BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
03/24/22
03:25 PM
R2110002

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Reforms and Refinements, and Establish Forward Resource Adequacy Procurement Obligations	Rulemaking 21-10-002

CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE AND UNION OF CONCERNED SCIENTISTS OPENING COMMENTS ON THE FUTURE OF RESOURCE ADEQUACY WORKING GROUP REPORT

Mark Specht
Western States Energy Manager & Sr. Analyst
Union of Concerned Scientists
500 12th Street, Suite 340
Oakland, CA 94607
Email: mspecht@ucsusa.org
(510) 809-1562

For Union of Concerned Scientists

Deborah Behles
Counsel for CEJA
2912 Diamond Street, No. 162
San Francisco, CA 94131
Email: deborah.behles@gmail.com
(415) 841-3304

For California Environmental Justice Alliance

Dated: March 24, 2022

CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE AND UNION OF CONCERNED SCIENTISTS OPENING COMMENTS ON THE FUTURE OF RESOURCE ADEQUACY WORKING GROUP REPORT

Pursuant to the March 4, 2022, "Administrative Law Judge's Ruling Seeking Comments on the Future of Resource Adequacy Working Group Report and the Local Capacity Requirement Working Group Report," the California Environmental Justice Alliance ("CEJA") and the Union of Concerned Scientists ("UCS") respectfully file these opening comments on the Future of Resource Adequacy ("RA") Working Group Report ("Future of RA Report").[1]

INTRODUCTION AND SUMMARY

CEJA and UCS thank the California Public Utilities Commission ("CPUC" or "Commission") for the opportunity to comment on the Future of RA Report. CEJA and UCS also thank the many workshop organizers and facilitators for all of the hard work that went into coordinating ten workshops and compiling the working group report. While it is clear that parties have by no means come to consensus, CEJA and UCS greatly appreciated the opportunity to assess party proposals in a public forum, which allowed for better understanding of proposals and the opportunity for parties to refine their proposals in response to feedback.

Over the course of the workshops, two main proposals have emerged: SCE's 24-slice proposal and Gridwell's 2-slice proposal. On the one hand, Gridwell's 2-slice proposal essentially maintains the existing RA framework and adds a "net peak resource assessment." On the other hand, SCE's 24-slice proposal requires a wholesale revamp of the Commission's RA framework by instituting hourly RA obligations.

At this time, CEJA and UCS do not support either proposal. CEJA and UCS have significant concerns with both proposals and multiple concerns specific to SCE's 24-slice proposal. These concerns are discussed at length in these comments, and CEJA and UCS also offer a summary of our comments here:

1. The Public Utilities Code and Commission precedent require RA reform to advance California's environmental goals.
2. The Future of RA report does not provide any analysis of which proposal best advances environmental requirements.

[1]Future of Resource Adequacy Working Group Report, Track 3.b2 of the RA Proceeding (Feb. 2022).

3. The calibration of RA obligations to ensure reliability may be more challenging with SCE's 24-slice proposal.
4. Existing renewable resource counting rules are incompatible with SCE's 24-slice proposal, and party proposals for new rules rely on analytically ungrounded determinations and are inadequate substitutes for Effective Load Carrying Capability ("ELCC") calculations.
5. SCE's proposal may hamper the transition to clean energy through the unnecessary retention of natural gas power plants.
6. SCE's 24-slice proposal may end up being much more complex than the current RA framework and Gridwell's 2-slice proposal.
7. The Maximum Cumulative Capacity ("MCC") buckets should be retired regardless of the proposal selected by the Commission.
8. CEJA and UCS do not support either proposal. If the Commission wishes to proceed with either slice-of-day proposal, the Commission should analyze the impact of the proposals, finalize critical details, and include guardrails before committing to adopt the proposal.

