2019 DRAM RFO ("DRAM 4") Pre-Bid Conference and Other Questions & Answers

I. Availability Assessment Hours

Q1: Which Availability Assessment Hours (AAH) are the resources procured in this RFO subject to?

A1: The AAH are determined by the CAISO for the specified RA product type. The Sellers are expected to comply with the AAH in effect at the time of contract delivery, as determined by the CAISO Tariff and BPMs. The CAISO recently applied for a limited tariff waiver for DRAM resources.

Docket Numbers: ER18-838-000
Applicants: California Independent System Operator Corporation
Description: Compliance filing: 2018-02-09 Petition Limited Tariff Waiver - Availability Assessment Hours to be effective N/A.
Filed Date: 2/9/18
Accession Number: 20180209-5155
Comments Due: 5 pm ET 3/2/18

II. Average August Capacity Cost Calculation

Q2: The IOUs state in their 2019 DRAM RFO Protocols that, when calculating the August average bid prices for System, Local, and Flexible capacity, they will either "Exclude outlying Offers in each category" (PG&E and SCE) or "Exclude the top ten percent of August bids offered in each category" (SDG&E). What is the basis for these exclusions? Is it D.16-09-056, which states (on pages 73-74): "The simple average bid price shall be calculated by (1) excluding the top 10 percent of August bids offered then (2) totaling all remaining August bid prices and (3) dividing by the number of bids in (2)"?

A2: Yes, it is based on the indicated Commission guidance.

Q3: How do PG&E and SCE define “outlying Offers”? Are these “the top ten percent of August bids offered in each category”, as is the case for SDG&E?

A3: For PG&E and SCE, while outliers are NOT defined as the top ten percent, it is expected that this metric would capture most, if any, outliers. If outlier offers are observed beyond this range, PG&E and SCE would consult with Energy Division on the next steps. Outliers are determined based on the offer set, as well as IOU's experience with other RFOs.

Q4: Suppose a utility receives comparatively few (e.g. fewer than 10) offers for a given category of capacity. Will “outlying Offers” still be excluded from the August average bid price calculation?

A4: Yes.

Q5: The IOUs’ 2019 DRAM Protocols allow several reasons why a utility may elect *not* to select certain Offers (e.g. because the utility has exhausted available MW under its reliability cap). Will such offers be included in, or excluded from, the set of offers used to calculate the August average bid prices for each category of capacity?

A5: Consistent with guidance from the CPUC, all offers will be considered when calculating the average bid prices except for:

- Outliers
- Offers above the long –term avoided cost of generation
- Offers with non-August capacity prices that are outliers
- RDRR Offers that cannot be accepted because an IOU would, in aggregate of all resources, exceed the reliability cap

Q6: In Section III of PG&E’s 2019 DRAM RFO Protocol, it is stated that “offers are within both the CPUC approved budget and August price constraints.” What is the August price constraint?

A6: As described in *Section IV.C, Selection Criteria* of PG&E’s 2019 DRAM Protocol, PG&E shall select Offers up to the August Average Prices for System, Flex, and Local Capacity, or up to their authorized budget – whichever comes first.

III. DRAM Administration

Q7: Can each IOU please specify how much of its authorized budget for the 2019 DRAM IV RFO is available for capacity payments to winning bidders (versus reserved for administrative costs)?

A7: SCE and PG&E both allocated a relatively small amount of their DRAM budget to administrative costs. SDG&E allocated 10% towards Admin costs.

Q8: (SCE only). In the documents provided on the website, the calendar goes through the notification date. Are there other dates provided for the rest of the process?

A8: On upcoming slide 29, there are more deadlines listed. We will add the remaining dates to the website.

Q9: Regarding registration, could the three IOUs elaborate on whether they expect to have any problems with processing registrations associated with this DRAM solicitation?

A9: PG&E recently had the "next step" beyond the intermediate implementation step of Rule 24 registrations approved, so we have increased the registration capacity from 40,000 to 75,000. Our estimates so far indicate this should be sufficient. PG&E is currently on track for the click-through phase 1 release in February.

SCE: We don't expect the volume for registrations to be an issue. For the process overall, it will depend on whether the registrations come through Green Button or through the manual CISR-DRP process used primarily for non-residential customers. Filling out the information on the offer form and identifying the number of new registrations will help us better manage our resources.

SDG&E: We do not anticipate any issues with registrations in 2019 DRAM.

Q10: Could SCE elaborate on the status of the Green button click-through process?

