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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements.	Rulemaking 13-09-011 (Filed September 19, 2013)

JOINT ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE RULING AND REVISED SCOPING MEMO DEFINING SCOPE AND SCHEDULE FOR PHASE THREE, REVISING SCHEDULE FOR PHASE TWO, AND PROVIDING GUIDANCE FOR TESTIMONY AND HEARINGS

This Joint Assigned Commissioner and Administrative Law Judge Ruling revises the schedule for Phase Two, which was adopted in the November 14, 2013, *Joint Assigned Commissioner and Administrative Law Judge Ruling and Scoping Memo* and defines the scope and the schedule for Phase Three. This Ruling also provides guidance to the parties on the issues for testimony and evidentiary hearings. Parties are reminded that Phases Two and Three will overlap.

1. Background

On September 19, 2013, the Commission initiated Rulemaking (R.) 13-09-011 by approving the Order Instituting Rulemaking (OIR) to enhance the role of demand response in meeting the State's resource planning needs and operational requirements. The Commission initiated the rulemaking to determine whether and how to bifurcate current utility-administered, ratepayer-funded demand response programs into demand-side and supply-side resources in order to prioritize demand response as a utility-procured resource,

competitively bid into the California Independent System Operator (CAISO) wholesale electricity market.

On November 14, 2013, the assigned Commissioner and Administrative Law Judge (ALJ) jointly issued a Ruling and Scoping Memo (Scoping Memo) that set forth the procedural schedule and scope of issues. The Scoping Memo determined that the best approach for such a complex proceeding is a four-phased approach with Phase One dealing with bridge funding issues, Phase Two addressing foundational issues, Phase Three covering future demand response program design, and in Phase Four, the Commission would develop a demand response road map. Furthermore, the Scoping Memo only established the full scope of issues for Phases One and Two and stated that the scope of issues for the other two phases would be determined in a later ruling.

The Scoping Memo had set a date of February 11, 2014 for the Commission to issue a proposed decision regarding foundational issues. The proposed decision was issued on February 21, 2013. On March 27, 2014, the Commission approved Decision (D.) 14-03-026 determining that demand response program should be bifurcated into load modifiers and supply resources. The decision also stated that a ruling would be issued to describe and get comments on a proposal for a demand response auction mechanism. While D.14-03-026 focused only on the foundational issue of bifurcation, the Commission explained that other foundational issues would be addressed in future Phase Two decisions.

2. Discussion

Because the Commission determined in D.14-03-026 to bifurcate demand response into the two categories of load modifying resources and supply resources, we now move forward with determining in which of the two categories we should assign each of the demand response programs.

Furthermore, we turn to the issues of Phase Three, Future Demand Response Program Design. In addition, several Phase Two issues remain to be resolved. D.14-03-026 determined that the record was insufficient for reviewing cost allocation, assessing the role of load impact protocols, revising cost-effectiveness protocols, and determining the rules regarding the use of backup generators. Thus, this ruling determines a schedule for Phase Three and revises the schedule for serving testimony for evidentiary hearings to address issues in Phases Two and Three. Furthermore, this ruling provides guidance to parties for what issues should be addressed in testimony and in hearings.

3. Issues for Phase Three

To determine the issues for Phase Three, we review the discussion from the prehearing conference (PHC) and take into account what we have learned thus far in Phase Two.

At the PHC, the ALJ provided a proposed list of issues for Phase Three developed from the OIR and the PHC statements served by the parties. During the PHC, parties discussed these issues and the potential relationship with foundational issues. Parties also discussed the past directives from Commission Decisions regarding future demand response proceedings.[1]

However, the Commission, in D.14-03-026, determined that demand response programs should be bifurcated into load modifying resources and supply resources, thus requiring changes to the initial list of issues that were discussed at the PHC. Furthermore, D.14-03-026 requires several additional issues to be addressed prior to the implementation of bifurcation:

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[1] D.12-04-045 at 55-56 regarding dual participation, at 188-189 regarding a procurement model, and at 189 regarding dismantling of the utility-centric model.

the development of an auction mechanism to procure demand response that will participate or be integrated into the CASIO energy market, the means with which to decrease CAISO market integration costs, resource adequacy concerns, and setting goals for the amount of demand response to be integrated into the CAISO market.

Accordingly, the scope for Phase Three will be as follows:

- Goals for Demand Response
    - Review past and current goals;
    - Determine how to measure and increase participation in demand response;
    - Determine how to set annual goals for demand response participation;
    - Set annual goals for demand response participation; and
    - Determine how to prevent the devaluation or soloing of the two categories of demand response programs.
- Resource Adequacy Concerns (as directed by D.14-03-026)
    - Determine parties' specific resource adequacy concerns as they specifically relate to the bifurcated framework of demand response programs; and
    - Determine the cause of these concerns and recommendations for resolving them.
- CAISO Market Integration Costs (as directed by D.14-03-026)
    - Capture and analyze the costs of CAISO market integration; and
    - Determine whether the estimated costs are considered high, and the extent to which they are a barrier to CAISO market integration.

