

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



August 14, 2017

**SCE AL 3629-E**

Russel G. Worden  
Managing Director  
State Regulatory Operations  
Southern California Edison  
8631 Rush St.  
Rosemead, California 91770

**SUBJECT: Staff Disposition of: SCE AL 3629-E – SCE’s 2018-2019 Demand Response Auction (DRAM) Purchase Agreements**

Dear Mr. Worden:

The CPUC Energy Division (ED) approves Southern California Edison Company’s Advice Letter (AL) 3629-E in its entirety. SCE AL 3629-E shall go into effect as of the date of filing, July 7, 2017, as requested by SCE in AL 3629-E.

On July 7, 2017, SCE timely filed a Tier 1 Advice Letter with signed contracts resulting from the third solicitation of the Demand Response Auction Mechanism (DRAM) pilot. On July 27, 2017 the following parties submitted protests to PG&E’s Advice Letter: CPower, EnerNOC, Inc., and EnergyHub (collectively, the “Joint DR Parties”). The Joint DR Parties did not contest the results of the auction and supported Commission approval of the proposed contracts. Rather, the Joint DR Parties requested that Commission direction be provided in response to information provided by SCE and its Independent Evaluator. Specifically, the Joint DR Parties requested that the Commission order a workshop or working group open to all stakeholders to transparently analyze the issues noted below as a basis to improve future DRAM RFOs.

The issues raised:

- Reasons for limited participation and declining numbers of residential offerors
- SCE’s selection and evaluation methodology

On August 3, 2017, SCE timely filed a response to the Joint DR Parties protest. SCE notes several instances where it disputes Joint DR Parties’ assertions as unsupported or incorrect, and it agrees that Commission review is needed (residential set-aside).

Energy Division’s *Research Plan for the Demand Response Auction Mechanism (DRAM) I, II, & III Pilots (2015 – 2017)*, issued in April, 2017 indicated that the ED study Project Manager will determine the “appropriate timing for one more informal public workshops and/or conference calls to discuss progress of the study” with all parties and will provide ten days advance notification of such workshops to the Service List for R.13-09-011 (DRAM Study Plan, pg. 4). The topics raised by the Joint DR Parties are appropriate to consider as part of the agenda for these previously-

Russell G. Worden  
August 14, 2017  
Page 2

identified workshop(s) or call(s), alongside topics raised by PG&E or other parties. This approach aligns well with the JDRP's requested timeline and purpose of additional workshops or working group. In addition, SCE provided responses to several of the JDRPs concerns in their reply; these can inform future discussions. Thus, no additional public process is approved at this time and SCE AL 3629-E is approved in its entirety.

Please contact Cathleen Fogel of Energy Division at [cathleen.fogel@cpuc.ca.gov](mailto:cathleen.fogel@cpuc.ca.gov) with any questions.

Sincerely,



Edward Randolph  
Director, Energy Division

Cc: ED Tariff Unit ([Edtariffunit@cpuc.ca.gov](mailto:Edtariffunit@cpuc.ca.gov))  
Gigio Sakota, SCE ([gigio.sakota@sce.com](mailto:gigio.sakota@sce.com))  
Russell G. Worden, Regulatory Operations ([AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com))  
Sarah Steck Meyers, Attorney at Law ([ssmeyers@att.net](mailto:ssmeyers@att.net))  
Mona Tierney-Lloyd, EnerNOC, Inc. ([mtierney-lloyd@enernoc.com](mailto:mtierney-lloyd@enernoc.com))  
Jennifer A. Chamberlin, CPower ([JAC@CPowerEnergyManagement.com](mailto:JAC@CPowerEnergyManagement.com))  
Erika Diamond, EnergyHub ([diamond@energyhub.net](mailto:diamond@energyhub.net))  
Laura Genao, Regulatory Affairs c/o Karyn Gansecki ([Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com))  
Megan Caulson, Regulatory Tariff Manager ([mcaluson@semprautilities.com](mailto:mcaluson@semprautilities.com))  
Erik Jacobson, Director of Regulatory Relations ([PGETariffs@pge.com](mailto:PGETariffs@pge.com))  
Service list: R.13-09-011

---

July 7, 2017

**ADVICE 3629-E**  
**(U 338-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION

**SUBJECT:** Southern California Edison Company's 2018-2019 Demand Response Auction Mechanism Pilot Solicitation Results

In compliance with California Public Utilities Commission (Commission or CPUC) Decision (D.)14-12-024, Resolution E-4817 approving with modifications Southern California Edison Company (SCE) Advice Letter (AL) 3466-E, Resolution E-4838 approving with modifications SCE AL 3466-E and addressing related Prohibited Resources restrictions, and CPUC Staff Disposition of 3466-E-A, 3466-E-B, and 3466-E-C. SCE hereby submits the results of its 2018-2019 Demand Response Auction Mechanism (DRAM) Pilot solicitation. As required by Ordering Paragraph (OP) 16 of Resolution E-4728, SCE provides additional information on all the submitted bids, signed contracts, as well as comparison data.

**I. PURPOSE**

The purpose of this advice letter filing (Advice Letter or AL) is to demonstrate compliance with D.14-12-024 and Resolution E-4817 and E-4838, and provide for Commission review of the 2018-2019 DRAM Pilot solicitation results.

Specifically, this Advice Letter addresses the following Pilot and filing requirements:

- Procuring 2018-2019 DRAM resources up to the approved budget limit of \$12 million.
- Providing information requested in Resolution E-4728, OP 16:
  - Indicative short-run Resource Adequacy (RA) capacity costs,
  - Long-run avoided capacity information using the values in the avoided capacity costs in the current cost-effectiveness protocols,
  - Avoided cost calculations for each investor-owned utility's (IOU's) current DR portfolio of comparable programs and procurement mechanisms, including the Aggregator Managed Portfolio (AMP), Capacity Bidding Program (CBP), Base Interruptible Program (BIP), Agricultural Pumping Interruptible (API) program, and LCR RFO bids and contracts, and

- All bids received for the DRAM pilot.
- Meeting the 20 percent residential set-aside, per Resolution E-4728, OP 19.

In addition to meeting the above listed requirements, this AL describes the solicitation process and demonstrates compliance with the Commission directions in Resolutions E-4728, E-4754, E-4817 and E-4838.<sup>1</sup>

## II. BACKGROUND

On April 20, 2015, SCE, on behalf of itself, Pacific Gas and Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E), (jointly, the Investor Owned Utilities or IOUs) filed a Tier 3 AL<sup>2</sup> defining the DRAM Pilot design, as well as a standard contract, pursuant to OP 5 of D.14-12-024. The Pilot design was a result of a collaborative effort in the DRAM Pilot design working group, whose activities were conducted at the direction of, and under continuing supervision of, the Commission.<sup>3</sup> The DRAM working group, authorized by OP 6 of D.14-12-024, included the IOUs, Ratepayer Advocates (Office of Ratepayer Advocates and The Utility Reform Network), Demand Response providers, Energy Division Staff, and other interested stakeholders.

On July 23, 2015, the Commission voted out Resolution E-4728, which approved with modifications the proposed DRAM Pilot design. Resolution E-4728 was published on July 27, 2015. On August 10, 2015, the Commission issued Resolution E-4737, instituting editorial corrections to Resolution E-4728. SCE filed a Supplemental Advice Letter<sup>4</sup> on August 24, 2015 to implement the DRAM Pilot pursuant to OP 5 of D.14-12-024, and to comply with requirements of OP 22 of Resolution E-4728. The Supplemental Advice Letter included the updated solicitation protocols and the final 2016 DRAM Pro-Forma Purchase Agreement.

As proposed in AL 3208-E et al, and approved by the Commission, the DRAM working group continued to work on the 2017 Pilot design. A Tier 3 AL<sup>5</sup> defining the second year DRAM Pilot design was filed on October 9, 2015, and focused on including Local RA and Flexible RA, aligning the DRAM pilot with the year-ahead RA process, incorporating changes to law or regulation that could impact the second year of the DRAM Pilot, and addressing the inclusion of Reliability Demand Response Resources (RDRR).

On January 28, 2016, the Commission voted out Resolution E-4754, which approved with modifications the proposed 2017 pilot design. SCE filed a Supplemental Advice Letter<sup>6</sup> on February 8, 2016 to comply with the requirements of OP 14 of Resolution E-

---

<sup>1</sup> Please note that successive DRAM Advice Letters and Resolutions have built upon the previous ones, generally continuing any DRAM Pilot provisions unless specifically modified.

<sup>2</sup> Advice Letter 3208-E et al.

<sup>3</sup> OP 6 of D.14-12-024.

<sup>4</sup> Advice Letter 3208-E-A.

<sup>5</sup> Advice Letter 3292-E et al.

<sup>6</sup> Advice Letter 3292-E-A.

4728. The Supplemental Advice Letter included the updated solicitation protocols and the final 2017 DRAM Pro-Forma Purchase Agreement.

On September 1, 2016, SCE filed AL-3466-E requesting adoption of a proposal for a third DRAM pilot. On January 19, 2017, the CPUC issued Resolution E-4817, approving with modifications the auction design protocols, standard pro forma Purchase Agreement (PA), evaluation criteria, and non-binding cost estimates. In addition, Ordering Paragraph (OP) 26 of the Resolution required the IOUs to file supplemental advice letters that demonstrate compliance with all the modifications adopted in the Resolution. As such, SCE filed AL 3466-E-A on February 2, 2017. Commission staff suspended AL 3466-E-A et al. on February 29, 2017, and clarified the reasons for the suspension in a letter to IOUs on March 7, 2017, while directing the Utilities to continue with the DRAM III Request for Offers (RFO) solicitation launch as scheduled per Resolution E-4817. Commission staff found that AL 3466-E-A et al. was fully in compliance with the stipulations contained in Resolution E-4817. However, the AL was suspended in order to allow time to develop a draft resolution addressing Commission direction in D.16-09-056 restricting the use of prohibited resources to reduce load during demand response events.

On April 28, 2017, the CPUC issued Resolution E-4838, Approval with Modifications to Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas and Electric Company's prohibited resources restrictions for Supply Side Demand Response programs and pilots; and, approval with modifications of DRAM III auction design, protocols, standard pro forma contract, evaluation criteria and non-binding cost estimates as directed in Resolution E-4817. The Resolution modified AL 3466-E-A et al. only with respect to its prohibited resources requirements and otherwise approved its DRAM III provisions in full. In compliance with OP 40 of the Resolution, the IOUs submitted 3466-E-B on May 8, 2017 and 3466-E-C on May 22, 2017.

As clarified by the Commission, the adopted pilot design is non-precedential, and intended to test the viability of the DRAM procurement mechanism. In building the proposed design, stakeholders have made mutual concessions on a pilot basis that they may not wish to continue in a final DRAM program design.

### **III. PROCUREMENT REQUIREMENTS**

D.14-12-024, Resolutions E-4728, E-4754, E-4817, E-4838, and SCE's Rule 24 established several key procurement requirements intended to encourage Pilot participation, ensure a level playing field and limit customer cost exposure:

1. D.14-12-024 required and Resolution E-4817 adopted use of a Standard Pro-Forma Purchase Agreement, developed in the working group process.
2. Resolution E-4838 adopted updated Prohibited Resources restrictions in the Standard Pro-Forma Purchase Agreement.
3. D.14-12-024 adopted and Resolution E-4754 confirmed a minimum procurement target of 22 MW in August statewide, allocating a 10 MW minimum for SCE;

4. Resolution E-4728 established a minimum residential customer set-aside of 20 percent of the procured capacity;
5. Resolution E-4817 approved a budget of \$12 million for SCE, including all direct solicitation, contract payment and administrative costs;<sup>7</sup>
6. Resolution E-4817 removed Rule 24 registration limitations as a procurement limit.

SCE has met or exceeded all of the above requirements as follows:

1. All contracts used the standard purchase agreement, as approved by Resolutions E-4817 and E-4838;
2. Signed contracts represent 88.50 MW in August 2018 capacity and 99.20 MW in August 2019 capacity;
3. The total contracted residential MW are 22.1 percent of the total based on August 2018 capacity and 23.6 percent of the total based on August 2019 capacity, exceeding the 20 percent requirement;
4. The total DRAM costs are estimated at below the budget cap;<sup>8</sup>

The following section provides more detail on the solicitation and selection process that resulted in the above summarized procurement.

## **IV. SOLICITATION OVERVIEW**

### **A. Process Overview**

On March 10, 2017, SCE sent its notification of the launch of the 2018-2019 DRAM Request for Offers (DRAM RFO) to thousands of parties on SCE's email distribution list, and also posted notice of the launch to both the Demand Response proceeding (R.13-09-011) and Rule 24 (A.14-06-001 et. al.) service lists. Additionally, SCE updated its website to include details related to the DRAM RFO. On March 21, 2017, SDG&E held a Pre-Bid Web Conference during which the IOUs explained how they intended to administer the DRAM RFO and responded to questions from the participants.

SCE accepted offers through 12:00 pm on April 3, 2017. SCE notified offerors of the status of their offers on May 24, 2017. Contracts were executed effective June 6, 2017.

### **B. Auction Design**

The auction, as described below, followed the 2016 DRAM pilot design developed by the DRAM working group and approved by the Commission. The DRAM RFO is a fairly simple process in which bidders submit offers, which SCE evaluates and ranks, and proceeds to select down the stack until pre-determined limits are reached. Bidders have the ability to submit multiple offers (no more than 20) and can designate either

---

<sup>7</sup> Rule 24 Implementation costs are covered separately, outside of the DRAM.

<sup>8</sup> Contract costs are provided confidentially in Attachment C.

“inclusivity” or “exclusivity” amongst the offers (e.g., an offer must be selected with another offer, or an offer cannot be selected with another offer).

For the 2018 auction, the Rule 24/32 registrations are no longer a binding limit and the IOUs were authorized to hold a secondary auction if certain conditions are met.

In order to assist bidders, SCE posted a number of reference materials on the DRAM RFO website:

- Regulatory Documents: DRAM Advice Letters and Resolutions.
- 2018-2019 DRAM Bidder's Conference Presentation: Presentation from DRAM 3 Pre-Bid Web Conference.
- DRAM RFO Instructions: Detailed instructions governing the DRAM RFO that outline eligibility requirements, deadlines, participant rules, and required documents and method for offer submittal.
- DRAM Purchase Agreement: Standard agreement to be executed with each selected Offer (launch, redlined, and final versions due to updates to Prohibited Resource requirements).
- Frequently Asked Questions: DRAM Questions and Answers from 2016, 2017 and 2018-2019 DRAM RFOs.
- Local Capacity Areas: Maps of SCE's LA Basin and Big Creek/Ventura LCAs.
- DRAM Customer Migration Matrix: Describes a pathway for SCE Demand Response Program customers' migration to DRAM participation.
- Rule 24: SCE Rule 24 for Direct Participation.
- Rule 24 Process Diagram: High level overview of Rule 24 process.
- Rule 24 DRP/Aggregator Informational Workshop Presentation: Webinar presented by SCE on September 7, 2016.
- Rule 24 Data Dictionary: Data field descriptions of Rule 24 customer and meter information reports.
- CISR-DRP Form: Authorization or Revocation of Authorization to Disclose Customer Information to DRP.
- Scheduling Coordinator RFI Information Packet: Results of the DRAM Scheduling Coordinator RFI.

