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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years.	Rulemaking 17-09-020

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) TRACK 3 PROPOSALS

JANET S. COMBS
TRISTAN REYES CLOSE

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-2883
E-mail: Tristan.ReyesClose@sce.com

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Per the Assigned Commissioner's Amended Scoping Memo and Ruling issued on January 29, 2019 ("Scoping Memo") and Administrative Law Judge Chiv's February 22, 2019 email ruling extending the deadline to file the Track 3 proposals, pursuant to Rule 11.6 of the California Public Utilities Commission ("CPUC" or "Commission") Rules of Practice and Procedure, Southern California Edison Company ("SCE") respectfully submits its Track 3 proposals.

I.

REVISIONS TO THE LOAD FORECAST METHODOLOGY

A. Developing an Intermediate Aggregated CCA Load Forecast for Each Investor-Owned Utility Service Area

With the implementation of more Community Choice Aggregators ("CCAs"), it is important for the California Energy Commission ("CEC") and the California Public Utilities Commission ("CPUC" or "Commission") to control for the quality of load forecasts for each load-serving entity ("LSE"). Because of the uncertainty of load migration that might occur between Electric Service Providers ("ESPs"), and separately, between CCAs and the bundled

service, SCE proposes that the CEC create an aggregated ESP load forecast, an aggregated CCA load forecast, and a bundled service load forecast for each investor-owned utility's ("IOU") service area, in addition to producing individual LSE (including individual CCA) load forecasts. This aggregated CCA load forecast should provide additional forecast certainty to the CEC's resource adequacy ("RA") load forecast process and is needed to prevent cost shifting between CCA and bundled service customers.

Unlike the California Independent System Operator ("CAISO") system-wide or IOU retail service level load forecast, which the CEC and utilities have established over many years, there is a lack of history and load forecast experience for the newly formed individual CCAs. For this reason, it would be beneficial for the CEC to develop an aggregated ESP load forecast and a separate aggregated CCA load forecast for each IOU area in order for the CEC and each IOU to reconcile and create reasonable RA load forecasts between Direct Access, CCA, and bundled service requirements. That way the CEC and IOUs can leverage historical forecasting experience to better align the aggregated CCA load forecast for each IOU. Once the aggregate load forecasts are assessed to be reasonable, the CEC can reconcile individual LSE load forecast discrepancies within the context of the separate Direct Access and CCA aggregated load forecasts.

Currently, the "CEC evaluates each LSE load forecast individually and performs an adjustment to reflect the LSE's load contribution to the coincident CAISO's system peak in that month."[1] The CEC will benefit from developing the separate aggregated Direct Access and CCA load forecasts for each IOU service area in order for the CEC to better evaluate each LSE load forecast. Individual IOUs can work with the CEC to establish sufficient historical data (*e.g.*, historical annual energy and peak demand) for the aggregated CCA load within IOU service areas, and ESPs can work directly with the CEC to do the same. This will allow the CEC

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[1] *Resource Adequacy 2016 Load Forecast Adjustment Methodology – Revised*, dated April 2016, by Miguel Cerrutti, Demand Analysis Office – California Energy Commission, and Donald Brooks, Energy Division – California Public Utilities Commission, at 2.

to establish reasonable coincident factors for the aggregate Direct Access and CCA portfolio load at the CAISO system peak time for each month. It would also be beneficial for there to be more transparency around the coincidence factor estimates for the Direct Access and CCA load forecasts. Once the CEC establishes the quality forecast around the separate aggregated Direct Access and CCA load forecast for each IOU service area, the CEC can then utilize the aggregated ESP and CCA forecasts for each IOU to conduct a plausibility comparison for individual ESP and CCA LSE load forecasts within each IOU area. If the sum of individual ESP and CCA load forecasts (on a coincident basis) do not add up to the established aggregated load forecast for each class of departing load LSE (*i.e.*, by ESP and CCA aggregated amounts), the CEC will further investigate each individual ESP and CCA ESP load forecast to eventually bring alignment to the individual LSE load forecasts and the CEC's Transmission Access Charge ("TAC") load forecast for each IOU (on a coincidence basis).

