

The ISO received comments on the 2024 and 2028 draft Local Capacity Requirements results presented at the March 9, 2023 stakeholder call from the following:

- 1. California Community Choice Association (Cal-CCA)
- 2. California Department of Water Resources (CDWR)

Copies of the comments submitted are located on the Local Capacity Requirements Process Page at: http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalCapacityRequirementsProcess.aspx.

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



No	Comment Submitted	CAISO Response
1	California Community Choice Association (Cal-CCA)	
4-	Submitted by: Shawn-Dai Linderman	
1a	Please provide your organization's overall comments on the 2024 and 2028 Local Capacity Requirements Technical Study Draft Results. The California Community Choice Association (CalCCA) appreciates the opportunity to comment on the 2024 and 2028 Local Capacity Requirements (LCR) Technical Study Draft Results (Draft Results). The Draft Results highlight the importance of how local capacity areas are studied to ensure reliable	Thank you for your comments.
	operations under a zero-carbon grid. In the California Public Utilities Commission's (Commission) Integrated Resource Planning (IRP) proceeding (R.20-05-003), CalCCA and other parties recommended that the Commission, in coordination with the California Independent System Operator (CAISO), begin explicitly studying the ability to reliably serve load in local areas and disadvantaged communities with reduced	These comments are not directly transmitted into the CPUC process. Please submit comments to the IRP process directly to the CPUC.
	reliance on fossil fuel resources. Specifically, CalCCA requested that the next sensitivity portfolios transmitted from the Commission to the CAISO for study in the Transmission Planning Process (TPP) should contemplate the retirement of fossil fuel resources in the local areas. In response to these requests and to the direction in Senate Bill 887, which requires the Commission to look at ways to reduce reliance on non-preferred resources in local areas, the Commission states in its D.23-02-040: ²	CAISO reminds stakeholders that it already conducted studies for alternatives to reduce or eliminate conventional gas generation during 2018-2019, 2019-2020 and 2020-2021 TPP assessment cycles. See details under each area and sub-area sections of the 10-year out LCR reports:
	The importance of planning for additional natural gas plant retirements has been a priority for us for some time and Commission staff have begun work to develop this type of analysis. The analysis is complex, and we commit to beginning a process for stakeholder input on it in 2023. If it is ready, we will include it in consideration for a sensitivity analysis in the next TPP cycle.	http://www.caiso.com/Documents/AppendixG-BoardApproved2020-2021TransmissionPlan.pdf http://www.caiso.com/Documents/AppendixG-BoardApproved2019-2020TransmissionPlan.pdf http://www.caiso.com/Documents/AppendixG-BoardApproved2018-
	The Draft Results highlight the importance of conducting this assessment as soon as possible. The ability to retire fossil fuel resources in local areas will depend on either (1) eliminating transmission constraints that limit the number	2019TransmissionPlan.pdf

¹ California Community Choice Association's Reply Comments on Administrative Law Judge's Ruling Seeking Comments on Electricity Resource Portfolios For 2023-2024 Transmission Planning Process, Rulemaking (R.) 20-05-003 (Nov.10, 2022), at 3.

² Decision (D.) 23-02-040, Decision Ordering Supplemental Mid-Term Reliability Procurement (2026-2027) and Transmitting Electric Resource Portfolios to California Independent System Operator for 2023-2024 Transmission Planning Process, R.20-05-003 (Feb. 23, 2023), at 78.



Stakeholder Comments 2024 and 2028 Draft Local Capacity Technical Study Results March 9, 2023

No	Comment Submitted	CAISO Response
	of resources capable of serving load in the local area, or (2) bringing online	
	enough effective carbon-free resources inside of the local area to replace the	
	existing fossil fuel resources. The Draft Results show that local area	
	requirements have reduced by over 40 percent in some areas due to new	
	transmission.3 These results demonstrate, that when cost-effective, new	
	transmission can be extremely effective at reducing reliance on resources	
	inside the local area by increasing the ability to import resources outside the	
	local area to load centers. Because local areas depend heavily on gas-fired	
	resources, it will be critical for the CAISO and the Commission to identify when	
	transmission can cost-effectively reduce LCRs to meet state policy goals.	
	Studying reduced reliance on fossil fuel resources in local areas now will result	
	in forward planning that ensures an orderly and reliable transition from reliance	
	on fossil fuels in local areas at least cost.	

