Written Stakeholder Comments Submitted After the October 30, 2013 Stakeholder Meeting, With Added ISO Response, Regarding the 2015 Local Capacity Requirement (LCR) Criteria and Methodology and the 2015 LCR Manual

Comments of Pacific Gas & Electric Company

Local Capacity Requirements Process

Pacific Gas and Electric Company (PG&E) thanks the California Independent System Operator (CAISO) for the opportunity to comment on the 2015 Local Capacity Technical (LCT) study.[1]

Adequate local capacity is a core component of California's electric system reliability requirements and this study provides an important basis for statewide capacity procurement. PG&E supports the CAISO's LCT study process.

As the CAISO moves forward, one adjustment to its study plan is needed. Specifically, the CAISO should slightly revise the study manual language and align the study load assumptions to reflect the uncommitted energy savings forecasts from energy efficiency and demand response activities as detailed in the 2013-2014 Transmission Planning Study Plan.[2] While the current study manual continues to assume the use of the latest California Energy Commission (CEC) 1-in-10 load forecast for the LCT Study, it does not mention any adjustment to capture incremental uncommitted energy savings as specified in the 2013-2014 Transmission Planning Study Plan. As PG&E understands it, such uncommitted energy savings were intended to be incorporated into the 2013-2014 assessment studies.

PG&E looks forward to further work with the CAISO and stakeholders on these matters.

[1] http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalCapacityRequirementsProcess.aspx

[2] "Final 2013-2014 Transmission Planning Process Study Plan", CAISO, p. 18. http://www.caiso.com/Documents/FinalStudyPlan-2013-2014TransmissionPlanningProcess.pdf

ISO Response: The language in the LCR Manual refers to the level of load forecast to be used, namely 1 in 10 vs. 1 in 5 or 1 in 2 for local areas studies and it does not mention the date of the CEC forecast or the assumption levels within that forecast including uncommitted energy efficiency. Since the LCR manual is more often finalized before the CEC forecast is received, the ISO would like to keep the generic language already available in the draft 2015 LCR manual, without any further specifics.

As done in the past the ISO will include the exact date of the CEC forecast and the level of underlying assumptions in the letter that it sends in late November or early December to the transmission owners as a request for updated base cases. The same information will be provided to stakeholders in the April and March stakeholder meetings.

COMMENTS OF PANOCHE VALLEY SOLAR ON BOUNDARY OF THE GREATER FRESNO LOCAL CAPACITY AREA

Panoche Valley Solar LLC (PVS) appreciates the opportunity to comment on the 2015 Local Capacity Technical Criteria discussed at the October 13th stakeholder meeting. PVS's comments address the issue of "Load Pocket" definitions generally, and of the Fresno Area Local Capacity Area (LCA) specifically. PVS recommends the following:

- The CAISO should continue its policy of judicious exceptions to the "Fixed Boundary" assumption, especially where those exceptions would expand the Load Pocket boundary; however, the CAISO could consider changes to the way in which it exercises that flexibility.
- The Greater Fresno LCA contains one such exception. Specifically, there is sufficient justification to include the Panoche 230 kV bus inside that Load Pocket boundary.

In support of these recommendations, the rest of these comments address the current CAISO policy generally regarding LCA boundaries, and the situation with the Panoche 230 kV bus specifically.

Current CAISO policy

The 2015 Local Capacity Requirements Draft Study Manual (Manual) states that the 2015 Technical Study (Study) "shall be produced based on load pockets defined by a fixed boundary." The Manual goes on to note that:

An overwhelming majority of stakeholders and the ISO have indicated that the requirement for the Technical Study should be reasonably stable over time to encourage longer-term contracting by LSEs. Transmission configurations as well as unit and load effectiveness

factors change every year due to new transmission projects added to the grid. As such, the only way to have a stable area is to define it as a fix boundary based on past experience of known constraints into any one area. The area definition is subject to change only if new major transmission and/or generation projects significantly change the local area constraints.

In other words, Load-Serving Entities (LSEs) need to know that, when they execute long-term contracts with generators inside the boundary, that those generators will continue to be considered Local Capacity Resources (LCRs) for the life of the contracts. Otherwise, they will have to pay those generators as though they were LCRs and also purchase other LCR capacity as well – effectively paying for the same thing twice – effectively, their LCR purchase from that generator would be "stranded."

There may be some units or loads located outside the local area boundary that may help reduce one or more of the constraints within the local area, but nevertheless not qualify as a Local Capacity Area Resource. However, in the great majority of cases, units and load outside the defined local area are less valuable in that they either do not mitigate the binding constraint or do not help to reduce flows on the majority of other potential constraints resulting from other less severe contingencies when compared to resources located within the local area. During the validation of local procurement, the ISO will use all units procured by all LSEs, regardless of location, in order to see if any further procurement is needed to satisfy Reliability Criteria.

