

The ISO received comments on the topics discussed at the March 9 stakeholder meeting from the following:

1. [San Diego Gas & Electric \(SDG&E\)](#)
2. [Pacific Gas & Electric \(PG&E\)](#)
3. [Vistra \(late submission\)](#)

Copies of the comments submitted are located on the Local capacity requirements process webpage at:

<https://stakeholdercenter.caiso.com/RecurringStakeholderProcesses/Local-capacity-requirements-process-2023>

The following are the ISO's responses to the comments.

1. San Diego Gas and Electric (SDG&E) Submitted by: Alan Soe		
No	Comment Submitted	CAISO Response
1a	<p>Please provide your organization’s overall comments on the 2023 and 2027 Local Capacity Requirements Technical Study Draft Results: SDG&E appreciates the opportunity to provide comments on the 2023-2027 Local Capacity Requirements – Technical Study Draft Results. CAISO’s approach to the LCR this year was sound and in line with the approach from previous year. However, we would like CAISO to publish information used to derive the LCR results. Specifically, it is very important for stakeholders to get a hold of the following documentation:</p> <ol style="list-style-type: none"> 1. The final LCR power flow case. CAISO has published this case before and we would like CAISO to do this more regularly. 2. The analysis and spreadsheets that were the basis of the Load Serving Capability graphs that account for storage constraints. <p>In both cases, it is important for relevant stakeholders to review and analyze the data such that potential pitfalls and solutions might be identified early. This will also provide for a more robust TPP that is more inclusive of creative ideas.</p>	<p>Thank you for comments and feedback.</p> <p>The CAISO will provide the power flow base cases as done in the past</p> <p>As stated before, the CAISO will continue to improve and refine the storage charging estimates. Currently they are considered preliminary, and as a result is premature to provide them at this time. The CAISO may reconsider this request in the future.</p>



2. Pacific Gas and Electric (PG&E) Submitted by: Igor Grinberg		
No	Comment Submitted	CAISO Response
2a	<p>Please provide your organization’s overall comments on the 2023 and 2027 Local Capacity Requirements Technical Study Draft Results:</p> <p>PG&E appreciates the opportunity to provide comments on the 2023 and 2027 Local Capacity Requirements (LCR) Technical Study Draft Results. Below please find PG&E’s brief comments.</p> <p>At the March 9, 2022, stakeholder meeting, CAISO shared that they plan to publish a white paper on the study methodology used to assess battery storage charging constraints in LCR studies. PG&E applauds this effort and recommends that the CAISO publish the white paper no later than the draft LCR report, in order that stakeholders better understand the assessment in time for reviewing the draft report.</p>	<p>Thank you for your comments.</p> <p>The draft white paper is included in the draft 2023 LCT study report.</p>

No	Comment Submitted	CAISO Response
	<p>South Bay – Moss Landing LCR sub-area from 2,165 MW in 2022 LCR study^[2] to 2,977 shown on slide 13.</p> <ul style="list-style-type: none"> • Please confirm the above increased generation between 2022 and 2023 LCR studies, includes the two phases of the Moss Landing Battery Energy Storage Facility that have achieved commercial operations, where 400 MW of the increased 812 MW of generation in the South Bay – Moss Landing sub-area is being contributed by Dallas Energy Storage units 1-4. <u>Approximate storage in GBA – South Bay – Moss Landing LCR subarea (slide 16)</u> • Please confirm our understanding from your verbal response during the stakeholder call that the approximate storage size that can be added to this area from a charging restriction perspective for local resource adequacy purposes are values that include the existing storage resources modeled in the case. • Specifically, please confirm that if there is 400 MW of 4-hour storage in operations in a sub-area and the 2023 1 for 1 max 4-hour storage MW value is 465 MW that this means only 65 MW of additional 4-hour storage can provide local resource adequacy capacity, without increasing the total Local Capacity Requirement • Please confirm the 400 MW of battery storage at the Moss Landing 500 kV substation that achieved commercial operations in 2021 were modeled in the 2023 and 2027 LCR study. • Please confirm if there was any additional battery energy storage generation modeled in the LCR sub-area that would increase the amount of battery storage online modeled as existing in this LCR sub-area and if so, what the total amount of battery energy storage generation is in this LCR sub-area as modeled in this LCR study. • Please confirm whether for purposes of estimating the 1 for 1 replacement max 4-hour storage value, whether the CAISO is making assumptions on whether the battery is charging, discharging, or idle in order to estimate the value. <u>Approximate storage in GBA – Oakland LCR subarea</u> • In 2022 and 2026 LCR study results the CAISO identified the Oakland sub-area had a 22 MW, 181 MWh, and 11 4-hour 1 for 1 replacement MW for 	<p>The CAISO has published a detailed excel list with all resources available for the 2022 LCR study and will publish one for the 2023 LCR study. (NQC values differ from one year to the next.) Please use the two lists to find the differences.</p> <p>The approximate maximum storage size that can be added to this sub-area from a charging restriction perspective include the existing storage resources modeled in the case.</p> <p>From a sub-area perspective only – 465 MW of 4-hour battery can be used to replace existing resources on a 1-for-1 bases.</p> <p>Yes these resources were modeled in all LCR base cases (2022, 2023, 2026 and 2027).</p> <p>Please use the excel list provided and sort by “Area”, “Sub-area” and then “CAISO Tag”.</p> <p>For methodological answers please read section 2.4 of the 2022 or 2023 LCR reports.</p> <p>For methodological reasons the LCR replacement of existing resources stops at the maximum MW of LCR need. For 2023 and 2027 there</p>

² 2022 Local Capacity Technical Study, Final Report and Study Results, April 30, 2021, Page 71, <http://www.caiso.com/InitiativeDocuments/Final2022LocalCapacityTechnicalReport.pdf>.

No	Comment Submitted	CAISO Response
	<p>2022 and had a 37 MW, 276 MWh, and no limit to 4-hour battery for 1 for 1 replacement in 2026. Please provide updated estimate values for the Oakland sub-area for 2023 and 2027.</p> <ul style="list-style-type: none"> Please clarify why the values described above are not in the draft results at this stage? <p><u>Feedback to improve digestibility of estimated battery storage characteristics analysis</u></p> <p>Vistra recommends the CAISO consider updating the load and resources information describing the inputs to the LCR study for generation assumption be enhanced to give greater transparency on the battery storage generation being modeled. It would be helpful to separate non-battery generation and battery generation into two separate values in the market/net seller/battery row. Given our understanding the estimated battery storage characteristics include the battery storage modeled as well, it would be beneficial for the CAISO to denote the MW and MWh of existing storage modeled in the case. It would also be useful to denote the amount of 4-hour storage in MW that is modeled in the case. This will make it easier for stakeholders to interpret the estimated storage characteristic values being reported considering whether the modeled existing generation is included in these values or not.</p>	<p>were more than enough batteries model in the Oakland sub-area and therefore there was no other technology that needed or could be replaced.</p> <p>Thank you for your suggestion. Please use this list https://www.caiso.com/InitiativeDocuments/PhysicalResourceListUsedDuring2022and2026LocalCapacityTechnicalStudies-Basedon2021NetQualifyingCapacity.xls when checking resources in the 2022 LCR study. A similar list will be provided with the final 2023 LCR report.</p>