 $^{^3}$ Requirements in the LA basin dropped from 7,529 MW in 2023 to 4,413 MW in 2024 due to new transmission.



No	Comment Submitted	CAISO Response
2	Vistra Corp.	
	Submitted by: Cathleen Colbert	
2a	Please provide your organization's overall comments on the 2024 and 2028 Local Capacity Requirements Technical Study Draft Results.	
	Vistra Corp. respectfully submits these comments on the CAISO's 2024 and	Thank you for your comments.
	2028 Local Capacity Technical Study ("LCT Study") Draft Report and Study	
	Results ("Draft Reports") posted on March 7, 2023 and discussed at a public	
	stakeholder call on March 9, 2023.4 Vistra comments will cover the following	
	four topics:	
	South Bay – Moss Landing LCR subarea continues to underrepresent the ground of bettering in the least area supported to be appreciate in 2024 and	
	the amount of batteries in the local area expected to be operating in 2024 and beyond	
	Oakland LCR subarea continues to fail to show there is a need to	
	procure storage in local area to complete the Oakland Clean Energy Initiative	
	LCT Study results do not adopt needed methodology changes to	
	recognize the reality that local Resource Adequacy in forward years can be met	
	by new resources with deliverability and that use limited resources are meeting	
	these needs	
	o LCT Study results do not allow planned resources that are	
	viable to achieve commercial operations to offset the need to reduce	
	the requirements in deficient areas o LCT Study results do not specify the minimum energy (MWh)	
	needed to meet the local area requirements	
	South Bay – Moss Landing LCR subarea continues to underrepresent the	CAISO can confirm that Q1540 was not modeled in the 2024 and 2028
	amount of batteries in the local area expected to be operating in 2024 and	LCR studies. The resource specific modeling assumptions in LCR base
	beyond ⁵	cases come from the TPP study plan. For details of requirements to be
	Vistra is concerned that the Moss Landing Battery Energy Storage Facility	modeled please see:
	Phase III, Moss 350, that is Q1540 project is not being included in the	http://www.caiso.com/InitiativeDocuments/FinalStudyPlan-2022-
	generation assumptions even though it is under construction with a target	2023TransmissionPlanningProcess.pdf
	commercial operation date of June 1, 2023. This is well in advance of 2024	

⁴ 2024 & 2028 Overall Summary of Findings – Draft 2024 and 2028 Local Capacity Requirements, http://www.caiso.com/InitiativeDocuments/Presentation-Draft-2024-and-2028-LCR-Bay-Area-Local-Area-Mar92023.pdf; Draft 2024 and 2028 LCR Bay Area Local, http://www.caiso.com/InitiativeDocuments/Presentation-Draft-2024-and-2028-LCR-Bay-Area-Local-Area-Mar92023.pdf.

⁵ Draft 2024 and 2028 LCR Bay Area Local, Slide 13, http://www.caiso.com/InitiativeDocuments/Presentation-Draft-2024-and-2028-LCR-Bay-Area-Local-Area-Mar92023.pdf .



No	Comment Submitted	CAISO Response
	commercial operation date listed in the CAISO's overall summary of findings when describing its assumptions and methods. We believe this because the 2022-2023 TPP Portfolios transmitted to CAISO do not include these 350 MW in the in-development column. Further, the numbers support this because the 2022 NQC resources list showed 678 MW of storage of which the first two phases including VISTRA_5_DALBT1, VISTRA_5_DALBT2, VISTRA_5_DALBT3, and VISTRA_5_DALBT4 amounting to 400 MW and there were an additional 278 MW of new units with MW that do not map to the Vistra Q1540 project with 350 MW.6 There should be an additional 350 MW shown in the Battery assumptions. We respectfully request the CPUC and CAISO coordinate to provide an update to its transferred portfolio that would reflect the 350 MW as in development resources so that the 2024 LCR and 2028 LCR results are more accurate.	The LCR base cases were posted for stakeholder comment and the CAISO did not received any comments regarding these units not being included at the time of the base case development. Furthermore, if these resources become operational and if they have deliverability then they will count towards resource adequacy and implicitly meet the local requirements regardless if they were modeled or not in the 2024 and 2028 LCR studies.
	Oakland LCR subarea continues to fail to show there is a need to procure storage in local area to complete the Oakland Clean Energy Initiative ⁷ CAISO assumptions show a 55 MW market resource and a 55 MW battery at the Oakland Sub-area, Vistra is not aware of any planned resource meeting the relevant inclusion criteria that would support this assumption for 2024 and 2028. The generation assumptions are inconsistent with the CPUC transferred portfolio which do not show any existing or planned resources at the Oakland substation for the 2022-2023 TPP. Vistra also requests the CAISO make clear that the local need cannot be met by the 48 MW of Muni/QF. Vistra believes the correct assumptions based on the CPUC transferred portfolios, which are consistent with current state of development efforts while assuming CTs are retired in future years, are shown below.	The need to procure storage in the Oakland sub-area is clear in every CAISO provided Transmission Plan since the approval of the Oakland Clear Energy Initiative project. The 55 MW battery in the Oakland sub-area was modeled by the CAISO in order for the base case to be in compliance with the approved OCEI project. It is true that the CPUC portfolio did not have such resource, however the CAISO has approved the OCEI and battery installation was a requirement of the project. At Vistra's request the CAISO has approved removal of the Oakland unit 2 from his RMR contract in order to be repowered with a battery storage. Therefore the only "under construction" battery the CAISO is aware of is Vistra's repower of Oakland unit 2 and as such it was modeled in future cases in order to be compliant with the approved OCEI project. The CAISO could remove the 55 MW battery from the base case and appropriate tables if Vistra confirms the repower has new proposed in-

