## Reliable and Clean Power Procurement Program Workshop

September 20, 2022

## Written Q&A Log

- Doug Karpa: On the accounting piece, can you shed light on how much extra you anticipate it will cost to not have alignment between IRP and RA, since optimizing for \*both\* ELCC and 24 hour slices is likely to drive excess procurement?
  - a. I think your question begins with an assumption that the two programs are inevitably unaligned simply because their designs, on the surface, could be quite different. Noting that IRP program development is still in early days, and we're only discussing options here, it'd be very hard to answer your question. It's also not a forgone conclusion that the two programs are un-aligned. Put differently, I'm not sure it's obvious that the costs you describe would be any more or less than the costs under the "old" paradigm, where IRP used marginal/annual ELCCs and RA annual/monthly ones.
  - b. It would be good if you can comment on this, and attempt to quantify the cost. On the flipside it would seem important to also consider if 24 hour slide approach could be used through the mid to long term.
- 2. Christian Lambert: (Cal Advocates): The "persistence of the attributes" compliance provision allows for a hypothetical whereby a CAISO-contracted resource rolls off its CAISO LSE contract and then supports exports to another BA. Would that constitute resource shuffling and (if GHG-emitting) possibly an increase in emissions attributable elsewhere in the western grid? How do staff envision the CPUC's role in preventing those outcomes pursuant to SB 100 / PUC 454.53?
  - a. See below.
- 3. Christian Lambert: (Cal Advocates): the forward showing example entails 100% for forward years 1-5. LSEs currently re-contract for a sizeable volume of unspecified RA imports year by year. Is the t+5 100% forward showing example a policy statement about preferences for in-CAISO resources over unspecified imports for RA?
  - a. I'm not sure it amounts to a policy position, in and of itself. However, one could see the benefits of relying on in-CAISO resources to meet our future goals instead of out-of-CAISO ones. If you think this potential requirement could drive such an outcome (or not), please let us know in comments. Ditto re: your concern about resource shuffling.
  - b. No specific policy statement. Illustrative to advance the conversation. Please explore your thinking on in-CAISO vs import in comments.

- 4. Mary Neal: The paper discusses wanting to complement RA. RA uses the slice of day technical method of determining need. Why is the CPUC considering using a separate technical method of determining reliability need for IRP? It doesn't seem complementary. What is the value add?
  - a. Energy Division uses a common model and data set for LOLP modeling across RA and IRP. The RA program is focused on the near-term, and IRP on the mid-to long-term, so staff expect different approaches to need determination, allocation and compliance should be considered.
- 5. Maren Wenzel: Perhaps echoing Nick's question a bit, regarding the timing of ELCCs and compliance, is the thinking that at some point an LSE would "lock in" the ELCC value? For instance, an LSE would be guaranteed the ELCC value in the year it contracts a resource even if it comes online 5 years later? Or would LSEs bear some ELCC risk if they change between contracting and the compliance check?
  - a. I can see pros and cons with both. Certainty vs. allowing for planning conditions to change. Pls comment on this. Perhaps ELCCs could be able to shift but only a limited amount.
- 6. Maren Wenzel: Related, if the ELCC values are locked in at the time of contracting (or before), how do we deal with issues when the ELCCs from 5years+ before are incorrect given the system doesn't develop as expected?
  - a. It will be important to regularly and predictably update reliability need determination and resource counting as conditions change. Please share more about this in your comments.
- 7. Mary Neal: If ELCC analysis is used to calculate firm energy equivalents, it sounds like SFPFC and ELCC are really the same thing. What is the value add of the SFPFC approach?
  - a. The rationale of the SFPFC approach is that contracting for capacity isn't enough, and that firm energy commitments are needed to properly incentivize generators.
- 8. Doug Karpa: What specific express statutory authorization has the Commission identified to a restructuring of the market and procurement contract structure that the SFPFC entails?
  - a. Please share legislative barriers you are seeing in your comments, and/or where legislative change might be needed, to implement a particular option.

