

The ISO received comments on the topics discussed at the July 18 stakeholder meeting from the following:

1. [Pacific Gas and Electric Company \(PG&E\)](#)
2. [Middle River Power \(MRP\)](#)
3. [Bay Area Municipal Transmission group \(BAMx\)](#)

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

<http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalCapacityRequirementsProcess.aspx>

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

1. Pacific Gas and Electric Company (PG&E) Submitted by: Jared Rist		
No	Comment Submitted	CAISO Response
1a	<p>Pacific Gas and Electric Company (PG&E) offers the following comments on the California Independent System Operator's (CAISO) Local Capacity Technical Study Criteria straw proposal.</p> <p>PG&E would like to reiterate that while PG&E supports the CAISO opening this initiative to update and review the Local Capacity Technical Study criteria, we urge CAISO to use this initiative take on a broader scope and consider necessary changes to the local capacity planning process to support the evolving RA framework in California, the changing resource mix, and the evolving needs of the system over the coming years. As we noted previously, the CPUC also appears to support undertaking such a holistic review of local RA and PG&E would advocate close coordination.</p> <p>PG&E recommends the CAISO adopt the following high-level principles in its review and update of the Local Capacity Technical Study (LCTS) methodology:</p>	<p>The ISO is committed to working with the CPUC and all other stakeholders to support the evolving RA framework through different and multiple venues. Given those other initiatives and venues, this initiative is being limited to updating the local capacity technical criteria. While several comments relate to issues beyond the scope of the initiative, responses have been provided to some extent to be helpful.</p>
1b	<p><u>Transparency and Clarity:</u> As PG&E has repeatedly noted in comments, the current LCTS methodology is opaque. The CAISO has repeatedly referred stakeholders to the Study Manual on its methodology, but this does not provide any details on the specifics for determining requirements such as the resources adjusted between contingencies for an N-1-1. Stakeholders have little or no opportunity to review the underlying assumptions, methodology, and inputs that go into determining the local area and subarea needs, only some of which are identified and conveyed to the CPUC as Local Capacity Requirements (LCR) that will drive the procurement of local Resource Adequacy (RA).</p> <p>In addition, clarity is needed on how the CAISO is envisioning the implementation of the Bulk Electric System (BES) definition. Non-BES elements are evaluated under ISO Planning standards, but clarity is needed to understand if this is intended to encompass the contingencies evaluated or the facilities constrained under contingency. Finally, nonconsequential load drop could be an appropriate solution to reduce the minimum capacity requirement and clarity is</p>	<p>Detailed adjustments between performance level P6 events can be found in the LCR Manual page 17 bullets #4 and #5. http://www.caiso.com/Documents/2020LocalCapacityRequirementsDraftStudyManual.pdf</p> <p>Every year since 2005 the ISO has conducted a stakeholder meeting around October 30th to specifically talk about LCR criteria, methodology and assumptions, therefore stakeholder had an ample opportunity to review and understand these assumptions and methodology. Please bring specific questions and improvement suggestions forward in the correct stakeholder engagement process.</p> <p>As specified in the ISO Planning Standards "NERC Transmission Planning (TPL) standard TPL-001-4 categories P0, P1 and P3 contingencies taken on the non-BES equipment" will drive the needs and not necessarily the constraining facility. Non-consequential load dropping is not allowed for P0, P1 and P3 categories, therefore the ISO will not recommend locations for load dropping.</p>