DISCUSSION

1. The Public Utilities Code and Commission Precedent Require RA Reform to Advance California's Environmental Goals.

The Public Utilities Code and Commission precedent require greenhouse gases ("GHGs"), air pollution, and disadvantaged community ("DAC") impacts be considered in the RA program. In particular, Section 380 of the Code requires the RA program to: "ensure the reliability of electrical service in California while advancing, to the extent possible, the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases."[2] This type of consideration of air pollution and GHGs is echoed in several parts of the Code. In particular, Section 454.52 requires "[m]inimiz[ing] localized air pollutants and other greenhouse gas emissions, with early priority on disadvantaged communities."[3] Section 399.13(a)(8)(A-B) further provides that electrical corporations "shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high

[2] Cal. Public Util. Code § 380(b).
[3] Cal. Public Util. Code § 454.52(a)(1)(I).

unemployment, or that suffer from high emission levels of toxic air contaminants, criteria pollutants, and greenhouse gases."[4]

Consistent with these requirements and policies, the Commission has explicitly required consideration of air pollution, GHGs, and DACs in prior RA decisions. For example, in D.20-06-002, the Commission required that the Central Procurement Entity ("CPE") include consideration of "[l]ocation of the facility (with consideration of environmental justice)."[5] To evaluate this factor, the Commission provided that the CPE must require bidders to include the CalEnviroScreen score of the resource location or the pollution burden if CalEnviroScreen score is unavailable.[6] As related to this Reform Track, one of the Commission's five principles used to assess RA reform proposals has been that "any RA framework must balance the need for hourly energy sufficiency to ensure reliable operations with advancing California's clean energy, greenhouse gas emission reduction, and air pollution reduction goals."[7] The Commission based this principle on the Code,[8] and further described that one of its primary motivations for restructuring the RA program was to "achieve California's environmental policy goals."[9]

2. The Future of RA Report Does Not Provide Any Analysis of Which Proposal Best Advances Environmental Requirements.

The Future of RA Report fails to include any analysis or analytical information to determine whether the SCE or the Gridwell proposal best meets the requirement to advance environmental goals. To analyze whether environmental goals are achieved to the greatest extent possible, the Commission should examine at least four primary considerations:

- Does the proposal facilitate procurement of the resources necessary to reduce GHGs in line with Integrated Resource Planning goals?
- Does the proposal accurately value the reliability contribution of variable resources to the grid to ensure that they are valued in procurement?
- Does the proposal minimize overprocurement of gas plants and facilitate a transition away from gas?

[4] Cal. Public Util. Code § 399.13(a)(8).
[5] D.20-06-002, p. 53.
[6] D.20-06-002, p. 53.
[7] D.21-07-014, p. 27.
[8] Cal. Public Util. Code § 380(b).
[9] D.21-07-014, p. 7.

- How does the proposal impact air pollution overall and in disadvantaged communities in particular?

These four minimal core considerations will help ensure advancement of air quality, climate, and clean energy requirements. Although the Future of RA Report touches on some of these, it does not include any analytical evaluation of how the proposals compare in relation to each other and to the advancement of environmental requirements, and it never even mentions the phrases "air pollution" or "disadvantaged communities." The proposals also include no specific requirements to ensure that environmental requirements are advanced in LSE procurement, such as consideration of how to prioritize clean energy resources.

With relation to SCE's proposal, SCE summarily states that its proposal meets the requirement to advance environmental requirements because:

- "LSE requirements match hourly load+PRM;
- Allows all resources (including renewables) to count at their expected hourly capacity;
- Incorporates additional capacity needed to charge storage."[10]

While these characteristics of SCE's proposal are somewhat related to meeting the first two markers of advancing environmental goals described above, they fail to show why SCE's proposal might be better than a different proposal. SCE further states that the 24-hour proposal "avoids over-procurement by effectively addressing challenges related to resource and load variability,"[11] but it fails to provide an analytical basis for this conclusion. Thus, these broad, conclusory statements fail to show, for example, how the proposal helps ensure GHG and air pollution emissions reductions, especially in DACs. SCE also fails to describe how its proposal accurately values the reliability contributions of variable resources and minimizes the potential overprocurement of gas plants.

Gridwell similarly provides no analytical support to show that its proposal advances environmental requirements or to compare it to SCE's proposal. Gridwell's justification also focuses on how the two-slice proposal better captures other resources for counting, stating that: "Over time, as the grid becomes more fully saturated with solar, wind, and storage of different technologies and durations, the two-slice proposal will dynamically capture their contribution to

[10] Future of RA Report, p. 24.
[11] Future of RA Report, p. 8.

grid reliability within and across multiple days."[12] Gridwell also makes an important point that "in order to advance California's environmental goals, it is imperative the IRP directly consider the need for renewables to charge storage."[13] These statements, however, are only conclusory statements. Similar to the SCE proposal, Gridwell proposes no guardrails to ensure that environmental policies are advanced, and it includes no analytical basis to show how their proposal advances environmental requirements.