1. Establishing Reasonable Steps and Assumptions to Develop an Aggregated CCA Load Forecast

SCE proposes that each IOU and the CEC work together and establish reasonable steps and assumptions toward developing the aggregated Direct Access and CCA load forecasts. Once the general steps and assumptions are agreed upon, each IOU and the CEC will perform separate analyses to generate the separate aggregated Direct Access and CCA load forecasts. Then the CEC and IOUs can work with the CPUC to compare and reconcile the separate aggregated Direct Access and CCA load forecasts prior to the year-ahead RA allocation process. This additional step will mitigate any significant RA load forecast deltas, as SCE experienced with its 2019 year-ahead RA forecast activities.

2. The CEC's Process around the Coincidence Factor Estimation for Each Individual LSE and the Separate Aggregated Direct Access and CCA Load Forecasts by IOU Should Be More Transparent

Coincidence factors are important in reflecting the peak contribution of each LSE's load to the CAISO system monthly peak load. Given the limited history of the newly formed CCAs, it is even more important to bring transparency to the process around how coincidence factors are established for each LSE, including the newly formed CCAs. Building more common understanding and transparency around the coincidence factor estimation method will allow stakeholders to provide further inputs for improving the calculation over time. SCE also thinks it is important to examine LSEs with large variations in coincidence factor adjustments from month-to-month to ensure the reasonable reflection of LSE's load contributions.

II.

SCE PROPOSES RA COUNTING METHODOLOGIES FOR STORAGE AND COMBINED RESOURCES

SCE provides the following proposals[2] on the "[c]onsideration of how storage and combined resources should be counted for RA credit." These are the same proposals that were introduced by SCE in its Track 2 testimony.

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[2] SCE put these same proposals in its Track 2 opening testimony and proposals served on July 10, 2018. In their August 8, 2018 reply comments, both CESA and CEERT commented on SCE's proposal. The comments from both CESA and CEERT did not necessarily oppose SCE's proposals (in fact CESA generally supported SCE's proposals), but rather provided clarification or their alternative view of the underlying issue. SCE provided its response to CESA and CEERT in its second reply comments served on September 14, 2018.
In particular, to CEERT's conclusion that with the growing deployment of use limited resources, NQC is no longer sufficient, SCE believes that the current mechanism to avoid over-reliance on use limited resources is sufficient and agrees with CEERT and other parties in this proceeding that have raised this very issue in that the evolution of, and increased reliance on, use limited resources will need to be considered in the ability of such resources to meet reliability needs and their implementation within a wholesale energy market. SCE also provided a clarification to CESA that the

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A. Pairing a Battery with a Dispatchable Generating Resource

This case is likely the easiest to resolve. With the battery and the generating resource fully dispatchable, the Net Qualifying Capacity ("NQC") and Effective Flexible Capacity ("EFC") values are the sum of the two parts subject to the interconnection establishing deliverability. For example, a 50 MW peaker with a 20-minute start time, a 10 MW/Min ramp rate, and a 10 MW battery with a duration of four hours, could meet an NQC of 60 MW to provide energy to meet Local and/or System RA needs. In addition, this resource could ramp from negative 10 MW to positive 60 MW in a manner to meet the three-hour ramping need and as such could have an EFC of 70 MW.

For dispatchable resources, as long as each component can meet the need and the interconnection is sized to allow for deliverability, the NQC and EFC should be determined by the sum of their parts. This is logical because if the resources in the example above were separate resources in separate locations, the NQC of the peaker would be 50 MW while the NQC of the battery would be 10 MW, thus providing between the two resources a total of 60 MW to the grid for NQC.[3] Similarly, the EFC for the peaker would be 50 MW and the EFC for the battery would be 20 MW as separate facilities, which would then provide the grid with 70 MW of EFC.

