

May 24, 2021

Energy Division
California Public Utilities Commission
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Re: CALSSA's Comments on Draft Resolution E-5150

Energy Division Staff:

Pursuant to Rule 14.5 of the California Public Utilities Commission's ("Commission") Rules of Practice and Procedure, the California Solar & Storage Association ("CALSSA") offers these comments on Draft Resolution E-5150 of the Energy Division ("Resolution").¹

The Resolution would violate the directives in D.19-05-019 by both approving major Avoided Cost Calculator ("ACC") updates and accepting the deficient procedural process associated with these updates. The Commission has established two separate biennial approaches for updating the ACC: a resolution process for making minor updates, and a formal process for making major updates.² In D.19-05-019, the Commission made clear both the nature of the changes that are to be adopted pursuant to these two distinct approaches, and the appropriate process for introducing and effectuating these changes through these two approaches.

The Resolution fails this framework in two key ways. First, three of the 2021 ACC updates constitute major, substantive changes under the Commission's own guiding definitions, and therefore are unfit for review in this resolution process: the use of a new and unapproved Integrated Resource Plan ("IRP") scenario, the use of a new SERVM production cost model run that employed new benchmarking and scarcity pricing methodologies, and the removal of Pacific Gas and Electric Company's ("PG&E") secondary distribution marginal capacity costs.

Second, the Energy Division did not follow the Commission-ordered notice, workshop, and comment procedures designed to ensure transparency and due process in connection with this resolution process. The Commission must reject these changes to the 2021 ACC that are not minor in nature and that were not adequately presented through the required procedural processes.

¹ Draft Resolution E-5150 (May 3, 2021) ("Resolution").

² D.19-05-019, p. 51.

I. The Proposed Changes Are Not Minor and Therefore Violate Clear Directives in D.19-05-019.

The Commission has clearly set forth the types of changes that are to be adopted in odd-numbered years via staff-initiated resolutions,³ and the appropriate process for adopting such changes. With respect to the substance of these “minor” updates, the Commission provided:

We clarify that minor changes include data and input updates as indicated in D.16-06-007 but can also include changes to the modeling method that most parties can reasonably agree are minor in scope and impact.⁴

In D.16-06-007, the Commission distinguishes these minor data and input updates from “major changes,” which include changes to the list of data inputs, addition or deletion of categories or types of avoided costs, or modifications of the methods or models used in the calculator.⁵ The Commission also made clear in D.19-05-019 why the resolution process is not the appropriate avenue for adopting these kinds of major updates to the ACC, explaining that “major changes to this ubiquitous tool should be addressed in a formal proceeding with the opportunity to address disputed factual issues in an evidentiary hearing.”⁶

The Resolution contravenes these directives by adopting three major changes to the ACC. First, the 2021 ACC adopted by the Resolution uses an entirely new IRP scenario from a new run of RESOLVE. This new run produced both a resource portfolio and avoided greenhouse gas (“GHG”) values that differ significantly from the adopted Reference System Portfolio (“RSP”) and the avoided GHG values in the 2020 ACC. This new IRP scenario and its inputs and assumptions have not been publicly vetted, have not undergone the same detailed review process as the adopted RSP, and have not been approved by the Commission. CALSSA has reviewed and agrees with the analysis of this new IRP scenario performed by the Solar Energy Industries Association (“SEIA”) and submitted in SEIA’s concurrently filed comments on the Resolution, and CALSSA incorporates that analysis by reference.

These changes cannot reasonably be considered “minor.” The new IRP scenario involves changes to modeling methods as well as input assumptions, and therefore this constitutes a methodological change. This methodological change is not “minor in scope and impact”⁷—rather, it would require stakeholders to litigate an entirely new resource plan for California in this resolution process designed to consider only minor updates. Further, this new and unvetted IRP scenario accounts for a significant portion of the dramatic reduction in the value of solar in this draft ACC.⁸ Finally, even putting aside the requirement that changes adopted in the resolution

³ *Id.*

⁴ *Id.*, p. 49. *See also id.*, Ordering Paragraph 11.

