California ISO

Stakeholder Comments Template

Day-Ahead Market Enhancements (DAME) Initiative

Submitted by	Organization	Date Submitted
Aditya Chauhan aditya.chauhan@sce.com Beverly Brereton beverly.a.brereton@sce.com	Southern California Edison (SCE)	7/13/2020

Please provide your organization's overall position on the DAME revised straw proposal:

- ☐ Support
- ☐ Support w/ caveats
- ☐ Oppose
- ☐ Oppose w/ caveats
- ☐ No position

Please provide written comments on each of the revised straw proposal topics listed below: SCE comments in Red Font

While SCE believes that the latest proposal may be an improvement toward addressing fundamental market price formation issues, SCE cannot support the approach due to the significant structural change with regard to how RA resources are treated in providing capacity already procured by California LSEs to the CAISO. SCE has advocated and continues to support a mechanism in which RA resources are required to bid zero dollars into the capacity product market and are not paid if accepted in this market. Doing so will avoid a double payment of these resources which have already been procured and paid by an LSE to meet grid capacity needs. This fundamental change risks a double payment to such resources that can be avoided by adopting the bidding and payment methodology utilized today for RUC. Implementing this change to the proposal while continuing with the revised optimization design is necessary for SCE to support the proposal.

1. **Corrective Capacity:**

SCE continues to not support the Corrective Capacity proposal in

addition to noting that there are several outstanding concerns that the CAISO did not address in the initiative where this product was first proposed[1].

2. **Updated market formulation:**

SCE supports the motivation to procure energy needs through the market while securing capacity intended for energy dispatch. To be able to evaluate the CAISO's updated formulation, SCE asks that the CAISO run its proposed optimization on historic market data and provide the results to stakeholders. The data should include monthly values, all total MW-cleared capacity values, for a minimum of a year:

1. One typical day for each month, total twelve days minimum.
2. Within each day, provide historic cleared variables for power balance constraint (physical and virtual, generation and load). Also, provide the cleared RUC capacity (provide it in the "RCU" cell, below) and the load forecast (D).
3. Within each day, provide the results of the first pass of the proposed new optimization (all variables requested in #2 as well as solutions for RC and FR, both up and down).
4. Within each day, provide the results of the final pass of the proposed new optimization (all variables requested in #2 as well as solved RC and FR, both up and down).

Thus, for each of twelve (minimum) days, the CAISO would provide MW values for:

Pass	EN	VS	L	VD	RCU	RCD	FRU	FRD	D	FRUR	FRDR
Historic											
First Pass											
Final Pass											

SCE will use the data to perform an internal analysis of whether the CAISO's proposed optimization is sufficiently separating the influence of (a) virtuals from reliability capacity, and (b) load forecast from the bid-in energy. These determinations are necessary to ensure that virtual bids are cleared against a willing counterparty and not against CAISO determined actions.

[1] http://www.caiso.com/InitiativeDocuments/SCEComments-ContingencyModelingEnhancementsDraftFinalProposal.pdf

3. **Accounting for energy offer cost in upward capacity procurement:**

SCE believes that the discussion here is applicable to Market Power Mitigation (MPM) and hence includes its comments in the MPM section.

4. **Resource Adequacy:**

SCE is concerned that there has not been commensurate progress in EDAM to match the progress of DAME. It is more likely that DAME will continue progressing through completion as a CA-specific design that can be amended in the EDAM process if and when necessary. SCE finds it more beneficial to avoid holding back DAME and addressing MOO within DAME given the RA structure within California and its impacts on contracting efforts both executed and planned and its relationship to how the resources will participate in the CAISO markets. If there is any need to address further RA elements, those can be addressed within EDAM when it makes sufficient progress. DAME's scope should remain relevant to DAME design.