### **C. Oversight**

SCE again used a DRAM RFO specific email address to facilitate communication between participants and the SCE DRAM RFO Team. This email address was used to answer questions posed by participants, receive official offer submittals and provide notifications. The DRAM RFO Independent Evaluator (IE) was copied on all correspondence, and the IE also participated in the Pre-Bid Web Conference and

review meetings with SCE senior management and the Procurement Review Group (PRG). The IE Report is attached as Attachment H. The PRG was consulted officially at two separate milestones: RFO Launch and Contract Selection.

#### **D. The DRAM Contract**

The 2018-2019 DRAM contract changes included: stricter performance requirements; a requirement for Buyers to identify RDRR resources, if any, as they are subject to reliability MW caps; and the combination of scheduling coordinator costs with bid prices in the offer form. On September 1, 2016, SCE filed Advice Letter 3466-E. On January 19, 2017, the Energy Division issued Resolution E-4817, which approved AL 3466-E with modifications. SCE subsequently filed a Supplement to Advice Letter 3466-E-A on February 2, 2017. On March 7, 2017, the CPUC issued a Direction to Proceed with the DRAM 3 RFO. The SCE Purchase Agreement pro-forma is attached as Attachment J.

Under the DRAM contract, SCE purchases System, Local and/or Flex RA Benefits associated with the PDR(s) and/or RDRR(s) designated by the Seller. The Seller is then responsible for adhering to the CAISO must offer obligations (MOO) by bidding into the CAISO markets.

### **V. SELECTION PROCESS**

#### **A. Bid Review and Cure**

After offers were received on April 10, 2017, SCE had until April 17, 2017 to notify bidders of non-conformances. Bidders then had until April 24, 2017 to clear identified non-conformances.

Minor non-conformances were identified for only one Offeror, which were cleared in a timely manner. No offers were disqualified in the DRAM 3 RFO.

#### **B. Offer Valuation**

SCE selected offers based on their quantitative valuation and the program limits described in this document. SCE used Net Present Value (NPV) per kilowatt year to value and rank offers received. NPV (\$/kW-yr) was calculated by taking the net of monthly benefits minus monthly costs and then discounting those cash flows back to 5/1/2017. The resulting NPV was then normalized by the sum of the monthly megawatts offered and multiplied by 12 to convert NPV (\$/kW-mo) to NPV (\$/kW-yr). Total benefits comprised RA value, which is the product of 115% of the contract capacity and SCE's forecast value of capacity for each corresponding month of the contract. SCE multiplied contract capacity by 115% to reflect how DR resources are counted toward meeting the reliability based planning reserve margin and SCE's associated RA requirement (i.e. every megawatt of DR capacity SCE procures has the effect of reducing SCE's RA requirements by 1.15 megawatts). Total costs comprised offered capacity price per kilowatt and Scheduling Coordinator fees.

Qualitative attributes were given zero weight in SCE’s selection process, as discussed in Section III, Part C of AL 3466-E-A.

## VI. SELECTION RESULTS

### A. Participation Summary

The 2018-2019 DRAM RFO received a less robust response than the 2017 DRAM RFO in terms of number of offers and bidders. SCE received 79 eligible offers from 11 bidders in this solicitation, compared to 119 offers from 17 bidders in the last one. On the other hand, the offers represented 229 and 259 MW of August 2018 and 2019 capacity respectively, compared to 158 MW received in the 2017 DRAM RFO (not taking into account inclusivity or exclusivity) – showing a substantial increase in both residential and non-residential MW offered. Twenty-one offers were received for local RA (17 for LA Basin and four for Big Creek/Ventura), three times the local capacity offers for the previous DRAM. A total of six flex RA offers were received (four system and two local). No RDRR products were offered. There were two new bidders that had not participated in the previous DRAM RFOs. The list of companies that submitted offers, the number of offers, and the offer type is provided confidentially in Attachment A.

### B. Selection Summary

The table below summarizes the combined 18 contracts executed with five counterparties in the 2018-2019 DRAM RFO:

Counterparty	Product Type	Resource Type	August 2018 Capacity (MW)	August 2019 Capacity (MW)	Contract Term
EcoFactor	Local	Res	.50	.50	May 2018 - Sep 2019
Enerwise (4 contracts)	System	Non-Res	35	35	May 2018 – Oct 2019
Green Charge Networks	Local Flex	Non-Res	.30	.50	Jun 2018 – Sep 2019
OhmConnect (3 contracts)	System	Res	7.42	8.90	Jan 2018 – Dec 2019
OhmConnect (3 contracts)	Local	Res	11.66	14	Jan 2018 – Dec 2019
OhmConnect (3 contracts)	System	Non-Res	24.96	29.97	Jan 2018 – Dec 2019

OhmConnect	Local	Non-Res	8.32	9.99	Jan 2018 – Dec 2019
Tesla (2 contracts)	System	Non-Res	.34	.34	Jan 2018 – Dec 2019

Additional confidential solicitation data is provided in Attachment B (all received bids) and Attachment C (ranked bids with valuation information). The executed DRAM contracts are provided in Attachment D.

### C. Benchmark Calculations

SCE compared existing DR programs (AMP, CBP Day Ahead, BIP and API programs, and LCR RFO approved contracts) against the 2018 and 2019 DRAM final selection offers on the \$/kW-year criteria, as shown in Attachment G.

SCE also tested the impact of using public RA price information on selected bid offer rankings, as shown in Attachment G. SCE found differences in selected contracts as discussed in Appendix G.

Overall, the selected DRAM offers seem on average more cost-effective than the comparison programs. However, it is difficult to draw definitive benchmarking conclusions for several reasons. First, existing DR programs have much stricter financial penalties for non-performance which ensure their reliability. For example, in the AMP and LCR contracts, if a Seller delivers a capacity amount of less than 75%, then the capacity payment is zero for that period. However, in DRAM, the capacity payment would be prorated down to 75%.<sup>9</sup> In addition, current SCE DR program structures are year-round in duration, whereas DRAM contracts are for the months selected by the Seller, and both can have varying MW capacity available through the year. This complicates the ability to create a single annual capacity cost to compare DRAM to existing DR. SCE observed a wide range of DRAM capacity offers (prices), contract duration, and MW capacity, with a relatively small “hockey stick” at the very end of the supply curve. DRAM offers are a mix of residential and non-residential offerings, whereas AMP, CBP, BIP, API, and the LCR DR Storage contracts are exclusively comprised of non-residential customers. Additionally, as indicated by stakeholder comments in the working group’s public meetings, at least some DRAM offers may represent exploratory and experimental efforts on behalf of the Sellers who intend to test wholesale DR direct CAISO market participation. Finally, while the 2018-2019 offers have been more competitive in terms of pricing than 2017 offers, possibly in response to the opportunity for longer contract terms and increased Seller confidence in the Pilot viability, it is still unknown whether the Sellers can fully deliver the products at the contracted prices. Hence the 2018-2019 Pilot offers should not be seen as

<sup>9</sup> This is a simplified comparison. In the AMP, there are also energy payment implications. In the DRAM, the Seller may still incur CAISO penalties, and the Buyer could claim damages.

representative of stabilized market costs should DRAM evolve into a mature and long-term approach to aggregated DR procurement.

At the low end of the spectrum, the least costly selected DRAM offers are lower than existing SCE DR Programs. At the high end, the most costly (not selected) DRAM offers were significantly higher than the existing SCE DR programs.<sup>10</sup>

DRAM offers do not have energy incentive payments; however, the Sellers retain all rights to the CAISO energy payments for their resources.

The results of the benchmark calculations are provided confidentially in Attachment G.

#### **D. Lessons Learned**

The lessons learned at this stage, prior to DRAM contracts delivery, are focused on the 2018-2019 DRAM solicitation design, administration and participation. SCE's initial observations are as follows:

- Although there was still significant interest in the 2018-2019 DRAM from an array of parties, as evidenced by the large number of participants in the DRAM Pre-Bidders' web conference, only two new counterparties submitted bids for a total of 5.5 MW (less if filtered for inclusive and exclusive offers), accounting for only 2.5% of August 2018 MW;
- As in prior DRAM solicitations, submitted bids displayed a wide range of prices, but overall, offers were more competitive than the 2017 DRAM, allowing procurement of more MW than in the past;
- There was no indication of collusion or market manipulation among the offerors;
- Generally, residential bids were not as competitive as non-Residential ones, requiring SCE to skip higher ranked non-residential offers in order to meet the 20% residential set-aside; and
- Two sellers declined to execute their residential contracts after they were notified that their offers were selected. Only two counterparties with residential contracts remain.

As with the 2017 DRAM, the big challenge for the 2018-2019 DRAM will be the residential Sellers' ability to recruit and register customers, and deliver the contracted resources. SCE anticipates that the implementation of the Rule 24 "click through" process in late 2017 will improve the residential customers' experience in authorizing data to third parties, thereby reducing a recruitment barrier cited by DRAM sellers in the past.

## **VII. REQUEST FOR CONFIDENTIAL TREATMENT**

---

<sup>10</sup> LCR RFO contracts are not considered an SCE DR program.

In support of this Advice Letter, SCE is providing the following confidential information:

- Summary of received offers (Attachment A);
- All bids received for the DRAM Pilot (Attachment B);
- Ranked bids with valuation information (Attachment C);
- Executed DRAM Purchase Agreements (Attachment D);
- Indicative short-run RA capacity costs (Attachment F);
- A calculation of SCE's current DR portfolio of comparable programs and procurement mechanisms, including the CBP, BIP and API programs, and LCR RFO bids and contracts (Attachment G);
- Independent Evaluator report (Attachment H).

This information is being submitted in the manner directed by D.08-04-023 and the August 22, 2006 Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with D.06-06-066 to demonstrate the confidentiality of material and to invoke the protection of confidential utility information provided under either the terms of the IOU Matrix, Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023, or General Order 66-C. A separate Declaration Seeking Confidential Treatment is filed concurrently with this Advice Letter.

SCE is also including the following public information:

- Long-run avoided capacity information using the values in the avoided capacity costs in the current cost-effectiveness protocols (Attachment I);
- SCE 2017 DRAM Pro-Forma Purchase Agreement (Attachment J);
- Redacted Independent Evaluator report (Attachment K).
- SCE Confidentiality Declaration (Attachment L).

The Attachment E page is intentionally left blank, as the Aggregator Managed Program (AMP) contract amendments are no longer applicable to the DRAM Pilot solicitation.

This Advice Letter will not increase any rate or charge, cause the withdrawal of service, or conflict with any other schedule or rule.

### **TIER DESIGNATION**

Pursuant to Resolution E-4728, this AL is submitted with a Tier 1 designation.

### **EFFECTIVE DATE**

SCE requests that this Advice Letter be effective July 7, 2017, the same day as filed.

**NOTICE**

Anyone wishing to protest this Advice Letter may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than July 27, 2017. Protest should be submitted to:

CPUC Energy Division  
ED Tariff Unit  
505 Van Ness Avenue, 4th Floor  
San Francisco, California 94102  
Facsimile: (415) 703-2200  
E-mail: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this Advice Letter shall be sent to either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Russell G. Worden  
Managing Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Telephone: (626) 302-4177  
Facsimile: (626) 302-6396  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Laura Genao  
Managing Director, State Regulatory Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: [Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com)

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this Advice Letter to the interested parties on the attached GO 96-B and R.13-09-011 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com) or at (626) 302-4039. For changes to all other

service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov).

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping this Advice Letter at SCE's corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE's web site at <https://www.sce.com/wps/portal/home/regulatory/advice-letters>.

For questions, please contact Gigio Sakota at (626) 302-5927 or by electronic mail at [Gigio.Sakota@sce.com](mailto:Gigio.Sakota@sce.com).

**Southern California Edison Company**

/s/ Russell G. Worden  
Russell G. Worden

RGW:gs:jm  
Enclosures

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type:

ELC       GAS  
 PLC       HEAT       WATER

Contact Person: Darrah Morgan

Phone #: (626) 302-2086

E-mail: [Darrah.Morgan@sce.com](mailto:Darrah.Morgan@sce.com)

E-mail Disposition Notice to: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas  
 PLC = Pipeline      HEAT = Heat      WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 3629-E

Tier Designation: 1

Subject of AL: Southern California Edison Company's 2018-2019 Demand Response Auction Mechanism Pilot Solicitation Results

Keywords (choose from CPUC listing): Compliance

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

Decision 14-12-024 and Resolutions E-4718; E-4838; and E-4728

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: \_\_\_\_\_

Summarize differences between the AL and the prior withdrawn or rejected AL: \_\_\_\_\_

Confidential treatment requested?  Yes  No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement.

Name and contact information to request nondisclosure agreement/access to confidential information:

Resolution Required?  Yes  No

Requested effective date: 7/7/17      No. of tariff sheets: -0-

Estimated system annual revenue effect: (%): \_\_\_\_\_

Estimated system average rate effect (%): \_\_\_\_\_

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed<sup>1</sup>: \_\_\_\_\_

Pending advice letters that revise the same tariff sheets: None

<sup>1</sup> Discuss in AL if more space is needed.

**Protests and all other correspondence regarding this AL are due no later 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, California 94102  
E-mail: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Russell G. Worden  
Managing Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Telephone: (626) 302-4177  
Facsimile: (626) 302-6396  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Laura Genao  
Managing Director, State Regulatory Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: [Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com)

**Attachment A – Summary of Received Offers [CONFIDENTIAL]**

**Attachment B – All Bids Received for the DRAM Pilot [CONFIDENTIAL]**

**Attachment C – Ranked Bids with Valuation Information [CONFIDENTIAL]**

**Attachment D – Executed DRAM Purchase Agreements [CONFIDENTIAL]**

**Attachment E – Aggregator Managed Program (AMP) Contract**  
Purposely left blank

**Attachment F – Indicative Short-Run RA Capacity Costs  
[CONFIDENTIAL]**

**Attachment G – A Calculation of SCE’s Current DR Portfolio of  
Comparable Programs and Procurement Mechanisms [CONFIDENTIAL]**

**Attachment H- Independent Evaluator Report [CONFIDENTIAL]**

**Attachment I – Long-Run Avoided Capacity Information [PUBLIC]**

## Attachment I – Long-Run Avoided Capacity Information from the Current Cost-Effectiveness Protocols

The IOUs were asked to provide long-run avoided capacity information from the current cost-effectiveness protocols. Local and statewide level information is presented.

