Q&A Session for Track 4 and 3B1 Workshop

Session Number: 1463410370 Date: 2021-2-25 Starting time: 09:41

-Mary Lynch(mary.lynch@constellation.com) - 10:15 Q: Do you want questions sent to you via this Q&A? Priority: N/A--Linnan Cao - 10:16 A: yes. -

-Jim Caldwell(jhcaldwelljr@gmail.com) - 10:17 Q: Think we need to recognize reciprocity here. Our imports are someone else's exports and it is critical that if push comes to shove, cleared exports that are to be used by the importing BA on their supply plan have equal or higher priority to native load. Priority: N/A--

-Nuo Tang(ntang@sdge.com) - 10:22 Q: Has the CAISO considered making the attestation as a standard practice for an SC rather than on a monthly or annual basis? Priority: N/A--

-Doug Karpa(dkarpa@peninsulacleanenergy.com) - 10:24 Q: How are CAISO and the CPUC thinking about the tradeoff that as the requirements for showings for RA imports become more stringent, the amount of imports shown for RA will go down and the share of imports under contractual obligations will go down? Priority: N/A--

-Deb Emerson(demerson@sonomacleanpower.org) - 10:27 Q: On the must offer obligation, are you saying it is NOT a self-schedule and an actual offer that "may" be dispatched by CAISO depending on the bid stack? This is different than current CPUC mandate of must flow.

Priority: N/A--

-Scott Olson(scott.olson@directenergy.com) - 10:30 Q: How is this proposed change an improvement over CPUC's non-resource specific import RA must flow rules? Have the new CPUC import RA requirements help to alleviate concerns regarding risk of nondeliverability? Any analysis performed the impact of the rule Priority: N/A--

-Nuo Tang(ntang@sdge.com) - 10:32 Q: To the extent the CAISO adopts these same rules as part of the Tariff, is there a specific rule for the Commission to adopt that would not be in the Tariff? Priority: N/A-- Q: The CAISO presentation says that its proposal for imports does not preclude other bidding/selfscheduling requirements by the CPUC. CAn the Commission Staff please describe how the CPUC import RA requirements differ from the CAISO proposal. Priority: N/A--

-Mary Lynch(mary.lynch@constellation.com) - 10:35 Q: And are there some elements of the CAISO proposal that the CPUC staff does not support? Priority: N/A--

-Paul Neslon (CLECA)(paul@barkovichandyap.com) - 10:35 Q: My questions is the timing of other RTO/ISO requirements for firm transmission? Is showing firm transmission at the time of a RA showing, a condition of submitting a bid, or upon e-tagging the market award?

Priority: N/A-

-Milos Bosanac - 11:10

A: They have to demosntrate transmission ahead of time - that participation in their capacity market is from a deliverable resource (which usually means securing long term firm transmission - for a full year). Need deliverability assurance.

-Jim Caldwell(jhcaldwelljr@gmail.com) - 10:38 Q: Agree with Eric Priority: N/A--

-Greg Lamberg(galamberg@petersonpower.com) - 10:41 Q: I see a 24/7 offer requirement. Is there a durational requirement. IE; if a storge asset is called in hour zero and discharges for 4 hours, it it "excused" for the next 20 hours? Or are you looking for resources that are truely available 24/7? Priority: N/A--

-Greg Lamberg(galamberg@petersonpower.com) - 10:42 Q: If you are looking solely for 24/7 resources, that suggests that only gas resources will qualify for RA -Correct? Priority: N/A--

-Justin Pannu(justin.pannu@calpinesolutions.com) - 10:43 Q: to CAISO: To what extent are the benchmarks the CAISO uses are implemented by the eastern ISO as ar result of getting day ahead priority rather than those ISO's dismissing FIRM-LD contracts as inadequate..in fact Firm LD and WSPP Schedule C firm contracts Priority: N/A--

-Justin Pannu(justin.pannu@calpinesolutions.com) - 10:43 Q: are to the most extent inapplicable Priority: N/A--

-Justin Pannu(justin.pannu@calpinesolutions.com) - 10:43 Q: in those regions Priority: N/A-- -Peter Griffes(peter.grffes@pge.com) - 10:46 Q: who is asking question? Priority: N/A--

-Merideth Sterkel(mts@cpuc.ca.gov) - 10:54

Q: Can the CAISO give a theoretical exmple of an actual commercial transaction that would support a 24X7 firm import? It would have to be a combination of multiple sources? Priority: N/A-

-Milos Bosanac - 11:13

A: For example, we would expect a system sale to be able to meet this. Now...an individual resource could potentially, based on operational limitations, as well or otherwise seek use limited status, or manage availability with outages (i.e. fuel limitations)-