⁵ *See id.*, p. 53 and Finding of Fact 49; D.16-06-007, pp. 8-9.

⁶ D.19-05-019, p. 54.

⁷ *Id.*, p. 49.

⁸ Note that according to SEIA’s analysis, incorporated herein by reference, the new IRP scenario and the SERVAM modeling changes adopted in the draft 2021 ACC together account for almost all of the reduction in the value of solar in the 2021 ACC. The 2021 ACC does have a lower gas forecast as well, but the impact of that is on the order of 10% of the change. Further, these two major methodological

process must be minor, the Commission has also separately emphasized the importance of coordinating the ACC with the *approved* RSP adopted in the IRP—rather than with a *draft* RSP that has not undergone the extensive public approval process via the IRP proceeding.⁹ It would therefore be contrary to multiple Commission directives to adopt this major change via the Resolution.

Second, the 2021 ACC adopted by the Resolution uses revised avoided energy costs from a new SERVVM production cost model run, and these avoided energy costs are significantly lower than those in the 2020 ACC. This change also constitutes a major update. In Energy and Environmental Economics, Inc. (“E3”)’s own language, they used a new scarcity pricing “*methodology*” to adjust the SERVVM model outputs,¹⁰ and also changed the method used to benchmark SERVVM results to historical CAISO market prices.¹¹ In describing the changes in SERVVM modeling, the Energy Division noted that “[t]he modeling team performed modeling with a variety of modeling input sensitivities *and with a variety of modeling methods* and arrived at what we consider to be our best route to harmonize with CAISO prices.”¹² It is therefore clear from both E3’s and the Energy Division’s own language that these SERVVM-related updates constitute methodological changes.

Again, methodological changes are only considered “minor” when most parties can reasonably agree such changes are minor in scope and impact.¹³ These methodological changes appear to account for the reduction in avoided energy costs, which is a substantial portion of the decrease in the value of solar in the draft 2021 ACC—they therefore cannot reasonably be described as “minor in scope and impact.”¹⁴ CALSSA has reviewed and agrees with the analysis of these revised avoided energy costs performed by SEIA and submitted in SEIA’s concurrently filed comments on the Resolution, and CALSSA incorporates that analysis by reference.

Finally, the 2021 ACC sets PG&E’s secondary distribution system (voltage level < 4kV) marginal capacity costs input to zero. The Resolution justifies this change by concluding that

changes interact. The new IRP scenario reduces the avoided GHG costs, but it may also change the marginal/avoided energy costs when that new scenario is modeled in SERVVM. Similarly, the SERVVM modeling changes appear to reduce the marginal/avoided emissions, which magnifies the impact of the drop in the avoided GHG costs (the GHG Adder) due to the new IRP scenario.

⁹ D.20-04-010, pp. 13, 32.

¹⁰ *2021 Distributed Energy Resources Avoided Cost Calculator Documentation For the California Public Utilities Commission*, p. 3 (May 3, 2021), available at <https://willdan.box.com/v/2021CPUCAvoidedCosts> (“ACC Documentation”) (Table 2, summarizing the changes in the draft 2021 ACC, refers to this change as “Updated Scarcity Pricing *Methodology*”) (emphasis added).

¹¹ See *Energy Division Response to List of Data Needs/Questions for Draft 2021 ACC Model Update*, served on the R.14-10-003 service list on May 19, 2021 (with respect to the scarcity adjustments to SERVVM prices, Energy Division stated: “E3 did evaluate results against hourly price shapes from the CAISO market and implemented improvements to better match those shapes with *an updated approach*”) (emphasis added).

¹² *Additional SERVVM Information*, served on the R.14-10-003 service list on May 19, 2021 (emphasis added).

¹³ D.19-05-019, p. 49. See also *id.*, Ordering Paragraph 11.

¹⁴ *Id.*, p. 49.

