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Capacity Capability Senior Task Force (CCSTF)

DRAFT Dispatch Methodology Proposal

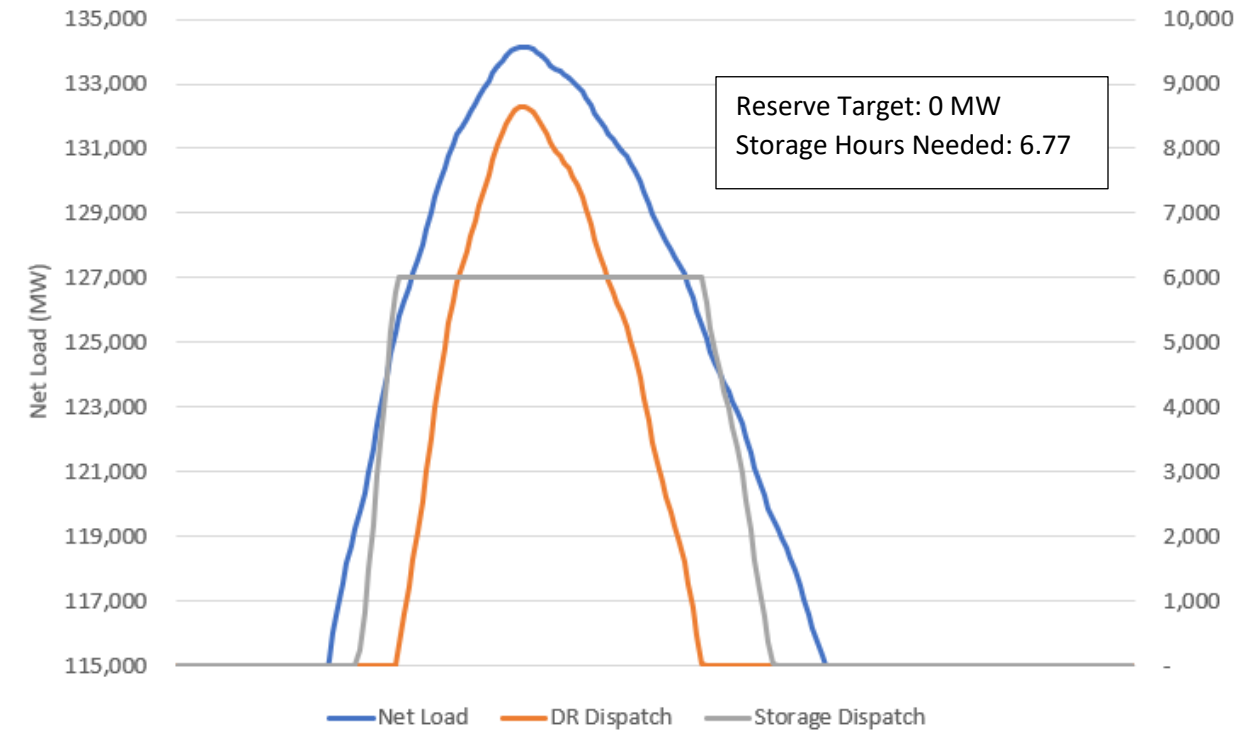
Principle #1: Utilize energy-limited resources to serve A/S requirements when sufficient total resources are available. To the extent multiple classes of ELRs can serve A/S, utilize longer duration resources to serve energy, and shorter duration resources to serve A/S. If sufficient resources are not available to meet load and serve A/S requirements, deploy reserves to the extent needed.

Principle #2: On a daily basis, maximize the reliability contribution of economic ELR by optimizing its utilization across energy and ancillary services by adjusting targeted reserves to be consistent with actual operating history. Reserve targets higher than operational minimums will result in slightly longer DR deployments but preserve storage capacity.

Method Comparison with 6GW Storage Portfolio:

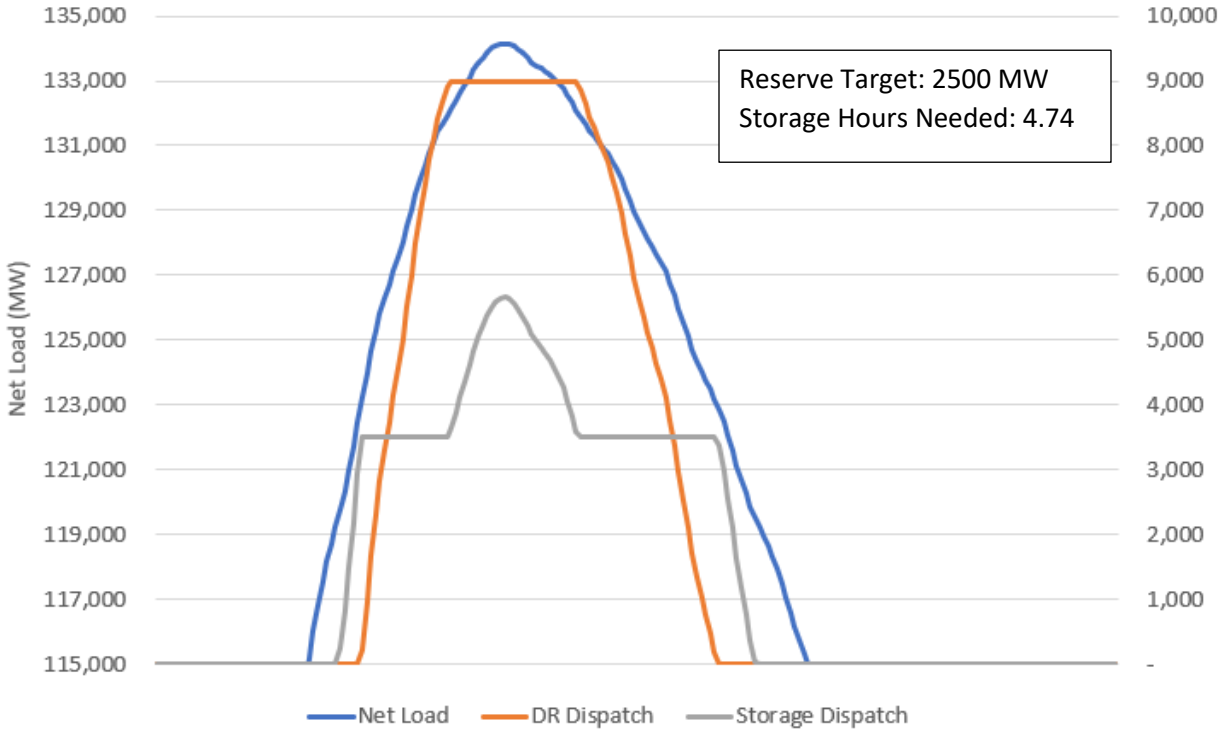
Method: PJM Initial Proposal. Dispatch storage first. Assume no reserves.

