return on capital and charging costs can be recovered through cost-based transmission rates. Identical non-TO ESR projects, however, must seek recovery through the market revenues despite providing the same transmission services. This is a clear unjust and unreasonable result of the senseless bifurcation between projects based on who owns them rather than based on the services they provide. The mere fact that the MISO tariff historically treats non-TO ESR projects as "non-transmission assets" is not a reason to discriminate between two identical projects. By MISO's own admission this bifurcation is nonsensical. An ESR project that exclusively provides transmission services is a transmission asset and should be compensated as such regardless of whether a registered TO owns it or not. The fact that does not currently provide a pathway for ESR as transmission and other ATT to

receive cost recovery for entities that are not currently receiving it under FERC-jurisdictional transmission rates is not a reason for MISO to ignore this inequity.

Once again, by biasing the SATOA process in favor of TO ESR projects, MISO's proposal is unduly discriminatory against non-TOs and preferential toward TOs. Further, by increasing the costs and risks of non-TO ESR projects, MISO's proposal will lead to unjust and unreasonable rates for transmission solutions that could otherwise be completed by cheaper, less environmentally impactful ESR solutions.

D. The Commission Should Require MISO to Develop a Proposal that Allows Both TO and Non-TO ESR Projects to be Developed and Utilized for Transmission Services on a Non-Discriminatory and Non-Preferential Basis and is Compliant with the FPA

As explained above, MISO's SATOA proposal unduly discriminates against non-TO ESR projects. This discrimination will result in unjust and unreasonable rates as well as a deficit in beneficial storage as transmission projects. These projects not only have the likelihood of being cheaper and more flexible than comparable wires solutions, but they also have added environmental and land use benefits. As explained by the TOs and MISO, requiring a project that will provide valuable transmission services without participating in the markets to go through the GIP will effectively preclude the projects from going forward. It is, therefore, important that advanced transmission technologies such as storage as transmission projects be allowed to participate in the MTEP process without having to go through the GIP.

Precluding competition of ESRs in the MTEP process has real consequences. Imagine that an incumbent TO proposed an expensive traditional wires-based transmission solution to a constraint. With the recent developments in storage and other ATT or GET, it is possible that a non-TO with an expertise in these technologies could be in a position to offer a lower-cost, less environmentally impactful solution. Under MISO's proposal, however, such a non-TO project

would never see the light of day in the MISO process. The ESR owner, recognizing that its project would not be able to compete in MTEP timeline given the GIP requirements would simply not bother to scope and present the project. MISO would then be forced to select the more expensive wires solution. If, however, non-TOs were able to compete on a level playing field in the MTEP process, receiving the same interconnection requirements and cost-recovery guarantees, the cheaper, faster, more flexible ESR solution could compete with the incumbent.

The Commission should reject MISO's solution and direct them to go back to the drawing board to ensure that both TO and non-TO ESR projects can participate in the MTEP process on a comparable basis and enables competition.

Additionally, the Commission should require MISO to remove any restrictions in their tariff that constrains an ESR to be considered a "non-transmission asset" and verify MISO's tariff does not restrict transmission solutions to traditional "wires and poles" technologies. As identified in the Commission's Grid Enhancing Technologies workshop, many technologies can provide transmission solutions and increase the efficiency of the grid. The Commission should require MISO to update its tariff to comply with Section 1223 of EPACT 2005, where Congress amended the FPA to define advanced transmission technologies.²³ Section 1223 states:

(a) DEFINITION OF ADVANCED TRANSMISSION TECHNOLOGY. — In this section, the term "advanced transmission technology" means a technology that increases the capacity, efficiency, or reliability of an existing or new transmission facility, including "... (11) energy storage devices (including pumped hydro, compressed air, superconducting magnetic energy storage, flywheels, and batteries);

(12) controllable load;

(13) distributed generation (including PV, fuel cells, and microturbines);

(14) enhanced power device monitoring;

(15) direct system state sensors;

²³ Pub. L. 109–58, title XII, § 1223, Aug. 8, 2005, 119 Stat. 953.

(16) fiber optic technologies;

(17) power electronics and related software (including real time monitoring and analytical software); ...”

and finally,

“... (19) any other technologies the Commission considers appropriate.”²⁴

As this Commission has articulated repeatedly in Orders 888, 890, and 1000 the ISO/RTOs have an obligation to evaluate solutions comparably and enable competition. MISO’s SATOA proposal goes in the opposite direction by forcing projects into the narrow box of projects owned by TOs and providing incumbent TOs a de facto right of first refusal. Additionally, the Stakeholder process has highlighted overly restrictive language in MISO’s tariff that must be removed in order to come into compliance with the FPA and Section 1223 of EPACT 2005 which defines advanced transmission technologies.

III. CONCLUSION

For the reasons set forth above, ELPC respectfully requests that the Commission: 1) grant ELPC’s motion to intervene, and 2) reject MISO’s proposal and direct the ISO to develop a new proposal that a) ensures ESR solutions are considered on an equal footing regardless of whether they are offered by a TO or non-TO; b) ensures ESR solutions are not restricted to a “non-transmission asset” classification and excluded from consideration as a transmission solution; c) requires MISO to update their tariff to comply with FPA and encompass all advanced transmission technologies in the MTEP process. This last one includes a need for MISO to provide a pathway for ESR as transmission and other advanced transmission technologies, or Grid Enhancing Technologies as defined recently by FERC, to receive cost recovery.

²⁴ EPAct 2005, Section 1223, Title 42 U.S. Code § 16422, Chapter 149, Subchapter XII, Part A (2005).

Respectfully submitted,

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On behalf of the Environmental Law and Policy Center and the Center for Renewables Integration.

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* The persons whose names are followed by an asterisk should be included on the official service list in these proceedings and should be served with all communications concerning this motion.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document has been served on this day upon each person designated on the official service list compiled by the Secretary for this proceeding.

Dated at Chicago, Illinois, this 21st day of January, 2020.

/s/ Justin Vickers

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