California ISO

Stakeholder Comments Template

Generator Interconnection: Cluster 14 Revised Study Process and Timeline

This template has been created for submission of stakeholder comments on the Supercluster Interconnection Procedures issue paper and draft final proposal that was published on May 14, 2021. The proposal, stakeholder meeting presentation, and other information related to this initiative may be found on the miscellaneous stakeholder meetings webpage at: http://www.caiso.com/informed/Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **May 28, 2021**.

Submitted by	Organization	Date Submitted
Ali Chowdhury	*8minute Solar Energy*	*5/28/2021*

Please provide your organization's comments on the Supercluster Interconnection Procedures issue paper and draft final proposal, and May 21 stakeholder call discussion:

8minute Solar Energy (8minute) appreciates the opportunity to provide comments and suggestions on the CAISO's May 14th document "Supercluster Interconnection Procedures—Issue Paper and Draft Final Proposal" (Proposal). It is indeed very challenging to model and evaluate the impact of approximately 105,000 MW of C14 generation projects which is more than twice the CAISO load (50,000 MW). Certainly, some innovative ways are needed to be developed to handle the challenge.

8minute would like to propose some high- level general comments and some specific technical comments as described below:

A. General High-Level comments

1. 8minute agrees and supports CAISO to omit Stability studies from Phase I. Accordingly, CAISO can save some time in the Validation process by not reviewing the Stability data at this time. Although the deficiency notices #1 have already gone to majority of ICs in which stability issues have been identified, it could be avoided

in the second round of notices. The IRs can be declared valid if Power flow and Short circuit issues have been resolved.

2. The 100% refundable option if costs increase by 25% is currently based on the Maximum Cost Responsibility (RNU + LDNU). We believe this should include the total sum of the Maximum Cost Exposure and the Interconnection Facilities (RNU + LDNU + CANU + ICF) as they all impact the project viability, not just RNU & LDNU currently assigned.
    a. It also mentions allowing 100% refundability if the longest-duration Reliability Network Upgrade extends by one year or more. This should also include LDNU, CANU, and IC Facilities as they all impact project viability, not just the RNU.

3. Site control should not be a pre-cursor to entering the CAISO Supercluster process as it can take significant time to establish an Option Agreement, and often California landowners do not want the Option to go longer than one or two years, which is shorter than the time to even receive an LGIA in CAISO.

4. Since “Advisory cost estimates” will be available after about 15 months from now, an alternative should be provided such as $/MW based on past experience so that ICs can decide early enough whether to stay in the queue or withdraw.

5. The latest release of Preliminary Cluster 14 list has revealed some very interesting facts. Thousands of MWs have been proposed in areas where the available “Deliverability” is zero or near zero. For example, looking at the 2021 TPD report, the available deliverability in “East of Miguel” area is “zero” MW, yet more than 5000 MW generation has applied in C14. Similarly, Deliverability in the Midway area in 2021 TPD report was 174.6 MW (this was already allocated in 2021, so available deliverability should be zero), yet nearly 10,000 MW have applied around Diablo Canyon-Midway-Gates-Los Banos area in C14.

   CAISO could inform ICs during the scoping meeting whether or not their project has a fair chance of getting deliverability. It will be an extremely valuable information for the ICs, up front, to decide whether to proceed with the study effort or withdraw. Majority of ICs may decide to withdraw if there is no deliverability available.

6. To have a comparable number of projects in C14 that of Cluster 12 and 13, the suggestion in item 5 would be a step in the right direction. With over 100,000 MW in C14, it is almost impossible to grant deliverability in any pocket of the CAISO system.

7. If after scoping meeting, significant number of projects drop, there may not be a need for any tariff modification, Board approval, or FERC filing and CAISO will be back to normal interconnection study process without delaying Phase 1, Phase 2 and Cluster 15.

8. If the number of projects is still significantly higher than say, 200, 8minute suggests skipping Phase I study completely and proceed directly to Phase II study. Since Cost caps are determined by Phase II study, the importance of Phase I study is significantly diminished. This suggestion and the ones in items 5-7 can be further discussed if any clarification is needed.

B. Technical comments

1. Studies are only as good as the assumptions they are based upon. Will CAISO, please provide a list of specific assumptions for ICs review and comments before the Board approval in July?

2. In power flow analysis, the load/generation balance has to be maintained at all times. So, discussing at a high level, if PG&E load is, say 25,000 MW, the maximum generation that can be modeled is few percentage points higher than 25,000 MW (to cover spinning reserve and system losses) say, 30,000 MW. That means you can accommodate only a maximum of 30,000 MW of C14 projects, assuming you shut down all existing generators (which would be impossible due to many units being “must-runs”). The actual IRs in PG&E system are approximately 50,000 MW. So, what will be the CAISO modeling strategy to ensure meaningful results? If the IR generation is curtailed (as it was mentioned in the 5/21 presentation) then will not the study results reflect curtailed generation, not the full IR generation?

3. Will the short circuit study model reflect the realistic on-line generation scenario? In other words, will the short circuit model reflect approximately the same generators that are in the Power flow model?

4. Diablo units #1 and #2 are supposed to be retired by the end of 2025. If the C14 study year is **2026**, will these units still be modeled in the Power flow and Short circuit studies? If the answer is yes, would it be technically accurate?

5. Would CAISO consider holding a stakeholder meeting before July Board meeting to discuss and finalize the Phase I study assumptions?