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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)

COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E) ON THE APRIL 9, 2014, WORKSHOP ON RESOURCE ADEQUACY ISSUES AND REVISED ENERGY DIVISION RESOURCE ADEQUACY PROPOSALS

CHARLES R. MIDDLEKAUFF
MARK R. HUFFMAN

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105
Telephone: (415) 973-3842
Facsimile: (415) 973-0516
E-Mail: MRH2@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

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Pursuant to the schedule established by the assigned administrative law judge (ALJ) at the April 9, 2014, workshop on resource adequacy (RA) issues,[1/] Pacific Gas and Electric Company (PG&E) provides these comments on the materials presented at the workshop, including the revised proposals circulated by the California Public Utilities Commission's (Commission) Energy Division.

These comments address five items discussed at the workshop:

- The California Independent System Operator (CAISO) Preliminary 2014 Flexible Capacity Needs Assessment (which addresses flexible capacity requirements (FCR) for 2015), distributed by the CAISO on April 4, 2014 (CAISO Preliminary FCR Study);
- The Energy Division revised Staff Proposal on the Implementation of the Flexible Capacity Framework, dated April 9, 2014 (ED Revised Flexible Capacity Framework Proposal);
- The Energy Division revised Qualifying Capacity and Effective Flexible Capacity Calculation Methodologies for Energy Storage and Supply-Side Demand Response Resources, dated April 9, 2014 (ED Revised QC and EFC Proposals for Storage and Supply-Side DR);
- The Energy Division Revised RA Implementation Staff Proposals, dated April 3, 2014 (ED Revised RA Implementation Proposals); and
- The status of implementation of the effective load carrying capability (ELCC) methodology to calculate the qualifying capacity (QC) value of wind and solar resources.

At the April 9 workshop, the CAISO informed the assigned ALJ that it would be providing a final FCR Study in the near future, and agreed to provide that study on or about May 1, 2014, at the same time that it presents its final local capacity requirements study to the Commission.[2/]

Each of the three Energy Division revised proposals is an update to a proposal that the Energy Division previously circulated in this proceeding. Parties, including PG&E, have provided comments and reply comments on the proposals previously circulated.

1/ Tr. p. 81.

2/ *See*, Tr. pp. 82-83.

The CAISO gave a presentation on its Preliminary FCR Study at the April 9 workshop, and the Energy Division gave presentations on their three revised proposals. The Energy Division presentations focused on the areas where it had revised its previous proposals. PG&E's comments on the Energy Division proposals here focus on the revisions. PG&E's comments here are intended to supplement PG&E's earlier comments, not to supersede or replace them with respect to those aspects of the Energy Division proposals that have not been revised. For example, PG&E made several requests regarding modifications and clarifications to the proposal for QC and effective flexible capacity (EFC) calculation methodologies for supply-side demand response resources that were not addressed in Energy Division's revised proposal. Those requests are not reiterated here, but should still be treated as open issues.

I. CALIFORNIA INDEPENDENT SYSTEM OPERATOR FLEXIBLE CAPACITY REQUIREMENTS STUDY

As the CAISO acknowledged at the workshop, the exact methodology to be used in the FCR Study is still under development. Several parties noted, for example, that there were "pros and cons" associated with the use of one year of historic data to develop monthly flexibility requirements, as the CAISO did in its preliminary study. PG&E has several requests and recommendations that, from PG&E's perspective, will help to refine the FCR analysis. While PG&E supports adoption of flexible capacity requirements for the 2015 RA compliance year, this year's FCR methodology should not be narrowly viewed as precedent setting. Rather, the FCR methodology should be continually improved and refined to reflect the CAISO's flexible resource requirements and a fair allocation of those requirements based on cost causation principles.

A. The CAISO Should Make FCR Study Workpapers Available For Review

It is PG&E's understanding that the CAISO intends to make all non-confidential data used in the FCR studies publicly available. Review of the data and calculations by other parties is an important aspect of validation of the results of the CAISO's analysis. For this year, at a minimum, workpapers/data should be made available at the same level of detail as those that

were provided last year to support the FCR calculations the CAISO conducted to establish 2014 monthly FCR levels. Information on monthly load growth factors applied and any anomalous data removed for the purposes of the FCR study should also be provided.