“secondary capacity costs are not time-differentiated costs and therefore not applicable to ACC.”¹⁵ This is not a minor data or input update—it is a conceptual change that relies on a faulty premise. A marginal cost that is not time dependent can still produce a change in costs if there is a change in demand. While the marginal cost is the same in all hours, that does not mean that the change is zero in all hours. This conceptual change in the draft ACC constitutes a major update because, by setting the input to zero, E3 is essentially removing this input—and therefore changing the list of data inputs.¹⁶

Largely as a result of these three major changes, the draft 2021 ACC would result in a 60% to 66% reduction in the 25-year levelized value of solar and a 74% reduction in the single-year 2030 value of solar.¹⁷ The Commission must reject these major changes and this drastic reduction in the value of solar, as approving them would be in direct conflict with prior Commission mandates in D.19-05-019.

II. The Proposed Changes Were Not Fully or Accurately Presented To Parties Through the Required Notice, Workshop, and Comment Process Ordered in D.19-05-019.

In D.19-05-019, the Commission set forth the required procedure surrounding the resolution process for making minor updates to the ACC. The 2021 ACC updates were not presented in line with these procedures, and as a result of this violation of D.19-05-019, parties have been denied a transparent process and have not been afforded the opportunity to meaningfully comment on these updates via the appropriate procedural steps.

In particular, D.19-05-019 provided:

The Commission strives for transparency in all processes. A workshop to allow for parties to comment prior to the resolution should provide the requested transparency and allow for agreed-upon minor changes to the modeling methods. A workshop also provides parties a reasonable opportunity to give feedback prior to the resolution being drafted. Accordingly, the Commission should retain the resolution process adopted in D.16-06-007, and, beginning with the 2019 process, hold a public workshop prior to the drafting and issuance of the draft resolution. To further improve transparency, a list of proposed changes will be sent to the appropriate service lists prior to the workshop, parties will be given an opportunity to provide informal comments on the proposed changes following the workshop, and the draft resolution will incorporate language regarding the discussion at the workshop.¹⁸

The Commission therefore requires, prior to the issuance of a draft resolution: (1) distribution of a list of proposed changes to the appropriate service lists, prior to a workshop, (2) a workshop to discuss minor updates, including minor changes to the modeling methods, and (3) an opportunity

¹⁵ Resolution, p. 5.

¹⁶ See D.19-05-019, p. 53 and Finding of Fact 49.

¹⁷ ACC Documentation, pp. 7-8, Figure 4.

¹⁸ D.19-05-019, pp. 53-54. See also *id.*, Findings of Fact 45, 46, and 47, Conclusions of Law 15 and 16, and Ordering Paragraph 11.

to provide informal comments on the proposed changes following the workshop. These established procedures were designed to ensure transparency and allow parties sufficient insight into and ability to comment on minor changes before they are presented in a draft resolution.¹⁹

These procedures were violated in myriad ways in connection with this 2021 ACC update. First, to CALSSA’s knowledge, a list of proposed changes was not sent to the service list prior to the workshop.²⁰ Missing this step is not only a violation of the directives in D.19-05-019, but it also significantly undermined the ability of interested stakeholders to participate fully in the workshop. Without notice of the significant proposed changes prior to the workshop, parties that participated in the workshop had less of an opportunity to familiarize themselves with the changes and actively engage in the workshop as informed stakeholders. Other stakeholders with strong opposition to the major changes now proposed in the Resolution may have skipped the workshop altogether, assuming—without notice to the contrary—that the changes discussed would only be “minor,” in line with Commission directives.

