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04/10/19
04:59 PM

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric
Company (U39E) for Approval of Demand
Response Programs, Pilots and Budgets for
Program Years 2018-2022

U 39 E

Application 17-01-012
(Filed January 17, 2017)

And Related Matters

Application 17-01-018
Application 17-01-019

**REPLIES TO RESPONSES TO ALJ HYMES' RULING
DIRECTING RESPONSES TO QUESTIONS
IN THE FEBRUARY 28, 2019 ALJ RULING**

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Pursuant to Administrative Law Judge (ALJ) Hymes' Ruling Directing Responses to Questions Resulting from the February 11-12, 2019 Demand Response Auction Mechanism Workshop and Comments on Proposals to Improve the Mechanism (Ruling), issued February 28, 2019, Pacific Gas and Electric Company (PG&E) respectfully submits the following reply to responses filed by the California Efficiency + Demand Management Council (Council), California Independent System Operator Corporation (CAISO), the California Energy Storage Alliance (CESA), the Joint DR Parties (JDRPs),^{1/} the Joint Proposal Parties (JPP),^{2/} the Public Advocates Office (PAO), OhmConnect, Inc. (OhmConnect), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE).

I. THERE IS WIDESPREAD SUPPORT FOR PG&E'S TWO-STEP APPROACH, BUT SUBSTANTIVE CHANGES ARE NECESSARY NOW, AND ANY CONTINUATION OF DRAM BEYOND THE PILOT (STEP ONE) SHOULD BE CONTINGENT ON DEMONSTRATED SUCCESS.

While there is support for a phased approach,^{3/} PG&E, SCE, SDG&E, and PAO believe substantive and critical changes are required for the Commission to authorize this fifth DRAM

^{1/} Consisting of CPower, Enel X North America, Inc., and EnergyHub.

^{2/} Consisting of CPower, Enel X North America, Inc., EnergyHub, Olivine, Inc., and Stem, Inc.

^{3/} JPP Responses, p. 2; JDRP Responses, p. 2; OhmConnect Responses, pp. 2-3; Council Responses, p. 4; CESA Responses, p. 4; SCE Responses, p. 2; SDG&E Responses, pp. 2-3; PAO Responses, pp. 3-4.

pilot (Step One). These parties argue that significant improvements to measuring the qualifying capacity (QC), assessing appropriate penalties for underperformance, and increasing testing, visibility, oversight with an independent monitor, and feedback loops, are critical in ensuring that DRAM resources can meet grid reliability requirements. In addition, they maintain that the pilot should be limited in term and budget given the risk to ratepayers.^{4/}

JDRPs, JPPs, OhmConnect, CESA, and the Council hold contrary opinions. They advocate for minor modifications to accelerate the regulatory process to launch the next pilot.^{5/} PG&E understands their intent is to minimize the gap between the end of the 2019 DRAM deliveries and when the 2020 DRAM deliveries begin. However, the Commission should not approve another pilot without making the necessary changes or removing the opportunity for parties to comment and be heard.

There also appears to be confusion among parties regarding what requires evaluation prior to any possible continuation of DRAM. PG&E clarifies that before any continuation, analysis is needed on the remaining 2018 DRAM delivery months, the 2019 DRAM, and at least six delivery months from the Step One pilot to determine if the modifications are working and if it is verifiable and transparent that the RA sold is being delivered. SCE, SDG&E, and PAO agree with PG&E that future auctions depend on the success of an evaluation of the Step One pilot, and the procedural record needs to support any decision for a permanent mechanism.^{6/} PG&E also supports the PAO, which stated that “If the critical improvements to get DRAM to perform its basic RA capacity function are not successful in Step One, the Commission should not pursue Step Two.”^{7/} PG&E suggests that work to set goals and evaluate the cost effectiveness of DRAM (and other Step Two topics) can be pursued during Step One. However, any decision

^{4/} PG&E Responses, pp. 2-3; SCE Responses, pp. 2-5; SDG&E Responses, pp. 2-5; PAO Responses, pp. 3-6.

^{5/} JDRPs Responses, p. 4; JPP Responses, p. 2; OhmConnect Responses, p. 3; Council Responses, p. 5.

^{6/} SCE Responses, p. 2 and p. 7; SDG&E Responses, pp. 2-3.

^{7/} PAO Responses, p. 7.

regarding whether to pursue future auctions must consider data and learnings from Step One and other DRAM delivery months not covered in the Energy Division's DRAM evaluation report.

II. STEP ONE PILOT

A. **Budgets for the next pilot need to be prudent since the Step One auction is a pilot to test if DRAM resources can be proven reliable**

PG&E does not support the JDRPs and the Council's proposals for 3-5 year extensions of the DRAM pilots, starting with a budget of approximately \$40 million and a trajectory to 1 GW.^{8/} Similarly, PG&E does not support OhmConnect's proposal for a similar budget, a trajectory to 1 GW, or a decision this year on 2021 deliveries.^{9/} Arguments that DRAM should begin its growth to 1 GW with this Step One pilot and continue over multiple years ignore that the Commission's guidance stated that this transition should only be made if it is appropriate to do so.^{10/} Specifically, "To move from pilot status the auction mechanism must be deemed successful."^{11/} The criteria for success was defined as the six criteria assessed in the Energy Division's DRAM Evaluation Report, which did not state that the DRAM pilot was successful, and specifically said that adopting the mechanism on a permanent basis is unreasonable given the issues identified.^{12/} In addition, arguments that suggest that this expansion is necessary to demonstrate the Commission's commitment to the market ignore the Commission's recent decision reminding DRPs that while it continues to support third-party providers, it must ensure that the use of ratepayer funds is prudent, and it cannot guarantee consistent business opportunities or contract awards for each DRP.^{13/} Therefore, it is not appropriate to expand DRAM at this time. Any argument to begin the transition now seeks to circumvent the

^{8/} JDRPs Responses, p. 8 and p. 14; Council Responses, p. 6.

