

The ISO received comments on the topics discussed at the October 31, 2018 stakeholder call from the following:

1. California Public Utilities Commission - Staff (CPUC-Staff)
2. Calpine Corporation
3. San Diego Gas & Electric (SDG&E)

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	<p><b>California Public Utilities Commission</b>            Submitted by: Donald Brooks, Khaled Abdelaziz, Michele Kito and Jaime Rose Gannon</p>	
1a	<p><b>CPUC staff encourages CAISO to expedite its local capacity technical study schedule</b>            In its October 31, 2018, presentation, CAISO presented a schedule that culminates in presentation of a final study on May 1, 2019. CPUC staff requests that CAISO expedite this schedule in order to finalize the year 1 LCR reports by April 16, 2019. CPUC staff would support a potential shortening of comment periods in order to allow for this requested timeline.</p>	<p>To ensure the detailed analysis and additional supplemental information to be included in the Local Capacity Technical Study reports, the ISO will be targeting to complete the Final report by May 1, 2019 as identified in the October 31, 2019 stakeholder presentation. .</p>
1b	<p><b>CAISO should provide local area and sub-area load data</b>            In the interest of transparency, CPUC staff recommends that CAISO provides the 1-in-10 load forecasts and historical data for each local area and sub-area. While CAISO has provided the 1-in-10 forecast for the local area in aggregate and at the sub-area level for the 2018 and 2019 LCR study, CPUC staff requests CAISO to provide historical load information for each local area and sub-area, similar to the historical load data for the Moorpark Subarea that was made available to parties on September 28, 2017, in response to a data request from CEERT. If this is overly burdensome, CPUC staff requests CAISO to provide as much historical load data as possible.</p>	<p>ISO will provide as much historical data as possible in order to aid resource adequacy procurement.</p>
1c	<p><b>CPUC staff appreciates the use of generation at time of study for solar and wind resources, but is concerned with the capping of solar and wind production at NQC level</b>            CPUC staff disagrees with the proposal to cap generation resources of wind and solar at their net qualify capacity.<sup>1</sup> Energy Division staff recommends keeping the generation level of wind and solar at the level corresponding to the time of study without setting a cutoff point.</p> <p>The current NQC values of wind and solar generators are set relative to an ELCC study which determines the value of generators to provide reliability benefit in all hours of the day and all days of a month, and generators sometimes operates at a higher level than NQC and sometimes at a lower level. For the purposes of the LCR study, it makes sense to use actual generation data for the time period of the study rather than the ELCC-based NQC estimates.</p>	<p>Using the NQC levels as a reasonable cap on output levels appears to be a reasonable simplification given that the NQC level is the amount of purchased RA capacity. The ISO was unaware of this assumption having a material impact on solar resource output levels, and will review in the course of developing final results. (Wind resources were considered at the NQC level, as opposed to being “capped” at the NQC level.)</p>



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1d	<p>CPUC staff encourages CAISO to incorporate any LCR changes made in the RA Track 2 decision to its LCR study processes</p> <p>CPUC staff notes that the RA proceeding (R.17-09-020) Track 1 decision concluded that implementation for a central buyer structure for multi-year local RA requirements should be initiated for 2020.2 Track 2 of this proceeding has been working to further develop this framework. A decision is scheduled for Q4 2018.</p> <p>CPUC staff requests that any process changes made in the Track 2 decision related to setting multi-year RA local requirements be incorporated into the short-term and long-term LCR studies. In particular, staff requests that any information necessary to inform the central buyer in the procurement of Local RA capacity be provided to ensure that Local RA procurement is cost effective and supports our reliability goals. This information-sharing may take the form of a ranking or specification of the most optimal or pivotal resources to procure in local areas and consultation between CAISO and CPUC staff regarding trade-offs between generation and transmission improvement.</p>	<p>The ISO will strive to incorporate in this upcoming cycle of LCR studies as many as possible issues resolved through Track 2 decisions. Since these decisions are unknown at this time the ISO is unsure of timing and effort required to committing to accommodating all Track 2 decisions in this year's cycle.</p> <p>ISO is committed to working with the CPUC and the central buyer to accommodate as many outcomes as possible among Track 2 decisions and to find out what would be required in future years in order to accommodate all Track 2 decisions.</p>