Second, when the workshop was held in December 2020, it provided insufficient detail for parties to meaningfully engage in a dialogue about the proposed updates. Notably, this workshop touched on the 2021 update to the ACC for only approximately 20 minutes at the very end of a workshop focused primarily on reviewing various research reports. Presenters used a single high-level slide²¹ to convey changes now provided in over 100 pages of supplemental documentation associated with the Resolution.²² This discussion was high-level and provided no meaningful specifics regarding the proposed changes or their impact on the ACC. As a result, parties did not have a “reasonable opportunity” to provide feedback on these proposed changes, and the Resolution does not incorporate “language regarding the discussion at the workshop[.]” as no meaningful discussion took place.²³

Further, during the limited discussion that did take place at the workshop, Staff did not accurately convey the scope of the changes now proposed in the Resolution. In briefly describing the “possible” IRP-related updates, the workshop presenter noted that the 2021 ACC would be “using outputs from the IRP process that are from the end of 2019,” and stated:

We’ll probably not make many updates from the IRP or the CEC IEPR except possibly to look at the No New DER scenario and see if there are things to update or change there. And then as we mentioned there is a potential for *the IRP process* to redo SERVVM modeling or do SERVVM modeling of an updated portfolio or if

¹⁹ *Id.*, pp. 53-54. *See also id.*, Findings of Fact 45, 46, and 47.

²⁰ Note that the Resolution seems to suggest that this step was followed prior to the workshop, but this does not appear to be the case based on a review of service emails surrounding the December workshop. *See* Resolution, p. 3 (“Energy Division proposed a list of minor updates to IDER stakeholders and held a workshop to discuss those updates in December 2020. A revised list was sent to the R.14-10-003 service list for informal comment.”).

²¹ *Integrated Distributed Energy Resources (IDER) Workshop*, Slide 27, California Public Utilities Commission (December 9, 2020), *available at* [2020 ACC Research Update](#) (“December 2020 Workshop Presentation”).

²² *See generally* ACC Documentation.

²³ D.19-05-019, pp. 53-54 and Conclusion of Law 16.

there are software updates^[24] to SERVVM and it looks like those improve the prices, we would want to run those.²⁵

In this brief description, Staff seemed to suggest to stakeholders that the 2021 ACC would use outputs from the previously approved IRP proceeding, and that not a lot of IRP-related updates were expected for this 2021 update. Further, in noting that certain updates may take place in the “IRP process,” Staff seemed to suggest that any such updates would be coming out of the formal IRP proceeding.

The broader workshop presentation was also structured in a way that signaled to stakeholders that certain substantial updates—including some that have been adopted in the Resolution—would only be adopted as part of a future formal ACC process geared toward approving “major” updates. The first portion of the workshop covered an “[o]verview of 2020 Avoided Cost Calculator and discussion of issues, possible future improvements, and questions.”²⁶ Given that this section of the workshop was presented as a separate agenda item, distinct from the “Avoided Cost Calculator 2021 Update[,]” CALSSA—and likely other stakeholders—interpreted this portion of the presentation as covering potential future “major” changes for consideration in the 2022 ACC.²⁷ However, the 2021 ACC has incorporated changes discussed during this portion of the workshop. For instance, both the updated scarcity pricing methodology adopted as part of this 2021 ACC update²⁸ and the new benchmarking of the SERVVM results included in this update²⁹ were presented as part of this portion of the workshop.³⁰

After the workshop, on March 11, 2021, the Energy Division circulated a slightly more detailed list of proposed “minor” updates (“March 11 List”). Pursuant to the process laid out in D.19-05-019, this is the list that should have been circulated *prior* to the workshop, or alternatively, another workshop should have been held to review this more detailed list, once released.³¹ In spite of the three-month gap between the workshop and the later distribution of this list, the lack of clarity and the inaccuracies from the workshop were not remedied in this list. The March 11 List included IRP-related changes under the heading “Incorporate any enhancements to IRP and SERVVM *made in IRP proceeding*[.]”³² suggesting that any such updates would have already been vetted publicly through the formal IRP proceeding.

Despite this framing, the new RESOLVE modeling incorporated into the 2021 ACC was not available for stakeholder review and evaluation or approved by the Commission via this formal

²⁴ CALSSA notes that software updates are generally understood to mean bug fixes, not methodological changes.

²⁵ See *CPUC IDER ACC Research Update (Workshop Recording)*, at 2:07-2:11, available at [2020 ACC Research Update](#) (emphasis added).