Issue: Dispatch method not consistent with actual operating practices.



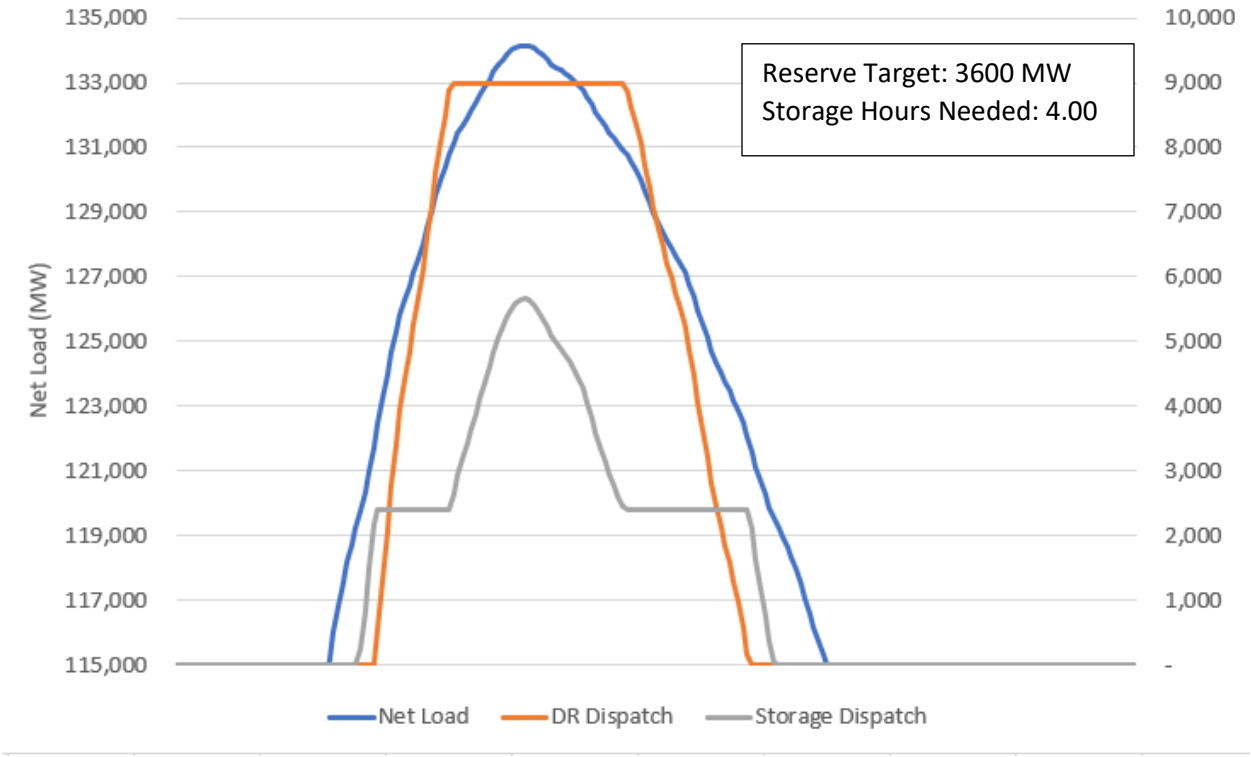
Method: Maintain Minimum Primary + Regulating Reserves When Available. Dispatch storage first, subject to provision of A/S.

Issue: Only considers minimum required reserves which may be significantly lower than typical operating practices.



Method: Target adequate reserves to maximize the reliability contribution of the existing fleet. Dispatch storage first subject to reserve target.

Conclusion: This method most closely aligns with typical operating practices.



Reserve Allocation Discussion

- The appropriate allocation strategy is to allocate reserves to shortest duration resources. Any other approach results in distortions in ELCC.
- Using the appropriate strategy, in the scenario where battery storage is added to the portfolio, reserve provision is de-allocated from other storage classes, making their reliability contribution less, but this only affects battery ELCC.
- Using the strategy of allocating half reserves to each storage class, the scenario where long duration storage is added removes allocation of reserve provision from batteries, which translates to lower than expected benefit allocated to long duration storage.