A10: SCE has been constructing Click-Through in compliance with Resolution E-4868 and in consultation with Energy Division, third-party DR providers, the other IOUs, and other stakeholders. We filed an extension request letter on 2/9 and expected implementation is 4/30/18.

Q11: If winning bidders terminate or default on their contracts, are those MWs reassigned or put up to re-bid? E.g. 200MW worth of contracts signed in April 2018, but in June 2018 the "Seller" of 20MW goes bankrupt and terminates their contract. Is the 200 MW assigned to another bidder, or put up for re-bid, or simply 'lost'?

A11: The IOUs only plan to run one solicitation for the procurement of resources under the DRAM 4 solicitation. We unfortunately are not able to comment on how the IOUs explicitly intend to handle the portfolio.

IV. Flex Capacity and Local Capacity

Q12: Can each utility please specify the premiums it will place on Local and Flexible capacity, relative to System capacity, in its evaluation of Offers? Can you share what the premium is for local and flexible resources relative to the system?

A12: Per Commission direction referred to in the question, the utilities are indicating that Local has greater value than System, and Flex has greater value than no Flex (please see each IOUs RFO Protocols for more information). The specific valuation premiums are considered confidential per D.06.06.066. Respondents are encouraged to bid at the lowest price possible regardless of the analysis that is taking place.

Q13: Is there a way we can confirm a customer is within one of the local areas?

A13: For SDG&E, there is one local sub-area. To determine whether the territory is in SDG&E or SCE, there is a map on the SDG&E RFO website.

SCE: SCE has a couple of tools where you can type a customer's address and it identify whether it is within a Local Capacity Area (LCA) or not.

One way are the Google Earth maps on SCE's DRAM website. These are live, interactive maps of the areas that can be drilled down for greater detail. You can enter a customer's address to pinpoint if it is within an LCA.

The second is the DR tool located at http://on.sce.com/mapview. You can also use this tool for identifying subLAPs:

> Enter an address under "block view" or else select all the blocks for a general breakdown of the six SubLAPs in SCE territory. Each SubLAP is comprised of multiple Blocks (also known as A-Banks). This is a great tool for identifying SCE's SubLAP areas. For the two LCAs in SCE territory:
>
> - Big Creek/Ventura Blocks: 400, 401, 404-406, 408, 411, 412, 501-503
> - LA Basin Blocks: 101-106, 108-110, 112-114, 117, 119, 120, 121, 600-602, 604-611, 613-620

PG&E: There is a link on PG&E's DRAM website to a map that includes PG&E substations, and Exhibit F in the PG&E's DRAM Purchase Agreement lists PG&E's LCAs and corresponding substations.

V. Purchase Agreement

Q14: Can you please tell me if the DRAM purchase agreement is the same as last year's, or are there any modifications?

A14: Only minor updates were made from the 2018-2019 DRAM Purchase Agreement (PA) to the 2019 DRAM PA, for all three IOUs. Specifically, we updated references to contract terms from 2018 – 2019, to 2019; and we updated requirements regarding Prohibited Resources in Section 7.2, Additional Seller

Representations, Warranties, and Covenants, to reflect the most recent CPUC Decisions on Prohibited Resources.

Q15: In 2018 DRAM and forward, all bids of the same product are collapsed in the same contract. If we do not want one or more of the contracts collapsed, is it possible to do so?

A15: This was instituted to prevent potential for gaming and to simplify contract administration (to have many agreements for small amounts makes it administratively difficult). The contracts are going to be collapsed, however for any special circumstances, please contact the IOUs.

Q16: How does the process on prohibited resource verification get updated in the DRAM contract, once the Commission adopts a final resolution on prohibited resources?

A16: The draft resolution thus far requires very minimal changes to the 2019 DRAM contract from the 2018-2019 DRAM contract. The only part that isn't in the contract mentions that the attestation should be made available to the verification administrators, but there is a blanket statement in Section 7.2(b)(v)(E) of the DRAM contract that the Sellers shall comply with the audit verification plan. PG&E will be commenting on this part of the draft resolution, and seeking clarity if revisions to the DRAM contract are necessary.

Q17: If an Offer is submitted by the February 20 deadline, but an unexpected event results in a downward revision to the desired quantity in March (10 MW to 5 MW in a specific offer, say) before the Purchase Agreement is signed, how would that be handled? Would revision be allowed as part of the cure period, or would the entire bid be rejected?

A17: The IOUs considers Offers submitted successfully by the Offer Submittal deadline to be binding, as outlined in Article 1.01 of the DRAM 4 RFO Instructions. If a bidder is unsure about the viability of an Offer then it may not be advisable to submit that Offer.

