CAISO-CPUC Joint Workshop on Slow Response Local Capacity Resource Assessment

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SDG&E appreciates the opportunity to provide comments on the CAISO-CPUC Joint Workshop for Slow Response Local Capacity Resources. Overall, SDG&E felt the workshop provided a good dialog for parties to understand the operational characteristics of PDRs in the current market. SDG&E has some questions and recommends the CAISO provide clarifications in future workshops or documents.

SDG&E notes that the work in this project is for assessment of technical potential alone. However, without understanding the technical assessment results that pertain only to the San Diego local area, it becomes difficult to identify specific benefits for the ratepayers that must pay for programs that must meet the criteria for the combined LA Basin-SDGE-IV areas. Therefore, CAISO should study whether customers of one Local area is providing benefits to customers of another Local area under the aggregated Local area assessment before cost responsibility can be considered.

It is unclear how the technical assessment results will influence future policy at this time. The CAISO notes that the most limiting characteristic for DR is the run-time limitation of 5 hours in duration in most areas and possibly 9 hours in many areas. How would the run-time limitation duration of 5 or 9 hours translate to all local resources? Currently, the minimum requirement for an RA resource is minimum of 3 consecutive days and 4 hours of duration each day. Does the CAISO believe the duration should be consistent for all RA resources or does the duration only apply to DR resources?

SDG&E appreciates the CAISO presenting a new bidding option that is similar to bidding options currently available to real-time imports and exports. However, it is unclear if the CAISO meant to treat DR exactly like import/export energy. For instance, the CAISO penalizes the import energy if it's not available for more than 10% of the month. Would such penalties also be applied to PDRs in this case? Or is the CAISO simply trying to introduce additional bidding options for PDRs so that these resources may have better dispatch awards in real-time and the additional bidding options are currently available due to implementation of FERC 764? SDG&E sees benefits of aligning the bidding options to the operational capabilities of the resources. Dispatching resources with 7.5 min notification window that cannot respond in 7.5 minutes will not allow the CAISO to optimize its market results. This option would allow the PDRs to respond more appropriately and ensure reliability.

Additionally, would the import bidding option allow for minimum and maximum run-time constraints? As the CAISO points out in the ESDER 3 initiative, the market does not recognize the max run time once the DR resource has reached its daily use limit. While the CAISO offers an alternative, it's uncertain if the max daily energy limit parameter is an available option under the import/export bidding option.

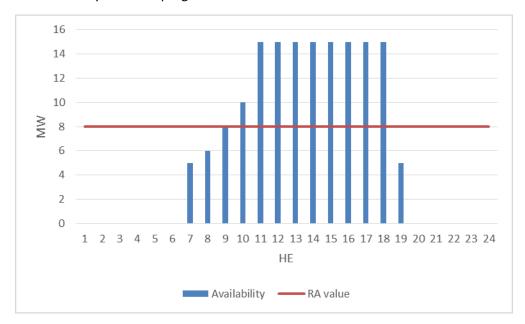
The CAISO asks the question how would applying this option help some PDR programs count towards local RA? SDG&E is uncertain if the question is accurate as the bidding options are not limiting characteristics of Local resources. Instead, the bidding options create limitations for how to best have the CAISO dispatch the PDRs based price or market needs. Simply put, does the lack of such new

bidding options prevent existing resources qualify for Local RA? SDG&E does not believe this would be the case.

SDG&E believes the CAISO should discuss other relevant issues associated with the must offer obligations, outage cards and RAAIM charges.

Must Offer Obligations

The existing MOO for all resources including PDRs is 24 hours of each day. However, due to the nature of the program, the PDR, including non-weather sensitive programs, may not be available to provide its monthly RA value for every hour of the day, including the program hours. The following example illustrates the availability of such a program.



The non-weather sensitive PDR has a maximum curtailment of 15 MWs, an NQC of 8 MWs and an hourly variable availability as it begins operations. The CAISO's system does not allow this resource to bid in below the RA value. If the SC bids in 5 MW for HE 19, the CAISO's system would adjust the bid to equal the 8 MWs RA value because that is the MOO for the resource. Providing the 15-minute bidding option would not prevent the PDR from having to meet its MOO every hour. If the CAISO bids and dispatches 8 MWs but the resource is only capable of 5 MWs, then the CAISO would have 3 MWs of energy it would need to dispatch from other resources on the grid. This would increase costs for ratepayers because the CAISO's system is not aligned with the operational capabilities of the resource it is dispatching.

Outage card

Using the same example as above, PDRs are not allowed to submit partial derates for its resource. This is to prevent the resource from adjusting its settlement and avoid certain penalties. SDG&E understands this limitation but requests the CAISO to revisit this issue and consider solutions which would allow the SC to submit the accurate hourly availability to the CAISO.

RAAIM charges

Still using the same example above, a PDR resource may register as a use-limited resource. This would prevent the CAISO system from submitting a bid that matches the 8 MWs RA quantity every hour. However, if the business hours do not overlap with the RAAIM assessment hours, the PDR would be penalized for its non-availability. Variable energy resources do not have such a problem¹. SDG&E believes that the CAISO should consider a different RAAIM assessment methodology similar to the one available to VERs during SCP. This would apply to all PDRs regardless of weather sensitivity.

Additional questions asked during the workshop

- 1. The ISO noted that the Settlement Agreement prevents it from "pre-dispatching" Reliability Demand Response Resources (RDRR). Is there anyone interested in opening the Settlement Agreement? If so, what do you think should change?
 - SDG&E supports giving CAISO all required flexibility to pre-position RDRR resources. SDG&E has no position on whether the settlement itself should be reopened.
- 2. During the workshop California Large Energy Consumers Association (CLECA) and Southern California Edison (SCE) referred to a pilot that creates new day ahead RDRR bidding options. Would such a pilot help provide more RDRR into the market either as "fast" RDRR or help to "pre-dispatch" it? If not, in what way might it inform approaches to these challenges?
 - SDG&E has no indication from loads on its system that such a pilot would provide more PDRRs in the market.
- 3. CLECA proposed in a CPUC rulemaking (A.17-01-012) that all IOUs should offer a Base Interruptible Program (BIP) 15 minute option, in addition to the existing 30 minute options. What are the barriers to this option, for instance the "excess energy penalty?" How can they be overcome? What options might exist for BIP customers that cannot meet a 15 minute response time?
 - As a general matter, SDG&E opposes penalties that are in addition (as opposed to substitute for) to imbalance energy charges or payments priced at RT market clearing prices.
- 4. During the workshop it was stated that other ISOs (NYISO was referenced) fall below their operating reserves several times a year. What are NYISO's reporting requirements and are they different than CAISO's when calling a Warning or Emergency for access to RDRR?
 - SDG&E suggests CAISO contact NYISO for consultation on this matter.

¹ VERs are exempt from RAAIM charges for generic RA. However, VERs had a different RAAIM assessment prior to April 2017 when the CAISO implemented standard capacity product availability mechanism.

Next Steps

SDG&E recommends the CAISO hold additional workshops to discuss its bidding options and provide responses to the questions raised by SDG&E and other market participants.