The ISO received comments on the topics discussed at the March 14 stakeholder meeting from the following:

1. Bay Area Municipal Transmission group (BAMx)
2. Pacific Gas & Electric (PG&E)
3. San Diego Gas & Electric (SDG&E)
4. Western Power Trading Forum (WPTF)

Copies of the comments submitted are located on the Local capacity requirements process webpage at:
http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalCapacityRequirementsProcess.aspx

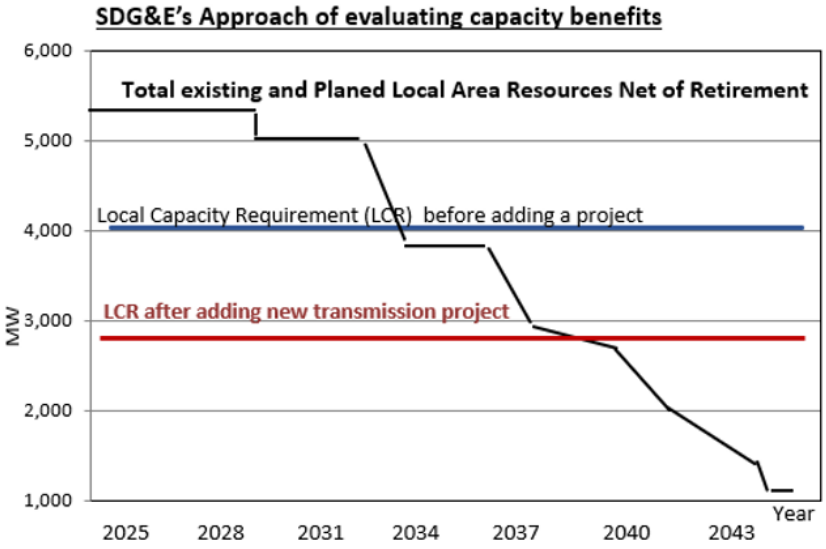
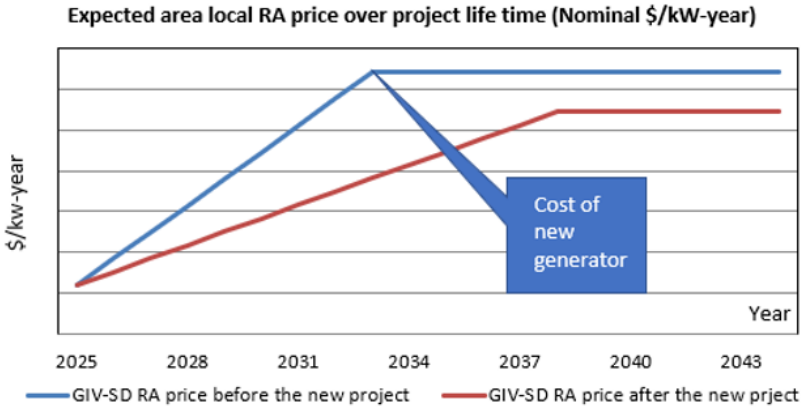
The following are the ISO's responses to the comments.

1. Bay Area Municipal Transmission group (BAMx) Submitted by: Moises Melgoza		
No	**Comment Submitted**	**CAISO Response**
1a	**Support CAISO's Efforts to Use Non-transmission Mitigation Measures to Reduce LCR** BAMx appreciates the CAISO's efforts to provide mitigations to reduce LCR needs. In particular, we noticed that Sierra subarea (South of Rio Oso) shows LCR Reduction in year 2024 not only due to new transmission, but also due to generation adjustments after the first contingency that determines the LCR for the Category C contingency. Furthermore, in the LA Basin and San Diego areas, preferred resources (bulk energy storage, energy efficiency, and 20-minute demand response) were utilized for overlapping contingencies. Separately, a combination of an operating procedure and LA Basin generation are utilized to mitigate a potential deficiency for the San Diego-Imperial Valley LCR area. BAMx encourages the CAISO to continue to explore methods to reduce LCR needs that do not require major capital additions.	Thank you for your comments and support.
1b	**Need to Continue to Report "Deficiency" Calculations** During the March 14th stakeholder meeting, the CAISO proposed to eliminate the "Deficiency" calculation while reporting the LCR findings. The CAISO cites the confusion that the deficiency calculation may create based on whether it is calculated vs. available net qualifying capacity (NQC) or vs. available resources at the time of peak – this is one of the primary reasons to eliminate the deficiency reporting. Despite this confusion, we strongly encourage the CAISO to continue to report the "Deficiency" amounts. We instead suggest that the CAISO produce these amounts both vs. available NQC and vs. available resources at the time of peak similar to how such results were presented for the Kern area during the March 24th meeting. We also suggest that CAISO includes a caveat to these results that the reported Deficiency amounts are estimated by using the most effective resource so that the stakeholders can appropriately interpret and understand these findings. The CAISO indicates that reporting the LCR deficiencies has not, in the past, encouraged the deployment of new resources in the LCR-deficient areas. BAMx does not believe that this is a sufficient reason to not report such deficiencies. BAMx suggests the CAISO, in the interest of transparency, to provide more information (as opposed to less information) on reporting LCR deficiency amounts.	The ISO has included the deficiency calculations in the detailed area and sub-area write-ups in section 3.3 of the draft reports, however this information has not been included in the tables located in the executive summary that identify the total local capacity needs for all areas.