^{9/} OhmConnect Responses, pp. 4-5.

^{10/} D.16-09-056, p. 60, "This section provides guidance regarding the future of the demand response auction mechanism pilot and the steps to be taken to transition, *if appropriate*, from pilot status." [Emphasis added.]

^{11/} D.16-09-056, p. 64.

^{12/} Evaluation Report.

^{13/} D.18-11-029, pp. 80-81.

Commission's guidance that any continuation of DRAM requires evaluation whether DRAM is a prudent use of ratepayer funds, cost-effective, and reliable.

For the reasons described above, PG&E supports a limited budget and term for the Step One pilot, commensurate with the performance issues in the DRAM pilots to date and the risks such issues pose to ratepayers. Budgets proposed by SCE, SDG&E, PAO, and CESA are in line with this exposure and appropriate to pilot the modifications proposed: \$4-6 million for PG&E and SCE and \$1-1.5 million for SDG&E.^{14/}

B. Procedural schedules must allow for adequate time to complete each step to ensure a successful next DRAM pilot

Several parties proposed overly aggressive schedules to enable deliveries in January 2020, but in doing so, accelerate steps in a way that limits the extent of modifications that must be considered.^{15/}

First, these proposals recommend accelerating the schedules by eliminating Commission review of the modifications to the solicitation process and revised pro forma contract, reducing solicitation periods, significantly faster than average Commission approvals,^{16/} and shortened comment periods.^{17/} The Council itself stated that it requires more time to properly understand and opine on the February 6, 2019, working group proposals. PG&E cautions that problems with parties not having the time to understand the proposals will only be exacerbated with unreasonably accelerated schedules. In addition, removal of Commission review may affect the ability of the IOUs to recover costs associated to the auction.^{18/}

^{14/} SCE Responses, p. 5; SDG&E Responses, p. 5; PAO Responses, p. 6; CESA Responses, p. 5.

^{15/} JDRP Responses, p. 9; OhmConnect Responses, pp. 5-7; Council Responses, p. 4.

^{16/} OhmConnect Responses, pp. 6-7; JDRP Responses, p. 10; Council Responses, pp. 7-8.

^{17/} JDRP Responses, p. 4.

^{18/} SCE states that Commission review of the signed contracts is not necessary, as long as it doesn't affect the ability to recover costs. (SCE Responses, p. 7.) PG&E agrees that it would be problematic if elimination of Commission review processes impacts cost recovery.

Second, efforts to reduce the period from when the RFO is issued to when contracts are signed by approximately half of the amount of time used in the fourth DRAM RFO are unreasonable and undermine other goals to support new entrants.^{19/} Many of the schedules leave one week between when the bidders' webinar is held and offers are due, which is approximately a third of what was allotted in the 2019 DRAM.^{20/} During this time, bidders asked at least 35 questions (duplicates removed) to understand DRAM and better develop their bids.^{21/} With significant modifications to the solicitation and pro forma, this time is valuable to support new entrants and ensure bidders understand the parameters of the revised pilot, which allows DRP bids to be more viable and realistic. In addition, accelerating the steps after bid submission is unreasonable as it limits the evaluation process, including steps necessary to cure bids, perform a thorough evaluation, present to the Procurement Review Group (PRG),^{22/} obtain management approval, and get contracts signed by bidders.

Third, time is necessary for Sellers to implement the new contract milestones and QC requirements.^{23/} In particular, the schedules proposed by OhmConnect in Scenarios 2 and 3 allow just over two weeks after signing a DRAM contract for Sellers to follow the two-step process PG&E recommends to assess the QC of their resources for the month-ahead supply plan before submission to the independent monitor for review. This timeline is also impossible for

^{19/} This process took more than 10 weeks to complete in the 2019 DRAM, while the JDRPs and OhmConnect's proposals average 5-6 weeks, with the Council's fastest schedule resulting in a solicitation that takes place in under four weeks.

^{20/} See schedule in Table 1 on page 2 of the 2019 DRAM Protocols, https://www.pge.com/pge_global/common/pdfs/save-energy-money/energy-management-programs/demand-response-programs/2019-demand-response/2019-DRAM-Protocol.pdf.

^{21/} See https://www.pge.com/pge_global/common/pdfs/save-energy-money/energy-management-programs/demand-response-programs/2019-demand-response/DRAM4-QA-FINAL.PDF During the time between when the auction launches and bids are due, the IOUs jointly host a bidder's webinar and coordinate responses to questions from the webinar or emailed to the DRAM RFO inboxes. The Independent Evaluator reviews the responses, and then the IOUs post the responses to each question online the week before bids are due.

^{22/} The PRG is a group of non-market participants who review PG&E's procurement proposals, including the Energy Division and PAO.

^{23/} See PG&E Responses, Appendix A, pp. 2-4.

new bidders, who must register as a DRP and recruit customers to deliver their contracted capacity. The CAISO shares PG&E's concern and also proposes to allow sufficient time for new DRPs to train on CAISO processes.^{24/}

Insufficient time at each of these steps threatens the success of a next DRAM pilot and should be carefully considered if the Commission seeks to ensure a fair process, support new entrants, and develop a reliable DRAM pilot. PG&E appreciates the efforts each party has made to provide schedules that allow for an auction in 2019 for deliveries in 2020, but there are significant differences in each party's recommendations for how to accelerate the procedural schedules, and many of these have unintended consequences.