- Supply Resources Issues
    - Determine the characteristics of each demand response program the Commission should use to categorize the current and future demand response programs;
    - Specify into which category each current demand response program should be located by analyzing the characteristics of each program;
    - Determine whether portions or groups of customers in exiting programs can be sub-aggregated and designated as Supply Resource;
    - Develop, pilot, and implement a competitive procurement mechanism for demand response (as directed by D.14-03-026.);
    - Determine how to measure and set annual goals for the amount of demand response that should be integrated into the CAISO market;
    - Set annual goals for the amount of demand response to be integrated into the CAISO market;
    - Determine mechanisms to modify current programs and design new programs that meet forecasted needs;
    - Determine the roles of Utilities and Third Party Providers in administering the supply resources (as directed by D.12-04-045); and
    - Address Dual Participation Issues.
- Load Modifying Resources Issues
    - Determining how to improve current load modifier programs to meet forecasted needs;
    - Determine how to measure and set annual goals for load impacts and the rules for reaching those goals;
    - Determine the role, if any, that the load impact protocol will serve in the realignment of the load modifying resources and supply resources;
    - Determine the roles of Utilities and Third Party Providers in administering the load modifying resources (as directed by D.12-04-045); and

    - Address Dual Participation Issues.
- Program Budget Application Process
    - Determine the length of budget cycles; and
    - Determine the need of and frequency of budget oversight reviews or audits.

4. Guidance for Testimony and Evidentiary Hearings in Phases Two and Three

Phases Two and Three will overlap at this juncture of the proceeding while the Commission determines the remaining Phase Two issues. As stated earlier, remaining Phase Two issues are: the use of back-up generation for demand response, reviewing cost recovery, and revising the cost-effectiveness protocols. Hence, parties' testimony should address the remaining issues in Phase Two and the issues listed above for Phase Three. While the Testimony may address the issues in general, parties are also requested to address the specific questions asked in the Testimony Guidance Document, attached to this Ruling as Attachment A. In addition, parties are asked to respond to a proposal to develop an auction mechanism as required by D.14-03-026.

In D.14-03-026, the Commission discussed the development of an auction mechanism for demand response capacity, which would be integrated into the CAISO energy market. As the Commission explained, the proposed auction mechanism would be administered by the utilities to ensure the Commission maintains authority over its implementation. Attached to this ruling, as Attachment B, is a proposal for a Demand Response Auction Mechanism (DRAM). In their testimony, parties should address their overall comments on the DRAM as well as provide responses to the specific questions provided in Attachment A.

In the schedule below, we allow for a week of evidentiary hearings. However, without seeing the testimony, it is difficult to determine what issues require evidentiary hearings. We remind parties that evidentiary hearings are held when material issues of fact are in dispute. Thus, parties are directed to provide a list of the material issues of fact in dispute and need to be addressed in hearings. This should be provided as part of the reply testimony.

5. Schedule for Phases Two and Three

In recognition of 1) the minor delay in issuing a decision on bifurcation and 2) the complex nature of the items in Phase Three, the adopted schedule is revised as follows:

May 6, 2014	Testimony Served
May 20, 2014	Rebuttal Testimony Served; Deadline to Present Material Issues of Facts in Dispute
June 9-13, 2014	**PLACE HOLDER**: Evidentiary Hearings (10:00 am on Day 1, 9:30 a.m. thereafter)
June 20, 2014	Ruling Issued Providing Briefing Guidance
July, 14 2014	Opening Briefs Filed and Served
July 28, 2014	Reply Briefs Filed and Served

The Presiding Officer may adjust this schedule as necessary for efficient management of this proceeding.

While many items may be raised over the course of the proceeding, the decision will address only those matters necessary to reach a decision. We remain on track to complete this proceeding within 24 months of the issuance of the original Scoping Memo.

IT IS RULED that the items addressed in the body of this ruling are adopted. In particular:

1. The issues for Phase Three of this proceeding are as stated in the body of this ruling.

2. The revised schedule stated in the ruling is adopted. The Presiding Officer may adjust this schedule as necessary for efficient management of this proceeding.

3. Parties shall include a list of material issues of fact in dispute when serving rebuttal testimony.

4. Parties shall provide the assigned Administrative Law Judge a paper copy of testimony and rebuttal testimony postmarked or hand delivered on the required due date.

Dated April 2, 2014, at San Francisco, California.

/s/ MICHAEL R. PEEVEY	/s/ KELLY H. HYMES
Michael R. Peevey	Kelly H. Hymes
Assigned Commissioner	Administrative Law Judge

Attachment A

ATTACHMENT A

GUIDANCE FOR TESTIMONY

Testimony should be provided in the following order, addressing the issues in general and addressing the specific questions asked in this guidance document.