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2	<p><b>Calpine Corporation</b>  <b>Submitted by: Mark Smith</b></p>	
2a	<p>As similarly suggested in the RA Enhancements scoping process, Calpine suggests that the scope be revised to ensure that the Local Capacity Technical studies address the same set of contingencies as those required under the revised NERC Transmission Planning (including TPL-001-4) standards. The CAISO Tariff explicitly and affirmatively requires in Section 40.3.1.1 that the CAISO include all identified NERC contingencies:</p> <p style="padding-left: 40px;"><i>In performing the Local Capacity Technical Study, the CAISO will apply those methods for resolving Contingencies considered appropriate for the performance level that corresponds to a particular studied Contingency, as provided in NERC Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0, and TPL-004-0, as augmented by CAISO Reliability Criteria in accordance with the Transmission Control Agreement and Section 24.2.1.</i></p> <p>However, in the scope documents of the Local Capacity Technical studies, the CAISO limits the list of contingencies to a subset of those required by NERC. Specifically, Table 1 of the 2020 Local Capacity Technical study, excludes contingencies such as bus section faults, breaker failures, sequential transformer outages, stuck breaker conditions and credible extreme events.</p> <p>The presentation materials of October 31 (slide 31) highlight the risk of limiting the consideration of credible contingencies:</p> <p style="padding-left: 40px;"><i>Limiting the number of contingencies (e.g., boundary elements) would contradict with real time operations where the ISO needs to maintain system reliability for all possible contingencies.</i></p> <p>As supply and demand tighten in these local areas, the CAISO must include all of these contingencies in the analysis of local area reliability. It should modify the scope of this LCR Study to evaluate all credible TPL contingencies.</p>	<p>Currently the ISO is applying in the LCR process the contingencies specifically required in Tariff section 40.3.1.2.</p> <p style="padding-left: 40px;">“The Local Capacity Technical Study will determine the minimum amount of Local Capacity Area Resources needed to address the Contingencies identified in Section 40.3.1.2.”</p> <p>The paragraph quoted by Calpine refers to the “methods for resolving Contingencies” not to the contingencies themselves. The contingencies are specifically called for in Section 40.3.1.2.</p> <p>However, the entire Tariff section 40.3.1 refers to the old NERC standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-004-0 and the ISO will have to go through a stakeholder process in order to make changes. At that time, other changes to section 40.3.1.2 may also be considered.</p>



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3	<p><b>San Diego Gas &amp; Electric (SDG&amp;E)</b>  <b>Submitted by: Habibou Maiga</b></p>	
3a	<p><u>Dispatch of solar photovoltaic generators in year 2020</u>            The dispatch level of solar photovoltaic resources and other generators in the Imperial Valley (IV) and southern and central Arizona areas has a significant impact on the determination of the Greater Imperial Valley SDG&amp;E (GIV-SD) LCR. SDG&amp;E supports the CAISO approach of dispatching all resources up to the latest available NOC and, where applicable, not to exceed historical (projection for new resources) output values at the time of the managed peak load in the local area. Provided that the CAISO approach is also applied to all resources (including resources allocated in neighboring areas) that impact the CAISO's Maximum Import Capability (MIC) and neighboring LCR areas.</p> <p>SDG&amp;E requests that the CAISO compares LCR results using the new approach of using historical dispatch of resources with LCR results using NOC values based on CPUC's ELCC for the month of August. Running these two scenarios will enable stakeholders and the CAISO to determine if changes to the LCR results are caused by other factor than the generation dispatch at IV.</p>	<p>The ISO will try to apply the same principles of dispatch of solar photovoltaic resources in neighboring utilities as applicable under the peak shift conditions. However, these external resources could be replaced by the dispatch of thermal resources in external Balancing Authority to meet their peak loads and exports to the ISO.</p> <p>As stated in the draft Study Plan, the Maximum Import Capability has been demonstrated to be deliverable during peak load conditions, while complying with reliability criteria. For the Technical Study, the Maximum Import Capability and generation deliverability needs to be maintained to avoid the need to reduce the import flows across branch groups and deliverability of certain generators. Other resources that have fuel available at that time could replace resources that are not available due to lack of fuel source (i.e., solar generation) in the evening hours.</p> <p>If time permits, ISO will consider SDG&amp;E's request for a sensitivity analysis of having another set of LCR study results based on the NOC values for solar generation in addition to the LCR results based on the expected generation output for solar generation at peak load time.</p>
3b	<p><u>Use of historical Maximum Import Capability (MIC)</u>            The CAISO should review its practice of setting flows into the CAISO Balancing Authority at historical levels during peak load periods. With the shift of forecast peak load periods into the early evening, it may no longer make sense to set Maximum Import Capability (MIC) at levels which correspond with imports during the time of historical peak imports. Even when peak imports have occurred in the late afternoon because LCR peak loads are not coincident for all areas.</p>	<p>The historical peak import or Maximum Import Capability (MIC) has already moved to the net peak sales or later (HE 19:00 and HE 20:00). Please see the above response regarding the need to assure that deliverability is maintain for all internal resources and Maximum Import Capability in order to reliably serve both system and local area peaks.</p>
3c	<p><u>Net Qualifying Capacity (NOC) values need to be posted along with the starting cases</u>            SDG&amp;E would appreciate if CAISO could post resources' NOC that will be used to perform the LCR analysis to make sure that SDG&amp;E study is in line with CAISO's.</p>	<p>First, the ISO uses the latest available NOC list (2019) to start the LCR studies. The list is posted here:  <a href="http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx">http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx</a></p>



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		Second, the ISO will continue to publishing the resources' NQC values that are relevant to the annual LCR study, at the end of the process because ISO internal process for updating the list is done during LCR report preparation time. Furthermore, this list needs to be consistent with the final LCR report and may be updated up to the point the final report gets posted.
3d	<u>LCR final cases</u> As part of the LCR study process, SDG&E encourages the CAISO to also share the final cases used to determine the final LCR results.	The ISO's intention at this time is to post the final year 1 cases with final dispatch levels upon completion of the Local Capacity Technical Studies. The ISO will consider any further input received on this topic.
3e	<u>Combined areas LCR optimization process</u> SDG&E recommends that the CAISO adds more details or a flowchart to the LCR study plan that describes the optimization process used to perform LCR computations of combined areas.	The refinement of LCR requirements in the combined LA Basin and San Diego areas are done based on manual iteration of power flow studies. After each iteration, the constraints and the requirements are observed. The objective of each successive manual iteration is to minimize the total LCR requirement for both the overall LA Basin and the San Diego-Imperial Valley areas.