C. Changes to the solicitation process are necessary, especially the removal of the August average capacity bid price cap criteria and modification to set-asides

Broad consensus exists over modifications to several areas of the solicitation process and the use of set-asides, most notably the removal of the August average capacity bid price cap criteria. Parties are concerned that higher valued bids were eliminated due to implementation of the August average capacity bid price cap criteria,^{25/} and no party supported keeping it. Similarly, many parties supported eliminating the 20 percent residential set-aside, claiming it is no longer necessary,^{26/} it doesn't effectively achieve its goal because it favors one DRP,^{27/} and distorts the market^{28/} or reduces it.^{29/} Likewise, most parties rejected the Energy Division's recommendation to implement a market share limit.^{30/} However, several parties suggested new

^{24/} CAISO Responses, p. 4.

^{25/} SCE Responses, p. 3; JPP Responses, p. 3; JDRPs Responses, p.4, 25; OhmConnect Responses, p. 25; Council Responses, pp. 22-23; CESA Responses, p. 18.

^{26/} SDG&E Responses, p. 22; PG&E Responses, p. 19.

^{27/} SCE Responses, p. 25.

^{28/} JPP Responses, p. 9; PG&E Responses, p. 19; OhmConnect Responses, p. 24.

^{29/} JDRPs Responses, pp.5,24; CESA Responses, p. 17.

^{30/} SCE Responses, p. 24; JPP Responses, p. 10; JDRPs Responses, p. 24; OhmConnect Responses, p. 23; OhmConnect Responses, pp. 23-24; PG&E Responses, p. 19.

set-asides, including those for new entrants^{31/} or disadvantaged communities or low-income customers. PG&E agrees with the majority of parties that these set-asides create problematic distortions to the market that have consistently resulted in higher value bids being skipped over for lower value bids, and that they should be avoided. While the existing and proposed set-asides are intended to meet various policy goals, support a more vibrant market, and provide ratepayers greater value in the long term, PG&E believes that these goals can be better achieved through (1) specifying to bidders that there are qualitative criteria for these policy goals, (2) requesting additional information from bidders if they seek to provide such products, (3) allowing IOU discretion to holistically evaluate the submitted bids and select a diverse portfolio that meets these goals within reason, and (4) with independent evaluator and Procurement Review Group (including Energy Division) oversight.

In terms of other solicitation changes, PG&E supports CAISO's recommendation to limit the auction to PDR offers,^{32/} which is also consistent with the Energy Division's recommendations.^{33/} In addition, procurement should be limited to RA products in which the IOUs can claim the benefits.^{34/} For simplicity and a streamlined process, PG&E recommends procurement of only system RA in the next auction.

^{31/} JPP Responses, p. 10, and JDRPs Responses, p. 5, proposed to add a 10 percent set-aside for new entrants and those who haven't been awarded contracts in three years. CESA Responses, pp. 16-17, supported a set-aside for new entrants and DRPs who have received contracts less than 1 MW.

^{32/} CAISO Responses, p. 5.

^{33/} Evaluation Report, p. 121.

^{34/} OhmConnect Responses, pp. 5-6, argue for prioritizing local RA because the DR Potential Study stated it would be valuable than system RA in the future. Procurement should be based on specific need and each IOU's assessments of the RA value of each product. In addition, the timing of the 2019 auction may not allow the IOUs to claim it in the annual supply plan process where local needs must be met at 100 percent, while needs for system and local RA could be 90 percent.

D. Contract milestones should be adopted to improve Buyer’s visibility into a Seller’s ability to perform

The Commission should adopt milestones that give the IOUs visibility into early issues the DRPs may experience so that they can have sufficient time to procure replacement capacity if necessary. PG&E agrees with SCE that milestones provide utilities minimal assurances that the Seller is “capable and ready to perform when the delivery period starts.”^{35/} SDG&E and the JDRPs also provide applicable examples of milestones that are relevant for assessing whether the Seller has met the basic requirements to deliver on their contracts.^{36/}

E. Determining reasonable QC criteria for the monthly supply plan is critical to reducing risks to ratepayers and ensuring a reliable DRAM resource that meets RA requirements

IOUs do not have confidence that the RA procured through the DRAM mechanism has the ability to respond to CAISO dispatches at the levels in the Seller’s contract(s). PG&E believes it is imperative that any future DRAM develop criteria and a reasonable process to sufficiently qualify the DRAM capacity the IOUs submit in their monthly supply plans, which the IOUs use to meet their RA obligations. Inaccurate or unrealistic supply plans from DRPs affect the integrity of the IOUs’ submissions and has the potential to impact both ratepayers and the reliability of the grid. Parties provide a number of proposals to assess the QC. PG&E recommends that the Commission ensure that any proposal selected ensures that the qualifying capacity in DRAM is reliable and corresponds with the resource’s physical deliveries.

The load impact evaluation process that has been used for IOU programs may not be a good fit for DRAM resources. PG&E conceptually agrees with SCE and SDG&E’s proposal to consider establishing a simplified load impact protocol.^{37/} A guiding principle should be that the ex-ante impacts, which inform the QC, should be grounded in the ex-post impacts to the extent possible and appropriate. PG&E believes additional discussion is needed among the stakeholders

^{35/} SCE Responses, p. 22.