-Nuo Tang(ntang@sdge.com) - 10:55

Q: Should the CAISO's proposal for resource specification and duration be part of the Tariff and not the CPUC's rules for RA? The CPUC would then say how LSEs should contract imports and SCs for importers would need to meet the CAISO Tariff requirements? Priority: N/A-

-Milos Bosanac - 11:15

A: We think that would work. That is what we are effectively proposing (in our filing) - CPUC should note LSE contracts should defer to CAISO tariff requirements for imports (i.e., source specification, attestation, transmission).-

-Mary Lynch(mary.lynch@constellation.com) - 10:58 Q: Does the CAISO agree with the CPUC statement that its 24/7 must offer is incompatible with the CPUC 6x16 requirement? Priority: N/A-

-John - 11:09

A: Mary. RA Imports have a 24x7 day ahead requirement today under the tariff. -

-Milos Bosanac - 11:18

A: This is an area of concern for CAISO and may not necessarily be incompatible. A RA import currently has a 24/7 MOO in DA, but to the extent it is not available we would expect the import to indicate that non-availability through an outage.-

-Mary Lynch(mary.lynch@constellation.com) - 11:07

Q: It sounds like the CAISO staff is joing to try and answer questions that were not answer on the the call. Can you make sure that my question is provided to them (if they cannot see it already? Priority: N/A-

-Brant, Simone - 11:08

A: they should be able to see all of the questions-

-Peter Griffes(peter.grffes@pge.com) - 11:09 Q: To what degree has PAO's proposal taken into account changes in resource counting to meet RA requirements? Priority: N/A--

-Barbara Barkovich(barbara@barkovichandyap.com) - 11:10 Q: Does PAO hvae a reaction to the recent Ruling in R. 20-05-003 that proposes a significantly higher PRM? Priority: N/A--Kyle Navis - 11:12 A: Christ will address this on slide 35-

-Mark Specht(mspecht@ucsusa.org) - 11:12 Q: would the 1-in-5 forecast still be developed using historical data? or would this forecast actually incorporate anticipated changes in weather due to climate change? Priority: N/A--Kyle Navis - 11:17 A: Mark Specht: would the 1-in-5 forecast still be developed using historical data? or would this

forecast actually incorporate anticipated changes in weather due to climate change?-

-Kyle Navis - 11:18

A: Apologies for the above, that's a typo on my part. -

-Monica Schwebs(monica.schwebs@morganlewis.com) - 11:12 Q: Assuming that the CPUC adopts the CAISO proposal for import RA, do you foresee changes to the CAISO tariff provisions relating to the Maximum Import Capacity? Priority: N/A-

-Milos Bosanac - 11:20

A: Potential changes to MIC (tariff) to allow allocations of MIC on a multi-year basis to resources that are other than pseudo tie or dynamic.-

-Doug Boccignone(doubocc@flynnrci.com) - 11:19

Q: Re: RA Imports. Can CAISO provide analysis of the frequency and magnitude of import curtailments using firm vs. non-firm transmission, including CAISO's share of the curtailment vs. other BAAs' share of the curtailment (e.g., COI, PDCI)?

Priority: N/A-

-Milos Bosanac - 11:23

A: Doug- will respond via email to you. This limits how many characters I can write. But, idea is to future proof RA - low priority transmission is inherently high risk compared to firm transmission.-

-Brian Ballek(bballek@invinity.com) - 11:20 Q: Where can I find the current version of the minimum state of charge proposal? Priority: N/A--

-Nuo Tang(ntang@sdge.com) - 11:20

Q: Does the 17.8% PRM equate to 0.1 LOLE? Shouldn't the forecast error be calculated based on Forecast vs Actuals and not 1-in-2 vs 1-in-5 forecasts?

Priority: N/A-

-Kyle Navis - 11:32

A: We're using some basic assumptions to determine forecast error for now. Further development is necessary to measure the accuracy of our current assumptions, and would benefit from stakeholder development and study of actuals vs forecast data.-

-Mary Lynch(mary.lynch@constellation.com) - 11:23

Q: My point is that the CPUC said they found the two requirements to be incompatible. If the CAISO thinks they are not incompatible, why is that, and how will the incompatibility be resolved for those of that have to procure RA?

Priority: N/A--

-Lynn Marshall(lynn.marshall@energy.ca.gov) - 11:26 Q: I can answer question about 1 in 5 Priority: N/A--Christian Lambert - 11:37 A: thanks for helping with this answer!-

-Mark Specht(mspecht@ucsusa.org) - 11:30

Q: thanks for the response. this is not a Q: I was asking because it seemed like part of the motivation for moving to a 1-in-5 forecast is to account for climate change, but it sounds like climate change will be incorporated into that forecast eventually...