<b>Long Run Avoided Capacity (\$/kW-yr)</b>	<b>2018</b>	<b>2019</b>	<b>Source</b>
Southern California	\$102.31	\$109.26	E3 Avoided Cost Model (August 2016)
Statewide	\$106.62	\$113.20	E3 Avoided Cost Model (August 2016)

**Attachment J – SCE 2017 DRAM Pro-Forma Purchase Agreement [PUBLIC]**

**2018 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**

ARTICLE 1. TRANSACTION .....	1
<b>1.1. Purchase and Sale of the Product.....</b>	<b>1</b>
<b>1.2. Term.....</b>	<b>3</b>
<b>1.3. Delivery Period.....</b>	<b>3</b>
<b>1.4. Seller’s Designation of the DRAM Resource.....</b>	<b>4</b>
<b>1.5. Product Monthly Quantity and Corresponding Contract Price .....</b>	<b>4</b>
<b>1.6. Demonstrated Capacity .....</b>	<b>5</b>
ARTICLE 2. CPUC APPROVAL .....	7
<b>2.1. Obtaining CPUC Approval.....</b>	<b>7</b>
<b>2.2. CPUC Approval Termination Right .....</b>	<b>7</b>
ARTICLE 3. SELLER OBLIGATIONS .....	8
<b>3.1. Delivery of Product.....</b>	<b>8</b>
<b>3.2. Resource Adequacy Benefits.....</b>	<b>8</b>
<b>3.3. Provision of Information and Testing .....</b>	<b>8</b>
<b>3.4. Seller’s Obligations .....</b>	<b>9</b>
<b>3.5. Indemnities for Failure to Perform. ....</b>	<b>10</b>
ARTICLE 4. PAYMENT AND BILLING.....	10
<b>4.1. Delivered Capacity Payment.....</b>	<b>10</b>
<b>4.2. Invoice and Payment Process.....</b>	<b>11</b>
<b>4.3. Allocation of Other CAISO Payments and Costs .....</b>	<b>12</b>
ARTICLE 5. CREDIT AND COLLATERAL .....	12
<b>5.1. Seller’s Credit and Collateral Requirements .....</b>	<b>12</b>

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

**Table Of Contents (Continued)**

<b>5.2.</b>	<b>Grant of Security Interest/Remedies.....</b>	<b>13</b>
<b>5.3.</b>	<b>Reduction and Substitution of Performance Assurance .....</b>	<b>13</b>
<b>5.4.</b>	<b>Administration of Performance Assurance .....</b>	<b>15</b>
<b>5.5.</b>	<b>Exercise of Rights against Performance Assurance .....</b>	<b>17</b>
<b>5.6.</b>	<b>Financial Information.....</b>	<b>17</b>
<b>5.7.</b>	<b>Access to Financial Information .....</b>	<b>18</b>
<b>5.8.</b>	<b>Uniform Commercial Code Waiver .....</b>	<b>20</b>
<b>ARTICLE 6. SPECIAL TERMS AND CONDITIONS .....</b>		<b>21</b>
<b>6.1.</b>	<b>Limitation of Liability .....</b>	<b>21</b>
<b>6.2.</b>	<b>Buyer Provision of Information.....</b>	<b>21</b>
<b>6.3.</b>	<b>Changes in Applicable Laws .....</b>	<b>21</b>
<b>6.4.</b>	<b>DBE Reporting.....</b>	<b>22</b>
<b>6.5.</b>	<b>Governmental Charges.....</b>	<b>22</b>
<b>6.6.</b>	<b>Customers in Buyer Automated Demand Response Program or Other Utility Program .....</b>	<b>22</b>
<b>ARTICLE 7. REPRESENTATIONS, WARRANTIES AND COVENANTS .....</b>		<b>24</b>
<b>7.1.</b>	<b>Representations and Warranties of Both Parties .....</b>	<b>24</b>
<b>7.2.</b>	<b>Additional Seller Representations, Warranties and Covenants .....</b>	<b>25</b>
<b>ARTICLE 8. NOTICES.....</b>		<b>28</b>
<b>8.1.</b>	<b>Notices .....</b>	<b>28</b>
<b>8.2.</b>	<b>Contact Information .....</b>	<b>28</b>
<b>ARTICLE 9. EVENTS OF DEFAULT; TERMINATION .....</b>		<b>30</b>
<b>9.1.</b>	<b>Events of Default.....</b>	<b>30</b>

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

**Table Of Contents (Continued)**

<b>9.2. Early Termination .....</b>	<b>31</b>
<b>9.3. Termination Payment.....</b>	<b>31</b>
<b>9.4. Reserved.....</b>	<b>32</b>
<b>9.5. Suspension of Performance .....</b>	<b>32</b>
<b>9.6. Rights and Obligations Surviving Termination or Expiration.....</b>	<b>32</b>
<b>ARTICLE 10. DISPUTE RESOLUTION .....</b>	<b>33</b>
<b>10.1. Dispute Resolution .....</b>	<b>33</b>
<b>10.2. Mediation .....</b>	<b>33</b>
<b>10.3. Arbitration.....</b>	<b>34</b>
<b>10.4. Dispute Resolution. ....</b>	<b>36</b>
<b>10.5. Provisional Relief .....</b>	<b>36</b>
<b>ARTICLE 11. INDEMNIFICATION.....</b>	<b>37</b>
<b>11.1. Seller’s Indemnification Obligations.....</b>	<b>37</b>
<b>11.2. Indemnification Claims .....</b>	<b>38</b>
<b>ARTICLE 12. LIMITATION OF REMEDIES, LIABILITY, AND DAMAGES.....</b>	<b>38</b>
<b>ARTICLE 13. CONFIDENTIALITY.....</b>	<b>39</b>
<b>13.1. Confidentiality Obligation.....</b>	<b>39</b>
<b>13.2. Obligation to Notify .....</b>	<b>40</b>
<b>13.3. Remedies; Survival .....</b>	<b>40</b>
<b>ARTICLE 14. FORCE MAJEURE .....</b>	<b>40</b>
<b>ARTICLE 15. MISCELLANEOUS .....</b>	<b>40</b>
<b>15.1. General.....</b>	<b>40</b>
<b>15.2. Governing Law and Venue .....</b>	<b>41</b>

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

**Table Of Contents (Continued)**

<b>15.3. Amendment .....</b>	<b>41</b>
<b>15.4. Assignment.....</b>	<b>41</b>
<b>15.5. Successors and Assigns .....</b>	<b>42</b>
<b>15.6. Waiver .....</b>	<b>42</b>
<b>15.7. No Agency .....</b>	<b>42</b>
<b>15.8. No Third-Party Beneficiaries.....</b>	<b>42</b>
<b>15.9. Entire Agreement.....</b>	<b>42</b>
<b>15.10. Severability .....</b>	<b>42</b>
<b>15.11. Multiple Originals.....</b>	<b>43</b>
<b>15.12. Mobile Sierra.....</b>	<b>43</b>
<b>15.13. Performance Under this Agreement .....</b>	<b>43</b>

**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:

	<b>Type of Product</b>	<b>Local Capacity Area (as applicable)</b>
<input type="checkbox"/>	Product A: System Capacity	Not applicable

	<b>Type of Product</b>	<b>Local Capacity Area (as applicable)</b>
<input type="checkbox"/>	Product B-1: Local Capacity with System Capacity	LA Basin LCA Substations
<input type="checkbox"/>	Product B-2: Local Capacity with System Capacity	Big Creek/Ventura LCA Substations
<input type="checkbox"/>	Product C1: Flexible Capacity (Flexible Category 1) with System Capacity	Not applicable
<input type="checkbox"/>	Product C2: Flexible Capacity (Flexible Category 2) with System Capacity	Not applicable
<input type="checkbox"/>	Product C3: Flexible Capacity (Flexible Category 3) with System Capacity	Not applicable
<input type="checkbox"/>	Product D1-1: Flexible Capacity (Flexible Category 1) with Local and System Capacity	LA Basin LCA Substations
<input type="checkbox"/>	Product D1-2: Flexible Capacity (Flexible Category 1) with Local and System Capacity	Big Creek/Ventura LCA Substations
<input type="checkbox"/>	Product D2-1: Flexible Capacity (Flexible Category 2) with Local and System Capacity	LA Basin LCA Substations
<input type="checkbox"/>	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)
<input type="checkbox"/>	Product D3-1: Flexible Capacity (Flexible Category 3) with Local and System Capacity	LA Basin LCA Substations
<input type="checkbox"/>	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, 2018 and no later than December, 2019.*

#### **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 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, either (i) reduce the Product Monthly Quantity for the following year or (ii) terminate this Agreement. Any such reduction or termination will be effective as of January 1 of the year following the next August 1 after Buyer's notice (for example, a reduction or termination notice on July 31, 2017 would be effective on January 1, 2018, and a reduction or termination notice on November 1, 2017 would be effective on January 1, 2019).
- (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, 2018 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 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 Capacity will equal the maximum 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 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 with respect to such PDR or RDRR will equal the maximum hourly load reduction during such test as calculated using the Capacity Baseline. 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.
- (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 comprised 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)-(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 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. In the event that Seller does not provide such documentation within ten (10) Business Days from Buyer's Notice or such documentation 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.

## **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 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.
- (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 III 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 Full Dispatch during August of each year when Seller is providing August capacity, then Seller shall cause a 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 Demonstrated Capacity.

In addition, if the Delivery Period is greater than six months per calendar year, and if a test or Full Dispatch has not occurred within the first half of the Delivery Period in said 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 for 2018, 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.

### **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.
- (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.

### **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, 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; or
- (d) 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.

$$\text{Delivered Capacity Payment} = [A \times B \times C \times D]$$

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
- 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) As 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.
- (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 any amounts that would otherwise be due to Seller under this Agreement from 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 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 2-609 of the Uniform 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 exercise of 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 ADR Customers 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 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.
- (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 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. Seller shall provide any returning Residential Customers with notice of such provision. 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 that each Customer execute an attestation (1) indicating whether it has a Prohibited Resource on site; (2) indicating that if it has a Prohibited Resource it 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 may have to use a Prohibited Resource during Demand Response events for operational, health or safety reasons, providing the nameplate capacity of the Prohibited

Resource, 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), regardless of whether the Prohibited Resource was actually used. Seller shall collect and store all such Customer attestations and make them available upon request after December 31, 2017, to the CPUC or to the Buyer, as directed by the CPUC.

- C. For new non-Residential Customers, the attestation shall occur at the time of enrollment and shall be provided with an electronic signature. For returning non-Residential Customers, Seller shall provide notice to the Customers of the new provision and outreach to the Customers that a signature, which may be an electronic signature, attesting to the prohibition or the default adjustment, shall be provided to Seller no later than December 31, 2017. Any new non-Residential customer that does not complete this component of the enrollment process will not be eligible to participate in Seller's DRAM Resource. Any existing non-Residential Customer that fails to do so by December 31, 2017 will be removed from Seller's DRAM Resource but will be eligible to re-enroll subject to the requirements associated with the prohibition.
- D. 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 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) (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).

- E. 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 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.
  - F. By December 31, 2017, and on an annual basis thereafter for all residential customers 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.
  - G. 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.
- (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 III 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 III 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 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) 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).
- (v) 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 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: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
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 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 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 2016 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 III Pilot Program” means the program during 2018 and 2019 for the Product as described in CPUC D.14-12-024 and D.16-06-029.

“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.

“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](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.

**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 E  
PRODUCT MONTHLY QUANTITY  
AND  
CORRESPONDING CONTRACT PRICE**

Showing Month	Product [Insert]			
	2018		2019	
	Monthly Quantity (kW for each day of Showing Month)	Contract Price (\$/kW-month)	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.]*



**Attachment K – Redacted Independent Evaluator Report [PUBLIC]**

***Southern California Edison Company***  
***2018-2019 Demand Response Auction Mechanism***  
***(DRAM 3)***  
***Request for Offers***  
***Resource Adequacy Resources***

***Draft Report of the Independent Evaluator***  
***On the Bid Evaluation and Selection Process***

***June 30, 2017***

***Prepared by***  
***Merrimack Energy Group, Inc.***



# Table of Contents

I. Introduction .....	2
II. Description of the Role of the IE.....	11
III. Outreach Efforts .....	14
IV. Description of SCE’s Bid Evaluation and Selection Process .....	16
V. Administration of the Solicitation Process.....	20
VI. Fairness of the Solicitation Process.....	28
VII. Contract Execution Process.....	30
VIII. Safeguards and Methodologies Employed ..	31
IX. Recommendations for Contract Approval.....	32
X. Conclusions and Recommendations.....	33

## APPENDICES

Appendix A – SCE – Offers Received for DRAM 3 RFO

Appendix B – SCE – Summary of Contracts Executed

## I. Introduction

### A. Overview of the Demand Response Auction Mechanism (DRAM) 2018-2019 Pilot Program

On March 10, 2017, Southern California Edison Company (“SCE” or “Company”) issued its Request for Offers (“RFO”) for Resource Adequacy for the 2018 Demand Response Auction Mechanism Pilot (“DRAM 3 RFO” or “2018 DRAM RFO”).<sup>1</sup> The purpose of the DRAM 3 RFO is to solicit offers from Sellers (“Offerors”) providing Resource Adequacy (“RA”) benefits from demand response resources to SCE. The DRAM 3 RFO sought Local, System and Flexible (Category 1, 2 or 3) RA resources using demand response resources. All purchases will be made according to the terms and conditions set forth under a standard, non-negotiable purchase agreement (“DRAM Agreement” or “PA”) for execution in accordance with the DRAM 3 RFO Instructions (the “RFO Instructions”).

In this RFO SCE is soliciting offers for RA benefits from Demand Response Resources (“Product”). Offers must specify whether the Product offered is a Proxy Demand Resource (“PDR”) or a Reliability Demand Response Resource (“RDRR”), and the product must be eligible for inclusion in compliance filings with the California Public Utilities Commission (“CPUC”). Further, each PDR specified by an Offeror must have a corresponding monthly Net Qualifying Capacity (“NQC”) value assigned to it by the CAISO for the portion of the January 2018 to December 2019 Resource Adequacy Compliance Period for which the offer is made. Offerors must designate whether the Product is a Residential Customer Product or not, as defined in the DRAM Agreement. The Product does not include energy or ancillary services.

SCE seeks to purchase RA capacity up to its authorized budget of \$12 million within its service territory, with a minimum of 20% of RA MW capacity from Residential Customers (as defined in the DRAM Agreement). RA product types include Local, Flexible, and System Capacity and applicable combinations.

The DRAM RFO solicitations are a pay-as-bid auction of monthly local, system, and flexible RA for Offerors to bid directly in the California Independent System Operator (“CAISO”) market, with participation from customers in SCE’s service territory. Offerors must bid directly into the CAISO day-ahead or real-time energy market and any resulting revenues or liabilities shall solely be that of the Offeror.

Offerors must comply with the eligibility requirements listed in SCE’s RFO Instructions. Offerors not complying with these requirements could be deemed ineligible and their Offers may not be considered.

---

<sup>1</sup> Pacific Gas and Electric Company (“PG&E”) and San Diego Gas & Electric Company (“SDG&E”) also issued their 2018 DRAM RFO’s on the same day as planned.