B. Pairing a Battery with a Non-Dispatchable Renewable Resource

This case must be broken into two options. In the first, the battery is fully dispatchable by the CAISO through the market. In the second, the battery acts at the discretion of the

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term "self-scheduling" in its proposals refers to a situation that a (battery) resource does not submit economic bids, due to a specific setup of the combined resource (e.g. to shape the output of a storage-PV resource and ensure consistent output from the combined resource as a whole during a temporary cloud cover), into the market that would allow the CAISO to dispatch the resource as market conditions indicate. Under this type of situation, SCE advocated that the ELCC for that resource should account for such shaping to better reflect the combined resources contribution to reliability.

[3] Assuming each resource is interconnected for full deliverability.

resource owner presumably to move energy output from periods of low energy prices to periods of higher energy prices.

In the case where the battery is fully dispatchable, the proper NQC is the sum of the ELCC for the renewable resource and the Pmax of the battery under a four-hour discharge. Similar to the assessment where both resources are dispatchable, the interconnection would need to be sized to ensure full deliverability of the battery and the renewable resource at Pmax. This is to ensure that in periods where the renewable resource is scheduling in accordance with RA requirements at its forecast and the forecast is for full output, the interconnection must be sized to allow the incremental capacity from the battery to be delivered at the same time. For EFC, the value should be based upon the flexible capability of the battery.[4]

In the case where the battery is non-dispatchable,[5] an ELCC methodology for renewable resources with a battery should be developed to assess the NQC value for such a facility. Such a method would account for the variable nature of the fuel supply for the renewable resource and the variable nature of the battery output that is not dispatched by the CAISO. In this case, because the resource is not dispatchable it is not bidding into the CAISO but rather self-scheduling[6] its output consistent with its forecast for renewable production plus the net output of the battery. As this resource is not bidding such that it can be dispatched by the CAISO to meet ramping needs, the resource should not be eligible for an EFC value.

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[4] This is based on the premise that the renewable resource be non-dispatchable. If the renewable resource has agreed to curtailment in order to provide flexible capacity and qualifies for Flex RA, this amount can then be combined with the flexible capacity of the dispatchable battery. EFC would then be the combined Flex capacity of the two facilities to the extent they are dispatchable to provide ramping service.

[5] By "non-dispatchable battery", SCE is referring to the dispatchability of the resource by the CAISO. In some cases, a battery device may be deployed to help a customer by avoiding utility demand or energy charges and may therefore choose to dispatch the battery according to drivers other than a bid in price to the CAISO. Such batteries would provide for reliability similar to a non-dispatchable renewable resource and their RA value could be determined based upon normal use through an ELCC type of mechanism.

[6] For example, without an economic bid that otherwise would allow the CAISO to dispatch the resource as market conditions indicate.

C. Pairing a Battery with Demand Response

This case is conceptually similar to pairing a battery with a dispatchable generator, and should be treated similarly – allowing for the battery and traditional DR to work in conjunction as long as they are not exporting to the grid. Under the current CAISO rules, interconnection and deliverability studies are not performed for DR resources – as load reduction (down to zero) is by definition deliverable. However, if the load behind the customer meter does not consume all the energy discharged by the storage device, then this combined resource could end up exporting to the grid, which is not allowed under the CAISO tariff. DR resources (including DR paired with storage), registered as Reliability Demand Response Resources ("RDRR") or Proxy Demand Resources ("PDR"), are not permitted to export energy – they may only provide load reduction. A storage resource that wants to export could qualify for RA, but the storage device would need to interconnect under the Wholesale Distribution Access Tariff ("WDAT") and have market-based rate authority. Furthermore, it is currently not possible under the CAISO tariff for a DR resource paired with a storage resource (i.e., behind the same customer meter) to be treated as more than one type of RA resource, such as an exporting WDAT and a PDR or RDRR resource – so a WDAT resource would not be a good candidate to combine with DR.

Another challenge is the establishment of a baseline and performance measurement. Combined energy storage and DR can already operate together, and receive credit based on the total load reduction as measured by the available baseline methodologies. To the extent there are proposals to separately measure pieces of a BTM resource, they should be carefully evaluated to ensure that they capture the actual load reduction delivered to the grid (i.e., the sum of all parts should not be greater than the actual load reduction delivered to the grid).

III.

