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 NRG ENERGY, INC.
ON PHASE 3 WORKSHOP TOPICS

Brian Theaker
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
Telephone: (530) 295-3305
Email: Brian.Theaker@nrgenergy.com

For
NRG ENERGY, INC.

March 3, 2014

SF:369764.1

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Consider Annual Revisions to Local Procurement Obligations and Refinements to the Resource Adequacy Program.	R.11-10-023 (Filed October 20, 2011)

REPLY COMMENTS OF NRG ENERGY, INC.
ON PHASE 3 WORKSHOP TOPICS

In accordance with the August 2, 2013 *Phase 3 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge* ("August 2 Scoping Memo"), NRG Energy, Inc.[1] ("NRG") hereby submits these reply comments regarding (1) the January 16, 2014 Energy Division Staff ("ED Staff") Proposal regarding *Effective Load Capacity and Qualifying Capacity Calculation Methodology for Wind and Solar Resources* ("Wind and Solar QC Proposal"); (2) the January 16, 2014 Staff Proposal Outline regarding *Qualifying Capacity and Effective Flexible Capacity Calculation Methodologies for Energy Storage and Supply-Side Demand Response Resources*[2] ("Storage and DR QC and EFC Proposal"); and (3) the January 16, 2014 *RA Implementation Staff Proposals* ("Implementation Proposals"); as discussed in the January 27, 2014 workshop.

[1] NRG Energy, