BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
03/29/19
04:59 PM

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018-2022	Application 17-01-012
And Related Matters.	Application 17-01-018 Application 17-01-019

SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) RESPONSE TO ADMINISTRATIVE LAW JUDGE'S RULING DIRECTING RESPONSES TO QUESTIONS RESULTING FROM THE FEBRUARY 11-12, 2019 DEMAND RESPONSE AUCTION MECHANISM WORKSHOP AND COMMENTS ON PROPOSALS TO IMPROVE THE MECHANISM

ANNA VALDBERG
ROBIN Z. MEIDHOF

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-6054
E-mail: Robin.Meidhof@sce.com

Dated: **March 29, 2019**

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018-2022	Application 17-01-012
And Related Matters.	Application 17-01-018 Application 17-01-019

SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) RESPONSE TO ADMINISTRATIVE LAW JUDGE'S RULING DIRECTING RESPONSES TO QUESTIONS RESULTING FROM THE FEBRUARY 11-12, 2019 DEMAND RESPONSE AUCTION MECHANISM WORKSHOP AND COMMENTS ON PROPOSALS TO IMPROVE THE MECHANISM

I. INTRODUCTION

Pursuant to the Rules of Practice and Procedure of the California Public Utilities Commission (Commission or CPUC), and in compliance with the Administrative Law Judge (ALJ) Ruling Directing Response to Questions Resulting from the February 11-12, 2019 Demand Response Auction Mechanism Workshop and Comments on Proposals to Improve the Mechanism (February Ruling), dated February 28, 2019, Southern California Edison Company (SCE) respectfully submits this filing which responds to the three directives in the February Ruling. First, SCE responds to the questions contained in the February Ruling. Second, in responding to the questions raised, SCE provides comments, where appropriate, on the proposals

that were attached to the February Ruling. Third, SCE provides comments on the public version of the *Energy Division's Evaluation of the Demand Response Auction Mechanism Report* (Staff DRAM Report) attached to the January 4, 2019 Administrative Law Judge Ruling.

II.
RESPONSES TO THE QUESTIONS CONTAINING IN THE RULING

1. ***Explain, in detail, whether the Commission should adopt a two-step approach wherein the auction mechanism is adopted allowing for:***

Step One – limited critical improvements to the mechanism in the initial decision to provide for a solicitation.

Step Two – continuous and iterative improvements to the mechanism in future decision(s) based on additional experience, continuous monitoring, and evaluation data from future solicitations.

In general, SCE supports the two-step approach outlined in the February workshops if the Commission puts in place, as part of Step One, the necessary critical improvements to the mechanism to ensure that DRAM capacity can be counted on for reliability, and the necessary financial consequences (in the form of penalties or terminated contracts) for Sellers who do not comply with the terms of the DRAM contract, including compliance with CPUC *and* CAISO Tariff provisions.

If the critical improvements identified in response to Question No. 2 are adopted by the Commission, SCE supports the Commission authorizing a solicitation in the initial decision for a limited, one-year (12-month) Step One implementation that starts delivery in 2020 and covers all seasons. This limited one-year implementation should also incorporate a feedback loop design that requires all parties to provide substantive data and updates throughout the entire implementation, and these lessons-learned should be vetted with all stakeholders before any permanent mechanism is authorized. This limited extension of the DRAM mechanism should also have a clear definition of success based on performance and the reliability of resources, preferably with clear signals of either pass or fail criteria.

2. ***If the Commission authorizes a two-step approach, explain which critical recommendations or party proposals should be required in order to implement a solicitation in 2019 for 2020 deliveries (i.e., a bridge period). Be specific about the details of the recommendations, including timing.***

If the Commission authorizes a two-step approach, SCE considers that the following proposals should be required in order to implement a solicitation for the Step One "bridge" DRAM. More details are provided in the Responses, as noted below.

Response Nos.	Critical Improvements	Description	Timeframe
2, 11	Independent Third Party Monitor	Monitor to serve as the bridge between the IOUs and DRAM Seller. Function would be to monitor and provide support to DRAM Sellers with the formulation of qualifying capacity and demonstrated capacity and provide, in parallel, a continuous feedback mechanism to cure any issues surrounding the efficacy of the proposed Qualifying Capacity and Demonstrated Capacity method, operation and process.	RFO by 12/10/2019 Selection by 2/10/2020
22, 23	Solicitation	Offer valuation based on net market value (NMV) instead of August average capacity bid Eliminate 20% MW residential set-aside (Option: limit to only low income customers or Disadvantaged Communities)	Effective upon approval of Step One DRAM
13	Penalties and Incentives for Performance	Penalty structure for DRAM Sellers for under-delivery of RA. Structure incents early notification by introducing a gradient of steeper financial consequences the later the DRAM Seller notifies the load serving entity of under-delivery.	Include in revised *pro forma*
15	Demonstrated Capacity (Invoicing)	Bi-monthly tests or dispatches to create a continuous track record of the resources and customers' capability to deliver throughout the year Limit customer shuffling among resources	Include in revised *pro forma*
16	Invoice Deadlines	Require DRAM Sellers to submit monthly invoices within 60 days after the end of the showing month.	Include in revised *pro forma*
19	Performance Reporting	Require DRAM Sellers to submit periodic reports to the CPUC for performance feedback. These reports should be developed among the DRAM Sellers and the CPUC and can be used to provide the Energy Division with more transparency and metrics for evaluation. a) Public report: Monthly report similar to the IOUs' DR Monthly ILP Report b) Confidential report (between Seller and ED): Confidential report should include, without limitation, bid prices, event-specific data, and number of enrolled customers.	Develop standard templates by end of 2019, effective first delivery month of bridge DRAM.

Several of the items in the above table are proposed to be addressed in a revised *pro forma* contract. As a starting point – and for potential settlement discussions among the stakeholders – SCE includes as Attachment A to these Responses and Comments a marked version of the current DRAM *pro forma* contract incorporating the revisions noted above along with other revisions necessary for SCE to support any continuation of the DRAM solicitations, including the proposed Step-One "bridge" DRAM. SCE also proposes revisions to ensure that any future DRAM contract complies with Commission Decisions and Resolutions related to the Prohibited Resources Policy.

The deployment of an independent third party monitor for the Step One DRAM is a critical requirement in addressing two key IOU concerns regarding the availability of RA sourced from the DRAM. First, the monitor could oversee and support the DRAM Sellers' efforts to estimate the load reduction potential of each of their enrolled customers, either based on the individual customer's maximum and average monthly demand during CAISO Availability Assessment Hours, or using results from previous DR events/test performances, with seasonal adjustments, to reflect individual customer's capacity for load reduction.

Second, the monitor could oversee, support and evaluate the DRAM Sellers' activities in determining the Monthly Quantity available for Supply Plan submissions. These activities could include, without limitation, reviewing forecasts of customer acquisition and attrition, and previous dispatch activities (in or out of market, or demonstrated capacity results from prior DRAM delivery months). The monitor could then provide to the IOU a rating of the reasonableness of the Monthly Quantity that is entered by the DRAM Seller in its Supply Plan, either agreeing that the Monthly Quantity is reasonable or recommending a de-rate to the Monthly Quantity.

The monitor's activities could alleviate IOU concerns regarding the availability of the DRAM Resources shown on Supply Plan submissions by providing an independent, informed opinion regarding the reasonableness of the claimed Monthly Quantities. This would help

differentiate between DRAM Sellers that realistically base their estimations of load drop capacity on actual physical characteristics of the resource and review of historical meter data and DRAM Sellers that aim only for a "plausible" estimation.

3. ***If the Commission authorizes a two-step approach, what budget amount should the Commission authorize for the bridge period solicitation and related deliveries and why?***

SCE agrees with the Public Advocates Office (formerly ORA)'s proposed $9 million budget, with an allocation of $4 million each for SCE and PG&E, and $1 million for SDG&E, for a bridge DRAM.[1] This budget is reasonable for the following reasons: 1) The proposals for the bridge DRAM will only address the most critical changes implementable in three to six months; 2) a limited budget will reduce the potential for unreasonable use of ratepayer funds until the Commission can determine how reliable DRAM resources are when dispatched according to the CAISO market instructions; and 3) provide for a sufficient budget to test the critical improvements approved by the Commission for a short-term DRAM before a decision on the long-term viability of DRAM as a procurement mechanism is reached. SCE would, however, need new authorization for cost recovery to support this bridge-year (or any future solicitations), because there is no current mechanism available to recover this funding and SCE does not have $4 million in available funds to transfer from the budget approved to fund SCE's DR programs for 2018-2022. SCE also requests that any incremental budget that is authorized include an allocation among the IOUs for the support of a statewide Independent Monitor.

4. ***If the Commission authorizes a two-step approach, describe the solicitation schedule the Commission should approve for the bridge period (a 2019 auction for 2020 deliveries). Include in your response a proposed schedule in which a final decision is issued by July 11, 2019 and the proceeding remains open to address the second step improvements. Include details on the timing for the deliveries.***

If the Commission authorizes a two-step approach, a 2019 auction for 2020 deliveries will require quick action from the Commission. Parties to this proceeding may be able to simplify the Commission's task by arriving at a settlement agreement. On March 25, 2019, SCE,

---

1 *See* ORA Opening Comments on ALJ Ruling re DRAM Pilot, p. 1, filed August 17, 2018.

on behalf of the IOUs, requested an extension of the deadline by which to file Replies to these March 29th Responses to allow time for settlement discussions to take place. On March 27, 2019, ALJ Hymes issued a ruling denying the extension request for the reply comments, but specifically noted that "parties are still encouraged to pursue settlement discussions." SCE proposes the below schedule if the Commission authorizes a two-step approach. These dates are intended to be general timeframes for discussion purposes. The actual dates for each action may require change if the extension request is not granted, if the final decision requires significant changes to the DRAM contract, or for some other reason.

Action	Date
Responses to ALJ Questions and Comments on WG Proposals	3/29/2019
Parties Engage in Settlement Discussions	4/2/2019-5/15/2019
Replies to Responses to ALJ Questions and Comments on WG Proposals and Staff DRAM Report	04/10/2019
Potential Motion to Adopt Settlement of Various DRAM Issues/Proposals	5/15/2019
CPUC Issues Proposed Decision	6/11/2019
CPUC Issues Final Decision	7/11/2019
IOUs Submit AL with Contract and Solicitation Modifications	8/12/2019
CPUC Approval of AL	10/11/2019
IOUs Launch RFO	12/10/2019
IOUs Complete RFO and Sign Contracts	2/10/2020
DRPs Submit Supply Plans	4/1/2020
First Deliveries	6/1/2020

5. ***In the Pilot Evaluation, Staff recommended an expedited scheduled in both the bridge period and future solicitations. If the Commission authorizes a two-step process, explain whether the Commission should waive Commission-specific review and approval of contracts for the Auction Mechanism.***

SCE is supportive of the Commission reducing explicit review and approval of DRAM contracts. First, DRAM contracts are non-negotiable, and procurement generally follows ranking by Net Present Value. As such, IOU-provided data and Independent Evaluator attestations that the solicitation has been run in a fair and impartial manner should be sufficient to ensure that procurement goals have been met. Second, as an ongoing pilot, DRAM resources should be

provided as much time as possible to ensure successful compliance with CAISO and IOU processes for customer acquisition and registration.

While SCE is supportive of a streamlined process, it should be clear that any waiver of review/approval by the Commission does not affect the IOUs' ability to recover costs. Also SCE is interested to hear what alternative process the Commission has in mind, as the existing approval mechanism is already a Tier 1 Advice Letter.

6. ***If the Commission authorizes a two-step approach, explain what procedural steps the Commission should use to address the remaining questions regarding the Auction Mechanism: e.g., workshops, working groups, evidentiary hearings, etc. Include, in your response, a recommended timeline through which the record is complete by August 30, 2019 and a decision can be written and adopted by December 19, 2019 to allow for a solicitation in the Spring of 2020, if the Commission authorizes a future mechanism.***

The initial first step to a two-step approach envisions a further DRAM pilot "bridge" year in 2019 for 2020 deliveries, with time to further develop the record on whether to continue DRAM as a permanent program. While SCE supports a thoughtful two-step approach to further develop a record on whether to continue DRAM as a permanent program, SCE does not support a timeline that would aim for a Commission decision on the long-term status of DRAM in 2019. Any determination about whether to authorize another DRAM pilot year must allow time to collect data and analyze whether any changes implemented for the Step-One "bridge" DRAM were successful. Question No. 1's description of Step Two specifically describes the need for "continuous and iterative improvements to the mechanism in future decision(s) based on additional experience, continuous monitoring, and evaluation data from future solicitations"). In addition, Staff's DRAM Report notes: "There appears to be a general consensus among parties that any continuation of DRAM should be associated with higher standards and stronger accountability for results."[2] Therefore, data should be collected over at least six months of deliveries for the "bridge" year of DRAM, including as much of the summer demand response season as possible. It would be premature to attempt to authorize a permanent mechanism before

[2] *See* Staff DRAM Report, p. 85.

the Commission and parties have a record of whether the critical improvements identified by the Staff DRAM Report and stakeholders have been successful in a Step-One "bridge" year of DRAM to accomplish clear goals identified by the Commission. As described in response to Question No. 8 below, SCE believes the goal of any future DRAM solicitations should be to support the cost-effective procurement of clean, flexible, and reliable resources to contribute to meeting resource adequacy requirements.

7. ***If the Commission authorizes a two-step approach, explain the procedural steps and timeline the Commission should use to address improvements for future years of the Auction Mechanism. How often should the Commission address iterative improvements to the Auction Mechanism?***

If the Commission authorizes future years of DRAM, it would be reasonable to assess the performance of each solicitation and implement improvements fairly often. SCE is still concerned that this DRAM pilot – which has already operated for 5 years without a cost-effectiveness review – may be continued for any future years without requiring very clear parameters for how or when it could become a program subject to the same cost-effectiveness protocols required of all other DR programs funded by customers. Should the Commission determine to continue the DRAM in its pilot status, DRAM should be reviewed annually. For the next DR funding cycle (2023-2027) and DR portfolio funding applications, the Commission will need to determine whether to continue the annual reviews and also authorize appropriate funding because a budget for the continuation of DRAM was not included in the 2018-2022 funding applications.

SCE proposes the below schedule, including SCE's proposed 2019 DRAM RFO dates proposed above, to address improvements to the DRAM if the Commission authorizes a two-step approach. These dates are intended to be general timeframes for discussion purposes. The actual dates for each action may require change if the extension request is not granted, if the final decision requires significant changes to the DRAM contract, or for some other reason.

Action	Date
Responses to ALJ Questions and Comments on WG Proposals & Staff DRAM Report	3/29/2019
Parties Engage in Settlement Discussions	4/02/2019-5/15/2019
Replies to Responses to ALJ Questions and Comments on WG Proposals	04/10/2019
Potential Motion to Adopt Settlement of Various DRAM Issues/Proposals	5/15/2019
CPUC Issues Proposed Decision	6/11/2019
CPUC Issues Final Decision	7/11/2019
IOUs Submit AL with Contract and Solicitation Modifications	8/12/2019
CPUC Approval of AL	10/11/2019
IOUs Launch RFO	12/10/2019
IOUs Complete RFO and Sign Contracts for Step-One "Bridge" Year DRAM	2/10/2020
DRPs Submit Supply Plans for Step-One "Bridge" Year DRAM	4/1/2020
First Step-One "Bridge" Year Deliveries	6/1/2020
CPUC Initial Report on Performance on "Bridge-Year" Deliveries	11/15/2020
ALJ Ruling Seeking Parties' Comments on CPUC Initial Report and Proposals for Step-Two Improvements to Future DRAM Solicitations	11/20/2020
Parties File Comments on ALJ Ruling Seeking Comment on CPUC Initial Report and Proposals for Step-Two Improvements to Future DRAM Solicitations	12/20/2020
Parties File Reply Comments on ALJ Ruling Seeking Comment on CPUC Initial Report and Proposals for Step-Two Improvements to Future DRAM Solicitations	12/28/2020
Proposed Decision on Step-Two Improvements to DRAM	2/1/2021
Final Decision on Step-Two Improvements to DRAM	4/1/2021

8. ***Building on the small group discussion in the workshop and the developed options for a goal provided above in Table 1, what should be the goal of the Auction Mechanism? Keep in mind that a goal is abstract, not measurable and long term. For example, the adopted goal of demand response is: Commission-regulated demand response programs shall assist the State in meeting its environmental objectives, cost-effectively meet the needs of the grid, and enable customers to meet their energy needs at a reduced cost.***

The goal for DRAM should support the Commission's overall goals for demand response: "Commission-regulated demand response programs shall assist the State in meeting its environmental objectives, cost-effectively meet the needs of the grid, and enable customers to meet their energy needs at a reduced cost." SCE proposes the following goal for DRAM: ***To***

support the adopted demand response goal by cost-effectively procuring clean, flexible, and reliable resources to contribute to meeting resource adequacy requirements.

SCE's proposed DRAM goal is tied to the larger goal for demand response and so positions DRAM to contribute to meeting the State's environmental objectives, meeting the needs of the grid, and supporting customer energy cost savings. The proposed goal envisions DRAM resources to be clean (not increasing GHG emissions), flexible (able to respond quickly to grid or market conditions), and reliable (MW purchased are actually available for dispatch when needed). SCE's proposed goal also identifies that DRAM resources are purchased to contribute to resource adequacy requirements, meaning that all CPUC and CAISO rules regarding resource adequacy should be followed. Finally, SCE's proposed goal, like the overall demand response goal, states that DRAM resources should be cost-effective (procured using least-cost, best fit principles), so that the procurement of DRAM resources can be justified as a prudent and reasonable use of customer funds.

9. ***Building on the discussion in the workshop and the developed list of objectives and principles provided above in Table 2, what objectives and principles should the Commission adopt? Keep in mind that objectives are specific, measurable, attainable, realistic, and timed. Principles are assumptions, fundamental rules, or guiding doctrines.***

Procurement Increase (Objectives a. & i.): Based upon SCE's review of the data presented in Staff's DRAM Report, SCE does not support the Commission making a determination at this time to increase the level of demand response procured through the DRAM by 2025. The Commission has already authorized $63 million of customer funds to third parties to provide a DR resource adequacy product to the market: a product that SCE must rely on for its resource adequacy filings with the CAISO. And yet, Staff's DRAM Report did not provide any evidence that the DRAM resources are meeting the resource adequacy needs. It is not clear how mandating a continuation of a pilot to ensure the viability of third party DR providers will benefit customers if the RA procured through the DRAM is not meeting grid reliability needs.

Customer Sustainability (Objective b.) and Customer Engagement (Objective f.): SCE does not support an objective to increase the current number of customers in the DRAM by a certain percent annually, because that objective, as written, is too broad and vague to understand its import or how an increase in customers will help lower energy costs, provide clean energy alternatives, or otherwise advance a Commission policy. Rather than administratively mandate growth in DRAM, the Commission should allow DRAM to grow organically. If the DRAM Sellers are offering a valuable product, customer participation will naturally increase.

Level Playing Field (Objective c.): As the State continues to embrace customer choice, the Commission must consider that community choice aggregators and direct access providers will assume responsibility for procurement of necessary resources, which will fundamentally affect any objective to have the procurement of DR by utilities and third party providers be equal by 2025.

Customer Performance (Objectives d. & e. & g.): As listed in Table 2, these customer objectives are unclear. The Commission has not defined what it means by "customer performance is 100 percent." As far as the objective to have customers be 100 percent compliant with CAISO reliability criteria by 2025, all market participants who bid Demand Response or Resource Adequacy into the Federal Energy Regulatory Commission's (FERC) wholesale markets must **currently** be 100 percent compliant with the FERC rules and regulations, including all CAISO reliability criteria. There is no waiver or permissible "grace period" for wholesale market participants that the Commission could authorize until 2025. Similarly, because the Demonstrated Capacity provided by DRAM resources is intended to provide reliable resource adequacy, it should equal 100 percent of the amounts shown on supply plans submitted to the IOUs and the CAISO. Therefore, SCE does not support the objective to have "monthly demonstrated capacity equal 90 percent by 2025" because it runs counter to current CAISO requirements. SCE would add its support for CAISO's acknowledgment that "coordination with the Commission is important to ensure consistency between CAISO and Commission resource

adequacy requirements and processes" and in particular CAISO's focus on "potential solutions for how demand response resources can help the CAISO address NERC and CAISO reliability standards for local area reliability."[3]

10. ***If the Commission determines not to authorize a two-step approach, explain whether the Commission should authorize a continuation of the Auction Mechanism. If the Commission should authorize a continuation of the Auction Mechanism, provide justification for the length of time the authorization should cover, the budget the Commission should authorize, and the cost recovery approach the Commission should authorize.***

SCE agrees with Staff's recommendation to authorize a DRAM extension, predicated on implementing the identified critical and necessary improvements in program design, but disagrees with the recommended term of 5-6 years.[4] In light of the issues identified in Staff's DRAM Report, the SCE audit, and the fact that each DRAM has been an iterative process, a 5+ year extension is not appropriate as it would preclude timely evaluation of the improvements that the Staff recognizes must be made. As seen in connection with the DRAM pilot, having a program with multiple planned solicitations means that RFOs follow each other in quick succession, with little time to pause, review effectiveness, and make adjustments.

Additionally, the most critical changes needed to the DRAM construct cannot be remedied through the DRAM procurement process alone. Resolving the shortfalls identified through the pilot, requires thoughtful and comprehensive efforts to ensure a transparent and effective DRAM program. While the goals of DRAM are laudable and while SCE is fully committed to those goals, much work remains to be done to ensure that any future DRAM program is actually designed to achieve its policy objectives.

As described in response to Question No. 3 above, SCE supports the Public Advocates Office's proposed $9 million budget, with an allocation of $4 million each for SCE and PG&E, and $1 million for SDG&E, for a one-year bridge DRAM.[5] As an alternative, SCE proposes a

---

3 *See* CAISO Track 3 Proposal Comments, at p. 17, filed March 22, 2019 in A.17-09-020 (RA OIR proceeding).
4 *See* Staff DRAM Report, Section 11.2, Program Authorization and Oversight at p. 88.
5 *See* ORA Opening Comments on ALJ Ruling re DRAM Pilot, p. 1, filed August 17, 2018.

solicitation for a three-year period, with three one-year contract terms (consistent with how DRAM has worked to this point), accompanied by a robust review process that provides opportunity and flexibility to make adjustments as needed. As described above, SCE would need new authorization for cost recovery to support any future DRAM solicitations (including a "bridge" year and any future solicitations), because there is no current mechanism available to recover this funding and SCE does not have $4 million in available funds to transfer from the budget approved to fund SCE's DR programs for 2018-2022.

11. ***Describe and explain the standards that the Commission should adopt for estimating the Qualifying Capacity of an Auction Mechanism resource applicable to Supply Plans. Be specific and include comments on the options discussed during the workshop: test, market dispatch, or an ex ante estimation method. Explain the process the Commission should use to implement the standards.***

SCE prefers, when possible, the established Load Impact Protocols as a means to determine Qualifying Capacity for Demand Response resources. SCE proposed in the Resource Adequacy OIR Track 3 proceeding[6] two possible paths forward to determining Qualifying Capacity for third-party DR, such as the DRAM resources.

The first method, a generic Load Impact Protocol (LIP), would recognize that specific third-party programs may not have sufficient history and past performance data to use the current process. The Commission could develop a generic Load Impact through the current LIP process, similar to how the Qualifying Capacity is 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 Qualifying Capacity. (For example, for residential customers in a certain weather region, the Seller could get X kW per registered customer towards its claimed Qualifying Capacity.). Furthermore, the Commission could set this default Load Impact for a specified start-up period, after which sufficient history and past

---

[6] *See* SCE"s Track 3 Proposals, at pp. 8-9, filed March 4, 2019 in R.17-09-020, *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.*

performance data would have been developed and the established Load Impact Protocols 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.