Many parties opine that one proposal or another advances environmental requirements, but they fail to provide any data to back up their assessment.[14] For example, PG&E broadly states that the 24-slice proposal "advances environmental goals by enabling a system that will increasingly be based on GHG-free resources,"[15] but it does not provide any evidence to support this statement and how SCE's proposal compares to Gridwell's proposal or even the current RA framework. Without any real data to back up either proposal, it is unclear how these proposals can meet the requirements of advancing environmental goals without at least guardrails and checks to ensure that they do.

3. The Calibration of RA Obligations to Ensure Reliability May Be More Challenging with SCE's 24-Slice Proposal.

Throughout the workshop process, CEJA and UCS have observed near consensus amongst parties that RA obligations should be calibrated with a loss of load expectation ("LOLE") study. Both SCE's 24-slice proposal and Gridwell's 2-slice proposal explicitly include calibration of RA obligations based on a LOLE study.[16] CEJA and UCS agree with this approach since calibration with a LOLE study is a critical step that ensures RA obligations actually achieve the desired reliability goal (e.g., the 0.1 annual LOLE reliability standard).

Currently, the Commission is in the midst of updating RA obligations based on the results of its recent LOLE/ELCC study,[17] and the process for doing so is relatively straightforward and analytically sound. First, the Commission calibrates a portfolio to achieve

[12] Future of RA Report, pp. 35-36.
[13] Future of RA Report, p. 36. Vistra also makes a similar point. Future of RA Report, p. 81.
[14] *See, e.g.,* Future of RA Report, p. 207 (CESA's comments broadly stating environmental requirements are met).
[15] Future of RA Report, p. 277.
[16] *See generally* Future of RA Report.
[17] *See* Feb. 18, 2022 ALJ Chiv Ruling on Loss of Load Expectation Study and Demand Response Report.

the 0.1 LOLE reliability standard; second, the Commission calculates the ELCC of the sub-portfolio that contains all the renewables and energy storage resources; finally, the Commission calculates the total amount of net qualifying capacity ("NQC") contained in the portfolio that meets the 0.1 LOLE standard (using the portfolio from the first step and the ELCC results from the second step). This total NQC number forms the basis for RA obligations, and the Commission can then use this NQC number to update the planning reserve margin ("PRM") if desired. Importantly, with Gridwell's proposal, this analytically robust process could be preserved, maintaining a clear relationship between LOLE studies and the calibration of RA obligations.

When it comes to SCE's proposal, it is not yet clear how different elements of the RA framework would be informed by LOLE studies. There are three elements that could be adjusted to ensure RA obligations achieve the 0.1 LOLE reliability standard: resource counting rules, monthly load profiles, and the PRM. SCE's proposal does indicate that LOLE studies should be used to inform the PRM,[18] but the proposal does not indicate if or how resource counting rules and the monthly load profiles should be modified based on LOLE studies.[19] Whereas the current RA framework has a clear process for reevaluating the PRM and resource counting rules simultaneously, SCE's proposal does not include these critical details. With multiple moving parts and no clear process for updating crucial components of the framework, it may ultimately be more challenging to ensure reliability with SCE's proposal.

4. Existing Renewable Resource Counting Rules Are Incompatible with SCE's 24-Slice Proposal, and Party Proposals for New Rules Rely on Analytically Ungrounded Determinations and Are Inadequate Substitutes for ELCC Calculations.

Implementation of SCE's 24-slice proposal would require new RA counting rules for certain types of renewable resources, particularly wind and solar. As SCE explains in its proposal, "[t]he current single-monthly Effective Load Carrying Capability (ELCC) approach does not provide any indication of the expected capacity contribution in any given slice and thus cannot be used in any slice-of-day framework."[20] Since the current ELCC framework is not

[18] Future of RA Report, pp. 10-11.
[19] In their proposal, SCE includes a list of "Open Items", which includes "determination of hourly profiles for wind and solar" and "determination of the proper PRM". Future of RA Report, pp. 22-23.
[20] Future of RA Report, p. 13.

compatible with SCE's 24-slice proposal, parties have put forth a variety of proposals for developing wind and solar hourly profiles that could be used in SCE's proposal. However, all these proposals rely on analytically ungrounded determinations and are ultimately inadequate substitutes for ELCC calculations.