Such workpapers/data should be updated as needed for the CAISO's Final FCR Study when it is released on May 1, and these workpapers should be made available at the same time. There will be a very short period to develop comments on the Final FCR Study, and workpapers will be needed in order to develop informed comments on whether there are any quantitative errors or omissions in the final study.

Looking forward to next year and beyond, the Commission should require the CAISO and other interested parties to develop a common understanding of what information should be provided in workpapers at the same time that the CAISO presents each of its subsequent FCR studies for review. Having such an understanding and agreement before the FCR Study is issued to establish 2016 requirements will result in a more efficient review process for that study.

B. The CAISO Should Refine Its FCR Study Methodology To Better Reflect The Effect Of Distributed Generation On Load Shape

It is PG&E's understanding that the CAISO took incremental behind-the-meter distributed generation (which is primarily photovoltaic solar (PV)) into account implicitly by using the California Energy Commission's Integrated Energy Policy Report (IEPR) monthly peak load forecast to scale the 2013 load data to future years. PG&E understands, more specifically, that the IEPR monthly peak load forecasts account for incremental distributed PV by reducing the load in the peak hour by the estimated output of incremental distributed PV in that hour.

The CAISO uses these IEPR peak load forecasts to scale every minute of load data in 2013 for future years. Under this approach, the effect of incremental distributed PV on the forecasted load profiles is to reduce the load profiles that go into the calculation of the net load and net load ramps by an equal percentage across all times.

This approach does not reasonably capture the effect of incremental behind-the-meter

distributed generation on the minute-by-minute net load profiles. In particular, it does not capture the instances where the impact of incremental distributed PV will increase net load ramps.

It is relatively straightforward to develop a more accurate estimate of the effect of this incremental behind-the-meter generation on the net load shape. Instead of the approach just described, monthly minute-by-minute profiles should be developed for specifically for this incremental generation.

To do this, first the downward adjustment to the monthly IEPR peak load forecasts made to reflect these incremental generation resources should be eliminated. Second, a separate minute-by-minute generation profile should be developed for these resources, based on a reasoned estimate of the generation shape that will be associated with them. Third, this minute-by-minute shape should be reflected in the net load calculation.

This change, which will result in a better minute-by-minute net load profile, is simple enough so that it can reasonably be incorporated into the CAISO's Final FCR Study this year. Such a profile was developed in the prior year's FCR study, and load serving entities (LSEs) have provided updated incremental distributed generation forecasts for this year's study. Therefore, the CAISO should make this change for its final study.

C. The CAISO FCR Study Should Be Refined To Reduce the Potential Year-To-Year Volatility In Results Caused By Reliance On Only One Year Of Historical Load And Wind And Solar Generation Data

As was discussed at the workshop, there are pros and cons associated with using just one year of historic data to derive the estimated minute-by-minute net load shapes for the forecast year. In particular, it appears that the anomalous weather in late June of 2013 had a fairly significant effect on the calculated June 2015 FCR result.

Looking forward to next year and beyond, the Commission should require the CAISO and other interested parties to develop an approach that uses historic load and wind and solar generation data in a manner that reduces the effects of an anomalous outcome of a random

variable in any one year (e.g., June 2013 weather) on the identified requirements. If all else is held equal, random year-to-year changes in weather outcomes should not drive significant year-to-year changes in the calculated FCR.

D. The CAISO FCR Study Should Consider The Treatment Of Controllable Generation From Renewable Sources Of Power

Based on the CAISO's description of its methodology for calculating monthly FCR, it appears as though the CAISO assumes that the minute-by-minute level of generation from all variable resources such as wind and solar is driven solely by the availability of the energy resource on the same minute-by-minute basis.

Depending on the resource, this may not be an accurate assumption. Some variable resources may be controllable, and the likelihood of such resources being controllable may very well increase moving forward with clear market incentives. To the extent that the generation from such resources is, in fact, expected to be controlled, the resulting minute-by-minute net load shapes will be different and this difference is likely to have an effect on the flexible capacity requirements that are calculated.

Therefore, the CAISO should consider modifying its methodology to more accurately capture the expected effect of controllable generation from renewable sources of power. Looking forward to next year and beyond, the Commission should urge the CAISO and other interested parties to develop an approach that more accurately models controllable generation from renewable sources of power.