The second method, an alternative to the first method described above, could be appropriate in cases where a new contract or resource is sufficiently different from existing ones. SCE is open to exploring approaches that would give the DRAM Sellers more leeway in determining their Qualifying Capacity, if paired with appropriate back-end controls and financial consequences to ensure and incentivize a realistic capacity forecast. The back-end controls and financial consequences SCE proposes in its responses to Question Nos. 13 and 15 below are examples of mechanisms that can support this second method to determining Qualifying Capacity.

In any event, any such approach to determining Qualifying Capacity would have to be designed to provide reasonably reliable estimates of Qualifying Capacity. Moreover, when undertaking "a reasonableness check," of demand response, i.e., *load reduction*, SCE does not believe it is reasonable for a DRAM Seller "to show that their customer load matches or exceeds their Supply Plan quantity" as proposed by OhmConnect.[7] OhmConnect's proposal for "qualifying capacity" for a supply plan suggests that all demand response customers provide 100% reduction of available load, and its proposal does not address that even if a customer were to drop 100% of its load during a certain hour on one particular day, the DRAM contract requires the resource to be available for the full amount of the Qualifying Capacity during the times of greatest need, specifically the CAISO Availability Assessment Hours. Below is a chart of the statewide DR programs where SCE's review of the publicly available load impact data reveals the highest level of potential demand response for the residential segment of customers is 36% *with the use of an IOU-controlled enabling technology*. For residential customer DR programs

[7] *See* Attachment 1 to February Ruling, Subtopic 1.1: (Qualifying Capacity in Supply Plans): OhmConnect's Proposal: Plausibility Demonstration of Ex Ante Supply, at p. 3.

that do not rely on enabling technology, but instead rely on behavioral responses to notifications or alerts, the demand response rate is far lower at between 2% to 4.5% reduction from available load.

Program / Provider	Type	Period	# of SAs	Average Load Reduction (kWh)	% of Load
SCE Peak Time Rebate	Behavioral	PY 2016 Load Impact Study (Ex-Post)	~300,000+	0.04	2.0%
SDG&E Peak Time Rebate	Behavioral	PY 2017 Load Impact Study (Ex-Post)	~70,000+	0.06	4.5%
SCE Smart Thermostat	Residential (w/enabling technology)	PY 2017 Load Impact Study (Ex-Post)	~24,000+	0.64	28%
SDG&E Smart Thermostat	Residential (w/enabling technology)	PY 2017 Load Impact Study (Ex-Post)	~17,000+	0.62	30%
SCE Residential Summer Discount Program	A/C Cycling Device	PY 2017 Load Impact Study (Ex-Post) June 21, 2017 (Highest Performing Day)	~250,000+	0.97	36%
PG&E Residential Summer Discount Program	A/C Cycling Device	PY 2017 Load Impact Study (Ex-Post)	~20,000+	0.65	21%

Based on the above, SCE objects to OhmConnect's "Plausibility Demonstration of Ex Ante Supply" for purposes of determining Qualifying Capacity supported by residential customer aggregations in Supply Plans.

Regardless of the method adopted, SCE strongly believes (1) that any method for determining Qualifying Capacity must be supported by both the CPUC and the CAISO, and (2) that the CPUC Energy Division or an independent third-party monitor (as explained in response to Question No. 2) should review and approve the Qualifying Capacity/Monthly Quantity numbers in DRAM Sellers' Supply Plans before submission to the IOUs.

12. ***Explain whether the Commission should adopt an energy component requirement [sic] Auction Mechanism resources. If the Commission authorizes optional dispatch hours in solicitations, explain whether and how the values of the bids should be modified to account for this additional requirement. If the Commission adopts a minimum dispatch hour performance requirement, explain the parameters the Commission should adopt.***

SCE continues to recommend that the DRAM product remain focused on RA capacity only. When submitting bids, DRAM providers calculate their offer prices based upon their obligations. At present, that obligation is to bid or schedule the resource with the CAISO at a price determined by the provider subject to the CAISO market rules (e.g., a price cap). Enforcing a minimum number of dispatches may place a requirement on the resource that is not already accounted for in the capacity price bid. This may increase the cost of DRAM resources.

In addition, the DRAM contract, through its cost allocation mechanism, has no direct method to credit any entity with the energy benefit of the dispatch. When utilities have in the past procured resources for all benefitting customers, with dispatch rights, the utility has served as the scheduling coordinator and all CAISO energy market revenues have been paid to the utility. The utility in return credited the net of those revenues and the marginal cost to generate the energy to offset the cost of the capacity within the contract. DRAM has no such mechanism, so energy market revenues would accrue to the DRAM provider and the customers paying for the capacity would not directly see any value from the dispatch.

SCE would expect that resources that can dispatch at lower energy market prices would be able to recoup more of their costs from the energy market and would therefore bid lower prices into the DRAM capacity solicitation. If a resource finds it uneconomic to bid energy at a price low enough to meet a minimum dispatch target, then the uneconomic portion of the dispatch would logically increase the cost of the capacity within the DRAM contract.

Given the potential pricing impact and the lack of a mechanism to directly address energy market revenues, SCE continues to recommend that DRAM remain a capacity-only product with no minimum dispatch requirement.

13. ***Explain whether the Commission should adopt penalties for shortfalls in both Qualifying Capacity and Demonstrated Capacity. If the Commission adopts penalties, explain at what point in time penalties should be assessed and under what conditions. Explain whether the penalties should be based on costs incurred by a utility for failure to perform or the price of the contract.***

SCE supports the IOUs' proposal to introduce additional financial consequences into the DRAM *pro forma* contract for under-deliveries of RA.[8] As previously noted, SCE includes as Attachment A to these Comments a marked version of the current DRAM *pro forma* contract with the revisions necessary for SCE to support any continuation of the DRAM solicitations. In Section 4.1 of the revised *pro forma* contract, SCE has introduced a gradient of penalties that increase based on the time that the DRAM Seller notifies the Buyer of a lower RA MW quantity, with steeper penalties for late notifications (e.g., if the DRAM Seller notifies SCE of lower RA MW well in advance of the Year-Ahead RA compliance deadline the financial consequence is less compared to a last minute notification). This penalty structure should help address reliability concerns by encouraging DRAM Sellers to be more realistic both in their MWs offered for contracting in the DRAM solicitation and in MWs reported on Supply Plans leading into each Showing Month. The application of different consequences at different times acknowledges that the Buyer has more options available to procure alternative RA capacity, and is better able to mitigate negative cost impacts for its customers, if it knows about under-deliveries as far in advance as possible.

14. ***Explain whether over-performance should be incentivized and what the incentive should be. Explain whether there should be a cap and what the cap should be.***

There should be no contract incentives for over-performance because utility customers receive no additional RA value for over-performance. Sellers are able to capture additional energy revenues for over-performance from the CAISO energy market, and that should be incentive enough to bid at competitive levels. However, if in future DRAM solicitations, the Load Impact Protocols are used to determine the capacity for a Demand Response resource, then

---

[8] *See* Attachment 3 to February Ruling: Proposals for DRAM Working Group 1, IOU Proposal, Sub-Topic 1.3 Penalties and Incentives for Performance.

consistent over-performance would have a positive impact because a Seller would be able to get incremental capacity credit, which they could then sell to the load serving entities going forward.

15. ***Explain the approach the Commission should adopt regarding Demonstrated Capacity on invoices including Must-Offer Obligation invoices and full or partial dispatch or test requirements. Explain what method demand response providers should use to calculate performance. Explain how the Commission should address the issue of locations moving between resources in a given month.***

The DRAM Resources are relied on for reliability, and as such, the Buyer and the CAISO must have confidence in the load reduction capabilities of the DRAM Resources. The current DRAM Contract gives DRAM Sellers flexibility, in a month when a PDR or RDRR in the DRAM Resource has not been fully dispatched or tested, of invoicing Demonstrated Capacity based on the Must-Offer Obligation (MOO) option (i.e. what MW level was bid into the CAISO market during the CAISO Availability Assessment Hours), rather than actual measurements of load drop. Because DRAM Sellers may have different views and practices in determining their available MW and bid prices when fulfilling their MOO, using the MOO as a basis for invoicing can create incentives for some DRAM Sellers to take as aggressive an approach as possible in estimating available MW (and, possibly, to price their wholesale market bids in a way that would minimize the chances of ever being called to perform). It is SCE's understanding, based on Staff's DRAM Report (See Section 8.2.3 and 8.3), that DRAM PDR/RDRR resources have a low rate of awards in the CAISO market, likely due to high market bids by DRAM Sellers.

Consistent with the proposal presented at the February 11-12 DRAM workshop,[9] SCE proposes changes to the DRAM for determination of Demonstrated Capacity. SCE proposes to require invoicing based on dispatch or test results when available, and require testing more frequently than currently required in the DRAM Contract to gain more transparency to actual load-drop capabilities of DRAM PDR/RDRR resources. These proposed revisions can be found in Section 1.6 of SCE's revised DRAM *pro forma* contract. In short, SCE proposes that testing

[9] *See* Attachment 4 to February Ruling: Proposals for DRAM Working Group 1, IOU Proposal, Sub-Topic 1.4 Demonstrated Capacity Invoicing.

or dispatch be required at least every second month, and that the MOO option to determine Demonstrated Capacity be unavailable in the month immediately following a month in which the Demonstrated Capacity was determined by testing or dispatch to be less than the MW shown on the Supply Plan for the DRAM Resource. (For clarity: the dispatch and testing options would still be available during that month.) SCE expects that the transparency gained by increasing the frequency of testing required by the DRAM Contract will help to ensure the capacity is available and reliable. Moreover, SCE notes that CAISO submitted the following Comments in the RA OIR proceeding:

> The CAISO supports SCE's proposal to implement an after the fact assessment and penalty structure to assess Demand Response Auction Mechanism (DRAM) resource performance. Because the after the fact assessment relies on actual data instead of historical data it can be applied to all new and existing resources comparably providing a more robust and non-discriminatory solution.[10]

This improvement to the DRAM *pro forma* contract will also address some aspects of the concerns addressed in Working Group item 1.2 (Dispatch Hours), by indirectly incentivizing the DRAM Sellers to seek more dispatches. It may also incentivize DRAM Sellers to offer their DRAM Resources at more competitive prices to the CAISO market, in order to try to capture CAISO market revenues on days when the DRAM Sellers anticipate their largest load reduction potential can be achieved.

SCE has also proposed revisions to Section 3.4(e) of the DRAM *pro forma* contract intended to mitigate concerns with service account shuffling between PDR/RDRR registrations intra-month, which can cause load drop from one service account to be counted multiple times in the determination of Demonstrated Capacity. SCE proposes that the DRAM Contract should be updated to restrict a Seller from moving customer service accounts between PDRs/RDRRs within a Showing Month.

---

[10] *See* CAISO Track 3 Proposal Comments at pp. 12-13, filed March 22, 2019 in R.17-09-020.

16. ***Explain whether the Commission should allow partitioning of contracts for reassignment and under what conditions. Explain whether and how the Commission can improve the transparency of the reassignment process. Describe the deadlines the Commission should require for invoices and any exceptions that should be made.***

Currently, DRAM Sellers can reassign the portions of their contracted capacity that they are not capable of providing by partnering with other aggregators to meet their contracted capacity while continuing to operate under their existing DRAM contract. SCE is concerned, however, that permitting the partitioning of contracts can become administratively burdensome. For example, if a contract is partitioned for reassignment, one DRAM contract becomes at least two contracts, with the possibility of multiple partitioned contracts throughout the relatively short duration of a DRAM contract. Each request for partitioning requires reviews of new Sellers, and each actual partitioning requires new accounts, new Performance Assurance postings (cash or letter of credit), potential shifting of customers from one DRAM Seller to another, and potential data management challenges.

The Commission can improve the transparency of the contract reassignment process (typically documented through a "Consent to Assignment" executed by the assignor, the assignee, and the IOU) by collecting data about contract reassignments and periodically publishing updated information about the capacity held by or assigned to DRAM Sellers. Currently, the IOUs file DRAM contract awards in an advice letter but do not publish any subsequent changes due to reassignments, such as change in DRAM Seller, changes in MW, and changes to terms and conditions. Publishing subsequent changes would improve transparency among DRAM participants.

With respect to the third part of this question about invoices and deadlines, SCE has proposed revisions to Section 4.2 of the DRAM *pro forma* contract that would require monthly invoices from Sellers within 60 days after the end of each showing month. However, if the Seller has not received 90% of the Revenue Quality Meter Data (RQMD) within 45 days after the end of the showing month, SCE proposes revisions to the *pro forma* contract that would permit a DRAM Seller to request an extension to submit its monthly invoice 30 days after the RQMD is

made available to the Sellers. SCE also proposes to provide the Seller the option to submit a partial invoice for the portion of the DRAM Resource for which RQMD is available, and a subsequent invoice for the remainder of the DRAM Resource. If RQMD is available, and the DRAM Seller misses the submittal deadline described above, the DRAM Seller should be deemed to have waived the payment for the showing month.

17. ***Explain whether the Commission should adopt a contract remedy for a utility's failure to deliver Revenue Quality Meter Data in time for CAISO settlement and what the remedy should be. Explain what improvements could be made to streamline communication between utilities and third-party demand response providers regarding missing data, data quality concerns, and gaps in data.***

SCE's proposed revisions to Section 4.2 of the DRAM *pro forma* contract provide a remedy for IOU failure to deliver timely, complete and correct Revenue Quality Meter Data (RQMD).[11] As discussed above, SCE recommends an extension of the invoicing deadline, and a right to submit partial invoices, for any Seller that has not received RQMD. The Commission should not adopt an additional contract remedy that would impose fees or penalties for delays in RQMD availability. SCE notes that the delivery of timely, complete and correct RQMD may be an issue best suited for dispute resolution because, as indicated recently in SCE's reply to protests of its Click-Through Application, it is not always the IOU that is at fault for the failure in a third party receiving timely data.[12]

The IOUs are already required to provide RQMD customer data to Sellers in accordance with the standards adopted in the Direct Access Standards for Metering and Meter Data or other standards in compliance with the CAISO's applicable requirement. An IOU that is found to have failed to comply with the applicable requirements for submission of RQMD is held liable and is

---

[11] *See* Staff's DRAM Report, Section 11.5.5, Revenue Quality Meter Data (RQMD) at p. 118.

[12] *See SCE Reply to Response and Protests of Its Application in Compliance with Ordering Paragraph 29, Resolution E-4868, Seeking Cost Recovery for Improvements to the Click-Through Authorization Process*, filed January 7, 2019, to service lists in A.18-11-016, R.13-09-011, and A.17-01-012, et al. at p. 5.

subject to penalties imposed by the CAISO due to non-compliance. (See SCE's and PG&E's Rule 24 and SDG&E's Rule 32).[13]

SCE is committed to improving communications regarding missing data, data quality concerns, and gaps in data. Accordingly, SCE's proposed revisions to Section 4.2 of the DRAM *pro forma* contract include a requirement for the DRAM Seller to notify the specific IOU, within five business days, when it believes there is missing data, data quality concerns, or gaps in data within the RQMD. This notice will help the IOUs identify and address potential issues at an early stage, which should lead to quicker resolution of issues.

18. ***Explain whether the Commission should approve implementation milestones with regard to utility systems, Commission registration, CAISO registration, and customer acquisition and what the milestones should be.***

Staff's DRAM Report identified that currently in the time period between contract signing and year-ahead RA showing, Sellers are not required to demonstrate any performance in customer enrollment and capacity aggregation and this lack of requirements for contract progress reporting leaves the utilities without any assurance that the Seller is capable and ready to perform when the delivery period starts. As part of the Energy Division-led workshops on the future of DRAM, the Working Group 2 addressed the Sub-Topic 2.4 and the utilities (jointly) and the Joint DR Parties submitted proposals, which both appear to support Staff's recommendation to require implementation progress milestones. SCE believes that there is room for the parties to do further work to come to consensus on the appropriate milestones.

19. ***Explain whether the Commission should require third-party demand response providers participating in the Auction Mechanism to submit performance reports for the purpose of evaluation or providing a feedback loop. If the Commission should require performance reports, explain who should receive these reports and what should be included in the reports.***

The Commission should require third-party demand response providers participating in the Auction Mechanism to submit monthly performance reports. SCE agrees with the Public

[13] SCE Rule 24, Sheet 21, 2.d., https://www1.sce.com/NR/sc3/tm2/pdf/Rule_24.pdf

Advocates Office that a "potential remedy for a DRAM pilot auction in 2019 is to require all awardees to provide their bid data and ex post load impacts to Energy Division on a monthly basis. The Commission should require the ex post load impact results of DRAM resources be included in the utilities' monthly load impact reports to help ensure this data collection occurs and to increase transparency of how these third-party resources are performing."[14]

A monthly report similar to the IOUs' "CPUC Monthly ILP and DRP Report Programs" should be posted publicly or distributed to the DRAM Buyers and Commission's Energy Division by the end of the month following the delivery month. These reports would allow the IOUs and the Energy Division to evaluate and provide feedback to the Sellers. The monthly reports would not take the place of a more rigorous impact evaluation, but they would provide more visibility into each contract's performance in a timely manner. Data fields should include the number of service accounts, ex-ante estimated MW and ex-post estimated MW by DRAM Seller contract.

SCE also recommends that the DRAM Sellers work with the CPUC Energy Division to develop monthly performance reports that can provide transparency to DRAM market performance. This information should be confidential between the Seller and the Energy Division Staff. SCE recommends that the reports include the following data elements in order to verify and assess the cost-effectiveness of DRAM as a market participant:

- Must Offer Obligation (MOO) bidding information, including the prices, dates and hours;
- Dispatch Data: Day-Ahead and Real-Time award and dispatch results;
- Seller Resources participating in a dispatch(es) and/or test event(s) for the month; suggest including verifiable information such as customer name, service account, service address, customer rate, baseline and estimated load reduction calculated for

[14] *See* ORA Opening Comments on ALJ Ruling re DRAM Pilot, at p. 4, filed August 17, 2018.

each dispatched interval. Estimated load reduction calculations can use unbilled interval data if RQMD not available.

20. ***Should the Commission create a process for monitoring and evaluating the Auction Mechanism and what should be the guidelines or principles for that process?***

SCE agrees that the Commission should create a process for monitoring and evaluating the DRAM and that the suggestion to have an Independent Monitor assisting the CPUC with oversight for the proposed Step-One bridge year of DRAM would be a useful first step. Alternatively, or in addition to the Independent Monitor, the monthly reports recommended in Response No. 19 above will provide for timely monitoring of performance by the IOUs and will support any feedback mechanism developed by the Commission.

21. ***Should the Commission set a limit on market share? Explain what the limit should be.***

The Commission should not set a limit on market share. It is in the best interest of ratepayers that the IOUs be allowed to evaluate and award offers based on the "least cost best fit" criteria applied in other resource procurement activities.[15] SCE notes that no other wholesale procurement activity has a limit on market share by Seller as a rule in the solicitation. If a potential market share restriction is set too high, then it makes no difference, or if it is set too low, then it may actually impinge upon the ability to successfully conclude the RFO (for example, if the proposed market share restriction is 25%, and the solicitation results in three large volume offerors and all other offerors providing small volumes IOUs may not actually be able to reach an overall procurement target--in this example, IOUs would essentially have to choose which of the requirements not to meet). In general, prescriptive rules could have unintended results that are contrary to overarching program goals.

In lieu of limiting market share, counterparty viability and past performance are important considerations that should be permitted as qualitative solicitation criteria in the bid

---

[15] *SCE and PG&E Joint Response to ALJ's Ruling Directing Responses to Questions Regarding the DRAM Pilot*, at pp. 6-7, filed August 17, 2018.

evaluation process.[16] Relevant factors would include DR capacity delivered under prior contracts, counterparty performance of other contractual terms, and [potential] tariff violations. Incorporating qualitative factors into bid selection would permit the IOUs to better mitigate the risk and impact of DRAM Seller non-performance.

22. ***Explain whether the Commission should maintain, revise, or eliminate the set aside of 20 percent for each utility of the total megawatts procured under the Auction Mechanism each year for residential aggregation.***

The Commission should eliminate the residential aggregation set-aside. After four years of DRAM solicitations, there is no evidence that continuing the residential set aside will "attract new players to the DRAM."[17] To the contrary, Staff's DRAM Report shows that in the most recent DRAM IV auction, only one Seller managed to win contracts focused on residential customers for 2019 deliveries.[18] More significant is the Independent Evaluator's finding that the current residential set-aside results in inefficient bid selection and has shown to skew evaluation results because several non-residential offers must be skipped in order to reach the required number of residential offers.[19] Retaining the residential set-aside will continue to favor one market player, instead of achieving the original goals of the set-aside, which were to attract new market players to DRAM and to test the participation of residential aggregations in the DRAM mechanism. As such, the residential set-aside should be eliminated. It is important to note that removing the residential set-aside does not remove the ability for third party providers to offer demand response to residential customers; it only requires all DRAM Sellers to compete on equal footing so that the most economic bids will be picked up first.

---

16 *Id*. p. 6.

17 *See* Staff DRAM Report, p. 92 "This lack of diversity in the residential sector, apparent in the auction results, suggest there may still be a need for the residential set-aside to advance the CPUC's desire to 'attract new players to the DRAM, and test the participation of residential aggregations.'".

18 *See* Staff DRAM Report, p. 92

19 *See* Final Report of the IE – SCE DRAM 4 Solicitation, dated May 1, 2018, page 32 and *SCE and PG&E Joint Response to ALJ Ruling Directing Responses to Questions regarding the DRAM Pilot*, at p. 6, filed August 17, 2018.

SCE is open to considering Staff's recommendation in the DRAM Report to consider a reduced cap, limited to new market participants to encourage market diversity, but SCE objects to Staff's recommendation to waive "other proposed requirements . . . for a limited time."[20] While SCE supports encouraging new residential market participants, SCE recommends that any set-aside should also be tied to a Commission goal of benefitting residential customers located in a disadvantaged community (DAC) or on a CARE rate, and the DRAM Seller should be required to show how the customers in DACs financially benefit from participation in DRAM. The capacity payments the Utilities pay to DRAM Sellers are customer-funded, and yet, it is not clear how much of those payments is actually passed along to the residential customers who respond to DR events by curtailing load. SCE's retail DR programs are transparent in showing what residential customers earn from participating in DR events; so too should this transparency requirement be considered for residential aggregators in DRAM.

23. ***Explain whether the Commission should maintain, replace or eliminate the simple average August bid price cap. If the Commission decides to replace the average August bid price cap, should the Commission adopt the Net Market Value cap as the replacement, as proposed by SDG&E, based on the adjusted Long Run Avoided Cost of Generation described in the Pilot Evaluation?***

SCE recommends that the Commission eliminate the simple average August bid price cap. The IOUs agree that it is a complicated requirement to implement and it distorts the bid selection process and market by incentivizing bidding behaviors that do not align with providing the best value to customers.[21] During the DRAM IV Pilot bid evaluation process, the August bid price cap forced PG&E and SCE to skip better priced offers in favor of lower value offers (from a net market value per unit basis). The cap does not accomplish the goal of increasing competition because offers with higher Net Market Value (NMV) may be skipped over in favor of bids with a lower August price but lower NMV. The proposed NMV cap has the potential to

---

[20] *See* Staff DRAM Report, Section 11.3.2, Residential Set-Aside at p. 92.