In the current RA framework, ELCC is used to measure a resource's contribution to grid reliability, or put another way, ELCC is a measure of a resource's ability to prevent loss of load. ELCC studies probabilistically examine the performance of a resource during all hours over a vast range of grid conditions, and these studies also preserve important correlations between load, renewable energy output, and other variables. In short, because of the comprehensive nature of probabilistic ELCC studies, these studies use the most analytically rigorous methodology available to calculate the reliability contribution of a resource. It is also important to note that ELCC calculations are compatible with Gridwell's 2-slice proposal.

SCE's proposal requires 24-hour profiles for each month, and parties have proposed many different methodologies for developing these profiles for wind and solar. Most of these proposals have relied on "exceedance methodology," which essentially uses historical production data to create hourly profiles.[21] For example, PG&E proposed using a methodology that aims to find the exceedance level that most closely matches historical wind and solar production on peak load days in each month, ultimately recommending 60% exceedance for solar and 70% for wind;[22] SEIA, LSA, and VS jointly proposed using a 50% exceedance profile for solar, justifying this selection based on the observation that the current solar ELCC values[23] closely matched the solar 50% exceedance values in the 5-9 PM timeframe;[24] and CalWEA proposed using an "effective net load reduction" methodology for wind and solar that calculates average historical production during hours with load above a certain threshold.[25]

Unfortunately, all of these proposals rely on analytically ungrounded determinations to develop wind and solar profiles, with the results dependent on the days and times examined in each analysis. PG&E's methodology specifically examines peak load days; the three solar parties

[21] For example, a 60% exceedance level for solar means that solar production was higher than that level 60% of the time in the historical data being used.
[22] Future of RA Report, pp. 27-29.
[23] This assessment was done using the ELCC values adopted in D. 19-06-026, not ELCC values from the Commission's recent LOLE/ELCC study.
[24] Future of RA Report, pp. 42-44.
[25] Future of RA Report, pp. 45-47.

propose a methodology that examines production between 5 PM and 9 PM; and CalWEA's methodology requires the selection of a specific load threshold. These are arbitrary decisions, and there is no clear rationale for selecting one of these methodologies over the others.

While several of the proposals do attempt to mimic ELCC calculations by specifically examining renewable output during periods of high load, these proposals are imperfect substitutes for ELCC calculations. ELCC examines a resource's output during *all* hours of the year across a wide range of potential grid conditions, with the most consequential hours being those when the loss of load probability is highest. Thus, ELCC is a more comprehensive methodology than any of the party proposals for resource counting rules under SCE's 24-slice framework, even those methodologies that specifically examine high load periods.

Furthermore, on today's grid, periods of high load align closely with periods that have the highest loss of load probabilities; but as the grid evolves, that trend likely will not hold.[26] As a result, it is not clear how durable resource counting methodologies will be under SCE's 24-slice proposal. However, the existing and well-established ELCC methodology will continue to provide a robust measure of a resource's contribution to reliability as the grid evolves over time.

5. SCE's Proposal May Hamper the Transition to Clean Energy Through the Overprocurement and Unnecessary Retention of Natural Gas Power Plants.

CEJA and UCS are concerned that SCE's proposal could hamper the transition to clean energy by retaining natural gas power plants that are not necessary for reliability, and numerous Community Choice Aggregators ("CCAs") have expressed similar concerns.

