

The Reliable and Clean Power Procurement Program Staff Proposal Workshop

9:00 AM – 1:00 PM on 5/16/2025.

WebEx Q&A Log

Answers made post-workshop are found in **red**.

Answers changed post-workshop are found in **green**.

Paul Klapka – SCE (paul.klapka@sce.com) - 9:08 AM

Q: Could you highlight any changes in the deck you discuss today from what was originally published?
Thanks.

Soufiani, Seina - 9:34 AM

A: Yes, we will highlight main changes at certain slides and will post changes on the RCPMP website.

Doug Karpa (dkarpa@peninsulacleanenergy.com) - 9:12 AM

Q: What attributes must qualifying contracts have? Are "offtake contracts" contracts for energy with delivery in year T or are they for RA capacity in year T? Would energy only contracts qualify? Is there a restriction on the duration? (e.g., could a contract for only one year of delivery qualify?).

Raffan, Neil - 9:16 AM

A: For the reliability side of the program it's proposed that the contracts meet RA requirements. Staff haven't proposed a minimum contract tenor - welcome comments.

Rahab SCE (rahab.mahfud@sce.com) - 9:17 AM

Q: The Staff Proposal says, "Staff would complete a stakeholder process to determine the zero carbon resources eligible for the CES, which would include consideration of currently non RPS eligible resources" (p.47). SCE would like up-front clarity regarding treatment of Diablo Canyon Power Plant's allocated energy to LSEs, i.e., whether it will count towards CES compliance.

Withers, Sierra - 9:25 AM

A: Thank you for the question. We will be following through with what is said in the proposal, where we will be completing a stakeholder process to determine the zero carbon eligible resources for the CES. More information on this stakeholder process will be released in the future. Please include your stance in your opening comments.

Rahul Kalaskar (rahul.kalaskar@aes.com) - 9:21 AM

Q: Will the RCPPP program require a system and local procurement requirements similar to the RA program?

Staff, post-workshop:

A: The reliability side of RCPPP focuses on system reliability. The staff proposal includes mentions of where RCPPP would interact with local reliability, but the RCPPP staff proposal does not have new local requirements.

Rahab SCE (rahab.mahfud@sce.com) - 9:21 AM

Q: The Proposal indicates pumped loads would be included in deriving CES %, whereas pumped loads are not included in calculating RPS % (p. 46). Can the Staff clarify the rationale behind the different treatment? In addition, can the Staff confirm that, when pumped loads are treated as retail sales in driving CES%, the discharging energy associated with pumped loads are included in the supply that meets the CES%? Is there data to share on pumped loads (e.g., MWh by year by TAC area) used the simulation?

Withers, Sierra - 9:39 AM

A: Rahab, the reason we count pumped loads in the CES is because SB 100 includes all state loads including DWR in their definition. We get those pumped load forecasts from the IEPR, so that data can be found there. In general, if there is pumped storage, we would generally count the generation MWhs going in or the net generation MWhs going out, but would not generally count standalone storage.

Jed Gibson (jgibson@downeybrand.com) - 9:23 AM

Q: To confirm, the RCPPP will not apply to the small and multi-jurisdictional IOUs outside the CAISO? So those IOUs will not be subject to RCPPP requirements?

Barcic, Nathan - 9:29 AM

A: Jed: Good question. There are some wrinkles we'd like to talk over internally. We'll respond in the Q&A transcript that gets posted next week.

Zoe Harrold, GPI (zharrold@clearhorizonsconsulting.com) - 9:23 AM

Q: Would a CES approach subsume the RPS Program and plan filing+review process into the RCPPP? Or is it envisioned to operate alongside the RPS?

Barcic, Nathan - 9:27 AM

A: Zoe: That's a detail we expect to work through with stakeholders. There would likely be a time where the two programs would operate alongside one another, but then we would want to work with stakeholders to figure out if that's the most efficient way to move forward over the years. Any comment on that would be much appreciated.

Rahab SCE (rahab.mahfud@sce.com) - 9:26 AM

Q: The Proposal describes how the CES % target will correspond to the % clean energy achieved by the PSP per year (slide 50). The CES % target assumes a specific resource mix. How will the differences be reconciled between the actual resource portfolio procured and the PSP if the actual portfolio achieves the CES % target but has higher emissions than the PSP because it has a different mix of resources? Are there mechanisms within the CES framework to incentivize development of the resources assumed in the PSP

Withers, Sierra - 9:36 AM

A: Rahab, the CES is based on delivered MWh, meaning that as long as energy gets delivered, it would count towards the CES, so it should make a minimal difference based on the difference in resource types.

Michael Quiroz - Ava Community Energy (mquiroz@avaenergy.org) - 9:28 AM

Q: There are multiple buffers in the reliability proposals, 2.5% on the reliability procurement need and 1-3% CCR reserve. Could you please elaborate on the reasoning behind stacking on each other and in addition to slice of day planning reserve margin?

Soufiani, Seina - 11:19 AM

A: Michael: For greater detail (the limited space here), I'd refer to sections 3.1.1 and 3.1.2, which contain detail on the buffer and CCR.

Michael Quiroz - Ava Community Energy (mquiroz@avaenergy.org) - 9:30 AM

Q: What incremental value do you see in the CES program relative to RPS? Are you trying to capture anything beyond large hydro, nuclear? Because compliance aligns so closely, have you considered folding this into RPS to streamline reporting requirements?

Barcic, Nathan - 9:35 AM

A: Michael: The primary driver in my view is expansion of the resource eligibility list, per your point. However, one could envision other pro's/con's. For instance, the CES as proposed here would key directly off of analysis/portfolios generated in IRP, whereas RPS targets are set through a different process. Curious to hear if you have any other thoughts you'd want to put in comments, as the pro/con list is going to be longer than that.

Kodiath, Praem (Praem.Kodiath@nexteraenergy.com) - 9:33 AM

Q: Are the Marginal ELCCs vintaged or do they change each year?

Aaron Burdick, E3 - 10:23 AM

A: They change with each new ELCC study and are not vintaged. The proposed frequency of those studies is described in the staff proposal.

Soufiani, Seina - 10:51 AM

A: It is possible for marginal ELCCs to change. Staff may update the resource accounting of marginal ELCCs every two years with new modeling. However, the initial implementation of RCPPP may allow for more flexibility in updating the RPN and marginal ELCCs in the early test years based on timing and

stakeholder feedback. The marginal ELCCs may shift depending on the portfolio contents (i.e., the combination of resources that exist and the resources that are planned at the time of modeling).

Soufiani, Seina - 10:51 AM

A: Also, in section 5.1.3, Staff asks whether marginal ELCCs should be bound or not

Nina Robertson (nrobertson@earthjustice.org) - 9:34 AM

Q: Why are you identifying system needs and then allocating RPN to each utility rather than actual service territory RPN?

Aaron Burdick, E3 - 9:56 AM

A: RCPMP is based on LSE-level procurement compliance, hence the reliability need would be allocated to each LSE based on their contribution to system need.

Andy Brown (abrown@b2energylaw.com) - 9:34 AM

Q: How does the state to transmission modifications and timeline get reflected in the need assessment? i.e., a TPP specifies certain upgrades and assumptions on completion timing, but delays then occur, would LSEs still be expected to bring on resources although the network can't integrate / interconnection in a timely manner?

Raffan, Neil - 9:45 AM

A: Under the proposal LSEs would need to manage resource development risk, including the risk of interconnection and transmission delays. Note section 3.1.5.2 though re Initial Implementation of Financial Penalties. Andy pls try rewording the start of your question in case I'm not following though.

Andy Brown (abrown@b2energylaw.com) - 9:35 AM

Q: Does the addition of "buffer" quantity mean that the RPS MMOP can go away, or is this additive?

Barcic, Nathan - 9:36 AM

A: Andy: Can you expand on this question a bit so we can provide a good answer?

carrie bentley (cbentley@gridwell.com) - 9:37 AM

Q: What does "not portfolio dependent" mean in the LOLP study?

Aaron Burdick, E3 - 9:55 AM

A: For long-term planning we calculate the total portfolio ELCC ("total reliability need") that must be met by the capacity expansion model and accredit all resources at their ELCC. This total need is dependent only on load variability and operating reserves. Because all resources are accredited at their ELCC, the need is not portfolio dependent.

Deb Emerson (demerson@sonomacleanpower.org) - 9:38 AM

Q: Is the CPUC considering scrapping SOD, since counting for procurement mandates are using ELCC counting methodologies?

Barcic, Nathan - 9:42 AM

A: Deb: No, we are not considering scrapping SOD. I think I see why you might assume that though: We're proposing here to use ELCC counting for certain parts of the process (e.g., need determination, allocation) but not others. Put differently, wherever the proposal has SOD in place, assume that SOD requirements are in play for those years (particularly for things like resource accreditation).

Nancy Rader (nrader@calwea.org) - 9:38 AM

Q: Is there linkage between the CES and the resource mix in the PSP? CES compliance seems to be measured in MWh-credits of GHG-free generation, like RECs. If so, is the total MWh generation needed to meet the GHG target derived from the generation mix in the PSP? If so, that will change if the resource mix procured by LSEs differs from the PSP, won't it? E.g., if LSEs procured solar and storage instead of wind and/or geothermal, more total MWh should be procured to cover storage losses and curtailment.

Withers, Sierra - 9:42 AM

A: The primary things that determine the CES are the CPUCs adopted GHG target and the IEPR load forecast. So based on those, it tells you how much clean energy you need to deliver, and then this portfolio question is secondary. The CES is based on the delivered MWh, so just like you do not get a REC for your storage resources or curtailed solar, you would not get the ability to count anything in the CES regime. The energy needs to be delivered, which means its more agnostic to the portfolio mix.

Withers, Sierra - 9:42 AM

A: There could be a mechanism to test for whether the CES is sufficient, or if its leading to divergence, in which case the CES may be adjusted as needed to ensure the GHG target is met.

Kailash Raman (kraman@formenergy.com) - 9:39 AM

Q: Is the marginal ELCC calculation performed by incrementing load or decrementing firm capacity?

Aaron Burdick, E3 - 9:58 AM

A: Either load or capacity tuning is common in ELCC studies. The current approach in SERVVM is to use firm capacity for tuning in ELCC studies.

Andy Brown (abrown@b2energylaw.com) - 9:39 AM

Q: re MMOP--RPS program calls on LSEs to have a minimum margin of over procurement, which is effectively an increase of the requirement to address uncertainties around resource production, curtailments, etc. RCPPP has an additional "buffer" which seems to be more than operating reserves and also seems to be on top of MMOP. So my question is whether the RPS MMOP can end since RCPPP is addressing both reliability and GHG/no carbon/RPS energy production.