[21] *See SCE and PG&E Joint Response to ALJ Ruling Directing Responses to Questions regarding the DRAM Pilot*, at p. 6, filed August 17, 2018.

maximize the benefits relative to cost, or minimize the net cost of the offer, providing selection of better value offers in an auction.[22]

III.
SCE'S COMMENTS ON STAFF'S DRAM REPORT

A. The Energy Division's Final DRAM Report incorrectly identifies a "gap in the design of the DRAM pilot" because the Commission-approved DRAM contract requires compliance with applicable CAISO tariffs.

Staff's DRAM Report acknowledges that "the CPUC and CAISO created policies, rules and tariffs governing DRAM contract obligations over a series of years."[23] And yet the Staff DRAM Report purports to identify "an important gap in the design of the DRAM pilot" related to the lack of a CPUC-approved ex ante forecasting method to estimate the contract capacity or Supply Plan capacity that a DRAM Seller submits to the IOU or CAISO.[24] SCE believes this finding is inconsistent with Commission Decisions that require DRAM Sellers to comply with the RA criteria applicable to DR, which includes compliance with CAISO rules related to providing a Resource Adequacy Product. The Commission understood when it authorized this pilot that non-compliance with the DRAM contract and CAISO tariffs fundamentally implicates the reliability of the grid if third parties fail to procure supply resources that IOUs rely upon for Resource Adequacy.

Specifically, in D.16-09-56, *Decision Adopting Guidance for Future Demand Response Portfolios and Modifying Decision 14-12-024*, the Commission determined that "the demand response auction mechanism shall be administered by the Utilities and serve as the main procurement mechanism for resource adequacy from all third-party demand response supply sources."[25] The Commission further reinforced its intent to ensure that the resource adequacy Product that Utilities purchased from the third party demand response providers (DRPs) was

---

22 *See* Staff DRAM Report, pp. 96-97.
23 *See* Staff DRAM Report, p. 67.
24 *See* Staff DRAM Report, p. 69.
25 *See* D.16-09-56 at p. 70, issued October 5, 2016.

capable of being delivered by requiring the same penalty structure as resource adequacy contracts. D.16-09-56 determined that the Seller must be capable of delivering the capacity under the contract or provide adequate replacement demand response and if it fails to do either, "it is appropriate to apply financial ramifications on the Seller."[26] The Commission further noted that "[t]his obligation should ensure protection for the procuring load serving entity as well as the ratepayers" and "potential penalties should ensure that ratepayers are not financially liable if contracted capacity is not delivered."[27] In Resolution E-4728, (issued before Commission Decision D.16-09-56), the Energy Division affirmed that it "agree[d] with ORA that DRAM contracts must adhere to RA criteria applicable to DR, as well as the obligations and criteria of the CAISO market."[28]

SCE has raised its concern in public workshops and in filings before this Commission that in its experience over the past four years with DRAM I through IV, not all Sellers have complied with the current DRAM contract or CAISO tariffs as required under Section 3.4 of the current Commission–approved DRAM *pro forma* contract. The Commission-approved DRAM *pro forma* contract is consistent with D.16-09-56. Specifically, Section 3 of the DRAM contract provides that the Seller must submit Supply Plans identifying and confirming the amount of Product to be provided (3.1 Delivery of Product), Seller must provide all Resource Adequacy associated with the Product (3.2 Resource Adequacy Benefits), and the Seller shall "cause each of the PDRs or RDRRs in the DRAM Resource . . . to comply with all applicable CAISO Tariff provisions" (Section 3.4 Seller's Obligations). Among other things, the CAISO tariff defines

---

[26] *Id*. p. 72

[27] *Id*. p. 72. While Sellers had limited exposure to the CAISO Resource Adequacy Availability Incentive Mechanism (RAAIM) penalties during the DRAM Pilot due to CAISO system functionality challenges, this does not mean Sellers could ignore the CPUC or CAISO requirements to supply the RA identified by the Sellers.

[28] *See* Resolution E-4728, *Approval with Modifications to the Joint Utility Proposal for a Demand Response Auction Mechanism Pilot Pursuant to Ordering Paragraph 5 of Decision 14-12-024*, at p. 17.

both PDRs and RDRRs in terms of a resource **capable of measurably and verifiably providing demand response services.** Staff's Final DRAM Report even notes:

> Demonstrated Capacity is indicated to the IOUs through invoicing at the end of each delivery month, and reflects the amount of the Product Monthly Quantity for each type of Product for that Showing Month ***that the DRP was capable of delivering*** (i.e., indicative of a DRP's ability to make its resources available in the wholesale market).[29]

The Commission has before it SCE's December 2018 request to include in this proceeding the results of an independent audit that confirmed SCE's internal analysis showing that a DRAM Seller substantially overstated in its supply plans submitted to SCE the demand response capacity it was capable of delivering. End-use meter data confirms that the Seller's claimed Demonstrated Capacity far exceeded the actual load reduction capacity of the Seller's registered resources. The DRAM Sellers all have access to historical load usage for all of the customers they register to DRAM resources, and still, a Seller continues to submit to SCE supply plans and invoices claiming registered customers would be able to curtail load that either substantially surpasses historical load usage, or claiming an ability to curtail a level of load that is not reasonable.[30] It is SCE's position that no CPUC-approved or CAISO-approved ex ante forecasting methodology supports load drop capability in excess of the actual load of applicable resources, nor does any methodology support a Seller submitting an invoice to a utility for payment of load drop that has not been shown to have performed, especially if that load drop is to be counted for resource adequacy.

As a resource adequacy product, demand response is an essential resource that supports grid reliability, and both SCE and the CAISO must be able to depend on the Seller's ability to provide the contracted load reduction when called upon. Moreover, SCE has an obligation to protect its customers' costs, submit accurate RA filings to the CAISO, and support market

---

[29] *See* Staff DRAM Report at p. 65. (emphasis added).

[30] The independent auditor noted that based on June 2018 event performance, it is not reasonable for a Seller to expect 100 percent of the load to be curtailed during an event. The auditor further noted that based on its analysis, only 3 to 5 percent of Seller's invoiced capacity under DRAM 3 contracts was curtailable based on customer load and June event performance.

reliability. Accordingly, should the Commission authorize any future DRAM solicitations, it should reaffirm its position that all DRAM participants must comply with the CAISO Tariff given the Commission requirement that demand response be integrated into the wholesale market, and the Commission should further direct that a Utility does not have to contract with a Seller that refuses to provide supporting data to show compliance with the terms of the Commission-approved DRAM *pro forma* contract *and* CAISO Tariff Section 4.13.3 which requires a Seller to provide information regarding the capacity and the operating characteristics of the RDRR or PDR that is "actually based on physical characteristics of the resources."[31]

B. SCE objects to Staff's recommendation in the DRAM Report to remove the qualitative criteria penalizing bidders for suspected violations

While SCE agrees with Staff's recommendation to include qualitative criteria promoting past performance, bidder viability, and market diversity, SCE objects to Staff's characterization of its recommendation to remove criteria penalizing bidders for suspected violations without a transparent review process.[32] It is unclear what Staff means by a "transparent review process." If a utility is complying with a non-public state or federal investigation into suspected violations by a DRAM Seller, the utility should be able to consider that as part of its qualitative criteria.

C. SCE disagrees with the recommendations in Staff's DRAM Report regarding the dispute resolution process

As an initial matter, SCE disagrees with Staff's characterization of its recommendation to clarify guidelines related to IOU audits of Demonstrated Capacity invoices to ensure a level playing field.[33] SCE is concerned about imposing further limitations to the audit rights set forth in the DRAM contract, especially the idea of trying to state definitively what might constitute "reasonable satisfaction" or "records and data necessary to conduct an audit" when the facts and

---

31 *See e.g.*, D.14-06-050, *Decision Adopting Local Procurement and Flexible Capacity Obligations for 2015, and Further Refining the Resource Adequacy Program*, "For demand response, we recognize that such resources, like all other resources, must comply with the testing requirements in the applicable CAISO tariff."

32 *See* Staff DRAM Report, Section 11.3.6 Qualitative Criteria at p. 97.

33 *See* Staff's DRAM Report, Section 11.5.2, Guidelines for IOU Audits at p. 114.

circumstances at issue may vary from Seller to Seller, and from contract to contract. These standards as currently stated are broad enough to accommodate application in different circumstances, and either party is free to invoke the dispute resolution process if it believes that the language is being unfairly construed.

SCE also disagrees with Staff's recommendation to clarify the dispute resolution process and IOU's discretion to adjust invoices and withhold payment.[34] In particular, SCE is concerned about Staff's implication that SCE should be limited in its discretion to withhold payments to a Seller.[35] Invoice dispute and withholding provisions of this nature are standard in all of SCE's contracts, and the DRAM contracts should not be an exception to the rule. Moreover, SCE already exercises these rights responsibly and judiciously. SCE stands by its position that the invoice dispute, payment withholding, and dispute resolution provisions of the DRAM contract are essential to ensure prudent use of customer funds – which may include seeking to collect overpayments for a product that could not reasonably have performed as represented. SCE has taken prudent and responsible steps to protect customer funds, and must continue to have the right to take these steps in the future, until performance questions have been resolved and more controls and oversights by both the CPUC and CAISO have been put in place.

D. SCE Notes Several Errors in its review of Staff's DRAM Report

- Staff's DRAM Report refers to "IOU touting of screen-scraping companies as 'DRAM success stories.'"[36] It is unclear whether this statement is framed as the view of the Commission or a quote from a survey respondent; SCE suggests that this context be clarified in any subsequent reports. **SCE does not agree with the proposition that screen-scraping companies are "DRAM success stories."**

- Staff's DRAM Report states that the current DRAM contracts likely permit the IOUs to pass on to the DRP costs incurred under the CAISO's Capacity Procurement Mechanism resulting from a DRP's performance shortfall on a 60-day Supply Plan showing.[37] **SCE believes that**

---

[34] See Staff DRAM Report, Section 11.5.4, Disputes & Payments at p. 116.
[35] See Staff DRAM Report at p. 117. "This discretion should be clarified with more specific guidelines and limitations."
[36] See Staff DRAM Report at p. 40.
[37] *Id*. at p. 111, referring to Section 11.1 of the 2018 DRAM *Pro Forma* Contract.

the concluding paragraph of Section 3.5 of the 2018 DRAM Pro Forma Contract restricts the IOUs' ability to pass on these costs.[38]

- Staff's DRAM Report (p. 62) stated, "Analysis revealed that **both IOU DR** (emphasis added) and DRAM bid prices…were noticeably higher than other non-DR resources," yet the following paragraph concludes, "it is apparent that DRAM bid prices were far less competitive in the DAM than bid prices for other resource types." Figure 20 also indicated that IOU DR programs were on the lower end of the DAM Bid Price Distribution spectrum right after IOU storage. "**IOU DR" should be removed from the first statement.**

- Page 95 states that the simple average August bid price cap was used for the DRAM III and IV solicitations. **The simple average August bid price cap was introduced for DRAM IV.**[39]

IV.
CONCLUSION

SCE appreciates the opportunity to provide these responses and comments to the February 28, 2019 Ruling.

Respectfully submitted,

ANNA VALDBERG
ROBIN Z. MEIDHOF

/s/ Robin Z. Meidhof
By: Robin Z. Meidhof

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-6054
E-mail: Robin.Meidhof@sce.com

March 29, 2019

---

[38] 2018 DRAM *Pro Forma* Contract, Section 3.5 at p. 10: "Notwithstanding Seller's obligations in Section 3.5(a), Seller is not required to indemnify or reimburse Buyer for any costs allocated to Buyer by the CAISO for any capacity procured by CAISO pursuant to the Capacity Procurement Mechanism with respect to any Shortfall Capacity."

[39] *See* Energy Division Guidance on DRAM IV, dated January 5, 2018.

Attachment A

[Year]~~2019~~ DRAM RFO PRO FORMA

DEMAND RESPONSE AUCTION MECHANISM RESOURCE PURCHASE AGREEMENT

between

[NAME OF SELLER]

and

SOUTHERN CALIFORNIA EDISON COMPANY

DEMAND RESPONSE AUCTION MECHANISM RESOURCE PURCHASE AGREEMENT
BETWEEN
[SELLER]* AND *SOUTHERN CALIFORNIA EDISON COMPANY

Table Of Contents

Table Of Contents (Continued)

Table Of Contents (Continued)

Table Of Contents (Continued)

DEMAND RESPONSE RESOURCE PURCHASE AGREEMENT
BY AND BETWEEN
[NAME OF SELLER]
AND
SOUTHERN CALIFORNIA EDISON COMPANY

PREAMBLE

This Demand Response Resource Purchase Agreement, together with its exhibits (the "Agreement") is entered into by and between **SOUTHERN CALIFORNIA EDISON COMPANY**, a California corporation ("Buyer"), and *[Aggregator or Demand Response Provider]*, a *[Seller's business registration]* ("Seller"), as of *[Date]* ("Execution Date"). Buyer and Seller are referred to herein individually as a "Party" and collectively as "Parties." Unless the context otherwise specifies or requires, capitalized terms in this Agreement have the meanings set forth in Exhibit A.

AGREEMENT

In consideration of the agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows.

ARTICLE 1. TRANSACTION

1.1. Purchase and Sale of the Product

(a) During the Delivery Period, Seller shall sell and deliver, and Buyer shall purchase and receive, the Product(s) as indicated in Table 1.1(b) in the respective amount of the Product Monthly Quantity, as indicated in Exhibit E, subject to and in accordance with the terms and conditions of this Agreement. More than one type of Product from Table 1.1(b) may be indicated. Each type of Product indicated in Table 1.1(b) shall be referred to individually or collectively as "Product" for purposes of this Agreement, as applicable.

(b) The Product is:

	Type of Product	**Local Capacity Area (as applicable)**
☐	Product A: System Capacity	Not applicable

	Type of Product	Local Capacity Area (as applicable)
☐	Product B-1: Local Capacity with System Capacity	LA Basin LCA Substations
☐	Product B-2: Local Capacity with System Capacity	Big Creek/Ventura LCA Substations
☐	Product C1: Flexible Capacity (Flexible Category 1) with System Capacity	Not applicable
☐	Product C2: Flexible Capacity (Flexible Category 2) with System Capacity	Not applicable
☐	Product C3: Flexible Capacity (Flexible Category 3) with System Capacity	Not applicable
☐	Product D1-1: Flexible Capacity (Flexible Category 1) with Local and System Capacity	LA Basin LCA Substations
☐	Product D1-2: Flexible Capacity (Flexible Category 1) with Local and System Capacity	Big Creek/Ventura LCA Substations
☐	Product D2-1: Flexible Capacity (Flexible Category 2) with Local and System Capacity	LA Basin LCA Substations
☐	Product D2-2: Flexible Capacity (Flexible Category 2) with Local and System Capacity	Big Creek/Ventura LCA Substations

	Type of Product	Local Capacity Area (as applicable)
☐	Product D3-1: Flexible Capacity (Flexible Category 3) with Local and System Capacity	LA Basin LCA Substations
☐	Product D3-2: Flexible Capacity (Flexible Category 3) with Local and System Capacity	Big Creek/Ventura LCA Substations

(c) Seller to indicate whether the Product is:

____ a Residential Customer Product; or

____ not a Residential Customer Product

{SCE Comment: Seller to choose only one option which applies to all Products for this Agreement}

(d) If Seller has chosen to deliver Product that is not Residential Customer Product, its DRAM Resources may nevertheless include Residential Customers and Small Commercial Customers.

(e) Seller to indicate whether the Product is:

____ a Proxy Demand Resource (PDR); or

____ a Reliability Demand Response Resource (RDRR).

1.2. Term

The "Term" of this Agreement shall commence upon the Execution Date and shall continue until the expiration of the Delivery Period unless terminated earlier in accordance with the terms and conditions of this Agreement.

1.3. Delivery Period

The "Delivery Period" shall commence on the later of (a) the first day of the first month that begins after sixty (60) days following CPUC Approval, and (b) *[Date]*, and shall continue in full force and effect until *[Date]* *{SCE Comment: The Date should be the last calendar day of the last Showing Month}*, unless terminated earlier in accordance with the terms and conditions of this Agreement. Notwithstanding anything to the contrary contained in this Agreement, the Delivery Period will not commence until CPUC Approval is obtained or waived by Buyer in its sole discretion.
{SCE Comment: Dates will be based on Seller's bid that was selected by SCE in the

RFO. Currently that would be no earlier than ~~***January, 2019***~~***[month, year]*** *and no later than* ~~***December, 2019***~~***[month, year]****.}*

1.4. Seller's Designation of the DRAM Resource

(a) On or before the later of (1) the first day of the first month that begins after the date that is sixty (60) days following CPUC Approval, and (2) the date that is sixty (60) days prior to the first Showing Month, and on a monthly basis thereafter no less than sixty (60) days prior to the applicable Showing Month if any of the information below changes, Seller shall:

(i) Provide to Buyer the Resource ID(s) for each PDR or RDRR providing each type of Product pursuant to this Agreement.

(ii) Confirm in writing to Buyer that each PDR or RDRR identified by Seller pursuant to Section 1.4(a)(i) for each type of Product is comprised solely of Bundled Service Customers or Unbundled Service Customers.

(iii) If the Product pursuant to this Agreement is a Joint Resource, Seller shall confirm in writing to Buyer (x) the amount of the capacity of such Joint Resource that will be used to show Demonstrated Capacity for the applicable type of Product under this Agreement and (y) the total capacity of such Joint Resource for the applicable type of Product.

(b) Sellers may sell and deliver System Capacity and Local Capacity from PDRs or RDRRs and may sell and deliver Flexible Capacity only from PDRs.

(c) The Parties shall cooperate to implement the requirements of Rule 24 to enroll **DRAM** Resource Customers in order for Seller to designate the PDR(s) and/or RDRR(s) pursuant Section 1.4(a)(i).

1.5. Product Monthly Quantity and Corresponding Contract Price

(a) The Product Monthly Quantity and Contract Price for the type of Product indicated in Table 1.1(b) for each applicable Showing Month during the Delivery Period is set forth in Exhibit E.

(b) In the event that Seller is not able to register the DRAM Resource for part or all of a Product Monthly Quantity for a Showing Month due solely to ~~(i)~~ the actions or inactions of Buyer or the CAISO~~, or (ii) insufficient Rule 24 registrations under D.16-06-008 Ordering Paragraph 6~~, then Seller may, in its sole discretion, by providing Notice to Buyer on or before the date that is sixty (60) days prior to the Showing Month for which Seller is unable to register the DRAM Resource, reduce the Product Monthly Quantity for the unregistered capacity by type of Product for such Showing Month; *provided*, Seller shall demonstrate to Buyer's reasonable satisfaction that Seller made commercially reasonable efforts to register the DRAM Resource corresponding to such reduced Product Monthly

Quantity for the unregistered capacity by type of Product in the applicable Showing Month.

(c) In the event that material changes to definition of Resource Adequacy, including but not limited to changes in the Resource Adequacy Availability Assessment Hours, are adopted during the Term of this Agreement, then Seller may, in its sole discretion, by providing Notice to Buyer on or before ~~August 1, 2018~~ ***[date]*** either (i) reduce the Product Monthly Quantity for the following year or (ii) terminate this Agreement.

(d) In the event that the Buyer has not yet enabled real time or ancillary services functionality that is adequate for the Buyer's CPUC-approved Rule 24 registrations, by the time that the DRAM Resource is offered into the CAISO Markets (on or after ~~*January 1, 2019*~~ ***[date]*** per the terms of this Agreement), Buyer shall provide Notice to Seller at least 60 days prior to the Showing Month and Seller shall be exempt from both any obligation to provide Flexible Capacity and any associated penalties. Once Buyer has provided 30 days' Notice to Seller that Buyer has enabled real time or ancillary services functionality that is adequate for the Buyer's approved 24 registrations, so that Sellers are able to provide Flexible Capacity to the CAISO Markets, this Section 1.5(d) shall have no further effect.

(e) Seller's exercise of its rights under Sections 1.5(b) or (c) will not be deemed to be a failure of Seller's obligation to sell or deliver the Product or a failure of Buyer's obligation to purchase or receive the Product, and will not be or cause an Event of Default by either Party. Neither Party shall have any further obligation or liability to the other and no Settlement Amount with respect to this Agreement will be due or owing by either Party upon termination of this Agreement due solely to Seller's exercise of its rights under Section 1.5(c).

1.6. Demonstrated Capacity

(a) Each invoice submitted by Seller to Buyer pursuant to Section 4.2 shall include a statement, in a form substantially similar to Exhibit C, of the amount of the Product Monthly Quantity for each type of Product for such Showing Month that Seller was capable of delivering ("Demonstrated Capacity"), including **determination of the Demonstrated Capacity per** one of the following, as provided below:

(i) The results of a Dispatch of the applicable PDR or RDRR in the DRAM Resource during the Showing Month, provided that the PDR or RDRR provided load reduction during all of the hours referenced in the Dispatch Instruction corresponding to the applicable MOO hours. The Demonstrated Capacity for System**,** ~~and~~ Local **and Flexible** Capacity will equal the ~~maximum~~ **average** hourly load reduction during any hour of such Dispatch as calculated using the Capacity Baseline ~~and the~~

~~Demonstrated Capacity for Flexible Capacity will equal the average hourly load reduction calculated using the Capacity Baseline~~.

(ii) In the event that there is no Full Dispatch of the PDR or RDRR in the DRAM Resource during the Showing Month under 1.6(a)(i) above the results of a capacity test **(with a duration of at least two consecutive hours)** conducted by the Seller's SC during the applicable Showing Month, if and as required under Section 3.3(b) below. The Demonstrated Capacity for System**,** ~~or~~ Local Capacity **and Flexible Capacity** with respect to such PDR or RDRR will equal the ~~maximum~~ **average** hourly load reduction during such test as calculated using the Capacity Baseline. **[See Exhibit C-1/C-2 for this requirement.]** ~~The Demonstrated Capacity for Flexible Capacity with respect to such PDR will equal the average hourly load reduction during such test as calculated using the Capacity Baseline~~; or

(iii) In the event that there is no Full Dispatch of the applicable PDR or RDRR in the DRAM Resource during the Showing Month as contemplated under 1.6(a)(i) above, or test of the applicable PDR or RDRR in the DRAM Resource during the Showing Month as contemplated under 1.6(a)(ii) above, the average amount of capacity for the applicable PDR or RDRR in the DRAM Resource that the Seller bid into the applicable CAISO Markets solely during the hours of the Showing Month in compliance with the CAISO MOO. **The method described in this Section 1.6(a)(iii) (i.e., the "MOO Method") shall not be applicable to establish Demonstrated Capacity for (A) the first month of the Delivery Period, (B) any month immediately following a month in which Demonstrated Capacity was less than the capacity shown on a supply plan, (C) any month immediately following a month in which Demonstrated Capacity was determined using the MOO Method, and (D) any month for which this agreement otherwise requires Demonstrated Capacity to be determined according to Section 1.6(a)(i) and/or Section 1.6(a)(ii).**

(iv) The Demonstrated Capacity for any Showing Month in which there is no determination of Demonstrated Capacity pursuant to Section 1.6(a)(i), Section 1.6(a)(ii), or Section 1.6(a)(iii), shall be equal to zero (0) MW.

(b) Solely for purposes of establishing the Demonstrated Capacity pursuant to Section 1.6(a), Seller shall use data available through Buyer's Customer Data Access Systems that has been designated by Buyer as final Revenue Quality Meter Data and such data shall be considered final by the Parties as of the date Seller submits its invoice for the applicable Showing Month to Buyer.

(c) If the DRAM Resource is composed of more than one PDR or RDRR, then Seller may establish the portion of the Demonstrated Capacity for a specific type of

Product associated with each such PDR or RDRR by using the methods based on the descriptions in Sections 1.6(a)(i)-(**iv** ~~iii~~), in which case the Demonstrated Capacity for a specific type of Product will equal the sum of the individual PDR or RDRRs demonstrated capacities.

