Written comments with CAISO reply Submitted after the November 10 Stakeholder Meeting regarding the 2012 Local Capacity Requirement (LCR) Criteria and Methodology and the 2012 LCR Manual

Comments of Pacific Gas and Electric Company Subject: CAISO Draft Manual, 2012 Local Capacity Area

Comments

PG&E appreciates the opportunity to comment on the CAISO Draft Manual, 2012 Local Capacity Area Technical Study. As requested, the following are PG&E's comments:

 On Page 8, please clarify how the path flows used in the study are determined. The section on "Maintaining Path Flows" (Page 9) states:

"Path flows shall be maintained *below* all established path ratings into the local areas, including 500 kV elements. For clarification, given the existing transmission system configuration, the only 500 kV paths that flows directly into a local area and, therefore, considered in the LCR Study is the South of Lugo transfer path flowing into the LA Basin.

Paths that do not directly flow into a local area, but influence the local area LCR need, should be set at a value *below the established path rating such that it assures the path operator that it can sustain any flow on this path at this local area peak time*. Currently the only known path that influences but does not flow directly into a local area is Path 15. As such this path will be set at 1275 MW N-S flow and this assumption assures

that at Fresno peak time the ISO can support any Path 15 flow." (emphasis added)

Since the levels of power flow "at values below the established path rating such that it assures the path operator that it can sustain any flow on this path at this local area peak time" can be limitless, more definitive description will be needed here.

A review of referenced portions of the WECC Minimum Operating Reliability Criteria (MORC) did not provide information on how the levels of path flows assumptions were set. Since the path flow level assumptions can impact the LCR, please provide the methodology which the CAISO will use to determine them.

CAISO response: The historical data regarding Path 15 flow at the time of high loads for the Grater Fresno area shows significant changes between different peak days and years and not a consistent pattern. Based on past LCR studies, done by the ISO, the maximum N-S flow (1275 MW) yields the highest local requirement and will therefore assure that enough local generation is available to mitigate Greater Fresno area needs without potential collateral market impact due to Path 15 limitation. Clarification language has been added to the LCR Manual.

 Also on Page 8, the URL provided to the WECC PCC Handbook is not a valid link. The correct URL is:

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http://www.wecc.biz/committees/StandingCommittees/PCC/Shared%20Documen ts/PCC%20Handbook%20Complete.pdf.

CAISO response: Thank you. The correct URL has been inserted in the LCR Manual.

3. On Page 14, Section on "System Readjustment" discusses the contingency Category C3, after the first N-1 but before the second N-1 (during the time the system is being re-adjusted). This is also referred to on Table 1 (Page 11) as "Category C" under the "Local Capacity" column and on Slide #9 as "LCR Category C". However, as explained, it is actually NERC Category B, with system readjustment. This reference to Category C has caused a lot of confusion. We suggest replacing the description "LCR Category C" with something more descriptive, such as "Category B with system adjustment". This can help avoid continued confusion, which can detract from the study efforts.

CAISO response: The ISO understands your concern, however the existing language is used to differentiate between LCR category B that literally stops after a single contingency and has no regard for "system adjustment" or the next contingency and LCR category C that looks at "system adjustment" after a first contingency as well as common mod N-2 (with system adjustment done is real-time) and selected category D contingencies that could produce voltage collapse and/or voltage instability. Since the LCR category C could be split in 3 parts with only one of them being able to be called Category B with system adjustment (or C3) the ISO is afraid that introducing this new

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language will exacerbate the stakeholder confusion rather than eliminate it; as such the language has not been changed.

- 4. On Pages 14 15, the Draft BPM specifies that the time allowed for adjustment is 30 minutes. The definitions of the Long-term emergency ratings and Short-term emergency ratings on Page 13 are as follows:
 - "Long-term emergency ratings, if available, will be used in all emergency conditions as long as "system readjustment" is provided in the amount of time given (specific to each element) to reduce the flow to within the normal ratings. If not available normal rating is to be used."
 - "Short-term emergency ratings, if available, can be used as long as "system readjustment" is provided in the "short-time" available in order to reduce the flow to within the long-term emergency ratings where the element can be kept for another length of time (specific to each element) before the flow needs to be reduced the below the normal ratings. If not available long-term emergency rating should be used."