^{36/} SDG&E Responses, p. 20; JDRP Responses, p. 22.

^{37/} SCE Responses, p. 13; SDG&E Responses, p. 13.

to identify areas of the existing load impact protocols to be simplified and impacts on the stakeholders' ability to assess the QC. PG&E sees this work as more appropriate for a Step Two process with the design and approach to be decided in the RA proceeding.

Numerous parties propose recommendations regarding the calculation of QC, but some of these proposals either contradict or do not sufficiently address the lessons learned in the Energy Division's findings in the DRAM Evaluation Report. For instance, CESA recommends that the Commission maintain the current QC exemption for a 2019 DRAM solicitation where QC equals contracted capacity.^{38/} Energy Division's findings show that allowing the contracted capacity to be used for QC is not sufficient,^{39/} and does not allow visibility to the entities responsible for ensuring system reliability (CPUC, CAISO, and IOUs/LSEs) to understand whether capacity claimed and entered by Sellers in supply plans is accurate.^{40/}

Further, PG&E disagrees with the JPP and JDRP's recommendation that a plausibility test should be performed infrequently, and only after the IOU has developed a reasonable suspicion that Sellers are unable to meet contract requirements.^{41/} Instead, PG&E believes a plausibility test, performed by the Independent Monitor, is needed monthly and should be mandatory for all Sellers to ensure that the calculation of their DRAM resources' capacity is reasonable such that what is being captured in the supply plans each month will show up when dispatched. A monthly plausibility check by an independent third party is essential for IOUs to

^{38/} CESA Responses, p. 11.

^{39/} Energy Division Evaluation of DRAM, p. 69. This relates to the fact that resources were exempted from Load Impact Protocols (LIPs) during the DRAM pilot. However, no other ex-ante forecasting method to estimate the contract capacity or Supply Plan capacity was provided by the Commission. Therefore, there is no standard available to evaluate the accuracy of the capacity claimed on the Supply Plan as well as the Demonstrated invoices based on the MOO option. Consequently, Staff concluded that any comparison of Supply Plan or MOO-based Demonstrated Capacity aggregation level to the contract capacity could and should be regarded as inconclusive at best. This issue is further discussed in the Recommendations section.

^{40/} *Ibid*, p. 108.

^{41/} JPP Responses, p. 3; JDRP Responses, p. 5.

have confidence that customers in a DRAM resource have the physical load to support any dispatches by the CAISO.

The JDRPs also recommend that if the initial screening indicates that the total customer premise loads are at least 130 percent of the qualifying capacity, then the supply plan will stand without adjustment.^{42/} In PG&E's experience, few customers have the ability to drop 77 percent of their premise load, making JRDP's proposal an unrealistic proposal for assessing the reasonableness of the QC submitted by Sellers in their monthly supply plans. This proposal is even less reasonable for mass market customers (i.e., residential and small-medium business), where PG&E's experience has shown that it is not a realistic expectation for the load drop for such customers to reliably exceed 40 percent of the premise loads, on average.^{43/}

F. The Commission should adopt modifications to demonstrated capacity (DC) and invoicing that incentivize reliable performance, measure the product delivered relative to the product procured and used for RA planning purposes, and inform the QC of the DRAM resources going forward

Several parties propose modifications to the assessment of DC that PG&E supports. For instance, the JPP, the JDRPs, and the Council support de-rating capacity payment similar to the Capacity Bidding Program's penalty structure to better incentivize performance,^{44/} though PG&E disagrees with parties that support compensating over-delivery.^{45/} The CAISO warns that any deviations from awarded instructions made by the DRAM resource may cause additional actions by CAISO operations in real-time to balance the grid, which could be costly, and should not be incentivized.^{46/} SCE, SDG&E, and PAO also disagree with proposals that would compensate

^{42/} JDRP Responses, p. 14.

^{43/} SCE Responses, p. 15. SCE provided a table highlighting that majority of residential participation in the current DR program provides somewhere between 21 percent and 36 percent of load with the range of kW load drop between .62 and .97 kW per customer.

^{44/} JPP Responses, p. 6; JDRP Responses, p. 6 and p. 17; Council Responses, p. 17; CESA Responses, p. 14.

^{45/} JPP Responses, p. 7; JDRP Responses, p. 17; OhmConnect Responses, p. 15; Council Responses, p. 18; CESA Responses, pp. 14-15.

^{46/} CAISO Responses, p. 8.

above the stated QC entered in year-ahead and month-ahead supply plan showings, given that the ratepayers are not benefiting from the capacity over-delivery.^{47/} Any performance provided by the DRAM Seller should be capped by the QC quantity the IOUs submitted in the supply plans for this reason.

In addition, PG&E strongly disagrees with OhmConnect's Appendix C Proposal for Calculating Demonstrated Capacity. OhmConnect proposes:

- (a) the calculation of DC at the customer level, whereas the current CAISO energy wholesale baseline evaluates performance at the resource level,
- (b) the use of CAISO-only implemented baselines, many of which have not been approved by the CPUC, and
- (c) the proration of monthly payment based on customer registration and performance.^{48/}

OhmConnect's proposal to calculate DC at the customer individual level with CAISO-only implemented baselines (Step 5) requires additional discussion at the CPUC, which PG&E highlighted during the March 22, 2019 baseline workshop. Current CAISO practice for calculating performance is at the aggregated resource level to settle wholesale energy delivery, which aligns with RA counting. OhmConnect's proposal would create mismatches between the RA claimed and payment of capacity delivered.^{49/} PG&E recommends that until the CPUC determines the appropriate resource performance calculation, Sellers should continue to use the CAISO's resource-level calculation for energy as the basis for measuring DC, with provisions to clarify that it is not appropriate to move customers between resources to inflate capacity. The JPP and JDRPs list reasonable standards regarding the movement of customers between resources.^{50/}

^{47/} SCE Responses, p. 17; SDG&E Responses, p. 16; PAO Responses, p. 13.