(d) If any respective PDR or RDRR in the DRAM Resource is a Joint Resource, Seller's invoice shall indicate (x) the amount of the capacity of such Joint Resource used to show Demonstrated Capacity for a specific type of Product for such month and (y) the total capacity of such Joint Resource during such month.

(e) ~~If the type of Product Seller delivers under this Agreement is a Residential Customer Product,~~ Seller's invoice shall indicate the number of Residential Customer SAID agreements and the number of Small Commercial SAID accounts in each PDR or RDRR for such type of Product.

(f) In addition to the requirements in Section 1.6(a), if Seller is electing Demonstrated Capacity for Local Capacity, then, as part of Seller's Demonstrated Capacity for Local Capacity, Seller's invoice shall indicate the number of SAID agreements in the applicable LCA that are associated with the Local Capacity as indicated in Table 1.1(b) and Exhibit C.

(g) Following Buyer's receipt of Seller's invoice and Notice of Demonstrated Capacity, Buyer may, upon Notice to Seller, require Seller to provide ~~documentation~~ **the following information with each invoice: (i) for the DRAM Resource, bid MW, awarded MW, and calculated performance; (ii) for each service account that was part of the DRAM Resource for the applicable Showing Month: data by service account, rate plan, registration history (resource ID(s) the service account has been registered with, and dates for each registration), and (iii) any other information requested by Buyer and available** from Seller or Seller's SC that establishes to Buyer's reasonable satisfaction the Demonstrated Capacity of each Product type from a PDR, RDRR or Joint Resource as stated by Seller in its invoice for the applicable Showing Month~~.~~**; and (iv) if the type of Product designated in Section 1.1(b) is Residential Customer Product, additional documentation that establishes to Buyer's reasonable satisfaction that the invoiced product is Residential Customer Product.** ~~In the event that~~ **Buyer may dispute any invoiced amounts for which** Seller does not provide such documentation within ten (10) Business Days ~~from~~ **after** Buyer's Notice or **for which** ~~such~~ **the** documentation **provided** is not reasonably satisfactory to Buyer, then Buyer may require an audit of Seller or Seller's SC records upon Notice ("Audit Notice"). With respect to an Audit Notice, Seller shall cause its SC to allow Buyer or its designated independent third-party auditor to have access to the records and data necessary to conduct such audit within five (5) Business Days of Seller's receipt of an Audit Notice; *provided*, such audit will be limited solely to verification of the data upon which Seller based its claim of the amount of the Demonstrated Capacity. If the type of Product designated in Section 1.1(b) is a Residential Customer Product, then, in addition to the documentation specified above, Buyer may, in its Audit Notice,

require Seller or Seller's SC to provide additional documentation that establishes to Buyer's reasonable satisfaction that the type of Product is Residential Customer Product as stated by Seller in its invoice for the applicable Showing Month. Buyer's costs, including the costs for any third-party auditor, incurred in connection with the conducting such audit are the sole responsibility of Buyer. **For the avoidance of doubt, regardless of the levels at which Seller bid the PDR or RDRR into the CAISO markets during any given Showing Month for which the MOO Method is used, Buyer may still require Seller to demonstrate, with reference to historical load data, the physical capability of the DRAM Resource to have delivered the Product Monthly Quantity during that Showing Month.**

ARTICLE 2. CPUC APPROVAL

2.1. Obtaining CPUC Approval

Within thirty (30) days after the Execution Date, Buyer shall file with the Commission the appropriate request for CPUC Approval. Seller shall use commercially reasonable efforts to support Buyer in preparing for and obtaining CPUC Approval. Buyer has no obligation to seek rehearing or to appeal a Commission decision which fails to approve this Agreement or which contains findings required for CPUC Approval with conditions or modifications unacceptable to either Party.

2.2. CPUC Approval Termination Right

(a) Either Party has the right to terminate this Agreement upon Notice, which will be effective five (5) Business Days after such Notice is given, if (i) CPUC Approval has not been obtained or waived by Buyer in its sole discretion within sixty (60) days after Buyer files its request for CPUC Approval and (ii) such Notice of termination is given on or before the ninetieth (90th) day after Buyer files the request for CPUC Approval.

(b) Failure to obtain CPUC Approval in accordance with this Article 2 will not be deemed to be a failure of Seller to sell or deliver the Product or a failure of Buyer to purchase or receive the Product, and will not be or cause an Event of Default by either Party. No Settlement Amount with respect to this Agreement will be due or owing by either Party, and neither Party shall have any obligation or liability to the other, upon termination of this Agreement due solely to failure to obtain CPUC Approval.

ARTICLE 3. SELLER OBLIGATIONS

3.1. Delivery of Product

(a) No later than ten (10) Business Days before the earliest monthly applicable Buyer's Compliance Showing deadlines with the CAISO and the CPUC for each Showing Month, Seller shall submit, or shall cause Seller's SC(s) to submit, Notice to Buyer which includes Seller's Supply Plan for such Showing Month.

Such Notice shall be in a form substantially similar to Exhibit D, or in a form as communicated in writing by Buyer to Seller no later than fifteen (15) Business Days prior to Buyer's Compliance Showing deadlines for a Showing Month **and shall identify the name, service address, zip code, and IOU service account number for each DRAM Resource Customer included in the DRAM Resource for such Showing Month. The amounts shown on Seller's Supply Plan for any Showing Month shall not exceed the average aggregate historical usage of the service accounts identified to Buyer for such Showing Month (whether or not the applicable service accounts were DRAM Resource Customers in prior years) for the same month in the prior three years (or, if three years of data is not available, for such shorter time for which data is available). Compliance with this provision shall not constitute a determination or a presumption of the accuracy or reasonableness of the applicable Supply Plan and the Demonstrated Contract Capacity shall be measured pursuant to Section 1.6.**

(b) Seller shall, on a timely basis, submit, or cause its SC to submit, a Supply Plan to CAISO in accordance with the CAISO Tariff to identify and confirm the Product Monthly Quantity for each type of Product to be provided to Buyer from the DRAM Resource for each Showing Month. The quantities in the Supply Plan that is submitted to the Buyer under Section 3.1(a) shall exactly match what is submitted by the Seller or its SC to the CAISO due on the earliest monthly applicable Buyer's Compliance Showing deadlines with CAISO and CPUC.

3.2. Resource Adequacy Benefits

Seller grants, pledges, assigns, and otherwise commits to Buyer the Product Monthly Quantity and all Resource Adequacy Benefits of the Product as associated with the DRAM Resource to enable Buyer to meet its RAR, Local RAR and/or Flexible RAR, as applicable. The Parties shall take all commercially reasonable actions, and execute all documents or instruments necessary, to effect the use of the Product for Buyer's sole benefit.

3.3. Provision of Information and Testing

(a) Within a reasonable period of time, or such time prescribed by the CPUC, Seller shall provide to the CPUC all information requested by the CPUC relating to Seller's obligations and performance pursuant to this Agreement and the DRAM IV Pilot Program to which this Agreement relates. In responding to any information request from the CPUC, the Seller may designate information for confidential treatment consistent with CAISO and/or Commission rule, tariff or decision. Any such confidential information provided by Seller to the CPUC shall be held in confidence by the CPUC and excluded from public inspection or disclosure, unless inspection or disclosure is otherwise required by Applicable Laws.

(b) ~~If a PDR or RDRR in the DRAM Resource has not had a~~ **Seller shall use its best efforts to ensure that a concurrent** Full Dispatch **of all PDRs and RDRRs in the DRAM Resource occurs** during August **of each year**. ~~then~~ **If Seller has been unable to cause a concurrent Full Dispatch of all PDRs and RDRRs in the DRAM Resource to occur before the twentieth (20th) day of the applicable month,** Seller shall cause a **concurrent** test of such PDR(s) or RDRR(s) in accordance with D.14-06-050, Appendix B, prior to expiration of that month, and provide the results of such test to Buyer ~~through their~~ **to support** Demonstrated Capacity **for that month pursuant to Section 1.6(a)(ii).**

In addition, if the Delivery Period is greater than six months in the calendar year, and if a test or Full Dispatch has not occurred within the first half of the Delivery Period in the calendar year, excluding August, then a test must be conducted in accordance with D.14-06-050, Appendix B, within the first half of the Delivery Period (e.g., for an Agreement with an eight month term, a second test would be required at some point in the first four months). Such test may not occur in August. Seller is permitted multiple retests during the calendar month of such testing.

~~If the test results demonstrate a capacity of 50.00 percent (%) or less of the Product Monthly Quantity for that month, then a retest would be required for those PDR or RDRR that are 50 percent (%) or less of their Product Monthly Quantity, within 30 days of Seller receiving data of the test results, if a Full Dispatch has not occurred during that 30 day period. If the retest results demonstrate a capacity of 50 percent (50%) or less of the applicable Product Monthly Quantity, then Seller will conduct an additional retest~~.

(c) Seller shall comply with the requirements for load impact analysis in D.14-06-050, Appendix B, and provide to the CPUC a load impact evaluation consistent with the Load Impact Protocols in D. 08-04-050 and data required by D.14-06-050. This Section 3.3(c) is applicable only for DRAM Resources for which historical data are available. If historical data are not available, Seller is not required to perform a load impact analysis. ~~Pursuant to Decision 16-06-045, Ordering Paragraph 5a, this provision is moot for the 2018 and 2019 RA Compliance Year.~~

(d) **Seller shall use reasonable efforts to meet the various Project related milestones set forth in Exhibit G ("Milestone Schedule") and avoid or minimize any delays in meeting such Milestone Schedule. Within five (5) days after Buyer's request, Seller shall deliver to SCE a report describing its progress in relation to the Milestone Schedule, including projected time to completion of any milestones, and shall provide any such documents as may be reasonably requested by Buyer. In addition, Seller shall advise Buyer, as soon as reasonably practicable, of any problems or issues of which Seller is aware which could materially impact its ability to meet the Milestone Schedule.**

3.4. Seller's Obligations

(a) Seller shall, and shall cause each of the PDRs or RDRRs in the DRAM Resource and corresponding DRPs and SCs to, comply with all applicable CAISO Tariff provisions, CPUC Decisions and all other Applicable Laws, including the Bidding of the DRAM Resource into the applicable CAISO Markets during the Availability Assessment Hours as required by the CAISO Tariff**, and in compliance with all other applicable market rules**.

(b) Seller shall or shall cause Seller's DRP to execute Buyer's Demand Response Provider Service Agreement in accordance with Rule 24.

(c) Seller shall not include any Customer premises or resource in a PDR or RDRR in the DRAM Resource that is concurrently enrolled in or otherwise concurrently committed to any other demand response program offered, maintained, or funded by Buyer (e.g., without limitation, behind-the-meter storage products in the Energy Storage RFO), or that is registered with CAISO as a part of any other demand response resource or Distributed Energy Resource Aggregation, other than as provided under this Agreement.

(d) **Seller will use its best efforts to ensure that the DRAM Resource Customers follow safe practices when reducing electrical usage in connection with the demand response services provided hereunder.**

(e) **Seller shall not include the same service account in more than one PDR/RDRR in the DRAM Resource during the same Showing Month, provided that**

(i) **Seller may add a newly recruited service account to a PDR/RDRR in the DRAM Resource if that service account is not part of a PDR/RDRR that is already included in a supply plan submitted to Buyer or any other LSE for the same month.**

(ii) **If a service account has moved to a new LSE (e.g., to or from a community choice aggregator), and if the CAISO tariff requires PDR/RDRRs to consist of service accounts that are customers of the same LSE, then Seller may move (add/remove) the affected service account between PDRs/RDRRs in the DRAM Resource**.

3.5. Indemnities for Failure to Perform.

Seller agrees to indemnify, defend and hold harmless Buyer from any costs, penalties, fines or charges assessed against Buyer by the CPUC**,** ~~or~~ the CAISO, **FERC or any other governing body,** resulting from Seller's failure to do, or cause to be done, any of the following:

(a) Provide any portion of the Monthly Quantity for any portion of the Delivery Period, except to the extent (i) such failure is solely the result of a failure by

Buyer to perform any of its obligations pursuant to Section 6.2, or (ii) Seller reduces a Monthly Quantity in accordance with Section 1.5(b) or (c);

(b) Submit timely and accurate Supply Plans that identify Buyer's right to the Monthly Quantity for each Showing Month;

(c) Comply with the requirements in Section 3.2 to enable Buyer to meet its RAR;

(d) **Comply with Applicable Law, the CAISO Tariff, or market rules;** or

(e) Meet CPUC Resource Adequacy requirements per the CPUC Filing Guide.

With respect to the foregoing, the Parties shall use commercially reasonable efforts to minimize any such costs, penalties, fines and charges; *provided*, in no event will Buyer be required to use or change its utilization of its owned or controlled assets or market positions to minimize these costs, penalties, fines and charges. If Seller fails to pay the foregoing penalties, fines, charges, or costs, or fails to reimburse Buyer for those penalties, fines, charges, or costs, then Buyer may offset those penalties, fines, charges or costs against any amounts it may owe to Seller under this Agreement.

~~Notwithstanding Seller's obligations in Section 3.5(a), Seller is not required to indemnify or reimburse Buyer for any costs allocated to Buyer by the CAISO for any capacity procured by CAISO pursuant to the Capacity Procurement Mechanism with respect to any Shortfall Capacity.~~

ARTICLE 4. PAYMENT AND BILLING

4.1. Delivered Capacity Payment

Buyer shall make a monthly payment to Seller, after the applicable Showing Month, ("Delivered Capacity Payment") equal to the product of (A x B x C x D) for each type of Product.

Delivered Capacity Payment = [A x B x C x D]

Where:

A = The Contract Price of the applicable type of Product for the applicable Showing Month, including SC costs.

~~B = The lesser of (i) the Demonstrated Capacity for each type of Product for the applicable Showing Month, and (ii) the corresponding Product Monthly Quantity for the applicable Showing Month~~

B = [AA – (BB x 1.2) – (CC x 1.5) – (DD x 2.0)]

Where:

AA = The corresponding Product Monthly Quantity for the applicable Showing Month

BB = The difference between (i) the corresponding Product Monthly Quantity for the applicable Showing Month, and (ii) the expected quantity of Product for the applicable Showing Month, if such expected quantity of Product is communicated by Seller to Buyer at least 90 days before the annual Compliance Showing deadline. BB can only be zero (0) or positive.

CC = The difference between (i) AA minus BB, and (ii) smaller of (x) the quantity communicated by Seller via Notice to Buyer pursuant to Section 3.1 (a) which includes Seller's Supply Plan for such Showing Month, and (y) the quantity communicated by Seller via Notice to Buyer pursuant to Section 3.1 (a) which includes Seller's Year-Ahead Supply Plan for such Showing Month. CC can only be zero (0) or positive.

DD = The difference between (i) AA minus BB minus CC, and (ii) the Demonstrated Capacity for each type of Product for the applicable Showing Month. DD can only be zero (0) or positive.

C = 1.0 if Seller has chosen (i) not to deliver Residential Customer Product in Section 1.1(c) or (ii) to deliver Residential Customer Product in Section 1.1(c) and the Product delivered meets the definition of Residential Customer Product, or 0.90 if the Product delivered does not meet the definition of Residential Customer Product.

D = (i) 1.0 if Seller has chosen to deliver RDRR in Section 1.1(e); or (ii) if Seller has chosen to deliver PDR in Section 1.1(e), the percentage of Product delivered that is PDR.

4.2. Invoice and Payment Process

(a) **Within 60 days** ~~soon as practicable~~ after the end of each Showing Month, Seller will render to Buyer an invoice for the payment obligations, if any, incurred hereunder with respect to such Showing Month. **If the Seller has not received at least 90% of the Revenue Quality Meter Data (as defined in the CAISO Tariff) within 45 days after the end of the Showing Month, (i) the deadline for submitting the monthly invoices shall be extended, at Seller's request, until 30 days after the day that the missing Revenue Quality Meter Data is made available to Seller, and (ii) Seller may, at its option, render to Buyer a partial invoice for such Showing Month, representing the portion of the DR**

Resource for which Revenue Quality Meter Data is available and a second partial invoice for the remainder of the DR Resource when the rest of the Revenue Quality Meter Data is available. Seller shall notify Buyer of any missing data or quality issues with the Revenue Quality Meter Data within five (5) Business Days after Seller becomes aware of the issue. Seller shall be deemed to have waived the right to reimbursement for any Showing Month for which an invoice is not rendered within the time frames set forth in this Section 4.2(a).

(b) Buyer will pay Seller all undisputed invoice amounts on or before the later of (i) the twentieth (20th) day of each month, or (ii) the tenth (10th) day after receipt of Seller's invoice and Demonstrated Capacity or, if such day is not a Business Day, then on the next Business Day.

(c) Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any amounts not paid by the due date will be deemed delinquent and will accrue interest at the Cash Interest Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full.

(d) Buyer may offset against any future payments by any amount(s) that were previously overpaid.

(e) Either Party may, in good faith, dispute the correctness of any invoice, bill, charge, or any adjustment to an invoice, rendered under this Agreement, or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, bill, charge, or adjustment to an invoice, was rendered. Disputes are subject to the provisions of Article 10 below. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with Notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within ten (10) Business Days of such resolution.

(f) Buyer may ~~deduct~~ **net** any amounts that would otherwise be due to Seller under this Agreement **(including Performance Assurance that would otherwise be returned to Seller)** ~~from~~ **in payment of** any amounts owing and unpaid by Seller to Buyer under this Agreement.

(g) With respect to any Joint Resource, if Seller and any third party both submit claims to Buyer for payment with respect to such Joint Resource which, when added together, exceed the total capacity of the Joint Resource, Buyer shall not be obligated to make payment to Seller in respect of such Joint Resource until Seller reconciles the error with such third party and Seller re-submits the corrected invoice to Buyer.

(h) With respect to a Joint Resource, if such Joint Resource's Demonstrated Capacity for a particular type of Product in any Showing Month is less than such Joint Resource's assigned NQC and/or EFC for such type of Product (as set forth in Exhibit C), Seller shall have the right to demonstrate to Buyer the Joint Resource's actual performance, and shall be compensated in accordance with Section 1.6. In the event Buyer finds Seller's demonstration inconclusive, the Joint Resource's total capacity shall be allocated pro-rata among the parties with rights to a portion of such Joint Resource's type of Product based on the information required to be provided in Section 1.6(d), and Seller's compensation shall be calculated using its percentage allocation of such PDR's or RDRR's capacity, accordingly.

4.3. Allocation of Other CAISO Payments and Costs

As between Buyer and Seller, Seller shall retain any revenues Seller or Seller's SC may receive from and pay all costs, penalties, charges charged to Seller or Seller's SC by the CAISO or any other third party in connection with the DRAM Resource, except as expressly provided otherwise in this Agreement.

ARTICLE 5. CREDIT AND COLLATERAL

5.1. Seller's Credit and Collateral Requirements

(a) If, at any time during the Term Seller does not have a Credit Rating, or if its Credit Rating is below BBB- from S&P or Baa3 from Moody's, if rated by both S&P and Moody's or below BBB- from S&P or Baa3 from Moody's, if rated by either S&P or Moody's, but not both, Seller shall provide and maintain collateral with Buyer in an amount equal to twenty percent (20%) of the sum of the estimated Delivered Capacity Payments for all of the remaining months of the Delivery Period including the current month, with such estimated Delivered Capacity Payments being based on the applicable Monthly Quantity values times the applicable Contract Price ("Performance Assurance").

(b) If Seller's Credit Rating is at or above BBB- from S&P and Baa3 from Moody's, if rated by both S&P and Moody's, or at or above BBB- from S&P or Baa3 from Moody's, if rated by either S&P or Moody's, but not both, Seller shall have no obligation to provide Performance Assurance to Buyer, and Sections 5.2 through 5.5 will not be applicable.

(c) If required pursuant to Section 5.1(a), Seller shall post the Performance Assurance with Buyer within ten (10) Business Days of the Execution Date.

5.2. Grant of Security Interest/Remedies

(a) To secure its obligations under this Agreement, and until released as provided herein, Seller hereby grants to Buyer a present and continuing security interest in, and lien on (and right of setoff against), and collateral assignment of, the

Performance Assurance and all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Buyer, and each Party agrees to take such action as the other Party reasonably requires in order to perfect Buyer's first-priority security interest in, and lien on (and right of setoff against), such Performance Assurance and collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, Buyer, if it is the Non-Defaulting Party, may do any one or more of the following: (i) exercise any of the rights and remedies of a Buyer with respect to all Performance Assurance, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the Defaulting Party in the possession of the Non-Defaulting Party or its agent; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of the Defaulting Party, including any equity or right of purchase or redemption by the Defaulting Party. In such an event Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

5.3. Reduction and Substitution of Performance Assurance

(a) If the amount of Performance Assurance held by Buyer exceeds the amount required pursuant to Section 5.1, on any Business Day, Seller may give Notice to Buyer requesting a reduction in the amount of Performance Assurance previously provided by Seller for the benefit of Buyer, provided that, (i) after giving effect to the requested reduction in Performance Assurance, no Event of Default or Potential Event of Default with respect to Seller has occurred and is continuing, and (ii) no Early Termination Date has occurred or been designated as a result of an Event of Default with respect to Seller for which there exist any unsatisfied payment obligations. A permitted reduction in Performance Assurance may be effected by the Transfer of Cash to Seller or the reduction of the amount of an outstanding Letter of Credit previously issued for the benefit of Buyer. Seller shall have the right to specify the means of effecting the reduction in Performance Assurance. In all cases, the cost and expense of reducing Performance Assurance (including, but not limited to, the reasonable costs, expenses, and attorneys' fees of Buyer) shall be borne by Seller. Unless otherwise agreed in writing by the Parties, (iii) if Seller's reduction demand is made on or before the Notification Time on a Business Day, then Buyer shall have five (5) Business Days to effect a permitted reduction in Performance Assurance, and (iv) if Seller's reduction demand is made after the Notification Time on a Business Day, then Buyer shall have six (6) Business Days to effect a permitted reduction in Performance Assurance, in each case, if such reduction is to be effected by the return of Cash to Seller. If a permitted reduction in Performance Assurance is to be effected by a

reduction in the amount of an outstanding Letter of Credit previously issued for the benefit of Buyer, Buyer shall promptly take such action as is reasonably necessary to effectuate such reduction.

(b) Except when an Event of Default or Potential Event of Default with respect to Seller shall have occurred and be continuing or an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to Seller for which there exist any unsatisfied payment obligations, Seller may substitute Performance Assurance for other existing Performance Assurance of equal value upon five (5) Business Days' Notice (provided such Notice is made on or before the Notification Time, otherwise the notification period shall be six (6) Business Days) to Buyer. Upon the Transfer to Buyer of the substitute Performance Assurance, Buyer shall Transfer the relevant replaced Performance Assurance to Seller within five (5) Business Days. Notwithstanding anything herein to the contrary, no such substitution shall be permitted unless (i) the substitute Performance Assurance is Transferred simultaneously or has been Transferred to Buyer prior to the release of the Performance Assurance to be returned to Seller and the security interest in, and general first lien upon, such substituted Performance Assurance granted pursuant hereto in favor of Buyer shall have been perfected as required by applicable law and shall constitute a first priority perfected security interest therein and general first lien thereon, and (ii) after giving effect to such substitution, the substitute Performance Assurance shall equal the amount of Performance Assurance being replaced. Each substitution of Performance Assurance shall constitute a representation and warranty by Seller that the substituted Performance Assurance shall be subject to and governed by the terms and conditions of this Article 5, including without limitation the security interest in, general first lien on and right of offset against, such substituted Performance Assurance granted pursuant hereto in favor of Buyer pursuant to this Article 5.