In informal comments, the Joint CCAs[27] supported Gridwell's 2-slice proposal, arguing that "[t]he Gridwell proposal does a better job of ensuring reliability while facilitating decarbonization, primarily because the 24-hour proposal incentivizes gas procurement."[28] The Joint CCAs' main concern is that the introduction of 24-hour RA obligations may incentivize contracting with gas resources (since they are available all 24 hours) at the expense of cleaner

[26] E3, *Long-Run Resource Adequacy under Deep Decarbonization Pathways for California* (June 2019) pp. 31-32. https://www.ethree.com/wp-content/uploads/2019/06/E3_Long_Run_Resource_Adequacy_CA_Deep-Decarbonization_Final.pdf
[27] The "Joint CCAs" consist of Silicon Valley Clean Energy, San Diego Community Power, and Central Coast Community Energy.
[28] Future of RA Report, p. 190.

resources like energy storage. In addition, a different group of CCAs, the Collective CCAs,[29] supports SCE's 24-slice proposal, but they also express their concern for how the framework could impact gas resource contracting:

> The Collective CCAs are concerned that without the ability to trade resources and compliance obligations on an hourly basis, there could be costly unintended consequences to ratepayers….This inefficiency [in contracting] would be especially inconsistent with California's environmental policy goals in the context of natural gas, where efficient utilization of existing natural gas capacity is crucial in the transition to a low- and zero-carbon emitting electricity grid.[30]

The Joint Parties,[31] in their justification for including hourly trading in SCE's 24-slice framework, further described why consideration of potential overprocurement is so critical:

> Together, any system that forces duplicative procurement or ignores resource diversity benefits would create greater requirements to retain more of the gas fleet and prevent the retirement of gas resources that are not needed for reliability at a system level, but would be needed solely to ensure all LSEs can make their regulatory RA showings. This result would hamper California's decarbonization and environmental justice goals.[32]

CEJA and UCS share these concerns about the potential for overprocurement, and we believe that SCE's proposal could result in the unnecessary retention of natural gas power plants, but there is insufficient analysis to say with certainty.

In addition, CEJA and UCS believe that SCE's 24-slice proposal could hinder the transition away from natural gas power plants by obscuring information about the resources required to replace gas plants. For example, CEJA and UCS can easily envision a scenario where a portfolio of clean resources appears to be able to replace gas plants (based on the technology-specific 24-hour profiles ultimately selected for use), but upon further examination with a LOLE/ELCC study, the ELCC value of that portfolio of resources does not provide enough NQC to replace the gas plants reliably. In this scenario, backstop procurement or further adjustments to RA obligations may be required to maintain reliability. Assuming the CPUC's RA framework is consistently calibrated with LOLE studies, the real factor that determines whether gas plants can be replaced with clean resources is the amount of NQC provided by those clean resources. SCE's

[29] The "Collective CCAs" consist of Clean Power Alliance of Southern California, East Bay Community Energy, Marin Clean Energy, Peninsula Clean Energy, Pioneer Community Energy, San Jose Clean Energy, and Sonoma Clean Power.
[30] Future of RA Report, pp. 185-186.
[31] The "Joint Parties" consist of the California Energy Storage Association, Peninsula Clean Energy, and San Jose Clean Energy.
[32] Future of RA Report, p. 200.

24-slice proposal adds a layer of complexity that could complicate the transition away from natural gas power plants by obscuring the actual reliability contributions[33] of clean resources.

6. SCE's 24-Slice Proposal May End Up Being Much More Complex Than the Current RA Framework and Gridwell's 2-Slice Proposal.

One of the Commission's five principles in evaluating RA proposals has been "[t]o balance granularity and precision in meeting hourly RA needs with a reasonable level of simplicity, and transactability."[34] While this has not been one of CEJA's and UCS's primary areas of focus, we do observe that SCE's proposal may end up being needlessly complex. There are two main areas where complexity could be increased: 1) in setting RA obligations (including the PRM, resource counting rules, and monthly load profiles), and 2) in load-serving entity ("LSE") compliance with the obligations.

One of the main drawbacks of the Commission's current RA framework (along with Gridwell's 2-slice proposal) is the complexity involved in setting RA obligations and counting rules. The current RA framework requires very technical but analytically rigorous LOLE/ELCC studies in order to update elements of the RA framework. However, SCE's proposal will still require LOLE studies in order to inform the RA framework, and the Commission may still wish to conduct ELCC studies in order to ground-truth resource counting rules. In addition, the Commission will have to develop new processes to link LOLE/ELCC studies to RA obligations in SCE's proposal. Thus, when it comes to setting RA obligations, it is not at all clear that SCE's 24-slice proposal will simplify RA.