Q18: If an offer revision is required after the signing of the Purchase Agreement but before the delivery year (i.e. in 2018), how is that handled? Would a penalty be imposed?

A18: An Offer revision after the signing of any agreement would be an amendment to the contract that would have to be mutually agreeable to both parties. Not all revisions are permitted. For example, except for rare circumstances, reduced monthly MW quantities are not an acceptable revision. Note also that the counterparty is paid the lesser of contract or demonstrated capacity per the DRAM Purchase Agreement.

Q19: If a DRP underperforms in one month does the DRP sacrifice future payments?

A19: Technically, if a DRP doesn't meet their contract obligations of delivery for one month, they are in default of their DRAM contract. It is each IOU's discretion whether or not they will terminate the contract with the DRP after one month of underperformance.

VI. Quantitative Valuation

Q20: I see that the system RA benefit is multiplied by 115%. What does that 1.15 come from - what is it used to account for?

A20: The 15% adder is intended to reflect the Planning Reserve Margin (PRM) credit given to demand response resources in the RA compliance process, because demand response resources are treated as load reduction and result in avoided procurement of the 15% PRM. E.g., while a 1 MW generation resource is (at most) given a 1 MW credit toward RA compliance, a 1 MW DR resource is given (up to) a 1.15 MW credit toward RA compliance. This multiplier is applied to all DRAM offers.

Q21: Are you giving any premium in the benefit portion of the calculation of RDRRs compared to PDRs?

A21: RDRRs and PDRs do not have different benefits for Resource Adequacy. However, once the reliability DR cap is reached or exceeded, the RDRR DRAM product is no longer providing RA value.

Q22: Regarding RDRR, are utilities specifying how much is available and are they applying the same prioritization as DRAM 3—making capacity available for the DRAM auction?

A22: For SCE, there are no current MW available under the cap. For PG&E, see slide 23 of the Bidders' Conference presentation. SDG&E has 15.5 MW left.

Q23: In terms of the Net Market Value, is the methodology behind the valuation the same for all three utilities? Is this methodology specified in all three IOUs' protocols?

A23: The general methodology is the same for all three utilities. This was done in coordination with the IE and the Energy Division. However, some of the specific inputs differ between the three IOUs. In general, the methodology for each of the IOUs are the same in terms of determining Net Market Values, Benefits minus Costs, and Average August Capacities, and this methodology is described in each of the IOUs' DRAM protocols.

Q24: Are the sample valuations available online? Do the IOUs vary in their procedures?

A24: The PG&E example is available on the "Evaluation - No Inputs Required" tab in their DRAM offer form. We take the information you provide in the Offer Form and show what your net market value *could* be. However, the actual price curves that we use for evaluation are confidential—so we use public

RA price curves that the CPUC provided a few years ago on this tab, and they are only intended to illustrate *how* we value Offers, not what those Offer values will actually be for PG&E.

SDG&E: The valuation example is on the RFO website for SDG&E.

SCE: Our general processes are the same. The backend tools are different and the confidential values are different.

Q25: How does DRAM value the difference between the total committed service accounts vs total required accounts needed?

A25: The total number of service accounts doesn't factor into the IOUs' evaluation of Offers.

VII. Small Business Standards

Q26: (PG&E only). PG&E's DRAM IV Protocol refers to two links for Small Business standards based on the Qualitative Question for certified small businesses to the DGS (California Department of General Services) or the SBA (US Small Business Administration). To qualify for the "certified small business", must the business be either certified by the DGS or SBA? Can you confirm that a "self-certified small business" will not be accepted as a "certified small business"?

A26: To qualify as a "certified small business" your company does not have to be certified by DGS or SBA and you can be self-certified, but you must *register* as a certified small business with DGS or SBA.

VIII. Transitioning Customers from IOU DR Programs to DRAM

Q27: (PG&E only) In the DRAM set aside requirements, it says that the transition for PG&E DR customers from Smart AC to DRAM would be done via a "new process." Can you clarify in detail what that process would be - both from the aggregator and customer perspectives?

A27: Customers that would like to participate in DRAM instead of the SmartAC program can elect to leave SmartAC prior to their 12-month participation requirement. Customers that would like to leave the SmartAC program for DRAM can elect to leave SmartAC by either calling the program call center at 866-908-4916, or emailing the program team at SmartAC@pge.com.