(c) The Transfer of any Performance Assurance by Buyer in accordance with this Section 5.3 shall be deemed a release by Buyer of its security interest, general first lien and right of offset granted pursuant to this Article 5 hereof only with respect to such returned Performance Assurance. In connection with each Transfer of any Performance Assurance pursuant to this Article 5, Seller will, upon request of Buyer, execute a receipt showing the Performance Assurance Transferred to it.

5.4. Administration of Performance Assurance

(a) Cash. Performance Assurance provided in the form of Cash to Buyer shall be subject to the following provisions:

(i) Notwithstanding the provisions of applicable law, if no Event of Default has occurred and is continuing with respect to Buyer and no Early Termination Date has occurred or been designated as a result of an Event of Default with respect to Buyer for which there exist any unsatisfied

payment obligations, then Buyer shall have the right to sell, pledge, rehypothecate, assign, invest, use, commingle or otherwise use in its business any Cash that it holds as Performance Assurance hereunder, free from any claim or right of any nature whatsoever of Seller, including any equity or right of redemption by Seller.

(ii) So long as no Event of Default or Potential Event of Default with respect to Seller has occurred and is continuing, and no Early Termination Date for which any unsatisfied payment obligations of Seller exist has occurred or been designated as the result of an Event of Default with respect to Seller, and to the extent that an obligation to Transfer Performance Assurance would not be created or increased by the Transfer, in the event that Buyer is holding Cash, Buyer will Transfer (or caused to be Transferred) to Seller, in lieu of any interest or other amounts paid or deemed to have been paid with respect to such Cash (all of which may be retained by Buyer), the Interest Amount when Buyer returns the Cash to Seller following the termination or expiration of this Agreement, as applicable and in conformity with Section 9.6. On or after the occurrence of a Potential Event of Default or an Event of Default with respect to Seller or an Early Termination Date as a result of an Event of Default with respect to Seller, Buyer shall retain any such Interest Amount as additional Performance Assurance hereunder until the obligations of Seller under the Agreement have been satisfied in the case of an Early Termination Date or for so long as such Event of Default is continuing in the case of an Event of Default.

(b) Letters of Credit. Performance Assurance provided in the form of a Letter of Credit shall be subject to the following provisions:

(i) Each Letter of Credit shall be maintained for the benefit of Buyer. Seller shall (A) renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit, (B) if the bank or financial institution that issued an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide either a substitute Letter of Credit or Cash, in each case at least thirty (30) calendar days prior to the expiration of the outstanding Letter of Credit, and (C) if a bank or financial institution issuing a Letter of Credit shall fail to honor Buyer's properly documented request to draw on an outstanding Letter of Credit, provide for the benefit of Buyer either a substitute Letter of Credit that is issued by a bank or financial institution acceptable to Buyer or Cash, in each case within one (1) Business Day after such refusal.

(ii) As one method of providing Performance Assurance, Seller may increase the amount of an outstanding Letter of Credit or establish one or more additional Letters of Credit.

(iii) Upon the occurrence of a Letter of Credit Default, Seller agrees to Transfer to Buyer either a substitute Letter of Credit or Cash, in each case on or before the first (1st) Business Day after the occurrence thereof (or the fifth (5th) Business Day after the occurrence thereof if only clause (i) under the definition of Letter of Credit Default applies).

(iv) Upon or at any time after the occurrence and continuation of an Event of Default or Letter of Credit Default with respect to Seller, or if an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to Seller for which there exist any unsatisfied payment obligations, then Buyer may draw on the entire, undrawn portion of any outstanding Letter of Credit upon submission to the bank or financial institution issuing such Letter of Credit of one or more certificates specifying that such Event of Default, Letter of Credit Default or Early Termination Date has occurred and is continuing. Cash proceeds received from drawing upon the Letter of Credit shall be deemed Performance Assurance as security for Seller's obligations to Buyer and Buyer shall have the rights and remedies set forth in Section 5.5 with respect to such Cash proceeds. Notwithstanding Buyer's receipt of Cash proceeds of a drawing under the Letter of Credit, Seller shall remain liable (A) for any failure to Transfer sufficient Performance Assurance and (B) for any amounts owing to Buyer and remaining unpaid after the application of the amounts so drawn by Buyer.

(v) In all cases, the costs and expenses of establishing, renewing, substituting, canceling, and increasing the amount of a Letter of Credit shall be borne by Seller.

(c) Care of Performance Assurance. Except as otherwise provided in Section 5.4(a)(i) and beyond the exercise of reasonable care in the custody thereof, Buyer shall have no duty as to any Performance Assurance in its possession or control or any income thereon or as to the preservation of rights against prior parties or any other rights pertaining thereto. Buyer shall be deemed to have exercised reasonable care in the custody and preservation of the Performance Assurance in its possession if the Performance Assurance is accorded treatment substantially equal to that which it accords its own property, and shall not be liable or responsible for any loss or damage to any of the Performance Assurance, or for any diminution in the value thereof, except to the extent such loss or damage is the result of Buyer's willful misconduct or gross negligence. Buyer shall at all times retain possession or control of any Performance Assurance Transferred to it.

5.5. Exercise of Rights against Performance Assurance

(a) If an Event of Default with respect to Seller has occurred and is continuing or an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to Seller, Buyer may exercise any one or more of the rights and remedies provided under this Agreement, or as otherwise available under

Applicable Law. Without limiting the foregoing, if at any time an Event of Default with respect to Seller has occurred and is continuing, or an Early Termination Date occurs or is deemed to occur as a result of an Event of Default with respect to Seller, then Buyer may, in its sole discretion, exercise any one or more of the following rights and remedies:

(i) All rights and remedies available to a Buyer under the Uniform Commercial Code and any other applicable jurisdiction and other Applicable Laws with respect to the Performance Assurance held by or for the benefit of Buyer;

(ii) The right to set off any Performance Assurance held by or for the benefit of Buyer against and in satisfaction of any amount payable by Seller in respect of any of its obligations; and

(iii) The right to draw on any outstanding Letter of Credit issued for its benefit.

(b) Buyer shall be under no obligation to prioritize the order with respect to which it exercises any one or more rights and remedies available hereunder. Seller shall in all events remain liable to Buyer for any amount payable by Seller in respect of any of its obligations remaining unpaid after any such liquidation, application and set off.

5.6. Financial Information

(a) If requested by a Party, the other Party shall deliver, if available, (a) within one hundred twenty (120) days following the end of each fiscal year, a copy of the annual report containing audited consolidated financial statements (income statement, balance sheet, statement of cash flows and statement of retained earnings and all accompanying notes) for such fiscal year setting forth in each case in comparative form the figures for the previous year for the Party, as the case may be, and (b) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of a quarterly report containing unaudited consolidated financial statements for such fiscal quarter and the portion of the fiscal year through the end of such quarter, setting forth in each case in comparative form the figures for the previous year, and if the Party files reports with the Securities and Exchange Commission, certified in accordance with all applicable laws and regulations, including without limitation all applicable Securities and Exchange Commission rules and regulations. If the Party does not file reports with the Securities and Exchange Commission, the reports must be certified by a Chief Financial Officer, Treasurer or any Assistant Treasurer as being fairly stated in all material respects (subject to normal year end audit adjustments); provided, for the purposes of this Section 5.6, if a Party's financial statements are publicly available electronically on the Securities and Exchange Commission's website, then this requirement shall be deemed satisfied. In all cases the statements shall be for the most recent accounting period and shall be prepared in accordance with generally accepted accounting principles; provided,

should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the relevant entity diligently pursues the preparation, certification and delivery of the statements.

5.7. Access to Financial Information

(a) Buyer shall determine, through consultation with its internal accountants and review with their independent registered public accounting firm, that Buyer is required to consolidate Seller's financial statements with Buyer's financial statements for financial accounting purposes under Accounting Standards Codification (ASC) 810/Accounting Standards Update 2009-17, "Consolidation of Variable Interest Entities" (ASC 810), or future guidance issued by accounting profession governance bodies or the SEC that affects Buyer accounting treatment for this Agreement (the "Financial Consolidation Requirement").

(b) If the Financial Consolidation Requirement is applicable, then:

(i) Within twenty (20) days following the end of each calendar year (for each year that such treatment is required), Seller shall deliver to Buyer unaudited financial statements and related footnotes of Seller as of the end of the year. It is permissible for Seller to use accruals and prior months' estimates with true-up to actual activity, in subsequent periods, when preparing the unaudited financial statements. The annual financial statements should include quarter-to-date and yearly information. Buyer shall provide to Seller a checklist before the end of each year listing the items which Buyer believes are material to Buyer and required for this purpose, and Seller shall provide the information on the checklist, subject to the availability of data from Seller's records. It is permissible for Seller to use accruals and prior month's estimates with true-up to actual activity, in subsequent periods, when preparing the information on the checklist. If audited financial statements are prepared for Seller for the year, Seller shall provide such statements to Buyer within five (5) Business Days after those statements are issued.

(ii) Within fifteen (15) days following the end of each fiscal quarter (for each quarter that such treatment is required), Seller shall deliver to Buyer unaudited financial statements and related footnotes of Seller as of the end of the quarterly period. The financial statements should include quarter-to-date and year-to-date information. Buyer shall provide to Seller a checklist before the end of each quarter listing items which Buyer believes are material to Buyer and required for this purpose, and Seller shall provide the information on the checklist, subject to the availability of data from Seller's records. It is permissible for Seller to use accruals and prior months' estimates with true-up to actual activity, in subsequent periods, when preparing the unaudited financial statements.

(iii) If Seller regularly prepares its financial data in accordance with GAAP, IFRS, or Successor, the financial information provided to Buyer shall be prepared in accordance with such principles. If Seller is not a SEC registrant and does not regularly prepare its financial data in accordance with GAAP, IFRS or Successor, the information provided to Buyer shall be prepared in a format consistent with Seller's regularly applied accounting principles, e.g., the format that Seller uses to provide financial data to its auditor.

(c) If the Financial Consolidation Requirement is applicable, then promptly upon Notice from Buyer, Seller shall allow Buyer's independent registered public accounting firm such access to Seller's records and personnel, as reasonably required so that Buyer's independent registered public accounting firm can conduct financial statement audits in accordance with the standards of the Public Company Accounting Oversight Board (United States), as well as internal control audits in accordance with Section 404 of the Sarbanes-Oxley Act of 2002, as applicable. All expenses for the foregoing shall be borne by Buyer. If Buyer's independent registered public accounting firm during or as a result of the audits permitted in this Section 5.7(c) determines a material weakness or significant deficiency, as defined by GAAP, IFRS or Successor, as applicable, exists in Seller's internal controls over financial reporting, then within ninety (90) days of Seller's receipt of Notice from Buyer, Seller shall remediate any such material weakness or significant deficiency; provided, Seller has the right to challenge the appropriateness of any determination of material weakness or significant deficiency. Seller's true up to actual activity for yearly or quarterly information as provided herein shall not be evidence of material weakness or significant deficiency.

(d) Buyer shall treat Seller's financial statements and other financial information provided under the terms of this Section 5.7 in strict confidence and, accordingly:

(i) Shall utilize such Seller financial information only for purposes of preparing, reviewing or certifying Buyer's or any Buyer parent company financial statements, for making regulatory, tax or other filings required by law in which Buyer is required to demonstrate or certify its or any parent company's financial condition or to obtain credit ratings;

(ii) Shall make such Seller financial information available only to its officers, directors, employees or auditors who are responsible for preparing, reviewing or certifying Buyer's or any Buyer parent company financial statements, to the SEC and the Public Company Accounting Oversight Board (United States) in connection with any oversight of Buyer's or any Buyer parent company financial statement and to those persons who are entitled to receive confidential information as identified in Article 13; and

(iii) Buyer shall ensure that its internal auditors and independent registered public accounting firm (1) treat as confidential any information disclosed

to them by Buyer pursuant to this Section 5.7, (2) use such information solely for purposes of conducting the audits described in this Section 5.7, and (3) disclose any information received only to personnel responsible for conducting the audits.

(e) If the Financial Consolidation Requirement is applicable, then, within two (2) Business Days following the occurrence of any event affecting Seller which Seller understands, during the Term, would require Buyer to disclose such event in a Form 8-K filing with the SEC, Seller shall provide to Buyer a Notice describing such event in sufficient detail to permit Buyer to make a Form 8-K filing.

(f) If, after consultation and review, the Parties do not agree on issues raised by Section 5.7(a), then such dispute shall be subject to review by another independent audit firm not associated with either Party's respective independent registered public accounting firm, reasonably acceptable to both Parties. This third independent audit firm will render its recommendation on whether consolidation by Buyer is required. Based on this recommendation, Seller and Buyer shall mutually agree on how to resolve the dispute. If Seller fails to provide the data consistent with the mutually agreed upon resolution, Buyer may declare an Event of Default pursuant to Section 9.1. If the independent audit firm associated with Buyer still determines, after review by the third-party independent audit firm, that Buyer must consolidate, then Seller shall provide the financial information necessary to permit consolidation to Buyer; provided, in addition to the protections in Article 13, such information shall be password protected and available only to those specific officers, directors, employees and auditors who are preparing and certifying the consolidated financial statements and not for any other purpose.

5.8. ~~Uniform~~ California Commercial Code Waiver

This Agreement sets forth the entirety of the agreement of the Parties regarding credit, collateral, financial assurances and adequate assurances. Except as expressly set forth in this Agreement, including, those provisions set forth in Article 5 and Article 9, neither Party:

(a) has or will have any obligation to post margin, provide Letters of Credit, pay deposits, make any other prepayments or provide any other financial assurances, in any form whatsoever, or

(b) will have reasonable grounds for insecurity with respect to the creditworthiness of a Party that is complying with the relevant provisions of Article 5 and Article 9; and all implied rights relating to financial assurances arising from Section 2609 of the ~~Uniform~~ California Commercial Code or case law applying similar doctrines, are hereby waived.

ARTICLE 6. SPECIAL TERMS AND CONDITIONS

6.1. Limitation of Liability

Buyer has no obligations to any person or entity that is, or may participate as, a DRAM Resource Customer, DRP (if Seller is not a DRP), or Seller's SC and Seller shall indemnify Buyer against any claim made by any such DRAM Customer, the DRP (if Seller is not a DRP), or Seller's SC with respect to its participation in or with the PDR, RDRR or DRAM Resource, as applicable.

6.2. Buyer Provision of Information

Buyer shall, to the extent available and permitted by Applicable Law, including Rule 24, provide specific information consistent with the CISR-DRP form adopted by the CPUC in D.13-12-029 and Resolution E-4630 including, but not limited to, usage, and/or meter data of a Customer to Seller, if Seller provides to Buyer written authorization from such Customer to release such information. Such written authorization must be provided in a form reasonably acceptable to Buyer. ~~Buyer shall be liable for penalties or charges incurred by Seller from either the CAISO or the CPUC resulting solely from Buyer's failure to provide timely, accurate data to Seller in accordance with this Section 6.2.~~

6.3. Changes in Applicable Laws

(a) If a change in Applicable Laws renders this Agreement or any material terms herein incapable of being performed or administered, then either Party, on Notice, may request the other Party to enter into good faith negotiations to make the minimum changes to this Agreement necessary to make this Agreement capable of being performed or administered, while attempting to preserve to the maximum extent possible the benefits, burdens and obligations set forth in this Agreement as of the Execution Date. The Parties acknowledge that such changes may require the approval of the CPUC before becoming effective.

(b) If the Parties have been unable to reach agreement within thirty (30) days after receipt of such Notice, then either Party may terminate this Agreement by providing Notice. A Party's exercises its rights under this Section 6.3 will not be deemed to be a failure of Seller to sell or deliver the Product or a failure of Buyer to purchase or receive the Product, and will not be or cause an Event of Default by either Party. Neither Party shall have any further obligation or liability to the other and no Settlement Amount with respect to this Agreement will be due or owing by either Party upon termination of this Agreement due solely to a Party's exercise of its right pursuant to this Section 6.3.

6.4. DBE Reporting

No later than twenty (20) days after each semi-annual period ending on June 30th or December 31st during the Term, Seller shall provide to Buyer a report listing all Diverse Business Enterprises that supplied goods or services to Seller during such period, including any certifications or other documentation of such Diverse Business Enterprises'

status as such and the amount paid to each Diverse Business Enterprise during such period.

(i) Buyer has the right to disclose to the CPUC all such information provided by Seller pursuant to this Section 6.4.

(ii) Seller shall make reasonable efforts to accommodate requests by the CPUC (or by Buyer in response to a request by the CPUC) to audit Seller in order to verify data provided by Seller pursuant to this Section 6.4.

6.5. Governmental Charges

Seller shall pay on request and indemnify Buyer against any taxes (including without limitation, any applicable transfer taxes and stamp, registration or other documentary taxes), assessments, or charges that may become payable by reason of the security interests, general first lien and right of offset granted under this Agreement or the execution, delivery, performance or enforcement of this Agreement, as well as any penalties with respect thereto.

6.6. Customers in Buyer Automated Demand Response Program ~~or Other Utility Program~~

Seller agrees to and acknowledges the following with respect to Buyer's **Non-Residential** ~~ADR~~ Customers **enrolled in Buyer's Automated Demand Response (ADR) Program,** which are included in Seller's DRAM Resource:

(a) ADR Customers in Buyer's ADR are eligible to participate concurrently in Buyer's ADR and Seller's DRAM **PDR** Resource, subject to the requirements of this Agreement and Applicable Laws. The ADR Customer remains responsible for fulfilling its obligations under Buyer's ADR during the time period such ADR Customer is in Seller's DRAM Resource. **Customers registered under Seller's RDRR resources are ineligible to participate in ADR.**

(b) Seller shall be responsible for (i) notification to ADR Customers in its DRAM Resource of each Bid awarded by the CAISO ("Award") for a PDR or RDRR, and (ii) operation of the ADR Customers' ADR equipment to respond to an Award. During the time period that an ADR Customer is enrolled in a DRAM Resource, Buyer will not send notifications to such ADR Customer of Awards and will not operate ADR Customers' ADR equipment.

(c) If Seller or its DRP enrolls an ADR Customer in Seller's DRAM Resource, Seller shall provide Buyer with Notice within five (5) Business Days of such enrollment of the ADR Customer's enrollment along with the ADR Customer's name, service account address, SAID, location, the ADR agreement, and confirmation that the ADR Customer has unenrolled from all or any of Buyer's event-based demand response programs (other than ADR) prior to enrolling in Seller's DRAM Resource. Seller shall provide Buyer with Notice within fifteen (15) days after an ADR Customer leaves Seller's DRAM Resource.

(d) ADR Customers in their first year of participation in ADR who enroll in a DRAM Resource will be required to demonstrate performance through the DRAM Resource to qualify for ADR technology incentive payments that future Commission decision(s) applicable to ~~2018 and 2019~~ **2020 and beyond** may require.

(e) Seller shall notify in writing all of its ADR Customers of the items set forth in this Section 6.6 prior to enrolling such ADR Customers in Seller's DRAM Resource, as applicable pursuant to Section 1.4.

(f) Buyer may communicate (i) with the Seller's ADR Customers about the ADR Customer's participation in a DRAM Resource and ADR, and (ii) with the ADR Customers with respect to anything involving their participation in ADR.

(g) Promptly following receipt of Buyer's Notice, Seller shall provide to Buyer all information necessary for Buyer to administer the ADR Customers' participation in Buyer's ADR, including, but not limited to: (i) the information described in Section 6.6(c), (ii) the days in each Showing Month of Dispatch of the applicable PDR or RDRR in the DRAM Resource, (iii) all hours in such Showing Month, corresponding to the days in subsection (ii), when Seller dispatched or called on the ADR Customer to respond to an Award, and (iv) information on ADR Customers that Seller did not dispatch or call on to respond to an Award for such Showing Month. The ADR Customer's participation in the Seller's DRAM Resource as described in this Section 6.6(g) will be used in conjunction with the ADR Customer's participation in Buyer's demand response programs, to calculate the ADR Customer's performance for its approved kW in the ADR.

(h) If Seller does not provide all the information Buyer needs to administer the ADR Customer's participation in Buyer's ADR, the ADR Customer will be in non-compliance with the requirements of ADR.

(i) Following the termination or expiration of this Agreement, Buyer may notify the ADR Customers in Seller's DRAM Resource that such ADR Customers need to participate in a utility demand response program, if such ADR Customers are within the first three years of their commitment to ADR as of the date of such termination or expiration.

(j) Seller agrees to and acknowledges the following with respect to Buyer's Customers in another Utility program, which are also included in Seller's DRAM Resource: When a Customer's participation in another Utility program is dependent upon Customer's inclusion in Seller's DRAM Resource, Seller shall provide to Buyer all information reasonably necessary or useful to establish and confirm the inclusion of such Customers in the Seller's DRAM Resource.

ARTICLE 7. REPRESENTATIONS, WARRANTIES AND COVENANTS

7.1. Representations and Warranties of Both Parties

On the Execution Date, each Party represents and warrants to the other Party that:

(a) It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;

(b) Except for CPUC Approval in the case of Buyer, it has or will timely acquire all regulatory authorizations necessary for it to legally perform its obligations under this Agreement;

(c) The execution, delivery and performance of this Agreement are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;

(d) This Agreement constitutes its legally valid and binding obligation, enforceable against it in accordance with its terms;

(e) It is not Bankrupt and there are not proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or become Bankrupt;

(f) There is not pending or, to its knowledge, threatened against it, any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(g) It (i) is acting for its own account, (ii) has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, (iii) is not relying upon the advice or recommendations of the other Party in so doing, and (iv) is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions, and risks of this Agreement; and

(h) It has entered into this Agreement in connection with the conduct of its business and it has the capability or ability to make available or take delivery of, as applicable, the Product under this Agreement in accordance with the terms of this Agreement.

7.2. Additional Seller Representations, Warranties and Covenants

(a) On the Execution Date, Seller represents and warrants to Buyer that Seller has not used, granted, pledged, assigned, or otherwise committed any of the Monthly Quantity to meet the RAR, Local RAR and/or Flexible RAR, as applicable, or confer Resource Adequacy Benefits upon, any entity other than Buyer during the Delivery Period.

(b) Seller covenants that throughout the Delivery Period:

(i) Seller will deliver the Product to Buyer free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person;

(ii) Seller has been authorized by each Customer, to act as an aggregator on behalf of such Customer to participate as a PDR or RDRR in the DRAM Resource, if Seller is not also a Customer;

(iii) The DRP has been authorized by each Customer to act on behalf of such Customer to participate as a PDR or RDRR for the DRAM Resource, if Seller is not the DRP; and

(iv) Seller will not use, grant, pledge, assign, or otherwise commit any Product Monthly Quantity to meet the RAR, Local RAR, and/or Flexible RAR, as applicable, of, or confer Resource Adequacy Benefits of the Product upon, any entity other than Buyer during the Delivery Period;

(v) During each month of the Delivery Period, if any participating Customers in the DRAM Resource have a Prohibited Resource, Seller shall ensure that such Prohibited Resource is not used to reduce load during a Dispatch by any PDR or RDRR providing Product to Buyer during such month, as follows:

A. For all Residential Customers, Seller shall include a provision in its contract forbidding the use of Prohibited Resources to reduce load during a Dispatch by any PDR or RDRR providing Product to Buyer. Any customer that does not accept the prohibition will not be eligible to participate in the Seller's DRAM Resource.