California's Resource Adequacy (RA) program is essential for reliability of the state's grid and any proposal should appropriately incorporate RA. The RA program has provided for two elements that SCE believes is critical to the consideration of the DAME design.
First, the RA program bilaterally procures capacity that can be then turned into energy through a must-offer obligation to the CAISO. The bilateral contract then pays for the capacity costs associated with the resource and enables an LSE to meet their obligations to the CAISO and the local regulatory authority. The development and design of the current RUC construct has accounted for this by recognizing that RA resources have already received payment for their capacity value and are obligated to the CAISO market. As such, RA resources are required to bid zero dollars into the RUC market and are not paid by the CAISO if accepted. While the proposed construct is different in how the quantity of capacity is determined and the characteristics of the resources needed, fundamentally, the new construct does not change the fact that RA resources have already received a capacity payment in their bilateral agreement and should continue to be available to the CAISO for energy purposes. While the DAME design contemplated the expansion of the Day-Ahead market to EIM entities, and such expansion would risk providing RA resources to other entities free of charge if RA resources were required to bid zero, the implementation of the EDAM appears to still be at a significant distance in time from the implementation of DAME. As such, SCE believes that the concerns of use of RA resources under EDAM can and should be addressed in that stakeholder process such that the issues are addressed in an appropriate time frame. In the

meantime, the DAME proposal should recognize the RA construct and the potential for double payment and avoid such an issue where a simple implementation consistent with the current RUC construct has already proved effective. Therefore, SCE urges the CAISO to require all RA resources to bid zero for all DAME capacity products and if accepted, such resources would not be paid the market clearing price.

Second, the RA program has long been established to provide energy from the procured capacity through Real-Time, if capable. SCE believes that the market should receive the full benefit of the products that the LSEs have procured in order to meet RA obligations that provide for grid reliability. Further, SCE is concerned that the strict reliance on the new DAME capacity products will result in excessive procurement of those products. SCE believes that requiring RA resources to be available all the way through Real-Time, if capable, is a more appropriate mechanism to ensure grid reliability. Should the RA program provide for more capacity than the DAME capacity mechanisms, the capacity has been procured and compensated and should be available to provide customers with the value they have paid for. Should the DAME capacity mechanisms predict a need above the available RA fleet, then the mechanism will procure for such a reliability need over and above the RA showings.

4.1 SCE Proposal on RA Treatment under the Reliability Capacity Product Design

Since California LSEs pay for the RA capacity under RA Contracts, California LSEs should not pay the RA resources again for reliability capacity product or imbalance reserve product awards in the day-ahead market. That is, today's design that RA resources bid at $0/MWh in RUC and receive a zero-dollar revenue for RUC awards must remain. To accommodate this feature in the design of the RCU and RCD products, SCE proposes that RA resources should bid at $0/MWh (or alternatively evaluated at $0/MWh) for the RC products and the first market run will determine the quantity of the RA capacity meeting the RC product requirement. The second/final market run will then only procure the incremental RC need that RA resources didn't meet from the first run. This method will be consistent with how physical energy awards from the first market run are treated in setting the RC requirements in the second/final market run under the framework of the CAISO proposal.

Here is an illustrative example on how this proposal would work.

	1st Market Run
Total Load Forecast / total RCU	40,000 MW

Requirement	
Physical energy award	38,500MW
RCU Requirement after accounting for physical Energy	1,500MW
RA Resource contributing to RCU Requirement in form of RCU award	1,000MW
Incremental RC Requirement to pass to the Final Run	500MW

	2nd/Final Market Run
Incremental RC to procure, i.e., from the first run results	500MW
RCU clearing price	$3/MWh
RCU payment	$1500

Notes:

- RA Resources bid $0 (alternatively, no bids are allowed for RA resources but instead RA capacity are evaluated at $0/MWh in the process of determining the RC award).
- Similar to today, RA resources receive $0 revenue for their RCU awards. In this example, RA resources are paid $0 for the 1,000MW RC award, similar to the RUC design today.
- Resources are allowed to bid for RCU/RCD in the second/final market run and their bids are used to meet the incremental RC needs that RA resources didn't meet from the first market run.
- This proposal provides accurate economic representation of California's RA mechanism. The presence of this mechanism provides a set of resources that have already been paid for to participate in meeting reliability. Hence, these resources should be allowed to offer their capacity in first. To not do so would ignore them and lead to ignoring the economics that they represent in the market.