Phase Three Issues and Questions

- **Goals for Demand Response**
  - *Parties should provide what they consider to be past and current goals for demand response so that this proceeding has a complete and accurate history of the goals.*
  - *Parties should provide recommendations for increasing individual demand response program load impacts and overall participation in demand response programs. If parties consider the current demand response participation level to be appropriate, please explain why.*
  - *Parties should provide recommendations for developing the goals of demand response load (MW) and demand response participation, how those goals should be measured (load impact protocol based on ex post or ex ante, or others), and how often they should be measured to ensure goal achievement (monthly, seasonally, or annually)*
  - *Parties should provide recommendations for programs or activities to ensure equality for load modifying resources and supply resources. Parties should suggest a definition for equality.*
- **Resource Adequacy Concerns (as directed by D.14-03-026)**
  - *Parties should provide a detailed explanation of their resource adequacy concerns, specific to the bifurcation framework adopted in D.14-03-026).*

- **CAISO Market Integration Costs (as directed by D.14-03-026)**
  - *Parties should provide their understanding of the costs (in dollars) of the CAISO market participation either through their own direct participation or through the participation of other entities in other markets.*
  - *Parties should present a range of costs that they would consider to be reasonable. Explain why this range of costs is reasonable and costs outside the range are not reasonable.*
  - *For costs outside the range and therefore unreasonable, please provide examples of ways to decrease those costs.*
  - *PG&E provided a list of solutions for decreasing CAISO market integration costs in its December 13, 2013 filing at page 13. Provide comments on the list of solutions.*
- **Supply Resources Issues**
  - Parties requested the Commission to analyze the characteristics of each demand response program in order to categorize current and future demand response programs into load modifying resources and supply resources. *Provide your list of characteristics that the Commission should use in determining how to categorize a supply resource.*
  - *Using your proposed list of characteristics, describe each demand response program and determine whether that program should be classified as a supply resource, as defined by D.14-03-026. Using your list of characteristics, describe how and whether subsets of customers in existing programs could be sub-aggregated and classified as Supply Resources.*
  - *Parties are invited to provide their overall comments on the Demand Response Auction Mechanism (DRAM) provided in Attachment B. Parties are asked to respond to the additional questions asked here:*

- *Are the proposed contract durations of one, two or three years sufficient? Should contracts of a longer duration be included? Why or why not? If yes, what duration(s) is/are recommended?*
- *In addition to the elements listed in this proposal, are there provisions that should be included in a standard contract? Explain the reason for each recommended provision.*
- *Are there benefits or drawbacks to holding one auction per year for seasonal products (May-Oct; Nov-Apr)? Describe these benefits and drawbacks. How should seasonal products be defined and structured, so as to maximize the potential of demand response in these seasons? If a different approach is preferable, describe in detail.*
- *The proposed auction schedule is detailed in Attachment B. Provide any comments on the schedule, in recognition of the following desired parameters: a) maximum of six months from RFO issuance to Commission approval, b) up to 60 days for bid selection and contract signing, c) 60 days for Commission review and approval of contracts, and d) alignment with annual resource adequacy showings in October.*
- *Is it preferable to have additional minimum eligibility criteria for bids than those listed in this proposal? Please fully describe the recommended criteria and how it should be used to judge bid viability.*
- *The proposal is to base the capacity cost cap for each auction on the average of bids received, per auction. Are there additional factors that should be considered in constructing a capacity cost cap? Is a different approach preferable? Please describe any recommendations in detail.*

- *Emergency demand response resources are included in the DRAM, which means that these resources must receive their capacity payments via a competitive mechanism. Provide specific recommendations on this approach.*
- *This proposal contains the option for the Commission to publish a weighted average of bids received at some point following each auction. Are there competitive, or any other, concerns with this action, should the Commission choose to adopt it? Describe in detail. If another approach or calculation is preferable, describe the recommendation in detail.*
- *The proposal notes that penalties may apply if deliveries of the DR resource fall below 60% of contracted capacity. Comment on the appropriateness of penalties in addition to capacity de-rates, and the point at which penalties could or should apply.*
- *This proposal currently envisions Commission-regulated utilities procuring DRAM capacity on behalf of their own load, and does not include a procurement obligation for other Load Sharing Entities. Comment on whether other Load sharing entities should also have a procurement obligation for DRAM capacity and, if so, how such procurement should be structured. Be as specific as possible.*

▪ In D.14-03-026, the Commission discusses its policy of increasing the amount of demand response integrated into the CAISO market. *Provide your thoughts on how we can determine an appropriate annual goal for overall demand response integrated into the CAISO market. Are there terms that we need to identify and define? What should those terms and definitions be?*

▪ *Do we need to improve forecasting with regard to supply resources that will be integrated into the CAISO energy markets? What are methods to improve the*

forecasting? What are methods that the Commission can use to modify current demand response programs to meet forecasted needs? What are methods that the Commission can use to design new programs to meet forecasting needs?