E. Clarification Is Needed On Whether "Merchant" Variable Energy Resources Are Accounted For In The Analysis

During the workshop the question arose of whether the CAISO methodology for identifying variable energy resources interconnected with the CAISO grid would capture "merchant" variable energy resources not contractually associated with any CAISO LSE, or variable energy resources contractually associated with an LSE located outside of the CAISO's balancing authority area. It is not clear to PG&E that the CAISO approach would capture these

resources.

These resources should be reflected in the FCR study. Therefore, the CAISO should clarify whether its current approach captures these resources in its analysis, and modify its approach to capture them if it does not.

F. The "Error Term" Should Become More Defined

PG&E supports using a value of zero this year for the error term in the FCR formula. Looking forward to next year and beyond, the Commission should require the CAISO to more clearly define the error term, and to develop the methodology to be used to calculate it with stakeholder input.

II. ENERGY DIVISION REVISED FLEXIBLE CAPACITY FRAMEWORK PROPOSAL

A. PG&E Urges The Commission And The CAISO To Align Their Respective Flexible Capacity Frameworks

As was the case with the development, ongoing refinement, and day-to-day implementation of the generic RA framework, in the development of the flexible RA framework the Commission and the CAISO's roles overlap to some extent. From PG&E's perspective, it is critical that the Commission's and the CAISO's frameworks be consistent. Inconsistent requirements and obligations under the Commission's decisions, on the one hand, and the CAISO tariff, on the other, will not add value, but only add confusion and cost, to the flexible RA framework.

At this point, based on the Energy Division's Revised Flexible Capacity Framework Proposal and the CAISO's ongoing stakeholder processes relating to flexible RA, there are at least two areas of potential conflict: 1) allocation of flexible capacity requirements among the LSEs; and 2) procurement requirements from the must-offer obligation categories for flexible resources. As discussed below, PG&E urges Commission and CAISO alignment on all components of the flexible RA framework.

1. PG&E Recommends That the Commission and the CAISO Adopt PG&E's Cost Causation-Based Methodology to Allocate the Flexible Capacity Requirement among Load Serving Entities.

For 2015, the Energy Division proposes to allocate flexibility requirements among the Commission-jurisdictional LSEs using load-ratio share.[3/] The CAISO proposes to allocate the flexibility requirements to Local Regulatory Authorities (LRAs) using a formula that, according to the CAISO, takes into account each LRA's contribution (via its jurisdictional LSEs) to the CAISO's largest three-hour net load ramp each month.[4/] The Energy Division does not support this proposal, believing it does not reflect cost causation properly.[5/]

PG&E agrees with the Energy Division that the CAISO's recommended approach does not properly reflect cost causation. Therefore, PG&E does not support the CAISO's recommended allocation approach.

However, the Energy Division's proposed load-ratio share allocation does not properly reflect cost causation, either. Therefore, PG&E does not support it.

Instead, PG&E recommends that

1. The flexibility requirements caused by the variable output of intermittent generators should be allocated to intermittent resources; and
2. The allocation of flexibility requirements to load should be done based on each LSE's largest monthly ramp, regardless of its coincidence with the system peak net load ramp.

Incorporation of these key features into the allocation of the flexibility requirements will help to ensure that the allocation methodology reflects cost causation.

a. The Portion Of The Flexibility Requirements Caused By Intermittent Resources Should Be Allocated To Them

PG&E supports allocating the flexibility requirement caused by intermittent resources to those resources. Such an allocation is fair and helps create efficient procurement outcomes. It is not appropriate to allocate the flexibility requirements caused by "merchant" intermittent

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3/ Energy Division Revised Flexible Capacity Framework Proposal, p. 5.

4/ *See*, Energy Division Revised Flexible Capacity Framework Proposal, pp. 4-5.

5/ Energy Division Revised Flexible Capacity Framework Proposal, p. 5.

resources or intermittent resources with non-CAISO off-takers to CAISO participating LSEs.

Allocating the appropriate share of the flexibility requirements to intermittent resources causing the requirement is similar to the approach taken in the allocation of costs associated with the flexible ramping constraint that is incorporated into the CAISO markets. There, the issue of cost allocation among load and generation was considered in the settlement that was approved by the Federal Energy Regulatory Commission, and generators are allocated that portion of the cost that was determined attributable to them (25 percent).[6/] Similar to the flexible ramping constraint, a portion of the flexibility requirements should be allocated to the generators causing them.