^{48/} OhmConnect Responses, Appendix C: Proposal for Calculating Demonstrated Capacity, p. 32.

^{49/} The Baseline issue will be the subject of comments due April 24, 2019, in response to Administrative Law Judge Hymes' April 8, 2019 ruling.

^{50/} JPP Responses, p. 5; JDRP Responses, pp. 18-19.

With respect to CAISO implemented baselines, PG&E maintains its position that any baseline used by third party Sellers to determine RA capacity payment should be approved by both CAISO and CPUC, contrary to several parties' recommendations that only CAISO-approved baselines should be permitted.^{51/}

In addition, PG&E supports SCE and SDG&E's proposals to require monthly invoicing of Sellers within 60 days of the end of the month, with failure to do so resulting in no payment to Sellers.^{52/} PG&E understands that the invoice is contingent on final provision and analysis of RQMD data and as a result believes the two proposals put forth by SCE can help in the case the Seller has not received necessary RQMD data within 45 days after the end of the month:

- The DRAM Seller could submit a partial invoice based on the RQMD that is available within 60 days after the end of the showing month for transparency into contract performance, and issue a subsequent invoice for the remainder of the DRAM resource after the RQMD is made available for payment.
- The DRAM seller could request an extension to submit its monthly invoice to 30 days after RQMD is made available. This is similarly supported by the JDRPs, who recommend that Sellers submit an invoice within 30 days of receipt of complete and accurate data from utilities.^{53/}

G. Feedback mechanisms and evaluation are critical to establishing learnings as the Commission considers the future of DRAM

PG&E agrees with SCE, SDG&E and PAO that the Sellers should submit monthly performance reports for the purposes of evaluation and development of a feedback mechanism. In the absence of monthly reports, the IOUs and Energy Division have limited visibility into the performance of DRAM resources the IOUs pay for, including how frequently the resources were dispatched, where they were dispatched, or how much load drop the resources delivered, beyond

^{51/} JPP Responses, p. 5; JDRP Responses, p. 3 and p. 18; Council Responses, pp. 18-19.

^{52/} SCE Responses, p. 20; SDG&E Responses, p. 18.

^{53/} JDRP Responses, p. 6.

testing requirements or full dispatches used for DC. PG&E generally supports SDG&E's working group proposal on performance reports.^{54/} The monthly reports offer evidence that the resources are real and are critical in establishing a feedback loop, so parties can observe if DRAM resources are performing in the market.

PG&E also supports SCE and SDG&E's position that the Commission should create a process for monitoring and evaluating DRAM; in particular, an independent monitor can fulfill the role of assessing the reasonableness of the Supply Plan and monitoring customer intra-month movements, as well as provide consistent reporting and analysis of the Step One DRAM pilot in a timely and efficient manner.^{55/}

PG&E disagrees with the JDRP and the Council's position that the monthly reports are burdensome to compile. The report is not meant to be a detailed investigation of Sellers' resources but only a concise summary about the customer count, estimated event performance (if the resources were dispatched in the month), and the ex ante load reduction capability. A DRP (or its Scheduling Coordinator) who routinely manages its resources should have the data easily available. It is not clear to PG&E why the monthly requirement is burdensome or why these data are sensitive, as asserted by the JDRP and OhmConnect. Detailed customer information and bid prices need not be included in the reports to the IOUs, in which estimated load reduction should be also redacted for events that do not meet the Commission's aggregation standards (i.e., less than 15 non-residential customers with no customer comprising greater than or equal to 15 percent of the load, or 100 residential customers) per SubLAP to protect customer confidentiality. Since confidential information is redacted in the public reports, a subpoena process (as suggested by JDRP, the Council, and OhmConnect) is unnecessary and inefficient for

^{54/} Attachment 7 of the ALJ Ruling included SDG&E's working group proposal for topic 2.5 on performance reports.

^{55/} SCE Responses, p. 24; SDG&E Responses, p. 20.

the purpose.^{56/} In addition, CESA recommends an annual report.^{57/} This frequency is an improvement to the existing evaluation process, but more timely feedback is necessary to inform the Step Two process and provide parties with visibility into DRAM performance.

Most importantly, a timely feedback loop is necessary between DC (dispatch and test results) and the QC determination, as described in PG&E's responses and supported by PAO, CAISO, and SDG&E.^{58/} In fact, most of the participants in the February 11 and 12, 2019 Workshops agreed that a feedback loop is one of the critical short-term activities for addressing the future of DRAM.^{59/} Feedback loops should impact the QC assessment based on the resource's capabilities, especially when a resource cannot reliably deliver the contracted capacity, which may cause the Buyer to seek replacement RA.

III. DRAM GOALS, OBJECTIVES, AND PRINCIPLES SHOULD GUIDE STEP TWO

A. Goals

PG&E asserts that all goals developed should guide the development of DRAM in Step Two and the future of DRAM rather than an interim bridge pilot. PG&E was pleased that no stakeholder has disagreed with the elements of PG&E's proposed goal that, "DRAM should assist the state in meeting its environmental objectives, cost-effectively meet the needs of the grid, and enable customers to meet their energy needs at a reduced cost" or the requirement that as a result the resource be reliable, competitively procured or fungible with standardized contracts. This means that DRAM resources both need to perform in a reliable manner in accordance with their contract and successfully meet grid reliability requirements to positively impact the needs of the grid. However, PG&E does not support some of the other goals that parties proposed.