- D.12-04-045 discussed the future of demand response and questioned what the roles of the utilities and third party providers would be in administering future programs.[1] We look at the roles of utilities and third party providers in administering supply resources. *Provide your comments on whether a utility-centric model for supply resource demand response can meet current and future needs. Provide your comments on the ability of third-party providers to provide supply resource demand response to meet current and future needs. As discussed in D.12-04-045, should the Utilities continue to offer rate-regulated supply resource demand response if these services are provided through competitive markets? Should the Commission focus on identifying more of these programs as supply resources, thus facilitating broader competition in the market? Should the utilities' role be solely to oversee the competitive procurement?*
- *For supply resources integrated into energy markets without a capacity contract, does the Commission have any role in tracking the resources' load impacts?" If yes, how should the load impacts of these resources be tracked and accounted.*

- **Load Modifying Resources Issues**
  - Parties requested the Commission to analyze the characteristics of each demand response program in order to categorize current and future demand response programs into load modifying resources and supply resources.

[1] D.12-04-045 at 185-192.

Provide your list of characteristics that the Commission should use in determining how to categorize a Load Modifying Resource.

- *Using your proposed list of characteristics, describe each demand response program and determine whether that program should be classified as a supply resource, as defined by D.14-03-026. Using your list of characteristics, describe how and whether subsets of customers in existing programs could be sub-aggregated and classified as Load Modifying Resources.*
- *How can the Commission improve current programs designated as load modifying resources in order to meet forecasted needs? As we discussed above, does the Commission need to improve forecasting for Load Modifying Resources? How?*
- In R.07-01-041, the Commission included in the scope of the proceeding, the intention to set annual goals for load impacts. *How should the Commission determine those goals for Load Modifying Resources? Does the Commission have any guidelines in place that it could use as a starting point for establishing rules to comply with these goals?*
- D.12-04-045 discussed the future of demand response and questioned what the roles of the utilities and third party providers would be in administering future programs. We look at the roles of utilities and third party providers in administering load modifying resources. *Provide your comments on whether a utility-centric model for load modifying resource demand response can meet current and future needs. Provide your comments on the ability of third-party providers to provider Load Modifying Resource demand response to meet current and future needs. As discussed in D.12-04-045, should the Utilities continue to offer rate-regulated load modifying resource demand response if similar services are provided through competitive markets? Should we limit the utilities' role in providing load modifying resource demand response? How?*

- **Program Budget Application Process**
  - In the OIR, the Commission discussed the idea of longer budget cycles. *Provide your comments on why the Commission should consider longer budget cycles. Provide justification for the specific length of the budget cycle.*
  - *If the Commission approves longer budget cycles, i.e. 5 or 10 years, should there be regular reviews of the budgets in between the application approval. How often should the reviews occur and what level of scrutiny should be involved and why? How can evaluation, measurement, and verification (EM&V) processes be leveraged to improve demand response programs in longer budget cycles?*

Phase Two Remaining Issues and Questions

- **Back-Up Generators**
  - *In D.11-10-003, Ordering Paragraph No. 3, the Commission adopted a policy statement that any demand response program, whether operated by a Commission-regulated Utility or another entity, that uses fossil-fueled emergency back-up generation (BUG) for demand reduction should not count towards resource adequacy obligations for any Commission-jurisdictional load shedding entity. Provide your understanding of the status of the Utilities' compliance with this policy statement.*
  - *How should the Utilities collect data on the customer's use of fossil-fuel emergency BUG during the demand response events? Identify the amount of demand response provided by BUG on an on-going basis?*
  - *How can this policy be further implemented for the Utilities' existing and new demand response programs as Supply Resource and Load Modifying Resources? What methods should the Commission use to exclude demand reduction provided through the use of BUG?*
  - *Should the Commission require on-site sub-metering for BUG and/or should the Commission require self-certification with the inclusion of data regarding*

the intended use of BUG during demand response events? If on-site metering is preferred, how should the costs of the metering be recovered?

- **Cost Recovery**
  - *Provide a summary of each of the Utilities' current demand response program cost recovery and provide citations for the decisions authorizing this recovery method.*
  - *Should the current cost recovery policy be changed? Please describe your proposed alternate cost recovery methods for the Supply Resource and Load Modifying Resource demand response programs in the future?*
  - *Are there fairness issues that the Commission should consider for Commission-regulated utilities and other Load Sharing Entities? Please describe these issues in detail, with specific recommendations for resolving and/or avoiding these issues.*

(END OF ATTACHMENT A)

Attachment B

ATTACHMENT B

DEMAND RESPONSE AUCTION MECHANISM PROPOSAL

INTRODUCTION

Energy Action Plan and DRAM

This proposal details a Demand Response Auction Mechanism (DRAM), which is a reverse auction for single or multi-year capacity contracts for demand response resources. It is a companion measure to both Rule 24, and utility-enabled demand response market participation, and is designed to both cost-effectively procure demand response capacity and enhance the viability of demand response resources in the CAISO wholesale market. Under the DRAM proposal, the utilities that administer Commission-regulated demand response programs (utilities) will be required to procure capacity for demand response resources via a reverse auction mechanism, wherein utilities will develop standard contracts with few modifiable terms, adopt bid eligible criteria pursuant to this proposal, issue requests for offers (RFOs) for demand response products, develop capacity cost caps specific to each auction and each utility, select eligible bids, sign contracts and submit contracts to the Commission for review and approval.