²⁶ December 2020 Workshop Presentation, Slide 4.

²⁷ *Id.*

²⁸ ACC Documentation, pp. 3, 13, 19-22.

²⁹ *Id.*, pp. 2, 13, 19-22.

³⁰ December 2020 Workshop Presentation, Slides 11-13.

³¹ See D.19-05-019, pp. 53-54.

³² *Minor Updates to the 2021 Avoided Cost Calculator*, served on the R.14-10-003 service list on March 11, 2021 (emphasis added).

proceeding. The March 11 List also downplayed changes to the scarcity pricing methodology and did not accurately describe the scope of these changes in the 2021 ACC. The list described this issue as “[i]nvestigate errors to make minor improvements in scarcity pricing adjustment.”³³ The 2021 ACC adopts an entirely new scarcity pricing methodology—this new method cannot accurately be described as an update that makes “minor improvements” to correct “errors.”

Thus, when stakeholders had the opportunity, as required by D.19-05-019, to provide informal comments on the proposed changes as presented in the December workshop and the March 11 List,³⁴ they could not foresee the scope and gravity of the changes now included within the Resolution and its supporting documentation. The email distributing the March 11 List also did not seem to provide a set process or comment period for these informal comments—it merely provided the list and stated: “If you have any questions or comments about this list please contact me.”³⁵ This casual framing, along with the un-descriptive and informal email subject line, further downplayed the importance of these updates.³⁶

In light of these shortcomings of the notice, workshop, and comment processes, parties were denied a “reasonable opportunity” to provide meaningful feedback on an accurate and complete representation of the proposed changes prior to the resolution being drafted.³⁷ As a result, this process failed to provide the transparency and due process that the Commission has stated is critical to this resolution process.³⁸

III. Conclusion & Recommended Changes to Draft Resolution

In line with D.19-05-019, the Commission must reject changes to the 2021 ACC that are not minor in nature and were not adequately presented through the required notice, workshop, and comment processes.

For the foregoing reasons, CALSSA recommends the Commission revise the Findings and the Ordering Paragraph in the Resolution as follows:

Finding 2: ~~D.20-04-010-OP 7~~ D.19-05-019 OP 11 directs Commission staff to make minor changes to the Avoided Cost Calculator, as specified in that Decision, during odd-numbered years.

Finding 3: D.19-05-019 clarifies that minor changes include data and input updates as indicated in D.16-06-007 but can also include changes to the modeling method that most parties can reasonably agree are minor in scope and impact. ~~OP 11 directs Commission staff to make corrections, data updates, and minor changes.~~

³³ *Id.*

³⁴ *See Minor Updates to the 2021 Avoided Cost Calculator* (distribution email), served on the R.14-10-003 service list on March 11, 2021.

³⁵ *See id.*

³⁶ *See id.* (email subject line: “To the Service List of R.14-10-003”).

³⁷ D.19-05-019, pp. 53-54.

³⁸ *Id.*, p. 52.

Finding 4: The updates to the Avoided Cost Calculator, as described by Energy and Environmental Economics, Inc. in its Avoided Cost Calculator spreadsheet and documentation, are reasonable for use in DER cost-effectiveness, except for the three major changes included therein: (1) the use of a new and unapproved IRP scenario, (2) the use of a new SERVM production cost model run that employed new benchmarking and scarcity pricing methodologies, and (3) the removal of PG&E's secondary distribution marginal capacity costs. It is reasonable to adopt a revised version of this 2021 Avoided Cost Calculator, specifically referred to as ACC_2021_v1a, after removing the changes and updates associated with these three major changes.

Ordering Paragraph 1: The updates to the Avoided Cost Calculator, as specified and modified herein and further enumerated in documents made available through Appendix A of this Resolution, are adopted for use in demand-side distributed energy resource cost-effectiveness analyses. The updates adopted by this Resolution exclude the three major changes enumerated in Finding 4 herein.

Respectfully submitted,

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Service list for R.14-10-003