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Attachment 1
Proposals for Working Group 1
Topic 1.1 Qualifying Capacity in Supply Plans

A.17-01-012 et al
Demand Response Auction Mechanism (DRAM) Working Groups Proposals Pursuant to Administrative Law Judge Hymes' January 23, 2019 Ruling

Working Group 1

Proposed Improvements for Performance and Accountability

Sub-Topic 1

Qualifying Capacity in Supply Plans

Proposals Included:

- JDRPs
- OhmConnect
- PG&E

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Nitro Software, Inc.
100 Portable Document Lane
Wonderland

Working Group 1.1 – Qualifying Capacity in Supply Plans

Problem Statement according to JDRP: Parties (IOUs/Ratepayers) have no upfront confidence in supply plans and that the capacity in them is real.

While this problem may be presented as a universal problem, the Joint DR Parties do not believe that it is. It is not appropriate to paint all DRPs with the same brush. Therefore, if there is a lack of confidence in a specific DRP as to whether the capacity that is presented in its supply plan is real, there may be justification for applying some other method of verifying the capacity. If the DRP has demonstrated that it has submitted reasonable supply plans that represents a realistic ability for the DRP to perform, no further corroboration may be necessary.

The Joint DR Parties do not support the application of load impact protocols for DRAM as a means of determining qualifying capacity because LIP looks at historical data to estimate future capabilities. The DRAM has been a highly volatile program in terms of the amount of capacity that has been allocated to any DRP in any year relative to prior years. Additionally, customers move in and out of DR Programs within a contract year as well as from one year to the next. Therefore, many DRPs do not have any consistent historical performance to point to in order to predict future performance.

Further, resource testing may also not be an accurate ex ante means of determining whether the capacity that is in the supply plan is capable of performing at a particular level due to the weather sensitive nature of some DR. Weather conditions on any given day may, or may not, allow the resource to perform at its expected capability at times of grid need. Additionally, pre-season testing may not reflect the loads that seasonal rather than weather sensitive would have at the time they are including in the supply plan in a delivery month.

Proposal: The Joint DR Parties respect that there are differences in portfolios between DRPs; there may be varying approaches that work for different DRPs. Thus, the JDRP recommend that the IOUs, or a neutral third party such as an independent evaluator, be given some discretion as to whether they believe that further substantiation of a supply plan is necessary, based on a reasonable assessment of a DRP and its portfolio. If they do, the IOUs can invoke their audit capability within the DRAM contract to require the DRP to provide further substantiation of its supply plan. In particular, the DRP should be required to demonstrate that the resource(s) are capable of providing a load reduction consistent with the supply plan. The JDRP Propose that an initial such step could be a review of the customers and historical loads that make up each resource serving a contract. Historical loads during the AAH that are a multiple of the supply plan capacity could be sufficient to provide an ex ante review of a DRPs resources. If more detail is required, the audit and any materials reasonably requested by the IOU must be reviewed only by the IOU's Rule 24/32 Staff, must be subject to an NDA and protected from dissemination to the IOU or externally, with the exception of Energy Division personnel with the appropriate authorization and subject to appropriate data protection standards. Any audit requests should be fairly standardized and provided with adequate notice. This should not occur on a monthly basis, but only in those instances where the IOUs have reservation about the supply plan and the DRP's ability to perform consistent with the supply plans.