Priority: N/A-

-Karl Meeusen - 11:35

A: Why is there a need for a transition in 2023 and 2024? If the capacity is procured under emergency authorizatiuon for 2021 and 2022, why take a step back in 2023?-

-Kyle Navis - 11:48

A: (This is in response to Karl's question, which I assume is for us)--If supply grows beyond the PRM and RA Requirements, then it would facilitate supply competition and acceptable retirement of older resources. -

-Mark Specht(mspecht@ucsusa.org) - 11:32 Q: nevermind, i understand the 1-in-5 justification. it's about the distribution and the fat tails. thanks! Priority: N/A--Kyle Navis - 11:33

A: Thanks for the question!-

-Doug Karpa(dkarpa@peninsulacleanenergy.com) - 11:34

Q: Since increasing obligations in a tight market accomlishes not much, the timeline for increasing obligations should account for the timeline (2-3 years) required for bringing new resources online, which would make a 2023 increase perhaps too fast.

Priority: N/A-

-Christian Lambert - 11:43

A: We can compare the 2023 timeline t9 the D1911016 timeline to get a sense of what we might expect for 2023 if the PRM is raised in Q2, a-

-Christian Lambert - 11:45

A: and are cautiously optimistic. We also see the 2023 PRM as an option for ensuring contracting with resources whose contracts may expire (apologies for the cut-off answer)-

-Nuo Tang(ntang@sdge.com) - 11:40

Q: The CAISO's proposal is to "require" CPE and LSEs to use the CAISO's study for procurement purposes. The CAISO's presentation uses the term "suggests" CPE/LSEs to use the infomation. Which is it?

Priority: N/A--

-Merideth Sterkel(mts@cpuc.ca.gov) - 11:41 Q: Is this problem going to materialize in 2021 based on expected quantity of new storage coming online Priority: N/A-- Q: How far out in advance will the problem be visible? Will it line up with existing timelines to trigger RMR?

Priority: N/A--

-Chris Devon(cdevon@ces-ltd.com) - 11:57 Q: Do you believe this same sort of modification should be explored for solar ELCC as well? Priority: N/A--

-Luke Nickerman(lxng@pge.com) - 11:57 Q: Have you considered the long-term solutions being discussed in Track 3B2, like an exceedance approach? Priority: N/A--

-Merideth Sterkel(mts@cpuc.ca.gov) - 11:58 Q: Do we really need to solve this problem -- shouldn't the NM wind get higher commercial value simply as it becomes the commercial basis of generation used to feed into the CAISO as an import? Priority: N/A--

-Brian Biering(bsb@eslawfirm.com) - 13:23 Q: Would moving to a marginal ELCC for new solar resources create time differentiated RA products, such that similarly situated resources would receive different capacity values depending on when they interconnect? Priority: N/A--

-Jim Caldwell(jhcaldwelljr@gmail.com) - 13:19 Q: Marginal ELCC for solar. My comment is to be careful. Understand the proposal, but... Wait until after my presentation this afternoon Priority: N/A--

-Christian Lambert(christian.lambert@cpuc.ca.gov) - 13:21 Q: Can ED confirm if this marginal zero ELCC for new solar would result in the eventual phase-out of all current solar QC as the existing solar contracts expire? Priority: N/A--

-Luke Tougas(I.tougas@cleanenergyregresearch.com) - 13:21 Q: It seems premature to conclude that this change is needed because it is only based on a few days under 1-in-30 conditions. Furthermore, only PDRs were not required to be available on weekends, whereas all RDRR is available 24 x 7. Priority: N/A--

-James Muraca(jmuraca@enersponse.com) - 13:21 Q: If Sat is mandatory, would that be able to be nominated at different KW value or different hours of availbiity to M-F? Priority: N/A-- Q: MCC Buckets. My comments are that, like SCE, we believe MCC Buckets are on their way out as being useful. Eventually think they will be totally non-productive and harm reliability. Having said that, they are here now and deserve some tweaks, but... Priority: N/A--

-Scott Olson(scott.olson@directenergy.com) - 13:22 Q: Has the CPUC done any analysis to demonstrate the need or benefit to change Bucket 1 and eliminate Bucket 2? Priority: N/A--

-Nuo Tang(ntang@sdge.com) - 13:23 Q: In one of the earlier CPUC decisions, the MCC buckets were set based on # of hours that load is above 90% of peak load Priority: N/A--

-Nuo Tang(ntang@sdge.com) - 13:23 Q: can you talk about how the 100 Hours correlate to that? Priority: N/A--

-Phillip Muller(philm@scdenergy.com) - 13:26 Q: Regarding DR limitations, why not create incentives for DR to perform as required and/or signifcant penalties for non-performance, rather than limiting amount? Priority: N/A-