Knierim, Christian - 10:05 AM

A: RPS MMoP: is required by statute, 399.13(a)(5)(D): "Commission shall adopt by rulemaking an appropriate MMoP above minimum RPS procurement level to meet RPS to lower risk that.... etc.," While Commission has not adopted a standard MMoP for LSEs, Commission requires LSEs to develop & present their own reasonable MMoPs in RPS Plans. If "MMoP" were removed, we would still need a way to provide a buffer specific for RPS renewables to satisfy statute. Would have to combine MMoP into RCPPP carefully

Lauren Carr CalCCA (lauren@cal-cca.org) - 9:39 AM

Q: Could panelists please clarify if the intent is for CES Need Allocation to lock in the CES percentages in advance or also the actual MWh targets? Essentially will enforcement be backward looking based on actual load like the RPS program or based on a forecasted load determined in advance?

Aaron Burdick, E3 - 10:00 AM

A: The need determination (CES percentage) would be defined on a forward basis so that LSEs have sufficient time to procure new resources, while the compliance would be backwards looking based on actual loads (like the RPS program).

Jed Gibson (jgibson@downeybrand.com) - 9:40 AM

Q: How would RCPPP reliability need determinations, procurement requirements, and compliance assessments be determined for entities that are not subject to the CPUC's RA program or requirements?

Barcic, Nathan - 9:48 AM

A: Jed: We'll think about this a little too and respond, perhaps in the transcript in a few days.

A: We don't propose setting requirements via RCPPP for LSEs that currently aren't subject to the CPUC's RA program. However, information regarding LSEs not jurisdictional to the LSEs will still likely be used in the modeling analysis that supports developing a need determination, similar to how that info is used in IRP's existing planning track.

Shayna Levia PCE (slevia@peninsulacleanenergy.com) - 9:42 AM

Q: the staff proposal states that the need allocation for CES will be based on a "retail sales forecast multiplied by the annual CES percentage" does that mean an LSE's IEPR forecast will be used to determine their CES targets? This is a departure from current RPS requirements that are based on actual retail sales. Can staff provide reasoning for this difference?

Raffan, Neil - 9:56 AM

A: The proposal isn't intended to differ to RPS in that regard. You're right that it is actual retail sales that would matter for assessing compliance (per section 3.2.4 of the Staff Proposal). 3.2.3 is expressing how LSEs could plan to procure, by using the forecast. Please put in comments how this could be clarified.

Shana Lazerow she/her CBE (slazerow@cbeal.org) - 9:43 AM

Q: How does the Marginal ELCC relate to Slice of Day, for example, for hours that are not "most constrained." Also, for resources that don't have well-calculated ELCCs like energy efficiency, demand response, distributed energy resources but that will be key components of each LSE portfolio?

Aaron Burdick, E3 - 10:03 AM

A: Slice of day requires LSEs to cover their load across all hours. Critical periods planning in RCPPP would require LSEs to cover their load during the critical hours the system faces risk (which may evolve over time). The critical hours would likely be those that are hardest for LSEs to meet in their slice of day filings. EE and most other DERs are generally included as load modifiers in the IEPR prior to IRP planning. New supply side DR would be accredited using marginal ELCC. Welcome comments on this topic

Gabe Murtaugh Hydrostor (gabe.murtaugh@hydrostor.ca) - 9:44 AM

Q: Aaron – I appreciate you walking through these slides, and I recognize that the ELCC methodology “puts all resources on a level playing field” in terms of how effective resources are anticipated to be at addressing periods of reliability need. I am a little bit concerned that this methodology does not put resources on a level playing field when balancing needs during reliability concerns and needs for least cost decarbonization. For example, some resources may be more effective at addressing system decarbonization than others. Have you thought about some of the interactions are between these two factors? Specifically, have you studied procurement outcomes for a procurement program using RCPPP (and associated costs) and compared that to procurement from an IRP base scenario?

Aaron Burdick, E3 - 10:07 AM

A: The proposed RCPPP design is intended to provide LSEs the incentives they need to procure the least-cost portfolio of resources to meet both reliability (via marginal ELCCs) and GHG reduction (via CES) needs. For resources that face potential market failures (i.e. LSEs may not procure them even though they're cost effective to the system), the state has DWR centralized procurement as an available tool.

Cunningham, Patrick (Patrick.Cunningham@cpuc.ca.gov) - 9:45 AM

Q: Are there any estimates available for annual RPR for the two RCPPP options? If not, what is the best way to build such an estimate (PSP and IEPR data)?

Soufiani, Seina - 11:29 AM

A: Patrick: I don't think we have an estimate of RPR in the deck. However, there is an illustrative example of RPN on slide 29. This is based on older 2022-23 IRP cycle results and will be updated soon for the current IRP cycle

Citlalli Sandoval (citlalli.sandoval@svcleanenergy.org) - 9:46 AM

Q: For Reliability Option 1 (referring to Table 6 in the proposal), wouldn't the T+2 100% obligation for all RCPPP contracting be more binding than the 90% RA obligation in T+1? If they differ significantly is the CPUC considering the potential implied misalignment between the two accounting methodologies (SOD & ELCC)?

Raffan, Neil - 10:02 AM

A: It possible that the RCPPP requirement would be more binding, driving LSEs towards more new resource procurement than the RA program alone would. As you indicate it would depend to some extent on the differences between the resource accreditation methodologies of RCPPP and SOD.

Nancy Rader (nrader@calwea.org) - 9:46 AM

Q: Following up on my previous question, what is the point of developing and adopting the PSP if the RCPPP is agnostic to the portfolio mix?

Barcic, Nathan - 9:49 AM

A: Nancy: There are a few uses that I can think of top-of-head: firstly, to develop an idea of what an optimal portfolio might look like (either for LSEs to use as guidance when procuring, or us to use to inform things like AB 1373 procurement) but also to fulfill our requirement to provide CAISO portfolios for study in its TPP

Aaron Burdick, E3 - 10:14 AM

A: In addition, the system portfolios in the planning track form the basis to calculate CES %'s and a forecast of marginal ELCCs in RCPPP.

Nick Pappas (Nick@NPEnergyCA.com) - 9:46 AM

Q: Will you be discussing the indicative mELCCs provided in the staff proposal and their relationship with MTR mELCCs? When would be an appropriate opportunity for stakeholders to ask questions to understand the significantly different results?

Barcic, Nathan - 9:50 AM

A: Nick: My first take is to not focus too much on indicative numbers for the purpose of today's workshop. If you have specific concerns, please feel free to reach out to us on the side.

Aaron Burdick, E3 - 10:16 AM

A: As noted, there will be an updated marginal ELCC forecast produced shortly as part of LSE filing requirements. Note that MTR ELCCs are incremental by tranche using an assumed load and portfolio forecast, both of which may have changed since the original MTR ELCC studies.

Rahul Kalaskar (rahul.kalaskar@aes.com) - 9:47 AM

Q: Does the SERVIM model also consider transmission zone or transmission path to take into account renewable curtailment due to transmission limitation?

Raffan, Neil - 12:46 PM

A: In SERVIM we model various regions inside and outside of California and can assess the renewable curtailment. Pls see the following resources for more info: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/2024-26-irp-cycle-events-and-materials/system-reliability-modeling-datasets-2024>, <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2024-2>

Nick Pappas (Nick@NPEnergyCA.com) - 9:47 AM

Q: On slide 32, what drove the changes between the 2023 MTR mELCC study and the 2023 IRP study values provided in the staff report?

Barcic, Nathan - 9:52 AM

A: Nick: See my response above **to Nick Pappas at 9:46 AM**.

Katie Wikler (kwikler@nrdc.org) - 9:48 AM

Q: When does the CPUC expect to finalize marginal ELCC values for the first RCPPP cycle?

Soufiani, Seina - 10:52 AM

A: We won't know for certain until RCPPP is adopted by the CPUC. In the meantime, we may refine the illustrative values shown in the proposal.

Rahul Kalaskar (rahul.kalaskar@aes.com) - 9:49 AM

Q: What is CPUC/E3 perspective on interaction between SOD and ELCC?

Barcic, Nathan - 9:57 AM

A: Rahul: You and a couple others (Citlalli, Deb) are asking related questions. I think we may try to address verbally later on so that we can add a little more detail.

Gregg Klatt (klatt@energyattorney.com) - 9:50 AM

Q: Would marginal ELCCs of procured resources change over time for purposes of counting toward Reliability Procurement requirements? Or would it be one-and-done compliance (and thus only the initial ELCC value matters), as it is for the D.19-11-016 and MTR requirements?

Soufiani, Seina - 10:54 AM

A: It is possible for marginal ELCCs to change over time. In section 5.1.3, Staff asks for comment on whether marginal ELCCs should be bounded or not. Also, RPR will remain fixed within T+2. In other words, the RPR for T+1 and T+0 of the current year will not be higher than the RPR for T+2 and T+1, respectively, of the prior year.

Nuo Tang (ntang@mrpgenco.com) - 9:51 AM

Q: Can you explain how you came up with the 14% PCAP PRM?

Aaron Burdick, E3 - 10:08 AM

A: This is covered in the prior IRP draft inputs and assumptions workshop, so please reference those slides. In short, we use SERVVM to draw a curve of ELCC MW vs. LOLE, the ELCC MW @ 0.1 LOLE determines total need, and the total need divided by the median peak defines the PRM.

Lauren Carr CalCCA (lauren@cal-cca.org) - 9:52 AM

Q: On Option 1, wouldn't the T+2 100% obligation for all RCPPP contracting be more binding than the 90% RA obligation in T+1? If not, does that imply a misalignment between the two accounting methodologies (Marginal ELCC & SOD)?

Barcic, Nathan - 10:13 AM

A: Lauren: it's possible the two accounting methodologies leads to different procurement outcomes. We have some internal studies that show SOD compliance generally leading to a little bit more procurement than the ELCC-based compliance proposed here. We realize the philosophical and accounting differences that are in play here between SOD and ELCC-based methods and are hoping parties can help us identify the best route forward.

Shayna Levia PCE (slevia@peninsulacleanenergy.com) - 9:52 AM

Q: the staff proposal states that the need allocation for CES will be based on a "retail sales forecast multiplied by the annual CES percentage" does that mean an LSE's IEPR forecast will be used to determine their CES targets? This is a departure from current RPS requirements that are based on actual retail sales. Can staff provide reasoning for this difference?

Withers, Sierra - 9:58 AM

A: As answered above, The proposal isn't intended to differ to RPS in that regard. You're right that it is actual retail sales that would matter for assessing compliance (per section 3.2.4 of the Staff Proposal). 3.2.3 is expressing how LSEs could plan to procure, by using the forecast. Please put in comments how this could be clarified.

Mary Neal (mnn@mrwassoc.com) - 9:53 AM

Q: For the statement that SoD and Marginal ELCC may yield "slightly different outcomes" please define "slightly." How did Staff determine they are only "slightly" different?

Barcic, Nathan - 10:14 AM

A: Mary: In my response to Lauren I just noted that we have some internal info that shows SOD compliance generally building slightly bigger portfolios than ELCC-based ones. However, that outcome might not hold in call cases (it could potentially differ in either direction).