IX. Year-Ahead RA Filing

Q28: Can you clarify the need to meet the October 1, 2018 deadline for providing the Resource Plans and how the QC and the NQC are determined. Why do IOUs need the Resource ID information by this date? Is the requirement to get all resource NQCs by October specific to local capacity? Would the October 1 deadline apply to System capacity? If my resource was only picked up for August—would you still need to have the information available by October 1? To the extent that we expect a couple of new customers by May, we do not expect to have all of the information by October 1, do we submit the best information available at the time?

A28: In terms of a resource being recognized by the CAISO, and subsequently the ability for that resource to be used by the IOUs for their resource adequacy obligations, that should occur by October 1.

In terms of a PDR resource registering customers, that does not need to occur by October.

All resources should be aware that they need to receive NQC by October 1 when the final NQC list is published. So, if you are developing a resource for 2019, your goal should be to: (1) develop the resource, and (2) register a resource ID. We encourage you to coordinate with your Scheduling Coordinator on this process.

These questions are about the timing of the Supply Plans and NQC related steps, and not about the Qualifying Capacity (QC) and Net Qualifying Capacity (NQC) determination. IOUs agree that through the resource adequacy (RA) 2019 compliance year, the relevant CPUC Decisions have established that QC will be deemed equal to the contract capacity (and NQC = QC for DR, as load reductions are by default deemed fully deliverable by the CAISO). As a reminder, while the QC for DRAM contracts is set to contract capacity per the CPUC decisions, the Net Qualifying Capacity (NQC) is determined by the CAISO, and the resources providing RA need to be recognized as having NQC by the CAISO in order for the Supply Plans to be accepted.

The issue IOUs raised is that due to the RA compliance rules and timelines, Load-Serving Entities (LSEs) need to provide 100% of their Local RA and 90% of their System RA in the year-ahead filing, due 10/31. As a result, IOUs are encouraging the (successful) Sellers to start the resource registration process early, and get on the NQC list as soon as possible, and provide Buyers with the relevant information prior to the RA year-ahead filing deadlines. For the resources that are already online, this should not be a challenge, as they already have their Resource ID, NQC, etc.

This discussion does not impact how the IOUs value and select resources, as all bids are given full credit based on the claimed MW and product type. (There is no feasibility assessment during the Pilot). Ultimately, the Sellers are responsible for delivering the specified RA product(s), and will be paid per Demonstrated Capacity terms, as outlined in the PA.

X. Other

Q29: (SDG&E only). Could you elaborate on the details/granularity of the key personnel of the Org Chart requested?

A29: Typically, key personnel are those involved in the RFO, running the programs. The org chart should provide us comfort with your company and your ability to deliver. Also, it should provide us an understanding of your company and the experience you provide. There is not a strict definition associated with this.

Q30: In the New residential solar customers in SDG&E territory are expected to be put on mandatory time of use electricity rate with significant overlap with the System/Local Availability assessment hours. Will participation in the DRAM relieve these customers from the forced adoption of a TOU rate?

A30: No, customers are responsible for making sure they are on the best rate structure for their usage.

Q31: Regarding the residential set-aside. Is it 20% for the year for just this year or cumulative with DRAM 2018 and 2017?

A31: The residential set aside of 20% only applies to this RFO (DRAM 4).

Q32: Beyond the requirement to offer resources in the month of August, are there other requirements or recommendations for offering resources in specific months or seasons?

A32: Please review the DRAM 4 RFO protocols posted on each IOU's website, unfortunately we are unable to provide you recommendations on how to structure your offer.

Q33: Does the use of multiple Scheduling Coordinators cause any complications? For example: a company is an SC for a purpose unrelated to demand response. That company is also successfully awarded a DRAM contract, but uses a separate Scheduling Coordinator. Is that a problem?

A33: The main concern would be that Seller obligations under the contract are met, regardless of who the Scheduling Coordinator is.

Q34: Is there a requirement to register with the CPUC and execute a DRP Service agreement prior to submitting an offer for the DRAM RFO? Or is the agreement signed after the RFO is awarded?

A34: The DRP Service Agreement can be signed after the DRAM contract is awarded.

Q35: In the SCE RFO document, they reference a maximum acceptable bid of $113.20/kW-yr that is the long-term avoided cost of generation (section 6.02.1.v.a). Does PG&E have a similar threshold for accepting bids? If so, what is the $/kW-yr value of that threshold?

A35: Yes, PG&E will use the same long-term avoided cost of generation as SCE and SDG&E, and may elect to not procure Offers that exceed this cost.