REFINEMENTS TO THE THIRD-PARTY DEMAND RESPONSE QUALIFYING CAPACITY METHODOLOGY

At present, Demand Response ("DR") Qualifying Capacity ("QC") is determined by Load Impact Protocols ("LIP"), with Decision ("D.") 14-06-050 setting forth the QC methodology for Supply-Side DR resources, directing that "QC and EFC determinations shall incorporate historical performance data where possible."[7] "To the extent that historical performance data is not available or appropriate, the program design and/or test data may be used."[8] Because sufficient historical data was not available in 2016, D.16-06-045 exempted third-party DR resources through the 2019 RA compliance year from the requirement to use LIP to determine RA capacity, and used contract capacity (design parameter) instead.[9]

In the following sections, SCE lays out paths forward to determining QC for third-party DR, such as the Demand Response Auction Mechanism ("DRAM") resources.

A. Method #1 – Load Impact Protocols

When possible, SCE's preferred approach is to follow the established Load Impact Protocols to determine Qualifying Capacity for Demand Response resources. Recognizing that specific third-party programs may not have sufficient history and past performance data, the Commission could develop a generic Load Impact through the current LIP process. A generic Load Impact could be similar to how the QC is currently determined for solar and wind resources, where based on certain resource parameters, such as technology type, location/weather region, etc. a generic factor is applied to derive the resource specific QC. For example, for

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7 D.14-06-050, Appendix B: Qualifying Capacity and Effective Flexible Capacity Calculation Methodologies for Energy Storage and Supply-Side Demand Response Resources, at B-5.

8 *Id*.

9 D.16-06-045 at 65 (Ordering Paragraph ("OP") 5b).

residential customers in a certain weather region, the Seller could get X kW per registered customer towards its claimed QC.

Furthermore, the Commission could set this default Load Impact for a specified start-up period, after which sufficient history and past performance data would have been developed and could be adopted. By this method, the Commission would encourage the adoption of new DR technologies and techniques, allowing them sufficient time to prove their worth, without putting reliability at risk with long-term deviations from the acknowledged, preferred LIP approach.

B. Method #2 – Seller Determined Qualifying Capacity Paired with Back-End Controls

As an alternative to Method #1 discussed above, especially in cases where a new contract or resource is sufficiently different from existing ones, SCE is open to exploring approaches that would give the third-party more leeway in determining their QC, if it is paired with more appropriate back-end controls and financial consequences to ensure and incentivize a realistic capacity forecast. The following illustrates one way to accomplish this.

For new contracts, parties can claim a reasonable MW capacity (based on their own studies and data), but it should be subject to a demonstration of the capacity in the market via dispatch or test, where qualifying capacity would be supported by the MW delivered to the CAISO per the applicable baseline or performance measurement criteria, based on a coincident load reduction for a single PDR/RDRR resource (SCE understands that for certain Demand Response resources, such as weather sensitive DR, it may be appropriate to allow for a tolerance band instead of a strict cap). With testing and dispatch being an important part of the process for this methodology, concerns surrounding Service Account shuffling between PDR/RDRR resources should be addressed. In addition, this QC determination method would require sufficient opportunities for testing of the resources.

IV.

THE PATH 26 CONSTRAINT AS CURRENTLY DESIGNED AND ADMINISTERED SHOULD BE REMOVED

The Path 26 constraint, as it is currently designed and administered, should be eliminated because it provides limited reliability benefits and is unnecessarily interfering with the ability of the LSEs to procure available resources at the lowest cost to customers. As suggested, the Path 26 constraint as applied today can limit the resources LSEs are allowed to procure for RA and could result in LSEs having to procure different resources than they otherwise would without this constraint, or even force LSEs into a situation where they cannot fulfill their system RA obligations because there are not enough system resources available on the side of Path 26 where they serve load. When this constraint is not actually binding, it is artificially placing restrictions on resource procurement and could increase costs for customers. As such, the Path 26 constraint should either be removed from the RA program or significantly modified to avoid overly constraining the bilateral RA market.