No	Comment Submitted	CAISO Response
	needed on whether the CAISO will identify the recommended locations for the load drop in specific areas.	
1c	<p><u>Full alignment between standards-based requirements and procurement.</u> The goal of a revised and updated LCTS process should be to fully inform the RA procurement process about all known local needs, in order to ensure that the right resources (with the right combination of characteristics, located in the right areas and subareas of the system), are identified with sufficient advanced planning runway to allow efficient and cost-effective procurement by Load Serving Entities (LSEs). PG&E notes that the new three-year forward local requirement adopted by the CPUC will provide greater runway to plan for and procure new resources, where needed, and to identify cost-effective transmission upgrades and alternative mitigation, such as energy storage and demand response, where appropriate.</p>	<p>You're your support towards the full alignment of the Local Capacity Technical criteria with the mandatory standards is noted. The updated criteria will improve the RA procurement process in order to ensure that the right resources (with the right combination of characteristics, located in the right areas and subareas of the system), are identified with sufficient advanced planning runway to allow efficient and cost-effective procurement by Load Serving Entities (LSEs).</p>
1d	<p><u>Accurately reflect the changing resource mix and hourly load variation:</u> Resource policy in California is driving the retirement of conventional gas-fired resources that historically provided a wide range of resource attributes bundled together and were generally dispatchable to the same predictable level of output at most times of the day and year. This led to the application of single hour "snapshot" capacity planning processes, based upon a relatively simple assumption: if the resources in a given area are capable of meeting the worst single hour stressed system condition (1-in-10 peak load, under a set of prescribed contingencies), then that resource mix can safely be assumed to be sufficient to meet any less severe conditions, of whatever duration, which might occur at other times. However, planning processes that rely on this single hour snapshot assumption do not appropriately account for the evolving resource mix in California and hourly load variations from the peak, with the increasing penetration of variable renewables and energy-limited resources, such as energy storage and Demand Response. With the new resource mix, it is no longer safe to assess local area needs based on a single hour snapshot, and to apply a single capacity number as the appropriate basis for procurement of local RA for the entire year. PG&E believes that CAISO should use this initiative to begin developing and discussing with stakeholders the tools and methodology that will appropriately account for the temporal nature of resource contributions and hourly load variations, including the seasonally variable nature of renewables, as well as the limited</p>	<p>The ISO has provided the hourly load profiles for each area and sub-area regarding the peak day as well as load profile for the entire year for most areas and sub-areas in the 2020 LCT Report.</p> <p>The ISO is committed to improvements on how data is presented as well as the process going forward after stakeholders have a chance to review and provide substantive comments. Data presented was in the same format as that presented in the Slow Response DR discussion.</p>

No	Comment Submitted	CAISO Response
	duration of energy storage and demand response use limitations. A template for how this can be done was already developed in the Slow Response DR discussion and would be a good starting point for any new methodology developed here.	
1e	<p>PG&E appreciates the considerations that have so far been made in the issue paper, however without these three principles stated above, we believe this initiative will fall short of accomplishing some of the important changes we feel are needed in the local capacity technical study process.</p> <p>PG&E understands that the burden of evolving to a new LCTS methodology that better meets the high-level goals articulated above will be great, and that additional CAISO personnel and resources may be required to perform the necessary studies. Nevertheless, PG&E believes it is in the best interests of all customers to do so, because the cost of not conducting transparent local capacity studies that are sufficiently detailed and more fully aligned with RA procurement – and which therefore increase reliance on costly backstop procurement to fill in the remaining unidentified needs – is likely to be far greater.</p>	The comment has been noted.
1f	<p>CAISO feedback on PG&E issue paper comments:</p> <p>In the straw proposal the CAISO responded to PG&E’s original comments regarding these principles and considerations for the initiative by stating that these issues had been addressed in the straw proposal or that there was another ISO process that we had been directed to in addressing these concerns. PG&E would like clarity on what the appropriate ISO process for addressing our concerns with the local capacity studies criteria if not through this initiative. We appreciate the work that has been done and look forward to a revised straw proposal that will address these issues.</p>	Most comments provide by PG&E herein are not criteria related and they should be addressed in the yearly meeting regarding LCR Methodology and Assumptions, that is usually scheduled on or around October 30 th .
2. Middle River Power (MRP)		
Submitted by: Lauren Holdway and Joe Greco		
No	Comment Submitted	CAISO Response
2a	Middle River Power (“MRP”) thanks the California ISO (“CAISO”) for the opportunity to submit these brief comments on the Local Capacity Technical Study Criteria (“LCT”) Straw Proposal dated July 11, 2019. MRP owns and/or manages approximately 2,000 MW of renewable and natural gas facilities in CA.	