The allocation of the flexibility requirement to intermittent resources will also promote efficient procurement outcomes. If the true cost of their operation is allocated to them, then intermittent resources will reflect these costs in their offers to energy and capacity solicitations. This means that the true costs will be reflected in the offers, and the procurement will be based on a more accurate cost basis resulting in better procurement decisions. Moreover, having these costs correctly allocated is fairer to competing resource technologies imposing lower or little flexibility requirement costs on the grid.

b. The Allocation Of Flexibility Requirements For Load Should Be Done Based On Each Load Serving Entity's Largest Monthly Ramp, Regardless Of Coincidence To The Net Load Peak Ramp

Under the CAISO's methodology, the monthly allocation to an LSE determined by load is based on the LSE's load change during the largest 3-hour ramp in net load and its relationship to other changes in net load during that same time period. Under PG&E's proposal, the monthly allocation to an LSE determined by load is based on the LSE's largest load ramp, regardless of its coincidence with the largest 3-hour ramp, and the relationship to other non-coincident changes in net load variables.

6/ CAISO Tariff, Section 11.25.3.

PG&E's recommended approach is preferable to an approach based on ramps coincident to the system net load ramp. The CAISO's approach can result in one LSE benefiting from the flexible capacity procured by another LSE and not sufficiently contributing to the procurement of flexible capacity. Thus, a fairness issue exists with the CAISO approach. PG&E's recommended approach addresses this flaw.

Moreover, academic research provides a foundation for allocating some measure of capacity costs to off-peak users. Research by Vardi, Zahavi, and Avi-Itzhak argues that although capacity procurement is based on the coincident peak load, it benefits all other hours by reducing the loss of load probability in each hour. Their paper states that:

> …modern power utilities are not designed just to meet the peak demand for power, but rather to deliver power at a certain level of reliability. Since the reliability performance of a power system is affected by all types of customers, any sustained increase in demand at any hour, including off-peak hours, calls for adding extra capacity to the system; otherwise the reliability design target will not be met. Consequently, each hour contributes its own share to the need to incur capacity costs, and should therefore have that responsibility reflected in its price.[7/]

This research was accompanied by a consistent methodology for allocating capacity costs to all hours based on such contribution. These findings readily apply to the allocation of flexible capacity procurement obligations and support PG&E's view. Flexible capacity procurement based on the coincident net load ramp also provides benefits at other hours when the system has net load ramps.

In sum, entities benefitting from procured flexibility should be required to pay a portion of the procurement costs, just as entities benefitting from the investment of transmission are required to pay for a portion of the costs of that transmission. This premise underlies PG&E's proposed allocation methodology – that all entities will utilize and benefit from procured flexible capacity, regardless of their contribution to the coincident system net load ramp.

7/ Vardi, Zahavi, and Avi-Itzhak, "Variable load pricing in the face of loss of load probability", The Bell Journal of Economics, Vol 8, No 1 (Spring 1977), article p. 2.

2. PG&E Urges The Commission And The CAISO To Align Their Procurement Requirements By Category For Flexible Capacity

A second area where the Energy Division's recommendation and the CAISO approach are at odds is with respect to the procurement requirements for Category 1 and Category 2 flexible resources. These categories determine the applicable must-offer obligation for procured resources. PG&E urges that the Commission and CAISO approaches be aligned, so that entities are not placed in the position of having to ensure compliance with two similar, but inconsistent sets of requirements intended to serve the same purpose.

B. PG&E Supports The Flexible Capacity Counting Requirements And Conventions Put Forth By The Energy Division

In Sections IV and V of its revised Flexible Capacity Framework Proposal, the Energy Division streamlines and refines its proposed counting requirements and conventions for flexible resources. PG&E supports the proposed counting requirements and conventions put forth by the Energy Division. With respect to the Energy Division's proposal for combined heat and power (CHP) resources, PG&E would object to the extent it is intended to relieve a CHP resource from meeting any applicable flexible capacity must-offer obligation as set forth in the CAISO tariff.

