

## Joint Long Duration Storage Q&A

#	Technical questions on Storage	
1	How is the minimum round-trip efficiency defined, as it depends on multiple factors such as storage operation, resting time between charging and discharging, etc.?	Thank you for pointing out an error in our term sheet. The definition should be "ratio of minimum charging energy to minimum discharging energy." The term sheet has been updated with this correction.
2	Are there any roundtrip efficiency requirements?	No, there are no roundtrip efficiency requirements.
3	Does the "Ramp Rate Range" refer specifically to charging or discharging operations? Or both?	There is a separate ramp rate range for charge and discharge (MW/min).
4	How is the 98% monthly availability defined? Does this refer to both charging/discharging of the storage facility in total? Or is there a designation between charging availability and discharging availability?	Availability is defined as the ability of the Buyer to send charging and discharging instructions to Seller, and thus applies to both actions. The 98% availability sets expectations for both parties and should Seller fall below it in any month, there will be a reduction to the amount of the monthly payment. Generally, Availability is meant to reflect the resources availability to be physically scheduled into the market and therefore includes only limited exceptions for force majeure and scheduled maintenance.
5	Is there a preference for augmentation over the term or are you ok with degradation?	No preference.
6	Could you please explain better what is the Estimated Planned and Forced Outage Rate (%)?	A planned outage is the complete reduction in the capability of a generating unit, scheduled in advance, for inspection, maintenance or repair with approval of the CAISO. A forced outage is an unplanned outage.
7	Is there a minimum Estimated Planned and Forced Outage Rate (%) that the Joint CCA requires?	No preference.
Product Requirements		
8	Is an 8hr ESS the minimum and maximum duration requested?	The 8 hour duration is a minimum requirement. The Joint CCAs will consider resources with a duration longer than 8 hours.
9	Is there any value to supply a 10hr or 12hr ESS?	The Joint CCAs' evaluation will consider all resources that meet the 8 hour duration minimum requirement.
10	Is it absolutely critical that the product to be sold is "grid charged"? This seems like an unnecessary limitation if a technology could otherwise meet the storage requirements.	Yes, the RFO has established the requirement for the resource to be grid-charged because one of the main objectives is to provide a cost effective solution to maintain reliability with the further integration of renewables.
11	Will proposals utilizing multiple technologies be considered?	The RFO is technology agnostic and does not specify technologies as long as the project meets the minimum requirements.
12	If projects claim the ITC, will this impact the grid charging requirement?	Yes, if the ESS is expecting to claim the ITC and is prohibited from grid-charging, it will not qualify under this RFO.
13	Would <u>PV charged projects</u> (and not grid-charged) not be eligible assuming the project would have a minimum of 8 hours discharge duration?	Yes
14	Is there a minimum Technology Readiness Level required?	There is no minimum requirement. But each project will be assessed under the technology/viability criteria in the scoring rubric and points will be awarded to those that show a proof of concept of the technology in either a pilot project or a commercial implementation.
15	What do you expect to be an adequate Proof of Concept size in order to be considered for a 50MW / 400MWh project?	There is no minimum size requirement for a proof of concept.
16	Is a laboratory level pilot enough to qualify as a proof of concept?	Please submit proof of concepts and the Joint CCAs will evaluate the project on a case by case basis.
17	Will you accept bids based on technologies which pilot plant will be operational within end of 2021 but it is not in operation now?	See #16

18	Will projects that can be online by June 1, 2026 on an energy only basis with FCDS to follow be considered?	No the RFO is looking to utilize resources as an RA product for the summer of 2026.
19	Please confirm that bidders can include more than 1 technology in their submittal.	Yes
20	Many innovative long-duration technologies will reach bankability in the next 2-3 years. How will you regard an offering consisting of two phases: an initial phase meeting minimum 8-hr duration requirements with proven technologies and an early COD well before 2026, and a subsequent phase that expands on the project's capabilities (both duration and value) with COD closer to 2026?	There are no limits on the number of proposals. Please submit the two options listed in your question as offers.
<b>Financing/Price</b>		
21	Please then help us understand what credit security and terms you are able to provide under this RFO.	Buyers are not willing to provide collateral support to Sellers
22	Will the Offer Deposit be refundable in the event the ESSA can't be agreed to	The Shortlist Deposit will be promptly returned to Offeror in its entirety under one or more of the following conditions: (i) following execution of an ESSA, (ii) the Joint CCAs' rejection of Offeror's offer following shortlist selection, (iii) failure of both Joint CCAs and Offeror to agree on the terms of an ESSA, or (iv) the Joint CCAs' termination of the Joint RFO process.