Discussion Points

- This method would give IOUs reasonable assurance that there is a real resource behind the capacity in a supply plan that is registered in the CAISO market and ready to participate.
- IOUs may have all data needed in house, and to the extent they do not, there are 60 days before the delivery month to examine the plan. This may only need to be checked early in the contract or occasionally, rather than every month, once resource confidence is established.
- New entrants are not penalized if they can show they have a plausible resource, even with no market history. Good actors who have shown they can reliably aggregate a resource may be audited less frequently lessening any temporal burden on both supplier and buyer.
- Employee and vendor time (SC) may be needed by both parties to compile data and evaluate resources, but this would be less effort than using a prescriptive lookback mechanism and analysis to create a calculated ex ante value, like Load Impact Protocols. This could be used by all market participants as an option.
- JDRP believe that a plausibility test as needed by the IOU, coupled with penalties for significant underperformance and a subjective weighting factor for selecting contracts based upon past performance, as discussed in other sections of the working groups and in the staff evaluation report, will discipline supply plan capacity and DRP bidding behavior.
- If there are other proposals with much stricter requirements, the JDRPs warn that there could be negative unintended consequences, such as DRPs underestimating supply to avoid penalties but then delivering much more than stated in the supply plan when responding to a market award; such a situation would cause grid planning issues with the CAISO, as briefly discussed during the working group. Furthermore, such a response from DRPs would disengage customers who might not get paid for their full potential, eroding away at the future stability of the DRAM resource.

ohmconnect

Working Group 1.1 (Sub-Topic: Qualifying Capacity in Supply Plans)
Proposal: Plausibility Demonstration of Ex Ante Supply

A. Problem Statement

Stakeholders, including the Investor-Owned Utilities (IOUs), have expressed concern regarding the availability of Resource Adequacy (RA) sourced from third-party Demand Response Providers (DRPs) through the Demand Response Auction Mechanism (DRAM). As one (of possibly several) ways to provide the IOUs with an added layer of confidence, we propose supplementing each month's Supply Plan with an ex ante supply plausibility check.

B. Description of Methodology

We propose adopting a ***two-tier supply plausibility check*** as one of the possible ex ante options to underpin and complement the DRP 60-day-ahead Supply Plans. The ***first tier*** is intended to provide a simple demonstration that the anticipated load of a DRP's customer base sufficiently exceeds the capacity submitted to the IOU in the Supply Plan.

If this reasonableness check is not enough—for example, if the customer load is less than twice the Supply Plan capacity—the DRP could be required to provide additional rigor. Specifically, the DRP could provide a ***second tier*** calculation that would use historic event performance to calculate the anticipated difference between non-event and event load.

First Tier: Load Reasonableness Check

For each showing month, at the Sub-LAP level, the DRP would use rolling two-year seasonal data[1] to calculate the aggregate customer non-event load during the hours of highest grid need. We define "grid need" as days where CAISO Day-Ahead Locational Marginal Price (LMP) exceeds $300/MWh. To calculate customer load, the DRP would:

(a) Identify all hours during which CAISO LMP was greater than $300/MWh.[2]
(b) For each customer currently registered in the Demand Response Registration System (DRRS), average the actual metered load during the hours identified above, eliminating the hours in which the customer was in a resource that underwent a DR event dispatch.
(c) For DRRS active customers who do not have historic meter data for at least 3 of the selected hours—for example, if a customer has recently moved—assume that their load reflects the average calculated for all customers with data.
(d) Sum the per-customer average non-event load across all DRRS-registered customers.

[1] May through October for summer months and November through April for winter months.
[2] There are myriad ways to define "grid need". In order to better align this ex ante calculation with expectations of economic dispatch, we propose looking at periods of high power prices rather than periods of high demand.

To obtain a final load value, the resulting sum would be adjusted for projected enrollment and avoided distribution system losses.

Second Tier: Load Reasonableness Check with Adjustment for Historic Event Load

If the first-tier reasonableness check yields load that is less than two times (2x) the capacity indicated on the Supply Plan, the DRP would compare customer load to performance during a subset of historic DR events. Specifically, for each showing month, and at the Sub-LAP level, the DRP would use rolling two-year seasonal data to calculate (1) the aggregate customer *non-event load* during the hours of highest grid need (same as above) and (2) the aggregate customer *event load* during a subset of DR event hours. The difference between (1) and (2), adjusted for projected enrollment and avoided distribution system losses, would represent the plausible supply for the contract delivery month.