In other words, the CAISO will consider the effectiveness of Resource Adequacy generators outside the defined Load Pocket boundaries in determining whether additional RA purchases by LSEs, or "backstop" CAISO RA procurement, is needed. Thus, those generators effectively reduce LCR needs, but they get no explicit credit for doing so.

These provisions have been in Manuals for LCR studies for many years.

PVS understands the concerns of the CAISO and LSEs about potential stranding of LCR contracts with generators. However, there are other options to ensure that this does not happen besides fixing the Load Pocket boundary.

First, the issues with stranded LCR contracts would only occur if the boundary was reduced, or otherwise moved such that generators that were inside the boundary were now outside it. Expanding the boundary to include more generators would not strand any contracts with existing generators, especially where those generators have effectiveness factors comparable to those already inside the boundary. Moreover, it would send a locational signal to developers to locate more generation in those areas, which would help meet LCA reliability needs.

Second, where generators with LCR contracts are no longer effective in meeting LCA reliability needs, those generators could be "grandfathered" (allowed to continue to count as LCRs) without continuing to include those areas in the LCA. Similar to the issue with expanding LCA boundaries, it would be helpful to exclude those areas from the LCA instead of allowing even more ineffective generation in those areas to enter into LCR contracts. As the Meeting presentation notes, "long-term, misalignment could increase the chance of ISO back-stop procurement potentially resulting in increased cost.

The CAISO has occasionally revised LCA boundaries; for example, the CAISO revised the Big Creek/Ventura boundaries between 2012 and 2013, and the Greater Fresno area between 2009 and 2010. PVS also understands that some LCR boundaries have been expanded when new generation was placed into service at an LCA boundary (though it is not clear whether those factors were responsible for the boundary changes in the prior sentence). For example, the Lodi

Energy Center, interconnecting at 230kV, was originally outside the Sierra LCA, but after Further CAISO evaluation, the Sierra LCA was adjusted to include ir.

Fresno LCA boundaries

The Fresno LCA boundaries include the Panoche 115 kV bus but exclude the Panoche 230 kV bus. This differential treatment would be justified if there was significant congestion between the two busses, or if there was evidence that generators connected to the former would help meet the LCA needs but those connected to the latter would not.

However, there is little evidence of congestion between the two busses. Moreover, the 2013 LCR study results indicate that generation at the Panoche 230 kV bus would relieve constraints in the Wilson Sub-Area, the sub-area with the largest LCR need in the Greater Fresno LCA (see Slide 10 of the April 12, 2012 stakeholder meeting presentation of final study results, posted at http://www.caiso.com/Documents/Presentation_Final2013LocalCapacityRequirements_Fresno_KernAreas_Apr12_2012.pdf.)

Conclusion

The CAISO should include the Panoche 230 kV bus in the Greater Fresno LCA boundary. There is little evidence in the information available to support the current distinction between the 115 and 230 kV busses.

Moreover, new resources in the CAISO interconnection queue that plan to connect to the Panoche 230 kV bus would seem to have a high potential to meet the needs within the Greater Fresno LCA. The CAISO could increase the viability of that generation, and the likelihood that it will develop, by including this bus in that LCA.

ISO Response:

For clarification the stakeholder call regarding the methodology, assumptions and criteria to be used in the 2015 LCR study was held on October 30-th 2013.

The ISO has considered your suggestion of expanding the local area boundary at Panoche and for the following reasons has decided against the expansion:

1. The Panoche area resources have a relative low effectiveness factor to the Wilson area constraint. The 230 kV connected resources have an effectiveness of about 8% compared to the 115 kV connected resources at about 10%.
2. The Panoche 230 kV bus is already a strong source even without additional resources locating here. It has 9x230 kV connecting transmission lines – 5 importing lines and 4 exporting lines plus a significant amount of resources already connected to it.
3. The local constraints in the vicinity are the 230/115 kV transformers at Panoche and for the loss of one of the Panoche 230/115 kV banks and in preparation of the next worst contingency (the remaining bank) the ISO will have to use the Panoche 115 kV connected resources to maintain acceptable flow limits and voltage levels in the Panoche 115 kV area, that would otherwise be served through only 2 very long 115 kV transmission lines and a few small 70 kV ties. The 230 kV resources are not effective after the double transformer outage, and after the first transformer outage they make this constraint worse by increasing the flow on the remaining transformer.