Second, SCE's 24-slice proposal would almost certainly make LSE compliance more complicated. Instead of contracting for essentially interchangeable NQC megawatts to meet a NQC-based RA requirement, LSEs will have to procure a portfolio of resources that meets a specific load shape. If the Commission permits hourly trading at the recommendation of many parties (mostly CCAs),[35] this will complicate LSE compliance even further, creating an RA market with 24 hourly products in each month of the year.

---

[33] Here, "actual reliability contribution" means the ability of a resource to prevent loss of load, which is most accurately measured with ELCC calculations.
[34] D.21-07-014, p. 52.
[35] Future of RA Report, p. 93.

In summary, CEJA and UCS doubt that SCE's 24-slice proposal would simplify any aspect of the Commission's RA program. Instead, the proposal will likely complicate LSE compliance in addition to the process for setting RA obligations and counting rules.

7. The MCC Buckets Should Be Retired Regardless of the Proposal Selected by the Commission.

CEJA and UCS believe that the MCC buckets are a vestige of the past that is no longer useful for ensuring the reliability of California's rapidly decarbonizing grid. A framework like MCC buckets is not used in any of the country's other Independent System Operators or Regional Transmission Organizations, and it is long past time for the Commission to shed the MCC bucket framework. The MCC approach is a historical artifact designed for a fossil-fuel based system that relied primarily on large gas generators to supply energy. As California increasingly decarbonizes, moving beyond the MCC approach is necessary to not artificially lock the State into retaining gas capacity and ensure that the increasingly diverse set of resources are appropriately valued. Keeping gas capacity online is unnecessarily costly for ratepayers and for the community members breathing the air pollution from these plants.

Regardless of the RA framework ultimately selected by the Commission, MCC buckets should not be necessary, and many parties agree that the MCC buckets are no longer needed.[36] If the Commission selects Gridwell's proposal or maintains the current RA framework, the application of ELCC to more types of resources (including energy storage) should help ensure reliability while eliminating the need for MCC buckets. Gridwell's proposal states that "[t]he ELCC methodology eliminates the need for the current RA MCC bucket construct because use-limited resources have their Qualifying Capacity value directly discounted."[37] On the other hand, if the Commission selects SCE's proposal, the hourly RA framework also obviates the need for MCC buckets. SCE's proposal states that, "The granularity of this approach eliminates the need for… the maximum cumulative capacity (MCC) buckets by directly accounting for resource capabilities and use limitations."[38] Regardless of the proposal selected, the MCC buckets will no longer be necessary.

[36] Future of RA Report, p. 93.
[37] Future of RA Report, p. 36.
[38] Future of RA Report, p. 12.

CEJA and UCS do recognize that, depending on the RA framework and resource counting rules, there may be some edge cases that require additional scrutiny. For example, PG&E acknowledges that SCE's 24-slice proposal eliminates the need for MCC buckets, but that the Commission should maintain a demand response ("DR") cap to "ensure the system does not rely too much on DR to meet needs during prolonged reliability events."[39] Likewise, Gridwell states that, "[d]emand response will need to retain a cap if not covered by ELCC or other methodology that captures its use-limitations."[40] However, by and large, the MCC buckets should no longer be necessary and they should be retired as soon as possible.

8. CEJA and UCS Do Not Support Either Proposal. If the Commission Wishes to Proceed with Either Slice-of-Day Proposal, the Commission Should Analyze the Impact of the Proposals, Finalize Critical Details, and Include Guardrails Before Committing to Adopt the Proposal.

At this time, CEJA and UCS do not believe the Commission should adopt either proposal. Gridwell's 2-slice proposal would institute a "net peak resource assessment," but CEJA and UCS do not believe such an assessment is necessary to ensure reliability, even during the net peak periods. The Commission has already undertaken a combined LOLE/ELCC study that could be used to update the PRM and resource counting rules. These types of updates alone should be sufficient to ensure that California achieves the 0.1 LOLE reliability standard. LOLE studies examine reliability during all hours of the day under a wide range of conditions, and these studies inherently examine the net peak period in addition to energy sufficiency concerns. As long as the Commission regularly updates RA obligations and counting rules based on the results of LOLE/ELCC studies, additional reliability requirements should not be necessary.