(1) Aggregate customer non-event load during hours of highest grid need
This would be calculated as follows (numerical example is provided in the Appendix, Table 1):
   (a) Identify all hours during which CAISO LMP was greater than $300/MWh
   (b) For each customer currently registered in the Demand Response Registration System (DRRS), average the actual metered load during the hours identified above, eliminating the hours in which the customer was in a resource that underwent a DR event dispatch.
   (c) For DRRS active customers who do not have historic meter data for at least 3 of the selected hours—for example, if a customer has recently moved—assume that their load reflects the average calculated for all customers with data.
   (d) Sum the per-customer average non-event load across all DRRS-registered customers.

(2) Aggregate customer event load during a subset of DR event hours
This would be calculated as follows (numerical example is provided in the Appendix, Table 2):
   (a) For each DRRS-registered customer, identify the actual metered load during the hours in which the customer received a DR event dispatch.
   (b) For each customer, average the actual metered load during the 5 event hours in which load was lowest.
   (c) For DRRS active customers who do not have historic event data for at least 3 event intervals—for example, if a customer is newly enrolled—assume that their lowest event load reflects the average calculated for all customers with data.
   (d) Sum the per-customer average event load across all DRRS-registered customers.

The Sub-LAP-level unadjusted aggregate supply would be calculated by subtracting the total in (2) from the total in (1). This value would then be adjusted for projected enrollment (e.g. based on historic growth trends) and avoided distribution system losses to obtain the final ex ante supply. (A numerical example is provided in the Appendix, Table 3.)

The DRP would retain discretion over the assignment of aggregate Sub-LAP supply to individual resources, provided that the resource-level supply remains below the resource's Net Qualifying Capacity (NQC) as set in the CAISO systems.

C. Discussion

This proposal has been updated from the original presented in the Working Group meeting to (1) add a reasonableness check as the first-tier ex ante approach, and (2) reflect a preference for a seasonal differentiation. We now propose the aggregate event and non-event load be calculated using rolling seasonal data – May through October for the summer months and November through April for the winter months.

OhmConnect is open to adjusting several variables in this proposal. These include:

- LMP >$300/MWh — the price threshold can be lowered or increased. For example, if this threshold does not provide enough sample days, or if the days are not sufficiently distributed, the price threshold can be lowered. Alternatively, the proposal could utilize two price thresholds, one for each season.
- Use of 5 lowest load events for each customer — averaging customer load from the 5 lowest events provides a good demonstration of the lowest level of energy consumption that the customer is willing to tolerate during an event. If there is sufficient grid need, the DRP can be reasonably counted on to offer appropriate incentives for the user to drop to that level of load.

D. Pros/Cons

Operational efficacy: The inclusion of an ex ante assessment with the 60-day-ahead Supply Plan addresses the concern that the indicated capacity reasonably reflect the DRP's capabilities. It is an additional exercise, and does require some, albeit very reasonable, resources (on the part of the DRP) to complete and review. However, the additional operational requirements are outweighed by the benefits to all DRAM parties that the additional certainty and transparency would provide.

Verifiability: In order to verify the ex ante results, the counterparty would need access to the following inputs: a) CAISO LMP data, b) customer-level metered load, c) CAISO resource composition, and d) CAISO dispatch information (day and hour). The first and second data points are available to both the DRP and IOU. The latter two would be available in the event of an audit.

Costs: Added cost would be relatively minimal. Additional resources (staff time) would be required within the DRP and IOU to calculate and review the ex ante Supply Plan addendum.

Impacts on new entrants: Because this ex ante methodology requires historic event load data as an input, it would be infeasible for new entrants. However, this is not necessarily problematic as we are proposing that this be *one of several* Commission-approved options to validate a Supply Plan. One possible option is to allow new entrants to use contract capacity as Supply Plan capacity for the first "X" months or year of their contracts. Another option is to mandate that new entrants undertake a "reasonableness check" of the type OhmConnect proposed as the first-tier exercise, described above. This would essentially allow these new entrants to show that their customer load matches or exceeds their Supply Plan quantity.