^{56/} JDRP Responses, p. 23; Council Responses, p. 21; OhmConnect Responses, p. 22.

^{57/} CESA Responses, p. 16.

^{58/} PG&E Responses, p. x; PAO Responses, p. 10; CAISO Responses, p. 6; and SDG&E Responses, p. 13.

^{59/} Ruling, Table 3, p. 8.

1. The goal of DRAM should not be an assumed or guaranteed business opportunity for DRPs

PG&E disagrees that DRAM should provide for a “continuous opportunity” as expressed by OhmConnect, the Council, and JDRPs.^{60/} As stated in D. 18-11-029, “the Commission cannot guarantee consistent business opportunities or contract awards for every demand response provider.”^{61/}

2. The Commission should consider the role of CCAs and the IOUs’ procurement responsibilities in developing a goal for DRAM

PG&E disagrees with the Council’s framing that the goal of DRAM should include a provision that procurement is done by IOUs exclusively. This does not reflect the current status of customer choice and the corresponding obligations. CCAs are forecasted to serve 50 percent of total system load in PG&E’s service area in 2019.^{62/} In future years that percentage is expected to increase. While CCAs positions have been to “Put financial stewardship, responsibility and control over programs such as demand response [...] under local control,”^{63/} there is no legal bar to CCAs developing DRAM-like offerings, or participating themselves in PG&E’s DRAM auctions.^{64/} While the RA benefits are spread through the RA allocation and the costs are recovered through distribution rates, it makes sense that the obligation and costs of the

^{60/} JDRP Responses, p. 3. “Hence, any lapse in that continuity of DRAM could be very destructive to the parties that have invested a great deal in the pilot to date.”

^{61/} D.18-11-029, Finding of Fact 106, p. 96.
<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M248/K670/248670669.pdf>

^{62/} PG&E 2019 ERRF Forecast, Chapter 2, Sales and Peak Demand Forecast, p. 2-1, lines 15-17. “In total PG&E expects CCAs and Direct Access (DA) providers to serve over 50 percent of PG&E’s total system load in 2019.” Available online at:
<https://pgera.azurewebsites.net/Regulation/ValidateDocAccess?docID=543405>

^{63/} Joint CCA Opening Comments in I.15-08-019, p. 3. “Our recommendations encourage the Commission to: ... Put financial stewardship, responsibility and control over programs such as demand response, energy efficiency and transportation electrification under local control.”
<https://cal-cca.org/wp-content/uploads/2019/02/I1508019-Joint-CCA-Opening-Comments.pdf>

^{64/} D.17-10-017, p. 31. “This Decision confirms that the Demand Response Auction Mechanism, if adopted as a permanent mechanism, is not eligible for the Competitive Neutrality Cost Causation Principle implementation because the auction mechanism is a procurement mechanism designed to allow third party direct participation into the CAISO market; it is not a demand response program.”

mechanism be shared among LSEs. In developing the long-term goal for a permanent DRAM, the Commission should consider the role of CCAs, the significant reduction in the bundled customers for whom PG&E procures energy, and the CCAs' options concerning DRAM.

3. The Commission should clarify if DRAM should only procure reliable capacity or if it should also procure energy in order to displace GHG-emitting resources

PG&E supports CAISO's goal of DRAM being "used and useful"-with caveats.^{65/} CAISO's discussion of "used and useful" is tied to avoiding or deferring new GHG emitting resources and limiting the procurement of RDRR in DRAM as it, "does not represent the future direction of demand response as a preferred resource."^{66/} PG&E interprets this goal as being aligned with "meeting grid needs" for the energy market versus serving a reliability need. PG&E suggests any discussion of displacing GHG emitting resources is tied with an energy requirement and therefore should be a part of future discussions in Step Two associated with what, if any, energy requirement there will be for DRAM resources. PG&E notes a distinction for pure reliability resources such as the Base Interruptible Program as its goal should be tied to serving a reliability event rather than displacing GHG-emitting resources.

B. Objectives and Principles

PG&E disagrees with several objectives put forward by parties related to arbitrary percentage goals that do not reflect grid needs, continue DRAM as a special carve out, or reflect backward looking metrics. In general, PG&E agrees with OhmConnect's observation on the distinction between objectives as forward-looking to guide the design and performance metrics as backwards looking to measure results.^{67/} Thus, any metrics developed may be important as far as evaluating DRAM, but should not guide the goals, objectives, or principles of DRAM. Parties have proposed objectives that are metrics, some of which are elaborated on below.

^{65/} CAISO Responses, p. 5.

^{66/} CAISO Responses, p. 5.

^{67/} OhmConnect Responses, p. 11.

1. DRAM should not function as a carve-out irrespective of procurement needs, other CPUC and CAISO planning processes, and RA frameworks

PG&E strongly opposes the Council’s objective tied to “a soft goal of 1 gigawatt” by 2022.^{68/} Mandated procurement as an objective neither enables a level playing field with other clean resources nor does it consider grid needs reflected in other Commission proceedings. Any procurement should be based on portfolios developed in the Integrated Resource Planning tied to grid needs, and allow clean resources to compete, otherwise, DRAM procurement operates in a silo. This counters the Commission’s goals of establishing a more holistic approach to resource procurement to meet California’s environmental and energy policy goals.^{69/} DRAM should also work within evolving RA rules, frameworks, and processes, and compete with other RA resources without exemptions and waivers. Lastly, the RA proceeding is considering a central buyer for local RA and a multi-year RA procurement framework for LSEs, which should be considered in terms of objectives and goals.