5. **Market power mitigation for reliability capacity and imbalance reserves:**

SCE supports development of a robust market power mitigation mechanism as part of the proposal. Regarding the specifics of the CAISO proposal, SCE has the following questions:

- Why is there an additional markup of $30 above the existing 10% DEB markup?
- Are all IR and RC awarded resources capable of providing SR? If not, then why is SR being used to determine competitive costs for resources that bid IR or RC??
- How is DEB – RT offer cap markup considered "competitive"?

- What measures does the CAISO intend to apply, if any, in relation to system market power mitigation for the procurement of RC and IR?
- How does the CAISO enforce the RT energy offer cap developed under the proposal? Will the CAISO cap all the offers bidding above the cap, or will the CAISO remove those bids from clearing the market?

The broader consideration for this proposal is the market participant behavior that the incentives contained within the proposal encourage. Will the proposal provide a stronger incentive for physical resources to clear for the physical capacity products instead of energy in the day-ahead market, and then be dispatched in the real-time market, therefore the physical resource would receive both an energy payment in the real-time market and a capacity payment from the day-ahead market. Under this scenario, the physical resource would apparently earn more revenue than if it just clears as energy bidding at its marginal cost for energy in the day-ahead market. The CAISO should then evaluate whether the proposal would set an incentive for physical resources to bid above the marginal energy cost in the day-ahead market. SCE is aware that the CAISO plans to address system market power in the day-ahead market within Phase 2 of the System Market Power Mitigation Initiative. SCE recommends that the CAISO consider implementing a system market power mitigation mechanism as part of this initiative, particularly if there is indeed an incentive issue associated with the CAISO proposal as described above.

6. **Settlements:**

   SCE opposes the IR (FR) cost allocation. It is specifically procured to meet uncertainty and should be allocated similar to RC (including VERs).

7. **ETC/TOR policy:**
   SCE requests the CAISO clarify what happens in the case that ETC/TORs do not deliver on their self-schedules. Assume the CAISO procures RC and IR for all needs, while assuming that ETC/TORs will meet their demand. Now assume that there remains some RC, IR MWs that are not used by the CAISO and instead applied to ETC/TORs for some unmet needs. Given that the CAISO is using products on a particular need that were not intended at the time of procurement, how does the CASO propose to deal with such a situation?

8. **Other Issues**

There are some issues on which the proposal is silent. Among the issues are:

i) **Non-Performance Penalties**. What penalty mechanism applies when resources partially deliver or fail to fully deliver their RC and IR awards?

ii) **Incentive Alignment**. Do the incentives within the RC and IR design align with the incentives of the RA program and the other products offered in the CAISO market? Does it strengthen or weaken any of the incentives and in what ways?

iii) **Redispatch and Pricing.** Will redispatch be a tool deployed by the CAISO in achieving least cost within the co-optimization of all products in the market inclusive of RC and IR? If yes, will the energy price be the only price adjustment expected from the adjustment of awards among resources?

iv) **Efficient Decision-Making by Market Participants.** Will the redispatch protocol maintain the market participant's indifference to supply products that the resource is eligible to supply by ensuring at least the same size of economic rent is earned by the resource as awards are adjusted in the co-optimization?

v) **Scarcity Pricing and Quality Cascading.** When scarcity arises for a single product or a subset of products, will the product prices cascade up according to the product quality spectrum? If yes, where do RC and IR lie on that spectrum?

vi) **Multiple Price Caps and Self-Selection of Market Participation.** Will the presence of different energy offer price caps for energy, RC and IR tilt market participation in any way that presents challenges for the CAISO to maintain grid reliability or increase the CAISO's reliance on out of market actions?