B. ~~For all non-Residential Customers,~~ Seller shall require**, from each of its non-Residential Customers,** ~~that each Customer execute~~ an attestation **in a machine-readable format, such as a comma-separated value (.csv) file or other format acceptable to Buyer, attesting to one of the following conditions:** (1) ~~indicating whether it has~~ **the customer does not have** a Prohibited Resource on site; (2) ~~indicating that if it has~~ **the customer does have** a Prohibited Resource ~~it~~ **on site and** will not use the resource to reduce load during a Dispatch by any PDR or RDRR providing Product to Buyer; or, (3) ~~if applicable, certifying that~~ the Customer **does have a Prohibited Resource on site and** may have to use ~~a Prohibited Resource~~ **the resource** during Demand Response events for operational, health or safety reasons. **Each attestation must provide the number of unit(s) of Prohibited Resources on site and**~~, providing~~ the nameplate capacity of the Prohibited Resource **(or, if the Recruited Account has multiple Prohibited Resources, by the sum of the nameplate**

capacity values from all Prohibited Resources on site) (the "Default Adjustment Value"). ~~and agreeing~~ **Customers must agree** ~~and agreeing~~ to a default adjustment in which the amount of Product such Customer can provide is reduced by the ~~nameplate capacity of the Prohibited Resource (or, if the Customer has multiple Prohibited Resources, by the sum of the nameplate capacity values from all Prohibited Resources on the site)~~ **Default Adjustment Value,** regardless of whether the Prohibited Resource was actually used. **Customers must sign Form 14-980, Authorization for Participation in Aggregated Demand Response Programs Form, or a successor form provided by SCE. Customers with multiple service accounts enrolled through Seller may submit one attestation for all service accounts.**

C. Seller shall collect and store all such Customer attestations and make them available upon request, to the CPUC or to the Buyer, as directed by the CPUC. **Seller shall also collect and store supporting documentation, such as nameplate capacities for each resource under each attestation scenario, and make them available upon request to a Verification Administrator or the CPUC.**

D. For non-Residential Customers, the attestation shall occur at the time of enrollment and may be provided with an electronic signature. Any non-Residential customer that does not complete this component of the enrollment process will not be eligible to participate in Seller's DRAM Resource.

E. Seller shall include provisions in its contracts with Customers (i) requiring compliance with verification requests and facility access for Site visits as deemed necessary by the Verification Administrator; (ii) requiring the Recruited Account to provide the Verification Administrator with written operating manifest(s), date and time stamped photo(s) of the Prohibited Resource unit(s), load curtailment plan(s), single line diagram(s) permit copy(ies), or other information or documentation about their onsite Prohibited Resources; and (iii) allowing SCE or its contractor(s) to install monitoring equipment at the Sites for the purposes of verification of attestations.

F. Seller shall include additional and separate provisions near the beginning of its contracts with Customers explaining and implementing these restrictions specifying that Customer compliance will be subject to verification, indicating the consequences for noncompliance with the provision. All Contracts with non-Residential Customers shall indicate that the non-compliance consequences will be as set forth in this section. If the instance of non-compliance involves clerical or administrative errors, such as an inaccurate listing of a

Customer name or the nameplate value of a Prohibited Resource in an attestation, or a failure to include a Customer's Prohibited Resource on an attestation, provided in all cases that such Prohibited Resource is not used in violation of the terms of this Agreement (collectively, "Type One Non-Compliance"), Seller shall specify that Customers will have sixty days from receipt of notice to cure such Type-One Non-Compliance. If the instance of non-compliance involves either (a) the Customer **does not attest to the use of any Prohibited Resource(s) but is using** ~~attested to the "does not have" or "no-use" provisions of Prohibited Resource(s) but is verified to have used~~ a Prohibited Resource to reduce load during a demand response event; or (b), a Customer ~~intentionally~~ submits an invalid nameplate capacity value for the Prohibited Resource(s) **that is lower than the actual capacity value on the nameplate** (collectively "Type Two Non-Compliance"), then Customer will be removed from Seller's DR program as follows. If there is an instance of (a) an uncured Type One Non-Compliance, or (b) a Type Two Non-Compliance, the consequences will be removal from Seller's DR program and ineligibility to enroll in any DR program subject to the prohibited resource requirement in D.16-09-056 for twelve calendar months from the removal date (for a single instance of noncompliance), or three years from the removal date (for two or more instances of noncompliance).

G. Seller shall provide such documentation as may be reasonably necessary for Buyer to verify the accuracy of the attestations referenced in subsections B(1)–(3) above and Seller's compliance with and enforcement of this Section 7.2(b)(v). For all non-Residential Customers, (a) Sellers will provide **the** default adjustment values (DAVs) monthly (with Demonstrated Capacity information); and, (b) Sellers will ensure that bids in the wholesale market reflect portfolio amounts prior to de-rating. Seller shall comply with any Prohibited Resource audit verification plan that is developed in accordance with D. 16-09-056 and approved by the CPUC (the Plan). ~~For Customer contracts executed with Seller prior to the CPUC's adoption of the Plan, installation of additional interval metering will not be required for verification purposes.~~

H. **On an annual basis,** Seller shall provide to Buyer the language on the prohibition included in its respective residential customer contracts. Seller will develop metrics, targets and record keeping systems to assess the effectiveness of its Customer outreach and notification efforts required under this Section 7.2(b)(v), and will provide such materials to the CPUC upon Buyer's request.

I. Seller shall include provisions in its contracts with non-Residential Customers ~~providing that Customers may adjust their DAV, if (a) the~~

~~Customer's change in DAV results from a change in the operational status of a Prohibited Resource associated with the Customer's Service Account; and, (b) Seller has verified this change in operational status~~ **permitting updates to their attestations to (x) add, remove or modify an on-site Prohibited Resource; (y) change the status or use of a Prohibited Resource to reduce load during any Dispatch; or (z) change the Default Adjustment Value, but only if, in each case, the change is supported by documentation that confirms the operational change and can be verified by SCE or a Verification Administrator.**

(vi) If any respective PDR or RDRR is a Joint Resource, Seller shall ensure that: (x) the use of the Joint Resource does not result in Buyer making payment in respect of Demonstrated Capacity for a type of Product in excess of the total capacity of the Joint Resource, whether to Seller or any other party, regardless of whether payment is made under this Agreement, another agreement in the DRAM ~~IV~~ Pilot Program, any other demand resource agreement or program, or any combination thereof; (y) the use of the Joint Resource does not result in Buyer making payment more than once in respect of capacity relating to a particular customer registered in the Joint Resource, regardless of whether payment is made under this Agreement, another agreement in the DRAM ~~IV~~ Pilot Program, any other demand resource agreement or program, or any combination thereof; and (z) Seller has the right to access and provide to Buyer the records and data regarding any DRAM Resource Customer that is not designated by Seller under Section 1.6(d) as part of the amount to be used to show Demonstrated Capacity for a type of Product under this Agreement to permit Buyer to audit such Joint Resource under Section 1.6(g) to the same extent Buyer may audit PDRs or RDRRs that are not Joint Resources.

ARTICLE 8. NOTICES

8.1. Notices

Notices, requests, statements or payments from one Party to the other Party shall be made to the addresses and persons specified in Section 8.2. All Notices, requests, statements or payments from one Party to the other Party shall be made in writing and may be delivered by hand delivery, first class United States mail, overnight courier service, e-mail or facsimile. Notice from one Party to the other Party by e-mail or facsimile (where confirmation of successful transmission is received) shall be deemed to have been received on the day on which it was transmitted (unless transmitted after 5:00 p.m. at the place of receipt or on a day that is not a Business Day, in which case it shall be deemed received on the next Business Day). Notice from one Party to the other Party by hand delivery or overnight delivery shall be deemed to have been received when delivered. A Party may change its contact information by providing Notice of the same in accordance herewith.

8.2. Contact Information

For Buyer:

Billing Representative
Name]
Phone:
Facsimile:
Email:

Contract Representative
[Name]
Phone:
Facsimile:
Email:

Supply Plan Contact
[Name]
Phone:
Facsimile:
Email:

Settlements

[Name]
Phone:
Facsimile:
Email:

Other Buyer Contact Information

Wire Transfer

BNK:

ABA:

ACCT:

Credit and Collections

Attn:

Phone:

Facsimile:

Email:

Notices of Event of Default or Potential Event of Default to:
[Name]
Phone:
Facsimile:
Email:

For Seller:

Billing Representative
Name]
Phone:
Facsimile:
Email:

Contract Representative
[Name]
Phone:
Facsimile:
Email:

Supply Plan Contact
[Name]
Phone:
Facsimile:
Email:

Other Seller Contact Information

ACH

BNK:

ABA:

ACCT:

Credit and Collections

Attn:

Phone:

Facsimile:

Email:

Notices of Event of Default or Potential Event of Default to:
[Name]
Phone:
Facsimile:
Email:

The Parties acknowledge and agree that those persons set forth in this Section 8.2 are designated by each Party as their respective authorized representatives to act on their behalf for the purposes described therein.

ARTICLE 9. EVENTS OF DEFAULT; TERMINATION

9.1. Events of Default

An "Event of Default" shall mean, with respect to a Party ("Defaulting Party"), the occurrence of any of the following:

(a) With respect to either Party:

(i) The failure to make, when due, any payment required to be made to the other Party pursuant to this Agreement, if such failure is not remedied

within three (3) Business Days after written Notice of such failure is given by the Non-Defaulting Party;

(ii) Any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated if the representation or warranty is continuing in nature;

(iii) The failure to perform any material covenant, obligation, term or condition of this Agreement (except to the extent constituting a separate Event of Default), where such breach is not remedied within five (5) Business Days of Notice of such breach by the Non-Defaulting Party; provided that a single occurrence during the Delivery Period of Demonstrated Capacity for a type of Product being less than Product Monthly Quantity for such type of Product in a Showing Month shall not be a Seller Event of Default.

(iv) Such Party becomes Bankrupt; or

(v) A Merger Event occurs with respect to such Party.

(b) With respect to Seller:

(i) The failure of Seller to satisfy the collateral requirements set forth in Article 5;

(ii) During the Term, Seller makes any material misrepresentation or omission in any **Supply Plan or other** report required to be made or furnished by Seller, the Seller's DRP or the Seller's SC pursuant to this Agreement;

(iii) During the Delivery Period, Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, the Product, or any portion thereof, to any party other than Buyer without Buyer's written consent; or

(iv) Seller fails to comply with any of its covenants under Article 3 or Section 7.2, unless such failure to comply is cured within a period specifically provided elsewhere in this Agreement applicable to such failure to comply;

(v) During the Term, the occurrence and continuation of a default, event of default or other similar condition or event (however described) in respect of Seller under one or more agreements or instruments relating to indebtedness for borrowed money (whether present or future, contingent or otherwise), which results in such indebtedness for borrowed money (whether present or future, contingent or otherwise) becoming, or becoming capable at such time of being declared, immediately due and payable under such agreements or instruments, before it would otherwise have been due and payable, or a default by Seller in making one or more payments on the due date thereof in an aggregate amount of not less than

[To be determined] under such agreements or instruments (after giving effect to any applicable notice requirement or grace period).

(vi) During the Term, Seller fails to comply with the requirements of Section 7.2(b)(v), where such breach is not remedied within thirty (30) days of Notice of such breach by Buyer.

9.2. Early Termination

If an Event of Default shall have occurred, the Party taking the default (the "Non-Defaulting Party") has the right:

(a) To designate by Notice, which will be effective five (5) Business Days after the Notice is given, a day, no later than twenty (20) calendar days after the Notice is effective, for the early termination of this Agreement (an "Early Termination Date");

(b) Withhold any payments due to the Defaulting Party under this Agreement;

(c) Suspend performance of this Agreement, but excluding Seller's obligation to post and maintain Performance Assurance in accordance with Article 5; and

(d) To pursue all remedies available at law or in equity against the Defaulting Party (including monetary damages), except to the extent that such remedies are limited by the terms of this Agreement.

9.3. Termination Payment

(a) As soon as practicable after an Early Termination Date is declared, the Non-Defaulting Party shall provide Notice to the Defaulting Party of the amount of the Termination Payment. The Notice must include a written statement setting forth, in reasonable detail, the calculation of such Termination Payment including the Settlement Amount, together with appropriate supporting documentation.

(b) If the Termination Payment is positive, the Defaulting Party shall pay such amount to the Non-Defaulting Party within two (2) Business Days after the Notice is provided. If the Termination Payment is negative (i.e., the Non-Defaulting Party owes the Defaulting Party more than the Defaulting Party owes the Non-Defaulting Party), then the Settlement Amount shall be zero dollars ($0), and the Non-Defaulting Party shall only pay to the Defaulting Party, within thirty (30) days after the Notice is provided, any amounts owed by the Non-Defaulting Party to the Defaulting Party determined as of the Early Termination Date.

(c) If a Party disputes the other Party's calculation of the Termination Payment, in whole or in part, the disputing Party shall, within two (2) Business Days of receipt of the Party's calculation of the Termination Payment, provide to the other Party a detailed written explanation of the basis for such dispute. Any disputes as to the

calculation of the Termination Payment which the Parties are unable to resolve may be submitted to dispute resolution as provided in Article 10.

9.4. Reserved

9.5. Suspension of Performance

Notwithstanding any other provision of this Agreement, if (a) an Event of Default or (b) a Potential Event of Default shall have occurred and be continuing, the Non-Defaulting Party, upon Notice to the Defaulting Party, shall have the right (i) to suspend performance under this Agreement and (ii) to the extent an Event of Default shall have occurred and be continuing to exercise any remedy available at law or in equity.

9.6. Rights and Obligations Surviving Termination or Expiration

The rights and obligations that are intended to survive a termination or expiration of this Agreement are all of those rights and obligations that this Agreement expressly provides survive any such termination or expiration and those that arise from a Party's covenants, agreements, representations, and warranties applicable to, or to be performed, at or during any time before or as a result of the termination or expiration of this Agreement, including:

(a) A Party's obligation to provide information, including but not limited to Sections 3.3, 5.7, 6.2 and 6.4.

(b) A Party's obligations with respect to invoices and payments pursuant to this Agreement;

(c) The obligation of Seller to maintain Performance Assurance as set forth in Section 5.1;

(d) The obligation of Buyer to return any Performance Assurance under Section 5.3;

(e) The right to pursue remedies as set forth in Sections 9.2(d) and Article 10;

(f) The obligations with respect to a Termination Payment as set forth in Section 9.3;

(g) The dispute resolution provisions of Article 10;

(h) The indemnity obligations expressly set forth in this Agreement;

(i) The limitation of liabilities as set forth in Sections 3.5, 6.1 and Article 12; and

(j) The obligation of confidentiality as set forth in Article 13.

ARTICLE 10. DISPUTE RESOLUTION

10.1. Dispute Resolution

Other than requests for provisional relief under Section 10.4, any and all Disputes which the Parties have been unable to resolve by informal methods after undertaking a good faith effort to do so, must first be submitted to mediation under the procedures described in Section 10.2 below, and if the matter is not resolved through mediation, then for final and binding arbitration under the procedures described in Section 10.3 below.

The Parties waive any right to a jury and agree that there will be no interlocutory appellate relief (such as writs) available. Any Dispute resolution process pursuant to this Article 9 shall be commenced within one (1) year of the date of the occurrence of the facts giving rise to the Dispute, without regard to the date such facts are discovered; provided, if the facts giving rise to the Dispute were not reasonably capable of being discovered at the time of their occurrence, then such one (1) year period shall commence on the earliest date that such facts were reasonably capable of being discovered. If the Dispute resolution process pursuant to Article 10 with respect to a Dispute is not commenced within such one (1) year time period, such Dispute shall be barred, without regard to any other limitations period set forth by law or statute.

10.2. Mediation

Either Party may initiate mediation by providing Notice to the other Party of a written request for mediation, setting forth a description of the Dispute and the relief requested.

The Parties will cooperate with one another in selecting the mediator ("Mediator") from the panel of neutrals from Judicial Arbitration and Mediation Services, Inc. ("JAMS"), its successor, or any other mutually acceptable non-JAMS Mediator, and in scheduling the time and place of the mediation.

Such selection and scheduling will be completed within forty-five (45) days after Notice of the request for mediation.

Unless otherwise agreed to by the Parties, the mediation will not be scheduled for a date that is greater than one hundred twenty (120) days from the date of Notice of the request for mediation.

The Parties covenant that they will participate in the mediation in good faith, and that they will share equally in its costs (other than each Party's individual attorneys' fees and costs related to the Party's participation in the mediation, which fees and costs will be borne by such Party).

All offers, promises, conduct and statements, whether oral or written, made in connection with or during the mediation by either of the Parties, their agents, representatives, employees, experts and attorneys, and by the Mediator or any of the Mediator's agents, representatives and employees, will not be subject to discovery and will be confidential, privileged and inadmissible for any purpose, including impeachment, in any arbitration or

other proceeding between or involving the Parties, or either of them; provided, evidence that is otherwise admissible or discoverable will not be rendered inadmissible or non-discoverable as a result of its use in the mediation.

10.3. Arbitration

Either Party may initiate binding arbitration with respect to the matters first submitted to mediation by providing Notice in accordance with Article 7 of a demand for binding arbitration before a single, neutral arbitrator (the "Arbitrator") within sixty (60) days following the unsuccessful conclusion of the mediation provided for in Section 10.2, above. If Notice of arbitration is not provided by either Party within sixty (60) days following the unsuccessful conclusion of the mediation provided for in Section 10.2 above, the Dispute resolution process shall be deemed complete and further resolution of such Dispute shall be barred, without regard to any other limitations period set forth by law or statute.

The Parties will cooperate with one another in selecting the Arbitrator within sixty (60) days after Notice of the demand for arbitration and will further cooperate in scheduling the arbitration to commence no later than one hundred eighty (180) days from the date of Notice of the demand.

If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable Arbitrator, the Arbitrator will be appointed as provided for in California Code of Civil Procedure Section 1281.6.

To be qualified as an Arbitrator, each candidate must be a retired judge of a trial court of any state or federal court, or retired justice of any appellate or supreme court.

Unless otherwise agreed to by the Parties, the individual acting as the Mediator will be disqualified from serving as the Arbitrator in the dispute, although the Arbitrator may be another member of the JAMS panel of neutrals or such other panel of neutrals from which the Parties have agreed to select the Mediator.

Upon Notice of a Party's demand for binding arbitration, such Dispute submitted to arbitration, including the determination of the scope or applicability of this agreement to arbitrate, will be determined by binding arbitration before the Arbitrator, in accordance with the laws of the State of California, without regard to principles of conflicts of laws.

Except as provided for herein, the arbitration will be conducted by the Arbitrator in accordance with the rules and procedures for arbitration of complex business disputes for the organization with which the Arbitrator is associated.

Absent the existence of such rules and procedures, the arbitration will be conducted in accordance with the California Arbitration Act, California Code of Civil Procedure Section 1280 et seq. and California procedural law (including the Code of Civil Procedure, Civil Code, Evidence Code and Rules of Court, but excluding local rules).

Notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, the place of the arbitration will be in Los Angeles County, California.

Also notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, discovery will be limited as follows:

(a) Before discovery commences, the Parties shall exchange an initial disclosure of all documents and percipient witnesses which they intend to rely upon or use at any arbitration proceeding (except for documents and witnesses to be used solely for impeachment);

(b) The initial disclosure will occur within thirty (30) days after the initial conference with the Arbitrator or at such time as the Arbitrator may order;

(c) Discovery may commence at any time after the Parties' initial disclosure;

(d) The Parties will not be permitted to propound any interrogatories or requests for admissions;

(e) Discovery will be limited to twenty-five (25) document requests (with no subparts), three (3) lay witness depositions, and three (3) expert witness depositions (unless the Arbitrator holds otherwise following a showing by the Party seeking the additional documents or depositions that the documents or depositions are critical for a fair resolution of the Dispute or that a Party has improperly withheld documents);

(f) Each Party is allowed a maximum of three (3) expert witnesses, excluding rebuttal experts;

(g) Within sixty (60) days after the initial disclosure, or at such other time as the Arbitrator may order, the Parties shall exchange a list of all experts upon which they intend to rely at the arbitration proceeding;

(h) Within thirty (30) days after the initial expert disclosure, the Parties may designate a maximum of two (2) rebuttal experts;

(i) Unless the Parties agree otherwise, all direct testimony will be in form of affidavits or declarations under penalty of perjury; and

(j) Each Party shall make available for cross examination at the arbitration hearing its witnesses whose direct testimony has been so submitted.

Subject to Article 11, the Arbitrator will have the authority to grant any form of equitable or legal relief a Party might recover in a court action. The Parties acknowledge and agree that irreparable damage would occur if certain provisions of this Agreement are not performed in accordance with the terms of the Agreement, that money damages would not

be a sufficient remedy for any breach of these provisions of this Agreement, and that the Parties shall be entitled, without the requirement of posting a bond or other security, to specific performance and injunctive or other equitable relief as a remedy for a breach of Article 13.

Judgment on the award may be entered in any court having jurisdiction.

The Arbitrator must, in any award, allocate all of the costs of the binding arbitration (other than each Party's individual attorneys' fees and costs related to the Party's participation in the arbitration, which fees and costs will be borne by such Party), including the fees of the Arbitrator and any expert witnesses, against the Party who did not prevail.

Until such award is made, however, the Parties will share equally in paying the costs of the arbitration.

At the conclusion of the arbitration hearing, the Arbitrator shall prepare in writing and provide to each Party a decision setting forth factual findings, legal analysis, and the reasons on which the Arbitrator's decision is based. The Arbitrator shall also have the authority to resolve claims or issues in advance of the arbitration hearing that would be appropriate for a California superior court judge to resolve in advance of trial. The Arbitrator shall not have the power to commit errors of law or fact, or to commit any abuse of discretion, that would constitute reversible error had the decision been rendered by a California superior court. The Arbitrator's decision may be vacated or corrected on appeal to a California court of competent jurisdiction for such error. Unless otherwise agreed to by the Parties, all proceedings before the Arbitrator shall be reported and transcribed by a certified court reporter, with each Party bearing one-half of the court reporter's fees.

10.4. Provisional Relief

The Parties acknowledge and agree that irreparable damage would occur if certain provisions of this Agreement are not performed in accordance with the terms of this Agreement, that money damages would not be a sufficient remedy for any breach of these provisions of this Agreement, and that the Parties shall be entitled, without the requirement of posting a bond or other security, to seek a preliminary injunction, temporary restraining order, or other provisional relief as a remedy for a breach of Article 13 in any court of competent jurisdiction, notwithstanding the obligation to submit all other Disputes (including all claims for monetary damages under this Agreement) to arbitration pursuant to this Article 10. The Parties further acknowledge and agree that the results of the arbitration may be rendered ineffectual without the provisional relief.

Such a request for provisional relief does not waive a Party's right to seek other remedies for the breach of the provisions specified above in accordance with Article 10, notwithstanding any prohibition against claim-splitting or other similar doctrine. The other remedies that may be sought include specific performance and injunctive or other equitable relief, plus any other remedy specified in this Agreement for the breach of the provision, or if the Agreement does not specify a remedy for the breach, all other remedies available at law or equity to the Parties for the breach.

ARTICLE 11. INDEMNIFICATION

11.1. Seller's Indemnification Obligations

(a) In addition to any other indemnification obligations Seller may have elsewhere in this Agreement, which are hereby incorporated in this Section 11.1, Seller releases, and shall indemnify, defend and hold harmless Buyer, and Buyer's directors, officers, employees, agents, assigns, and successors in interest, from and against any and all loss, liability, damage, claim, cost, charge, demand, penalty, fine or expense of any kind or nature (including any direct, damage, claim, cost, charge, demand, or expense, and attorneys' fees (including cost of in-house counsel) and other costs of litigation, arbitration or mediation, and in the case of third-party claims only, indirect or consequential loss or damage of such third-party), arising out of or in connection with:

(i) any breach made by Seller of its representations, warranties and covenants in Article 7 or any payment disputes resulting from the use of a Joint Resource;

(ii) Seller's failure to fulfill its obligations regarding Resource Adequacy Benefits as set forth in Article 3;

(iii) any violation of Applicable Law**, the CAISO Tariff, or market rules** arising out of or in connection with Seller's performance of, or failure to perform this Agreement;

(iv) injury or death to persons, including Buyer employees, and physical damage to property, including Buyer property, where the damage arises out of, is related to, or is in connection with, Seller's obligations or performance under this Agreement.