The following eligibility requirements are listed in SCE's DRAM 3 RFO Instructions:

- SCE will only consider Offers that meet the Offer Submittal Deadline set forth in the DRAM RFO Schedule;
- Each Offeror's bid into the RFO must be at least 100 kW per month per PDR bid or 500 kW per month per RDRR bid. Larger offers must be offered in quantities rounded to the nearest hundredth of a megawatt (ten kilowatt);
- A single bid may consist of multiple PDRs or multiple RDRRs, but cannot consist of both PDRs and RDRRs;
- Each individual bid must not exceed 10 MW per month. However, a single Seller is not prohibited from submitting multiple bids that total more than 10 MW per month;
- The Delivery Period(s) for the Product will be no earlier than January 2018 and no later than December 2019. Each bid must contain a minimum of one month of delivery and must include delivery during the month of August for each year in which a bid is offered;
- The Offer Sheet must contain a Monthly Quantity (MW) to no greater than two decimal places and Contract Price (\$/kW-month) for each applicable Showing Month (as defined in the DRAM Agreement) and includes Scheduling Coordinator costs in the Contract Price;
- Each Offeror may submit no more than 20 bids;
- Each PDR/RDRR and each service account registered for the PDR(s)/RDRR(s) used to deliver the Product must be located within SCE's service territory (SCE DLAP);

Offerors must submit Offers to sell Product to SCE using the 2018 DRAM Agreement. The DRAM Agreement is non-negotiable and is available on the RFO Website. Accordingly, the Offeror shall submit Offers assuming the costs of Offeror's adherence to the provisions of the DRAM Agreement.

The RFO documents available to Offerors include: (1) SCE DRAM 3 RFO Instructions; (2) DRAM Offer Form; (3) 2018 DRAM Purchase Agreement; (4) Company Organization Chart; (5) Non-Disclosure Agreement; (6) Customer Migration Matrix; (7) Rule 24; (8) Scheduling Coordinator RFI Information Packet.

The RFO Instructions also outline the evaluation criteria to be applied to evaluate and select the shortlisted offers from those submitted. For screening purposes, the RFO Instructions indicate that to be considered for selection in this RFO, the Offer must (1) meet the eligibility criteria set forth in Article Three of the RFO Instructions; and (2) adhere to the submittal requirements set forth in Article Five of the RFO Instructions. SCE will screen Offers on a "pass-fail" basis against these criteria and requirements.

The RFO Instructions note that SCE will evaluate conforming offers using a quantitative assessment only. SCE will perform a quantitative assessment of each conforming Offer individually and subsequently rank the Offers based on each Offer's benefit and cost relationship. Benefits are comprised of Resource Adequacy credit (Contract Quantity),

while costs include the offered capacity price (including Scheduling Coordinator fees) per kilowatt. Evaluation will consider the RA value in each month the DR is provided and will use relative value weights for each month reflecting the value of RA throughout the year. The result of the quantitative analysis is a merit-order ranking of all conforming Offers.

SCE uses only quantitative considerations in evaluating offers. Although Offerors are required to submit answers to several questions regarding the qualitative attributes of their Offers, these answers will not be given any weight in the final selection process in this RFO by SCE.

Pursuant to utilities request, and with the CPUC approval in Resolution E-4728, SCE retained Merrimack Energy Group, Inc. (“Merrimack Energy”) as the Independent Evaluator (“IE”) for this market solicitation.<sup>2</sup>

### **B. Cumulative DRAM Procedural History and Regulatory Requirements (Orders and Resolutions)**

On September 19, 2013, the CPUC issued an Order Instituting Rulemaking (OIR) in Decision (D.) 13-09-011 to enhance the role of Demand Response (DR) in meeting the state’s resource planning needs and operational requirements. In this rulemaking proceeding, CPUC Staff proposed that a Demand Response Auction Mechanism (DRAM)<sup>3</sup> be used to obtain a new resource comprising Demand Response resources which would be aggregated as PDRs or RDRRs by third parties in order to participate directly in the CAISO Day-Ahead or Real-Time Energy Markets<sup>4</sup>. Once selected in the DRAM, these third-party aggregators would be paid by the IOU buyers for the Resource Adequacy (RA) attributes of their DRs with capacity payments bid into the DRAM. CAISO energy settlements would be retained by the third parties (Sellers) as a part of their compensation stream.

In D. 14-12-024 (December 4, 2014), the CPUC resolved various issues in the evolving phases of the rulemaking<sup>5</sup>, modified an attached Settlement Agreement entered into by the majority of the parties and directed that the DRAM be instituted as a two-year pilot during 2015 (“2016 DRAM”) and 2016 (“2017 DRAM”)<sup>6</sup>. In D. 14-12-024, Ordering

---

<sup>2</sup> Merrimack Energy was retained by all three IOUs for this assignment. Merrimack Energy has also served as IE for the previous two DRAM Pilot solicitations.

<sup>3</sup> The DRAM was formally introduced by the CPUC in D. 14-03-026 (March 27, 2014), as described further below.

<sup>4</sup> Bidding Demand Response into the CAISO market has been a CPUC objective since 2007. Finding of Fact 12, D. 14-12-024.

<sup>5</sup> The phases of the Rulemaking proceeding were the subject of a series of scoping memoranda and associated orders: October 24, 2013 Ruling and Scoping Memo; D. 14-01-004 (addressing Phase One issues); D. 14-05-025 (addressing Phase One issues and closing Phase One); D. 14-03-026 (addressing Phase Two issues and determining that demand response programs should be bifurcated beginning in 2017 into load modifying resources and supply side resources); and April 2, 2014 Ruling and Revised Scoping Memo (addressing the continuation of Phase Two and the Phase Three scope and schedule).

<sup>6</sup> D. 14-12-024 Findings of Fact 31-38; Conclusions of Law 14; Ordering Paragraphs 5-6, 10-13 (more general back up generation issues).

Paragraphs 5 and 6, the utilities were ordered to file an advice letter for the DRAM, together with a standard pro-forma contract and to work collaboratively with stakeholders in the DRAM pilot design working group.

### **2016 DRAM (DRAM 1 RFO)**

In their Tier Three Advice Letter filed for the 2016 DRAM on April 20, 2015 (“April 20 Advice Letters”)<sup>7</sup>, SCE, Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E) described the DRAM Pilot design as follows:

“The DRAM will be a pay-as-bid auction of monthly system Resource Adequacy (RA) associated with a demand response product located in the IOU’s service area that will offer the product directly into the CAISO day-ahead energy market. The IOUs will acquire the RA only and will have no claim on revenues the winning bidders may receive from the CAISO energy market.” AL 3208-E, p. 3.

In Resolution E-4728 (July 27, 2015), the 2016 DRAM Pilot as proposed pursuant to D. 14-12-024 and the April 20, 2015 Advice Letters 3208-E, 4618-E and 2729-E, were approved with modifications. Resolution E-4728-E resolved open issues arising from the April 20 Advice Letters as follows<sup>8</sup>:

- The DRAM is a two-year pilot program that is designed to enable DR wholesale market participation by providing a competitive means to a capacity contract outside of any IOU DR program;
- The minimum target for the 2016 DRAM Pilot for June through December delivery is 22 MW of system PDR across all three IOUs. No cap for DRAM procurement was detailed in D.14-12-024. AL 3208-E et al states that winning bids are limited by either the budget or the applicable Commission authorized maximum for Rule 24/32 registrations;
- The CPUC encourages the IOUs to procure viable bids beyond the 22 MW minimum authorization, up to either the applicable Rule 24/32 registration limit or budget limitation<sup>9</sup>;
- Bidders would have to demonstrate that they were not relying on fossil-fueled Back-up Generators (BUGs) for the performance of their PDRs;
- While fossil-fueled BUGs are not allowed in the DRAM program, storage is allowed and encouraged;
- The IOUs’ request for a waiver from RA penalties for any failure of DRAM Sellers to deliver was granted for the limited purpose of the Pilot<sup>10</sup>;

---

<sup>7</sup> AL 3208-E (Southern California Edison Company); AL 4618-E (Pacific Gas and Electric Company); AL 2729-E (San Diego Gas & Electric Company).

<sup>8</sup> The contents of the Tier 1 Advice Letter accompanying the executed DRAM contracts and a Supplemental Advice Letter filed 30 days after the Resolution were also set forth in Resolution E-4728, Ordering Paragraphs 16 and 22.

<sup>9</sup> Resolution E-4728, Ordering Paragraph 14.

<sup>10</sup> Resolution E-4728, Ordering Paragraph 6.

- DRAM contracts must adhere to RA criteria, as well as CAISO obligations and criteria;
- DRAM customers would not need to be under contract in advance of contract execution and certain provisions proposed to allow existing DR customers to migrate to DRAM were approved;
- Net Metering Customers would be allowed to participate in the DRAM program;
- A residential set-aside (without any cost cap<sup>11</sup>) was approved equal to 20% of the total MW procured<sup>12</sup> for each IOU for residential customers (defined as aggregations of at least 90% residential and no more than 10% small commercial customers). The purpose of the set-aside is to attract new market players to the DRAM, and test the participation of residential aggregations in the DRAM mechanism. In other words, if the IOUs collectively procure 50 MW worth of DRAM bids, then 10 MW should be reserved for the residential set-aside;
- The IOUs were directed to each inform the CPUC's Energy Division immediately if there are bids that it wishes to reject that are either clear price outliers or where there is evidence of market manipulation, present those bids and explain the reasons for rejection in advance of actually rejecting the bids;
- AL 3208-E states that cost-effectiveness evaluation does not apply to pilots. However, for purposes of fully analyzing the costs and benefits of the program, the IOUs are also required to file a benchmark capacity calculation using the relevant version of the cost effectiveness protocols approved by the Commission at the time of filing the signed DRAM pilot contracts. The IOUs are also required to file benchmark calculations of the capacity value of the IOUs' comparable DR programs;
- In D.14-12-024, the DRAM working group was directed to develop transparent standard evaluation criteria. AL 3208-E et al. proposed a quantitative criterion, which includes bid price, weighted by month of delivery and scheduling coordinator costs, and a list of standard qualitative criteria which may be weighted, and therefore applied differently at each IOU's discretion;
- The IOUs were directed to develop a clear scoring matrix for each criterion, in a table format, with a numeric score to be assigned to each variable that will be applied equally across the IOUs. This matrix must include all criteria that will be used in scoring DRAM bids, and must be made available to bidders, incorporated into bid documents and explained at DRAM Bidders conference(s);
- The DRAM Contract provision (§3.3) requiring Seller performance and other data requested by the CPUC was allowed as modified; the provision (§5.7) requiring financial information for possible balance sheet consolidation was approved as modified by mutual agreement; and the provision (§3.3(b)) requiring load impact analysis was ordered to be removed<sup>13</sup>;
- Winning bids would be limited as a practical matter to either the budget authorized in D. 14-12-024 or the applicable Rule 24 maximum registrations;

---

<sup>11</sup> Resolution E-4728, Finding Paragraph 29.

<sup>12</sup> Resolution E-4728, Finding Paragraph 30.

<sup>13</sup> Resolution E-4728, Finding Paragraph 7, Ordering Paragraph 5.

- The request of the IOUs to select the next best DRAM bid if a short-listed bid discontinues participation in the DRAM auction is accepted;
- In addition to signed DRAM contracts, the IOUs are required to file all bids received for the DRAM pilot;
- The Resolution requires that the IE Report include both (1) an assessment of the effectiveness of the set-aside in attracting aggregations of residential customers and (2) recommendations for how the set-aside can be improved to better attract residential customer aggregations in subsequent rounds of the DRAM;

The 2016 DRAM was launched on September 28, 2015, with a deadline for the submission of 2016 Offers of October 26, 2015. SCE executed (18) 2016 DRAM PAs with the selected (9) counterparty Offerors in December, 2015 for a total of 20.32 MW. Residential accounts represented 41% of August capacity. On January 8, 2016, SCE timely filed a Tier 1 Advice Letter (“AL”) (“AL 3340-E”) with the results of the first year of the DRAM pilot pursuant to Resolution E-4728 and Resolution E-4737. On February 8, 2016, the CPUC Energy Division approved AL 3340-E in its entirety for effect on that date (“2016 DRAM Approval”).

### **2017 DRAM (DRAM 2 RFO)**

On October 9, 2015, SCE, on behalf of itself, PG&E and SDG&E, filed a Tier 3 Advice Letter (AL 3292-E for SCE; AL 4719-E for PG&E; and AL 2796-E for SDG&E) (the “2017 DRAM Advice Letter”) with respect to the second year of the DRAM Pilot, together with proposed changes to the standard DRAM Resource Purchase Agreement. Subsequently on January 28, 2016, the CPUC issued Resolution E-4754, approving with modifications the second year of the DRAM Pilot Program (“2017 DRAM”).

In compliance with OP 12 of Resolution E-4728, the 2017 DRAM Advice Letter focused on including Local RA and Flexible RA in the 2017 DRAM, aligning the DRAM pilot with the year-ahead RA process, incorporating changes to law or regulation that could impact the second year of the DRAM pilot, and addressing the inclusion of RDRRs.<sup>14</sup>

### **Resolution E-4754**

On January 28, 2016, the Energy Division of the CPUC approved, with modifications, the 2017 DRAM Advice Letters for SCE, PG&E and SDG&E (AL 3292-E for SCE; AL 4719-E for PG&E; and AL 2796-E for SDG&E) and ordered the filing of supplemental Advice Letters within 30 days of the CPUC vote on Resolution E-4754. Among the findings and ordering paragraphs, Resolution E-4754 contained several principal orders:

- The IOUs’ non-binding cost estimates of \$6 million each for PG&E and SCE and \$1.5 million for SDG&E, for a total of \$13.5 million, were approved, and their

---

<sup>14</sup> Resolution E-4817, issued on January 20, 2017 identified the two primary differences between the DRAM 1 and DRAM 2 pilots as: (1) in DRAM 2 a Seller could elect to offer deliveries over 12 months, from January to December; (2) DRAM 2 allowed for local and flexible resource adequacy offers, in addition to system capacity.

request to expend 2015-2016 bridge year funds in 2017 for purposes of funding the DRAM was also approved;

- The minimum procurement targets of 10 MW each for SCE and PG&E, and 2 MW for SDG&E, were retained for the 2017 DRAM. As with the 2016 DRAM, the IOUs were encouraged to procure up to the 2017 budget limitation or the available authorized Rule 24 registrations, whichever comes first;<sup>15</sup>
- The CPUC required the IOUs to make all revisions and modifications to the pro forma contract as prescribed in Resolution E-4754 in a Supplemental Advice Letter. Revisions were required for the pro forma contract in Sections 7.2(b)(v), Section 3.3(c), Section 3.4(a), Section 3.5, and Section 1.5;
- Unless explicitly modified or revised in Resolution E-4754, the provisions, directions, and rules that were adopted for the 2016 DRAM RFO shall apply for the 2017 DRAM RFO.

In accordance with Resolution E-4754, conforming Supplemental Advice Letters were filed on February 8, 2016 by the IOUs (Supplemental AL 3292-E-A for SCE; Supplemental AL 4719-E-A for PG&E; and Supplemental AL 2796-E-A for SDG&E).

The DRAM 2 solicitation was conducted over the period March through July of 2016. On July 27, 2016, SCE filed AL 3442-E requesting approval of contracts resulting from its 2017 DRAM solicitation. On August 25, 2016, Energy Division approved SCE's AL by Disposition letter. SCE shortlisted 30 offers totaling 56.2 MW of August capacity at a total cost of \$5.4 million. SCE executed 9 contracts with 7 counterparties, which included combining the 30 offers into fewer contracts. For the DRAM 2 process, residential accounts represented 20.7% of total August volumes.