A. An Examination of Recent Data Illustrates the Path 26 Constraint Is Unlikely to Bind in RA

In October 2017, the Energy Division presented an analysis of the Path 26 constraint given Local RA requirements, the location and likely showing of renewable resources, utility owned generation, and Demand Response.[10] In its analysis, Energy Division demonstrates that this combination of resources does not violate the South to North Path 26 constraint for the data set selected. In addition, this combination of resources would only be potentially binding in the North to South direction in the event that all other RA resources were procured in the North with no additional RA resources in the South in only three months and a maximum quantity of roughly 3,500 MW. In contrast with this limited potential for a violation of the Path 26

[10] Analysis available at http://cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442455436.

constraint, the current mechanism requires that LSEs show a need for Path 26 counting rights in the year-ahead RA process and that the netting of resources in the north to serve an LSE in the south and vice versa, is only performed on a voluntary basis. In practice, this has resulted in the Path 26 RA counting rights being entirely issued in the year-ahead process. While the year-ahead process only requires LSEs to show 90% of their annual system RA requirement, the amount of import and Path 26 counting rights are generally fully consumed before the monthly process in which the remaining 10% is procured. Because Path 26 counting rights are not readily traded, this leaves LSEs with few options in procurement which in turn reduces the efficiency of the RA bilateral market. In addition, the Path 26 counting right mechanism is utilized in all months of the year even placing limits on where resources can be procured due to the administrative process, while the analysis provided by Energy Division demonstrates that there are a limited number of months in which Path 26 could bind under very extreme conditions.

Because of the current Path 26 counting rights structure, what we know is that the RA showings could never create a violation of the Path 26 constraint. What we do not know is whether the natural procurement and likely dispersion of resources would have provided sufficient capacity to meet RA requirements while likewise honoring the Path 26 constraint. While the current process ensures no Path 26 constraints occur through RA showings, it is overly constraining and unnecessarily increases costs.

B. Alternative Path 26 Process if the Constraint is Still a Concern

If parties are not comfortable that the Path 26 constraint is unlikely to bind or are not comfortable that a simple back-stop by the CAISO in the limited occurrences where it does bind, a compromise alternative to move the obligation to the monthly timeframe while still enforcing the constraint would allow for more cost effective procurement while still enforcing the constraint.

In the year-ahead showing, non-local resources are not committed to a must-offer obligation. This must-offer occurs in the monthly RA filings. As such, the evaluation of Path 26

in the annual proceeding provides little value as it may or may not be that set of resources shown in the monthly filings of the LSEs. As such, the evaluation of Path 26 on an annual basis could be significantly modified and serve an advisory purpose. That is, the allocation of Path 26 counting rights can be discontinued. Upon completion of the annual RA showing, the CAISO can evaluate whether the portfolio of resources, if shown in the monthly RA showings, would satisfy the Path 26 constraint. If it does not or is coming close to the constraint, the CAISO could notify the market of the over-reliance/potential over-reliance of resources in a specific area such that LSEs have the information necessary to complete their RA portfolio for their monthly showing.

This process would also eliminate the "netting process" as currently constructed. Today, an LSE can net their south to north RA with another LSEs north to south RA provided that both agree to be bound to showing those resources in each monthly showing. This is a constraint that is better addressed in the monthly process as at the time of the monthly showing, the Scheduling Coordinator ("SC") for the resource is agreeing to a must-offer obligation rather than making such a commitment in the year-ahead timeframe. Placing this constraint at the actual operating month is more appropriate because at that point there no longer needs to be an agreement to commit to a future must-offer obligation as such is already being committed to for the RA month. This would also mean that no process for netting among LSEs and the SC needs to exist at all. Rather, the CAISO would simply evaluate the entire portfolio of resources submitted to determine if a violation of the Path 26 constraint exists. For the annual RA showings, this evaluation could provide information to the market on the need to adjust in the monthly showings. In the monthly showings, this process could be utilized similar to the current Local RA process. For example, after all showings are made, the CAISO would evaluate the entire portfolio of RA resources for the month to determine if the portfolio is sufficient to address Path 26 constraints. If it is not, the CAISO could issue a notice to the market to cure the deficiency. If the deficiency is not cured, the CAISO could then utilize its backstop mechanisms to address the deficiency. If necessary, the allocation of such back-stop costs could be made

such that the costs are incurred by those relying more heavily on resources utilizing Path 26 in the binding direction.