2. Pacific Gas & Electric (PG&E Submitted by: Ronnie Lau		
No	**Comment Submitted**	**CAISO Response**
2a	**Kern Area: Westpark Sub-area** Kern-Westpark 115 kV #1 and #2 lines have been identified as the first limiting facility in the Westpark sub-area. PG&E has recently completed the Kern-Westpark 115 kV #1 and #2 line rerate project, and PG&E is in the process of updating the CAISO Transmission Register. With this project in service, the sub-area LCR need and deficiency should be reduced. PG&E requests the CAISO to re-evaluate the LCR study results based on the latest Kern-Westpark 115 kV #1 and #2 line rerate project information. Model change file for the project will be sent to the CAISO separately.	ISO will consider this change official when the ISO Transmission Register is changed, because this is not an ISO approved project, or available to the ISO in either the Resource Interconnection Management System or the Quarterly AB 970 Project Status Report filed with CPUC. This project does not influence the overall Kern area LCR requirements; it only affects requirements in a small sub-area.
2b	**Kern Area: Kern PP 70 kV Sub-area** Kern PP 70kV bus tie has been identified as the first limiting facility for the Kern PP 70kV sub-area in Years 2020 and 2024. Upgrading the Kern PP 70kV bus limiting element is part of the Kern PP 70kV Bus conversion project. After the upgrade work is done, bus tie ratings will increase and the sub-area LCR need/deficiency will decrease. The target in-service date of the upgrade work is May 2020. PG&E will monitor and expedite the work to ensure the project is on schedule. PG&E requests the CAISO to re-evaluate the LCR study results based on the latest Kern PP 70kV bus tie project information. The project model change file will be sent to the CAISO separately.	ISO will consider this change official when the ISO Transmission Register is changed; because this is not an ISO approved project, or available to the ISO in either the Resource Interconnection Management System or the Quarterly AB 970 Project Status Report filed with CPUC. This project does not influence the overall Kern area LCR requirements; it only affects requirements in a small sub-area.
2c	**Greater Bay Area: Oakland Sub-area** The study results presented for the Oakland sub-area identified a 27MW LCR need in Year 2024 even with the Oakland Clean Energy Initiative (OCEI) project in service. The OCEI project covers a combination of DERs, energy storage, substation upgrades and operational (switching) solutions, which together are expected to reduce if not eliminate the sub-area LCR need. PG&E requests the CAISO to ensure all these project components are considered when addressing the remaining P6 outage issue in the sub-area.	The entire OCEI project has been modeled at the minimum procurement target as approved for year 2021. Also, this requirement doesn't reflect potential load transfer that could occur following the first contingency. An approved operating procedure including this load transfer could reduce this requirement to about 6 MW.

3. San Diego Gas & Electric **Submitted by: Effat Moussa**		
No	**Comment Submitted**	**CAISO Response**
3a	1. **Final LCR power flow cases** SDG&E wants to thank the CAISO for proposing to make final LCR cases available to stakeholders. SDG&E believes this will further improve the LCR process and allow stakeholder to gain a better understanding of some of the mechanics used by the CAISO to determine LCR results. This will also enable stakeholders to benchmark LCR results and provide better feedback to the CAISO.	Thank you for your comments.
3b	2. **Value of LCR Reduction Projects in the Greater Imperial Valley – San Diego (GIV-SD) Local Area** The 2020 and 2024 LCR preliminary results show that all the generators in GIV-SD area need to be dispatched to meet the GIV-SD LCR requirement. This essentially means that there is already no surplus of generation in the GIV-SD local area and that projects aim to reduce LCR requirements in this area should be valued differently than they were in the recent Transmission Planning Process (TPP) draft report. SDG&E notes that in the 2018-2019 planning cycle, the CAISO used the difference between ***near-term local capacity*** prices and ***near-term system*** capacity prices to assess the economic benefits of transmission projects that are proposed to reduce LCRs. The near-term capacity prices used by the CAISO were based on the CPUC's most recent 2017 Resource Adequacy Report. Considering current state policies and the anticipated retirement of gas-fired generation within the next 20 years, which is a shorter time frame than transmission projects (e.g. more than 40 years), the economic assessment of LCR reduction projects in the GIV-SD area should not be based on near-term Resource Adequacy (RA) prices. As recognized in section 4.3.4 of the TPP draft report, the basis for the local prices should depend on the circumstances within the local capacity area. Specifically, and at a minimum, LCR reduction projects in the GIV-SD area should be valued as the price differential between the CPM soft offer cap and system capacity prices If there is no competition (or if all the units are needed) as described in table 4.3-2 of the TPP draft report.	Thank you for your comments. In regards to SDG&E's suggestion of using longer term local and system capacity prices to provide for an estimate of economic benefits of LCR reduction, the ISO will look to the CPUC for further guidance on availability of updated and appropriate local and system capacity values for use. The ISO also encourages SDG&E to provide further inputs to the CPUC for consideration in improving the estimate for long-term local and system capacity values at the CPUC public resource adequacy forums.