Oh, Helena (Helena.Oh@cpuc.ca.gov) - 9:53 AM

Q: To confirm, is the RPN essentially the same as the total MRN from the 2022 IRP filings? And since existing resources will compete with new to meet the RPN in Option I, does this mean existing resources would receive marginal ELCC accreditation?

Aaron Burdick, E3 - 10:11 AM

A: Yes, the RPN is like the MRN from 2022 LSE plans. And yes under both options, all resources (existing and new) would be accredited via marginal ELCC.

Mary Neal (mnn@mrwassoc.com) - 9:54 AM

Q: Will there be any changes to the timing and production of LOLE studies by IRP Staff and/or RA Staff under either Option 1 or 2? If so, please describe these changes.

Barcic, Nathan - 10:15 AM

A: Mary: We'd aim for them to be consistent. We'd also hope to eventually align w/ any other related studies (say, for IRP's planning track or for similar things done in RA) to the extent possible.

Nick Pappas (Nick@NPEnergyCA.com) - 9:54 AM

Q: As "ELCC takers," under the scenario in which 4-hour storage mELCC is substantially reduced due to energy insufficiency, is it correct to understand that LSEs with balanced energy + storage portfolios will

receive the same storage derates as LSEs which failed to develop sufficient energy-generating resources?

Barcic, Nathan - 10:16 AM

A: Nick: I don't think we're currently proposing to have different ELCCs for different LSEs, if that's what you're asking.

Mary Neal (mnn@mrwassoc.com) - 9:54 AM

Q: Is there any science behind how Staff recommended a 2.5% buffer as opposed to a different number such as 1% or 3%?

Soufiani, Seina - 10:57 AM

A: Mary: There is not an exact science behind the 2.5% buffer at this time. Rather, it just an initial proposal based on collective experience within the IRP/RA teams. We are happy to consider other numbers if justified in stakeholder comments.

Nina Robertson (nrobertson@earthjustice.org) - 9:54 AM

Q: What is the 2.5 percent bumper derived from? What's the rationale for 2.5 percent?

Soufiani, Seina - 10:57 AM

A: Nina: There is not an exact science behind deriving the 2.5% buffer at this time. Rather, it just an initial proposal based on collective experience within the IRP/RA teams. We are happy to consider other numbers if justified in stakeholder comments.

Nancy Rader (nrader@calwea.org) - 9:55 AM

Q: Nathan, how can CAISO plan and build TX toward the portfolio if LSEs have no obligation to purchase the higher-cost resources in the portfolio? (I acknowledge the advocacy-oriented question, but I think it's a fair one.)

Barcic, Nathan - 10:18 AM

A: Nancy: We've already been planning the system for close to a decade of IRP under this paradigm. If you are concerned about a lack of signals (either to CAISO, LSEs, developers, etc.) to produce efficient outcomes, and especially if you have proposed solutions, please put them in your comments.

Hillary Hebert (hillary@hmnenergy.com) - 9:55 AM

Q: Can you clarify how the purpose of the 2.5% buffer differs from the purpose of the PRM?

Soufiani, Seina - 11:22 AM

A: Hillary: Aaron could correct me if I'm mistaken, but technically no PRM is needed for RCPPP since the reliability procurement need (need determination) is calculated with a given load forecast, resource portfolio, and buffer. The buffer would ensure that LSEs are procuring and building sufficient resources such that they can collectively enter the reliability year T+0 sufficiently resourced to meet the CPUC's 0.1 LOLE reliability standard and RA program requirements

Shana Lazerow she/her CBE (slazerow@cbeval.org) - 9:55 AM

Q: Given the statutory and practical requirements to include local analysis for resource procurement, where is that staff work reflected in the staff proposal? I'm particularly concerned about risks and costs of rolling out a whole new procurement program that is solely focused on system resources.

Barcic, Nathan - 10:57 AM

A: Shana: We understand your concern. The proposal doesn't currently have an explicit mechanism for local procurement (setting aside those that already exist, such as for local RA). That's not to say that we couldn't in the future, though. Happy to hear proposals re: how.

Loram, Chris (Chris.Loram@nexteraenergy.com) - 9:56 AM

Q: How will assets be treated, if they have been operational for more than 10 years but are no longer under an RA contract and are capable of offering RA to a new counterparty?

Barcic, Nathan - 10:19 AM

A: Chris: Can you expand on this a bit? Treated under which part of the proposed program?

Eric Little (eric@cal-cca.org) - 9:56 AM

Q: Development risk is very dependent on the developer that is contracted. If the 2.5% is to address development risk, this will be too high for some and too low for others. Is there a reason we shouldn't allow the LSE to determine their own development risk given penalties for failure?

Barcic, Nathan - 10:21 AM

A: Eric: I can imagine a world in which 40 different LSEs would then be using 40 different values for this - and of varying levels of validity -- which could certainly complicate things. However, if you have a proposed solution, we'd love to hear about it in comments.

Mary Neal (mnn@mrwassoc.com) - 9:57 AM

Q: Does the CEC produce the LSE-specific load forecast for the RPR determination and how will that work?

Raffan, Neil - 10:10 AM

A: Comments welcome on this pls, perhaps drawing from existing LSE-specific forecasting that is done for IRP planning track and RA.

Michael Quiroz - Ava Community Energy (mquiroz@avaenergy.org) - 9:58 AM

Q: Have you considered DWR to serve as the RCPPP-CPE? Any thoughts on that?

Barcic, Nathan - 10:22 AM

A: Michael: That's not being proposed here, but if have proposals on a different set of entities doing it besides what we proposed, we'd love to hear about it in comments.

Mary Neal (mnn@mrwassoc.com) - 9:58 AM

Q: Was there any science behind the range of the size of the CCR (1.5%-3%)?

Soufiani, Seina - 10:59 AM

A: Mary: Similar to the buffer, no exact science behind the CCR at this time, but it's designed to cover a range. We are happy to consider other numbers if justified in stakeholder comments.

Jerri Strickland (jstrickland@3ce.org) - 9:58 AM

Q: Will the system need determination, particularly for binding years, consider what resource types are available within the CAISO queue?

Barcic, Nathan - 10:24 AM

A: Jerri: Currently we aren't proposing there be an explicit mechanism for this, but if you have a proposal here we'd be very curious.

Doug Karpa (dkarpa@peninsulacleanenergy.com) - 9:58 AM

Q: How does the RCPPP handle the provision of backstop in the event that the IOUs are short while other LSEs are long (as has historically been the case in the IRP program)?

A: It depends on what part of history we are talking about, but regardless, you raise an interesting hypothetical. We are curious what your thoughts are on what to do in such a situation.

Doug Karpa (dkarpa@peninsulacleanenergy.com) - 9:58 AM

Q: (that is, who backstops the IOUs?)

Soufiani, Seina - 11:44 AM

A: Doug: Ideally the 2.5% buffer applied to all LSEs would help mitigate against this, but we can investigate this further.

Kailash Raman (kraman@formenergy.com) - 9:59 AM

Q: Under Options 1 and 2, would the marginal ELCC applied to a new resource be fixed for its lifetime (based on the marginal ELCC assigned at time of COD?) Or would the marginal ELCC of the resource be updated in each compliance year?

Soufiani, Seina - 11:01 AM

A: Kailash: Marginal ELCCs can change and wouldn't be fixed for a new resource's lifetime. Section 5.1.3 of the proposal asks for stakeholder comment on whether marginal ELCCs should be bounded or unbounded.

CC Song (csong@cleanpoweralliance.org) - 10:02 AM

Q: An earlier slide indicated that the compliance program doesn't start until 2028, after MTR orders roll off. Can you explain how that fits into the compliance schedule you just described? Would the earlier years be indicative as well if they are earlier than 2028?

Soufiani, Seina - 11:05 AM

A: CC: This is subject to the timeline of CPUC-adoption of RCPPP, so specific dates in the proposal could change depending on that timeline. Ideally, however, RCPPP would be a mature program by the time MTR orders roll off around 2028

Mary Neal (mnn@mrwassoc.com) - 10:03 AM

Q: The Staff proposal discusses a MOO for the months of May through September. Please elaborate on what this MOO is and who enforces it. Will resources used for RPR compliance need to be submitted on a CAISO RA supply plan?

Barcic, Nathan - 10:26 AM

A: Mary: You bring up some details that require more thinking, however you're on the right track. e.g., will the resources need to be on a supply plan? Our current thinking is "yes", but very open to suggestions re: what you think the best way is to make resources get shown.

Scott Olson (scott.olson@avangrid.com) - 10:03 AM

Q: With marginal ELCC changing every 2 years, will the value of a resource for compliance showing will also change and there will not be locked annual marginal ELCCs like in MTR? Put another way, if an LSE shows a resource for T+4 compliance and the marginal ELCC changes in T+2, will that resource be required to now use the new marginal ELCC? Even though the RPR is fixed at T+2, could an LSE be out of compliance in T+0 if they do not change their resource mix shown at T+2 but the marginal ELCCs drop?

A: Yes, an LSE could be out of compliance in T+0 if they did not change their resource mix shown at T+2 and the marginal ELCCs drop. The last time the marginal ELCCs will be able to change is at T+2.

Michael Quiroz - Ava Community Energy (mquiroz@avaenergy.org) - 10:04 AM

Q: Would the currently monthly data requests be consolidated into the two proposed reliability compliance filings outline here?

Barcic, Nathan - 10:27 AM

A: Michael: That's TBD. However, I'd think of what's being proposed here as more a part of the current June-Dec compliance filing schedule for IRP (and not the monthly submissions)

Mary Neal (mnn@mrwassoc.com) - 10:04 AM

Q: Will Diablo Canyon be allowed to meet an LSE's RPR under Option 1?

Soufiani, Seina - 11:09 AM

A: Mary: Given the restrictions on using Diablo Canyon in IRP planning, and the relationship of IRP procurement to planning in PU Code, it's not clear that Diablo Canyon would be allowed. However, we encourage stakeholder comments if parties have differing thoughts.

Eric Little (eric@cal-cca.org) - 10:04 AM

Q: I thought I saw earlier that the intent was to have the resource qualify for RA (response to Doug Karpa). Why then is there a requirement for a MOO for the summer five months of the contract? If they are not shown as RA, then they would not ordinarily have a MOO. It is possible that procurement

used to meet RCPMP will not be needed in all months. Is this saying they have to be shown as RA regardless of need?

A: With the context of the Mid-Term Reliability and Supplemental Mid-Term Reliability procurement orders, which broadly required RA-compliant contracting without reference to particular season/months of the year, the proposal for RCPMP here is to focus reliability procurement to help avoid unnecessary cost. Staff also note that the respective purposes of RCPMP and RA programs may mean it's appropriate to have longer-term planning and procurement addressing need that differs to the year ahead. Comments appreciated to help find ways to best handle the trade-offs involved here.