C. PG&E Supports The Energy Division's Proposal That For Resource Adequacy Showing Purposes, The Effective Flexible Capacity Committed For A Resource May Be Less Than, Equal To, Or Greater Than The Net Qualifying Capacity Committed For That Resource

One significant refinement that the Energy Division has made to its flexible capacity framework proposal is that, for RA showing purposes, the level of EFC (flexible capacity) committed for a resource does not have to equal the level of net qualifying capacity (NQC) (generic capacity) committed for the resource. The Energy Division now proposes that the level of EFC committed may be less than, equal to, or greater than the level of NQC committed.[8/] PG&E supports this approach. In particular, as PG&E noted in earlier comments, it would like the flexibility to choose to commit certain demand response resources as flexible capacity, but not generic capacity. PG&E's understanding of the Energy Division's proposal is that it would

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8/ Energy Division Revised Flexible Capacity Framework Proposal, p. 9.

allow this, not just for demand response resources, but for all resources having both an EFC and an NQC.

D. PG&E Supports The Retention, For Now, Of Maximum Cumulative Capacity Buckets

In its earlier proposal the Energy Division had proposed to eliminate the maximum cumulative capacity (MCC) buckets. PG&E opposes that action as premature. In its revised proposal the Energy Division has dropped that recommendation. PG&E supports the Energy Division's revision, and continues to urge the Commission not to drop the MCC bucket requirement at this time.

E. The Energy Division Should Address Flexible Counting Rules For Controllable Generation From Renewable Sources Of Power

As discussed above, to the extent that generation from renewable sources of power such as wind and solar is controllable, this generation may not contribute to flexibility requirements. In fact, such resources might be able to help meet the grid's requirements. However, without flexible counting rules for controllable generation from renewable sources of power, there are limited incentives for renewable sources to become more controllable, and thereby to help contribute to meeting the grid's requirements. Therefore, for next year and beyond, the Commission should consider whether flexibility counting rules are appropriate for controllable generation from renewable sources of power, and if so, what those counting rules should be.

III. ENERGY DIVISION REVISED QUALIFYING CAPACITY AND EFFECTIVE FLEXIBLE CAPACITY CALCULATION METHODOLOGIES FOR ENERGY STORAGE AND SUPPLY-SIDE DEMAND RESPONSE RESOURCES

A. Consistent With The Approach For The Generic Resource Adequacy Framework, The Commission Should Establish The Counting Rules For the Flexible Resource Adequacy Framework

As the Energy Division notes in its Revised QC and EFC Proposals for Storage and Supply-Side DR, there are a number of differences between the Energy Division's proposed EFC counting rules for storage resources and certain counting proposals set forth as a part of the CAISO's flexible resource adequacy criteria and must-offer obligation (FRAC-MOO)

stakeholder process.[9/]

As noted above, generally speaking PG&E urges the Commission and the CAISO to align the rules each develops and applies for the flexible RA framework. More specifically, with respect to EFC counting rules, PG&E urges the Commission and the CAISO to follow the same approach as they adopted for the generic RA framework; just as it does for generic RA, the Commission should set the flexible RA counting rules for Commission-jurisdictional LSEs. The CAISO should adopt default counting rules to be applicable to the LSEs of a LRA if the LRA does not adopt flexible RA counting rules. No reasoned basis has been put forward to alter the roles played by the Commission and the CAISO in this regard.[10/]

B. PG&E Urges The Commission To Adopt The Flexible Resource Adequacy Counting Rules For Storage Resources Proposed By The Energy Division

In its Revised QC and EFC Proposals for Storage and Supply-Side DR, the Energy Division proposes a comprehensive approach to determine the EFC of storage resources.[11/] PG&E supports these recommendations.

As the Energy Division notes, it may refine its QC and EFC recommendations in the future.[12/] PG&E agrees that refinements may be appropriate as operational experience is gained with the flexible RA framework.

C. PG&E Generally Supports The Energy Division's Revised Proposals For Supply-Side Demand Response Resources, But Requests Additional Clarity In Some Areas

Generally speaking, in its Revised QC and EFC Proposals for Storage and Supply-Side demand response, the Energy Division provided additional explanation and clarity to the QC proposals it put forth initially with respect to supply-side demand response resources. PG&E

9/ ED Revised QC and EFC Proposals for Storage and Supply-Side DR, p. 7.

10/ PG&E agrees with the Energy Division that a resource's QC values, which figure into the Energy Division's recommended approach for calculating the resource's EFC values, should continue to be subject to the CAISO's NQC process. (ED Revised QC and EFC Proposals for Storage and Supply-Side DR, p. 6.)