An Energy Action Plan goal for demand response is to "(e)ncourage the integration of demand response programs into a capacity market or other [energy procurement] mechanisms"[2]. This goal is still relevant today in the

[2] Energy Action Plan II: Implementation Roadmap for Energy Policies. Goal 11, Page 5. September 21, 2005.

current marketplace and regulatory framework, to improve the economics, and thus the viability, of demand response resources. To this end, the Order Instituting Rulemaking for this proceeding states as one if its primary objectives to "create an appropriate competitive procurement mechanism for supply-side demand response resources"[3]. The DRAM is focused on achieving this objective. The Energy Action Plan also includes a goal to "(i)dentify and adopt new programs and revise current programs as necessary to achieve the goal to meet five percent demand response by 2007..."[4] Thus, the DRAM is also focused on achieving a goal of 5% of peak capacity by 2020, five years from its initial launch in 2015. Each utility's procurement target will increase annually consistent with this goal.

Current Wholesale Market Integration Efforts and Products

Currently, three products exist specifically for participation of demand response in the wholesale energy market – the participating load program, the proxy demand resource program and the reliability demand response resource program. Demand response is not limited to these products, however, and could also provide other services for flexible, ancillary service, and other needs via related CAISO products. The Commission authorized Rule 24 in Decision (D.) 12-11-025, Phase IV, of the prior Demand Response Rulemaking, R.07-01-041. Rule 24 allows for direct participation of bundled customers by utility and non-utility entities – individual customers and demand response providers (Provider)

[3] Order Instituting Rulemaking. R.13-09-011. Issued September 25, 2013. Page 2.

[4] Ibid., Goal 3.

– in the CAISO day-ahead and real-time energy markets, starting in 2014. On February 4, 2015, the Commission approved Resolution E-4630, adopting Rule 24, and Rule 24 tariff language. The utilities are also permitted and encouraged to bid in demand response resources under contract.

The Intermittent Renewables Management 2 (IRM2) pilot is currently underway in the Pacific Gas and Electric (PG&E) service territory to provide non-utility entities training and experience with registering with the CAISO, becoming a scheduling coordinator, and bidding into the day-ahead CAISO energy market. Under both the current design for a number of programs in the demand response portfolio, and the IRM2, PG&E provides a fixed capacity payment to demand response providers, based on full delivery, which is adjusted proportional to any deliveries to the wholesale market that are less than day-ahead commitments.

Reverse Auction is a Good Design for Ratepayers

The primary benefit to ratepayers and the electric system of demand response resources is avoided generation capacity. The DRAM proposal is a reverse auction to procure demand response capacity, with two primary objectives– first, to deliver real, verifiable and reliable demand response capacity; and, second, to do so at the lowest reasonable cost over time. In order to achieve the first objective, bidders must meet demand response criteria, as specified in the Commission's Resource Adequacy Program and as under development in proceeding R.11-10-023, for system, local and flexible capacity. Eligible demand response resources bid or scheduled into the CAISO energy markets, pursuant to applicable must-offer requirements will also, in the future, be subject to the

associated standards of both the standard capacity and standard flexible capacity products[5] appropriate for demand response, both of which are currently intended to be completed by the CAISO in their respective stakeholder processes. All current must-offer obligation requirements shall apply as they exist at the time of issuance of RFO for each auction. In order to achieve the second objective, the reverse auction structure incents bidders to bid capacity at the lowest reasonable cost at which they can deliver that capacity, which is expected to drive down overall demand response capacity costs over time.

Experience with Reverse Auctions in California

Reverse auctions have proven successful in California for spurring competitive renewable energy resource development. We highlight two specific examples – the Commission's Renewable Auction Mechanism (RAM) and the New Renewable Auctions held by the California Energy Commission (CEC) during 1998 through 2001. RAM was created by the Commission in 2010 and is specifically designed to contract for, and bring on-line, new renewable energy facilities between 1 MW and 20 MWs in capacity, at the lowest price and within a specified timeframe. The program has so far proven successful, as the majority of projects contracted in the first solicitation are coming on-line, and contracts have been awarded at prices that have declined across at least three of the four auctions held to date. For the first two RAM auctions, the weighted average price

[5] At the time of writing, the Standard Flexible Capacity Product is in final stages of development by the CAISO, as a component of the Flexible Resource Adequacy Capacity Must-Offer Obligation (FRAC-MOO); and the CAISO has stated its intention to develop the Standard Capacity Product appropriate for DR (SCP 3).

of all contracts was $90/MWh, after adjustment for time-of-day. For the third RAM auction, the weighted average price was $80/MWh.[6] Between 1998 and 2001, the CEC held three New Renewable Auctions for production incentives to new renewable energy facilities, up to a cap of 1.5 cents/kWh, for five years. Those auctions awarded incentives to 488 MWs of new renewable facilities, for a total of 8,730 GWhs of generation.[7] The DRAM proposal described herein builds onto the design and experience of these two auctions, in addition to other procurement programs and policies.