On June 9, 2016 in Decision D.16-06-029, the Commission stated that it anticipated issuing a decision in the proceeding that will provide guidance to the utilities for their demand response program year 2018 and beyond applications. The Commission stated that it cannot determine whether a DRAM will be adopted by the Commission for 2018 and beyond programs. However, given the apparent success of the 2016 auction process and the anticipated potential for the 2017 auction process, the Commission found that it was reasonable and prudent to continue, at the very least, the current form of the DRAM as a pilot (pages 43-44). The utilities were authorized a budget of \$27 million, double the current budget, for the continuation of this pilot in the following breakdown for the utilities: \$3 million for SDG&E and \$12 each for PG&E and SCE. In response to comments by ORA and the utilities, the Commission stated that it agreed that with the third auction pilot, it was important for the utilities to be prudent and sensible in selecting and approving bids. Utilities were instructed to ensure that the bids fit portfolio needs and offer the best value to the ratepayers.

---

<sup>15</sup> As a general ordering principle, the IOUs were instructed, "Unless explicitly modified or revised herein, the provisions, directions and rules that were adopted for the 2016 DRAM RFO shall apply for the 2017 DRAM RFO."

The Decision also required the three utilities to file, no later than September 1, 2016, a tier three advice letter requesting adoption of a proposal for a third demand response auction mechanism pilot. Advice Letter 3466-E, filed on September 1, 2016, suggested changes in the DRAM pilot program in the following areas:

- Modifications to product design;
- Demonstrated capacity and performance testing requirements, including stricter performance requirements;
- Potential legal and regulatory changes and their impacts
  - CAISO market changes associated with resource adequacy and must offer obligation requirements
  - Seller's provisions of information to buyers to support customer eligibility for other IOU programs;
- Solicitation protocols and valuation criteria
  - Refinements to qualitative criteria
  - Contract price averaging
  - Potential limitations on RDRR
  - Available Rule 24/32 registrations
- Contract terms and miscellaneous issues

#### **Resolution E-4817**

Resolution E-4817, issued on January 19, 2017, approved, with modifications, the IOUs' proposals for the DRAM 2018-2019 pilot (DRAM 3 RFO) contained in Advice Letter 3466-E, including modifications associated with auction design, protocols, standard pro forma contract, evaluation criteria, and non-binding cost estimates. The Ordering paragraphs in the Resolution included the following provisions and requirements for the DRAM 3 RFO process:

- The IOUs shall ensure that the availability of customer registrations does not limit 2018-2019 DRAM pilot procurement;
- The IOUs will procure 2018-2019 DRAM resources up to an approved budget limit of \$27 million across the three IOUs, including \$3 million for SDG&E and \$12 million each for SCE and PG&E, or to a point at which there is a clear price outlier in bids, whichever comes first. To reject a bid based on an assessment that it represents a price outlier, the IOUs will first discuss with the Energy Division, and Energy Division must agree, before rejecting the bid;
- The bid selection criteria should be fully transparent and available to all potential bidders at the time of the 2018-2019 DRAM RFO, including maintaining the qualitative criteria approved and providing information on how the IOUs will evaluate contract length;
- Authorize the IOUs to hold a secondary auction if either of the following conditions are met for their company: (1) if three or more sellers terminate at least one contract prior to the end of the stated contract length if, as a result of Commission or CAISO rule changes, their DR resources would no longer meet

Commission or CAISO requirements without penalty; or, (2) if, following Commission or CAISO rule changes that create the same conditions, Sellers terminate contracts representing a minimum of twenty five percent of the August 2018 or 2019 contracted capacity (MW);

- The Commission approved the IOUs’ proposal that Sellers be permitted to terminate their contracts at no penalty if the CAISO rule changes negatively impact their ability to deliver the capacity and energy as indicated;
- Agreed with the IOUs regarding modifications to the qualitative criteria to reflect a downgrade in the score of bidders who have failed to deliver or perform in other DRAM RFOs. The Commission agreed with the IOUs that prior experience with delivery shortfalls is an acceptable qualitative criterion. The Commission directed the IOUs to work with the Energy Division Staff and the IE to identify any bidders to which this criterion will be applied and to notify any bidders to whom it is found to apply of this finding at least one week in advance of the 2018 DRAM RFO.

The Resolution also identified the differences between DRAM 2 and DRAM 3.<sup>16</sup> “In DRAM 3, (1) Sellers are required to differentiate between a Proxy Demand Resource (PDR) and a Reliability Demand Response Resource (RDRR); (2) scheduling coordinator costs are to be bid as part of the product capacity costs; (3) an option is available for Sellers to offer a Flexible Capacity Category 1 product; (4) a DRAM Seller may elect to offer deliveries of a maximum of two years through December 2019; (5) utilities have enhanced testing requirements to a minimum of one each August (2018 and 2019), if Full Dispatch has not occurred; and (6) Sellers must show Demonstrated Capacity if a test or Full Dispatch occurs during a month”.

### C. 2018 DRAM Schedule

In accordance with the applicable orders, resolutions and Advice Letters, each of the IOUs, including SCE, adopted the following schedule listed in Table 1 below.

**Table 1: 2018 DRAM Schedule**

<b>DRAM 3 RFO Event</b>	<b>Date</b>
DRAM RFO Launch	March 10, 2017
DRAM RFO Pre-Bid Conference	March 21, 2017
Offer Submittal Deadline	April 10, 2017
Notification of Offer Non-Conformances	April 17, 2017
Offeror Deadline to Cure	April 24, 2017

<sup>16</sup> Resolution E-4817 also identified the differences between the first and second DRAM pilots (DRAM 1 and DRAM 2). These include: (1) in DRAM 2 a Seller could elect to offer deliveries over 12 months, from January to December as opposed to a partial year in DRAM 1; and (2) DRAM 2 allowed for local and flexible resource adequacy offers, in addition to system capacity.

#### **D. Issues Addressed in this Report**

This report addresses Merrimack Energy's assessment and conclusions regarding the following issues identified in the Commission's CPUC Independent Evaluator Report Template:

1. Describe the role of the IE throughout the solicitation and negotiation process.
2. How did the IOU conduct outreach to bidders, and was the solicitation robust?
3. Describe SCE's bid evaluation methodology. Evaluate the strengths and weaknesses of the methodology.
4. Evaluate the administration of the solicitation process including the fairness of the IOU's bidding and selection process (i.e. quantitative and qualitative methodology used to evaluate bids, consistency of evaluation methods with criteria specified in bid documents, etc.).
5. Describe any applicable project-specific negotiations. Highlight any areas of concern including unique terms and conditions.
6. If applicable, describe safeguards and methodologies employed by the IOU to compare affiliate bids or Utility-Owned Generation ("UOG") ownership proposals. If a utility selected a bid from an affiliate or a bid that would result in utility asset ownership, explain and analyze whether the IOU's selection of such bid(s) was appropriate.
7. Based on the complete bid process, is (are) the IOU contract(s) the best overall offer(s) received by the IOU?
8. Is the contract a reasonable way of achieving the need identified in the RFO?
9. Based on your analysis of the RFO offers, the bid process, and the overall market, do the contracts merit Commission approval?

All these issues are addressed in this report, generally in the order included in the CPUC Independent Evaluator Report Template.

## **II. Description of the Role of the IE throughout the Solicitation**

In compliance with the above requirements, the California investor-owned utilities ("IOU"), including SCE, retained Merrimack Energy to serve as Independent Evaluator for SCE's 2018 DRAM RFO. Merrimack Energy was retained to provide an independent

evaluation of the appropriateness of SCE's proposal evaluation methodology and selection process for product offers and to provide SCE, SCE's Procurement Review Group ("PRG"), and the Energy Division with periodic presentations, findings and other reports as requested. The objective of the role of the IE is to ensure that the solicitation process is undertaken in a fair, consistent, unbiased and objective manner and that the best offers are selected and acquired consistent with the solicitation requirements.

This role generally involves an assessment of the solicitation documents, detailed review and assessment of the evaluation process, the results of the quantitative and qualitative (non-price) analysis, selection of the short list or preferred product options, and monitoring and assessment of contract negotiations. For this solicitation, Merrimack Energy was retained from the beginning of the process through contract execution. Merrimack Energy participated in meetings of the DRAM RFO teams comprised of representatives of all three utilities prior to receipt of offers and coordinated with all three utilities separately after submission of offers.

#### **A. Regulatory Requirements for the Independent Evaluator**

The requirements for participation by an Independent Evaluator ("IE") in utility solicitations are outlined in decisions D.04-12-048 (Findings of Fact 94-95, Ordering Paragraph 28), D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8) of the California Public Utilities Commission ("Commission" or "CPUC") and D.09-06-050.

The role of IE's in California IOU procurement processes has evolved over the past twelve years. In Decision 04-12-048 (December 16, 2004), the CPUC required the use of an IE by IOUs in resource solicitations where there are affiliates, IOU-built or turnkey bidders. The CPUC generally endorsed the guidelines issued by the Federal Energy Regulatory Commission ("FERC") for independent evaluation where an affiliate of the purchaser is a bidder in a competitive solicitation, but stated that the role of the IE would not be to make binding decisions on behalf of the utilities or administer the entire process.<sup>17</sup> Instead, the IE would be consulted by the IOU, along with the Procurement Review Group ("PRG") on the design, administration, and evaluation aspects of the Request for Proposals ("RFP"). The Decision identifies the technical expertise and experience of the IE with regard to industry contracts, quantitative evaluation methodologies, power market derivatives, and other aspects of power project development. From a process standpoint, the IOU could contract directly with the IE, in consultation with its PRG, but the IE would coordinate with the Energy Division.

In the Advice Letter filed by the three IOUs on April 20, 2015, the IOUs indicated they planned to engage an IE to evaluate and report on the solicitation, evaluation, and selection for the DRAM Solicitation. A single evaluator will be used if one is on all IOU approved IE lists, if available, and using an IE is approved by the Commission through a Resolution to this Advice letter. The IE can be present at meetings and conference calls

---

<sup>17</sup> Decision 04-12-048 at 129-37. The FERC guidelines are set forth in Ameren Energy Generating Company, 108 FERC ¶ 61,081 (June 29, 2004).

between the IOUs and bidders and will have full access to the solicitation management system used in the DRAM solicitation. The IE will review all answers to questions and may periodically make presentations to the IOUs, the CPUC and stakeholder groups to ensure that the DRAM solicitation remains open, fair, and transparent. The IE will also check for consistency in each IOU's application of its protocols and evaluation processes across bidders in its auction. The IE will review all offers and share findings about how the DRAM process worked and what could be improved. The IE will submit a confidential report and a public report on the auction process to be submitted with the contracts for approval by the CPUC.

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, issued by the CPUC on July 27, 2015 approved the IOUs request to employ an IE. In addition to the elements proposed in AL 3208-E et al, the IE's final report shall include:

- An assessment of the effectiveness of the IOUs' efforts in soliciting and attracting new DR participants, and recommendations for how to better attract new DR participants to the California market in subsequent rounds of the DRAM, and
- The effectiveness of the residential set-aside and recommendation for how to better attract residential customers to the California market in subsequent rounds of the DRAM.

This report is filed consistent with the above requirements and is consistent with the requirements outlined in the CPUC's Short Form IE Report Template.

## **B. Description of IE Oversight Activities**

The IE was involved in a number of activities and completed several specific tasks in performing its oversight role in connection with development of the DRAM 3 RFO pilot program, SCE's evaluation methodology, and evaluation and selection process. The activities of the IE during the process are described below:

- Participated in utility DRAM team meetings prior to receipt of offers as well as conference calls in which the utilities discussed common issues;
- Reviewed and commented on the Draft DRAM 3 RFO documents for each IOU;
- Participated in PRG meetings prior to and during the solicitation process for each utility;
- Reviewed and discussed the bid evaluation methodology with all three utilities;
- Participated in the Pre-Bid Conference and provided comments on the presentation;
- Reviewed and commented on the Company's responses to bidder's questions;
- Reviewed and summarized the offers received to ensure the Company and IE identified and assessed the same list of offers;
- Reviewed the conformance assessment undertaken by each IOU and participated in discussions with the Utilities regarding conformance issues;

- Participated in weekly calls regarding the DRAM 3 Solicitation with SCE's project team;
- Reviewed and assessed SCE's evaluation of the offers received for purposes of selecting the offers that would be included in the final shortlist. Participated in several conference calls with SCE's project team and project staff to discuss the status of the bids and any revisions to the shortlist;
- Prepared the IE report for inclusion with the utility Advice Letter filings seeking approval for the contracts executed;

This report provides an assessment and review of SCE's DRAM 3 RFO procurement process from development of the RFO through execution of the final contracts. The role of the IE is also discussed as it pertains to specific activities as identified in Section V of this report.

### **III. How Did SCE Conduct Outreach to Bidders and Was the Solicitation Robust**

#### **A. Describe the IOU Outreach to Potential Bidders**

For the 2016 DRAM RFO, the IOUs' outreach efforts targeted approximately [REDACTED] contacts from companies involved in DR and other programs for its distribution list for the initial RFO.<sup>18</sup> This included companies who had participated in utility programs in California as well as companies involved in DR programs in other markets in the US and Canada. The IE also identified a number of DR program participants from other ISOs or markets and provided the contact list to the IOUs' project team involved in the outreach activities. For the 2017 and 2018 DRAM RFOs, the utilities added other contacts to the original list, if appropriate. The distribution list for the 2017 and 2018 DRAM RFOs included over [REDACTED] contacts.

The IOUs' outreach activities resulted in a robust response in terms of the number of respondents and the quantity and quality of the proposals received. As we will discuss later, the response to the DRAM 3 RFO was not as robust as the response to the DRAM 2 RFO process, both in terms of the number of Bidders and overall number of offers, although total MW offered was slightly higher than the previous RFO.

SCE also established a section on the Company website for distribution of information to prospective Offerors. The website contained all the pertinent solicitation documents including:

- SCE Advice Letters;
- CPUC Resolution E-4817;
- DRAM Bidders Conference Presentation and Recording;
- Bidders Conference FAQs;
- CISR – DRP Form;

---

<sup>18</sup> The list of potential candidates was based on a compilation of the lists for all three IOUs.

- DRAM RFO Instructions;
- DRAM Customer Migration Matrix;
- Rule 24 Information;
- Rule 24 Process Diagram;
- Scheduling Coordinator RFI Information Packet;
- DRAM Purchase Agreement (launch version);
- DRAM Purchase Agreement (final version);
- Redline DRAM Purchase Agreement;
- Frequently Asked Questions;
- Local Capacity Area Google Earth Maps – LA Basin and Big Creek/Ventura;
- Q&A from the 2016 and 2017 DRAM RFOs;
- Rule 24 Data Directory;
- Seller Offer Form;
- Seller Organizational Chart;
- Non-Disclosure Agreement;
- Available Rule 24 Registrations

The IE found the website easy to access and easy to download information.

### **B. Identify the Principles Used to Determine Adequate Robustness of the Solicitation**

There are several principles generally applied to determine whether the robustness of the solicitation was adequate. These include:

- Did the amount of capacity bid for the product sought allow for a competitive process?
- Were offers submitted for all products requested?
- Was there a competitive number of Respondents for all products?
- Did the utility adequately market the solicitation?

