8minute Solar Energy's comments on CAISO Deliverability Assessment Methodology Straw Proposal Paper, Stakeholder meeting dated August 5, 2019

8minute Solar Energy (8minute Solar) appreciates the opportunity to provide comments on the CAISO's revised Deliverability Assessment Methodology incorporating 2018 Stakeholder comments. 8minute Solar notes a significant improvement in this revised document as compared to the one issued in 2018. However, 8minute solar observes that Solar-Battery Hybrid projects and Standalone Battery projects are not very well addressed in the current proposal. Specific comments and questions follow:

- 1. CAISO presentation on 8/5 Stakeholder meeting, Page 19, HSN Assumptions. The table is missing assumptions for Battery as well as Hybrids output. The SSN timings of 18-22 are the timings when batteries will kick in to maintain solar output to 100% level. How is CAISO planning to model Hybrid projects in the study base cases?
- 2. Page 20 of the same presentation: Will 20% exceedance level apply to hybrids also? If not, what output level will be modeled for hybrids?
- 3. Page 21 of the same presentation, SSN Assumptions, Hybrids and Standalone Batteries are missing in the table. What output level is CAISO considering for Hybrids?
- 4. Page 21, even though Pmax set to 50% exceedance for PV plant is a good assumption, it may not be accurate for Hybrid project which is committed to keep PV output to full 100% level for designated number of hours. What are CAISO thoughts on that?
- 5. How will Hybrid project be modeled under off-peak Deliverability Assessment?
- 6. Page 37 of the above presentation, Assumptions for Hybrid is missing.
- 7. Page 37, since solar is modeled at 68%, would it not be better to use the remaining output to charge the battery if it is a Hybrid?
- 8. While modeling for off-peak Deliverability Assessment, would it not be better to put battery of the Hybrid in the charge mode to add more load to the system and avoid generation surplus? This could also minimize or eliminate transmission overloads due to excessive generation?
- 9. Page 42, Steps to Mitigate Overloads: These are perfect common-sense steps to mitigate overloads. Would CAISO consider applying these steps in its Annual Transmission Plan studies, Reliability studies and other internal studies as well?
- 10. CAISO has mentioned CPUC's ELCC approach several times in this document. But it seems like CAISO is using 20% and 50% Exceedance levels in its On-Peak studies and a different level for off-peak studies. At what stage does CAISO use ELCC in its Deliverability Assessment?