AUCTION DESIGN

The DRAM is a reverse capacity auction for eligible price-responsive and emergency-triggered demand response resources, wherein the lowest priced capacity bid must be procured first, and then progressively the next lowest priced bids, until the utilities' obligation or the capacity cost cap is reached, whichever occurs first. Utilities may reject bids at any capacity price point if the utility finds evidence of market manipulation, subject to review and approval by the Commission. Instances of market manipulation may include, but are not necessarily limited, to: bids at artificial and unreasonable prices, bids offered

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6 California Public Utilities Commission. Renewables Portfolio Standard: Quarterly Report: 2nd Quarter 2013, at 12.

7 Clean Energy States Alliance. 2010 Individual State Reports. California Energy Commission, Renewable Energy Program, at 17. http://www.cleanenergystates.org/assets/2010-Individual-State-Reports/CEC_2010_Report.pdf

using the same customers, or for customers/resources for which there is insufficient evidence or suspect evidence.

Capacity Cost Cap and Cost-Effectiveness

Public Utilities Code 454.9(b)(9)(C) states *"(T)he electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible,"* thus DRAM procurement must be cost-effective. The DRAM is designed to meet this requirement, as bids are selected consistent with least-cost principles. Demand response resources that bid into CAISO wholesale electricity markets are also required to meet wholesale cost-effectiveness standards. For capacity, all DRAM auctions, and resultant awards, would be subject to a capacity price cap specific to that auction.

To ensure cost-effectiveness of demand response capacity procured under the DRAM, capacity cost caps will be calculated based on bids received for each auction. Each utility shall bear responsibility for calculating the capacity cost cap specific to its service territory and auction. The capacity cost cap shall be calculated immediately following each auction. For price-responsive demand response, the capacity cost cap will be an average of the capacity bids received in that auction for system, local and flexible demand response products. A separate cost cap will be established for emergency-triggered demand response resources, and will also be the average of bids received for those resources. For both categories of resources, disproportionately high bids shall be eliminated for purposes of calculating the cost cap.

The cost cap is not made public. However, the Commission may consider publishing a weighted average of bids awarded across utilities at some point following the auction. The demand response cost-effectiveness protocols will be used as benchmarks for an additional measuring point for the reasonableness of DRAM bids and contracts.

Utility Procurement Obligation – Price-Responsive Demand Response

Each utility will be required to procure a minimum amount of price-responsive demand response and be expressed as a minimum percentage of total system peak for the appropriate year, and procured as part of their system, local and flexible resource adequacy requirements. This is the DRAM procurement obligation. Price-responsive demand response capacity comprises about 2.5 percent of maximum utility system peak load in 2014. With this as the starting point, the aim is to reach a total procurement target for price-responsive demand response in 2020 of 5 percent of peak load for each utility on a service territory basis. The annual target for price-responsive demand response will increase incrementally from 2016 onward, at the following percentages: 3 percent in 2016, 3.5 percent in 2017, 4 percent in 2018; 4.5 percent in 2019; 5 percent in 2020 and in each year thereafter, unless and until another target is adopted.

Each utility's procurement obligation will count toward that utility's annual requirements to achieve local, system and future flexible resource adequacy, and will be included in annual and monthly RA showings. In order to be eligible to participate in the DRAM, price-responsive demand response products and/or bidders must meet the following minimum criteria:

- Demand response resources must meet the most current criteria set forth by the Commission's resource adequacy program for the appropriate demand response product. At the time of this proposal, the rules for the demand response maximum cumulative capacity resource adequacy bucket dictate that demand response used to meet system and local resource adequacy obligations must be available a minimum of four hours per day on three consecutive days, and 24 hours per month. Demand response products of shorter duration may be bundled and bid together as a full four-hour product. The Commission and CAISO are currently in the process of finalizing criteria for demand response products. Once these criteria are finalized and adopted by respective regulatory bodies, they will automatically apply for purposes of DRAM eligibility, for the subsequent auction following adoption.
- Each capacity bid must be for a minimum block of 100 kW.[8]
- Aggregated resources must be bid at a single sub-load aggregation point, as pursuant to CAISO requirements. This provision will be modified if and when the CAISO modifies this criterion.
- Make economic bids into the CAISO energy market, in accordance with the requirements of the must-offer obligation for system, local, flexible, or emergency demand response resources, as they exist at the time of the RFO for each auction. Until the CAISO finalizes must-offer

[8] This criteria is consistent with the CAISO's minimum bid offer criteria (100 kW) for the Proxy Demand Response (PDR) product.

obligations specific to demand response, the applicable existing must-offer obligation will apply. Demand response resources may also be self-scheduled.