Impacts on good actors: The imposition of this ex ante methodology would have no adverse impacts on good actors, especially if it is one option among several.

Parties' positions (for and against): In general, parties are in favor of having greater clarity around the validity of the Supply Plan numbers. There is also some agreement that an ex ante methodology like the one proposed here is reasonable. Two areas where consensus is not yet reached are 1) the specific price and event thresholds discussed above, and 2) the penalties for Supply Plans showing below contract quantity.

E. Dependencies

The ex ante calculation is tightly integrated with a host of other Working Group issues, most notably: penalties for Supply Plan deficiencies (including what constitutes contract default), capacity demonstration and penalties for underdelivery.

Appendix: Ex Ante Numerical Example

Table 1. Illustrative Customer Non-Event Load for Sub-LAP X (kWh)*

Customer	Hours with LMP > $300/MWh							Average
	8/4/18 6pm	9/6/18 7pm	8/25/17 6pm	7/15/18 5pm	9/10/18 7pm	8/20/17 5pm	7/16/18 6pm	
1	1.7	1.9	1.2	1.1	1.7	1.3	1.0	1.4
2	1.2	1.1	1.0	1.5	1.3	1.0	0.9	1.1
3	0.9	Event	0.7	1.1	0.8	1.0	0.7	0.9
4	1.5	1.6	1.8	1.7	1.2	1.5	1.7	1.6
5	1.3	1.4	1.2	Event	1.1	1.5	0.9	1.2
6	1.6	1.3	1.1	1.8	1.4	1.6	1.7	1.5
7	0.7	0.6	1.1	0.7	0.8	0.6	0.5	0.7
8	Event	Event	0.8	0.5	0.9	1.0	1.1	0.9
9	No data				1.3	1.7	1.4	1.5
10	No data							*1.2*[a]
Aggregate Customer Non-Event Load								**12.0**

** All numbers are purely illustrative.*

[a] *This is the average of the per-customer average non-event load for all customers with historic data.*

Table 2. Illustrative Customer Event Load for Sub-LAP X (kWh)*

Customer	Actual load during 5 "lowest load" events					Average
1	1.0	1.1	0.8	0.9	1.1	1.0
2	0.5	0.2	0.4	0.6	0.3	0.4
3	0.3	0.2	0.3	0.4	0.1	0.3
4	1.2	1.1	1.0	1.3	1.4	1.2
5	0.7	0.6	0.8	0.7	0.5	0.7
6	1.1	1.3	1.0	1.1	1.2	1.1
7	0.2	0.1	0.2	0.2	0.1	0.2
8	0.1	0.3	0.2	0.3	0.5	0.3
9	No data					*0.6*[a]
10	No data					*0.6*[a]
Aggregate Customer Event Load						**6.3**

** All numbers are purely illustrative.*

[a] *This is the average of the per-customer average event load for all customers with historic data.*

Table 3. Plausible Load Drop for sub-LAP X (kWh)*

Aggregate Customer Non-Event Load	12.0
Aggregate Customer Event Load	6.3
Plausible Supply (Sub-Total)	**5.7**
Adjustment for expected enrollment (+10%)	6.3
Adjustment for avoided distribution losses (+5%)	6.6
Plausible Supply	**6.6**

* *All numbers are purely illustrative.*

Proposal #1: Sub-topic 1.1 – Qualified Capacity

Problem Statement:

There are methodology and accounting challenges to determining the qualifying capacity (QC) of a DRAM resources today. Key challenges include:

- It is unknown whether there is consistency across Sellers in the methodology they used to determine their QC and demonstrated capacity (DC) at each stage.
- It is unknown how consistently an individual Seller translates the QC in the contract into a QC value applicable at the CAISO Resource ID level for annual and monthly supply plans.
- Both of these challenges make it impossible today to perfectly reconcile what an IOU should be expecting from DRAM resources.

Figure 1 illustrates the different stage gates where DRAM Sellers need to demonstrate their ability to forecast accurately their kW potential (Qualifying Capacity or QC with gates 1, 2 and 3) and then their ability to accurately deliver what they've forecasted for the operating month (Demonstrated Capacity[1] or DC with gate 4).

