Stakeholder Comments

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Commitment Cost Enhancements Phase 3 Workshop

Southern California Edison (SCE) appreciates the opportunity to provide comments on the Commitment Cost Enhancements Phase 3 (CCE3) initiative and associated issues discussed at the July 27th workshop.

Below are SCE answers to the questions posed by the CAISO.

1. What types of documentation exist that can be provided to the ISO which supports the limitations of each PDR resource in the Use-Limit data plan template (ULPDT)? This documentation will be used to verity the limitations of the resource.

For utility Demand Response (DR) programs, the best available documents are the California Public Utilities Commission (CPUC or Commission) approved Tariffs, programs and contracts. For example, SCE's Summer Discount Plan (SDP) has a published tariff that sets its parameters. Similarly, the Aggregator Managed Program (AMP) has bilateral contracts, approved by the CPUC, that define the resource requirements and limitations. However, for certain programs, such as the Demand Response Auction Mechanism (DRAM) pilot, the contract between the utility and the Seller does not currently specify the resource use limitations, but rather it focuses on the minimum resource requirements.

What is also important here, from an implementation perspective, is that Use-Limitations can be established on a per-program basis, and do not have to be revisited each time a resource registration is updated. For example, a single program is likely to result in dozens of PDRs (or RDRRs) in the market, and SCE recommends that the process for approving and managing ULR status recognize and accommodate that. Furthermore, the ULR status of a resource should not be revisited each time the underlying Service Account registrations are updated. Many programs, such as residential based DR, may have resources consisting of tens of thousands of Service

Accounts, all with the same use limitations. In such programs, a level of customer turn-over is normal, and regular registration updates are expected, where Service Accounts may be added or subtracted from the resource, without material impact to resource's use limitations.

2. What are the demonstrable costs for PDR resources that may be analogous to a start-up or minimum load cost of a traditional generator? What costs would be included in the energy bid?

For traditional (load reduction) DR, SCE's current Tariffs and programs do not have any start-up or minimum load cost – besides the opportunity costs associated with the use of the resource. Please note that, as discussed at the workshop and in SCE's presentation, start-up or minimum-load costs may be the best way to account for certain opportunity costs.

For Energy Storage based DR, the resources may have costs associated with the cycling and physical use of the storage asset (e.g., wear and tear).

3. Should there be a lower bound of the net benefits test on the energy cost used in the opportunity cost model?

This is a reasonable assumption. Per current CPUC rules, utilities cannot bid their Demand Response resources below the net benefits test.

4. Are there other resource characteristics for PDR we should include in the opportunity cost model?

An additional resource characteristic to consider is the variable MW quantity available from weather-sensitive programs. For example, on a hot summer day, a weather-sensitive DR resource may be able to deliver above its Qualifying Capacity; however, on a cool summer day, it may have a significantly lower MW impact. As a first step, any opportunity cost calculation should consider the resource's monthly expected MW impact, and not the registered Pmax. This is because a Scheduling Coordinator is likely to register the Pmax for a PDR/RDRR as expected in the peak month, and then bid in the capacity actually available into the market – rather than having to continuously update the Resource Data Template (RDT) every single month.

5. Can all limitations be captured by the types and granularities noted at the workshop?

The parameters discussed in the workshop (events per day/month/year, run-hours per event/month/year) cover the major DR program limitations that drive the opportunity costs.

6. Are there any other concerns regarding the CCE3 methodology to estimate opportunity costs for PDR resources?

One concern is the proposed monthly frequency for opportunity cost updates. If the realized market prices, and the resulting market dispatches, are higher than the forecast assumptions, a resource may end up with significant (higher than expected) use within a month. As a result, as the month progresses, the calculated opportunity costs may be too low, resulting in relative overuse of the resource. A solution to this would be to update the opportunity cost model calculations more often if frequent DR resource dispatches are observed.

Additional Comments

SCE would like to document several issues that were raised in the workshop. While some may not fall within the CCE 3 initiative, they should be addressed by the CAISO in a stakeholder forum.

RDRR opportunity cost bidding in Day-Ahead Market (DAM) – For RDRR resources that are bid economically into the DAM, they should be allowed to use the same opportunity cost bidding mechanisms in the DAM as PDR resources.

RDRR decremental bidding in Real Time Market (RTM) – Currently, RDRR resources can be bid and awarded economically in DAM. Once awarded, there is no mechanism for the CAISO to dispatch the resource down (de-commit them) in RTM, even if the conditions change, and the resource is no longer needed in RT.

SCE supports the reactivation of the maximum run hour resource characteristic. (As discussed in the issues matrix.)

The idea of treating DR similar to Variable Energy Resources for Resource Adequacy (RA) and Must Offer Obligation (MOO) compliance purposes should be further explored. This may be especially important for weather-sensitive resources, whose performance is highly dependent on, and correlated to weather conditions (e.g., temperature).

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