- Bidders are prohibited from submitting demand response bids from the same customers/resources into the DRAM auctions of more than one utility.
- Bidders are prohibited from scheduling actual DRAM deliveries from the same customers as another bidder, or those that are current participants in a utility demand response program. Thus, all capacity bids must be for unique resources that are additional and incremental to existing utility baselines, unless the bidder demonstrates that the customer(s) has(ve) disenrolled from the applicable utility program, or have committed to disenroll by the commencement date of the contract.
- Capacity awards and obligations may not be sold, traded, or otherwise transferred to another non-demand response capacity resource – either conventional or preferred.

Utility Procurement Obligation – Emergency-Triggered Demand Response

Emergency demand response capacity will also be procured competitively via the DRAM, subject to an annual procurement cap. As set forth in D.10-06-034, and the associated Settlement,[9] the annual procurement cap for

[9] D.10-06-034 Adopting Settlement Agreement on Phase 3 Issues Pertaining to Emergency Triggered Demand Response Programs, in R.07-01-041. June 24, 2010.

Footnote continued on next page

DRAM procurement of emergency-triggered demand response is 2 percent of peak load unless and until revised by the Commission. A separate cost cap will be calculated by each utility for emergency-triggered demand response for purposes of DRAM procurement, and will be based on the average of emergency demand response bids received. All provisions of the Settlement apply, and nothing in the DRAM structure modifies or proposes to modify the Settlement. Emergency-triggered demand response does not count toward the DRAM procurement obligation and associated annual targets. In order to be eligible to participate in the DRAM, emergency-triggered demand response products and/or bidders must meet the following minimum criteria:

- Demand response resources must meet the most current applicable criteria set forth by the Commission's resource adequacy program. Once any additional applicable criteria are finalized and adopted by respective regulatory bodies, they will automatically apply for purposes of DRAM eligibility, for the subsequent auction following adoption.
- Aggregated resources must be bid at a single sub-load aggregation point, as pursuant to CAISO requirements. This provision will be modified if and when the CAISO modifies this criterion.
- Meet all requirements of the CAISO reliability demand response resource product.

Parties to the Settlement are: PG&E, SCE, SDG&E, CAISO, CLECA, ORA, TURN, and Enernoc.

- Bidders are prohibited from submitting demand response bids from the same customers/resources into the DRAM auctions of more than one utility.
- Bidders are prohibited from scheduling actual DRAM deliveries from the same customers as another bidder, or those that are current participants in a utility demand response program. Thus, all capacity bids must be for unique resources that are additional and incremental to existing utility baselines, unless the bidder demonstrates that the customer(s) has(ve) disenrolled from the applicable utility program, or have committed to disenroll by the commencement date of the contract.
- Capacity awards and obligations may not be sold, traded, or otherwise transferred to another non-demand response capacity resource – either conventional or preferred.

STANDARD CONTRACT

Successful bidders will enter into standard contracts for the DRAM, with few modifiable terms. The standard contract shall include an option to select whether the resource will deliver system, local, or flexible products, as well as an option for the appropriate delivery months. Emergency-triggered demand response resources will have a separate standard form contract that is applicable to these resources. The utilities will each file proposed standard contracts, for review and approval, in advance of the first DRAM auction. In the standard contracts, modifiable terms shall be limited to the following: capacity price(s),

delivery point/bid location, delivery months/season, and duration (1, 2 or 3 years).

The utilities shall use their aggregator managed portfolio contracts as the starting place for the standard contract for price-responsive demand response products, including the provisions listed below, and others as determined by the Commission. For emergency-triggered demand response, the utilities shall choose an appropriate standard contract and propose it to the Commission, including the provisions listed below, and others as determined by the Commission.

Duration of Contract

Contracts of one, two or three years are allowed for the DRAM.

Calculation of Capacity Payments for Under-Delivery

After the demand response resource has been subjected to a full-portfolio dispatch, the delivered capacity payment shall be calculated for each month as follows:

- Delivered capacity is 105 percent or greater than the applicable contract capacity, the capacity payment shall equal (1.05) x (applicable capacity rate).
- Delivered capacity is between 75 percent and 105 percent of the applicable contract capacity, the capacity payment shall equal (delivered capacity percent) x (applicable capacity rate).

- Delivered capacity is between 60 percent and 75 percent of the applicable contract capacity, the capacity payment shall equal (50 percent) x (applicable capacity rate).
- Delivered capacity is less than 60 percent of the applicable contract capacity, then the capacity payment shall equal (0 percent) x (applicable capacity rate), and penalties may apply.

Bid Ranking

For price-responsive demand response, utilities must rank eligible bids on two factors – capacity price and the fulfillment of system, local and flexible resource adequacy need. For emergency-triggered demand response, utilities must rank eligible bids based on capacity price alone. For both categories, utilities are obligated to first procure the bid with the lowest capacity price, and continue to procure the next lowest priced bids until the utilities' DRAM obligation for the auction is reached, or until the available eligible bids below the capacity price cap is reached, whichever occurs first.

Must-Offer Obligation

All DRAM contracts require the scheduling coordinator for the demand response resource to provide appropriate bids or self-schedule into the CAISO wholesale market, in accordance with applicable must offer requirements and tariff provisions appropriate to that contract, as these requirements, provisions and products exist at the time of signing the contract.