Figure 1: Current Approaches

Figure 1 – Current approaches at the different stage gates

[1] The term "Demonstrated Capacity" actually refers to an energy value (kWh) rather than a capacity value (kW).

Inadequate vetting and inaccuracies for the kW QC values incorporated in the annual (stage 2) and monthly RA (stage 3) supply plans is problematic because:

- **It could create incremental procurement for the IOU.** If a DRAM Seller submits QC quantity to the annual and/or monthly supply plan (stage 2 and 3) that is less than what they committed in the Contract (stage 1), the IOU will need to procure additional RA, if the IOU determines a need and deficit to their overall portfolio prior to the submission deadline. In addition, there is a direct impact to the MW capacity allocated to the other non-IOU LSE (i.e., Community Choice Aggregators) that originated from the DRAM contracts.
- **It could require incremental procurement by the CAISO.** A shortfall between the QC value in the contract (stage 1) and the QC values in the supply plans (stages 2 and 3) creates situations in which the CAISO, via Capacity Procurement Mechanism (CPM), may procure additional MWs to firm up any RA product deficiency during the Annual and Monthly RA showing if the quantities entered by DRAM Sellers are not deemed to be reliable. [Please refer to SCE's 1.3 (Penalties and Incentives for Performance) Proposal Part B]

Aspects of the problem addressed by PG&E's short-term proposal

Development of what the appropriate standardized method, procedures and vetting of QC is a critical issue that will require continuous improvement with several iterations. As a first iteration towards improvement, PG&E is suggesting the following short-term levers to test getting to a more refined and reliable QC for stages 1, 2 and 3:

(1) **Utilizing past Demonstrated Capacity (DC) performance methodology to calculate QC** – Although it is called Demonstrated Capacity (DC), the data and methodology used for evaluation is based on the PDR/RDRR resource's energy delivery performance as determined by an energy baseline (not a capacity baseline). PG&E is proposing that DRAM Sellers use the DC energy baseline (one that is approved by both CAISO and CPUC) to calculate QC for both Annual and Monthly RA Supply Plan. This will fix the lack of alignment in the current methodology of in calculating the QC and DC methodology – and instead align the QC and DC methodology used by DRAM Sellers resulting in a more consistent quantity across each stage gate.

(2) **Increased number of event dispatches via testing and actual CAISO market dispatch –** PG&E is proposing bi-monthly event dispatches to create a continuous track record of the resources and customers capability of delivering throughout the year. This will also enable Buyers to use past performance (ex-post) to effectively inform the DRAM resource's QC value (ex-ante for the future deliveries).

(3) Mechanism to Penalize and Adjust QC – PG&E is proposing to construct a reconciliation feedback loop between DC and QC quantities. If there is a deviation, that deviation will either de-rate (reduce the Supply Plan) and/or reduce the capacity payment. [Please refer to SCE's 1.3 (Penalties and Incentives for Performance) Proposal Part A]

(4) **Independent Actor –** PG&E is proposing to have an independent actor that will serve as the bridge between Energy Division and DRAM Seller. The function of the Independent Actor would be to monitor and provide support to DRAM Seller with the formulation of QC and DC and provide, in parallel, continuous feedback mechanism to cure any issues surrounding the efficacy of the proposed QC and DC method, operation and process.

(5) New Entrants? For new DRAM Sellers – contract quantity can be used as the QC until enough historical DR event data is collected to establish performance / capability (kW quantity). In addition, PG&E is proposing that as part of the milestone check-in for new DRAM Sellers, checking historical customer's total peak usage (kW) corresponding to the availability assessment hours for the past 12 months would be a step towards putting safeguards towards available load (ceiling), recognizing that it does not account for what the actual reduction might be since a baseline is required to determine typical usage against the event response from the resource/customers.

