



May 9, 2022

Governor Ashutosh Bhagwat, Chair  
Governor Mary Leslie, Vice Chair  
Governor Severin Borenstein  
Governor Angelina Galiteva  
Governor Jan Schiori

**RE: 2021 Interconnection Process Enhancements (IPE), Phase 1**

Dear Governors Bhagwat, Leslie, Borenstein, Galiteva, and Schiori:

I am writing on behalf of the Large-scale Solar Association (LSA). Our members include many of the largest renewable-energy developers in California markets; their projects include numerous utility-scale projects for both solar energy and solar-storage combined resources, many scheduled to come on-line in the near future.

LSA has been an active participant in the 2021 IPE initiative, and recently presented at an IPE workshop at the start of the initiative recommending a list of reforms, several of which the CAISO incorporated into the recommendations before you today. We commend the CAISO staff for being open-minded and welcoming of stakeholder input throughout this initiative, and for providing responses to all stakeholder suggestions, even those it decided not to include.

LSA supports most of the proposals in the 2021 IPE package. However, we are concerned that one proposal in particular is especially troublesome, i.e., has not been justified and would have adverse impacts on developer ability to conclude the Power Purchase Agreements (PPAs) needed to finance renewable and storage projects in today's challenging environment.

That proposal is the new minimum three-year PPA term to qualify for receiving/retaining a "Transmission Plan Deliverability" (TPD) allocation. Only projects with TPD allocations can provide Resource Adequacy (RA) to CAISO-area Load-Serving Entities (LSEs). RA is an extremely valuable attribute, and most new projects would not be financially viable without it.

While the proposed three-year minimum PPA term is better than the previously proposed five-year minimum, it's important to note that there has never been a minimum PPA term at all to qualify for a TPD allocation. Because TPD allocations, and the RA status they convey, are such critical elements of project viability, imposition of a minimum term would significantly influence PPA contracting generally.

LSA, and other stakeholders active in the 2021 IPE initiative, strongly oppose the proposed minimum term, for the reasons explained below.

- **The CAISO has provided no evidence that lack of a PPA minimum term has caused any problems**, making this proposal "a solution in search of a problem." Repeated inquiries about

the CAISO's rationale have elicited only vague responses, such as "some entities have asked about minimum terms" and "most contracts are longer than that," but no specific concerns about the current framework that would justify such a significant change.

For example, it is highly implausible that an operating project with valuable RA attributes would withhold those attributes from the market, and willingly forego the associated revenue stream, just because its PPA expires, and there is no indication that this is happening.

- **PPA contract length is beyond the purview of the CAISO.** PPA term length, and the other key elements of PPAs, are under the jurisdiction of the regulatory authorities for the LSEs executing them. The CAISO tariff recognizes the oversight of these regulatory authorities through deference to their rules for RA Qualifying Capacity and other important features.
- **Efficient markets for RA generally depend on short-term availability of at least some RA capacity.** For example, the CAISO instituted last year a requirement that RA resources obtain substitute RA capacity during planned maintenance outages, and their ability to comply with that requirement depends on short-term RA availability of those substitute resources.
- **The CAISO proposal would undermine market flexibility at a time when increased flexibility is needed.** While developers typically rely on longer-term contracts to support project development, the PPA market is struggling with many issues that are pushing parties in the opposite direction. Among those are:

- Regulatory uncertainty: The CPUC is conducting an extensive and lengthy effort to significantly revise how RA resources are counted, among other things. The proposed Mid-Term Procurement counting rules are not consistent with current rules, adding uncertainty.

The CAISO itself has contributed to this uncertainty through its Unforced Capacity (UCAP) proposal. That proposal, which has been public for a couple of years but has not yet moved forward, has nevertheless greatly complicated RA contracting, and it is unclear whether or when it might be imposed and what the eventual rules might be.

- Cost uncertainty: Equipment markets – e.g., for batteries – have been especially hard hit by the combination of inflation and supply-chain shortages. Equipment has become harder to obtain, and equipment suppliers are quoting cost increases of 30% or more in some cases. This situation could persist far into the future as renewables and storage construction ramp up considerably, raising the possibility of higher operating costs after Commercial Operation as well.

This makes it extremely difficult for developers to quote the kinds of long-term firm prices that buyers have become accustomed to in long-term PPAs. LSA is aware of PPAs that have been cancelled because they are no longer economic, and longer-term contracts are, all other things equal, riskier in this respect.

- Import tariff issues: The potential imposition of tariffs on imports from China, perhaps on a retroactive basis, increases the difficulties of making longer-term commitments for critical equipment needed to construct projects and bring them on-line.

- **The CAISO proposal would disadvantage new projects** compared to existing projects with expired shorter-term contracts. These existing projects, which were and are not

subject to any minimum terms, could contract for any term agreeable to their off-takers, while new projects would be hobbled by any CAISO minimum-term requirements.

For these reasons, LSA concludes that the CAISO should not impose mandatory minimum PPA term lengths on an already fraught situation without any demonstration of need, and we strongly urge the board to remove this from the overall IPE revisions. The trade-offs between contract/revenue certainty and regulatory/cost risk should be left to free interaction between contracting parties, and approval of LSE regulators, and not dictated by the CAISO.

Again, LSA does not want to detract from CAISO's vital efforts in this initiative; on the contrary, we are extremely grateful for the CAISO's hard work here and in the past to help make new projects more viable. We simply believe that this one proposal is misguided and should be removed from the overall package in order to avoid further market disruption.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Shannon Eddy". The signature is written in dark ink and is positioned above the typed name and contact information.

Shannon Eddy  
Executive Director,  
Large-scale Solar Association  
[shannon@largescalesolar.org](mailto:shannon@largescalesolar.org)  
415-819-4285