### **C. Was the Solicitation Adequately Robust**

SCE received 79 original offers on April 10, 2017 from eleven (11) counterparties, compared to 119 offers from 17 counterparties in the 2017 DRAM RFO. There were two new Bidders in the 2018 DRAM RFO compared to previous RFOs. Of the offerors competing in the process, [REDACTED] provided residential offers only, [REDACTED] provided non-residential offers only, and [REDACTED] provided both residential and non-residential offers. There were [REDACTED] non-residential and [REDACTED] residential offers submitted. Overall, there was a total of approximately 226 MW submitted for August, 2018 and 256 MW for August, 2019, filtered for mutually exclusive offers.

The IE concludes that SCE's outreach activities were more than adequate and led to a reasonably robust market response based on the competitive number of respondents and options submitted. Respondents submitted RA offers that included all months in the

contract terms (i.e. January – December, 2018-2019), summer months only, as well as a mix of residential and non-residential customer classes.

#### **IV. Description of SCE’s Proposal Evaluation Methodology**

This section of the report provides an overall description of SCE’s evaluation methodology and criteria for DRAM resources. SCE developed an internal evaluation methodology designed to assess DRAM offers to meet requirements for the DRAM 3 RFO based on the set of constraints and eligibility criteria identified in the RFO Instructions and the requirements outlined in the CPUC Resolutions. As will be discussed in this section, the three California utilities, including SCE, developed a generally consistent “value oriented” quantitative evaluation methodology for the DRAM 3 RFO.

As described in its 2018 DRAM RFO Participant Instructions, SCE starts by screening Offers on a “pass-fail” basis against the eligibility requirements identified in the RFO for conformance purposes. In order to be considered for selection in this RFO, the Offer must (1) meet the eligibility criteria set forth in Article Three of the RFO Instructions and (2) adhere to the submittal requirements set forth in Article Five of the RFO Instructions.<sup>19</sup> Conforming offers<sup>20</sup> will then go through the analysis described later in this section to evaluate and rank the offers received. Offers will be shortlisted based upon the requirements identified in the DRAM Decisions, Resolutions and Advice Letters unless Offers are rejected as price outliers or in cases where there is clear evidence of market manipulation. SCE’s solicitation is seeking to procure DR resources under the following identified constraints:

- DR Budget Cap of \$12 million;
- 20% of capacity which must be from residential Offers;<sup>21</sup>
- Select contracts, in aggregate, up to the funding limits.

SCE evaluated conforming offers using a quantitative assessment only. SCE performed a quantitative assessment of each conforming offer individually and subsequently ranked the Offers based on each Offer’s benefit and cost relationship over the term offered. Benefits are comprised of capacity value, while costs include the Capacity Payment (offer price each month times offer quantity). For SCE, capacity value is based on the ████████ distributed by month based on SCE’s monthly system RA forecast times monthly contract capacity. Capacity Value will be multiplied by 1.15 since every 1 kW of DR resources reduces RA requirements by 1.15 kW. All costs and benefits will be discounted

---

<sup>19</sup> The criteria/requirements include: (1) Offer submitted on time; (2) delivery period is no earlier than January 2018 and no later than December 2019; (3) an offer must contain greater than 0 kW bid in August of each year that any bid is offered; (4) single bid is at least 100 kW per Showing month per PDR bid or 500 kW per RDRR and not more than 10 MW per month; (5) Offer Sheet must contain a Monthly Quantity (MW) and Contract price (\$/kW-month) for each applicable showing month; and (6) required submittal documents.

<sup>20</sup> Based on the schedule, there is a 7-day cure period from April 17, 2017 to April 24, 2017 to cure offers.

<sup>21</sup> “Residential Offer” is a DRAM resource composed of at least 90% residential customers and no more than 10% small commercial customers based on registrations by rate.

using SCE's internal discount rate of 10% annually. The result of the evaluation is a Net Present Value ("NPV") of the costs and benefits for each offer.<sup>22</sup> The NPV of the benefits minus the costs divided by the monthly kW offered is then converted to a \$/kW-year value for each offer. All offers are ranked based on NPV\$/kW-year values, which serves as the basis for selection, taking into consideration any mutually exclusive offers, the 20% residential set-aside requirement and the total budget cap.

As SCE stated in its RFO Instructions, although Offerors were required to submit answers to several questions regarding the qualitative attributes of their Offers, these answers were not given any weight by SCE in the final selection process in this RFO.

Prior to issuance of the DRAM 3 RFO, the IE reviewed SCE's and the other utilities' evaluation methodology and participated in calls with SCE's project team along with the teams of the other utilities to review and discuss the proposed methodology and ensure the methodology was reasonably consistent to facilitate participation by Bidders.

After submission of Offers, the IE summarized and ranked the offers received by each utility as a check relative to the summary prepared by the utility. The IE also reviewed SCE's and other utilities' assessments of the offers received to ensure that the best offers were reasonably considered based on the constraints and requirements imposed. The IE used his own spreadsheet model as a check against the utility assessment.

### **Framework and Principles for Evaluating SCE's Bid Evaluation Methodology**

This section of the report addresses the principles and framework underlying Merrimack Energy's review of SCE's methodology for the DRAM RFO offer evaluation and selection. Key areas of inquiry by the IE and the underlying principles used by the IE to evaluate the methodology and results include the following:

- Were the procurement targets, products solicited, principles and objectives clearly defined in the RFO documents?
- Is the bid evaluation based on the criteria specified in the bid documents?
- Do the bid documents clearly define the type and characteristics of products desired and what information the bidder should provide to ensure that the utility can conduct its evaluation?
- Does the methodology identify how qualitative and quantitative measures were considered and were they consistent with an overall metric?
- Does the price evaluation methodology allow for consistent evaluation of offers of different sizes and in-service dates?

### **Evaluation Criteria and Methodology**

SCE's DRAM 3 RFO adequately defines the products solicited (Article 2 in the RFO Instructions), the basis for the solicitation, the principles and objectives of SCE,

---

<sup>22</sup> Costs and benefits are discounted back to May 1, 2017 as the basis for the evaluation results.

eligibility requirements, the evaluation criteria, quantitative and qualitative evaluation factors, and the information required from the Respondents. The DRAM 3 RFO documents also provide the Offer Forms which the Respondents should complete as part of their offer. As described in the RFO Instructions, as a first step all incoming proposals were initially assessed for conformance with the basic submittal requirements identified in the DRAM 3 RFO. Subsequent to the conformance review, SCE undertook a quantitative assessment only as noted above. SCE assessed the proposals based on the benefit and cost relationship which reflects the relationship between the bid prices offered for each month relative to SCE's projection of market RA value.

As is typical in procurement processes, the DRAM 3 RFO does not provide the detailed inputs (i.e. RA prices projected for each month by product) or the specific methodology that SCE will use in the evaluation. However, the methodology was reviewed with the IE in advance of receipt of offers and discussed with SCE's project team. Also, the methodology was described in detail during the Pre-Bid Web Conference and a sample spreadsheet model was provided by SDG&E to bidders based on hypothetical rather than actual RA price curves. The methodology was consistently and reasonably applied to all offers given the type of product sought. Respondents were aware of the importance of August in meeting DRAM targets as well as the value of summer month RA capacity relative to other months although the specific values were not identified.

In summary, the description and implementation of the evaluation methodology, criteria, and inputs meets the requirements of the Resolutions. While the Qualitative Scoring Matrix for the DRAM 3 RFO includes two additional criteria to reflect bidder performance (weighted at 0 by SCE),<sup>23</sup> one issue to consider for future DRAM solicitations (after completion of the pilot) is whether the evaluation process should contain stricter thresholds or stricter qualitative criteria based on performance of Respondents who were awarded contracts and their experience performing under the contracts.

### **Strengths and Weaknesses of SCE's Evaluation Methodology for DRAM RFO**

This section of the report provides an assessment of the strengths and weaknesses of SCE's evaluation and selection methodology.

Our experience has indicated that utilities use a variety of methodologies and criteria to evaluate resources based on the specific products requested and other factors. We will draw upon this experience to address SCE's methodology relative to the product solicited.

---

<sup>23</sup> One of the qualitative criteria addresses the question whether the bidder willfully terminated or defaulted on a past DRAM Purchase Agreement ("PA"), or submitted offers that demonstrated bidding behavior providing clear evidence of market manipulation or collusion. The second criteria addresses whether the bidder did not sign the DRAM PA when extended a shortlist offer, or delivered Supply Plans to the IOU for DRAM totaling in aggregate less than 50% of the contract capacity.

The following are the strengths identified by the IE with regard to the evaluation methodology:

- The methodology is reasonably straightforward, is easy to implement, and can be reviewed and audited easily;
- The methodology is generally consistent with the traditional utility “least cost best fit” methodology wherein the utilities generally compare the value of an offer based on market projections relative to the bid cost. The “net market value” methodology therefore accounts for both value and cost in evaluating and ranking offers. Furthermore, this methodology is valuable for the DRAM 3 RFO and future DRAM RFO’s in which the utilities may be considering a range of RA products (i.e. system and local RA, flex options, etc.) as opposed to a cost-only evaluation methodology used for the 2016 DRAM RFO. In particular, the methodology is capable of evaluating a range of products and offer types;
- The methodology does reflect the importance of summer capacity costs and volumes offered;
- The methodology is consistently applied for both residential and non-residential customers.

In the opinion of the IE, one potential weakness of the methodology may be associated with the use of █████ as the basis for calculating RA capacity value.

The IE raised questions about SCE’s use of a █████ methodology for assessing two-year contracts for RA via the DRAM 3 RFO process, since █████. At the current time, monthly capacity prices are low (both in actual terms and █████) based on the surplus of RA capacity in the CAISO market and are projected to remain so in the near term. The IE questioned whether a █████ would be more applicable for evaluating products sought in the DRAM 3 solicitation. In response to the IE’s questions about the use of █████ as a reasonable cost on which to evaluate the value of capacity in the market, SCE team members informed the IE that they were following the requirements of CPUC Decision D.15-11-042.

In conclusion, the IE is of the opinion that the general methodology used by SCE (and the other IOUs) for evaluating DRAM RFO offers is reasonable for this type of product. The methodology provides a systematic way of evaluating and ranking a range of offers and products considered with the objective of meeting spending, and customer set-aside targets to develop a final short list based on the constraints identified and offers submitted. Furthermore, this methodology offers a solid base in cases where the DRAM solicitation requirements may become more complex. While the IE raised questions about SCE’s use of █████ as a basis for assessing the value of capacity for the DRAM solicitation, SCE indicated it based its decision on a Commission Decision. Furthermore, SCE concluded that the bid rankings would not change if the previous DRAM RA curve methodology was applied.

## **V. Administration of the DRAM Solicitation Process**

In performing its oversight role, the IE participated in and undertook a number of activities in connection with the DRAM 3 solicitation including providing comments on the RFO documents, participating in weekly conference calls with the IOU's project teams prior to receipt of offers, discussing the bid evaluation methodology and selection process, discussing the rationale for any constraints or objectives underlying the evaluation and selection, organizing and summarizing the bids received, reviewing and commenting on the evaluation and selection process and results at each step of the evaluation and selection process, and participating in meetings with the PRG. The key project activities are listed in this section of the report in conjunction with the activities of the IE.

### **Project Team Meetings**

Contrary to previous DRAM solicitations, meetings of the evaluation teams for each utility was limited in the DRAM 3 solicitation process. Instead, discussions among the utilities focused on specific issues, such as the evaluation methodology. SCE did schedule weekly team meetings of the internal SCE DRAM team and invited the IE to each meeting. The meeting agendas focused on the status of the internal workplan and the specific tasks required to implement the DRAM RFO as well as a discussion of the timeline and schedule going forward.

### **Preparation/Launch of the DRAM RFO**

The IE reviewed a draft of SCE's DRAM RFO Participant Instructions and the Offer Forms prior to launch and provided minor comments to SCE. The IE and SCE's DRAM team members also had discussions regarding the bid evaluation methodology and RA curve proposed by SCE prior to the launch.

The RFO was issued on March 10, 2017 as planned. The DRAM 3 RFO Instructions, Offer Form, and related documents were posted to the DRAM 3 RFO website at that time. The documents included on SCE's DRAM RFO website were identified previously in this report.

### **Pre-Bid (Bidders) Web Conference**

The IOUs held a Pre-Bid Web Conference on March 21, 2017 for interested Offerors to provide an overall perspective on the solicitation process including the products sought, eligibility requirements, bid evaluation and selection methodology and process, requirements of the Offerors/Respondents, process schedule, and steps in the process. In addition, the utilities provided a description of the Offer Forms used by each utility and SDG&E provided a sample spreadsheet model and used the model to describe the evaluation methodology. Offerors/Respondents had the opportunity to ask any follow-up questions, and the IOUs, including SCE, posted the responses shortly after the Pre-Bid Web Conference. The IE had the opportunity to review the Pre-Bid Web Conference presentation and provide a few comments on the draft materials.

Agenda issues addressed at the Pre-Bid Web Conference included:

- Introduction and Overview
- Bid Valuation and Selection
- DRAM Request for Offers Bid Materials
- Walk-Through of IOU DRAM RFO Offer Forms
- Closing Remarks

One of the points raised by the IOUs was a description of the changes in the DRAM 3 program relative to the DRAM 2 solicitation. Table 2 provides the comparison table presented in the presentation and highlights the important changes.

**Table 2: Revisions to the DRAM 3 Process Relative to DRAM 2**

<b>Items</b>	<b>2017 DRAM (DRAM 2)</b>	<b>2018 DRAM (DRAM 3)</b>
RA (Capacity) Products	System, Local, and Flexible Capacity Categories (2 and 3)	System, Local and Flexible Capacity Categories (1, 2, and 3)
Showing (Operating) Months	January – December 2017	Two years (2018-2019); January – December
Budget	\$6 million for PG&E and SCE; \$1.5 million for SDG&E	\$12 million each for PG&E and SCE; \$3 million for SDG&E
Rule 24/32 Registration Cap	SCE – 42,000; PG&E – 40,000; SDG&E – 30,000	None – Pending funding approvals of Tier 1 filing (SCE) and Tier 3 (PG&E, SDG&E)
Demonstrated Capacity (Agreement Articles 1.6, 3.3)	Seller choice of: Average monthly bid during Showing Month hours in compliance with CAISO MOO, maximum hourly load reduction, Seller capacity test, or maximum hourly load reduction during actual Dispatch.	Order of fulfillment for each Showing Month: <ol style="list-style-type: none"> <li>1. Results of actual dispatch; if none, then</li> <li>2. Results of Seller capacity test before end of month,</li> <li>3. If Showing Month is not subject to mandatory capacity testing, then average monthly bid amount can be used.</li> </ol>
Prohibited Resources (Agreement Article 7)	BUGS prohibition	Attestations, default adjustment value added to BUGS prohibition
Ability to set Capacity to zero based on RA Rule changes	Not applicable	Yes

Approximately [REDACTED] Participants called into the Pre-Bid Web Conference, including a number of potential new Participants.

**Discussion of Bid Evaluation Methodology**

After discussions, the utilities agreed to implement a consistent methodology based on a Net Market Value type of methodology which involved calculating the difference between costs for each offer as bid relative to the benefit received based on the same

quantity of MW offered each month. Calculation of the benefits would be based on each utility’s projection of RA value for each product solicited, if applicable. This would essentially be compared to the cost bid for each month.