No	Comment Submitted	CAISO Response
	A better and more accurate approach would to use the methodology outlined in SDG&E's TPP comments for the recent 2018-2019 Draft Transmission Plan also included as Appendix with these comments. SDG&E's proposed approach is to forecast longer term (corresponding to asset lives of 50 or more years) capacity prices by considering resource scarcities over time, the cost of building new generators that will comply with California's policies (e.g. SB100) including the replacement of such generation when their useful economic lives end, and the impact of future technology improvements on zero-carbon resources' costs (e.g. storage).	
3c	**APPENDIX A.** SDG&E notes that in the 2018-2019 planning cycle, the CAISO used the difference between near-term local capacity prices and near-term system capacity prices to assess the economic benefits of transmission projects that are proposed to reduce LCRs. The near-term capacity prices used by the CAISO were based on the CPUC's most recent 2017 Resource Adequacy Report. SDG&E has some concerns regarding the CAISO's new RA price forecasting approach. The CPUC's 2017 Resource Adequacy Report reflects only near-term (less than 5 years) system and local RA capacity prices. Near-term price forecasts are not an accurate representation of capacity prices for time periods in the future when a potential transmission project could be placed in-service and operational. Long-term price forecasts which account for forecast LCR, projections of existing and committed amounts of RA capacity within the LCR area, and estimates for the Cost of New Entry (CONE) when projections of existing and committed amounts of RA capacity are less than the forecast LCR, are needed to evaluate the cost-effectiveness of potential transmission projects. By doing so, consideration of project construction timeframes, which may take as long as seven years, and appropriate asset economic life can be accounted for. Specifically, SDG&E's proposed approach is to forecast longer term (corresponding to asset lives of 50 or more years) capacity prices by considering resource scarcities over time, the cost of building new generators that will comply with California's policies (e.g. SB100) including the replacement of such generation when their useful economic lives end, and the impact of	Please refer to the responses above.

No	Comment Submitted	CAISO Response
	future technology improvements on zero-carbon resources' costs (e.g. storage). The graph below illustrates such a methodology:   SDG&E notes that important studies by the CAISO have been previously conducted using the approach proposed by SDG&E in these comments. SDG&E is unclear why, in the current transmission planning cycle, the CAISO	

No	Comment Submitted	CAISO Response
	has chosen to use a different approach for forecasting long-term RA capacity prices. Frequent changes to the LCR reduction benefit methodology creates uncertainties and difficulties for stakeholders working on potential LCR reduction projects.	

4. Western Power Trading Forum (WPTF) **Submitted by: Carrie Bentley – Gridwell Consulting for WPTF**		
No	**Comment Submitted**	**CAISO Response**
4a	**Summary** WPTF appreciates the opportunity to submit these brief comments on the CAISO's 2020 and 2024 Draft Local Capacity Requirements Study Results discussed with stakeholders at the March 14, 2019 meeting. WPTF appreciates the efforts put in by the CAISO staff each year as they plan for and conduct these studies. WPTF strongly supports market transparency which includes providing information to market participants that can be used to inform both near-term and long-term business decisions, such as the deficiency amounts for each local area and sub-area. WPTF was surprised to hear the CAISO proposing to no longer publish the deficiency numbers for each local area and sub-area. The study results are extremely useful information used by market participants as one indicator of where additional capacity and transmission may be valuable to the overall reliability of the grid. While WPTF understands the deficiency amounts that have historically been calculated by the CAISO and included in the results are based on sophistical models with inherent, albeit vetted, assumptions, they remain a useful piece of information that are used by the market. WPTF encourages the CAISO to continue publishing the deficiency numbers, and at a minimum, engage with stakeholders on this topic such that a robust discussion around how these numbers are used by market participants can take place before moving forward with the proposal. This would also provide an opportunity for stakeholders to better understand why the CAISO is proposing to no longer publish this valuable information.	Please refer to response 1b above.