23	Can you define fixed costs at the charge of the Joint CCA, what does that include? Could you please give an example?	Under the Full Toll Product, the offered \$/kw-month pricing entitles Buyers to the energy, capacity, ancillary services and RA counting rights. Under the RA Only Product, the offered \$/kw-month pricing entitles Buyers to only the RA counting rights.
24	RFO refers only to \$/kW-Mo (capacity payment), not \$/MWh (energy payment). Based on that, it sounds like if we were to have a solar and battery project co-located, the only relationship you would have would be with the battery project. To charge the batteries, you would be buying from the grid, as opposed to (at least in part) via a commercial arrangement with the co-located solar generation facilities. Please confirm.	Under the Full Toll Product, the offered \$/kw-month pricing entitles Buyers to the energy, capacity, ancillary services and RA counting rights. Under the RA Only Product, the offered \$/kw-month pricing entitles Buyers to the RA counting rights. Buyers expect the energy storage project to be capable of grid charging. If a potential offeror wishes to offer a commercial arrangement with a co-located generation facility, this can be offered as an alternative pricing structure, and will be considered on a case-by-case basis in the context of the scoring rubric.
25	Would the Joint CCA consider buying the equipment as "alternative pricing" instead of an RA or Full Toll agreement?	Bidders are free to submit alternative pricing structures, and each offer will be considered on a case-by-case basis in the context of the scoring rubric.
26	Regarding ESSA Storage Production Options 1 - 4, we understand that the Buyer would operate the storage with the Offeror remaining as the owner, receiving a rent/leasing fee for the storage facility. Is this understanding correct?	Option 1 is for RA counting rights only, with Seller able to operate the resource, and keep all energy or A/S revenues earned. Option 2 is the Full Toll product and the Buyers receive all energy, capacity, RA counting rights, and ancillary services produced by or associated with the energy storage facility. Buyer receives full dispatchable rights and energy revenues earned. Option 3 is a hybrid, where Seller schedules and dispatches the energy storage facility and shares a portion of any revenues received (energy or A/S). Buyer gets the the RA counting rights. Option 4 is another hybrid where Buyers gets the RA counting rights and gets to choose energy discharge blocks, but Seller is able to keep all energy & A/S revenues.
27	Regarding ESSA Storage Production Option 5: Would the Joint CCA be interested in playing the developer role and taking over the ownership of the plant as an alternative to paying for the storage as a service?	Bidders are free to submit alternative pricing structures, and each offer will be considered on a case-by-case basis in the context of the scoring rubric.
28	Please confirm that both the "toll" and "RA" options should be priced on a \$/kW-month basis?	Yes

29	For the ESSA Contract Price - Option 2, the monthly payment is understood to be effectively based on the rated electrical discharge power?	For Option 2, Buyers will operate the energy storage facility, retain all energy & A/S revenues. Seller will be paid a fixed monthly payment, expressed in \$/kw-month. This payment to Seller is for energy storage's availability to be charged and discharged.
<b>Interconnection/Location</b>		
30	Are there any interconnection milestones required in order to bid eg, Phase 1 results?	There are no interconnection milestones requirements. The further a project is along in the CAISO's interconnection queue, the more favorable it will look in the evaluation.
31	Do projects have to have gone through the CAISO cluster process in order to qualify or can they enter the 2021 cluster?	No as long as the resource can meet the COD requirement of June 1, 2026
32	Given the long development timeline (5 years until COD), projects are not likely to have interconnection results. Are conditions precedent allowed?	Yes
33	if BPA joins EIM, do you expect any modification to project location requirements?	No we do not expect any modifications since if the resource is not within the CAISO balancing authority area it will need to provide firm transmission to participate as an RA resource.
34	Are out of state imports treated differently?	Yes, the resource must have a dynamic transfer capability.
35	Is it ok to submit without a site location identified yet, then if awarded, identify and secure the site afterwards? Or is it disqualifying?	A project does not have to identify a site location but it will be evaluated under the location scoring criteria.
36	Must the offeror have a commitment from asset or site owner to host the proposed project as part of offer due December 1?	see #35
37	Will geographic location of the proposed projects be taken into consideration outside of the energy arbitrage benefits one particular location may have over another?	Yes, the location of the project will be scored beyond the energy arbitrage benefits.