⁶ Attachment A – List of Physical Resources Accounted for in the 2023 and 2027 Local Capacity Technical Studies, South Bay – Moss Landing sub-area, https://www.caiso.com/InitiativeDocuments/AttachmentA-ListofPhysicalResourcesAccountedforinthe2023and2027LocalCapacityTechnicalStudies.xls.

⁷ Draft 2024 and 2028 LCR Bay Area Local, Slide 17, http://www.caiso.com/InitiativeDocuments/Presentation-Draft-2024-and-2028-LCR-Bay-Area-Local-Area-Mar92023.pdf.



Assumpt Assuming Fuel CTs after 2025 2024 1108 0 LCT Study Oaklan Generati on MW)	ions g Oakla are reti 5 20 09 01	228 0 should be Aug 2026- 2028	
110 ⁸ 0 LCT Study Oaklan	09 011 d results s Aug 2024- 2025	should be Aug 2026- 2028	they do exist and they are modeled in the base cases. The same resources are on the NQC list and they are allowed to count for RA. As
0 LCT Study Oaklan Generati	010 d results : Aug 2024- 2025	should be Aug 2026- 2028	they do exist and they are modeled in the base cases. The same resources are on the NQC list and they are allowed to count for RA. As
LCT Study Oaklan	Aug 2024- 2025	Aug 2026- 2028	they do exist and they are modeled in the base cases. The same resources are on the NQC list and they are allowed to count for RA. As
Generati	Aug 2024- 2025	Aug 2026- 2028	they do exist and they are modeled in the base cases. The same resources are on the NQC list and they are allowed to count for RA. As
	2024- 2025	2026- 2028	resources are on the NQC list and they are allowed to count for RA. As
	INGC	NQC	resources are on the NQC list and they are allowed to count for RA. As previously explained in CAISO RMR Board memorandums those resources are also part of a metered sub system (MSS) agreement.
Market	110	0	These resources have limited hours of operation per year (due to their
Battery	0 ¹¹	0	environmental permits) and are to be used by the MSS entity to follow
Muni/QF	012	0	their own load (with significant penalties if not achieved). The CAISO
34 Solar	0	0	may not directly use these resources for local reliability without
Existing 20-minute DR	0	0	impacting the MSS agreement and therefore the CAISO is looking resources that directly participate in the CAISO markets in order to maintain local reliability in this sub-area. However the CAISO cann
Mothball	0	0	eliminate these resources from the LCR tables.
34 Total	110	0	CAISO will not allow Oakland sub-area to become "deficient", in order
3	Existing 20-minute DR Mothball 84 Total	Existing 0 20-minute DR Mothball 0	Existing 0 0 0 20-minute DR 0 0 0 84 Total 110 0

⁸ Consistent with Vistra's identifying that it is the future years that need the assumptions revised, Vistra suggests for the different generation assumptions that CAISO acknowledge the actual operating conditions for 2024.

⁹ Consistent with the goal to complete the Oakland Clean Energy Initiative, CAISO should assume the existing Jet-Fuel fired CTs are retired in 2026-2028 but no earlier.