Cathleen Colbert (cathleen.colbert@vistracorp.com) - 10:04 AM

Q: Under option 1, does the June compliance filing replace the October year-ahead filing under our current timelines?

Soufiani, Seina - 11:10 AM

A: Cathleen: No, any filings/requirements in the current RA program would remain unchanged.

Kodiath, Praem (Praem.Kodiath@nexteraenergy.com) - 10:05 AM

Q: How does the Interconnection Agreement requirement apply for projects that plan to have a Material Modification Assessment (MMA) to add a resource? Does the MMA need to be approved by T+2's filing deadline?

Raffan, Neil - 10:16 AM

A: The proposal is for that showing to demonstrate an appropriately sized interconnection is on track. Please put in your comments how an MMA should be considered.

Hillary Hebert (hillary@hmhenergy.com) - 10:05 AM

Q: When developing marginal ELCC values, does the IRP model require the renewable to be deliverable to charge storage? In other words, does the model reflect the RA program's charging sufficiency test which requires LSEs to show that they have enough deliverable renewables in their portfolio to charge any storage they are showing for RA, unless the renewables are co-located with the storage?

Aaron Burdick, E3 - 10:12 AM

A: Current SERVM modeling does not remove energy only resources from the portfolio when performing ELCC calculations. We welcome your comments on this topic.

Citlalli Sandoval (citlalli.sandoval@svcleanenergy.org) - 10:05 AM

Q: Referring to Table 7 in the proposal, is it a correct reading of the table that LSEs are allowed to show contracts for new build up until T+1? Given the multi-year lead time for new resources, we're wondering what the thinking behind that is.

A: Yes, for Option II, to meet the requirement to have 90% of the LSE's allocated quantity of new vintage resources for T+1 contracted, the LSE must show contracts of at least that quantity. They need not yet be online. Table 7 in the proposal has since been changed to include an offtake contract for T+1 through T+4 (can be seen in the Workshop PPT). LSEs are able to show an offtake contract through T+1 until T+0 when the resource should be online.

Nick Pappas (Nick@NPEnergyCA.com) - 10:06 AM

Q: Could you describe the mechanics of the mELCC studies for RCPPP? Would these parallel the current IRP process of developing surfaces for a single year and applying across the

Barcic, Nathan - 10:29 AM

A: Nick: We'd hope to sync them w/ the other studies done in IRP.

Aaron Burdick, E3 - 11:11 AM

A: Note that surface runs are intended to approximate ELCCs over a broad solution space for capacity expansion, whereas marginal ELCC forecasts are tied to a specific resource portfolio.

Nick Pappas (Nick@NPEnergyCA.com) - 10:06 AM

Q: * Could you describe the mechanics of the mELCC studies for RCPPP? Would these parallel the current IRP process of developing surfaces for a single year and applying across the study period? How frequently would the surfaces be refreshed?

Barcic, Nathan - 10:29 AM

A: Nick: See above response [to Nick Pappas at 9:46 AM from Aaron Burdick](#).

Mary Neal (mnn@mrwassoc.com) - 10:06 AM

Q: For Option 1, are LSEs required to purchase any RA qualifying capacity to meet the RPR contracting standard? If so, please define how that works.

A: [Please look to Paragraph 25 in the Staff Proposal Reliability section for more information on this question. Welcoming comments on the nuance of RPR contracting.](#)

Mary Neal (mnn@mrwassoc.com) - 10:06 AM

Q: For Option 2, why did Staff not expand the RA program to T+4?

Barcic, Nathan - 10:41 AM

A: Mary: If one sees the RA program as more focused on contracting/resource retention, and IRP as more focused on physical/new resources, you can see an argument for the former's requirements to maybe not go as far into the future as the latter's (considering it usually takes more lead time to get new resources), which in Option 2 starts 4yrs out

Eric Little (eric@cal-cca.org) - 10:07 AM

Q: Does option 1 effectively mean that the 90% YA that we use currently is now a 100% requirement YA?

A: [Yes, however, the requirement is different. The 90% YA is a Slice-of-Day obligation with an LSE load forecast determined by recent IEPR vintage plus a PRM, and using exceedance and other RA accreditations. The RCPPP 100% requirement is determined farther in advance, locked in for 2 years and it is only a monthly peak requirement \(not a full SOD requirement\), and the resource accreditation is marginal ELCC not exceedance or other RA counting.](#)

Nancy Rader (nrader@calwea.org) - 10:08 AM

Q: An early slide noted compliance with various legislation, but omitted AB 1584 (2019). Does staff consider this proposal to be consistent with that bill's requirement to allocate system integration needs to each LSE based their individual contribution to that need?

Barcic, Nathan - 10:43 AM

A: Nancy: As I think has been covered in IRP, identifying LSE-level drivers of system level need in the planning and need determination phase is pretty difficult. Therefore, I see us enacting this more on the compliance side -- e.g., identifying where LSEs have failed and tagging them w/ the need for corrective action and potential penalties. However if you disagree or have a diff't proposal, we'd be happy to see it in comments.

Mary Neal (mnn@mrwassoc.com) - 10:08 AM

Q: How did Staff arrive at the annual percentage contracting requirements for each option. For instance, why does Option 1 require 50% of T+4 requirements while Option 2 only require 60% of "new" resources?

A: The key consideration was striking a balance between the market signal sent by the proposed requirement, the timelines needed by LSEs to do procurement, leaving some flexibility for LSEs to not have to procure their full requirement at T+4, and the possibility of some contracting/project failure. Option 1 allows for "new and existing" resources, thus the amount of resources is larger and the majority of contracted-for resources is likely to be 'existing' and thus the percentage can be higher farther in advance of prompt year. Option 2 allows for only "new" resources via the proposed RCPPP requirement (plus an extension of the RA program, which loops in "existing"), thus the amount of resources is smaller, and many of the contracted-for resources may not yet be online and thus the percentage can be lower in the T+4 time frame, but needs to accelerate quickly to ensure reliability. Parties should comment on whether the percentages for option 1 and 2 should be higher or lower to ensure programmatic effectiveness.

Cathleen Colbert (cathleen.colbert@vistracorp.com) - 10:08 AM

Q: How do you envision this timeline working for long-lead time projects where contracts may be needed farther out than 5 years?

Barcic, Nathan - 10:47 AM

A: Cathleen: We're hoping that the indicative numbers (generally for T+5 onwards) provide signals to the market for development of resources that might take longer than others. Also keep in mind the interaction w/ AB 1373 process for LLTs, which is another place where those could come in.

Nina Robertson (nrobertson@earthjustice.org) - 10:08 AM

Q: On need determination, how will the program analyze local needs rather than just system needs?

Raffan, Neil - 10:12 AM

A: Staff proposes that RCPMP directly addresses system reliability, not local. Interactions with local reliability are mentioned in the proposal though.

Mary Neal (mnn@mrwassoc.com) - 10:09 AM

Q: For Option 2, are LSEs required to show resources used for the RPR standard on their CPUC and/or CAISO RA supply plans or will the products be unbundled? Why or why not?

Barcic, Nathan - 10:48 AM

A: Mary: I tried to start answering this in response to your prior question. I'd put the question back to you: if staff see the need for the resources to be shown *somehow* (supply plan or otherwise), what would you propose?

Ed Kiolbasa (ed.kiolbasa@gdsassociates.com) - 10:10 AM

Q: 2. How did the CPUC arrive at \$15 penalty? CPUC's net CONE is based on 4hr battery. This should but doesn't align with recent numbers from Lazard's report (\$19-20) which has been referenced before

Soufiani, Seina - 11:24 AM

A: Ed: This was an estimate from other IRP data, but we encourage presenting other values for net CONE in comments.

Sanada, Cristy (csanada@caiso.com) - 10:11 AM

Q: Can you explain more what information and/or considerations you used derived the % procurement requirements out to T+4 for each Option?

A: The key consideration was striking a balance between the market signal sent by the proposed requirement, the timelines needed by LSEs to do procurement, leaving some flexibility for LSEs to not have to procure their full requirement at T+4, and the possibility of some contracting/project failure. Option 1 allows for “new and existing” resources, thus the amount of resources is larger and the majority of contracted-for resources is likely to be ‘existing’ and thus the percentage can be higher farther in advance of prompt year. Option 2 allows for only “new” resources via the proposed RCPPP requirement (plus an extension of the RA program, which loops in “existing”), thus the amount of resources is smaller, and many of the contracted-for resources may not yet be online and thus the percentage can be lower in the T+4 time frame, but needs to accelerate quickly to ensure reliability. Parties should comment on whether the percentages for option 1 and 2 should be higher or lower to ensure programmatic effectiveness.

Eric Little (eric@cal-cca.org) - 10:12 AM

Q: MTR has used a COD requirement. Here you have a COD requirement for option II and a contracting requirement. Is there a reason both are needed?

A: Option II has a forward contracting requirement and then as time passes there is the requirement to show the resource once it reaches commercial operations. This is similar to MTR via its reference to the backstop decision D.20-12-044, and staff have similar rationale here, but maybe staff are not fully understanding the question. Requiring LSEs to submit a contract first, and then confirm later when it comes online, allows CPUC staff to see how a resource progresses. Both are needed because there are many situations in which a resource is contracted but does not come online.

Ed Kiolbasa (ed.kiolbasa@gdsassociates.com) - 10:12 AM

Q: How did the CPUC arrive at \$15 penalty? CPUC’s net CONE is based on 4hr battery. This should but doesn’t align with recent numbers from Lazard’s report (\$19-20) which has been referenced before

Raffan, Neil - 10:26 AM

A: Noted this is a duplicate question. We're working on the other instance of it, [in response to Ed Kiolbasa at 10:10 AM](#).

Hillary Hebert (hillary@hmnenergy.com) - 10:12 AM

Q: So, the December compliance filing will contain contracts intended to meet the need identified in April of the same year, correct? Meaning LSEs would likely hold solicitations and negotiate PPAs between May and November?

A: The December showing is informational-only, so no compliance will be determined based off of it. LSEs should already have a projection of their need from previous years' release of information, so solicitations and PPAs could happen prior (or following) May through November. For example, if we are looking at a 2027-2028 RCPPP year, the need allocation for each LSE would be made in 2027. Depending on the option, the years of binding information released is different. Indicative information through 2037 would be released with either option. Then, in December 2027, there would be a non-binding showing that will only be subject to a administrative penalty. Then, in June of 2028, there will be the final compliance showing that is subject to deficiency penalties.

Cem Turhal NRG (cem.turhal@nrg.com) - 10:12 AM

Q: Thank you for organizing this workshop. Currently, all CPUC-jurisdictional LSEs are required to submit RA, RPS, IRP, and MTR compliance filings. It appears that the RCPPP may replace the MTR bi-annual filings (June and December). Will this initiative result in any broader efficiencies by reducing the number of required compliance filings, or will it add an additional filing obligation? Has there been any consideration given to consolidating existing compliance filings? Thank you.