38	It is our understanding that Malin 500-kV in southern Oregon on the border of California with a BPA LGIA is directly interconnected to CA-ISO based on discussions with CA-ISO prior CEO/senior management and has the ability to provide RA as a dynamic transfer, but can you please confirm?	The Joint CCAs request that you confirm this with the CAISO.
39	Are there any locational preferences for participating CCAs?	No
40	Do the CCA's have a preferred pnode location, or locations for interconnects?	No
41	Are there specific regions in the Silicon Valley area that should be focused on for deployment of the asset?	No, the RFO is looking for any resource that meets the requirement to participate in the CAISO wholesale market and qualify as an RA resource.
42	Will the individual CCA's provide property or will the Offeror be required to secure property and interconnections	The offeror is required to secure property and interconnections.
<b>Resource Adequacy</b>		
43	Will the CCAs assign more points to local RA project locations, given that a central procurement entity will be responsible for procuring local RA soon?	RFO respondents should NOT assume that projects located in transmission-constrained areas (i.e., local RA areas) will be valued higher than projects outside of such areas. In fact, due to the nature of storage resources (which consume more power than they generate), projects located in local RA areas may actually be valued lower than projects outside of such areas.
44	What is expected impact of the ongoing central procurement mechanism of RA on the long-duration RA RFO and its goals?	CPUC Decision 20-06-002 establishes a Central Procurement Entity for Local RA beginning in 2023. This decision introduces uncertainty into the joint CCAs' ability to monetize Local RA. Accordingly, RFO respondents should NOT assume that projects located in transmission-constrained areas (i.e., local RA areas) will be valued higher than projects outside of such areas.

45	How does the long-duration requirement relate to the current 4hr RA requirements? Is there a projection that RA will be valued more or differently for long-duration resources in the future?	The joint CCAs will take into account existing RA rules as well as projections of how such rules may change. The joint CCAs do expect that RA rules will evolve in accordance with the needs of the physical grid, and that the current 4 hour requirement will be modified in the future
46	Is the minimum 8 hr discharge duration at full nominal capacity? What RA counting rule will be applied?	Yes, the joint CCAs are requesting storage resources that have the capability to discharge for a minimum of 8 hours at full (i.e., nominal) capacity
47	For an RA only offer, how will you value additional duration above 8 hours (i.e how will you compare RA only offers with different durations)?	The joint CCAs will take into account projections of how RA rules will evolve in accordance with the needs of the physical grid. This may include a forecast of storage duration requirements that surpasses eight hours in the outer years of a potential contract term
48	With regard to the "RA + Energy Discharge" product, is there a proposed notice period to get the batteries charged and ready for the 8-hour discharge?	The expectation is that the Super JPA will assume the scheduling coordinator responsibilities and will schedule the resource to abide by RA rules.
49	Considering a 2026 COD is so far out into the future and projects are unlikely to have FCDS by the time an ESSA is executed, will a CP for RA be considered?	Any special contract terms including a condition precedent for resource adequacy should be identified in the Offeror's marked up Term Sheet. These revisions will be assessed through the evaluation and proposal ranking process. Negotiation of contract provisions will only be undertaken with shortlisted candidates.
50	Will local RA be given value above system RA?	See #44 and #45
51	Is RA assumed to be only System (ie, not Local)?	See #44 and #45
52	How will value of RA be established for evaluation purposes of different durations of storage? Will the Joint CCAs be benchmarking value relative to projected value of RA or is the RFO being conceived more as a price discovery of the value 8+ hour RA?	See #48
53	One of the requirements for project location is to be able to participate directly in CAISO electricity markets or <u>have the ability to provide RA as a dynamic transfer</u> . Can you comment as if this requires assets outside CAISO to exclusively participate in RA and have a firm transmission capacity?	Yes
<b>Evaluation/ Scoring Rubric</b>		
54	The minimum duration for a project is 8 hours. If a bidder submits an offer for a longer duration project, say 10 hours, would that project be compared to other 10 hour projects or do you plan to compare all offers for all durations together?	All projects will be evaluated for their their ability to meet the Joint CCAs capacity targets based on a best fit and value and at the lowest reasonable cost. We will score each project on its value and fit independently and then choose the projects that best meet the CCAs' needs.
