

**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 and Flexible Procurement
Obligations for the 2016 and 2017
Compliance Years.

Rulemaking 14-10-010
(Filed October 16, 2014)

**REPLY COMMENTS OF THE
CALIFORNIA WIND ENERGY ASSOCIATION
ON FINAL PHASE 3 PROPOSALS**

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*On behalf of the California Wind
Energy Association*

March 24, 2017

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I. INTRODUCTION

Pursuant to the Phase 3 Scoping Memo and Ruling issued by the Assigned Commissioner and Administrative Law Judge Dudney (“Ruling”) on September 13, 2016, the California Wind Energy Association (“CalWEA”) submits these reply comments on the Final Phase 3 Resource Adequacy (“RA”) proposals, focusing on Effective Load Carrying Capability (“ELCC”) issues. We reply primarily to the opening comments of Calpine Corporation (“Calpine”), the CPUC’s Office of Ratepayer Advocates (“ORA”), Pacific Gas & Electric Company (“PG&E”) San Diego Gas & Electric Company (“SDG&E”), and The Utility Reform Network (“TURN”).

In summary, while CalWEA continues to support the adoption of the Calpine and Energy + Environmental Economics proposal, as amended March 7, 2017 (“Calpine/E3 Proposal”), for the 2018 RA year for reasons discussed below, it would be appropriate for the Commission to adjust that proposal to aggregate all solar resources to produce supply-side solar ELCC values and use a one-day-in-10-years’ reliability criterion, or to adopt the CPUC Energy Division’s February 24, 2017, main proposal, which aggregates all solar resources (“ED Proposal”). The Commission should reject proposals to phase in ELCC values. In advance of the 2019 RA year,

the Commission should continue to discuss with parties issues pertaining to behind-the-meter (“BTM”) solar, resource vintaging, reliability criteria used in generating ELCC values, and locational and sub-resource-class valuation issues.

II. COMMENTS

A. Phase-in Proposals

CalWEA is surprised that TURN and ORA would favor delaying the immediate implementation of ELCC values largely or solely due to the costs associated with rectifying the RA shortage caused by the previous over-estimation of solar RA values.¹ Typically, consumer advocates insist that ratepayers receive value commensurate with what they pay for. Phasing-in ELCC values would mean that ratepayers would pay for more capacity value than the Commission knows they will actually receive. More importantly, ratepayers will not be getting the assurance that the grid is reliable until the ELCC values are fully implemented. As explained by the CAISO (at pp. 3-4):

Any transition period would inappropriately allow load serving entities (LSEs) to continue overvaluing the capacity of certain resources, potentially resulting in insufficient RA capacity being available when needed, jeopardizing reliability. Also, it could lead to inefficient resource retirement if needed flexible resources retire because LSE’s procured capacity from resources whose capacity values were overly optimistic and inflated.

For the same reason, the Commission should reject PG&E’s proposed “blending” of accurate ELCC values and values based on the “exceedance methodology” -- which, as CLECA states (at p. 11), “has been demonstrated to have severe shortcomings” and which we now know to be scientifically baseless and, as a result, inaccurate.

Were a reliability incident to occur, it is quite possible that some will blame a portfolio heavy with variable renewable energy resources, which could sour the public on the state’s clean energy goals. With the proper and immediate implementation of ELCC methodology, the Commission need not fear such an event or such a backlash.

¹ “[T]he Commission should ... phase-in ELCC implementation over a two-year period in order to moderate the impact of potentially significant cost increases” (TURN at p. 1). “The Commission should adopt the transition proposal in order to avoid the potential of hasty and possibly high-priced procurement in a demand-heavy market for 2018 following adoption of ELCC RA values. Adopting the transition

Regarding SDG&E's concern (at p. 3) that adopting ELCC values for 2018 could impact local capacity requirements ("LCRs") and "create unintended local reliability issues," CalWEA notes that the large majority of solar projects are outside of LCR areas.² Moreover, as discussed above, inaccurately assessing the RA value of these projects could result in a significant shortfall of system RA capacity -- 4,471 MW in the estimation of ORA for the month of August 2018 (ORA at p. 3). This significant shortfall, and its expected impact on system reliability, must be remedied to ensure system reliability.

B. BTM Solar Adjustment & Reliability Criterion

ORA and PG&E support (at p. 15 and 6, respectively) ED's alternate proposal (within its February 24, 2017 final proposal) to estimate the effect that BTM solar has on ELCC, but neither offer any substantive justification for ED's alternative BTM methodology. Worse, the justification for supporting ED's alternate approach appears to be based not on its methodological soundness, but rather on the fact that it reduces the impact on LSEs' RA requirements.³ Indeed, "eas[ing]the transition was the justification offered by the Energy Division for its alternative approach."⁴

As CalWEA explained in opening comments (at Footnote 1), the Energy Division's alternative method of addressing BTM solar has not been demonstrated to be consistent with the methodology used to develop industry standard loss-of-load-expectation ("LOLE") values, and thus could produce inaccurate results. As Calpine noted (at p. 2), the Energy Division's alternate BTM results are artificially high for supply-side solar because its method effectively treats BTM

proposal would also minimize ratepayer costs that could result from procuring additional capacity without adequate time for the LSEs to adjust their contracting and procurement strategies" (ORA at p. 18).