Withers, Sierra - 10:17 AM

A: CEM: Yes, there has been consideration given to consolidating existing compliance filings. We have not gotten to the CES portion of the presentation yet, but we will discuss this. We are looking for party comments on how to streamline these processes as much as possible.

Matt Freedman (matthew@turn.org) - 10:13 AM

Q: Can an LSE comply with RCPPP reliability obligations by just paying the financial penalties (0.5-1.0x of net CONE)? Would any other penalties or remedies apply?

Soufiani, Seina - 11:34 AM

A: Matt: By definition the penalties would be enforced if an LSE is non-compliant with its RCPPP obligations, and they would continue year-after-year if the LSE continues to be non-compliant. In terms of the multiplier of net CONE, the Staff Proposal states that if an LSE incurs any deficiency penalty for online or contracting sufficiency (i.e., not cured) for three consecutive years, then in the fourth year it will be twice (2x) the net CONE.

carrie bentley (cbentley@gridwell.com) - 10:14 AM

Q: How does this timeline fit in with CEC load forecast publication?

Soufiani, Seina - 12:30 PM

A: Carrie: The IRP process uses the CEC's IEPR in developing resource portfolios. Since the reliability options in RCPPP are based on an adopted portfolio, the CEC's IEPR would flow into the reliability options

Christa Lim, Shell Energy (christa.lim@shell.com) - 10:14 AM

Q: How was 2027 set as T+0?

Soufiani, Seina - 11:13 AM

A: Christa: This is a hypothetical example, and the exact years will depend on the timing of CPUC adoption of RCPPP. However, generally, Staff would release need determination and need allocation in T-1. So for example, if we released in 2026 (T-1), following year would be 2027 (T+0). The Staff Proposal contains further language describing the timeline.

Shana Lazerow she/her CBE (slazerow@cbeal.org) - 10:15 AM

Q: How does the RCPPP address non-GHG emissions?

Barcic, Nathan - 10:53 AM

A: Shana: The proposal doesn't explicitly entertain that, but please add in comments if/how we could that. GHG emissions are frequently (but not always) an ~analog for other emissions, but to the extent that you don't see that as sufficient we'd be happy to look at proposals from you.

Nina Robertson (nrobertson@earthjustice.org) - 10:16 AM

Q: Did Staff consider LOLH as an alternative to LOLE? What is the basis for choosing LOLE over LOLH?

Raffan, Neil - 11:02 AM

A: Loss of Load Expectation (LOLE) is central because the generally accepted reliability standard in CPUC IRP and RA uses that metric. Staff and stakeholders do study and report LOLH and other metrics too though, and please comment how it would benefit RCPPP to use them directly, or instead of LOLE.

Nick Pappas (Nick@NPEnergyCA.com) - 10:16 AM

Q: Re SOD and mELCC procurement results, are the internal studies analyzing similar results at the aggregate system level or do they assess differences for individual LSEs? Interested to understand the degree to which RA program use of LSE specific load shapes and LSE specific portfolios (with endogenous portfolio effects in SOD) may result in differences at the LSE level.

Aaron Burdick, E3 - 10:29 AM

A: The RCPPP marginal ELCC studies would be performed at the system level, not at the LSE level.

Mary Neal (mnn@mrwassoc.com) - 10:17 AM

Q: You mentioned in a prior Q&A an internal study of SOD vs ELCC compliance. Will those studies be provided on the record in this proceeding?

Barcic, Nathan - 10:51 AM

A: Mary: That's TBD. If you see a strong need, please put that in comments.

Matt Freedman (matthew@turn.org) - 10:18 AM

Q: Can you confirm that the RCPPP Reliability procurement obligation would not establish any long-term contracting requirements? Has ED considered the potential challenges with new resource development if LSEs focus primarily on short and medium-term contracting?

Raffan, Neil - 11:05 AM

A: Per response to a similar question earlier, confirmed that the proposal doesn't include a minimum contract tenor/length. Yes, staff have considered that challenge and that there are trade-offs, including re flexibility. Appreciate comments.

John Newton Ava (jnewton@avaenergy.org) - 10:18 AM

Q: Regarding Cem's question, would RCPPP reporting also replace the monthly IRP data response--which appears largely duplicative of the semi-annual IRP compliance reporting.

A: Streamlining contract submittal processes is a priority for the CPUC. Please add your comments and ideas for streamlining filings.

Mary Neal (mnn@mrwassoc.com) - 10:18 AM

Q: For Option 2, could you provide an example of the "rolling" nature of the definition for "new" resources?

Raffan, Neil - 11:07 AM

A: As time passes, a resource that was previously "new" based on its online date, won't be new because it came online more than 10 years prior to the applicable compliance year.

Sara Fitzsimon (sara@iepa.com) - 10:19 AM

Q: will the Q&A also be posted somewhere? The questions and answers are very helpful.

Withers, Sierra - 10:19 AM

A: Yes, a transcript will be published next week on the website.

Matt Freedman (matthew@turn.org) - 10:19 AM

Q: What requirements would apply to reliability resources located outside CAISO that are procured to meet the RPN? Are there specific scheduling/delivery requirements that would apply?

Raffan, Neil - 11:09 AM

A: The proposal is to use RA requirements

Sara Fitzsimon (sara@iepa.com) - 10:19 AM

Q: Thank you!

Katie Wikler (kwikler@nrdc.org) - 10:20 AM

Q: The proposal states that LSEs can streamline showing procurement progress via a pre-vetting process that would require resources to attest that they plan to perform under a MOO in CAISO for 5 months in a calendar year, but specific months are unspecified. Is it expected that these months would be aligned with Staff's identification of months of greatest need (i.e. May-Sept)?

Soufiani, Seina - 12:29 PM

A: Katie: Correct. The 5 months of highest need for the foreseeable future are May-Sept

Kimiko Elguea (kimiko.elguea@sce.com) - 10:20 AM

Q: Hi, when are comments due?

Fitch, Julie A. - 10:25 AM

A: Comments are due July 15, reply comments August 5.

Michael Quiroz - Ava Community Energy (mquiroz@avaenergy.org) - 10:21 AM

Q: With M-RETS dropping WREGIS as a customer, there's some uncertainty with how California will track RECs after 2027. How do you envision managing the creation/tracking of ZECs?

Barcic, Nathan - 10:50 AM

A: Michael: We acknowledge the options out there for building/managing such a regime are somewhat limited, as I believe that's what you're getting at. If you have other proposed alternatives, please let us know in comments.

Doug Karpa (dkarpa@peninsulacleanenergy.com) - 10:26 AM

Q: Super interesting about the differences in SOD and ELCC procurement. Not so much a question as perhaps a suggestion that you perhaps share that analysis, and especially whether the answer changes depending on whether the LSE procures all or predominantly renewables vs. a LSE that procures primarily or entirely gas (under Option 1, my understanding is that's a legitimate strategy). It might go a good ways to blunt some concerns to see that. Thanks for the work on all this.

Barcic, Nathan - 10:57 AM

A: Thanks, Doug.

Rahul Kalaskar (rahul.kalaskar@aes.com) - 10:29 AM

Q: Question about slide 33: "How LSEs can mitigate against shifts in critical hours and Marginal ELCC". Consider a scenario with two LSE 1 & 2, if the LSE 1 portfolio has two technology types A and B, each of 50%. However, LSE 2 has 90% of type A and 10% of type B. How does LSE 1 protect its portfolio against actions from LSE 2? This is an extreme example of how other LSEs impact an individual LSE portfolio. How does CPUC address these concerns or the procurement mandate of specific technology types?

Aaron Burdick, E3 - 12:13 PM

A: See the proposal portions related to the frequency of ELCC studies and whether to bound ELCCs. In general, near-term ELCC changes will be minimized since load/resource changes will be minimized. There is a balance between "protecting LSEs" and them having to manage their own compliance risk as market participants, as they manage energy market risk and other related basic procurement functions.

Mary Neal (mnn@mrwassoc.com) - 10:31 AM

Q: Just to follow up on who is doing LOLE studies, am I correct to assume the RPR will be based on Staff's IRP team LOLE study and the RA team will continue to do LOLE studies for the SOD framework?

Raffan, Neil - 11:11 AM

A: IRP and RA uses cases for LOLE modeling share the common SERVIM modeling platform and data set and Energy Resource Modeling staff to implement

Simon Baker (Simon.Baker@NextEraEnergy.com) - 10:34 AM

Q: The proposal is intended to solve for procurement "orders largely ending after 2028." With CODs mostly 2029-2036, Cluster 14 projects are best positioned to fill this gap. C15 has later CODs. C14 is threatened by lack of LSE contracting post-2028, because projects that received deliverability in 2024 must demonstrate by Aug 2025 that they have a signed PPA or were shortlisted. The RCPMP will not be implemented in time to fix this. How does CPUC see this problem being solved in coordination with CAISO?

Raffan, Neil - 11:54 AM

A: This question has been answered verbally.

Matt Freedman (matthew@turn.org) - 10:34 AM

Q: Is there a backstop procurement mechanism in the event that LSEs fail to engage in sufficient long-term contracting to develop adequate resources to satisfy compliance needs?

A: There is not a traditional backstop procurement mechanism in the proposal. Instead, there is a buffer and a Collective Capacity Reserve to help as collective insurance against a variety of events, including RCPMP capacity deficiencies of LSEs (which are unmitigable in real time), large changes in total load forecast, or unexpected retirements. In contrast to backstop procurement, which may take several years to come online after an LSE is deemed deficient, the CCR will be procured in advance so that there is adequate additional capacity to readily address LSE deficiencies that may not be known until T+0. In addition, Staff will apply a 2.5% buffer to the initial RPN that is necessary to mitigate development risk and/or other potential causes of insufficient resources being online for LSEs to meet year-ahead system Resource Adequacy requirements. The buffer ensures that CPUC-jurisdictional LSEs are procuring and building sufficient resources such that they can collectively enter the reliability year T+0 sufficiently

resourced to meet the CPUC's 0.1 LOLE reliability standard and RA program requirements. The buffer will be above the expected system RA requirements such that total online installed RA capacity by T+0 (including available import capacity) is expected to exceed total RA program requirements, which are expected to be set using forecasted load plus a planning reserve margin that ensures a 0.1 LOLE.

Nick Pappas (Nick@NPEnergyCA.com) - 10:37 AM

Q: In the current RA proceeding, there is a proposal to align the input methods (e.g. SERVM profiles and high-risk load days), capacity accreditation (critical risk days), and PRM methods with probabilistic methods and data used in IRP. This proposal would substantially improve alignment between IRP ELCC and RA SOD fundamentals. Will this be considered and integrated as part of the broader suite of RA proceeding reforms framed in RCPMP?

Draghi, Zoe - 11:06 AM

A: Nick, thank you for your question here. We would encourage that you please include this in comment should you submit them. That would be the best forum for us to consider these questions. Thanks!