55	For the requirement that we have a proof of concept or a pilot project, is that a requirement for those 10 points or is it disqualifying for the whole project?	The Joint CCAs' will evaluate the technology risks and viability based on proof of concept. Although a lack of a pilot project or commercial implementation will not disqualify a resource, it will be seen as an inherently risky project.
56	Is there value to local content -- Engineering, Procurement, and Construction dollars spent in the locality, the State of California, and/or the USA?	Local content is not one of the evaluation categories.
57	Can you expand on how "Project Value" will be calculated/evaluated given the potential for alternate pricing structures	The Joint CCAs' will evaluate the value of a project based on the expected cost of the resource (ESSA capacity price) vs. value the resource will bring from the various energy and capacity products it can offer. The Joint CCAs' reserve the right to include additional value streams in its analysis but will wait to review all submissions before making its analytical decision.
58	How will the expected value component of the scoring rubric be judged during Phase I when the projects are not being modeled?	Each qualified resource will be modeled in Phase 1 to capture the expected net present value.

59	Could you please elaborate on which CAISO forward price or net-load scenarios would be best representative of the arbitrage value to be captured by a proposed storage system?	The Joint CCAs plan to use several forward price scenarios and, for Phase 2 of the evaluation, conduct stochastic analysis to capture the uncertainty associated with any one scenario. Bidders should submit the most competitive offers possible reflecting their understanding and expectations for the CAISO market.
60	There are attributes to storage technologies which do not have present monetizing programs, such as resiliency enabled from a multiplicity of energy (hydrogen) sources. Please let us know if these attributes will be considered in the valuation of the project.	The Joint CCAs' reserve the right to include additional value streams in its analysis but will wait to review all submissions before making its analytical decision.
61	Can you describe how your scoring rubric will value RA vs a toll?	An RA only proposal will be evaluated differently than a full toll product since they will provide different benefits to the Joint CCAs.
62	What model and assumptions with the Joint CCAs be using to value future energy and capacity? will this be a TEAM analysis per the CAISO?	The CCAs' will use several different modeling approaches to evaluate projects. For Phase 2 of the evaluation, the Joint CCAs plan to conduct stochastic analysis to capture the uncertainty associated with any one scenario. The Joint CCAs do not plan to use the CAISO TEAM analysis. The CCAs' analysis will focus on the costs and benefits to the Joint CCAs.
63	How will the modeling be done given that each CCA must have their own model. How will be results be integrated ?	The Joint CCAs' are working together to evaluate the costs and benefits of each project. Then, each CCA will have to determine for itself how a particular project fits within its portfolio and whether it will participate in procuring a portion of a project.
64	Regarding the scoring rubric: Are points allotted based on relative competitiveness? If so, a project coming online in 2023 would have a 9 or 10, while a 2026 project would (due to comparison) score a 5 or 6. Correct?	Although the Joint CCAs' cannot confirm the exact scoring breakdown, it will evaluate resources with an earlier COD with a favorable score versus a resource coming online closer to the June 1, 2026 deadline.
65	Is the financial scoring relative to other offers or it will be scored on its own?	Financial scoring will be a part of the project risk component of the scoring rubric.
66	Is credit given through the scoring process for obtaining, refurbishing and utilizing existing power plant properties that were or will be decommissioned? If so, how?	The Joint CCAs have defined how it will evaluate and score an offer under the "environmental impact" criteria.
67	Is credit given through the scoring process for providing a technology that has proven environmentally friendly O&M impacts over the life of the facility? If so, how?	See #66
68	Is credit given through the scoring process for providing a technology that has low to no impact on environmental and property reuse post facility decommissioning? If so, how?	See #66
69	Is credit given through the scoring process for providing a technology with extended facility life in excess of 20 or up to 50 years of continuous operations? If so, how?	See #66
70	Part of the evaluation is for technology and existing implementation track record, how will a new technology be evaluated? Will new technologies be scored less than previously built technologies, even if the new technology has been demonstrated via small scale testing?	New technology will be assessed under the "technology/viability" criteria of the scoring rubric. Offers with new technology can submit proof of concept in the form of a pilot project or commercial deployment.
71	Will credit be given for transmission upgrade deferral? How?	The Joint CCAs have not identified transmission upgrade deferral as a consideration but will evaluate the value of the offer if submitted.
72	Is it possible to propose a hybrid RA/toll solution? For example, a 200 MW project and 100 MW is RA and the other 100 MW is full toll?	The Joint CCAs will consider all offers as long as the resource meets the minimum requirements set in the protocol.