¹⁰ Consistent with the pressing need for CAISO results to show that there is a need for new resource in Oakland sub-area, it is detrimental to procurement activities to assume any batteries in Oakland sub-area unless it is for forward years where a new resource could feasibly achieve commercial operations.

¹¹ No battery project in development, should be 0 MW.

¹² Muni/QF cannot meet local need. Please clarify this somehow so that the generation available to meet Oakland local need does not appear that the Muni/QF can.

CAISO Response



lo	Com		ment Submitted			
	Year	Cat ego ry	Limiting Facility	Contingency	LCR (MW)(D eficien cy)	LCR (MWh)(<u>Deficien</u> <u>cy)</u>
	2024	P6	Oakland C- X #2 115 kV cable	Oakland C-X #3 & D-L #1 115 kV lines	31	~176 ¹³
	2025	P6	Oakland C- X #2 115 kV cable	Oakland C-X #3 & D-L #1 115 kV lines	31	~176
	2026	P6	Oakland C- X #2 115 kV cable	Oakland C-X #3 & D-L #1 115 kV lines	31 (- 31) ¹⁴	~176 (~- 176)
	2028	P6	Oakland C- X #2 115 kV cable	Oakland C-X #3 & D-L #1 115 kV lines	40 (-40)	~176 (~- 176)

Based on our practical experience with previous LCT Study results, we are concerned that failure to modify the LCT study assumptions will produce results that do not send the appropriate signal to address local capacity deficiencies in the Oakland local area. Specifically, energy storage will not be developed and achieve commercial operations to complete the Oakland Clean Energy Initiative and facilitate the retirement of the Oakland Power Plant Jet-Fired Combustion Turbines if the LCT study assumes energy storage will be in operation in 2024. LCT Study results do not adopt needed methodology changes to recognize the reality that local Resource Adequacy in forward years can be met by new resources with deliverability and that use limited resources are meeting these needs

Vistra provided comments on the 2024 LCR methods on November 22, 2022. 15 We respectfully asked the CAISO to revise its methodology to allow the LCT Study to keep pace with the changing RA fleet and RA program by 1) specifying requirements in terms of capacity and energy and 2) only reducing

The CAISO has been consistent in all messaging related to Oakland sub-area. OCEI is a CAISO approved project and it requires new battery storage in the Oakland sub-area to be operational in order to allow existing Oakland CTs to retire.

CAISO has already responded to similar suggestions from Vistra in our response to the October 31, 2022 stakeholder call found here: http://www.caiso.com/InitiativeDocuments/ISOResponsestoComments-2024LocalCapacityRequirementsDraftStudyManual.pdf

¹³ Please confirm that our understanding that the MWh need has not changed is correct, preferably by including this in the requirement as MWh requirement.

¹⁴ Illustrative and intending to represent that there is a full deficiency starting in 2026 assuming CTs are retired to send the signal that additional procurement is needed to cure local needs in this area with projects that achieve COD in 2025 that have deliverability rights but have yet to be procured.

 $^{^{15}\} Vistra\ Corp.\ Comments\ on\ the\ 2024\ Local\ Capacity\ Technical\ Study\ Criteria,\ Methodology,\ and\ Assumptions,\ November\ 22,\ 2022,\\ \underline{https://stakeholdercenter.caiso.com/Comments/AllComments/3e2c6d79-eb22-4d85-a14b-ed93e2dbdb6a\#org-57df6a1d-445e-432e-ae3b-8b6d5e583fb9\ .$