The utilities agreed to discount costs and benefits based on their discount rates to generate a net present value calculation for each offer. The utilities also agreed to apply an average kW per year metric as the denominator for calculating a single metric to use for evaluation and ranking purposes.<sup>24</sup> All utilities also applied the 1.15 factor for valuing RA benefits.

A major point of difference was the treatment of qualitative criteria. While the utilities generally agreed on the matrix for scoring and evaluation, there were differences regarding the qualitative criteria and weights applied in the evaluation process by each utility. In this regard, the utilities were able to include their own weights and qualitative criteria in the matrix for purposes of conducting the evaluation. SCE proposed to use weights of 0 for all qualitative criteria.

While the methodology does not allow for the same calculation of prices and value for the offers submitted across each utility since each utility is using different RA forecasts, different products and different discount rates, the methodology does allow for a reasonably consistent evaluation by each utility for the products solicited.<sup>25</sup>

**Questions and Answers**

The utilities received and answered forty-three questions for the DRAM 3 RFO. Questions were generally received at the Pre-Bid Conference as well as additional questions after the conference. Once questions were received, the utilities each provided input to the responses. The IE reviewed and commented on final draft responses to ensure the responses were clear and consistent. The Q&As were organized by topic and posted on each utility’s website. Table 3 summarizes the number of questions and answers provided by topic area included in the Frequently Asked Questions which are posted to the IOU websites.

**Table 3: Summary of Questions and Answers by Topic Area**

<b>Topic Area</b>	<b>Number of Questions/Responses</b>
RFO General	20
Supply Plan/RA/Local/System/Flex	5
Capacity Demonstration and Must Offer Obligations	3
Purchase Agreement	0
Proxy Demand Resource (PDR)/Reliability Demand	9

<sup>24</sup> The selected metric to evaluate and rank order offers was NPV (PV\$/kW-year), where kW-year was based on an annualized value of the average kW offered each month (i.e. Net Value/sum of kW-months x 12).

<sup>25</sup> The primary difference in the evaluation methodology used by the utilities is that SCE did not discount the kW bid in the denominator, while SDG&E and PG&E did discount the kW.

Resource (RDRR)	
Prohibited Resources/Back-Up Generators	1
Scheduling Coordinator	0
Customer Eligibility	4
CISR – DPR/Green Button	1
Total	43

The IOUs compiled the questions received by each utility, distributed the questions to a utility representative for each utility, prepared initial responses to the questions, and distributed the draft responses for further comment. The responses to the questions generally reflected the combined input of team members from each utility and consensus regarding a consistent response, if possible. Overall, the IE felt the IOUs were responsive and thorough with regard to the responses to bidders and provided valuable information to assist bidders with regard to responses to the RFO.

**Receipt of Offers**

Offers were received as scheduled on April 10, 2017. For SCE, Offers were submitted directly to the SCE RFO inbox with a copy sent to the IE. A total of eleven Bidders submitted offers. In all, 79 offers were submitted, substantially less than the 119 offers submitted by 17 Bidders for the 2017 DRAM RFO process, while MW offered were greater than in the previous RFO <sup>26</sup> Two new Respondents submitted offers to SCE’s DRAM 3 RFO.

Eligible Respondents offered a mix of residential and non-residential customer accounts. [REDACTED] Offerors ([REDACTED]) submitted offers for residential only service accounts. [REDACTED] Offerors ([REDACTED]) submitted offers for non-residential service accounts only. [REDACTED] submitted offers for both residential and non-residential accounts.

In summary, eligible Bidders submitted offers that included a total of 100,790 Customer registrations and 228.9 MW of August RA capacity in 2018 and 259.3 MW of August RA capacity in 2019 (including mutually exclusive offers), with a total cost of approximately \$ [REDACTED]. In comparison, eligible DRAM 2 Bidders submitted offers that included a total of 52,436 Customer registrations, 158 MW of August RA with a total cost of \$ [REDACTED]. DRAM 1 Bidders submitted offers for 21,306 registrations, totaling \$ [REDACTED] for 63.01 MW.

The IE downloaded the proposals and reviewed the offers along with SCE’s project team. The IE prepared its own summary of the offers received including high level summary information of the offer quantities and pricing for each product. The IE used this information to also check the evaluation results and ranking of offers compiled by SCE for selection purposes using a model developed by the IE.

---

<sup>26</sup> Fifty offers from eleven Bidders were submitted to SCE’s 2016 DRAM RFO.

Appendix A provides the IE's list of the offers received, including the Offeror, the customer class offered, estimated number of registrations, monthly capacity and pricing offered, and total costs for each offer.

### **Conformance of Offers/Cure Period**

The DRAM RFO schedule allowed approximately 14 days from submission of offers on April 10, 2017 to identify any conformance issues and to allow bidders to cure any non-conformance issues associated with their offers by the cure deadline of April 24, 2017.

With regard to conformance issues, [REDACTED].

### **Offer Ranking and Selection**

After the conformance stage, SCE proceeded to complete its review and assessment and rank offers based on its evaluation methodology. The evaluation methodology consisted of the following steps:

1. Calculate the total bid cost for each offer for each month as the product of the monthly capacity offered times the monthly offer price;<sup>27</sup>
2. Calculate the total RA value of the offer for each month as the product of the monthly capacity offered times SCE's forecast of the RA value for each month based on the product submitted by the Respondent;
3. Multiply the total RA value by 1.15;
4. Calculate the Net Present Value of the cost and benefit streams based on SCE's discount rate of 10% which is used for most solicitation processes;
5. Calculate the difference between the benefits and costs for each offer;
6. Divide the difference between the benefits and costs by the sum of the monthly kW submitted for each offer;
7. Multiply this value times 12 to derive a PV\$/kW-year metric;
8. Rank order the offers from highest to lowest value (PV\$/kW-year) for all eligible offers.

### **PRG Meeting – DRAM 3 RFO Final Selection**

SCE presented its final evaluation results and project selection to the PRG on May 23, 2017. SCE informed the PRG that it obtained FRM Energy Procurement Working Group approval on the recommended selection of DRAM RFO offers totaling 89.8 MW of August 2018 capacity and a notional cost of \$[REDACTED], exclusive of administrative costs.

SCE provided the PRG background on the DRAM RFO process and SCE's requirements for the DRAM 3 RFO. These include:

- DR budget cap of \$12 million;
- No Rule 24 registration cap;

---

<sup>27</sup> The bid cost includes Scheduling Coordinator costs for DRAM 3.

- Procurement MW must be at least 20% residential;
- SCE can reject offers that are either clear outliers or where there is evidence of market manipulation, subject to ED concurrence.

SCE provided a summary of the offers received and its recommended selection which included the following:

- SCE recommended selecting offers in order when ranked by NPV\$/kW-year up to the 20% Residential limit and the inclusion of one flexible RA (Category 3) offer [REDACTED]. This results in:
  - 89.8 MW of August 2018 capacity;
  - .3 MW is LA Basin Flex (with an additional cost of approximately \$ [REDACTED] over non-flex offer);
  - Six out of eleven Offerors were awarded contracts
  - The results of the evaluation and ranking was a NPV [REDACTED] value in comparison to previous DRAM RFO's due to the use of [REDACTED];

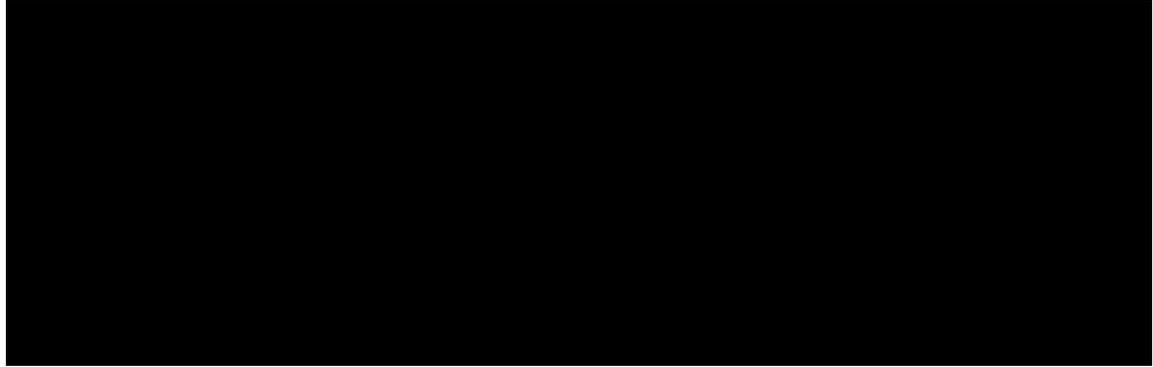
The shortlisting decisions were based on NPV\$/kW-year. The offers were selected in rank order based on the metric identified by SCE as the metric it would use for ranking and selection purposes. SCE selected offers from the following seven Offerors:

[REDACTED]

Table 4 provides a summary of the shortlisted offers that SCE presented to the PRG at its May 23, 2017 meeting (only a subset of these offers, designated in the final column with a Y, were selected due to exclusivity or the requirement to by-pass offers to meet the 20% residential set-aside).

**Table 4: SCE Shortlist Selection**

[REDACTED]



For its recommended shortlist, SCE selected [REDACTED] offers from six counterparties, generally in rank order adjusted for exclusivity constraints, which included the following statistics:

- 89.8 MW of Demand Response RA in August, 2018 and 99.6 MW in August, 2019;
- Total cost of \$[REDACTED];
- 20.9 of Residential capacity for August, 2018, which is equivalent to 23.2% of all RA capacity selected for August;
- Total customer account registrations of 61,658 including 9,774 existing registrations and 51,884 new registrations;
- SCE selected one Flexible RA offer (Category 3).

While SCE selected offers out of rank order to meet the residential set-aside requirement, SCE decided to select offers up to but not including [REDACTED] Offer [REDACTED] because the total cost of the offer would result in SCE exceeding the budget cap. SCE decided not to select any non-residential offers out of rank order.

Merrimack Energy also provided its comments on the results of the solicitation process and also discussed trends in pricing and offers over the three DRAM pilot solicitations, including the following:

- Merrimack Energy was able to verify SCE's evaluation results and rankings based on use of Merrimack Energy's model with SCE inputs and offer pricing and volumes;
- The number of Bidders submitting proposals was the same number as the initial DRAM pilot solicitation but fewer than the DRAM 2 pilot solicitation. This may indicate a diminished interest on the part of the market to compete in the DRAM pilot solicitations;
- There are five Bidders who have participated in all three SCE DRAM pilot solicitations ([REDACTED]);
- On the positive side, prices offered are showing a downward trend over the three DRAM pilot solicitations, both for average prices overall and for August deliveries;

- However, the percentage of residential MWs offered for August deliveries (for both 2018 and 2019) has declined from previous DRAM solicitations and was approximately [REDACTED] of total MW offered. As a result, there is not a lot of headroom to meet the 20% residential requirement. SCE had to dip deeper in the stack to pick up residential offers out of rank order to meet the 20% residential set-aside.

### **Contract Execution**

The final steps in the DRAM RFO process involved shortlist notification through contract execution. According to the DRAM schedule, the IOUs were expected to contact the counterparties by May 24, 2017 to inform them of the status regarding shortlisting. SCE notified the counterparties of shortlist selection of their offers on May 24, 2017. In the notice, SCE informed the counterparty which offers were selected and also notified the Bidder that the Purchase Agreements will be emailed to the Bidders in the next few days. In addition, SCE informed the DRAM 3 participants that the CAISO has proposed updates to its Business Practice Manual, which would move the summer Availability Assessment Hours from 1-6 pm to 4-9 pm for the 2018 Resource Adequacy compliance year. The notice also provided the link to the Business Practice Manual.

On May 25, 2017 SCE sent the selected counterparties an email informing the counterparties that SCE is preparing the final DRAM contracts and requested that the counterparty provide the information requested in Section 8.2, which includes contract information for the counterparty.

On May 30, 2017, SCE distributed the DRAM 3 Purchase Agreements to each of the selected counterparties. In the email conveying the contracts, SCE stated that counterparties should review the Purchase Agreements for accuracy and respond by reply email with executed electronic versions of the Purchase Agreements by 3 pm PPT on June 5, 2017.

SCE informed shortlisted Offerors on June 5, 2017 that executed contracts were required by 3 pm PPT. Shortly thereafter, SCE was informed by [REDACTED]

As a result of the withdrawal of the [REDACTED] offers noted above, SCE contracted for 88.50 MW of 2018 August capacity at a total cost \$[REDACTED], with a residential percentage of 22.12% for August 2018. SCE did not add any additional offers because the next offer in rank order was the [REDACTED] offer which would result in SCE spending beyond the budget cap.

Appendix B contains applicable information for each contract executed that supports the summary information provided above.

## **VI. Fairness of SCE's Offer Evaluation and Selection Process**

## **Principles Used to Determine Fairness of Process**

In evaluating SCE's performance in implementing the DRAM 3 RFO pilot program, Merrimack Energy has applied a number of principles and factors, which incorporate those suggested by the Commission's Energy Division as well as additional principles that Merrimack Energy has used in its oversight of other competitive bidding processes. These include:

- Were bidder questions answered fairly and consistently and the answers made available to all?
- Did the bid evaluation team maintain consistent scoring and evaluation among and across projects, including different products, offer metrics and price structures?
- Did the evaluation methodology result in a fair and equitable evaluation and selection process?
- Was the evaluation and selection process consistent with the requirements outlined in the CPUC Resolution with regard to the DRAM RFO pilot?
- Were the requirements listed in the DRAM RFO applied in the same manner to all proposals?
- Was there evidence of any undue bias regarding the evaluation and selection of different offers that cannot be reasonably explained?
- Were the offers given equal credibility in the economic evaluation?
- Did SCE ask for "clarifications" that provided the bidder an advantage over others?
- Were all cost factors treated in an equitable and consistent manner?
- Did SCE consistently apply the requirements, procedures and criteria of the evaluation process as identified in the RFO documents to different bids and types of projects?
- Was the evaluation and selection process based on complete information about each proposal and a thorough investigation by SCE's project team?