2. If the Commission adopts objectives like percentages of emissions reductions, it should consider how the DRAM design could achieve that objective and it should be measurable

CESA and SDG&E^{70/} proposed emissions reduction as a part of the objectives of DRAM. While SDG&E proposes a 1 percent drop, CESA suggests a reduction by “some amount” by 2025. PG&E believes that in addition to this being a performance metric, these suggestions are premature, do not align with what DRAM is currently procuring and lack detail on how this could be measured. This proposal is premature in that today DRAM procures RA and any measurement of energy reductions would be based on energy delivery which would necessitate changing the objective of DRAM. In this respect, PG&E agrees with OhmConnect, that because

^{68/} Council Responses, p. 13.

^{69/} Senate Bill 350 requires, in part, that the Commission “identify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a *cost-effective* manner.” [Emphasis added.]

^{70/} SDG&E Responses, p. 10. “Emissions are reduced by 1 percent annually due to DRAM resources.”

the Commission has not adopted energy delivery as a goal for DRAM, emissions reductions are premature.^{71/} Prior to the Commission approval of this objective, it should be clear what is procured and that DRAM capacity can be transparently measured in this manner.

3. The Commission should be cautious about setting objectives that establish poor standards or cannot effectively guide the design of a procurement mechanism

PG&E disagrees with the Commission setting any DC target under 100 percent. PAO, JDRPs, and CESA suggest that DC performance should exceed 90 percent by 2025.^{72/} This is unwise given the DRAM product is intended to provide a reliable capacity product. It is vital to the RA program that any demonstration of reliability needs to be at 100 percent. To only require performance at 90 percent of contract capacity puts the grid at risk unless additional resources are procured to compensate for an expected amount of underperformance.

PGE& disagrees with a subset of JDRP and CESA's objectives which are metrics or are arbitrary. The JDRPs suggest that DRAM resources should serve 10 percent of the evening ramp and decrease the mid-day trough by 10 percent by 2025.^{73/} CESA and JDRPs include enrollment targets in their comments; the JDRPs suggest that a quarter of all customers in California should be enrolled in DR by 2030 and CESA suggests DRAM represent 50 percent of DR procured by 2025. As mentioned above, these types of metrics could be a part of an evaluation, but should not be tied to forward requirements.

C. Schedule for Step Two

PG&E agrees with SCE and SDG&E who recommend that any Step Two decision on the future of DRAM should be based on a record that demonstrates that DRAM is meeting its goals and able to reliably deliver RA.^{74/} PG&E is open to workshops and working groups to refine the goals, principles, and objectives for DRAM; develop an evaluation process that sufficiently

^{71/} OhmConnect Responses, p. 12.

^{72/} PAO Responses, p. 8; JDRP Responses, p. 12; CESA Responses, p. 10.

^{73/} JDRP Responses, p. 12.

^{74/} SCE Responses, p. 8; SDG&E Responses, p. 7.

develops this record; determine a mechanism to assess if DRAM is a cost effective use of ratepayer funds; and implement a process for incorporating ongoing improvements. However, a Commission decision on future auctions requires an evaluation that demonstrates successful results, which should include the remaining months of the 2018 deliveries, 2019 deliveries, and at least six months of the Step One pilot deliveries. A final decision this year does not allow for either analysis of the 2019 deliveries or six months of the Step One pilot deliveries, which are most important to establishing that the modifications proposed are able to effectively improve the reliability of DRAM resources.

D. Adding a minimum dispatch requirement to DRAM requires a discussion of whether DRAM should procure energy and what the value of that energy is

Almost all parties support the energy requirement as an issue to be explored in Step Two. PG&E supports this approach as substantial discussions will be required with regards to the goal of DRAM, clarity on what is procured through DRAM (i.e., RA tags/capacity vs. energy), and requires adequate metrics and reporting to transparently prove that any requirement is met.

PG&E disagrees with PAO's minimum dispatch hour requirement.^{75/} As PG&E raised in its prior comments,^{76/} a minimum dispatch requirement:

- Should be discussed in Step Two as the requirement is complex and implies changes in what DRAM is procuring.
- An energy dispatch hour requirement on its own will not necessarily displace natural gas peaker plants or result in dispatches at times when the grid most needs it.
- Instead of a dispatch hour, the Commission could apply metrics, similar to what IOUs report for their DR dispatch as a part of Energy Resource Recovery Accounting least-cost dispatch, to understand DRAM resources bidding behavior and if it is bidding economically. This would shed light on DRAM resource bidding behavior to understand if the resource is

^{75/} PAO Responses, p. 11.

^{76/} PG&E Responses. p. 12.

reflecting their marginal and opportunity costs accurately or in a way that would make it unlikely to be dispatched.