Delivery Schedule

Two possible options are contemplated. Appendix 1 to this proposal includes a year-ahead auction schedule, which would apply to each option:

- Year-round deliveries:
    - Maximum one year between CPUC approval and delivery/availability of the demand response capacity. Deliveries may occur earlier than 12 months, if specified in the contract.
    - Contracts of one, two or three years duration are allowed. For example, a contract awarded as a result of a solicitation in 2016 could serve requirements in the 2017, 2018 and 2019 resource adequacy years.
- Seasonal deliveries (2 seasons/year)
    - Maximum one year between CPUC approval of the contract and delivery/availability of the demand response capacity. Deliveries may occur earlier than 12 months, if it is specified in the contract. For example, if a bidder is able to deliver a seasonal product commencing in May of the following year, that situation may be specified in the contract.
    - One primary auction is held per year for two seasonal products, to be delivered during one or two different periods. The two seasons are as follows: May-October; and November-April.
        - May – October demand response delivery will be focused primarily on system and local resource adequacy requirements.
        - November – April demand response delivery will be focused primarily on system and flexible resource

adequacy requirements, when the system ramping needs are expected to be greatest.

- Contracts of one, two or three years duration are allowed. For example, a three year contract awarded as a result of a solicitation in 2016 would serve season-specific requirements in one or both seasons in in the 2017, 2018 and 2019 resource adequacy years. Similarly, a two-year contract awarded as a result of a solicitation in 2016 would serve requirements in one or both seasons in in the 2017 and 2018 resource adequacy years.

COMPLIANCE AND OVERSIGHT

Utilities will file an advice letter with standard contracts, RFO schedule, bidding protocol – before the first auction, and following any change in program rules. Once approved, each utility holds an auction based on Commission-adopted rules, selects and ranks bids, signs contracts, and files the contracts in a single advice letter. The confidential version of the advice letter shall contain all of the following: all bids received in the auction, bids selected for contracts, signed contracts, specific detailed calculation of the capacity cost cap, the application of the capacity cost cap to each bid that was selected and contract signed, and other information as required by the Commission.

Staff anticipates requiring 60 days for review and approval of the advice letter. Following Commission approval, projects have a maximum of 12 months to commence first deliveries. Contracts will not be approved on an individual basis, nor will contracts be approved that do not conform to the standard contract provisions and adopted DRAM rules and requirements.

Each utility must file an annual report with aggregated program data, auction timing, project status, anticipated annual performance of portfolio, after-the-fact performance as and when data becomes available, and other factors as determined by the Commission.

INDEPENDENT EVALUATOR

Utilities shall use an Independent Evaluator to oversee DRAM auctions to ensure that the process is fair, adequately competitive, and complies with Commission intent and direction.

DRAM PROGRAM MODIFICATIONS

Staff has the ability to modify the DRAM program through the Commission's formal Resolution process, with or without formally filed proposal of DRAM program modifications by parties. Following the adoption of any resolution modifying program rules, utilities must file an updated advice letter incorporating all modifications. This process is in lieu of an Application filing by the utility for any DRAM program modifications.

APPENDIX 1 – PROPOSED AUCTION SCHEDULE

2015												
Action	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*
RFO Issued				1								
Bids Ranked and Selected					1							
Contracts Signed						1						
AL Filed with CPUC						1						
AL Approved by CPUC								1				
Delivery												
Annual RA Showing										31st		
2016												
RFO Issued				2								
Bids Ranked and Selected					2							
Contracts Signed						2						
AL Filed with CPUC						2						
AL Approved by CPUC								2				
Delivery									1			
Annual RA Showing										31st		
2017												
RFO Issued				3								
Bids Ranked and Selected					3							
Contracts Signed						3						
AL Filed with CPUC						3						
AL Approved by CPUC								3				
Delivery									1, 2			
Annual RA Showing										31st		
2018												
RFO Issued				4								
Bids Ranked and Selected					4							
Contracts Signed						4						
AL Filed with CPUC						4						
AL Approved by CPUC								4				
Delivery									1, 2, 3			
Annual RA Showing										10/31		

2019												
Action	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*
RFO Issued				5								
Bids Ranked and Selected					5							
Contracts Signed						5						
AL Filed with CPUC						5						
AL Approved by CPUC								5				
Delivery									2, 3, 4			
Annual RA Showing										10/31		
2020												
RFO Issued				6								
Bids Ranked and Selected					6							
Contracts Signed						6						
AL Filed with CPUC						6						
AL Approved by CPUC								6				
Delivery									3, 4, 5			
Annual RA Showing										10/31		
2021												
RFO Issued				7								
Bids Ranked and Selected					7							
Contracts Signed						7						
AL Filed with CPUC						7						
AL Approved by CPUC								7				
Delivery									4, 5, 6			
Annual RA Showing										10/31		

(END OF APPENDIX 1)
(END OF ATTACHMENT B)