Figure 2: PG&E's Recommended Short Term Strategy

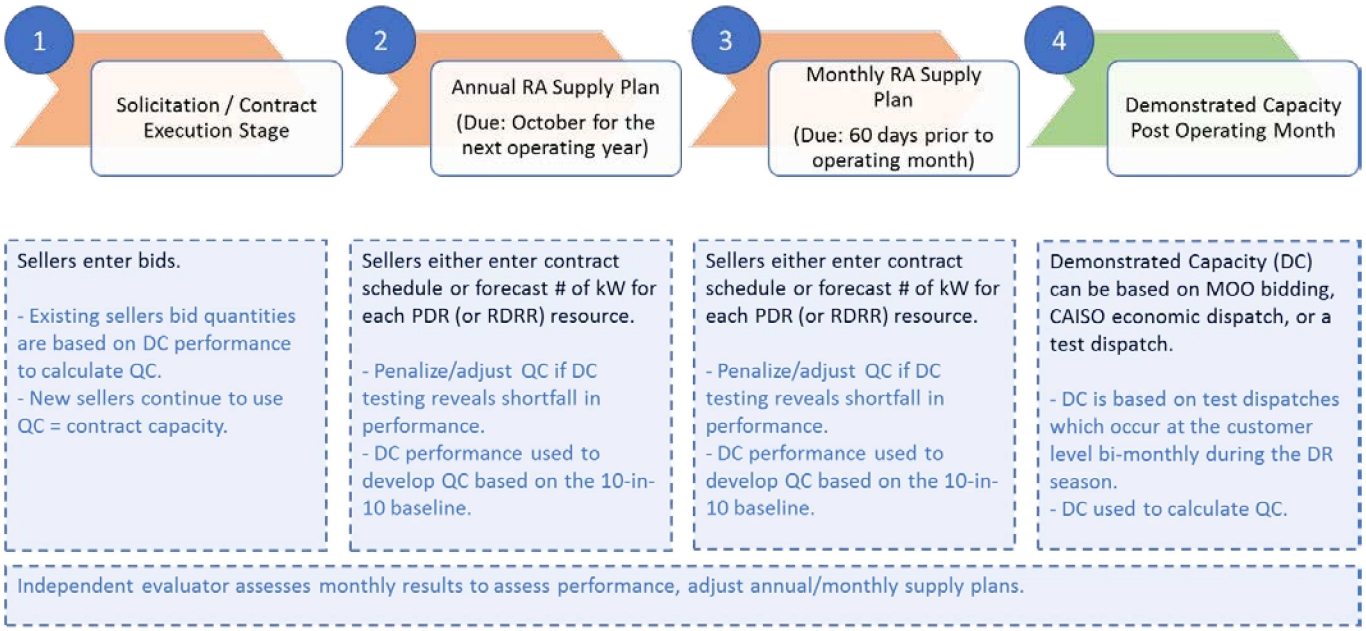

Figure 2 – PG&E's recommended short term strategy
Blue font indicates the delta from the previous figure.

PG&E's QC proposal, detailed further below, should be understood as a starting point in which all parties (Buyers, Sellers and market operator), can apply and demonstrate these methods and procedures. The end goal is to learn from this iteration for the design of a viable proposed methodology for QC determination that will be submitted to the Resource Adequacy proceeding for final guidance and acceptance.

Short-term proposal for QC to inform the Long-term Solution

According to the DRAM Evaluation Report, *"Lack of a Commission-approved methodology to estimate Qualifying Capacity (QC) on Supply Plans, which, in Staff's view, makes the earlier findings regarding capacity aggregation inconclusive at best."*[2] Constructing reliable and uniform CPUC standards with feedback loops between calculating DR resource's QC and DC will ensure consistency and a better understanding on how reliably DRAM resources can be dispatched in situations of reliability events.