- 9. Scott Olson: For Reliability, a number of options were outlined for IRP program design, some which reflect current RA program design (slice of day) and some which do not (ELCC and SFPFC). Instead of a separate IRP Reliability showing, would staff be open instead to modifications of the existing RA program to meet the needs outlined in the white paper? For example, requiring multi-year System RA showings in RA filings and a certain percentage of RA from long-term contracts (similar to current RPS requirements)?
  - a. Paper only touches on RA and new program interaction at a high level, and comments and ideas on this would be very welcome.
- 10. Mary Neal: If ELCCs are used to define reliability benefits, will they be fixed in advance? For instance, will an LSE know in 2025 what the reliability contribution of a resource will be in 2030?
  - a. For each procurement program cycle an ELCC forecast will need to be developed and provided to LSEs. However, the ELCC forecast may change between procurement program cycles. For instance, if state policy changes, resource costs, or other factors lead to different 2030 portfolio, which would cause some changes to resources ELCCs. This allows the resource counting values to flexibly evolve as policy and market dynamics evolve over time.
- 11. Luke Tougas: Could customer-side programs (e.g., EE, DR, DERs) qualify as eligible resources under a Clean Energy Standard?
  - a. Paper suggests demand and supply side resource should all be eligible to compete.
- 12. Doug Karpa: What are your thoughts on the challenges of estimating a mass based target system, compared to a Clean Energy Standard approach? (I had been under the impression that the CES would be simpler for the CPUC to implement, but I'm curious whether than impression is true).
  - a. Both options have their challenges. A CES may have some simplicity benefits in terms of design, compliance and enforcement, e.g., not needing to maintain the Clean Power System calculator. Also, many elements like the compliance periods are already established in RPS. That said, there may be a cost in the form of reduced accuracy with respect to how an LSE's clean energy portfolio translates into actual GHG emissions reductions.
- 13. Mary Lynch: What do you see as the pros and cons of the Mass based versus RPS approach from both policy and implementation perspective?
  - a. There are pros and cons of both approaches. Both build off existing programs (IRP planning track and the RPS) so I think either could be implemented and administered. I can't say for sure at this point which option would be simpler for LSEs and the CPUC, but we're very interested in party perspectives on that question.

- 14. Christian Lambert: (Cal Advocates): the MTR Decision included an "additional thermal retirements" allowance as a component for the need determination. What element of the programmatic approach will fulfill the same function? If none, what happens if and when a resource seeks retirement in advance of the assumed retirement date in the WECC ADS - backstop procurement?
  - a. This is a big question. You'll notice some ink on this in the paper. Part of it could potentially be addressed by having the program cover existing resources as eligible (instead of just new resources), but would be curious about your thoughts in comments if you have details of program design in mind.
- 15. Mary Neal: A 15 MMT target for 2045 is mentioned on page 24 of the Staff Paper. Has that been adopted by the CPUC? If so, can you point me to the reference?
  - a. See recent discussion of 2045 GHG targets in this recent ALJ Ruling: <u>https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M485/K625/48562591</u> <u>5.PDF</u>
- 16. Jake McDermott: How do staff translate the mass-based GHG target into a corresponding CES target?
  - a. This conversion currently takes place in the RESOLVE model, and it is reported out as the "SB 100%" in the RESOLVE Results Viewer.
- 17. Mary Neal: Questions about "fixing ELCCs in advance" also similarly apply to the CSP calculator if it is used for compliance. When will that be known because currently they change in every IRP cycle.
  - a. Setting an appropriate frequency (and lead time) for things like ELCCs, elements of the CSP tool, or similar is going to be difficult. Would be curious about what you and others think the right frequency is. There could be a world where annually is too frequently, but every 5yrs would be too infrequently. That's part of why the paper raises the concept of "vintaging" for key assumptions like these.
- 18. Julia Levin: To meet the GHG targets, will all SB 100 resources be assessed on a lifecycle carbon intensity basis?
  - a. IRP does not currently use a lifecycle analysis when estimating GHG emissions. Incorporating lifecycle emissions was not proposed as an option in the staff paper, but if you think we should consider that, please suggest it in comments.
- 19. Helena Oh: Are we assuming that the LSEs will try to procure resources that meet both reliability and GHG reduction needs or will there be some coordination to optimize future procurement orders to meet both reliability and GHG reduction needs?
  - a. Every LSE will need to develop their own procurement strategy, but presumably they will try to optimize to meet both sets of targets where possible. Program design will seek to make rules as clear as possible to allow LSEs to do that. The LSE Planning Track is also a venue for LSEs to consider how they might procure to meet their GHG and reliability targets.