Zoe Harrold, GPI (zharrold@clearhorizonsconsulting.com) - 10:39 AM

Q: Can you clarify whether Option II would create instances of duplicative RA and RCPMP penalties on the same resource if the resource is delayed?

Soufiani, Seina - 11:17 AM

A: Zoe: Yes, there could be both expanded RA SOD penalties and RCPMP penalties on the same resource

Nuo Tang (ntang@mrpgenco.com) - 10:40 AM

Q: Can you consider hosting these types of workshops in person in the future? It's very difficult to keep up with fast presentation/content and read/ask Q&A at the same time. It reduces the effectiveness of the workshop.

Withers, Sierra - 10:45 AM

A: Nuo, thanks for the comment. Please add this to comments if you are submitting them. Also, the recording and Q&A transcript will be available to go through again.

Peter Griffes (peter.griffes@outlook.com) - 10:42 AM

Q: How does the CPUC plan to address transmission differences (i.e. deliverability and zonal constraints) between RA and IRP programs under this proposal?

Raffan, Neil - 11:23 AM

A: Hi Peter - pls could you share what differences you see on this?

Matt Freedman (matthew@turn.org) - 10:43 AM

Q: Would RPN compliance be satisfied through procurement of the RA attribute or would the LSE need to procure the bundled output (energy+RA+RECs (if applicable)) from the resource?

Raffan, Neil - 11:29 AM

A: The proposal is for the former. Note that in parallel LSEs are needing to meet the GHG reduction side of the program - the CES option for doing this needs energy/RECs contracting.

Looram, Chris (Chris.Looram@nexteraenergy.com) - 10:44 AM

Q: To expand on my question, what options will an existing asset have to re-contract under Option II. If an existing RA contract rolls off and there is no mechanism for procurement of assets that do not qualify as "new vintage", it could lead to the potential for stranded assets.

A: Chris: Option II has an explicit "new" requirement, as you note. However, its at least implied (if not explicitly stated) that the consideration of "existing" resources would happen in other parts of the proposal, such as the expansion of the RA program to multiple years.

Jerri Strickland (jstrickland@3ce.org) - 10:45 AM

Q: Does the CPUC have an idea of how volatile the critical peak periods may be? Could we see them changing year over year?

Aaron Burdick, E3 - 10:52 AM

A: The critical peak periods will change primarily as a function of the evolution of loads and resources, so their rate of change is function of how fast loads and resources evolve. The regular updates proposed in RCPPP will generally minimize near-term changes (since load/resources do not change much in the near-term). Long-term ELCC forecasts have higher uncertainty but will also be updated regularly to provide LSEs an indication of ELCCs over time.

Sarah Harper (sarah.harper@fervoenergy.com) - 10:45 AM

Q: Harper with Fervo Energy: Thank you for your work on these frameworks. How will these frameworks value the hourly GHG contributions of firm resources such as geothermal that operate 24/7, especially during evening hours?

Aaron Burdick, E3 - 10:49 AM

A: Clean firm resources would A) generally have high and durable ELCC values for reliability compliance, and B) provide RECs/ZECs at high capacity factors. The valuation of (B) will be done by LSEs in their own procurement processes, i.e., LSEs will determine how much they value energy during various hours based on their own valuation frameworks and assumptions therein (energy price forecasts, etc.).

Matt Freedman (matthew@turn.org) - 10:48 AM

Q: Under the CES, would there be any long-term contracting requirement? If no, why is the absence of such a requirement reasonable?

Withers, Sierra - 11:08 AM

A: There would not be any long-term contracting requirement at this time. If you would like to submit other information on this topic to discuss why it is necessary, please include in comments.

Matt Freedman (matthew@turn.org) - 10:50 AM

Q: Under the CES, would LSEs be able to satisfy compliance obligations by procuring unbundled RECs/ZECs without the associated electricity?

Withers, Sierra - 11:13 AM

A: We will get a response back to you here on the transcript. Thanks for the question.

Matt: We can see the benefit of aligning as much as possible with IRP's planning track in its GHG accounting, which only counts the GHG reduction benefits of PCC 1 (e.g., bundled) RECs. However, we want to explore with parties the implications of this, and what allowances for other PCCs could look like under an RCPPP regime.

Matt Freedman (matthew@turn.org) - 10:51 AM

Q: What delivery requirements would apply under the CES for resources located outside of CAISO?

Withers, Sierra - 11:15 AM

A: Hi Matt, in a similar vein to your above question, we will answer this topic in the transcript.

Matt: Similar to our response above, we can see the benefits of adhering to PCC 1 eligibility, but are curious regarding party thoughts on making other types of resources/delivery.

Simon Baker (Simon.Baker@NextEraEnergy.com) - 10:53 AM

Q: Regarding the Master Resource Database and resource accounting process, what happens if, closer to T+0, a resource ID that wasn't dependent on a major transmission network upgrade known to be delayed subsequently becomes delayed due to a transmission upgrade delay? How could the staff proposal be structured to fairly allocate accountability to the appropriate entities, including PTOs whose transmission upgrades may be a cause of project delays?

Barcic, Nathan - 11:48 AM

A: Great question, Simon. We'd want to make sure that these sorts of situations are dealt with fairly, so would be very open to proposals in comments.

Nina Robertson (nrobertson@earthjustice.org) - 10:53 AM

Q: How will the CES meet SB 350's air quality requirements for the IRP --i.e. to minimize localized pollutants with an early priority for disadvantaged communities?

A: The RCPPP design options in this proposal are focused on system reliability and GHG reduction. To the extent that local components to the program should or could be added, those proposals should be put into party comments. It would also be helpful to hear in comments to what extent reductions in GHGs at the system level may play manifest in emissions reductions (of all types, not just GHG) in local areas and communities.

Matt Freedman (matthew@turn.org) - 10:53 AM

Q: How would the CES address the requirement in Public Utilities Code §454.53(a) that "the achievement of this policy for California shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling"?

A: Thanks Matt. You've probably noticed there isn't much in the way of explicit prohibitions for things like resource shuffling in the proposal right now, such as what TURN recommended in comments on the Sept '22 Options paper. What detail would you add re: what those prohibitions would look like, and how you think they could be assessed and then enforced?

Andrew Mills (andrew@cal-cca.org) - 10:54 AM

Q: How would storage's reduction in system-wide solar curtailment be reflected in the storage-contracting LSE's CES compliance?

Aaron Burdick, E3 - 12:08 PM

A: Storage on its own does not generate any RECs/ZECs, hence it would not produce MWh to contribute to CES. If you add storage paired onsite with solar to reduce curtailment (vs stand alone solar), then the extra MWh you generate would count to the CES.

Doug Karpa (dkarpa@peninsulacleanenergy.com) - 10:54 AM

Q: I'm sure its in the proposal, but do the CES requirements include line losses in the retail sales?

Aaron Burdick, E3 - 11:04 AM

A: The approach is similar to how CES is defined via the SB100/1020 targets in the planning track: as a percentage of retail sales (which exclude line losses).

Doug Karpa (dkarpa@peninsulacleanenergy.com) - 10:54 AM

Q: (and storage losses)

Julia Levin (jlevin@bioenergyca.org) - 10:54 AM

Q: Will GHG emissions be evaluated on a lifecycle basis and, if so, using which model? Will all SB 100 resources be assessed on a lifecycle basis or will some be deemed zero emission based on some de minimus level of emissions?

Barcic, Nathan - 12:31 PM

A: Julia: A lot more thinking would have to be done re: if/how to evaluate based on lifecycle emissions. If you have proposals on how to do so, pls do put in comments.

Nick Pappas (Nick@NPEnergyCA.com) - 10:54 AM

Q: Can you describe how RESOLVE assesses exported excess generation from clean resources? My recollection is that these are not netted against the CAISO GHG constraint; would they count for CES?

Aaron Burdick, E3 - 11:08 AM

A: RESOLVE counts MWh delivered to the CAISO towards its CES accounting, including during hours when the system may be in oversupply and a portion of delivered MWh may be exported. In RCP, delivered clean MWh to CAISO would count for CES. There are logistical challenges of not doing this (whose MWh are getting exported?). Welcome your comments on this topic.

rachael koss (rkoss@adamsbroadwell.com) - 10:55 AM

Q: So for CES, the RPS long term contracting and bucket system requirements would not apply?

Withers, Sierra - 11:05 AM

A: The RPS program requires LSEs to procure 65% of their compliance obligation from long-term contracts, defined as contracts with terms of 10 or more years. The RCPPP would not add a longterm contract requirement to the CES; however, the RPS program's long-term contract would remain in place.

Sai Powar (spowar@mcecleanenergy.org) - 10:55 AM

Q: In the section of relationship to CPE procurement, the proposal states that a backstop process would be required if LLT projects fail. What sort of process is the CPUC thinking of?

A: Staff are thinking the risk of centrally procured LLT resources failing or being delayed may warrant some form of backstop procurement. This could occur outside of RCPPP and the impact on LSEs' RCPPP requirements could be handled as part of regularly communicating to LSEs the credit they should expect to receive for their share of centrally procured resources.

Simon Baker (Simon.Baker@NextEraEnergy.com) - 10:56 AM

Q: On slide 70, what's the distinction between "PSP Achieved RPS (from GHG target)" under the RPS vs. "PSPS Achieve CES (from GHG target)" under CES. If they are both from the GHG target, why isn't the number the same?

Aaron Burdick, E3 - 11:01 AM

A: The CES %'s shown on that slide include additional resources (hydro, nuclear) hence the achieved CES is higher than the achieved RPS (that does not include those resources).

Mary Neal (mnn@mrwassoc.com) - 10:56 AM

Q: I want to confirm the CES would not change the RPS percentages. That would max out at 60% unless changed by legislation?

Knierim, Christian - 11:05 AM

A: The 60% RPS is set by statute. However, PUC 399.15(b)(3) gives the Commission the authority to raise the RPS beyond what is in statute. So far the Commission has not done that. I'm not saying that the Commission will do it in the future. I'm just clarifying that the Commission has the option to do it if it deems necessary

Nick Pappas (Nick@NPEnergyCA.com) - 10:57 AM

Q: Will the RDT collection process / IIRP framework assess LSE progress toward meeting their individual and collective CES needs and how this tracks with modeled GHG constraint achievement? Will there be any assessment of LSE CES portfolio alignment with LSE load shapes, as performed currently with the CSP and IIRP framework?

Raffan, Neil - 11:53 AM

A: If I'm following your question Nick, the CES option involves the CPUC monitoring IRP modeling (system level) over time and the extent to which CES % requirements need to be adjusted to meet the GHG mass-based reduction trajectory. This doesn't need LSE-level load shapes to do I don't believe, but please share more in comments.

