

Comments on Hybrid Resources – Aggregate Capability Constraint Final Proposal

Department of Market Monitoring

June 15, 2021

Summary

DMM appreciates the opportunity to comment on the ISO's *Hybrid Resources Aggregate Capability Constraint (ACC) for Co-located Resources - Final Proposal*.¹ In this Final Proposal, the ISO proposes to revise the ACC construct for co-located resources to allow multiple ACCs to apply to a given set of co-located resources using "master" and "subordinate" constraints. The proposal maintains the existing framework such that the master ACC applies to all resources behind the point of interconnection (POI) and reflects the total interconnection rights limit. Subordinate ACCs would further constrain the dispatch of subsets of co-located resources behind a point of interconnection to reflect contractual limitations between developers and project off-takers.

The master ACC at each POI would not be subject to relaxation by the market optimization. However, DMM understands that the ISO proposal would allow relaxation of subordinate ACCs at a penalty price just below that of the power balance constraint. DMM supports this construct to maximize the efficient use of interconnection capacity. We offer additional detail in the comments below.

I. DMM supports the ISO's proposal to allow relaxation of subordinate ACCs when needed to satisfy the power balance constraint

DMM supports the ISO's proposal to allow relaxation of subordinate ACCs before relaxation of the power balance constraint. This would allow maximum efficient use of co-located resources and interconnection capacity under tight supply conditions, when this capacity is needed to achieve power balance.

DMM understands that subordinate ACCs would reflect contractual shares of interconnection rights allocated to different project off-takers behind the same POI. The total of the limits of all subordinate ACCs behind a given point of interconnection would equal the interconnection rights limit, and the limit of the master ACC.

The ISO has clarified that the master ACC would not be subject to relaxation by the market optimization, and could only be relaxed when determined to be feasible by the ISO in emergency conditions. However, subordinate ACCs would be modeled using a penalty

¹ *Final Proposal - Hybrid Resources - Aggregate Capability Constraint for Co-Located Resources*, California ISO, May 27, 2021: <http://www.caiso.com/InitiativeDocuments/FinalProposal-HybridResources-AggregateCapabilityConstraint-Co-LocatedResources.pdf>

parameter just below that of the power balance constraint. This would allow for relaxation of subordinate ACCs under tight supply conditions, before relaxation of the power balance constraint.

DMM supports the ISO's proposed approach to allow relaxation of subordinate ACCs before relaxation of the power balance constraint. DMM understands that parties may have entered contractual arrangements to prevent one off-taker from utilizing more than its allotted share of the total interconnection limit and preventing other off-takers from accessing their full share of the interconnection limit.

As DMM understands, the ISO's proposal to allow relaxation of subordinate ACCs would not threaten parties' access to contractually allocated shares of interconnection rights. As the ISO noted in the June 3 stakeholder web conference, relaxation of subordinate ACCs would not result from the bidding behavior of a given set of co-located resources.² Further, DMM understands that the amount of the relaxation of a subordinate ACC should not exceed the amount by which other co-located resources at the same point of interconnection are unable to produce output up to their respective subordinate ACC limits.

When all co-located resources behind a point of interconnection are physically available and have economic bids up to the limit of the applicable subordinate ACC, other subordinate ACCs will not be relaxed when the penalty parameter is above the bid cap and near the power balance penalty parameter as described. A subordinate ACC could only be relaxed when needed to achieve power balance, and the capacity of another set of co-located resources behind the same point of interconnection is not physically available or does not have economic bids up to the limit of its subordinate ACC.

DMM supports the ISO's proposal to allow relaxation of subordinate ACCs before the power balance constraint at a penalty price above the economic bid cap, and as described in the Final Proposal and in the June 3 stakeholder web conference.³ This approach maximizes efficient use of interconnection and generation capacity that may otherwise go unused during periods of tight supply, and may minimize total cost by preventing relaxation of the power balance constraint. The approach further ensures that the market dispatches of any set of co-located resources do not prevent other co-located resources behind the same point of interconnection from producing the full amount for which they have submitted economic bids and are physically capable, up to their subordinate ACC limit.

² See video recording of web conference *Hybrid Resources – Aggregate Capability Constraint (ACC) for Co-located Resources Final Proposal*, California ISO, June 3, 2021, at 32:43 – 33:20:

<https://www.youtube.com/watch?v=6712dN7y9PQ>

³ Ibid.