This indemnity applies notwithstanding Buyer's active or passive negligence; *provided*, Buyer will not be indemnified for its loss, liability, damage, claim, cost, charge, demand or expense to the extent caused by its gross negligence or willful misconduct.

11.2. Indemnification Claims

All claims for indemnification by Buyer will be asserted and resolved as follows:

If a claim or demand for which Buyer may claim indemnity is asserted against or sought to be collected from Seller by a third party, Buyer shall as promptly as practicable give Notice to Seller; *provided*, failure to provide this Notice will relieve Seller only to the extent that the failure actually prejudices Seller.

(a) Seller will have the right to control the defense and settlement of any claims in a manner not adverse to Buyer but cannot admit any liability or enter into any settlement without Buyer's approval.

(b) Buyer may employ counsel at its own expense with respect to any claims or demands asserted or sought to be collected against it; *provided*, if counsel is employed due to a conflict of interest or because Seller does not assume control of the defense, Seller will bear the expense of this counsel.

ARTICLE 12. LIMITATION OF REMEDIES, LIABILITY, AND DAMAGES

EXCEPT AS SET FORTH HEREIN WITH RESPECT TO THE PRODUCT, THERE ARE NO WARRANTIES BY EITHER PARTY UNDER THIS AGREEMENT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF.

FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY WILL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE.

SUBJECT TO SECTION 9.3, IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY WILL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED.

UNLESS EXPRESSLY PROVIDED IN THIS AGREEMENT, INCLUDING WITHOUT LIMITATION THE PROVISIONS OF ARTICLE 11 (INDEMNITY), NEITHER PARTY WILL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE.

IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE

REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

NOTHING IN THIS ARTICLE PREVENTS, OR IS INTENDED TO PREVENT BUYER FROM PROCEEDING AGAINST OR EXERCISING ITS RIGHTS WITH RESPECT TO ANY PERFORMANCE ASSURANCE.

ARTICLE 13. CONFIDENTIALITY

13.1. Confidentiality Obligation

Neither Party shall disclose the terms or conditions of this Agreement to a third party (other than the Party's or the Party's Affiliates' officers, directors, employees, lenders, counsel, accountants, advisors, or Rating Agencies, who have a need to know such information and have agreed to keep such terms confidential) except (a) in order to comply with any Applicable Law, summons, subpoena, exchange rule, or accounting disclosure rule or standard, or to make any showing required by any applicable Governmental Body other than as set forth in Sections 13.1(e) and (f); (b) to the extent necessary for the enforcement of this Agreement; (c) as may be obtained from a non-confidential source that disclosed such information in a manner that did not violate its obligations to the non-disclosing Party in making such disclosure; (d) to the extent such information is or becomes generally available to the public prior to such disclosure by a Party; (e) when required to be released in connection with any regulatory proceeding (provided that the releasing Party makes reasonable efforts to obtain confidential treatment of the information being released); (f) with respect to Buyer, as may be furnished to its duly authorized Governmental Bodies, including without limitation the Commission and all divisions thereof, to Buyer's Procurement Review Group, a group of participants including members of the Commission and other governmental agencies and consumer groups established by the Commission in Commission decisions 02-08-071 and 03-06-071, and to Buyer's Cost Allocation Mechanism Group established by the CPUC in D.07-12-052, or (g) Seller may disclose the transfer of the Monthly Quantity under this Agreement to its SC in order for such SC to timely submit accurate Supply Plans. The existence of this Agreement is not subject to this confidentiality obligation; *provided*, neither Party shall make any public announcement relating to this Agreement unless required pursuant to subsection (a) or (e) of the foregoing sentence of this Article 13.

13.2. Obligation to Notify

In connection with discovery requests or orders pertaining confidential information in connection with this Agreement as referenced in Section 13.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to:

(a) Notify the other Party before disclosing the Confidential Information; and

(b) Prevent or limit such disclosure.

After using such reasonable efforts, the Disclosing Party will not be:

(c) Prohibited from complying with a Disclosure Order; or

(d) Liable to the other Party for monetary or other damages incurred in connection with the disclosure of the Confidential Information.

13.3. Remedies; Survival

The Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation. With respect to information provided in connection with this Agreement, this obligation shall survive for a period of three (3) years following the expiration or termination of this Agreement.

ARTICLE 14. FORCE MAJEURE

To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement and such Party (the "Claiming Party") gives notice and details of the Force Majeure to the other Party as soon as practicable, then, unless the terms of the Product specify otherwise, the Claiming Party shall be excused from the performance of its obligations with respect to this Agreement (other than the obligation to make payments then due or becoming due with respect to performance prior to the Force Majeure). The Claiming Party shall remedy the Force Majeure with all reasonable dispatch. The non-Claiming Party shall not be required to perform or resume performance of its obligations to the Claiming Party corresponding to the obligations of the Claiming Party excused by Force Majeure.

ARTICLE 15. MISCELLANEOUS

15.1. General

(a) This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.

(b) The term "including," when used in this Agreement, shall be by way of example only and shall not be considered in any way to be in limitation.

(c) The headings used herein are for convenience and reference purposes only.

(d) Each Party agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement.

(e) Words having well-known technical or industry meanings have these meanings unless otherwise specifically defined in this Agreement.

(f) Whenever this Agreement specifically refers to any Applicable Law, tariff, government department or agency, or Rating Agency, the Parties hereby agree that the reference also refers to any successor to such law, tariff or organization.

(g) Nothing in this Agreement relieves either Party from, or modifies, any obligation or requirement that exists in any Applicable Law, tariff, rule, or regulation.

(h) The Parties acknowledge and agree that this Agreement and the transactions contemplated by this Agreement constitute a "forward contract" within the meaning of the Bankruptcy Code and that Buyer and Seller are each "forward contract merchants" within the meaning of the Bankruptcy Code.

15.2. Governing Law and Venue

THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS. EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY DISPUTE ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

15.3. Amendment

This Agreement can only be amended by a writing signed by both Parties.

15.4. Assignment

Neither Party shall assign this Agreement or its rights hereunder, as the case may be, without the prior written consent of the other Party, which consent may not be unreasonably withheld; *provided*, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), (i) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof or thereof, as the case may be, in connection with any financing or other financial arrangements to any person or entity whose creditworthiness is equal to or higher than that of such Party, (ii) transfer or assign this Agreement to an Affiliate of such Party which Affiliate's creditworthiness is equal to or higher than that of such Party, or (iii) transfer or assign this Agreement to any person or entity succeeding to all or substantially all of the assets of such Party and whose creditworthiness is equal to or higher than that of such Party; *provided*, in each such case, any such assignee shall agree in writing to be bound by the terms and conditions hereof and so long as the transferring Party delivers such tax and enforceability assurance as the non-transferring Party may reasonably request.

15.5. Successors and Assigns

This Agreement shall be binding upon and inure to the benefit of, the Parties and their respective successors and assigns. This Agreement is not intended to confer any rights or remedies upon any other persons other than the Parties.

15.6. Waiver

None of the provisions of this Agreement shall be considered waived by either Party unless the Party against whom such waiver is claimed gives the waiver in writing. The failure of either Party to insist in any one instance upon strict performance of any the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishments of such rights for the future but the same shall continue and remain in full force and effect. Waiver by either Party of any default of the other Party shall not be deemed a waiver of any other default.

15.7. No Agency

Except as otherwise provided explicitly herein, in performing their respective obligations under this Agreement, neither Party is acting, or is authorized to act, as the other Party's agent.

15.8. No Third-Party Beneficiaries

This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound by this Agreement).

15.9. Entire Agreement

This Agreement, when fully executed, constitutes the entire agreement by and between the Parties as to the subject matter hereof, and supersedes all prior understandings, agreements or representations by or between the Parties, written or oral, to the extent they have related in any way to the subject matter hereof. Each Party represents that, in entering into this Agreement, it has not relied upon any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.

15.10. Severability

If any term, section, provision or other part of this Agreement, or the application of any term, section, provision or other part of this Agreement, is held to be invalid, illegal or void by a court or regulatory agency of proper jurisdiction, all other terms, sections, provisions or other parts of this Agreement shall not be affected thereby but shall remain in force and effect unless a court or regulatory agency holds that the provisions are not separable from all other provisions of this Agreement.

15.11. Multiple Originals

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any of the signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto by having attached to it one or more signature pages.

15.12. Mobile Sierra

Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to the FERC pursuant to the provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior written agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party, or the FERC acting *sua sponte* shall be the "public interest" standard of review set forth in *United States Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956)*.

15.13. Performance Under this Agreement

Each Party and its representatives shall maintain records and supporting documentation relating to this Agreement, and the performance of the Parties hereunder in accordance with, and for the applicable time periods required by, all Applicable Laws.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the Execution Date.

SOUTHERN CALIFORNIA EDISON COMPANY, a California corporation	[SELLER]
By:_____	By:_____
Name:_____	Name:_____
Title:_____	Title:_____
Date:_____	Date:_____

EXHIBIT A

DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth below:

"Affiliate" means, with respect to a Party, any entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with that Party. For this purpose, "control" of any entity or person means ownership of a majority of the voting power of the entity or person.

"Agreement" has~~t~~ the meaning in the Preamble.

"Applicable Laws" means all constitutions, treaties, laws, ordinances, rules, regulations, interpretations, permits, judgments, decrees, injunctions, writs and orders of any Governmental Body that apply to either or both of the Parties, the DRP, the PDR or the terms of this Agreement.

"Arbitrator" has the meaning set forth in Article 10.

"Audit Notice" has the meaning set forth in Section 1.6(g).

"Automated Demand Response" or "ADR" is Buyer's demand response program offering Customers an incentive to install automated communication equipment and associated software that enhances their ability to reduce load during Buyer's demand response program events. For purposes ADR, Seller's participation in the CAISO Markets pursuant to this Agreement is a Buyer demand response program, pursuant to the September 24, 2015 disposition letter from Commission staff. The CPUC approved the ADR programs by Decision 12-04-045 and Decision 14-05-025.

"Automated Demand Response Customer" or "ADR Customer" is a Non-Residential Customer that has installed the ADR equipment under Buyer's ADR **program** and received, at minimum, approval from Buyer that it has been approved for its first (60%) incentive payment.

"Award" has the meaning set forth in Section 6.6(a).

"Bankrupt" means with respect to any entity, such entity (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

"Bankruptcy Code" means the United States Bankruptcy Code (11 U.S.C. §101 *et seq*.), as amended, and any successor statute.

"Big Creek/Ventura LCA Substations" means the following substations located in the CAISO area: ACTON SC, ANAVERDE, BIG CRK1, DEL SUR, FRAZPARK, GOLETA, GORMAN, GREATLKS, HELIJET, LANCSTR, LANPRI, LITTLERK, MOORPARK, NEENACH, OASIS SC, OSO, PALMDALE, PIUTE, PSTRIA, PURIFY, QUARTZHL, RECTOR, REDMAN, RITE AID, RITTER, ROCKAIR, ROSAMOND, S.CLARA, SAUGUS, SHUTTLE, SPRINGVL, TORTOISE, VESTAL, WESTPAC, and WILSONA.

"Bid" shall have the meaning in the CAISO Tariff.

"Bundled Service Customer" means a customer of Buyer as a utility distribution company who takes bundled services from Buyer as a utility distribution company including having all its power requirements purchased by Buyer.

"Business Day" means a day that is not a Saturday, Sunday, a Federal Reserve Bank holiday, or the Friday immediately following the U.S. Thanksgiving holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

"Buyer" has the meaning set forth in the preamble.

"CAISO" means the California Independent System Operator or any successor entity performing the same functions.

"CAISO Markets" has the meaning set forth in the CAISO Tariff.

"CAISO Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended or supplemented from time to time, of the CAISO.

"Capacity Baseline" means the CAISO baseline as applicable to the PDR(s) or RDRR(s) in the DRAM Resource, as specified in the CAISO Tariff.

"Capacity Procurement Mechanism" has the meaning set forth in the CAISO Tariff.

"Cash" means U.S. Dollars held by or on behalf of Buyer as Performance Assurance hereunder.

"Cash Interest Rate" means the Federal Funds Effective Rate - the rate for that day opposite the caption "Federal Funds (Effective)" as set forth in the weekly statistical release designated as H.15 (519), or any successor publication, published by the Board of Governors of the Federal Reserve System.

"Claiming Party" has the meaning set forth in Article 14.

"Commission" or "CPUC" means the California Public Utilities Commission, and all divisions thereof, or any successor thereto.

"Compliance Showings" means the (i) RAR compliance or advisory showings (or similar or successor showings), in each case, an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, to the CAISO pursuant to the CAISO Tariff, or to any Governmental Body having jurisdiction.

"Contract Price" means the price for each type of Product as specified in Exhibit E for each Showing Month.

"CPM Capacity" has the meaning set forth in the Tariff.

"CPUC Approval" means a decision of the CPUC that (i) is final and no longer subject to appeal, which approves the Agreement in full and in the form presented on terms and conditions acceptable to both Parties, including without limitation terms and conditions related to cost recovery and cost allocation of amounts paid to Seller under the Agreement; (ii) does not contain conditions or modifications unacceptable to both Parties; and (iii) finds that any procurement pursuant to this Agreement satisfies the requirement to procure preferred resources under Commission Decision 13-02-015.

"CPUC Decisions" means Commission Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-031, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 09-12-053, 10-06-036, 10-12-038, 11-06-022, 11-10-003, 12-06-025, 13-02-006, 13-04-013, 13-06-024, 14-03-026, 14-06-050, 14-12-024, 15-02-007, 15-06-063, and any other existing or subsequent decisions, resolutions, or rulings related to resource adequacy, including, without limitation, the CPUC Filing Guide, in each case as may be amended from time to time by the CPUC.

"CPUC Filing Guide" is the 2017 annual document issued by the Commission which sets forth the guidelines, requirements and instructions for LSE's to demonstrate compliance with the Commission's resource adequacy program.

"Credit Rating" means, with respect to any entity, the rating then assigned to such entity's unsecured, senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its senior unsecured long-term debt, then the rating then assigned to such entity as an issuer rating by the Ratings Agencies.

"Customer" means a person or entity that is either a: (i) Bundled Service Customer; (ii) community choice aggregation customer or direct access customer who would otherwise be eligible to be a Bundled Service Customer; or (iii) Unbundled Service Customer.

"Customer Data Access Systems" has the meaning described in CPUC Decision 13-09-025.

"Day-Ahead Market" has the meaning set forth in the CAISO Tariff.

"Day-Ahead Schedule" has the meaning set forth in the CAISO Tariff.

"Defaulting Party" has the meaning set forth in Section 9.1.

"Delivered Capacity Payment" has the meaning described in and is calculated pursuant to Section 4.1.

"Delivery Period" has the meaning set forth in Section 1.3.

"Demand Response Provider" or "DRP" has the meaning in the CAISO Tariff.

"Demonstrated Capacity" has the meaning set forth in Section 1.6(a).

"Dispatch" means the act of reducing all or a portion of the electrical consumption of the PDR pursuant to a Dispatch Instruction.

"Dispatch Instruction" has the meaning in the CAISO Tariff.

"Dispute" means any and all disputes, claims or controversies arising out of, relating to, concerning or pertaining to the terms of this Agreement, or to either Party's performance or failure of performance under this Agreement.

"Distributed Energy Resource Aggregation" has the meaning in the CAISO Tariff.

"Diverse Business Enterprises" or "DBE" means Women, Minority, Disabled Veteran (WMDV) and Lesbian, Gay, Bisexual and Transgender (LGBT) Business Enterprises as defined in CPUC General Order 156.

"DRAM ~~[IV]~~ Pilot Program" means the program during ~~2019~~ ***[year]*** for the Product as described in CPUC D.14-12-024 and D.17-10-017.

"DRAM Resource" means the PDR(s) or RDRR(s) that Seller identifies pursuant to Section 1.4 that will provide Product to Buyer.

"DRAM Resource Customer" is a Bundled Service Customer and/or Unbundled Service Customer account at the Service Account Identification level that is included in the DRAM Resource.

"Early Termination Date" has the meaning set forth in Section 9.2(a).

"EFC" shall mean Effective Flexible Capacity as defined in the CAISO Tariff.

"Event of Default" has the meaning set forth in Section 9.1.

"Execution Date" has the meaning set forth in the preamble.

"FERC" means the Federal Energy Regulatory Commission, or any division thereof.

"Financial Consolidation Requirement" has the meaning set forth in Section 5.7(a).

"Fitch" means Fitch Ratings Ltd. or its successor.

"Flexible Capacity" means any and all flexible resource adequacy attributes associated with the PDR(s) or RDRRs designated by Seller pursuant to Section 1.4, as such attributes may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction, that can be counted toward Flexible RAR, and which may be (i) exclusive of Local

Capacity and (ii) be in Flexible Category 1 (base flexibility), 2 (peak flexibility) or 3 (super-peak flexibility) as described in the CAISO Tariff.

"Flexible RAR" means the flexible resource adequacy requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body having jurisdiction.

"Force Majeure" means an event or circumstance which prevents one Party from performing its obligations under this Agreement, which event or circumstance was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of Buyer's markets; (ii) Buyer's inability economically to use or resell the Product purchased hereunder; (iii) the loss or failure of Seller's supply; (iv) Seller's ability to sell the Product at a greater price; (v) a failure of performance of any other entity that is not a Party, except to the extent that such failure was caused by an event that would otherwise qualify as a Force Majeure event; or (vi) breakage or malfunction of equipment, except to the extent that such failure was caused by an event that would otherwise qualify as a Force Majeure event.

"Full Dispatch" means a dispatch of a PDR or RDRR of the DRAM Resource in the CAISO market for 100% of the associated monthly capacity, as submitted in a Seller's Supply Plan for that Showing Month.

"GAAP" means United States generally accepted accounting principles as in effect from time to time, consistently applied.

"Governmental Body" means any federal, state, local, municipal or other government; any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and any court or governmental tribunal.

"IFRS" means the International Financial Reporting Standards.

"Interest Amount" means with respect to a Party and an Interest Period, the sum of the daily interest amounts for all days in such Interest Period; each daily interest amount to be determined by such Party as follows: (i) the amount of Cash held by such Party on that day; multiplied by (ii) the Cash Interest Rate for that day, divided by (iii) 360.

"Interest Period" means the period from (and including) the last Business Day on which an Interest Amount was Transferred by a Party (or if no Interest Amount has yet been Transferred by such Party, the Business Day on which Cash was Transferred to such Party) to (but excluding) the Business Day on which the current Interest Amount is to be Transferred.

"JAMS" has the meaning set forth in Article 10.

"Joint Resource" means respectively a PDR or RDRR which includes DRAM Resource Customers registered by the Seller (or its DRP) and other customers registered by another aggregator (or its DRP) who are not considered part of the respective PDR or RDRR for purposes of meeting Seller's obligations under this Agreement.

"LA Basin LCA Substations" means the following substations located in the CAISO area: ALMITOSW, AMERON, BANNING, BARRE, BOTTLE, CABAZON, CARODEAN, CENTER, CHEVMAIN, CHINO, CONCHO, DELAMO, DEVERS, EAGLROCK, EISENHOW, EL CASCO, EL NIDO, ELLIS, ETIWANDA, FARREL, GARNET, GOODRICH, GOULD, HI DESER, HINSON, IEEC-G1, IEEC-G2, INDIAN W, JOHANNA, LA FRESA, LAGUBELL, LCIENEGA, LITEHIPE, LTHRNECK, LWIS ANM, MARASCHI, MESA CAL, MIRALOMA, OLINDA, PADUA, RIOHONDO, SANBRDNO, SANTA RO, SANTIAGO, SONG2XR1, SONG2XR2, SONG2XU1, SONG2XU2, SONG3XR1, SONG3XR2, SONG3XU1, SONG3XU2, TAMARISK, THORNHIL, VALLEY-S, VALLEYSC, VIEJO66, VILLA PK, VSTA, WALNUT, WINTEC8, WINTECX1, WINTECX2, YUCCA, and ZANJA.

"LCA Customers" means a Customer that either (i) directly takes or receives electricity services from Buyer's LCA or (ii) directly takes or receives electricity services from a lower voltage substation that electrically connects to Buyer's LCA.

"Letter of Credit" means an irrevocable, nontransferable standby letter of credit, substantially in the form of Exhibit B and acceptable to Buyer, provided by Seller from an issuer acceptable to Buyer that is either a U.S. financial institution or a U.S. commercial bank or a U.S. branch of a foreign bank with such financial institution or the bank (i) having a Credit Rating of at least (a) Credit Ratings of at least "A-" by S&P, "A-" by Fitch and "A3" by Moody's, if such entity is rated by the Ratings Agencies; (b) if such entity is rated by only two of the three Ratings Agencies, a Credit Rating from two of the three Ratings Agencies of at least "A-" by S&P, if such entity is rated by S&P, "A-" by Fitch, if such entity is rated by Fitch, and "A3" by Moody's, if such entity is rated by Moody's; or (c) a Credit Rating of at least "A-" by S&P or "A3" by Moody's, or "A-" by Fitch if such entity is rated by only one Ratings Agency; and (ii) having shareholder equity (determined in accordance with generally accepted accounting principles) of at least $1,000,000,000.00 (ONE BILLION AND 00/100 DOLLARS). Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

"Letter of Credit Default" means with respect to a Letter of Credit, the occurrence of any of the following events: (i) the issuer of such Letter of Credit shall fail to maintain a Credit Rating of at least (A) "A-" by S&P, "A-" by Fitch, and "A3" by Moody's, if such issuer is rated by the Ratings Agencies, (B)"A-" by S&P, "A-" by Fitch or "A3" by Moody's if such issuer is rated by only two of the Ratings Agencies, or (C) "A-" by S&P, "A-" by Fitch, or "A3" by Moody's, if such issuer is rated by only one Ratings Agency; (ii) the issuer of the Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit; (iii) the issuer of such Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit; (iv) such Letter of Credit shall expire or terminate, or shall fail or cease to be in full force and effect at any time during the Term of the Agreement, in any such case without replacement; or (v) the issuer of such Letter of Credit shall become Bankrupt; *provided*, no Letter of Credit Default shall occur or be continuing in any event with respect to a Letter of Credit after the time such Letter of Credit is required to be canceled or returned to a Party in accordance with the terms of this Agreement.

"Local Capacity" means any and all resource adequacy attributes or other locational attributes associated with the PDR(s) or RDRRs designated by Seller and comprised of LCA Customers

pursuant to Section 1.4, from a Local Capacity Resource (as defined in CAISO Tariff) in Buyer's Local Capacity Area, as applicable and as such attributes may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction, that can be counted toward Local RAR, which may be exclusive of any Flexible Capacity, as applicable to the Product.

"Local Capacity Area" or "LCA" means the areas where LCA Customers are electrically interconnected to any of the LA Basin LCA Substations and/or the Big Creek/Ventura LCA Substations.

"Local RAR" means the local resource adequacy requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body having jurisdiction. Local RAR may also be known as local area reliability, local resource adequacy, local resource adequacy procurement requirements, or local capacity requirement in other regulatory proceedings or legislative actions.

"LSE" means load-serving entity.

