

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the  
Resource Adequacy Program, Consider  
Program Refinements, and Establish Annual  
Local Procurement Obligations

R.11-10-023  
(Filed October 20, 2011)

**REPLY COMMENTS OF PACIFIC GAS AND ELECTRIC  
COMPANY (U 39 E) ON THE ENERGY DIVISION'S  
RESOURCE ADEQUACY PROPOSALS ISSUED ON  
JANUARY 16, 2014 AND DISCUSSED AT THE JANUARY  
27, 2014 WORKSHOP**

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Pursuant to the February 4, 2014 e-mail from the assigned administrative law judge (ALJ) and the schedule set forth in the August 2, 2013, *Phase 3 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge*, Pacific Gas and Electric Company (PG&E) provides these reply comments on the following Energy Division resource adequacy (RA) proposals which were discussed at the January 27, 2014 workshop in this proceeding:

- Effective load carrying capability (ELCC) methodology for calculating the qualifying capacity (QC) of wind and solar resources (ED Paper On ELCC For Wind And Solar);
- Calculation of the QC and effective flexible capacity (EFC) for energy storage and supply-side demand response resources (ED Paper On QC And EFC For Storage And Supply-Side Demand Response); and
- Six proposed modifications to the California Public Utilities Commission's (Commission) RA program (ED Paper On RA Implementation).

**I. THE EFFECTIVE LOAD CARRYING CAPABILITY METHODOLOGY TO CALCULATE THE QUALIFYING CAPACITY OF WIND AND SOLAR RESOURCES SHOULD BE APPLIED IN 2016, BUT NOT 2015**

PG&E continues to support the use of the ELCC methodology to determine the QC of wind and solar resources. However, as the comments of parties made clear, there are a variety of

issues and uncertainties that remain unresolved at this time.<sup>1/</sup> Further, no specific recommended new ELCC-adjusted QC values for wind or solar resources have been published at this time.

Once specific results are provided, parties will be able to further evaluate the underlying calculations, and perhaps propose improvements or refinements to the specific methodological approach the Energy Division uses to obtain the ELCC-adjusted QCs of wind and solar resources. This review will take several months to complete. Therefore, PG&E continues to urge the Commission to not adopt the ELCC approach to calculate the QC of wind and solar resources for 2015, but to encourage the Energy Division and the interested parties to continue their efforts so that an ELCC approach can be used for 2016.

## **II. THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR SHOULD NOT ADOPT “MINIMUM CRITERIA” INDEPENDENT OF THE COMMISSION’S RESOURCE ADEQUACY COUNTING RULES TO DETERMINE THE EFFECTIVE FLEXIBLE CAPACITY OF FLEXIBLE RESOURCE ADEQUACY RESOURCES**

In the context of discussing the counting rules to determine the EFC of demand response resources, the California Independent System Operator (CAISO) states that, “[t]he ISO will set minimum criteria for determining EFC capacity.”<sup>2/</sup>

Just as is the case for QC for generic RA value, the counting rules for EFC for Commission-jurisdictional load serving entities (LSEs) should be set by the Commission.<sup>3/</sup> The CAISO would be acting inappropriately, and going beyond the boundaries of the current division of RA responsibilities between the Commission and the CAISO if the CAISO were to assert that it has veto power over the counting rules for flexible RA resources, insofar as those counting rules relate to the RA obligations of Commission-jurisdictional LSEs.

Therefore, the Commission should clarify in its decision that it, not the CAISO, is setting

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<sup>1/</sup> See, e.g., California Independent System Operator Comments, pp. 4-10; Southern California Edison Company Comments, pp. 4-9.

<sup>2/</sup> CAISO Comments, p. 12.

<sup>3/</sup> “The CAISO shall use the criteria provided by the CPUC or Local Regulatory Authority to determine and verify, if necessary, the Qualifying Capacity of all Resource Adequacy Resources.” CAISO Tariff, section 40.4.1.

the counting rules for flexible resource adequacy with respect to the RA obligations of Commission-jurisdictional LSEs.

The CAISO notes in a footnote that it may adjust the results of the Commission's EFC counting rules for a resource based on testing.<sup>4/</sup> The CAISO analogizes this to the current approach with respect to QC and net QC (NQC). Under the CAISO's tariff the CAISO can adjust a resource's QC value, determined using the Commission's counting rules, downward to a lower NQC value. These adjustments are for testing, performance criteria, and deliverability.<sup>5/</sup> None of these give the CAISO the authority to adjust the QC counting rules adopted by the Commission.

The CAISO provides, as an example for adjusting the EFC value, the testing of a resource's ramp rate to ensure that it is consistent with the EFC value claimed for the resource. PG&E agrees that the CAISO should have this testing capability. However, the analogy to the QC-NQC approach should be a close one. The Commission's testing of QC does not change the counting rules, but only confirms that the correct values were used for the resource, given the resource's tested performance capabilities and the Commission's adopted counting criteria. The same should be true of any CAISO testing to confirm EFC values. The testing should confirm that correct values (e.g., ramp rate) were used for the resource. The testing should not establish additional criteria, independent of the Commission's counting rules, for determining a resource's EFC.