73	Do the Joint CCAs have any particular preference for particular storage products – for example the “full toll” (option 2) vs “RA” (option 1)? If not, how would different storage products be reflected in the Expected Value evaluation methodology?	Each offer will be assessed individually and there will be a separation of a full toll product versus an RA only option.

74	Can you share the consultant names you are using for modeling market assessments?	The Joint CCAs will utilize various tools and/or consultants to carryout an extensive evaluation of potential project value and risk. The details of how the projects will be modeled are still in development. As of now, the projects will be valued using software tools from cQuant and Ascend Analytics with consulting support from Ascend Analytics and Gridwell Consulting. The evaluation team will refine their analytical approach and reserve the right to modify the tools and consultants to be used in this RFO.
<b>Project Size/Capacity</b>		
75	Per the RFO protocol, the minimum offered capacity per bid is 50 MW – would the CCAs consider a portfolio of say 3 projects in service territories of 3 different participating CCAs that would sum up to 50 MW capacity or do these 50 MW have to be offered from a single site/location/interconnection?	Yes, the Joint CCAs would consider a portfolio of multiple projects that collectively meet the 50 MW treshold as long as they could be procured through a single contract.
76	Will projects <50 MW be considered at all if bid into the RFO?	No, the RFO Protocol specifies a 50 MW minimum capacity.
77	Can you confirm the minimum project capacity is referring to the minimum nominal power rating of the battery storage system?	Yes, the storage system must have a nominal capacity of 50 MW or more.
78	Your RFO states a goal of 500MW with minimum project size of 50MW. There are eight CCA's equaling 400MW. There is 100MW left. How is this broken down?	The Joint CCAs will consider offers of 50 to 500 MW, and will determine how to divide the capacity during the contract negotiation process. Given that the Joint CCAs serve different peak demands/load volumes and thus have different appetites for the various solicited products, the procured capacity won't necessarily be divided in equal increments among the Joint CCAs.
79	Is the minimum individual project size 50MW? or is this the minimum procurement and could be divided among the CCA's	The 50 MW represents the minimum procurement size that will be considered for dividing among the CCAs.
80	Can you deliver all 50 MW to one CCA for an individual project?	No, this RFO is intended to provide joint procurement opportunities to all or a subset of the Joint CCAs, not individual CCAs.
81	Will a project with a guaranteed capacity of 49.9 MW be eligible to participate in the RFP?	No, the RFO Protocol specifies a 50 MW minimum capacity.
82	Is there a preference to distribute resources among several developers, or to centralize as much as possible, with just 2 or 3 larger installations?	The Joint CCAs do not have a preference for how many developers to contract with.
<b>Super JPA</b>		
83	In the presentation Slide 7 it talks about a "Super JPA" what does JPA stand for? Who is the Super JPA?	JPA stands for joint powers authority which is a non-for-profit public agency with certain procurement authorities provided for under California law, Title I, Division 7, Chapter 5, Article 1 of the California Government Code (the "Joint Powers Act" or "Act") authorizes the joint exercise by two or more public agencies of any power which is common to each of them. CCAs are a form of JPA. The "Super JPA", which is on track to being formed in early 2021, will be the procurement entity who's membership is intended to be comprised of the CCAs participating in this LDS RFO.
84	when will the decision be made to form the Super JPA	see #83
85	If the Super JPA is not established, will there be a single entity nominated as the scheduling dispatcher?	While project operating and scheduling protocols have yet to be determined, it is most likely the case that one scheduling coordinator will be selected to operate individual project facilities.
86	Please elaborate on the credit quality of the Super JPA.	While individual members of the Super JPA have achieved investment grade credit ratings, the Super JPA at formation will not have a credit rating. The Super JPA will have agreements in place with the individual CCA taking a share of a project which may include step-up provisions.

87	How will the JPA backstop agreements with the sellers?	The CCAs committing to a participation of a project through will have a Participation Agreement with the Super JPA ("buyer") with commitments and obligations identified including possible step-up provisions.
88	Will the Super JPA offer credit to the Seller? If so, is it on an aggregate basis, or is it divided among the members?	For the purpose of submitting a proposal, the Seller should assume that the Super JPA will not provide credit support. The Seller can specify credit requirements as part of its offer, which will be considered in the evaluation process. Final credit and collateral provisions will be part of the agreement negotiations for shortlisted projects.