PG&E is proposing the following to start the development of a streamlined and standard base QC methodology:

- The proposed Milestone Progress Report [Please refer to SDG&E's 2.4 (Implementation Milestones) Proposal] will be required to follow the progress of Seller's portfolio.
- Similar to DC actual dispatch or testing performance method, QC should also be based on CPUC and CAISO approved energy baseline methodology; the 10-in-10 w/ day matching adjustment baseline is the only current method approved by both CAISO and CPUC. Any alternative energy baseline[3], should be out of scope until the CPUC approves these new alternative baseline and configuration methods since the energy baseline inform the capacity determination and payment which is under CPUC's jurisdiction. [4]
- Establishing a new independent actor to assist DRAM Sellers to work through the implementation and operations of this new QC standard is warranted. This new role will provide independent assessments throughout the process for continuous learning. This will inform and help any future contract development and any operational functions.
- Establishing and refining QC requires additional and more frequent testing (e.g., bi-monthly testing/actual dispatch link). Requires coordination and consistent use of the same CAISO and CPUC approved baseline when conducting DC.
- This proposal recommends reconciliation of DC PDR resource performance results against Month RA Supply Plans. If the Monthly RA Supply Plan (using QC) and DC PDR resource continuously produces a mismatch and the delta of the mismatch is greater than 20%, Seller may be penalized by derating the next Supply Plan and/or reduction on capacity payment.

PG&E believes this short-term proposal on refining the calculation of QC can help inform on how to best proceed with quantifying third party DR resource from any sourcing mechanism, including DRAM. Testing the efficacy and reasonableness of the methodologies (CAISO's energy baseline) and process is warranted given the current design does not take prior performance into consideration, and instead

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[2] Energy Division's Evaluation of Demand Response Auction Mechanism Final Report [Public Version– Redacted] (January 4, 2019), Criterion 5, p. 11.

[3] Alternative baselines include the Energy Storage Distributed Energy Resource (ESDER) phase 1 (e.g., Meter Generator Output) and ESDER phase 2 (e.g., control group, 5-10 day matching, weather matching)

[4] Pacific Gas and Electric Prehearing Conference Statement and Responses to ALJ Questions on Retail Baseline, (B) Interaction between Retail and Wholesale Baselines, p. 6-7 (http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M254/K771/254771320.PDF)

assumes the contract value is the qualified capacity. In contrast, IOU programs rely on past performance and use the Load Impact Protocol (LIP) to determine qualified capacity.

