

DC Energy, Comments on Contingency Modeling Enhancements

Submitted by	Company	Date Submitted
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DC Energy was pleased to see that the revised process schedule for the Contingency Modeling Enhancements (CME) initiative included additional draft proposal iterations and expanded opportunities to provide feedback leading up to the final proposal. Also, we appreciate the exhaustive list of CRR alternatives thoughtfully put together by the California Independent System Operator (CAISO) in the February 3, 2016 CRR Alternatives Discussion Paper. Our comments focus on the proposed CRR alternatives and which options should be explored in more detail. Overall, we continue to believe that the CME proposal contains numerous benefits in the areas of congestion price signals and reduced operational use of exceptional dispatch and minimum online commitment constraints. With these improvements we desire to preserve a robust level of participation in the CRR market.

DC Energy supports continued review of Option 3a and is looking forward to the CME prototype results

DC Energy finds that option 3a is a compelling option, as it bifurcates the congestion components of the k and kc constraints into two separate CRR products that clear on separate bids (i.e. CRR^k and CRR^{kc}). We believe this approach, which aligns the congestion type with CRR product type has numerous advantages:

- It leads to a simpler product valuation process and steers away from complex CRR structures that would require participants to value the k and kc constraints with a single bid.
- It does not create unnecessary dependencies in the clearing of two products as compared to option 2a, which also utilizes a separate bid structure.
- It preserves the intuitive nature of the current CRR product and promotes transparency by settling each product on the separate constraint types (i.e. eliminates the necessity of constructs such as Contingency CRRs that correct the original CRR payment)

For these reasons, we desire to start discussion on the specific mechanics of option 3a, especially in context of the forthcoming prototype results. We are interested in the specific design of the CRR^{kc} product and there appears to be at least two general approaches. As we explore the options, the ISO should strive to develop a product that is elegant; promotes ease of hedging; and is generally in-line with the characteristics of the current CRR product. Design options that might require separate bids and auctions for each kc constraint appear to be sub-optimal as compared to settling all kc constraints impacts together utilizing one bid set and auction. We look forward to these discussions and any additional information that the CAISO can provide, including the feasibility of the possible CRR^{kc} product designs.

In closing, we recognize that there is significant forthcoming information on the CME proposals, such as the prototype results, and as this new information becomes available our support for any one option may evolve due to the identification of unintended outcomes or opportunities to enhance the proposals.

The forthcoming prototype results are an important consideration in the final proposal

DC Energy looks forward to reviewing the prototype results and believes they must be carefully analyzed in order to gain further insight into the performance of the different options. As in our previous comments, we urge the CAISO to perform robust testing of the prototype implementation, which includes at least a full year of historical simulated market results, i.e. binding constraint detail, LMPs, and constraint shadow prices; and estimated avoided uplift. We believe that an undertaking to introduce new optimization features on major transmission corridors (i.e. those impacting System Operating Limits) necessitates a robust testing and review period for numerous reasons:

- It provides market participants the opportunity to understand the preventive corrective constraint in the context of market settlement and its potential impact to market investment.
- It provides time to identify and address any issues prior design approval. This would ensure the design of the CME is aligned with its policy intentions and help mitigate against post-implementation market disruptions, e.g. price corrections; inefficient market results and related administrative “patches”; and the market uncertainty that comes with successive fixes.
- It provides more transparency into the potential benefits of the revised CME proposal

The proposal to monitor the CRR market in a strong preventive state (i.e. n-2) produces an asymmetry between sequential ISO markets and could result in lower auction revenues

DC Energy notes that option 1b is particularly detrimental to the sequential ISO markets. The proposal enforces the strong preventive state (i.e. n-2) in the CRR optimization, which produces an asymmetry in available capacity between markets. Specifically, the mismatch would create a situation where there would be significantly less CRRs available than what is actually supported by the preventive corrective constraint utilized in the day-ahead and real-time markets. This option, if implemented, could result in fewer CRR MWs clearing than today, which, if not compensated by higher auction prices, would result in a net reduction in auction revenues from the current state of the world.

We note that options 2 and 3 of the CRR alternatives paper are rooted in creating symmetry (and hence convergence between auction revenues and DAM congestion

rents). We appreciate the exhaustive list of alternatives thoughtfully put together by the CAISO; however we believe it is time to focus on the viable options that are contained within options 2 and 3 and avoid any unnecessary limitations on CRR product availability and its potential adverse impacts.