- 20. Doug Karpa: Very helpful note around process. On that point, are you envisioning some more workshops after the staff proposal?
  - a. To the extent that we're building up to a future, more focused, staff proposal for this program -- yes, we'd expect more stakeholder engagement.
- 21. Scott Olson: The Clean Energy Standard (CES) proposal appears to align well with the existing RPS program and that it could be adopted as a modification to the existing RPS program requirements and showings instead of a separate obligation. Is that how staff envisions CES showings would work to meet the white paper approach?
  - a. As noted in the Option Paper, to minimize time and effort for LSEs and staff, the program design should consider whether the new procurement reporting and tracking requirements can be combined with the current annual RPS compliance reports. We welcome party comment on how this could be done, while also streamlining filings with the IRP planning track.
- 22. Mary Neal: From page 24 of the Staff Paper: "Separate CSP calculator-like tools may need to be developed for a forecast of hourly system emissions (for forward showings) and for actual historical system emissions, depending on whether and how the CPUC decides to check LSE compliance against actual system conditions that occurred" My question: Is the Staff inviting comment on whether the CPUC should check LSE compliance against actual system conditions? IS that in scope of this proceeding?
  - a. Yes, that is in within scope and we are inviting comment on that topic. As noted elsewhere in that section, other backward looking mass-based compliance options include integration with the CEC's Power Content Label program and a simple assessment of whether LSEs brought/kept online all the resources that they included as contracted resources in their forward-showing CSP calculators.
- 23. Nuo Tang: How does the GHG model account for hybridized thermal peakers that would significantly reduce the emissions output of the thermal resource? Does that require operational parameters of the thermal resource?
  - a. The CSP calculator currently does not assign specific emitting units to LSEs, but rather looks at their net energy position (after storage dispatch) vs. the emissions rate of the market. It does not directly allow for hybridizing peakers to count for GHG reduction. Please refer to the CSP calculator documentation for details and welcome any suggested improvements in your comments.
- 24. Doug Karpa: The question of whether these externalities even exist is a good one. Can you point to analyses or data that dig into the question of whether LSEs have \*market\* power over each other? Isn't that a question for CAISO's DMM?
  - a. I think CAISO DMM would be a good source on the question of whether there is generator market power. Sharing LSEs' experience in procurement processes would be helpful to inform about market power between LSEs.

- 25. Christian Lambert: (Cal Advocates): Objective 11 of the paper is "Co-optimize transmission planning with procurement." I'm not sure which parts of the paper correspond to implementing this objective. Can you shed more light on what transmission-related IRP issues will be dealt with in the planning track vs in the new procurement program?
  - a. There are a couple pieces where it might apply, but noted re: your point of overlap w/ the planning track. The lack of obvious connection in the paper might point to the need to highlight that better in future work products. The major one that comes to mind for me is: if/how procurement signals can be sent that correspond to known information about Tx topography and/or interconnection.
- 26. Clarice Schafer: Can LSEs purchase offsets to meet GHG targets?
  - a. This has not been proposed as an option in the staff paper, but you think we should consider that, please suggest it in comments.
- 27. Clarice Schafer: To what extent, if any, are Scope 3 emissions considered in your accounting?
  - a. This has not been proposed as an option in the staff paper, but you think we should consider that, please suggest it in comments.
- 28. Nuo Tang: to confirm, if Option 3 were adopted, this procurement program would require LSEs to meet some portion of % their X year ahead load by 12 months by 24 hours?
  - a. Yes, as written. Comments on if that is appropriate, and/or how to make it more workable please.
- 29. Matthew Langer: Has staff observed compliance deficiencies in the RPS program that lead to the suggestion that forward showings with enforcement is necessary in a GHG-reduction framework?
  - a. Staff has not observed deficiencies in the RPS program. The RPS program includes both forward showing requirements (I.e., Annual RPS Compliance Reports) and enforcement mechanisms. The GHG design elements in the staff paper are meant to build on the successes of the existing RPS and IRP planning processes.
- 30. Anja Gilbert: When we talk about expression of need, will the scope of this proceeding also include a look at expending our metrics for reliability the LOLE (frequency of events in days per year) to also include duration of outage events and or magnitude of energy not served?
  - a. Good question, Anja. Introducing the use of new metrics, such as magnitude of unserved energy and/or event duration could provide more detail to the reliability picture, and could potentially help any procurement program see more depth, so to speak. We'd be open to trying to incorporate, but do you have any recommendations? First instinct would be that this could be applied at the need determination stage, but curious about your thoughts.