Merrimack Energy has the following observations about the process based on our role as the IE:

- Overall, the IE viewed the offer evaluation and ranking process by SCE as being reasonable, consistent, and fair to all respondents and consistent with

the pre-specified evaluation protocols and criteria identified in SCE's DRAM RFO documents. As described in this report SCE indicated that it intended to rank offers based on quantitative factors only. SCE followed the process and methodology it had identified in ranking and selecting offers;

- SCE's evaluation and selection process resulted in SCE meeting its targets subject to the MW procurement, budget amounts and residential target requirements identified in the Commission Resolution for the DRAM 3 RFO. SCE's evaluation and selection process resulted in the following outcomes:
  - SCE selected 89.8 MW of RA capacity for August, 2018 and 99.6 MW for August 2019;
  - SCE contracted for 88.5 MW of RA capacity for August and 99.2 MW for August 2019;
  - SCE met the Residential Set-Aside requirement of 20%, contracting for residential accounts totaling 22.12% of August capacity, slightly above the 20% threshold;
  - SCE's expenditures of \$ [REDACTED] its authorized budget cap of \$12 million;
- Based on our assessment of the evaluation process relative to the above criteria, it is our opinion that all Offerors had access to the same amount and quality of information at the same time via SCE's website. SCE maintained a website dedicated to the solicitation and posted all documents and Questions and Answers on the website. We also observed no difference in the treatment of Offerors regarding clarification questions for Offerors, correspondence and communications with Offerors, and follow-up contacts. SCE (in conjunction with the other IOUs) also conducted a Pre-Bid Conference call which allowed all potential bidders to ask clarifying questions about the DRAM RFO and related requirements;
- SCE and the other IOUs were diligent in answering questions submitted by potential Bidders and were thorough and complete in their responses. The answers were posted on the websites of the three IOUs;
- All offers submitted were eligible to compete in the process. There were no non-conforming offers for the DRAM 3 RFO for SCE;
- Based on the responses and offers submitted by the Bidders, it appears that Bidders are now familiar with the process, including the requirements of the utilities, the offer forms, evaluation methodology, contracts and other information required. For the most part, the offers were complete and thorough with few clarification requirements;
- The PRG was actively involved in the DRAM 3 RFO process via SCE's presentation on Final Offer Selection on May 23, 2017. The presentation included a discussion of DRAM 3 selection requirements, a summary of the

offers received, a list of offers in rank order, a recommended shortlist and basis for selection, the RFO schedule, and back-up information.

Our assessment is that SCE's evaluation of the offers and its decisions on offer ranking and selection were fair, reasonable and consistent.

## **VII. Contract Execution Process**

The 2018 DRAM RFO Pro Forma Purchase Agreement ("2018 DRAM PA") is a standard contract which incorporates elements of the Edison Electric Institute ("EEI") Master Power Purchase and Sale Agreement between the Parties used in RA contracts, and elements of existing DR contracts. Since the DRAM PA was intended to be executed without negotiations or changes, Respondents were not allowed to provide a redline mark-up.

In the 2018 DRAM Advice Letter<sup>28</sup> filed on September, 2016, the utilities proposed several miscellaneous contract updates from the 2017 DRAM pilot, including the following:

- Removed Seller termination right for actions or inactions of Buyer or CAISO, or for insufficient Rule 24/32 registrations, while preserving Seller's right to adjust Product Monthly Quantity in such instances;
- Clarified that the Notice to Buyer is due before the earliest applicable Buyer's Compliance Showing deadlines with CAISO and CPUC for each Showing Month (Section 3.1(a));
- Clarified that the Product included in a Supply Plan for a given Showing Month exactly match information submitted by Seller or its Scheduling Coordinator to CAISO (Section 3.1(b));
- Clarified that Seller shall not include a PDR or RDRR in the DRAM Resource, if the PDR or RDRR is concurrently enrolled or otherwise concurrently committed to another DR program offered, maintained, or funded by Buyer. Furthermore, the PDR or RDRR in the DRAM Resource cannot also be part of a Distributed Energy Resource Aggregation (Section 3.4(c));
- Clarified that Section 3.3(c), regarding load impact analysis requirements, is irrelevant for the 2018 and 2019 RA Compliance Year;
- Clarified language regarding when Performance Assurance would be required, to better align with standard IOU Performance Assurance requirements (Section 5.1);
- Clarified that additional financial information (Section 5.6) may be required if requested by a Party, only if available;
- Clarified that PG&E may require access to financial information, only for contracts with a Delivery Period of more than two years (Section 5.7);

---

<sup>28</sup> The Advice Letter contained a red-line version and clean version of the proposed PA.

- Clarified that a single occurrence of Demonstrated Capacity for a type of Product being less than Product Monthly Quantity would not be a Seller Event of Default (Section 9.1(a)iii);
- In Exhibit A, Definitions, added definitions of “Distributed Energy Resource Aggregation,” “DRAM III Pilot Program,” and “Full Dispatch;” clarified definitions of “Product” and “Termination Payment;” and removed an extra word in the definition of “Shortfall Capacity.”

The IOUs’ proposed changes to the PA were generally accepted in Resolution E-4817. On March 7, 2017, in its Direction to Proceed with the DRAM 3 RFO, the CPUC required the IOUs to modify the DRAM 3 pro forma contract to address Commission direction in D.16-09-056 restricting the use of prohibited resources to reduce load during demand response events. The IOUs posted a red-line of the changes and a clean PA on their websites.

## **VIII. Safeguards and Methodologies Employed**

Article Seven of SCE’s RFO addresses the Applicant’s Acknowledgments, Waivers and Reservation of Rights, Representations, Warranties and Covenants. This section includes confidentiality requirements, as well as the requirement that an Offeror not engage in any communications with any other actual or potential Offeror in the RFO concerning this solicitation, price terms in Offeror’s Offer, or related matters and has not engaged in collusion or other unlawful or unfair business practices in connection with the RFO. No affiliate proposals were submitted.

## **IX. Recommendation for Contract Approval**

The CPUC IE Report Template requires that the IE address the question, “Based on your analysis of the proposals received and available, the bid process, and the overall market does the contract merit Commission approval? Explain.” The resulting contracts from this solicitation include 18 Purchase Agreements with five Demand Response Providers. The agreements resulted from a competitive solicitation process that generated a reasonably robust level of competition for the Demand Response RA products subject to the solicitation. As discussed in the previous sections, the solicitation was conducted consistent with the utility’s protocols and was required to meet the provisions identified in the CPUC Resolution.

Since the contracts were essentially standard contracts, there was no formal contract negotiation process with any Respondent. Instead, the process of completing and executing contracts generally involved clean-up items such as the name of the counterparty, contact information, verification of pricing, contract volumes and delivery periods, and agreement on the level of credit required.

The contracts executed were generally selected in rank order<sup>29</sup> and serve to meet the DRAM RFO pilot program requirements as contained in the CPUC Resolutions with regard to the spending caps and residential capacity thresholds. Overall, the 18 contracts executed were reasonably selected and executed, and merit approval. SCE selected offers in order up to the 20% Residential limit when ranked by NPV\$/kW-year. Through this solicitation, SCE procured 88.5 MW of August 2018 capacity (.3 MW of which is LA Basin Flex) at a cost of \$ [REDACTED].

SCE decided to procure up to the amounts identified above for the following reasons:

- The 20% residential requirement was the most challenging constraint for SCE and required SCE to by-pass several non-residential offers in rank order to meet the residential requirements;
- SCE decided to limit its procurement to [REDACTED] million (not including administrative costs) because the next highest ranked offer in rank order was a non-residential offer which would result in SCE exceeding the budget cap if selected. SCE preferred not selecting non-residential offers outside of rank order.

Of the 18 contracts executed by SCE, ten were with one counterparty, OhmConnect. SCE also executed four contracts with Enerwise/CPower, two contracts with Tesla, and one contract each with Green Charge and EcoFactor. OhmConnect accounted for 52.36 MW of the total 88.5 MW or nearly 60% of total MWs procured. EcoFactor is one of only two remaining residential counterparties, with .5 MW. From a cost standpoint, Ohm-Connect accounted for [REDACTED] of total expenditures for offers under the DRAM 3 solicitation.

Any issues associated with the appropriate level of procurement for this initial DRAM RFO and whether SCE should have executed additional contracts does not affect the contracts executed, which should be approved in any case.

As a result, the IE concludes that the resulting contracts are reasonable and appropriate.

## **X. Conclusions and Recommendations**

The results of the 2018 DRAM RFO solicitation process for DR products are generally consistent with policy objectives. First, the response of the market was reasonably robust in that there were sufficient offers to generate a competitive market response but from the IE perspective was disappointing overall and was dominated by two large Offerors. SCE was able to execute contracts that resulted in spending levels approaching the budget cap, while at the same time meeting the 20% residential set-aside requirement. The primary

---

<sup>29</sup> SCE made only a minor adjustment with regard to selection of offers in rank order. First, there were a few offers that contained exclusivity provisions whereby if the utility selected one offer, other similar offers with the same customers could not be selected. For example, [REDACTED] submitted three offers that were mutually exclusive, SCE selected the [REDACTED] offer. SCE also by-passed a few non-residential offers in rank order to select a few residential offers to meet the 20% residential set-aside.

constraint facing SCE in its selection was the 20% Residential requirement, which was an overriding factor in SCE's procurement decisions, since SCE had to by-pass several offers in rank order to meet the residential set-aside.

The IE reviewed the market response and pricing from the three DRAM pilots undertaken by SCE in an attempt to assess market trends. On the positive side, the clear evidence is that offer prices have fallen considerably from DRAM 1 to DRAM 3 for August deliveries and for offers overall. However, there are also a few negative trends that are emerging. First, the number of Offerors have declined from DRAM 2 to DRAM 3. Second, the response of the market illustrates that [REDACTED]. Third, the response from Offerors providing residential offers has also declined.

For the reasons stated herein, Merrimack Energy concludes that the selection decisions by SCE in the 2018 DRAM RFO pilot were reasonable and based on the requirements and evaluation criteria set forth in the RFO documents. SCE followed its established protocols and methodology in evaluating and selecting offers for DRAM RFO RA capacity requirements. The resulting 18 contracts ([REDACTED]) under review are for DRAM Purchase Agreements with five counterparties, representing 88.5 MW of August 2018 capacity. We believe the PAs are reasonable, are in the best interests of customers under the parameters of the DRAM pilot, and should be approved.

### **Recommendations**

Based on our involvement throughout the process, the IE has the following recommendations for SCE for undertaking future similar solicitations:

- SCE should consider utilizing qualitative factors and including among the factors viability type criteria based on the experiences from the three DRAM RFO pilot programs. For example, experience gained by observing the performance of Offerors who were awarded contracts in the past two solicitations should begin to be reflected into the evaluation and selection process by either increasing the threshold requirements or revising the qualitative criteria or weights. If the DRAM auction process becomes a standard solicitation process, the eligibility and threshold requirements and contract penalty provisions should be included;
- The utilities and Energy Division should undertake a review and assessment of the factors leading to the decline in interest in the DRAM solicitation process on the part of Offerors and implications that future solicitations could be dominated by a few participants. One concern of the IE is the decline in interest from the market for a process that includes minimum penalties for non-performance and a larger volume of contract capacity available via DRAM 3;
- SCE should reassess the use of a [REDACTED] forward curve for [REDACTED] DRAM solicitations.



**Attachment L – SCE Confidentiality Declaration [PUBLIC]**

**DECLARATION OF RYAN BELGRAM REGARDING THE  
CONFIDENTIALITY OF CERTAIN DATA**

I, Ryan Belgram, declare and state:

1. I am a Contract Manager at Southern California Edison (SCE). As such, I had responsibility for preparing the Southern California Edison Company’s 2018-2019 Demand Response Auction Mechanism Pilot Solicitation Results Advice Letter (“DRAM AL”). I make this declaration in accordance with Decisions (“D”) 06-06-066 and D.08-04-023, issued in Rulemaking 05-06-040. I have personal knowledge of the facts and representations herein and, if called upon to testify, could and would do so, except for those facts expressly stated to be based upon information and belief, and as to those matters, I believe them to be true.

2. I have reviewed the DRAM AL. Listed below are the data in the DRAM AL for which SCE is seeking confidential protection and the categories of the Matrix of Allowed Confidential Treatment Investor Owned Utility (IOU) Data (“Matrix”) appended to D.06-06-066 to which these data correspond.

<b>Location of Data</b>	<b>Pages</b>	<b>Matrix Category</b>	<b>Limitations on Confidentiality Specified in Matrix</b>
Attachment A – Summary of Received Offers	All	VIII.A Bid Information	Total number of projects and megawatts bid by resource type (e.g. fossil, wind, solar, hydro-electric, etc.) – public after final contracts submitted to CPUC for approval
Attachment B – All Bids Received for the DRAM Pilot	All	VIII.A Bid Information	Total number of projects and megawatts bid by resource type (e.g. fossil, wind, solar, hydro-electric, etc.) – public after final contracts submitted to CPUC for approval
Attachment C – Ranked Bids with Valuation Information	All	VIII.A Bid Information	Total number of projects and megawatts bid by resource type (e.g. fossil, wind, solar, hydro-electric, etc.) – public after final contracts submitted to CPUC for approval

		VIII.B Specific quantitative analysis involved in scoring and evaluation of participating bids	<p>Evaluation guidelines should be public. Other information confidential for three years after winning bidders selected.</p> <p>Other information includes levelized and/or escalated bid prices, transmission upgrade cost adders, wheeling charges, congestion costs, delivery characteristics, portfolio fit, "dump energy" quantities and costs, SEP calculations.</p>
Attachment D – Executed DRAM Purchase Agreements	All	VII.B Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	<p>Contract summaries public, including counterparty, resource type, location, capacity, expected deliveries, delivery point, length of contract and online date.</p> <p>Other terms confidential for three years from date contract states deliveries to begin; or until one year following expiration, whichever comes first.</p>
Attachment F – Indicative Short-Run Capacity Costs	All	VIII.B Specific quantitative analysis involved in scoring and evaluation of participating bids	<p>Evaluation guidelines should be public. Other information confidential for three years after winning bidders selected.</p> <p>Other information includes levelized and/or escalated bid prices, transmission upgrade cost adders, wheeling charges, congestion costs, delivery characteristics, portfolio fit, "dump energy" quantities and costs, SEP calculations.</p>
Attachment G – A Calculation of SCE’s Current DR Portfolio of Comparable Programs and Procurement Mechanisms	All	VIII.B Specific quantitative analysis involved in scoring and evaluation of participating bids	<p>Evaluation guidelines should be public. Other information confidential for three years after winning bidders selected.</p> <p>Other information includes levelized and/or escalated bid prices, transmission upgrade cost adders, wheeling charges, congestion costs, delivery characteristics, portfolio fit,</p>

			"dump energy" quantities and costs, SEP calculations.
Attachment H – Independent Evaluator Report	21-24, 26	VII.B Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Contract summaries public, including counterparty, resource type, location, capacity, expected deliveries, delivery point, length of contract and online date.  Other terms confidential for three years from date contract states deliveries to begin; or until one year following expiration, whichever comes first.
		VIII.A Bid Information	Total number of projects and megawatts bid by resource type (e.g. fossil, wind, solar, hydro-electric, etc.) – public after final contracts submitted to CPUC for approval
		VIII.B Specific quantitative analysis involved in scoring and evaluation of participating bids	Evaluation guidelines should be public. Other information confidential for three years after winning bidders selected.  Other information includes levelized and/or escalated bid prices, transmission upgrade cost adders, wheeling charges, congestion costs, delivery characteristics, portfolio fit, "dump energy" quantities and costs, SEP calculations.

3. I am informed and believe that SCE is complying with the limitations on confidentiality specified in the Matrix that pertain to the data listed in the table above.

4. I am informed and believe and thereon allege that the data in the table in paragraph 2 above cannot be aggregated, redacted, summarized, masked or otherwise protected in a manner that would allow partial disclosure of the data while still protecting confidential information.

5. I am informed and believe and thereon allege that the data in the table in paragraph 2 above has never been made publicly available.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on June 30, 2016 at Rosemead, California.



---

Ryan Belgram