

# Mosaic Power Executive Summary

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# Scoring Algorithm

Precision-only is the most accurate all-in measure of a resource performance.

The precision-threshold system proposed by PJM amounts to a significant increase in the practical minimum participation requirement of around 85%.

Mosaic Power can support Beacon Power's compromise proposal of  $(0 \cdot \text{Accuracy} + 0 \cdot \text{Delay} + 1 \cdot \text{Precision})$  when Precision is less than 75%. This provides a modest kicker for the highest performing assets while maintaining the overall fairness of the scoring system.

# MRTS

Mosaic Power agrees with the ESA that the MRTS unfairly double-penalizes RegD resources by reducing payments to high and low performers together as a class based on historical performance, and then further reducing payments based on individual performance.

With the new signal design, a high performing resource with unlimited energy should never be assigned a MRTS less than 1.

MRTS should not be used in settlements in combination with the performance score.

# Price Formation

When a resource is found to have market power via the TPS, the resource should be prohibited from offering below cost

Offering prices below cost is a significant barrier to rational price formation. While it may not be anti-competitive given the rational expectation of winning regular LOC lottery prizes, bidding below marginal costs results in the clearing of higher marginal cost resources than would clear if actual costs were considered.

This behavior is a contributing factor to the lottery-like boom-or-bust hourly settled price.

Self-schedule should be limited to self-supply.

# Signal Design

Mosaic Power supports the Steel Producers recommendation for separate Reg-Up and Reg-Down clearing.

The ability of a resource to offer differing Reg-Up and Reg-Down quantities provides a valuable tool for managing charge state. Resources in a depleted charge state can offer the full down capability to recharge while offering a smaller offer based on the limited ability to discharge.

If the ability to change quantities intra-hour is permitted, PJM will gain an accurate state of the resource pool without explicit charge state management.

# Testing Schedule

Mosaic Power supports a one success a month testing limit. Units that fail a test should not have to wait a month to try again.

The RegA test signal is easier to follow than RegD, and both test the same 15-minute storage:

Units that seek to dual-qualify for RegA and RegD should be required to pass a single RegA test after qualifying for RegD. A resource that is qualified for RegA and RegD should be deemed to have passed the RegA update if it has passed the RegD update test.