"Mediator" has the meaning set forth in Section 10.2.

"Merger Event" means, with respect to a Party, that such Party consolidates or amalgamates with, merges into or with, or transfers substantially all its assets to another entity and (i) the resulting entity fails to assume all the obligations of such Party hereunder, or (ii) the resulting entity's creditworthiness is materially weaker than that of such Party immediately prior to such action. The creditworthiness of the resulting entity shall not be deemed to be 'materially weaker' so long as the resulting entity maintains a Credit Rating of at least that of the applicable Party, as the case may be, immediately prior to the consolidation, merger or transfer.

"Monthly Quantity" means the aggregate amount of all Product Monthly Quantities set forth in Exhibit E that Seller has agreed to provide to Buyer from the DRAM Resource for each day of the respective Showing Months for the respective types of Product.

"Moody's" means Moody's Investor Services, Inc. or its successor.

"Must-Offer Obligation" or "MOO" means Seller's obligation to Bid or cause Seller's SC to Bid the DRAM Resource into the CAISO Markets based on the type of Product and in accordance with the CAISO Tariff.

"NQC" shall mean Net Qualifying Capacity as defined in the CAISO Tariff.

"Notification Time" means the 10:00 a.m. Pacific Prevailing Time on a Business Day.

"Non-Competitive Behavior" means bidding behavior providing clear evidence of market manipulation or collusion.

"Non-Defaulting Party" has the meaning set forth in Section 9.2.

"Notice" means notices, requests, statements or payments provided in accordance with Article 8.

"Performance Assurance" has the meaning set forth in Section 5.1(a). Performance Assurance must be in the form of Cash or Letter of Credit. Any Cash received and held by Buyer after drawing on any Letter of Credit will constitute Performance Assurance in the form of Cash.

"Potential Event of Default" means an event which, with Notice or passage of time or both, would constitute an Event of Default.

"Procurement Review Group" has the meaning set forth in Article 13.

"Product" means either System Capacity (PDR or RDRR), Local Capacity (PDR or RDRR) and/or Flexible Capacity (PDR). The particular type of Product sold by Seller to Buyer under this Agreement is specified in Table 1.1(b). Buyer and Seller will have separate contracts for separate products and will combine multiple awards of the same product into one contract at a weighted average price.

"Prohibited Resource" means a technology using diesel, natural gas, gasoline, propane, or liquefied petroleum gas, in topping cycle Combined Heat and Power (CHP) or non-CHP configuration. The following resources are exempt: pressure reduction turbines and waste-heat-to-power bottoming cycle CHP, ~~as well as storage and storage coupled with renewable generation that meet the relevant greenhouse gas emissions standards adopted for the Self Generation Incentive Program~~ **resources powered by fuel (e.g., renewable gas, renewable diesel, or biodiesel) that has received renewable certification from the California Air Resources Board, as well as energy storage resources not coupled with fossil fueled resources.**

"Proxy Demand Resource" or "PDR" has the meaning in the CAISO Tariff.

"Product Monthly Quantity" means the respective amount of each type of Product set forth in Exhibit E that Seller has agreed to provide to Buyer from the DRAM Resource for each day of the respective Showing Months.

"RAR" means the resource adequacy requirements established for LSEs by the Commission pursuant to the CPUC Decisions, the CAISO pursuant to the CAISO Tariff, or by any other Governmental Body having jurisdiction, or successor program requirements.

"Ratings Agency" means any of S&P, Moody's, and Fitch (collectively the 'Ratings Agencies').

"Reliability Demand Response Resource" or "RDRR" has the meaning in the CAISO Tariff.

"Resource Adequacy Benefits" has the meaning in the CPUC Decisions.

"Resource ID" has the meaning in the CAISO Tariff.

"Residential Customer" means a DRAM Resource Customer which is a Single Family or Multi-Family Dwelling customer on a Domestic rate, including RV Parks, Residential Hotels, and Mobile Home Parks and includes electric vehicle charging for customers on Domestic Rate if separately metered, as such capitalized terms are defined in Rule 1.

"Residential Customer Product" means Product that is comprised solely of Residential Customers and Small Commercial Customers; *provided* that the percentage of Residential Customers in the PDR(s) constituting the DRAM Resource is equal to or greater than ninety percent (90%). Where multiple PDRs, or portions thereof, are used to meet Seller's Demonstrated Capacity obligations, the percentage requirements apply in the aggregate, based on the total number of PDR Customer service accounts in the DRAM Resource used to show Demonstrated Capacity.

"Revenue Quality Meter Data" means Interval Meter Data that has been validated, edited, and estimated in accordance with the Direct Access Standards for Metering and Meter Data as described in Rule 22.

"Rule 24" means Direct Participation Demand Response: https://www.sce.com/NR/sc3/tm2/pdf/Rule_24.pdf.

"S&P" means Standard & Poor's Financial Services LLC, or its successor.

"SAID" or "Service Account Identification" means a Buyer specific identifier or number for tracking energy service deliveries for a specific load through one or more meters at a customer premises or location as described in Rule 1.

"Scheduling Coordinator" or "SC" has the meaning set forth in the CAISO Tariff.

"Seller" has the meaning set forth in the preamble.

"Settlement Amount" means the sum of the estimated Delivered Capacity Payments for all of the remaining months of the Delivery Period, including the current month if not invoiced pursuant to Section 4.2, as of the Early Termination Date, with such estimated Delivered Capacity Payments being based on the sum of the applicable Product Monthly Quantity times the applicable Contract Price for each type of Product.

"Shortfall Capacity" means the amount of capacity with respect to the Product Monthly Quantity for a type of Product for any portion of a Showing Month which was shown by Buyer in its Compliance Showing that CAISO determines requires outage replacement in accordance with Section 40.7 of the CAISO Tariff.

"Showing Month" shall be each day of each calendar month of the Delivery Period that is the subject of the Compliance Showing, as set forth in the CPUC Decisions and outlined in the CAISO Tariff. For illustrative purposes only, pursuant to the CAISO Tariff and CPUC Decisions in effect as of the Execution Date, the monthly Compliance Showing made in June is for the Showing Month of August.

"Small Commercial Customer" means a DRAM Resource Customer which is a non-residential customers with monthly maximum demand of 20 kW or less, including agricultural/pumping customers (PA-1, PA-2, TOU-PA-2 rates) and TOU-EV3, service to electric charging facilities with monthly maximum demand of 20 kW or less. Excludes customers on rate schedules for fixed usage and unmetered service (Schedules LS-1, LS-2, OL-1, TC-1, Wi-Fi-1, and WTR).

"Successor" means any successor accounting practices to GAAP or IFRS.

"Supply Plan' has the meaning set forth in the CAISO Tariff.

"System Capacity" means system Resource Adequacy Benefits associated with the PDR(s) or RDRRs designated by Seller pursuant to Section 1.4, as such attributes may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction, that can be counted toward RAR, which may be exclusive of any Local Capacity and Flexible Capacity as indicated on Table 1.1(b).

"Term" has the meaning set forth in Section 1.2.

"Termination Payment" means the sum of all amounts owed by the Defaulting Party to the Non-Defaulting Party under this Agreement, which shall include the Settlement Amount, less any amounts owed by the Non-Defaulting Party to the Defaulting Party determined as of the Early Termination Date. If Buyer is the Non-Defaulting Party and reasonably expect to incur penalties, fines or costs from the CPUC, the CAISO, or any other Governmental Body, then Buyer may estimate the of those penalties or fines and include them in the Termination Payment amount.

"Transfer" means, with respect to any Performance Assurance or Interest Amount, and in accordance with the instructions of the Party entitled thereto: (i) in the case of Cash, payment or transfer by wire transfer into one or more bank accounts specified by the recipient; (ii) in the case of Letters of Credit, delivery of the Letter of Credit or an amendment thereto to the recipient.

"Unbundled Service Customer" means a retail customer of the Buyer acting as a utility distribution company, who takes and receives its electrical power requirements from a different Load Serving Entity that is not the Buyer, pursuant to CPUC Rule 22 Direct Access or Rule 23 Community Choice Service.

"Verification Administrator" means an independent contractor engaged by Buyer to verify Prohibited Resources attestations.

EXHIBIT B

Form of Letter of Credit

IRREVOCABLE NONTRANSFERABLE STANDBY

LETTER OF CREDIT

Reference Number:

Transaction Date:

BENEFICIARY:

Southern California Edison Company
2244 Walnut Grove Avenue
Risk Control GO#1, Quad 1D
Rosemead, CA 91770

Ladies and Gentlemen:

Nontransferable Standby Letter of Credit ("Letter of Credit") in favor of Southern California Edison Company, a California corporation (the "Beneficiary"), for the account of _____, a _____ corporation (the "Applicant"), for the amount of XXX AND XX/100 Dollars ($_____) (the "Available Amount"), effective immediately and expiring at 5:00 p.m., California time, on _____ (the "Expiration Date").

This Letter of Credit shall be of no further force or effect upon the close of business on the Expiration Date or, if such day is not a Business Day (as hereinafter defined), on the next Business Day.

For the purposes hereof, "Business Day" shall mean any day on which commercial banks are not authorized or required to close in Los Angeles, California.

Subject to the terms and conditions herein, funds under this Letter of Credit are available to Beneficiary by presentation in compliance on or before 5:00 p.m. California time, on or before the Expiration Date of the following:

1. The original or a photocopy of this Letter of Credit and all amendments; and
2. The Drawing Certificate issued in the form of Attachment A attached hereto and which forms an integral part hereof, duly completed and purportedly bearing the signature of an authorized representative of the Beneficiary.

Notwithstanding the foregoing, any full or partial drawing hereunder may be requested by transmitting the requisite documents as described above to the Bank by facsimile at _____ or such other number as specified from time-to-time by the Bank.

The facsimile transmittal shall be deemed delivered when received. Drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

Partial drawing of funds shall be permitted under this Letter of Credit, and this Letter of Credit shall remain in full force and effect with respect to any continuing balance; *provided*, the Available Amount shall be reduced by the amount of each such drawing.

This Letter of Credit is not transferable or assignable. Any purported transfer or assignment shall be void and of no force or effect.

Banking charges shall be the sole responsibility of the Applicant.

This Letter of Credit sets forth in full our obligations and such obligations shall not in any way be modified, amended, amplified or limited by reference to any documents, instruments or agreements referred to herein, except only the attachment referred to herein; and any such reference shall not be deemed to incorporate by reference any document, instrument or agreement except for such attachment.

The Bank engages with the Beneficiary that Beneficiary's drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored if presented to the Bank on or before the Expiration Date.

Except so far as otherwise stated, this Letter of Credit is subject to the International Standby Practices ISP98 (also known as ICC Publication No. 590), or revision currently in effect (the "ISP"). As to matters not covered by the ISP, the laws of the State of California, without regard to the principles of conflicts of laws thereunder, shall govern all matters with respect to this Letter of Credit.

AUTHORIZED SIGNATURE for Issuer

_____

(Name)

Title:_____

ATTACHMENT A

TO ***[ISSUING BANK NAME]***

IRREVOCABLE NON-TRANSFERABLE STANDBY LETTER OF CREDIT

No. _____

DRAWING CERTIFICATE

Bank

Bank Address

Subject: Irrevocable Non-transferable Standby Letter of Credit

Reference Number_____

The undersigned _____, an authorized representative of Southern California Edison Company (the "Beneficiary"), hereby certifies to ***[Issuing Bank Name]*** (the "Bank"), and _____ (the "Applicant"), with reference to Irrevocable Nontransferable Standby Letter of Credit No. {_____}, dated _____ _____, (the "Letter of Credit"), issued by the Bank in favor of the Beneficiary, as follows as of the date hereof:

1. The Beneficiary is entitled to draw under the Letter of Credit an amount equal to $_____, for the following reason(s) [check applicable provision]:

   [ ]A. An Event of Default , as defined in that certain Demand Response Resource Purchase Agreement between Applicant and Beneficiary, dated as of ***[Date of Execution]*** (the "Agreement") with respect to the Applicant has occurred and is continuing.

   [ ]B. A Letter of Credit Default (as defined in the Agreement) has occurred and is continuing

   [ ]C. An Early Termination Date (as defined in the Agreement) has occurred or been designated as a result of an Event of Default (as defined in the Agreement) with respect to the Applicant for which there exist any unsatisfied payment obligations.

   [ ]D. The Letter of Credit will expire in fewer than twenty (20) Business Days (as defined in the Agreement) from the date hereof, and Applicant has not provided

Beneficiary alternative Performance Assurance (as defined in the Agreement) acceptable to Beneficiary.

[ ]E. The Bank or Applicant has heretofore provided written notice to the Beneficiary of the Bank's or Applicant's intent not to renew the Letter of Credit following the present Expiration Date thereof, and Applicant has failed to provide the Beneficiary with a replacement letter of credit satisfactory to Beneficiary in its sole discretion within thirty (30) days following the date of the notice of non-renewal.

[ ]F. The Beneficiary has not been paid any or all of the Applicant's payment obligations now due and payable under the Agreement.

2. Based upon the foregoing, the Beneficiary hereby makes demand under the Letter of Credit for payment of U.S. DOLLARS AND ____/100ths (U.S.$_____), which amount does not exceed (i) the amount set forth in paragraph 1 above, and (ii) the Available Amount under the Letter of Credit as of the date hereof.

3. Funds paid pursuant to the provisions of the Letter of Credit shall be wire transferred to the Beneficiary in accordance with the following instructions:

_____
_____
_____

Unless otherwise provided herein, capitalized terms which are used and not defined herein shall have the meaning given each such term in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Beneficiary by its authorized representative as of this ____ day of _____, _____.

Beneficiary: SOUTHERN CALIFORNIA EDISON COMPANY

By:

Name:

Title:

EXHIBIT C-1

Form of Notice of Demonstrated Capacity

EXHIBIT C1 - Notice of Demonstrated Capacity (QC)

For use with System and Local Capacity Product

Demand Response Auction Mechanism (DRAM)

Showing Month: ____________

Seller: ____________

Seller Contact Name: ____________

Seller Contact Phone: ____________

SCID: ____________

Local Capacity Area (LCA): ____________ *(mark "n/a" if not a Local Capacity product)*

Total "Monthly Quantity"▲ (MW): ____________

Total "Demonstrated Capacity" (MW), Net of Prohibited Resources Adjustment: 0.00 MW

Residential Product (Yes / No): ____________

Therefore: in Delivered Capacity Payment formula, "**B**" = 0.00 MW and "**D**" =

PDRs and/or RDRRs in the DRAM Resource			--- "Demonstrated Capacity" (MW) --- It is Seller's responsibility to use the required Demonstrated Capacity method for each Resource per Section 1.6(a) of DRAM Purchase Agreement.						Joint Resource Adjustment		Prohibited Resources Adjustment		Residential Product Delivery			Local Capacity Product Delivery	
			For each PDR / RDRR Resource (row), chose one demonstration method (column) to establish monthly Demonstrated Capacity						Complete for all resources		Complete for all resources						
			Capacity Test Maximum hourly load reduction during capacity test conducted by Seller's SC during Showing Month		**Must Offer Obligation (MOO)** Average capacity amount Seller bid into CAISO during Showing Month		**Dispatch Results** Maximum hourly load reduction resulting from Dispatch during Showing Month		**MW Claimed** Specify the MW portion used to meet the contract obbligation		**Adjusted MW Claimed** Specify the MW portion used to meet the contract obbligation		**Residential Product** This section is only required if delivering Residential Customer Product			**Local Capacity Product** This section is only required if delivering Local Capacity Product	
PDR / RDRR Resource Name	**CAISO Resource ID**	**Assigned NQC (MW)*** 0.00 MW	Raw Demonstrated Capacity	Lesser of Assigned NQC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lesser of Assigned NQC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lesser of Assigned NQC or Raw Demonstrated Capacity	Joint Resource? (Yes/No)	MW Claimed	Default Adjustment Value (DAV) (MW)	Net MW Claimed	Total Service Accounts**	Residential Customer Service Accounts**	Small Business Customer Service Accounts**	Total Service Accounts**	Customer Service Accounts within specified LCA**
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
				0.00 MW		0.00 MW		0.00 MW									
Demonstrated Capacity ===>				0.00 MW		0.00 MW		0.00 MW		0.00 MW		0.00 MW	0	0	0	0	0
IMPORTANT NOTES: **▲ "Monthly Quantity" is from the quantity & pricing Table in Exhibit E.** *** In case of a Joint Resource, report full PDR / RDRR NQC here.** **** If using a Joint Resource, report Service Account information (count) only for the portion used.**			1) Each capacity test must be at least two (2) consecutive hours long		1) PDR must be bid into the Day-Ahead Market; RDRR must be bid into the Real-Time Market		1) An eligible Dispatch requires that the PDR/RDRR provided load reduction in all applicable hours of the CAISO Dispatch Instructions. Only include dispatch results during the MOO hours.		For PDR / RDRRs that are not Joint Resources, MW Claimed = MW Demostrated (Column F, H or J)		Per pro-forma Section 7.2(b)(v), provide the DAV adjustment, if any.		Percent Residential Accounts			Percent Local Accounts	
			2) Should be calculated using the PDR / RDRR Capacity Baseline		2) Only include bids submitted in compliance with the MOO hours		2) Should be calculated using the PDR / RDRR Capacity Baseline		For Joint Resources, MW Claimed is a portion of MW Demonstrated								

The information provided by Seller in this Notice of Demonstrated Capacity is required by Section 1.6 of the DRAM Resource Purchase Agreement with <insert IOU name>.

EXHIBIT C-2

Form of Notice of Demonstrated Capacity

EXHIBIT C2 - Notice of Demonstrated Capacity (EFC)

For use with Flexible Capacity Product

Demand Response Auction Mechanism (DRAM)

Showing Month: ....

Seller: ....

Seller Contact Name: ....

Seller Contact Phone: ....

SCID: ....

Local Capacity Area (LCA): .... *(mark "n/a" if not a Local Capacity product)*

Total "**Monthly Quantity**"ª (MW): ....

Total "**Demonstrated Capacity**" (MW), Net of Prohibited Resources Adjustment: 0.00 MW

Residential Product (Yes / No): ....

Therefore: in Delivered Capacity Payment formula, "**B**" = **#######** and "**D**" =

PDRs in the DRAM Resource				--- "Demonstrated Capacity" (MW) --- It is Seller's responsibility to use the required Demonstrated Capacity method for each Resource per Section 1.6(a) of DRAM Purchase Agreement.						Joint Resource Adjustment		Prohibited Resources Adjustment		Residential Product Delivery			Local Capacity Product Delivery	
				For each PDR Resource (row), chose <u>one</u> demonstration method (column) to establish monthly Demonstrated Capacity						Complete for all resources		Complete for all resources						
				<u>Capacity Test</u> Average hourly load reduction during capacity test conducted by Seller's SC during Showing Month		**<u>Must Offer Obligation (MOO)</u>** Average capacity amount Seller bid into CAISO during Showing Month		**<u>Dispatch Results</u>** Average hourly load reduction resulting from Dispatch during Showing Month		**<u>MW Claimed</u>** Specify the MW portion used to meet the contract obligation		**<u>Adjusted MW Claimed</u>** Specify the MW portion used to meet the contract obligation		**<u>Residential Product</u>** This section is only required if delivering Residential Customer Product			**<u>Local Capacity Product</u>** This section is only required if delivering Local	
PDR Resource Name	**CAISO Resource ID**	**Assigned EFC (MW)*** 0.00 MW	**Flexible Category (1, 2, or 3)**	Raw Demonstrated Capacity	Lesser of Assigned EFC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lesser of Assigned EFC or Raw Demonstrated Capacity	Raw Demonstrated Capacity	Lesser of Assigned EFC or Raw Demonstrated Capacity	Joint Resource? (Yes/No)	MW Claimed	Default Adjustment Value (DAV) (MW)	Net MW Claimed	Total Service Accounts**	Residential Customer Service Accounts**	Small Business Customer Service Accounts**	Total Service Accounts **	Customer Service Accounts within specified LCA**
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
					0.00 MW		0.00 MW		0.00 MW									
Demonstrated Capacity ===>					0.00 MW		0.00 MW		0.00 MW		0.00 MW		0.00 MW	0	0	0	0	0
IMPORTANT NOTES: **ª "Monthly Quantity" is from the quantity & pricing Table in Exhibit E.** *** In case of a Joint Resource, report full PDR EFC here.** **** If using a Joint Resource, report Service Account information (count) only for the portion used.**				1) Each capacity test must be at least two (2) consecutive hours long		1) Must be bid into the Day-Ahead and Real-Time Market		1) An eligible Dispatch requires that the PDR provided load reduction in all applicable hours of the CAISO Dispatch Instructions. Only include dispatch results during the MOO hours.		For PDRs that are not Joint Resources, MW Claimed = MW Demostrated (Column F, H or J)		Per pro-forma Section 7.2(b)(v), provide the DAV adjustment, if any.		Percent Residential Accounts			Percent Local Accounts	
				2) Should be calculated using the PDR Capacity Baseline		2) Only include bids submitted in compliance with the MOO		2) Should be calculated using the PDR Capacity Baseline		For Joint PDRs, MW Claimed is a portion of MW Demonstrated								

The information provided by Seller in this Notice of Demonstrated Capacity is required by Section 1.6 of the DRAM Resource Purchase Agreement with <insert IOU name>.

EXHIBIT D

Form of Notice of Showing Month Supply Plan

Sample Counterparty Monthly Supply Plan Template

Contact Information			Supply Plan Information for Resources under DRAM Purchase Agreement to [insert IOU name]													
										If Joint Resource						
Contact Person	Phone Number	Email	Seller (or Seller's agent) SCID	Resource ID in CAISO Master File	System RA Capacity (QC) (MW 00.00 No rounding)	Local RA Capacity (QC) (MW 00.00 No rounding)		Flex RA Capacity (EFC) (MW 00.00 No rounding)	Flex RA Category (1, 2, or 3)	System RA Capacity used for Contract (MW 00.00)	Local RA Capacity used for Contract (MW 00.00)		Flex RA Capacity used for Contract (MW 00.00)	RA Capacity Effective Start Date (mm/dd/yyyy hh: mm:ss)	RA Capacity Effective End Date (mm/dd/yyyy hh: mm:ss)	Resource Capacity Contract Number	SCID of Load Serving Entity
						LCA 1	LCA 2				LCA 1	LCA 2					

The information provided by Seller in this monthly Supply Plan template is required by Section 1.4 of the DRAM Resource Purchase Agreement with Buyer.

[Relevant IOU LCA's to be inserted in final form]

EXHIBIT E
PRODUCT MONTHLY QUANTITY
AND
CORRESPONDING CONTRACT PRICE

Showing Month	Product [Insert]	
	~~2019~~[Year]	
	Monthly Quantity (kW for each day of Showing Month)	Contract Price ($/kW-month)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

[Parties to complete one table for each type of Product indicated in Table 1.1(b) and accepted bid information.]

TABLE 1.1(b) (CONT'D)

EXHIBIT F

Form for providing supporting data for invoiced amounts, test results, or other data requests

Contract ID	Resource ID	Registration ID	Registration Start Date	Registration End Date	Location ID	Location ID Start Date	Location ID End Date	SubLAP Code	Service Account ID	Rate Schedule	Demonstrated Capacity (kWh)

In the event of a test or dispatch, Seller is required to provide the following information:

1. **On which dates and times the events were called (dispatches or tests)**
2. **Which Resource IDs are included in the events**
3. **Which Customers were included in the Resource IDs when the event occurred**

Data is to be provided at the Customer level. Buyer reserves the right to request additional data to reconcile Demonstrated Capacity, tests, or dispatch results

EXHIBIT G
MILESTONE SCHEDULE