Michael Colvin (mcllvlin@edf.org) - 10:58 AM

Q: For the 2.5% buffer, why designate the IOUs to do central procurement and not the central procurement entity? Doesn't this set up a conflict between the IOUs and the other load serving entities?

Barcic, Nathan - 12:29 PM

A: Michael: We don't propose using DWR for this. If you have thoughts on them or an alternative, pls provide in comments.

Matt Freedman (matthew@turn.org) - 10:58 AM

Q: What RPS compliance rules would be "leveraged" for purposes of CES?

Withers, Sierra - 11:06 AM

A: The structure of RPS is pretty similarly mirrored: the compliance periods, the credit scheme, the compliance reports, the penalty amount as well as others

Andy Brown (abrown@b2energylaw.com) - 10:59 AM

Q: on CES, since this is a counting of MWh over multi year with increasing obligation over the years, and the pool of resources subject to CAISO dispatch decisions (including curtailments), what happens if a LSE's resources are not dispatched as much as the resource would be capable of producing? Will that result in a \$50/MWh penalty although the procurement was done?

A: RESOLVE counts MWh delivered to the CAISO towards its CES accounting, including during hours when the system may be in oversupply and a portion of delivered MWh may be exported. In RCPPP, delivered clean MWh to CAISO would count for CES. There are logistical challenges of not doing this (whose MWh are getting exported?). Welcome your comments on this topic. Therefore, this scenario would not result in a 50\$/MWh penalty.

Matt Freedman (matthew@turn.org) - 11:00 AM

Q: If LSEs fail to comply with CES targets, would the maximum penalty be \$50/MWh? Would the LSE also be required to make up its procurement deficiency?

A: The maximum penalty proposed for deficient LSEs would be the penalty of \$50/MWh for each MWh they are deficient within the compliance period. Similar to RPS, the LSE would not be required to make up its procurement deficiency. However, it should be noted that the next compliance period will be an even higher CES percentage to meet.

Ana Garza-Beutz (agarza@socalgas.com) - 11:00 AM

Q: Has CPCUC engaged with WREGIS about implementing ZECs?

Withers, Sierra - 11:19 AM

A: Yes, we have engaged with WREGIS on what the implementation of this would look like.

Mary Neal (mnn@mrwassoc.com) - 11:00 AM

Q: You mention a separate process to determine resource eligibility for the CES, but ultimately the CPUC will decide? Or who?

Barcic, Nathan - 12:28 PM

A: Mary: We anticipate the CPUC will have to adopt what the eligible resource list should be for this program. If you have thoughts on what that list should be, pls provide in comments.

Mary Neal (mnn@mrwassoc.com) - 11:01 AM

Q: Will LSEs be required to purchase energy with the ZECs for CES target compliance much as the RPS program has requirements for PCC1 RECs? Or will unbundled ZECs be allowed for all the procurement?

Withers, Sierra - 11:20 AM

A: This was a question earlier that we will be answering in the transcript. Thanks.

A: We can see the benefit of aligning as much as possible with IRP's planning track in its GHG accounting, which only counts the GHG reduction benefits of PCC 1 (e.g., bundled) RECs. However, we want to explore with parties the implications of this, and what allowances for other PCCs could look like under an RCPPP regime.

Michael Colvin (mcllvin@edf.org) - 11:01 AM

Q: For the zero emissions credit, would there be a vintage requirement? Or would we be giving new value to legacy units the state may no longer want like large hydro, nuclear, etc?

Withers, Sierra - 11:26 AM

A: There is not a vintage requirement for the CES.

Nick Pappas (Nick@NPEnergyCA.com) - 11:01 AM

Q: Will the CES incorporate any eligibility requirements to ensure necessary new build resources are developed and preventing resource shuffling as directed in PUC 454.53?

Withers, Sierra - 11:28 AM

A: The CES as a proposed option right now does not have any eligibility requirements having to do with new build resources. Welcoming discussions of this within comments.

Matt Freedman (matthew@turn.org) - 11:02 AM

Q: Would "conditions beyond the LSE's control" that warrant a waiver include insufficient resources available at reasonable prices? Would the LSE's procurement practices (e.g. reliance on short-term contracting) be considered in the waiver process?

Withers, Sierra - 11:23 AM

A: Hello Matt, as of now, the proposal states that a waiver could be possible. Please add any thoughts on this into your comments.

Rahul Kalaskar (rahul.kalaskar@aes.com) - 11:02 AM

Q: Does CPUC's GHG modelling incorporate EIM exports and its impact on RPS and CES when CAISO's entire load is being served by renewable resources?

Aaron Burdick, E3 - 11:41 AM

A: Yes, IRP modeling includes exports when CAISO is in oversupply, subject to neighboring region demands for those exports.

Shayna Levia PCE (slevia@peninsulacleanenergy.com) - 11:02 AM

Q: how will retirements to other regulated programs (LCFS) be reflected in CES compliance reports?

A: Staff would appreciate comments on how such programs might fit with the CES design option. Generally electrifying load may or may not help with CES compliance – it would depend on what resources a load serving entity procures.

Hillary Hebert (hillary@hmnenergy.com) - 11:03 AM

Q: Regarding indicative ELCC values, it would be helpful if you provide a brief explanation for what factors may be causing their increase/decline (e.g. solar is increasing in value because of the increase in storage and the increase need for charging). Even though the values you provide just examples, marginal ELCCs are inherently volatile, and we know these are not the final values, this additional step would help clarify the way it works.

Soufiani, Seina - 11:36 AM

A: Hillary: I'd refer to slide 32 of the Workshop slides on the RCPPP website, which shows the reasons for why marginal ELCCs could change. Also, in section 5.1.3 of the Staff Proposal, Staff asks stakeholders to provide comment on whether marginal ELCCs should be bounded or unbounded.

Ana Garza-Beutz (agarza@socalgas.com) - 11:03 AM

Q: The staff Proposal states that staff will conduct an initial assessment based on preliminary evaluations of the various calculations involved in both Option I and Option II. And that these assessments could inform the eventual adoption and implementation of either option.

When will these assessments occur? And will stakeholders be able to review and provide comment?

Soufiani, Seina - 11:37 AM

A: Ana: we are currently in the process of potentially updating the RDT to get information to evaluate the options. I believe stakeholders will be able to provide input.

Ed Kiolbasa (ed.kiolbasa@gdsassociates.com) - 11:05 AM

Q: Will the RCPPP proposal ensure alignment with the CAISO process and when PPAs have to be signed? eg. Cluster 14 projects out in 2030 and beyond getting picked up in the procurement signal?

Raffan, Neil - 12:10 PM

A: This question has been answered verbally.

Matt Freedman (matthew@turn.org) - 11:05 AM

Q: Could an LSE rely entirely on existing zero carbon/renewable resources to meet CES obligations? Is there any new resource obligation?

Withers, Sierra - 11:38 AM

A: There is no new resource obligation for the CES portion of the proposal.

Hillary Hebert (hillary@hmnenergy.com) - 11:08 AM

Q: If we submitted questions before the workshop, will those be included in the final Q&A doc or should we ask them again here?

Withers, Sierra - 11:39 AM

A: Please ask them again here if they have not been answered already.

Cathleen Colbert (cathleen.colbert@vistracorp.com) - 11:09 AM

Q: (sorry if this is a repeat) I'm wondering if staff has considered or would like workshop whether the program should include flexibility needs as a prudent complement to CES that would set requirement for min load flexibility/shifting from resources such as fast ramping resources, demand response, distributed energy resources, and energy storage?

Raffan, Neil - 12:04 PM

A: Staff have focused the reliability side of the program on system reliability; we are not seeing flexibility as a key constraint to transitioning our resource mix. Please comment how you see it differently, and also why this might be a CES-related matter. I'm interpreting it as more reliability-oriented.

Andy Brown (abrown@b2energylaw.com) - 11:10 AM

Q: for existing resources nearing the end of its mechanical life, where are the incentives on owners reinvesting in those sites? RCPPP makes certain retirement assumptions, but actual retirement timeline

by resource may differ, and refreshing existing sites for repowering / life extension would leverage existing infrastructure, but wasn't clear from the proposal how that happens.

Raffan, Neil - 12:13 PM

A: Existing resources would be eligible to count towards compliance with Option 1 of the reliability side of RCPPP, as well as to the CES option for GHG-reduction. Option 2 for reliability would have RA expand to multi year for system reliability and so contracts with existing resources would be eligible for compliance there.

Adam H. (ahatefi@gridwell.com) - 11:10 AM

Q: Procedural question for ALJ Fitch Primarily: How do you envision the robust record developed in the RCPPP will be transferred into the RA proceeding? There will be many changes for RA to consider/ make after the RCPPP chooses an "option". It would be great if the record did not need to be duplicated (some parties raised this in a motion back in 2023). thank you! (sorry if this is submitted twice)

A: Staff envision that IRP will make a threshold decision first about which option to choose for the reliability portion of the program. Once that decision is made, it will drive how much (or how little) further RA decision-making is needed. Thereafter, if there is record (in the form of party comments) that can be used in the resource adequacy proceeding for future decision-making there, the IRP and RA judges can coordinate on how to make that happen without the need for parties to submit duplicative or repetitious comments.

Nick Pappas (Nick@NPEnergyCA.com) - 11:12 AM

Q: Re: RESOLVE exports and counting, will the revised RESOLVE package modify the logic or underlying regional dynamics impacting overgeneration export versus curtailment? We submitted data in the 2023 IRP proceeding identifying some gaps between historical observed curtailment being sizeably larger than what was modeled in RESOLVE moving forward. How would RCPPP navigate potential differences between modeled CES generation and actual operational CES generation? Would that risk fall on LSE compliance?

Aaron Burdick, E3 - 12:01 PM

A: RESOLVE and SERVM are not nodal models so they will not model all curtailment that occurs due to local Tx constraints. Recent updates to capture N<>S zonal limits will better capture internal CAISO

constraint driven curtailment. It will be up to LSEs to ensure their delivered MWh meet the CES target * their retail sales and to manage curtailment risk as a part of that.

Nina Robertson (nrobertson@earthjustice.org) - 11:12 AM

Q: How and when will "clean energy" be defined? This seems like a fundamental issue given the different resources contemplated across applicable statutes (renewable vs. zero carbon).

Withers, Sierra - 11:58 AM

A: We will be stakeholdering this decision, but do not have a date set for the implementation of these details. Please add thoughts to this process in comments.

Matt Freedman (matthew@turn.org) - 11:12 AM

Q: Under CES, would LSEs be required to file long-term plans detailing their proposed procurement strategy and expected resource mix?

Aaron Burdick, E3 - 12:06 PM

A: Welcome comments on this topic. There could be a check during LSE IRPs of their CES positions and/or a CES row added to RPS Procurement Plan filings.

Andy Brown (abrown@b2energylaw.com) - 11:12 AM

Q: Could staff outline all the compliance submissions deadlines for RCPPP, RA, IRP and RPS and highlight where anything might be streamlined as opposed new incremental compliance deadlines?