<b>Other</b>		
89	Please let us know if the operation and maintenance of the project is to be performed by the bidder, by the member CCA's, or some combination thereof.	The operation and maintenance of the project will be performed by the seller or whomever the seller contracts with but the Super JPA will look to have the full scheduling rights of the resource.
90	For full turnkey projects, what solutions or approaches will the JPA or CCAs use to operate the storage assets?	This will be determined on a project by project basis but at a high level, the and Super JPA will operate facilities to maximize value to the benefit of all member CCAs.
91	Do the CCAs want full dispatch control?	Yes
92	The RFO requests full dispatch control for a Tolling Arrangement. a. Please confirm that this will be hourly dispatch. b. Please confirm that full dispatch control pertains to both the charging power to be accepted by the facility and the discharge power to be delivered from the facility. c. Can a proposed facility include capability [MWs of charging capacity, MWs of discharging capacity, and/or MWh of energy] beyond that offered to the CCAs, that could be independently dispatched, provided the contracted capability was always reserved for the Joint CCAs?	A. The resource will be bid in an hourly block but may have dispatches in 5-min increments for energy and 4 second signals by participating as a regulation resource under the CAISO. B. Yes C. Yes, as long as there are no conflicts in delivering the full capacity of the resource due to the interconnection limits.
93	Are CCAs interested in monetizing potential T&D deferral value of offered projects/solutions?	The Joint CCAs will consider all offers as long as the resource meets the minimum requirements set in the protocol.
94	At this stage only the given documents are required until a company/supplier gets chosen for the next round. At this stage the supplier is on the "shortlisted" – will there be room for negotiations regarding the commercial terms.	The Offeror should identify all revisions to commercial terms in its submittal of a red-line Term Sheet. If the project/offer is shortlisted, then the parties will negotiate an Energy Storage Service Agreement however modifications to commercial terms will be minimal if any.
95	For a storage+renewables project, will the CCAs want the associated RECs?	The CCAs are not seeking renewable resources and/or RECs through this RFO. To the extent that the project will have the ability to generate RECs the Offeror should state the type of RECs, compensation mechanism and metering configuration and protocols to ensure validation of RECs.
96	Any considerations of site specific cost variables?	If offerors have specific O&M or variable costs associated with the resource, the Joint CCAs request that it is incorporated into the ESSA capacity price.
97	Do we have to fill values on term sheet? If so, do we submit a separate term sheet for every offer we are proposing in "Appendix-A-Offer Form (LDS RFO)"?	The Offeror will need to fill values on the term sheet as well as submit a separate term sheet for each offer.
98	Would the CCAs/JPA consider a hybrid battery-gas offering? For example, a 4-hour energy storage system backed up by a gas peaker? Or an 8-hour energy storage system backed up by a gas peaker? SB338 does recognize a gas-storage hybrid as Clean RA.	The resource must meet the minimum duration requirement of 8 hours and have the ability to be grid-charged.
99	Are the Joint CCAs receptive to bids that propose a dispatchable PV+storage product capable of firm evening and night-time generation, or will the CCAs only accept offers that solely include energy storage resources?	The LDS RFO does not specify a technology type nor does it require the project to be limited to a single technology. The resource must meet the requirement to be able to be grid charged.
100	Is there a maximum number of bids that may be submitted from the same entity?	No

101	If CCAs need to seek ESSA approval from local governing jurisdictions, will the CCAs maintain the confidentiality of offers and ESSA pricing?	It is envisioned that when individual CCAs seek approval from the governing board/council, that price and other sensitive information will be held confidential however, each CCA will need to adhere to the requirements of their governing bodies. The CCAs and the Super JPA, once formed, as public entities will be subject to California's Public Record Act.
102	Can we as a manufacturer of storage equipment apply directly in this RFO or do we need a local contractor (utility or electricity provider) to enter the bidding with us as an storage equipment provider? If we need a local contractor or partner – do have a list of providers looking for storage equipment suppliers maybe?	The RFO protocol does not specify that offers need to come from a certain type of entity or supplier. All offers are welcome, but the proposal submitted will need to demonstrate how the project will be developed, financed and operated. No list of storage equipment providers is available.
103	We would like to know that there are any minimum eligibility requirements the 'supplier' must need? (For example) The supplier must have at least (XX) MW of installation experience. The supplier must have at least (X) times experience of installation in California(U.S).	There are no minimum eligibility requirements but under the scoring rubric's criteria of the offeror experience, the Joint CCAs will evaluate the offeror's experience with delivering projects of similar magnitude as well as the project team members' collective experience.
