

MSC: Evaluation of Hybrid Generation Resources and Modeling Options (IR086)
OMS Markets and Tariffs Work Group

During the September 10, 2020, MISO Markets Subcommittee (MSC) meeting MISO indicated Hybrid Resources (Hybrids) are a growing segment of RTO interconnection queues, compared and contrasted Hybrids to co-located resources, presented modeling options with which to evaluate Hybrids, and sought stakeholder feedback to the following questions:

- How should Hybrid Resources be defined?
- What market enhancements or tweaks are necessary to better enable Hybrid Resources to participate in MISO markets?
- What unique characteristics of Hybrid Resources are not recognized by the markets but should be?

The Organization of MISO States (OMS) Markets and Tariffs Working Group (MTWG) appreciates this opportunity to respond to MISO's request for Hybrid Resource treatment feedback and finds MISO's Hybrid initiative as both appropriate and timely. The MTWG believes MISO is generally moving in the right direction and asks MISO to remain flexible in future discussions. The MTWG looks forward to exploring specific proposals as ideas are developed in future MSC meetings. This response does not constitute a position of the OMS Board of Directors.

How should Hybrid Resources be defined?

The MTWG agrees with the proposed Hybrids definition. The MTWG notes that a Hybrid's generation capacity may not equal its interconnection capacity and that this situation is already contemplated by the tariff for other resources. Therefore, the MTWG suggest shortening the definition Hybrid Resource to the following: "A Generation Facility that has multiple energy production devices that have more than one Fuel Source and participates in MISO Markets as a single asset."

What market enhancements or tweaks are necessary to better enable Hybrid Resources to participate in MISO markets?

Hybrid resources could provide the same services as any other resource. Expansion of the various markets registration parameters to include all Hybrid combinations should allow their owners to enroll them to provide services that they are technically able to offer. In addition to energy, hybrids can provide ancillary services and reactive power services. Given that Hybrids could take many and different configurations, it may be appropriate for MISO to require Hybrids-specific verification requirements.

What unique characteristics of Hybrid Resources are not recognized by the markets but should be?

If a Hybrid resource includes storage, stakeholders will have to contemplate how the market will accommodate charging the hybrid component and how transmission charges will be imposed when the resource takes power from the grid to charge. Also, if the Hybrid is comprised of a DIR should limits be placed on its forecast flexibility?