

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.

	an Diego Gas and Electric (SDG&E) ubmitted by: Alan Soe			
No	Comment Submitted	CAISO Response		
1a	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:	Thank you for comments and feedback.		
	 The final LCR power flow case. CAISO has published this case before and we would like CAISO to do this more regularly. The analysis and spreadsheets that were the basis of the Load Serving Capability graphs that account for storage constraints. 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. 	The CAISO will provide the power flow base cases as done in the past. 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.		

	Pacific Gas and Electric (PG&E) Submitted by: Igor Grinberg				
No	Comment Submitted	CAISO Response			
2a	Please provide your organization's overall comments on the 2023 and 2027 Local Capacity Requirements Technical Study Draft Results:				
	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.	Thank you for your comments.			
	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.	The draft white paper is included in the draft 2023 LCT study report.			



	March 9, 2022 S. Vistra Submitted by: Cathleen Colbert				
No	Comment Submitted	CAISO Response			
3a	Please provide your organization's overall comments on the 2023 and 2027 Local Capacity Requirements Technical Study Draft Results: Vistra Corp. respectfully submits these comments on the CAISO's 2023 and 2027 Local Capacity Technical Study Draft Report and Study Results ("Draft Reports") posted on March 7, 2022 and discussed at a public stakeholder call on March 9, 2022.	Thank you for your comments and suggestions.			
	Our focus continues to remain on increasing transparency and understanding of the study used to estimate the storage characteristics for local resource adequacy purposes. In addition, it has come to our attention that there may be some confusion about the status of projects that are under construction for work necessary to complete the interconnection or that have long-term contracts executed that are pending regulatory approval. In these comments on the Draft Reports, we will focus on four areas of the 2023 & 2027 Draft LCR Study Results Greater Bay Area[¹]: Power Plant Changes (slide 4) Approximate storage in GBA – South Bay – Moss Landing LCR subarea (slide 16)				
	 Approximate storage in GBA – Oakland LCR subarea Feedback to improve digestibility of estimated battery storage characteristics analysis Power plant changes clarifications (slide 4) 				
	• Please confirm what MW amount and source of the expected additions is for the "OCEI Energy Storage" MW addition? Specifically, Vistra asks the CAISO to confirm the source of the 43 MW value shown on slide 17 for market/net seller/battery generation that appears to assume that the 110 MW of jet-fuel combustion turbine units are retired in 2023 and an additional 43 MW is being modeled as replacement batteries.	Per OCEI CAISO has modeled 55 MW of market based battery addition required in conjunction with the TPP upgrades in order to reduce reliance on the existing Oakland CTs.			
	Please confirm which projects described in the power plant changes contributed to the generation increase from market/net seller/battery projects at	The expected available resource total for 2022 in the South Bay-Moss Landing sub-area was 3021 MW see page 732. The expected available resource total for the same sub-area will be 3075 MW.			

 $^{^1~2023~\&}amp;~2027~Draft~LCR~Study~Results~Greater~Bay~Area, March~9, 2022, \\ \underline{http://www.cais~o.com/InitiativeDocuments/Presentation-Draft2023and2027LCRBay~AreaLocalArea-Mar092022.pdf}.$



	Warch 9, 2022				
No	Comment Submitted	CAISO Response			
	South Bay – Moss Landing LCR sub-area from 2,165 MW in 2022 LCR study[2]				
	to 2,977 shown on slide 13.				
	Please confirm the above increased generation between 2022 and	The CAISO has published a detailed excell ist with all resources			
	2023 LCR studies, includes the two phases of the Moss Landing Battery	available for the 2022 LCR study and will publish one for the 2023 LCR			
	Energy Storage Facility that have achieved commercial operations, where 400	study. (NQC values differ from one year to the next.) Please use the			
	MW of the increased 812 MW of generation in the South Bay – Moss Landing	two lists to find the differences.			
	sub-area is being contributed by Dallas Energy Storage units 1-4.				
	Approximate storage in GBA – South Bay – Moss Landing LCR subarea (slide				
	<u>16)</u>				
	Please confirm our understanding from your verbal response during	The approximate maximum storage size that can be added to this sub-			
	the stakeholder call that the approximate storage size that can be added to this	area from a charging restriction perspective include the existing storage			
	area from a charging restriction perspective for local resource adequacy	resources modeled in the case.			
	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	From a sub-area perspective only – 465 MW of 4-hour battery can be			
	operations in a sub-area and the 2023 1 for 1 max 4-hour storage MW value is	used to replace existing resources on a 1-for-1 bases.			
	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	Yes these resources were modeled in all LCR base cases (2022, 2023,			
	500 kV substation that achieved commercial operations in 2021 were modeled	2026 and 2027).			
	in the 2023 and 2027 LCR study.				
	Please confirm if there was any additional battery energy storage	Please use the excel list provided and sort by "Area", "Sub-area" and			
	generation modeled in the LCR sub-area that would increase the amount of	then "CAISO Tag".			
	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	For methodological answers please read section 2.4 of the 2022 or			
	replacement max 4-hour storage value, whether the CAISO is making	2023 LCR reports.			
	assumptions on whether the battery is charging, discharging, or idle in order to				
	estimate the value.				
	Approximate storage in GBA – Oakland LCR subarea				
	In 2022 and 2026 LCR study results the CAISO identified the Oakland	For methodological reasons the LCR replacement of existing resources			
	sub-area had a 22 MW, 181 MWh, and 11 4-hour 1 for 1 replacement MW for	stops at the maximum MW of LCR need. For 2023 and 2027 there			

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 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. • Please clarify why the values described above are not in the draft results at this stage? Feedback to improve digestibility of estimated battery storage characteristics	warch 9, 2022			
replacement in 2026. Please provide updated estimate values for the Oakland sub-area for 2023 and 2027. • Please clarify why the values described above are not in the draft results at this stage? Feedback to improve digestibility of estimated battery storage characteristics) Response			
analysis 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.	model in the Oakland sub-area and anology that needed or could be Please use this list ocuments/PhysicalResourceListUsed vTechnicalStudies- ity.xls when checking resources in			