IV. NEW CONTRACT REMEDIES REGARDING THE DELIVERY OF REVENUE QUALITY METER DATA (RQMD) ARE REDUNDANT

PG&E would like to reiterate that there are existing mechanisms in place to address any data related issues which the DRPs face. As parties like the JPPs and the Council have stated, there are existing procedures in place under Electric Rule 24 that address Seller's liabilities associated with data delivered. There may be opportunities for improvement in these processes; however, entering into service level agreements through the DRAM contracting process is premature and this is not the right place to discuss these matters. The Customer Data Access Committee established in Application 14-06-001 et al was developed to discuss enhancements and improvements related to data access, and PG&E supports the opportunity for all parties to work together in evaluating additional provisions, which may benefit both the DRPs and the IOUs with respect to data access.^{77/} As the IOUs each pointed out, the DRPs share the responsibility in resolving data issues, which includes reasonably timed communication between the two parties, and their own strong management of business practices and technical systems related to data.^{78/} Placing the onus solely on the IOUs will not resolve the full set of challenges which the DRPs find themselves facing. PG&E also reiterates that the IOUs have already developed customer authorization and data delivery performance metrics, which have not yet been fully analyzed nor utilized, and it strongly recommends reviewing the available information and evaluating whether it addresses existing challenges.

^{77/} Resolution E-4868, Ordering Paragraph 27.

^{78/} SCE Responses, p. 22; SDG&E Responses, p. 19.

V. REVISIONS TO SCE'S REDLINED CONTRACT

PG&E offers a few comments on top of SCE's proposed revisions to the DRAM pro forma. These are initial comments, since PG&E has not had sufficient time to develop proposed contract language in response to SCE's draft.

Section	Page No.	Section Description	PG&E Comments
1.2, 1.3	3-4	Term and Delivery Period	Definitions of Term and Delivery Period should be revised in order to ensure consistency in the intended application of these definitions throughout the contract
1.4(a)(i)	4	Provision of Resource IDs	Seller shall confirm in writing to Buyer that all PDRs are properly registered with the CAISO and included on the NQC/EFC list by T-60D (required for it to be claimed by PG&E)
1.4	4	Supply plan	Provide for Buyer audit rights on supply plan and resource qualifying capacity, and provide Buyer with the right to withhold (and cause the Seller to withhold) the Seller's supply plan if the plan is not supported by the capacity available based on Buyer's audit findings
1.6(a)	5-6	Demonstrated capacity	Should be aligned to the final decision on the demonstrated capacity requirements adopted. PG&E recommends its methodology.
1.6(g)	7	Invoice and DC documentation	Clarify that the Rule 24 firewall would be maintained with the provision of customer-specific information, unless waived by Seller. That information pertaining to the calculation of resource-level performance, including the underlying customer-level data and other information required to calculate baselines, etc. In addition, it should be clarified that Buyer has the right to withhold all payments until a pending audit is completed and any disputes relating to any audit findings are resolved
2.1	8	CPUC Approval	Should be aligned to final decision on whether CPUC approval is required
2.2	8	CPUC Approval Termination Right	Timelines may need to be extended
3.1(a)	9	Supply plan	Should be aligned to final decision on the qualifying capacity methodology adopted, and reference that a methodology approved in the RA proceeding may supersede the methodology prescribed in this contract

Section	Page No.	Section Description	PG&E Comments
3.3(b)	10	Testing	Should be aligned to final decision and retesting requirements should be clarified such that underperformance for testing purposes (above a specified threshold) of any resource should require retesting at the resource, not contract, level
3.3(c)	10	Load impact analysis	Seller should provide Buyer access to the load impact analysis performed in accordance with CPUC requirements. This will need to be aligned to any decisions coming out of the RA proceeding
3.4(d)	11	Addition of a clause requiring Sellers to ensure customers follow safe practices in providing DR	PG&E supports the intent, but specific standards should be provided or referenced to specify the scope of safe practices, which Seller shall represent, warrant and covenant are incorporated into Seller's contracts with its customers
3.4(e)	11	Movement of customers between resources	Should be aligned to final decision. PG&E recommends the JDRPs' provisions (pp. 18-19)
4.1	12-13	Delivered capacity payment	Should be aligned to final decision. PG&E recommends the penalty structure described in Appendix A of its March 29, 2019 responses to the ALJ questions, which includes penalties for underperformance at the supply plan stage
4.2	13-14	Invoice and payment process	Initial invoices must be provided within 60 days after the end of the showing month. Revisions to the initial invoices are only permitted for late RQMD-based delays, with a list of affected customers provided to the Rule 24 team with invoice submission. Otherwise, the Buyer has the right to withhold all subsequent invoice payments to protect against delays to the feedback mechanisms employed with demonstrated capacity submission. Deadline for payment of invoices should be clarified.
5.3	16-17	Reduction or substitution of performance assurance	Limit right to request reductions in performance assurance to quarterly or semi-annually to alleviate administrative burden, and return of collateral timeline should be dependent on approval of invoices, such that there is clarification that performance

Section	Page No.	Section Description	PG&E Comments
			assurance should not be returned for contested invoices (i.e., invoices under audit)
7.2(b)(v)	28-31	Prohibited resources	Further alignment may be necessary for PG&E's requirements and/or to comply with any decisions coming out of Application 18-10-008 et al. Costs of verification allocated to the Seller should also be netted out from invoice payments.
9.1(a)(iii)	33-34	Event of default for shortfalls in capacity	This should specify a specific figure by which underperformance shall constitute an event of default, i.e., two months of either: (1) qualifying capacity falling below 60 percent of contract capacity, or, (2) demonstrated capacity falling below 90 percent of the qualifying capacity
Exhibit A	A-1 to A-11	Definitions	Clarifications to existing definitions and better alignment of terms throughout the contract would be helpful in contract administration

VI. CONCLUSION

PG&E appreciates the Commission's consideration of these matters and the opportunity to provide this reply.

Respectfully Submitted,

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Dated: April 10, 2019

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