Withers, Sierra - 11:53 AM

A: This question has been answered verbally.

Withers, Sierra - 11:53 AM

A: We will continue thinking on how to streamline these processes. Welcoming comments on how best to do this. Thanks

Luke Nickerman (luke.nickerman@pge.com) - 11:12 AM

Q: Under Option II, what's the initial thinking on determining which resources are retiring? For example, what assumptions would be made for hydro resources?

Soufiani, Seina - 11:55 AM

A: Luke: Need determination under both reliability options would be based on calculating the marginal ELCC percentage of each resource class in the adopted portfolio. We currently use assumptions for retirements in our IRP modeling to create portfolios, so I would assume that similar retirement assumptions that we use in IRP modeling would apply, since Option II would be based on an adopted portfolio.

Kailash Raman (kraman@formenergy.com) - 11:13 AM

Q: A bit confused by the application of marginal ELCC here. My understanding is that marginal ELCC is only applicable to marginal (incremental) resources. I would expect that as a resource is brought online, it is assigned a certain marginal ELCC; and then the next set of resources brought online would receive a separate set of marginal ELCC. Option 1 appears to apply a marginal ELCC value all resources (not just marginal ones) - what is the rationale for this?

Aaron Burdick, E3 - 11:21 AM

A: A vintaged approach is not proposed here, in part due to it requiring an arbitrary vintaging baseline and challenging reconciliation between ELCC vintages. The basic rationale is that existing resource (retention) and new resource (builds) are substitutes for one another for reliability needs. Both can be "marginal" (market entry vs. market exit).

Matt Freedman (matthew@turn.org) - 11:14 AM

Q: Under CES, would LSEs be allowed to bank excess procurement in one compliance period and apply that excess to a future period compliance obligation?

Soufiani, Seina - 11:47 AM

A: Matt: The CES option in the Staff Proposal does not currently allow for banking between compliance periods

Luke Nickerman (luke.nickerman@pge.com) - 11:15 AM

Q: Does Energy Division have a sense of what needs to be addressed prior to implementing multi-year RA under SOD?

A: The concepts related to multi-year RA have been considered in proceedings, primarily RA, for years at this point. Thus we think a robust record exists to inform next steps. We also expect to find out more over the course of stakeholder interaction vis a vis this proposal. However, if you have thoughts or believe some considerations are missing, please add into comments.

Luke Nickerman (luke.nickerman@pge.com) - 11:16 AM

Q: Since the CCR will not have RA being allocated, do these resources have to be RA-eligible?

A: This is TBD. Please add this into comments if you have thoughts on the CCR allocation process and its relation to RA-eligibility.

Cunningham, Patrick (Patrick.Cunningham@cpuc.ca.gov) - 11:17 AM

Q: The Proposal says that central procurement credits would be given to LSEs "at the same time as their RCPPP filing obligation". I assume that's when LSEs have to submit their RCPPP compliance filings, but that would mean LSEs would not be able to plan procurement with consideration of those credits. When exactly would those credits be sent out?

A: The time when we release the "RCPPP filing obligations" refers to when Staff release obligations, not when filings are due. Assuming you are referring to the CCR, the Proposal currently states that IOUs should identify CCR resources at the time they seek contract approval and cost recovery. Staff are also asking a question on Incorporating Centrally Procured Resources in Section 5.1.7 of the Staff Proposal for further comment.

Luke Nickerman (luke.nickerman@pge.com) - 11:25 AM

Q: There is some conflicting language in the paper on the start year for the reliability. Can you clarify the start year for reliability? Is it 2030 or 2031?

Soufiani, Seina - 11:49 AM

A: Luke: The official start year would be dependent on when the CPUC would adopt the program, which is currently indeterminate.

Franco Ghadiri (franco.ghadiri@mainspringenergy.com) - 11:27 AM

Q: Franco Ghadiri with Mainspring Energy here. Not a question but want to share our support another workshop in person. Thanks.

Withers, Sierra - 11:33 AM

A: Thanks for your input Franco.

Nick Pappas (Nick@NPEnergyCA.com) - 11:29 AM

Q: One more comment on process: highly recommend providing specific structure and framing that informs specific design choices and working down toward implementation details.

Withers, Sierra - 11:50 AM

A: Thanks for your input Nick.

Soufiani, Seina - 11:57 AM

A: Nick: Thanks for the feedback, we will take this into consideration post-workshop

Hillary Hebert (hillary@hmnenergy.com) - 11:31 AM

Q: Please provide additional rational/context for the proposal to define "new" resources as those that are 10 years old or less.

A: As noted on pages 19-20 of the proposal, new vintaged resources are intended to spur all LSEs to make investments in supporting the new capacity for the system but allow for some flexibility in the timing of those new resources. In setting a definition for "new vintage resources", there is recognition that most new resources require a minimum of 10 years of contract length, and traditionally most

capacity was expected to have a useful life of 30-40 years so only a minority of the fleet should need to be “new” within any given decade.

Excerpt:

“New vintage resources” are defined as those that came online or will come online no more than 10 years before the compliance year. This definition of new resources will serve to “give credit for and take into account proactive and early procurement by LSEs,” as required by D.23-02-040.12 LSEs will not necessarily need to bring online new resources each year but rather show a portfolio of resources that contains eligible new resources. This will ensure that resources brought online to meet CPUC-jurisdictional LSE needs will continue to serve CPUC-jurisdictional LSEs (i.e., new resources will not be sold out of state once online.).

In setting the new RPN, Staff will determine an assumption for the rate of retirements of existing resources that will reduce the number of existing resources in the model, which will in turn increase the number of new resources required to be procured to maintain reliability. The new resource need will therefore be a function of (A) online (plus in-development and planned online) resources vintaged as “new” using the 10-year-prior definition, (B) load growth, and (C) Staff’s assumptions for the rate of retirement of existing resources. 9. Staff will annually update the RPN, the existing resource retention and retirement assumptions, and the resulting new reliability procurement and planning needs, for each year.

Petet Griffes (peter.griffes@outlook.com) - 11:36 AM

Q: As I understand it, the need determination under ELCC includes energy-only resources that are excluded from contributing to reliability under the RA program. How accurate will the forward reliability analyses reflect shorter term reliability needs?

A: Please see Staff Proposal section 3.1.4 where it is proposed that compliant resources will have Transmission Plan Deliverability, similar to what the RA program requires. The resource accreditation values that are applied would be marginal ELCCs. These ELCCs are calculated based on each resource type’s expected performance during critical periods. The studies don’t involve overlaying regulatory constructs such as energy-only but rather directly model physical system conditions, looking at all resources for all hours of the year and accounting for all factors that can limit their availability, including variability in output,

Hillary Hebert (hillary@hmhenergy.com) - 11:40 AM

Q: Seina thank you for the response on indicative ELCC values. Slide 32 is helpful but too generic. It would be helpful to have a description of why each resource's indicative ELCC value is what it is. The purpose would not be to hold you to those values, but to increase understanding of which resources are vulnerable to which portfolio effects. Thanks for considering.

Soufiani, Seina - 11:50 AM

A: Hillary: Thanks for the feedback, we will take this into account

Hillary Hebert (hillary@hmnenergy.com) - 11:41 AM

Q: Since CAISO is reserving Transmission Plan Deliverability (TPD) for specific resource types at specific locations, has the CPUC considered whether it should be requiring procurement of those resource types and/or locations? Has the CPUC considered the consequences of the possibility that the CAISO might reserve deliverability for resources that are ultimately not procured? How might this impact the ability for LSEs to achieve the procurement targets outlined in the RCPPP?

Raffan, Neil - 12:32 PM

A: Staff proposes that RCPPP not be designed/expected to address procurement of all the resource types needed in the IRP portfolio. Some resource types e.g., "long lead-time" will need separate/specific CPUC action e.g., utilizing authority under AB 1373 for centralized procurement. The RCPPP proposal does discuss how centralized procurement would interact with RCPPP though.

John Newton Ava (jnewton@avaenergy.org) - 11:41 AM

Q: My Q "Regarding Cem's ..." has been answered. Thanks!

Hillary Hebert (hillary@hmnenergy.com) - 11:41 AM

Q: Has the CPUC considered whether it will provide direction/guidelines to LSEs regarding commercial interest point allocation for the CAISO's interconnection process? CAISO has expressed that the intent of these scores should not be used to extract value in exchange for points. Will the CPUC consider providing similar direction in this venue?

Raffan, Neil - 12:39 PM

A: CPUC staff have and continue to engage in the CAISO's Interconnection Process Enhancements effort, generally supporting the strong linkages that are developing between LSEs' procurement, resource

development (incl interconnection) and transmission planning. Staff expect that the RCPPP would greatly help this further. I don't think the RCPPP design needs to get into the specifics of how LSEs interact with the CAISO's process, but please put in comments if/how you see it differently.

Nick Pappas (Nick@NPEnergyCA.com) - 11:49 AM

Q: Are you seeking substantive feedback or more substance-focused process recommendations in the remaining time we have scheduled?

Barcic, Nathan - 12:25 PM

A: Nick: We're wrapping up. Be on the lookout for another email from us re: next steps in next 1-2wks.

Nick Pappas (Nick@NPEnergyCA.com) - 12:09 PM

Q: If we are anticipating need in 2029-2030, is it possible to do the underlying analysis now (in parallel with design) to inform the market? To the broader discussion on urgency for near-term action, that information would be highly valuable to the market to move necessary projects forward even if the exact compliance requirements are not ready.

A: Yes, given the reliability need determination methodology staff proposes for both RCPPP reliability options is broadly the same as what is used for other IRP use cases (portfolio development and setting the filing requirements for load serving entities' individual IRPs), staff have and will continue to provide analysis on need. However, taking time to develop proposals, vetting them, and turning them into policy/new requirements independent of developing and adopting RCPPP would likely involve significant incremental effort. Comments on this are appreciated.

Cunningham, Patrick (Patrick.Cunningham@cpuc.ca.gov) - 12:12 PM

Q: Does the proposal to lock RPR within T+0 to T+2 apply only to RCPPP obligations, or also to RA requirements for either or both Option 1 and Option 2?

A: While the proposal does not explicitly indicate, the current RA program does not lock obligations across years. Extending the current RA framework would require updated annual multi-year RA system requirements, based on the most recent load forecast.

John Newton Ava (jnewton@avaenergy.org) - 12:14 PM

Q: Thanks CPUC team for a good workshop discussion. A lot of work has gone into the proposal. We're looking forward to more collaboration to get this right!

Sanada, Cristy (csanada@caiso.com) - 12:14 PM

Q: Thank you all!

Nick Pappas (Nick@NPEnergyCA.com) - 12:16 PM

Q: When will Q&A be posted? It would be helpful to receive early next week to support planned stakeholder engagement.

Withers, Sierra - 12:18 PM

A: We will release next week, but hopefully earlier in the week. Thanks.