104	With regards to the grid connection costs, to what extent does the Offeror need to account for the grid connection (transformers, cables, etc.)? Which voltage levels are provided by the grid/CAISO?	The offeror is responsible for all costs and will account for those costs in its offer. Please confirm with the CAISO on voltage levels.
105	Would the Joint CCAs consider moving the proposal due date out to February? Given the first-of-a-kind procurement for long duration storage, it would benefit developers and ultimately the Joint CCAs to allow for more thoughtful responses.	The Joint CCAs will be maintaining the December 1 deadline.
106	The RFO says longer terms (longer than 10 years) are accepted but less desired. This was not reflected in the webinar on October 28, 2020. Can you clarify the Joint CCAs' preference for term?	Offers must meet the minimum term requirements of 10 years. Projects will be evaluated based on a scale with more points being awarded to shorter terms.
107	In the Appendix A Offer Form (Excel file), what is the Offered Variable Price (\$/MWh) supposed to represent (column "O")?	The offered variable price has been removed from the offer form.
108	Please confirm that all capacity/duration/product offerings can be included as separate items in the Excel file vs submitting different submittals for each "bid". We believe this to be the case but wanted to confirm as was a bit unclear on the webinar on October 28, 2020.	Yes, each product can be submitted with separate items in the excel file.
109	Under Option 1: RA Product, there is a note indicating that "...subject to the agreement of Buyer and Seller, the ESSA for an RA Only product may take the form of an EEI confirmation between the Buyer and Seller". Please clarify what is meant by EEI confirmation.	EEI stands for Edison Electric Institute, which is a trade association. EEI has developed a master agreement containing the essential terms governing the purchase of RA. This master agreement standardizes the RA product and thus streamlines the negotiations.
110	Please provide more information on Option 4 in Appendix B Pro Forma Term Sheet (RA Product + Energy Discharge: "includes Resource Adequacy Benefits and blocks of 8 hours of discharge at the hours of Buyer's choosing"). For example, would those 8 hours be determined at the signing of the contract? Would the 8 hours be consecutive hours? Would those hours be "take or pay"? Any further clarity here would be helpful.	Bidders should view this Option 4 as similar to a call option, whereby Seller provides to Buyers a daily option to charge and discharge the energy storage on a daily basis. Regarding the discharge period, the bidders are free to provide parameters that may constrain the Buyers flexibility here, and thus would be part of the evaluation process.
111	In Appendix B: Proforma Term Sheet, under Contract Price, the current language indicates that the \$ / kW-month price will be "multiplied by the actual round-trip efficiency". Please clarify the calculation intended here and if this is intended to reflect an actual round-trip efficiency <u>adjustment</u> (e.g. actual round-trip efficiency / maximum round-trip efficiency).	The Maximum & Minimum RT Efficiency definitions set the tolerance bands for application of any adjustments to the monthly payment. First your monthly payment is adjusted based on actual RT Efficiency if it is between the Maximum and Minimum RT Efficiency rates. However, if actual RT Efficiency is greater than Maximum, then Seller receives the full monthly payment. If actual RT Efficiency is less than the Minimum RT Efficiency, then the Seller receives no monthly payment.



112	1. What is the Storage Capacity Test (Appendix B: Proforma Term Sheet under “Contract Price”), and will further information on this be available in advance of bidding in order for bidders to establish proposed Contract Price for the Storage Product?	The Storage Capacity Test is a test conducted by the Seller, at the Buyer's request, in order to demonstrate the actual discharge capability, in MWs, of the energy storage facility. The results of any Test will set the MW amount that will be multiplied by the fixed \$/kw-month contractual payment rate, until a subsequent Storage Capacity Test is conducted.
113	Appendix B: Proforma Term Sheet specifies “Maximum Round-Trip Efficiency” and “Minimum Round-Trip Efficiency” definitions. Please confirm that any actual round-trip efficiency adjustment is not binary (0% or 100%) for actual round-trip efficiencies between the minimum and maximum round-trip efficiencies.	The Maximum & Minimum RT Efficiency definitions set the tolerance bands for application of any adjustments to the monthly payment. That is, if actual RT Efficiency is greater than Maximum, then Seller receives the full monthly payment. If actual RT Efficiency is less than the Minimum RT Efficiency, then the Seller receives no monthly payment.