-Linnan Cao - 13:54 A: This question has been answered verbally.-

-Nuo Tang(ntang@sdge.com) - 13:29 Q: Does the ED prefer having these DR resources that receive credits as load modifying rather than supply side? Priority: N/A--

-Sergio Duenas(sduenas@storagealliance.org) - 13:29 Q: What is the rationale of eliminating Category 2? The IRP process has found the need for energy storage resources with durations in excess of 4 hours. Eliminating Category 2 would erode the few incentives LSEs have to get those assets. Priority: N/A--

-Nuo Tang(ntang@sdge.com) - 13:32 Q: can I follow up on Eric's ELCC question Priority: N/A--

-Luke Tougas(l.tougas@cleanenergyregresearch.com) - 13:48 Q: Hi Simone, I think I've connected my audio. Can you please confirm? Priority: N/A--Brant, Simone - 13:49

A: it doesn't seem to be connected-

-Gil Wong(gxwf@pge.com) - 13:51 Q: For the DR category, is the proposed revision contemplating a weekend QC vs a weekday QC for each month? Priority: N/A--John - 13:54 A: If we move to ELCC, it won't matter. --Linnan Cao - 13:54

-Linnan Cao - 13:54 A: This question has been answered verbally.--John - 13:55 A: And multiple QCs is not possible. -

-Chris Devon(cdevon@ces-ltd.com) - 14:00

Q: Does ED staff beleive the MCC category cap amounts need to be increased to accomodate this storage procurmeent and does the ED staff think there may be a need for other types of adjustment to RA requirements to ensure RA storage can be charged reliably? Priority: N/A--

-Paul Neslon (CLECA)(paul@barkovichandyap.com) - 14:03 Q: I have some questions, that I would like to ask verbaly. Priority: N/A--

-Paul Neslon (CLECA)(paul@barkovichandyap.com) - 14:19 Q: What is CAISO view on the use of ELCC for wind, solar, or DR, if the Commission adopts the SCE/CaICCA RA proposal or PG&E's Slice of Day? Priority: N/A--

-Michael Perry(mop4@pge.com) - 14:25 Q: Could the CAISO expand on what they mean by LIP can be used for operational capabilities (last bullet on slide 78)? Priority: N/A--

-Aimee Wong(aimee.wong@sce.com) - 14:25 Q: This question is for Lauren. Does CAISO have issue that capacity for DR is one number for a given month? Are they proposing that capacity should vary by hour, by day, by month? Priority: N/A--

-Aimee Wong(aimee.wong@sce.com) - 14:27 Q: Or is ELCC attempting to find the lowest value and use that for capacity value for the entire month, even though, the actual value for peak hours maybe higher than the ELCC value? Priority: N/A--

-Gil Wong(gxwf@pge.com) - 14:34 Q: LOLE timing varies and may not necessarily be aligned with RA assessment hours. Should RA hours be modified so that we are not shooting for different targets? Certainty with the target hours matters when designing DR programs. Priority: N/A-

-John - 14:39 A: RA hours are 24x7 not just 4 to 9 pm. - -Gil Wong(gxwf@pge.com) - 14:41 Q: The value of DR becomes dependent on the value of other intermittent resources under ELCC. How can we be certain how much cost-effective DR can be procured before giving the MW value as input to ELCC to derate? Priority: N/A--

-Gil Wong(gxwf@pge.com) - 14:44 Q: John - the current RA assessment hours are 4-9 pm. Am I mistaken? Priority: N/A--John - 15:15 A: RAAIM hours are 4 to 9. RA is a 24x7 req to with certain exceptions, like DR. We couldn't operate the system if RA was only available 4 to 9 ;)-

-Nuo Tang(ntang@sdge.com) - 15:02 Q: I have a question Priority: N/A--

-Scott Olson(scott.olson@directenergy.com) - 15:36 Q: Would PG&E considering changing the point system to be based on the magnitude of the shortfall, not the number of shortfalls? Larger shortfalls should seemingly accrue more points. Priority: N/A--

-Evelyn Kahl(evelyn@cal-cca.org) - 15:37 Q: Would a 1MW deficiency for 5 months get the same # of points as a 1000 MW deficiency for 5 months? If so, did PG&E consider weighting points by MW or % load share? Priority: N/A--

-Evelyn Kahl(evelyn@cal-cca.org) - 15:41 Q: But couldn't you weight based on load share? Priority: N/A--Brant, Simone - 15:56 A: you could give more points for bigger % deficiencies-

-Paul Neslon (CLECA)(paul@barkovichandyap.com) - 16:09
Q: Thank you for your patience! :)
Priority: N/A