If the Commission wishes to proceed with either slice-of-day proposal, CEJA and UCS request that the Commission finalizes critical details and includes guardrails before committing to adopt the proposal. We have four recommendations in particular.

First, the Commission should require an evaluation of how the proposals will impact GHGs and air pollution before approving the program, and then again a year or two after implementation. Without any analytical basis, the Commission will not be able to determine which proposal best meets the principle to balance environmental requirements with hourly

[39] Future of RA Report, p. 31.
[40] Future of RA Report, p. 34.

needs. Thus, the Commission should require an analysis by Staff to help determine which proposal best advances environmental requirements. For example, this analysis could look at the difference in the two proposals related to gas contracting requirements for a certain year, and compare the results to the status quo. This type of analysis then will show how the proposals will work in practice, not just in theory.

Second, the Commission should give directions, consistent with its direction to the CPEs, to require consideration of the Loading Order, GHGs, and impacts to DACs in procurement decisions, consistent with the requirements of the Public Utilities Code.[41] For example, the Code requires that "[w]here feasible, [the Commission] should authorize procurement of resources to provide grid reliability services that minimize reliance on system power and fossil fuel resources."[42] The Code further describes how the ultimate portfolio of resources "shall rely upon zero carbon-emitting resources to the maximum extent reasonable and be designed to achieve the greenhouse gas limit."[43] These considerations must be integrated into all RA decisions to ensure advancement of environmental goals and requirements.[44]

Third, after the slice-of-day proposal is designed, it is important to require reporting and tracking to see how the transition to this framework is impacting resource procurement, especially in DACs, and to ensure that the framework is advancing the State's environmental goals to the greatest extent possible. At a minimum, the Commission should require reporting of the types of resources contracted in each slice-of-day and the percentage of emitting resources located in DACs. Reporting of the types of resources meeting RA requirements has previously been included in the Commission's State of the Resource Adequacy Market report,[45] and the Commission should commit to at least this type of reporting and expanding it to include information about resources contracted to be utilized in different slices and in DACs. Furthermore, Energy Division should conduct an evaluation of the new framework's design to determine if additional requirements are needed to reach the State's environmental goals. These

[41] See supra Section 1 (describing requirements of the Code and the Commission's directions to the CPEs).
[42] Cal. Public. Util. Code Section 400(c).
[43] Cal. Public Util. Code Section 454.51(a).
[44] See Cal. Public Util. Code Section 380 (requiring that the RA program advance environmental goals to the extent possible).
[45] CPUC, The State of the Resource Adequacy Market – Revised (January 13, 2020), pp. 3-4. https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/ra_market-report_revised-final.pdf

types of evaluations will demonstrate whether the Slice-of-Day proposal, as designed and implemented, is meeting its intended purpose of achieving California's environmental and equity policy goals.

Fourth, when it comes to SCE's proposal in particular, CEJA and UCS are very concerned by the unclear relationship between LOLE studies and certain details of the RA framework, especially the PRM, resource counting rules, and monthly load profiles. Without resolving these crucial aspects of the proposal, it is not clear if SCE's 24-slice proposal will adequately ensure reliability, and it may also hamper the transition to clean electricity. Before making a final decision, the Commission should finalize these elements of the proposal and carefully compare the new framework to the Gridwell proposal and the existing RA framework.

CONCLUSION

If the Commission wishes to proceed with either slice-of-day proposal, the Commission should analyze the impact of the proposals, finalize critical details, and include guardrails before committing to adopt the proposal.

Thank you for your consideration of these comments.

Respectfully submitted,

/s/ Mark Specht

Mark Specht
Western States Energy Manager & Sr. Analyst
Union of Concerned Scientists
500 12th Street, Suite 340
Oakland, CA 94607
Email: mspecht@ucsusa.org
510-809-1562

For Union of Concerned Scientists

/s/ Deborah Behles

Deborah Behles
Counsel for CEJA
2912 Diamond Street, No. 162

San Francisco, CA 94131
Email: deborah.behles@gmail.com
(415) 841-3304

For California Environmental Justice Alliance

Dated: March 24, 2022