No Comment Submit the local requirement in areas with resource de require CPE to cure the resource deficiency in request out of fear that reluctance to do so rest	ficiency for the binding year and forward years. We repeat that ricts developers' ability to rely on anner that best supports local	CAISO Response
require CPE to cure the resource deficiency in request out of fear that reluctance to do so rest	forward years. We repeat that ricts developers' ability to rely on anner that best supports local	
request out of fear that reluctance to do so rest	ricts developers' ability to rely on anner that best supports local	
	anner that best supports local	
these results to help inform our activities in a m	a una tha CNICO ta adduses this	
reliability in the near and mid-term horizons. W		
oversight and to make these changes to its 202	24 and 2028 results in the final	
version.		
LCT Study results do not allow planned resource		
commercial operations to offset the need to rec	uce the requirements in deficient	
<u>areas</u>		
Vistra strongly believes the three-year forwar	d local RA requirements	As explained above what is modeled in the LCR base cases does not
established through the LCT Study must be rev	rised to allow for new resources	establish what resources can count towards meeting the local capacity
that can achieve commercial operations in a fo	ward year to facilitate curing	needs. The latest NQC list establishes what resources can and cannot
area(s) with resource shortfalls for the forward-	year requirements. This change	count towards meeting the LCR needs in the annual RA process. The
is needed to better align the LCR requirements	to respect that the local RA	CAISO does not run a multi-year RA process, for questions on what
program has evolved to require procurement of	local RA on a three-year	counts in the multi-year process please address the local regulatory
forward basis where new resources are able to	be procured to meet those	agency (LRA) that established such RA program.
needs.	·	
Vistra again requests that the CAISO change	its assumptions to allow	Deficiencies are calculated to give stakeholders a view as to where new
resources with commercial operation dates in 2	2025 and 2026 that are viable to	future resources may be better located, however it is not advisable that
achieve COD, such as by already receiving TP	D allocation or by utilizing	the deficiency part be included in the actual requirement until such
deliverability retained at the point of interconne		future new resources are on their path of becoming operational
Study Project. 16 We are concerned that failure		themselves.
it more difficult for procurement arms and deve		Secondary many of these "deficiencies" are actually better resolved by
existing procurement mechanisms to cure need		transmission upgrades rather than new resources.
example, PG&E Central Procurement Entity ("C		
progress on its efforts to cure local area deficie		
resources under its existing CPE authority to ex		
with new resources.		
Vistra urges the CAISO to update its method	plogy and produce 2024 and	The CAISO does not agree with Vistra's proposal. CAISO believes the
2028 study results that will send the appropriat		incentive to locate resources in deficient areas and sub-areas already
forward years.	o io irai a digital for add in the	exists.
Tornard youro.		Onote.

 $^{16}\ 2024\ \&\ 2028\ Overall\ Summary\ of\ Findings-Draft\ 2024\ and\ 2028\ Local\ Capacity\ Requirements,\ Slide\ 3, \\ \underline{http://www.caiso.com/InitiativeDocuments/Presentation-Draft-2024-and-2028-LCR-Bay-Area-Local-Area-Mar92023.pdf}\ .$





No	Comment Submitted	CAISO Response
	LCT Study results do not specify the minimum energy (MWh) needed to meet	
	the local area requirements	
	California fleet has evolved to include a greater concentration of use limited	
	resources where providing the installed capacity requirement is insufficient to	
	capture the energy requirement necessary to meet the LCT need. The LCT	
	Study should evolve to recognize that the local needs will increasingly come	
	from non-conventional resources and adopt changes for 2024.	
	By not specifying the local needs in both terms of capacity and energy, the	
	CAISO is unintentionally confusing procurement arms that are considering	
	meeting their local needs from non-conventional resources. Load Serving	
	Entities or Central Procurement Entities need to understand that there is a MWh	As previously explained, the daily and yearly energy requirement can
	requirement in some areas where the 4-hour Resource Adequacy obligation	be ascertained by the graphs already provided for each local area and
	may not be sufficient.	sub-area. The CAISO does have back-stop authority to assure that both
	Vistra urges the CAISO to enhance its final results to include this needed	the capacity and the energy (as a collective requirement) are met in order to achieve local area reliability needs.
	level of detail to its LCT Study. CAISO should revise the LCT Study to identify	·
	both a minimum capacity (MW) and minimum energy (MWh) requirement for	The CAISO is concerned that listing a specific energy requirement in
	each LCR area(s). Additionally, we request the CAISO specify in its methods whether the energy requirement is (1) non-continuous hours requirement or (2)	MWh could be misunderstood as a change in policy, since currently
	continuous hours requirement of (2)	energy (MWhs) are not enforced at the LSE level.
	continuous nours requirement	

¹⁷ For example, in the 2023 LCT Study CAISO identified a local need for Oakland sub-area of 35 MW. However, there is also an energy requirement of 176 MWh based on Vistra's review of the studies. This means to meet the need there needs to be resource(s) that provide either 35MW with at least a ~5 hour continuous output or 44MW with at least a ~4 hour continuous output. Vistra requests CAISO specify the requirements with both MW (35 MW) and energy (176 MWh) for all areas going forward to address the changing RA fleet various capabilities.