DC Energy Comments on Generator Contingency & RAS Modeling Revised Straw Proposal

Submitted by	Company	Date Submitted
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DC Energy appreciates the opportunity to provide comments on the California Independent System Operator (CAISO), March 15, Generator Contingency and RAS Modeling Revised Straw Proposal.

DC Energy supports the ISO's proposal to model generation contingencies and Remedial Action Schemes (RAS) contingencies in the ISO market optimizations. Today the ISO manages these contingencies with out-of-market actions and nomograms. The out-of-market actions do not provide correct price signals and cause uplifted costs and the nomograms pose operational challenges, as they are approximations of the actual constraints. We appreciate the ISO's attention to these operational and transparency issues and agree with the ISO on a number of issues articulated in the straw proposal, including:

- (i) it is appropriate for congestion management price signals to account for the impacts of RAS equipment, as they can alter a generators contribution to congestion on the system. Furthermore, we agree that modeling RAS constraints in the market solution does not create improper incentives since RAS installations are based on reliability studies.
- (ii) it is appropriate to maintain consistency between virtual bidding impacts on transmission constraints and the newly modeled generation and RAS constraints
- (iii) the proposal does not lead to increasing real-time congestion imbalance offset uplift. Any additional efforts spent on this topic should be balanced with a quantification of the potential reduction to out-of-markets actions, which would serve to reduce uplifted costs.

We were pleased to see the ISO put forward details on the proposal's impacts congestion management. The ISO prototype results are useful in understanding the mechanics of the dispatch; however, we request that the ISO share actual, 'real-world' information that shows which current generation and RAS constraints, if modeled in the market as proposed, are anticipated to lead to a significant reduction in the use of out-of-market actions. This would provide insight on the proposal's tangible benefits and shed light on potential impacts to actual operations.

Perhaps the most important design decision is how to account for generation and RAS constraints in the CRR market. The ISO thoughtfully provided several options for review and the primary consideration focused on ensuring CRR revenue adequacy. We agree with the ISO that directly modeling the constraints is the most correct way to mitigate potential revenue inadequacy. This option aligns the proposal between the ISO's sequential market and is consistent with how transmission contingencies are treated today. The ISO put forward two

alternatives to address this issue, one that involves path specific derates and another that would apply a derate at the system level. The first alternative would involve off line studies used to formulate approximations to the actual constraints. These approximations would inevitably fall short and are the type of practices the ISO is generally seeking to do away in this initiative. That said, the most concerning option is the expanded utilization of the current global scaling factor mechanism. Of course, it has the potential to help ensure revenue adequacy at the system level; however, it falls short by an additional degree by not making any attempt to approximate the locational impacts of the generation and RAS constraints. Instead it would limit auction capacity across the system, including areas completely unrelated to the inefficiencies caused by not modeling the constraints. While these less refined alternative options might save project implementation dollars, they would do so at the recurring expense of newly created inefficiencies, which is counter to the overarching goals of the initiative. Accordingly, we submit the only viable option is to directly model the RAS and generation contingencies in the CRR market.