² See California Energy Commission, "Tracking Progress – Renewable Energy," Table 1 (Number and Capacity of In-State Renewable Projects On-Line as of October 31, 2016) (December 22, 2016). Available at: http://www.energy.ca.gov/renewables/tracking_progress/documents/renewable.pdf.

³ PG&E states (at p. 5) that it supports the "higher" ED BTM-adjusted ELCC values as part of "a two-year transition period [that] will better allow LSEs to manage the anticipated decrease in RA capacity from wind and solar resources during the peak months." ORA states (at p. 15), that "the Energy Division's BTM proposal results in higher ELCC values for supply-side solar. Therefore, it would require less potential replacement procurement to account for the reduction of current solar capacity values from adoption of ELCC."

⁴ Energy Division Proposal at p. 16.

solar as an incremental resource, which results in assigning BTM solar with the lowest marginal values, leaving supply-side solar with the larger non-marginal values.

CalWEA's opening comments noted that, apart from Calpine/E3's vintaging proposal and the fact that it uses the RECAP model, the differences between the ED Proposal and the Calpine/E3 Proposal (and the results they produce) are small (particularly relative to the previous exceedance values). TURN points out (at p. 6-7), however, that Calpine/E3 subtracted the capacity benefits of BTM solar from the capacity benefits provided by grid-connected solar, and that the result of this is that Calpine/E3's BTM solar ELCC factors are almost 50 percent higher than grid-connected solar ELCC factors, which TURN argues is not credible. CalWEA agrees with this point. CalWEA further notes that Calpine asserted that the higher ELCC values for BTM solar resources are due, among other factors, to transmission and distribution loss savings attributed to these resources. However, Calpine/E3 overlooked the fact that BTM solar generation is typically not as efficient as supply-side solar generation due to less-optimal locations and angling of BTM solar resources as compared to utility-scale supply-side solar resources. These two factors (lower T&D losses and less-optimal siting) are likely to offset each other and produce BTM-solar ELCC values that are similar to supply-side-solar ELCC values. In view of TURN's point and CalWEA's additional point, we agree with TURN that, if the Commission adopts the Calpine/E3 Proposal, it should use its "Solar Resource Class" ELCC figures (which include BTM and supply-side solar resources) as the supply-side-solar ELCC values. TURN reports such solar figures in its Table 4, which are from a TURN data request to Calpine. The same figures were included in footnote 3 of Calpine's opening comments, which also include the wind ELCC values under that approach. Alternatively, the ED Proposal also reports (in its Table 3) ELCC values based on all solar resources, which are similar to the aforementioned values; the Commission could adopt these values instead.

TURN also points out (at p. 8-9) that Calpine's latest ELCC modeling results, included in its March 7, 2017, amended proposal, are based on the most restrictive LOLE of 1-hour-in-ten-years' reliability criterion, while credible planning agencies regularly use a one-day-in-ten-years' LOLE criterion. (The ED Proposal uses a 3-hours-in-ten years' criterion.) CalWEA understands from Calpine and E3 that they used the more restrictive reliability criterion based on their understanding that ED sought consistency with a CPUC ruling on modeling standards. However, Calpine's original study results, presented at the February 14, 2017, workshop, were

based on the one-day-in-ten-years LOLE criterion. CalWEA agrees with TURN that a less-stringent, industry-standard criterion should be used.

In consideration of both the reliability-criterion and the BTM issues, and because CalWEA continues to believe that the RECAP model is preferable, CalWEA recommends that the Commission adopt, for the 2018 RA year, the Calpine/E3 model and methodology, based on a one-day-in-10-years' reliability criterion (or, alternatively, a 3-hours-in-10-years' criterion), to generate ELCC figures based on all solar as a resource class, using the all-solar ELCC values for supply-side solar resources.⁵ The RECAP model is preferable due to its relative simplicity, transparency, and public availability, and because it has been used in a number of other CPUC proceedings and for a variety of purposes.

In any case, the Commission should convene a working group to address the BTM issue and the reliability-criterion issue (including monthly planning reserve margin standards, as CalWEA advised in opening comments) so that appropriate adjustments can be made to the methodology for the 2019 RA year. Issues of lesser significance that pertain to resource locations and sub-resource-class technologies also need to be addressed for the 2019 RA year.

C. Vintaging

SDG&E (at p.3) and others argue against Calpine/E3's vintaging proposal for the 2018 RA year. CalWEA notes that, whether or not vintaging is adopted, all resources that are existing and planned as of 2018 will be treated as a single vintage. Therefore, while CalWEA strongly supports vintaging for the reasons provided in opening comments, it is not necessary for the Commission to rule on the vintaging question for the 2018 RA year; the Commission can continue to evaluate vintaging issues for application to the 2019 RA year. CalWEA urges the Commission not to rule against vintaging at this juncture.

⁵ These values would apply as well to BTM solar, however, the RA program at this point does not award RA credit to BTM solar. This issue should be addressed for the 2019 RA year.

Respectfully submitted,

/s/ Nancy Rader

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***On behalf of the California Wind Energy
Association***

March 24, 2017

VERIFICATION

I, Nancy Rader, am the Executive Director of the California Wind Energy Association and am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing *Reply Comments of the California Wind Energy Association on Final Phase 3 Proposals* are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 24, 2017, at Berkeley, California.

/s/ Nancy Rader

Nancy Rader
California Wind Energy Association