Subject: 2016-2017 TPP Joint CAISO-CPUC Workshop on Slow-Response Local Capacity Resource Assessment, October 3, 2016

Submitted by	Company	Date Submitted
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Please submit comments on the workshop to <u>regionaltransmission@caiso.com</u> by close of business October 10.

<u>Initial Results Demonstrate that Local Resource Adequacy (RA) Response Time</u> <u>Requirements Do Not Need To Be Changed in the CAISO's 2016-2017 TPP and the</u> <u>CPUC's June 2017 RA Decision</u>

The workshop examined how Demand Response or any slower-response energy limited resource can contribute to local RA needs. The initial premise was that these resources could not respond quickly enough after a contingency to meet the local need. The workshop reviewed initial analyses of how much "pre-dispatch" would need to occur to have those resources ready. For example, on hot days in case of a contingency, the pre-dispatch would line the resources up and have them ready for dispatch ahead of time. CLECA appreciates the time and effort put in by the utilities, CAISO staff and CPUC staff to examine these important issues. Initial results are reassuring; while more work is needed to critically and accurately examine the issues, it does appear that most of the current suite of DR resources can meet local RA needs.

Notably, based on the initial study results and the discussion at the workshop, the existing response time requirements for local capacity resources do not need to be altered in this 2016-2017 transmission planning cycle or for the June 2017 RA decision by the CPUC for the 2018 RA compliance year. Stakeholders, the CAISO and the CPUC can and should continue to study the slow-start, energy limited resources; this continued study does not need to hold up the CAISO's conclusion of its 2016-2017 TPP. Slide 33 shows that for SCE, as Commissioner Florio stated at the workshop, "most of the DR can meet the sufficient energy criteria." Slide 69 elaborates on the data showing that most of the existing SCE DR "can meet local RA needs at current levels" and for El Nido, the forecasting issues (discussed below) distort the results. It is likely that the existing DR in the El Nido area is sufficient. Accordingly, given the results of the analysis and the workshop discussion, stakeholders and the CPUC and CAISO should undertake

more analysis and develop workable methodologies and consider reasonable performance requirements for these resources; this ongoing work could be concluded in the next TPP cycle and the June 2018 CPUC RA decision.

Additional Analysis Is Needed

The timeline for the 2016-2017 TPP provides only a 30-day period to refine the results based on comments (October 11-Nov. 11), an update to stakeholders on Nov. 16, and one opportunity for stakeholder comments after that. The discussion at the workshop recognized the concerns with the initial, overly simplistic methodologies for analyzing these DR resources, including the issues with how to accurately scale-up a flat load shape for a one-in-ten forecast that doesn't overestimate the amount of "sufficient energy" or number of "calls" of DR.

Slides 23-24 describe the scaling up process for load. However, for areas with flat load shapes, such as El Nido (which consists primarily of industrial load), the scaled up forecast will be greatly overstated for the one-in-ten scenario. This leads to results that represent not an average of what is needed, but an extreme of what is needed. To set the 1 in 10 correctly, flat load should not simply be scaled up; while slide 24 shows how "peaky" load can be scaled up, if the load curve is flat, scaling up in this manner to create a 1 in 10 forecast results in an inflated estimate of how much DR would be required. For industrial or flat loads, most of which are not temperature-sensitive, consideration should be given to actual recorded loads, or other approaches, rather than a simplistic scaling up.

At the workshop, utility personnel agreed that thirty days is not enough time to resolve the issues with load forecasting for industrial areas. Fortunately, given the initial results, more time than the thirty days in the TPP schedule can be devoted to this issue.

Per slide 4, the following also needs to be developed:

"Identify a method to ensure that resources are not overly dispatched pre-contingency without good cause"

"Identify a method to calculate the portion of a slower responding DR program that can reliably respond within the required period, and therefore be counted for Local RA"

Additional work is required on these topics. And stakeholders and staff of the CAISO and CPUC need to address the potential mis-alignment of local areas with sub areas.

It could also be informative to examine the history of TOP-007 which sets the NERC requirements for stability and review how the 30 minutes response time requirement was developed; it could be that the circumstances dictating a 30 minute response time are no longer fully applicable or may have changed since the standard was developed.