11/ ED Revised QC and EFC Proposals for Storage and Supply-Side DR, pp. 6-16.

12/ ED Revised QC and EFC Proposals for Storage and Supply-Side DR, pp. 6-17.

supports the use of the load impact protocols until a well-vetted probabilistic approach can be developed for determining the QC values of supply-side demand response resources. The initial QC of a resource should be based on an ex-ante analysis, but revised as necessary according to the ex-post analysis conducted following an event.

1. Additional Guidance Is Needed With Respect To The Use Of The Load Impact Protocols To Determine The Qualifying Capacity Of Supply-Side Demand Response Resources

In addition to and in support of the comments submitted previously, PG&E has several observations with respect to the Energy Division's revised proposals. First, the demand response load impact protocols do not provide a specific methodology for calculating the ex-post load impact of a demand response event. While the protocols do provide some guidelines for this purpose, they are not detailed enough to establish a specific calculation. Therefore, additional guidance may be needed for the Energy Division to carry out the performance assessment it discusses for supply-side demand response resources, adjustments which the Energy Division recommends be based on ex-post assessments of testing and dispatches of demand response resources.[13/]

Second, more specificity is needed with respect to the Energy Division's proposal that the Energy Division *may* choose to adjust test results for supply-side demand response for anticipated weather, enrollment, or program design.[14/] Such adjustment protocols do not exist currently. Such adjustments should be clearly defined and understood, not subject to ad hoc, one-off changes, and their applicability should not be subject to the discretion of the Energy Division.

Finally, it should be made clear in the Commission decision that it is the responsibility of the demand response provider to conduct the ex-ante and ex-post load impact analyses, in a manner consistent with the current demand response load impact protocols.

13/ ED Revised QC and EFC Proposals for Storage and Supply-Side DR, p. 5.

14/ ED Revised QC and EFC Proposals for Storage and Supply-Side DR, pp. 5, 6.

2. The Commission Should Indicate That The Energy Division's Proposal That, For Resource Adequacy Showing Purposes, The Effective Flexible Capacity Committed For A Resource May Be Less Than, Equal To, Or Greater Than The Net Qualifying Capacity Committed For That Resource, Is Applicable To Supply-Side Demand Response Resources

In the February 18, 2014, Comments of Pacific Gas and Electric Company on the Energy Division's Resource Adequacy Proposals Issued on January 16, 2014 and Discussed At The January 27, 2014 Workshop (PG&E February 18, 2014, Comments), PG&E urged the Commission to determine that demand response resources wishing to provide flexible RA would not also have to qualify to provide generic RA.[15/] In its revised proposals, the Energy Division has proposed that, for RA showings, the level of EFC committed may be less than, equal to, or greater than the level of NQC committed.[16/]

PG&E urges the Commission to adopt this Energy Division recommendation. PG&E recommends that the Commission explicitly indicate that under this approach, a demand response program may commit to provide flexible RA, but not generic RA. In this case, the resource would need to meet the flexible RA must-offer obligations applicable to it, but not the generic RA must-offer obligations.

IV. ENERGY DIVISION REVISED RESOURCE ADEQUACY IMPLEMENTATION STAFF PROPOSALS

A. PG&E Supports The Energy Division's Revised Recommendations To Use Path 26 Netting For Cost Allocation Mechanism and Combined Heat And Power Resources Procured Outside Of An Investor-Owned Utility's Transmission Access Charge Area

In its original set of RA implementation proposals, the Energy Division recommended that an investor-owned utility (IOU) not receive RA credit for any cost allocation mechanism (CAM) or CHP resources procured outside of the IOU's Transmission Access Charge (TAC) area. This recommendation was opposed by many parties, including PG&E.

In its revised recommendations, the Energy Division recommends that RA capacity of

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15/ PG&E February 18, 2014, Comments, p. 10.

16/ Energy Division Revised Flexible Capacity Framework Proposal, p. 9.

CAM and CHP resources procured outside of an IOU's north or south zone count toward load-serving entities' RA obligations, subject to the Path 26 netting process and based on each LSE's participation ratio.[17/] PG&E supports the revised approach and recommends that the Commission adopt it. PG&E also recommends that the decision make clear that this change is applicable to all resources submitted to the Path 26 netting process, not only CAM and CHP resources.