This methodology would ensure that the current Path 26 counting right process is not overly binding, as described above, while enabling the CAISO to ensure that the RA process does not result in a violation of the Path 26 constraint in any given RA month.

Finally, SCE notes that Pacific Gas & Electric Company ("PG&E") has advocated for eliminating the Path 26 counting rights convention. PG&E's argument is centered around the fact that the convention as currently implemented applies only to CPUC-jurisdictional LSEs, while the Path 26 constraint impacts all LSEs. With the proposal as described above, the CAISO could continue to monitor and ensure that Path 26 limits are respected while also evaluating the totality of all resource showings from all LSEs.

C. Removal of the Path 26 Constraint Would Be in Line with Other Potential Modifications to the RA Program

Currently the Path 26 Constraint adds to the complexity of the RA program. If the Path 26 Constraint is removed, then it may facilitate practical discussion on other important potential modifications to the RA program. As will be discussed below, SCE believes that the flex and system attribute of an RA resource should be unbundled. The continuation of a Path 26 constraint would be more complicated where the evaluation of the constraint must be performed for the impact of two attributes from a single resource. This constraint can lead to additional complexity in RA counting and compliance showing when the system and flexible attributes are unbundled. Such additional complexity could be avoided by adopting the SCE proposal, which would allow for more efficient transactions of RA resources and the individual attributes of those elements.

V.

THE FLEXIBLE ATTRIBUTE SHOULD BE UNBUNDLED FROM SYSTEM AND LOCAL RA ATTRIBUTES

The CPUC currently requires that if an entity sells a MW of Flex RA from a resource it must also sell the corresponding MW of System RA from that resource.[11] As the RA program evolves, it would be beneficial to unbundle the flexible attribute from system and local to remove this restriction. SCE has had requests from third parties to transact only the flexible RA portion of a resource. Because the CAISO allows an entity to show only the flexible attribute, the market has generally taken a view that the products are already separable. As multiple parties have commented previously,[12] the unbundling has several benefits, such as freeing up stranded flexible capacity in an LSE's portfolio and allowing more liquidity in flexible capacity procurement. For example, under the present rules, if SCE found itself long on Flex RA but holding just enough to meet its System and Local RA requirements, the opportunity to sell the excess flex would only be possible if SCE could sell the flex bundled with the system/local and then do a separate purchase to obtain the needed system/local due to the bundled sale requirement. Such opportunities are not always present and as such can reduce market liquidity for Flex RA even if there is abundant supply. If flex is unbundled, SCE could sell its long Flex RA position without adversely impacting its System and Local RA position.

To facilitate the unbundling, CAISO deliverability studies will need to be modified. As contemplated by the CAISO, one approach is to develop a separate EFC deliverability study

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[11] D.14-06-050.

[12] CESA's Track 2 Testimony, served on July 10, 2018; LS Power Track 2 Comments, served on August 8, 2018; San Diego Gas & Electric's presentation, dated February 9, 2015, available at http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6539; CAISO's Flexible Resource Adequacy Criteria Must Offer Obligation ("FRACMOO") Phase 2 Proposal, available at http://www.caiso.com/Documents/SecondRevisedFlexibleCapacityFrameworkProposal-FlexibleResourceAdequacyCriteriaMustOfferObligationPhase2.pdf.

so NQC and EFC can be reasonably and reliably unbundled.[13] SCE believes that such an approach should be further explored and the details worked out as necessary. For existing resources, this is largely not a problem as all resources with an EFC already have an NQC where deliverability has been studied. This is more likely to present itself in the development of new resources that see little value in providing system but significant value in providing flex (*e.g.*, battery storage).