Additionally, regarding the presentation's reference to a Day Ahead dispatch, this could be 4 hours or 12 hours in advance; it was unclear in the workshop discussion what "sufficiently in advance" means for operational purposes; these "sufficiently in advance" parameters were not defined and perhaps not developed. The parameters around what is sufficient advance pre-dispatch need further exploration.

Finally, the next iteration of the analysis should study the LA Basin area and the SDG&E area on a stand-alone basis. According to the workshop presentation (slide 59), the analysis combined the two; the explanation for the combination was that it was due to the interdependence that developed between the areas after the SONGS retirement, and that the load characteristic of the combined area is what is important. LA and San Diego should be analyzed on their own under Method 2.

Need to Connect the Dots Between Planning and Operations

Planning focuses on meeting peak load in a stressed August month; operations focuses on meeting load all 8,760 hours in the year. Planning's peak August load is turned into a monthly RA requirement, but it is not clear how operationally the minimum online commitment (MOC) process (run on a day-ahead basis) relates to the monthly planning RA requirement. There is a real concern that the analysis presented at the workshop would lead to consistent over-procurement of local RA – and perhaps not just from DR resources. This needs further exploration.

<u>Real-time Contingency Triggers for Reliability Demand Response Resources Must Be</u> <u>Acknowledged</u>

It is not clear to CLECA, based on the discussion at the workshop, that all stakeholders are fully aware of the contingency requirements for RDRR's participation in the real-time market and there are questions on how they interact with voluntary participation in the day-ahead market. RDRR participates in the real-time market on a contingency basis pursuant to Tariff section 34.18 "for reliability or to perform a test." CAISO Operating Procedure 4420 expands on the reliability real-time dispatch triggers. Under OP 4420, to "prevent, mitigate or otherwise manage a system emergency", RDRR may be dispatched in real time in response to the following:

- A declaration of a transmission emergency per section 3.3 of OP 4420; or
- A warning notice of an operating reserve deficiency per section 3.4.2 of OP 4420;

One of these contingencies must occur before RDRR is entered into the real time market bid stack; RDRR's real time bid price is set at 95% of the bid cap. RDRR participation in the real-time market should be rare and infrequent, as it is an emergency resource intended to "prevent, mitigate or otherwise manage a system emergency." Voluntary participation in the day-ahead market is very different and not predicated on these contingencies. A Reliability Demand Response Resource's voluntary participation in the day-ahead market in a manner similar to price-responsive Proxy DR (PDR) as opposed to contingency-triggered reliability DR in the real time market must be separately and carefully considered.

SCE's slide 106 notes the current inability to bid RDRR "economically" in the real-time market in order to decrement a Day-Ahead award to the RDRR resource. We speculate that this may be a result of SCE's treatment of its Summer Discount Program in the CAISO market as RDRR. SDP behaves very differently from other RDRR such as Agricultural Pumping-Interruptible (AP-I) or the Base Interruptible Program (BIP) since it has triggers that are not reliability-based. SCE suggests as a potential solution that "RDRRs with Day-Ahead awards could be exempt from the current requirement for RDRR RT bids at 95% of bid cap." (SCE slide 106.) CLECA has serious concerns about this proposal for AP-I or BIP, which have reliability-based triggers to participate in the real time market and not price-based triggers. CLECA believes that far more attention must be paid to the different characteristics of RDRR and PDR for different programs before the implications of proposals such as SCE's can be considered. While CLECA strongly supports finding a way to enable customers that provide contingency-triggered RDRR in the real time market to also provide economic or price-responsive demand response on a voluntary, day-ahead basis, CLECA cautions against turning a proven emergency resource into an unproven economic resource.

Conclusion

As Commissioner Florio recognized at the end of the workshop, "we need to dig into [this] a bit more." Specifically, we need a more detailed analysis of the meaning of commitment or predispatch for a DR resource, and whether there is a difference. We also need to understand how much pre-dispatch is really likely to be required. In addition, the forecasting methodologies need additional work to improve their accuracy, particularly for flat industrial load shapes. CLECA appreciates this opportunity to provide its comments and looks forward to the continued efforts of all involved on demand response integration into the CAISO's markets.