B. PG&E Generally Supports The Energy Division's Revised Proposal For Scheduled Outage Replacements For Cost Allocation Mechanism And Combined Heat And Power Resources, But Recommends Some Modifications

In Energy Division's response to comments on its initial proposal, it substantially modifies its proposals for the treatment of scheduled outage replacements for CAM and CHP resources.[18/] PG&E generally supports the revised proposal. However, PG&E recommends two refinements: 1) import RA contracts should not be incorporated into the determination of the price for replacement RA; and 2) the actual price paid for replacement RA should be used when the IOU must procure RA from the market to replace a CAM or CHP resource during its scheduled outage.

1. Import Resource Adequacy Contracts Should Not Be Incorporated Into The Determination Of The Price For Replacement Resources

Under the Energy Division's revised proposal, the scheduling coordinator for the IOU will provide necessary replacement capacity for all of the RA capacity associated with CAM and CHP resources.[19/] The Energy Division proposes that the cost of replacement RA capacity from the IOU's portfolio be the average capacity price from the most recent RA report.[20/]

This recommendation should be modified before adoption. Only RA-only contracts with resources located within the CAISO system (both system and local RA contracts) should be used

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17/ ED Revised RA Implementation Proposals, pp. 3-4.
18/ ED Revised RA Implementation Proposals, pp. 5-7.
19/ ED Revised RA Implementation Proposals, pp. 5-7.
20/ ED Revised RA Implementation Proposals, p. 6.

to determine the average capacity price. This is because the CAISO requires replacement RA for the scheduled outage replacement rule to be provided by resources within the CAISO system; replacement RA cannot come from import energy or import RA. The RA report may need to be modified to include these values.

2. The Actual Price Paid Should Be Used When An Investor-Owned Utility Must Procure Replacement Resources From The Market

The Commission should clarify that if the scheduling coordinator for the IOU purchases replacement RA from the market, then the actual price paid should be used in the balancing account mechanism for cost recovery.[21/] The Energy Division proposal does not state this explicitly. When a purchase is made, the actual price paid is the more appropriate value for the balancing account, as compared with a value from the latest RA report.

C. The Commission Should Reject The Energy Division's Proposal To Allow Further Aggregation Of Local Resource Adequacy Obligations For Small Load Serving Entities

In its initial proposals, the Energy Division proposed to allow LSEs with less than five megawatts of local RA obligation in an IOU service territory to meet their local obligations in that service territory using any local RA capacity, regardless of how it is distributed within the local areas in the service territory. Larger LSEs would not be given that flexibility.

Several parties, including PG&E, opposed that proposal. Nonetheless, in its revised proposals the Energy Division does not modify this recommendation.[22/] This proposal should be rejected by the Commission. The RA obligations should be applied equally to all LSEs, as stated in Public Utilities Code section 380(e).

V. IMPLEMENTATION OF THE EFFECTIVE LOAD CARRYING CAPABILITY METHODOLOGY TO CALCULATE THE QUALIFYING CAPACITY VALUES OF WIND AND SOLAR RESOURCES SHOULD BE DEFERRED UNTIL THE 2016 RESOURCE ADEQUACY COMPLIANCE YEAR

PG&E continues to support the Energy Division's efforts to develop an ELCC

21/ ED Revised RA Implementation Proposals, p. 6.

22/ ED Revised RA Implementation Proposals, p. 11.

methodology to determine the QC values of wind and solar resources. However, PG&E recommends that this approach not be used for the 2015 RA compliance year. The parties to the proceeding have not yet received any specific recommended values for the QC of wind and solar resources using the ELCC approach. There is not sufficient time remaining between now and the issuance of a final RA decision in June 2014 (in anticipation of the 2015 RA compliance year) to evaluate any initial results the Energy Division produces and provide sufficiently informed comments to the Commission to enable a reasoned decision. PG&E looks forward to working with the Energy Division and other interested parties in the development of an ELCC methodology that might be used for the 2016 RA compliance year.

Respectfully Submitted,

CHARLES R. MIDDLEKAUFF
MARK R. HUFFMAN

By: *\/s/ Mark R. Huffman*
MARK R. HUFFMAN

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105
Telephone: (415) 973-3842
Facsimile: (415) 973-0516
E-Mail: MRH2@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

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