Under SCE's unbundled flexible attribute proposal, a resource offering flexible capacity will ensure it can meet the must-offer obligation ("MOO") in the same way as today.
One example is that, a resource that offers flexible capacity would need to ensure it can meet the MOO for the flexible capacity being offered, regardless of whether the capacity has been sold just for flexible RA. Further, the selling resource would need to meet the obligations of the CAISO tariff accounting for the characteristics of the resource. For example, if a resource has a Pmin of 50 MW and has sold 25 MW of Flex, the resource may need to self-schedule 50 MW and bid 25 MW in order to meet its Flex RA must offer obligation. This is no different than a system resource that has sold less System/Local RA than the plant's Pmin. In this case, the resource would have to bid or schedule the greater of the Pmin or the RA quantity.

VI.

A WAIVER PROCESS SHOULD BE ESTABLISHED FOR SYSTEM AND FLEXIBLE RA

A waiver process currently exists for Local RA whereby an LSE can request a waiver if the LSE is unable to bilaterally contract for local capacity needed to meet its assigned obligation. The process also lays out details on a demonstration requirement that all reasonable efforts have been made by the LSE. This waiver process is an integral part of the RA program and provides a

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[13] CAISO's FRACMOO Phase 2 Proposal at 25-26, available at http://www.caiso.com/Documents/SecondRevisedFlexibleCapacityFrameworkProposal-FlexibleResourceAdequacyCriteriaMustOfferObligationPhase2.pdf.

means necessary for LSEs, in compliance with the RA program, to protect customers from unreasonable costs or contractual terms.

Initially, this process was put in place for local resources due to concerns with the potential for market power exerted by sellers. California's supply condition is undergoing several changes. These include the anticipated retirement of the State's once-through-cooling ("OTC") plants, the retirement of Diablo Canyon, the economic pressure for conventional resources due to greater penetration of renewable generation, and an integrated resource planning that ensures just enough resources being built for the system load (with a 15% reserve margin). The Energy Division has provided a graphical representation of the fleet of available RA as well as expected RA need.[14] This graphical representation reflects the conditions described above and demonstrates that the RA market will become more constrained as time progresses. From the RA perspective, all these changes will likely result in a tightening supply condition that will at times make LSEs' procurement of System and Flexible RA very challenging and have the potential to lead to the same market power concerns as described above for Local RA resources. As the potential for market power in System and Flexible RA resources increases, a waiver process should be established for those resource requirements. SCE proposes that a waiver process, similar to that for Local RA, be established for System and Flexible RA.

The current waiver process for Local RA uses $40 per kW-year as a threshold in assessing a bid for an RA capacity contract and $73 per kW-year as another threshold for a bundled capacity and energy product.[15] The $40 per kW-year threshold is roughly $36/kW-year

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[14] Track 2 Energy Division Staff Proposals: Multi-Year RA Requirements, issued on Nov 16, 2018. Included in the proposals, the Energy Division staff performed an analysis that compares projected System RA requirements to available capacity for 2018 through 2028 at the system level. The comparison was also performed at the zonal level for North of Path 26 and South of Path 26. This analysis was initially included in the report prepared by the Energy Division titled as "Current Trends in California's Resource Adequacy Program", issued on Feb 16, 2018.

[15] Among other things, the waiver process requires the LSE to demonstrate if it either received no bids, or received no bids for an unbundled RA capacity contract of under $40 per kW-year or for a bundled capacity and energy product of under $73 per kW-year, or received bids below these thresholds but with unreasonable terms and/or conditions.

lower than the soft cap for the CAISO's backstop Capacity Procurement Mechanism ("CPM") ($75.68/kW-year). Given that the soft cap for CPM was established by the CAISO and filed and approved by the FERC as a price intended to reflect the costs likely to enable most generation to cover its going forward fixed costs and to return some amount to cover other fixed costs, it would be reasonable to set the threshold for system and flexible waiver requests at the soft-offer cap of $75.68/kW-year.

VII.

CONCLUSION

SCE appreciates the opportunity to submit its Track 3 proposals and assist in the further development, including reform, of the Commission's RA program

Respectfully submitted,

JANET S. COMBS
TRISTAN REYES CLOSE

/s/ Tristan Reyes Close
By: Tristan Reyes Close

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-2883
E-mail: Tristan.ReyesClose@sce.com

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