Taken together, it appears that the draft BPM specifies that the 30 minutes will apply only to the time allowed to readjust the system to keep the power flows under the short-term emergency ratings. The time allowed to continue to readjust the system will be based on the time allowed for the Long-term emergency ratings of the specific element impacted. If this is correct, please add this clarification in the draft BPM. If not, please explain the apparent discrepancy between the time allowed for system readjustment for the power flow to stay within the short-term emergency ratings and that allowed to stay within the long-term emergency ratings.

CAISO response: As described in the ISO Grid Planning standards, the timed allowed for manual adjustment in order to protect for the next contingency is 30 minutes. See page 8 in: <u>http://www.caiso.com/docs/09003a6080/14/37/09003a608014374a.pdf</u>

The length of time the facility ratings are good for can only shorten the 30 minute duration of time allowed for manual readjustment. For example if certain equipment has 15 minutes rating (and is used in the LCR studies) the system needs to be readjusted within 15 minutes in order to be compliant. However a 1 hour, 4 hour or other longer time facility rating does not influence the manual adjustment time (30 minutes). The manual adjustment only needs to bring the system in a state where it can support the next worst contingency to within available emergency ratings. The level of flow that needs to be decreased on any element is contingency specific; some elements can be within their emergency ratings and be able to support the loss of another contingency and still remain within their emergency ratings whereas some elements need to be relieved well below their normal ratings in order to be able to support the next contingency to within their emergency ratings. 5. Pages 17-18 and pages 19-20 outline the methodology to be used following loss of two circuits on the same tower (C5). Since C5 is a Category C contingency, after this contingency, load shedding is allowed in order to meet the standards. We suggest adding load shedding to the "system configuration change" before determining the LCR generation that is needed to meet standards.

CAISO response: Clarification added to the LCR Manual: "include all known automatic [including firm load shedding] special protections schemes and". To clarify any new special protection scheme needs to be approved by the ISO and have an appropriate inservice date before it can be considered in the LCR studies.

Dynegy Comments on the 2012 Local Capacity Area Technical Draft Study Manual November 24, 2010

The CAISO has gone to great lengths to craft a technically justifiable and open Local Capacity Area requirements study process. The CAISO's thorough draft 2012 Local Capacity Area Technical Study Manual is evidence of the CAISO's continuing effort to maintain that reasoned and open process. Such a process helps keep the owners and operators of RMR units informed as to those units' RMR status for the coming year, which, in turn, helps them better plan and coordinate operations with suppliers, community groups and their employees.

The CAISO has always based in Local Capacity Requirements (LCR) process on publicly-available 1-in-10 year California Energy Commission (CEC) load forecasts. These publicly available forecasts help RMR owners assess their future RMR status, especially when that status depends as much on simple in-area capacity calculations as on the results of complex powerflow analyses.

However, in October 2010, the CAISO rescinded the previously-issued 2011 RMR status for South Bay Power Plant based on revisions to the CEC's forecasts by the CAISO and CEC that were not made publicly available before the CAISO revoked South Bay's 2011 RMR status. Such non-public action undercuts the CAISO's considerable efforts to ensure that the LCR process is open and verifiable.

Dynegy urges the CAISO to commit in its LCR manual to publicly releasing all information on which RMR status decisions are made prior to making those decisions. This will ensure that the robust LCR process it has crafted over the past decade is not compromised.

CAISO response: The ISO understands the importance of transparency when it comes to RMR designations. However, the ISO Officers and Board determined it was appropriate to remove the RMR status of South Bay based on Local RA Showings made after the RMR Agreement extension date. The additional capacity in these showings provided ISO management with the assurance that local San Diego reliability could be maintained in 2011 while accommodating the retirement of the South Bay Power Plant. The new draft load forecast received from CEC staff showed a decrease in load for the next few years in San Diego and that give the ISO management confidence that local reliability without South Bay Power Plant can be maintained not only in 2011 but also during 2012.

Regarding your request on the LCR Manual, the ISO is committed to provide any data necessary in order to have an open and transparent LCR process. Further, the LCR Manual is intended as a technical write-up on how to conduct these studies such that stakeholders can follow along and verify the study results (LCR needs) themselves. However, the ISO is authorized to make RMR decisions through-out the year and may obtain critical information that either creates a need for additional RMR capacity or allows for the release of RMR capacity. Therefore, it would not be appropriate for the LCR Manual to indicate the ISO intends "to publicly releasing all information on which RMR status decisions are made prior to making those decisions." We would note; that the status of RMR

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units does not fundamentally change the quantity of capacity identified in the annual LCR results. The ISO understands, the CEC will make the new load forecast information publicly available in the December 2010- January 2011 timeframe.