No	Comment Submitted	CAISO Response
	<p>We provide the following brief comments on the proposed change to the LCT planning standards.</p> <p>MRP is supportive of the CAISO updating the LCT study criteria to align NERC, WECC and CAISO Mandatory Standards which have been implemented over time.</p> <p>MRP supports the CAISO's current proposal in the LCT straw proposal dated July 11, 2019. MRP appreciates that the CAISO has maintained its position from the prior May LCT Criteria Update and continues to support a more detailed evaluation of a more stringent set of contingencies. As previously stated in prior comments, MRP believes the current misalignment between standards across CAISO studies creates inefficiencies from a planning perspective within the CAISO and across agencies. Utilizing the same standards will provide a clear understanding of the trade-offs between transmission, retirements, and replacement capacity especially in local and sub-local areas.</p> <p>Overall, MRP continues to believe that aligning study assumptions improves transparency and will lead the most efficient and economic approach to local reliability which may include transmission upgrades, replacement capacity and/or maintaining existing resources.</p> <p>MRP thanks the CAISO for the opportunity to participate in the LCT enhancement process.</p>	<p>Your support towards the full alignment of the Local Capacity Technical criteria with the mandatory standards has been noted.</p>
<p>3. Bay Area Municipal Transmission group (BAMx) Submitted by: Moises Melgoza and Paulo Apolinario</p>		
No	Comment Submitted	CAISO Response
3a	<p><u>Introduction and Stakeholder Feedback</u></p> <p>On July 18, 2019, the CAISO held a web-conference to discuss its straw proposal ("Straw Proposal" hereafter) regarding updates to its Local Capacity Technical (LCT) study criteria. The Bay Area Municipal Transmission group (BAMx)¹ appreciates the opportunity to comment on the CAISO's Straw Proposal on this topic that was posted on the CAISO website on July 11, 2019.</p>	

¹ BAMx consists of City of Palo Alto Utilities and City of Santa Clara, Silicon Valley Power.

No	Comment Submitted	CAISO Response
	<p>BAMx continues to appreciate the efforts of the CAISO to consider the alignment of the LCT criteria with the mandatory standards. We especially appreciate the CAISO's efforts in responding to BAMx's comments on the Issue Paper dated June 17, 2019.² They helped to clarify many issues. In the remaining portion of these comments, we include further comments on the Straw proposal for the CAISO's consideration.</p> <p><u>BAMx Suggestions</u> <i>Support for full alignment of the Local Capacity Technical criteria with the mandatory standards</i></p> <p>BAMx does not agree with the CAISO's assessment that "An overwhelming majority of comments support the full alignment of the LCR criteria with the mandatory NERC, WECC and ISO standards."³ Three entities representing the generators and traders, i.e., Calpine, Western Power Trading Forum (WPTF) and Middle River Power (MRP) did support the full alignment of the LCR criteria with the mandatory NERC, WECC and ISO standards. However, three load-serving entities, viz. PG&E, SCE and BAMx did not oppose the alignment of the LCR criteria with the mandatory planning standards but felt the proposed changes should be evaluated as part of a broader effort to consider local capacity issues.</p>	<p>The comment has been noted.</p>
3b	<p><i>Need for Further Study Before Implementing the Alignment of the LCT criteria with NERC, WECC and CAISO Mandatory Standards</i></p> <p>The Straw Proposal indicates that the existing LCT study criteria were established and included in the ISO Tariff before NERC mandatory standards were formed and it represented a subset of the NERC voluntary standards available at the time. The CPUC at that time agreed with that subset but wanted a lesser set of criteria to also be studied (Category B in addition to category C). Therefore, the need to assess the level of resources needed to satisfy multiple levels of LCR criteria has been constant from the beginning. We believe it is appropriate to do so going forward. We agree that one of the levels should be the full alignment of the LCR criteria with the mandatory planning standards proposed in the Straw Proposal. However, we do not agree that dropping the</p>	<p>The comment has been noted. The ISO will highlight the difference in binding contingencies and magnitude of changes between criteria, through the LCR study process.</p>

² See CAISO response to Stakeholder Comments Updates to Local Capacity Technical Criteria Issue Paper May 30, 2019.