Long-term QC Solution

Figure 3: PG&E's Recommended Long Term Strategy

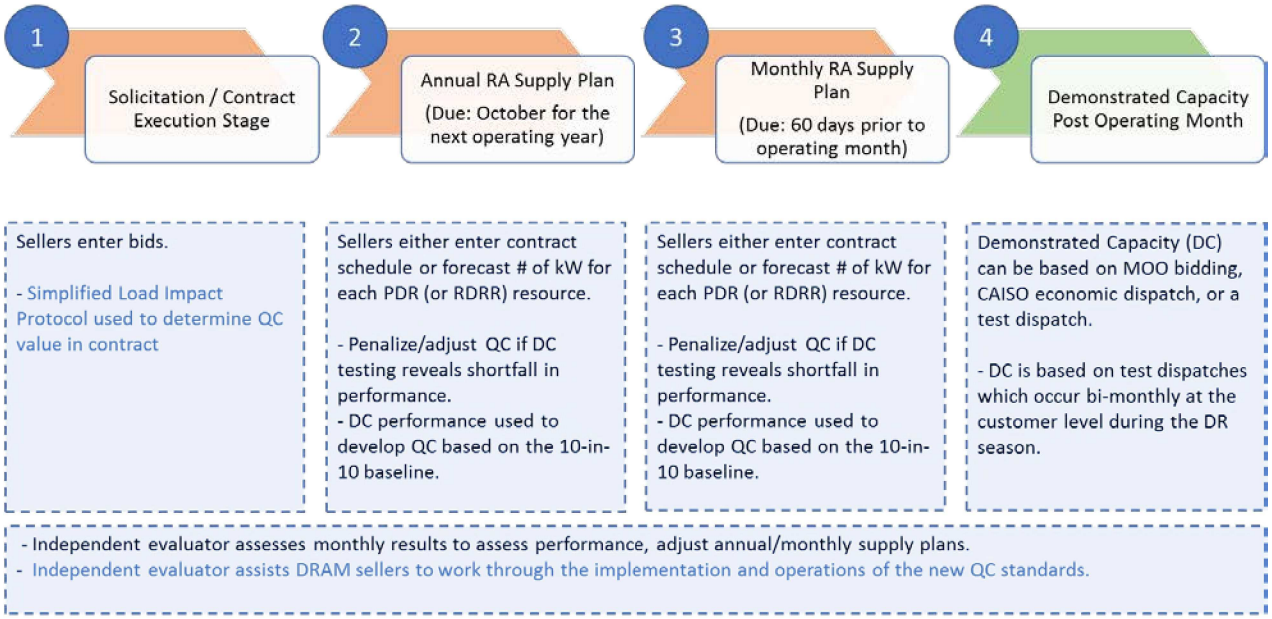

Figure 3 – PG&E's recommended long term strategy
Blue font indicates the delta from the previous figure.

Based on the learnings, provided by the independent actor and DRAM Sellers, from the short-term QC solution, PG&E sees this as the path to discuss the future construction on how to best determine QC. This discussion will include evaluating the existing LIP and suggest modification that works for all parties. Forge from this would be the longer-term establishment of a ***Simplified Load Impact Protocol.***

PG&E would also suggest that future load impacts may need to be done at the customer level instead of resource aggregation point for several reasons.

- Technology specific rules like the Energy Storage Multiple-use Application (MUA) requires better understanding of whether customers are physically capable of providing multiple grid services. To the extent MUA rules are extrapolated across all other DER and appliances, it will be challenging to evaluate customer load impact if the evaluation continues to be at the resource level.
- To ensure no double/over compensation, customer level evaluation is required to establish incrementality.

Operational Efficacy

The proposal points to a variety of requirements for DRAM sellers to construct (and continuously refine) their QC quantity. PG&E believes that the set of requirements including the insertion of an independent actor will establish an effective streamline and feedback process.

Verifiability

The proposal points to existing standards (i.e., CAISO and CPUC baselines). So long as the standards and methods are known, independent actor could verify the approach and calculation done by the DRAM seller.

Costs

Cost is unknown at this time.

Impacts on good actors

Proposal should not have a negative impact(s) to good actors. The suggestion outlined here is trying to achieve reliable numbers that can be used as the QC which can be entered for future supply plan showings. Previous and existing DRAM (good) actors that strive to compose accurate quantities for their Monthly RA Supply Plan

Impacts on new entrants

PG&E recognize that new entrants require a different means to calculate their QC given their experience and the reality in which they may not have customers to begin with. PG&E offered a two-step approach to commence the QC establishment for new entrants.

Parties Positions

PG&E collaborated with the other IOUs and Olivine in preparing its proposals and believes that there is a general agreement. However, the compressed time frame did not allow for a formal signoff from them on the final proposals, and it cannot be assumed that the IOUs and Olivine agree unanimously on all items presented here."

Dependencies (other WG and Policy):

PG&E's proposal has several cross-overs with on-going proceeding and workshops which may influence what can be done in the near term.

- Resource Adequacy (R.17-09-020) - Resource Adequacy Track 3 is in the midst of obtaining proposals from parties on which method and process should be constructed to evaluate third

party Demand Response resources (4b). Resolution from that proceeding may impact how third parties are to calculate their QC quantity.

  - Supply Side WG (D.17-10-017) – DR stakeholders are putting forth proposals to be submitted to the RA proceeding on issues surrounding QC calculation, supply plan, etc… The WG is on course to end by June of 2019.

- Demand Response Baseline Workshop (A.17-01-012) – Commencing a WG to address alternative wholesale baselines for retail use. Direct impact on CAISO alternative methods to calculate DC, which would impact QC determination.