### **III. THE P<sub>min</sub> FOR STORAGE RESOURCES SHOULD BE ALLOWED TO BE NEGATIVE, AND NO SPECIAL COUNTING RULES FOR REGULATION ENERGY MANAGEMENT RESOURCES SHOULD BE ADOPTED AT THIS TIME**

#### **A. P<sub>min</sub> For Storage Resources Should Be Allowed To Be Negative**

The CAISO recommends that the Commission adopt the proposal for counting the

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<sup>4/</sup> CAISO Comments, p. 11 fn. 6.

<sup>5/</sup> CAISO Tariff, sections 40.4.4, 40.4.5, 40.4.6.

flexible capacity of storage resources that the CAISO has put forth in its flexible resource adequacy criteria – must offer obligation (FRAC-MOO) stakeholder process.<sup>6/</sup> Under the CAISO’s proposal, Pmin cannot be negative.<sup>7/</sup> This is contrary to the Energy Division’s proposal that allows Pmin for storage to be negative.<sup>8/</sup> PG&E continues to support the Energy Division’s proposal to allow Pmin for storage resources to be negative. No party other than CAISO opposes the Energy Division’s proposal.

The CAISO suggests further study.<sup>9/</sup> PG&E agrees with the CAISO that the calculation of EFC for storage should continue to be examined, and fine-tuned if necessary as additional operational experience is gained. But storage resources are fundamentally different from generation-only resources, and should not be treated the same. The EFC for storage should recognize the bi-directional range in which the resource can operate.

The Energy Division proposes minimum requirements on a storage resource’s operation at Pmin before the resource can use that Pmin to determine its EFC.<sup>10/</sup> PG&E supports a reasoned set of requirements to help ensure that the storage resource can help to address the identified flexibility requirements of the grid. But not taking into account the ability of a storage resource to charge, as the CAISO proposes, should be rejected.

**B. No Special Counting Rules For Regulation Energy Management Resources Should Be Adopted At This Time**

The California Energy Storage Alliance (CESA) proposes that the Commission adopt a special EFC counting rule for storage resources intended to provide regulation energy management (REM) service at this time.<sup>11/</sup> It is not clear that REM resources will contribute significantly toward meeting flexible RA requirements as they are currently defined, based primarily on the amount of resources necessary to meet the maximum three-hour ramp each

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<sup>6/</sup> CAISO Comments, p. 13.

<sup>7/</sup> *See*, CAISO Comments, p. 15.

<sup>8/</sup> ED Paper On QC And EFC For Storage And Supply-Side Demand Response, p. 5.

<sup>9/</sup> CAISO Comments, pp. 14-15.

<sup>10/</sup> ED Paper On QC And EFC For Storage And Supply-Side Demand Response, p. 6.

<sup>11/</sup> CESA Comments, p. 3.

month. Therefore, PG&E opposes adopting a special EFC counting rule for REM storage resources at this time.

**IV. THE COMMISSION SHOULD CONTINUE TO RECOGNIZE THE RESOURCE ADEQUACY VALUE OF “COST ALLOCATION MECHANISM” AND COMBINED HEAT AND POWER RESOURCES PROCURED OUTSIDE OF A PROCURING INVESTOR-OWNED UTILITY’S SERVICE AREA**

There is significant opposition to the Energy Division’s proposal to not allow a “cost allocation mechanism” (CAM) or a combined heat and power (CHP) resource to provide RA value unless it is located in the service territory of the procuring investor-owned utility (IOU).<sup>12/</sup> The limitation proposed by the Energy Division should not be adopted as it would not follow least-cost principles. It would increase costs for customers as LSEs are forced to procure additional RA to replace the RA which would have been provided by the CAM or CHP resources affected.

PG&E does agree that the Path 26 constraints should be taken into account. There are relatively straightforward ways to count the RA from these resources while adhering to the Path 26 constraint. Southern California Edison Company’s (SCE) proposed netting alternative for like amounts of capacity north and south of Path 26<sup>13/</sup> is a simple fix that has no impact on Path 26, and PG&E does not oppose this approach. By contrast, the transaction-based approach for incremental capacity also suggested by SCE<sup>14/</sup> is more complex than necessary to address this issue, and may not be a feasible solution in any case. Other, more suitable alternatives are available.

One relatively easy solution that could be used for any incremental capacity above SCE’s netting alternative, or as a stand-alone alternative, would be to require each LSE to demonstrate that it has sufficient Path 26 allocation before it can count the CAM or CHP-related RA under

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<sup>12/</sup> See, Alliance for Retail Energy Markets Comments pp. 4-6; Office of Ratepayer Advocates Comments pp. 1-2, PG&E Comments, pp. 11-12; Southern California Edison Company Comments, pp. 13-15; San Diego Gas & Electric Company Comments, pp. 5-7, TURN Comments, pp. 2-5.

<sup>13/</sup> SCE Comments, p. 14.

<sup>14/</sup> SCE Comments, p. 15.