³ Straw Proposal, p.6.

No	Comment Submitted	CAISO Response
	<p>information gained from also studying the existing criteria level is appropriate at this time. We believe that the information gained from studying and reporting on the level of resources needed under both criteria levels is well worth the effort at least until the important issues outlined in the next section are considered/resolved.</p>	
<p>3c</p>	<p><i>Justification for Fully Aligning the LCT Criteria with NERC, WECC and CAISO Mandatory Standards</i></p> <p>BAMx believes that the decision to provide an increased level of local resource versus building new transmission is a complicated one because those alternatives have many different characteristics. Each of them has different attributes that provide different levels of reliability depending on the technology involved and the needs for each reliability issue being addressed. Therefore, BAMx does not agree with the CAISO claim that the lack of LCT and mandatory planning criteria alignment means “it could be more challenging for regulators to direct resource procurement in lieu of the ISO advancing conventional transmission alternatives.”⁴ We believe that the CPUC can and should consider various levels of reliability as part of its procurement decision-making. The issues created by not planning a level of local resources to meet the higher level of criteria can be part of an already complicated decision making progress.</p>	<p>The ISO believes that mandatory standards represent the minimum criteria that all regulators need to achieve by either approving new transmission projects or providing local resources through RA procurement. This will be accomplished by aligning the two criteria (planning and LCT).</p>
<p>3d</p>	<p><i>Need for a Broader Scope</i></p> <p>In its comments on the Issue Paper, PG&E did a good job in articulating a need for a “broader scope and consider necessary changes to the local capacity planning process to support the evolving RA framework in California, the changing resource mix, and the evolving needs of the system over the coming years.”⁵ PG&E notes that “The CPUC also appears to support undertaking such a holistic review of local RA and PG&E would advocate close coordination.”⁶ Although the CAISO seems to support close coordination with the CPUC and the evolving RA framework through different and multiple venues, it seems to</p>	<p>Please see response to comment 1a above.</p>

⁴ Straw Proposal, p.6.

⁵ PG&E Comments on the Issue Paper, p.2.

⁶ “PG&E recommends a working group to specifically ‘examine the relationship between local RA requirements, RA resource obligations, changes to NQC in forward years, how RA performance i[s] assessed, and how local RA backlog procurement occurs or does not occur from uncured deficiencies.’ The Commission finds PG&E’s proposal to be reasonable, and directs Energy Division to establish a working group to evaluate improvements and refinements prior to the development of the 2021-2023 local RA requirements.” Proposed Decision of ALJ Chiv, 5/24/19, R. 17-09-020, pp. 8-9

No	Comment Submitted	CAISO Response
	<p>consider the issues raised by PG&E to be beyond the scope of the current initiative. We do not agree with the CAISO's view on scope.</p> <p>In summary, we think the CAISO needs to provide LCR needs under existing and updated criteria. Currently, the CAISO provides the local capacity needs under both the Category B and Category C conditions. So far, it appears the Category C has predominantly been used as a criterion to direct procurement. We request the CAISO to continue providing the resource level needed by the "old Category C criteria" even though it could define that level as represented by a combination of criteria under the new NERC definitions. The CAISO should also provide the local capacity needs under the full set of mandatory criteria as it has proposed.</p> <p>We believe the increased efforts are fully justified, at least for a period of time, as the CAISO and CPUC continue to co-operate in finding appropriate methods to achieve the desired level of reliability in the most cost effective manner.</p> <p>BAMx appreciates the opportunity to comment on the Straw Proposal and acknowledges the significant efforts of the CAISO to develop this material. Based upon our above comments, we urge the CAISO to take the time to report on the level of local resources needed for the two levels of criteria suggested above.</p>	<p>Please see response to comment 3b above.</p>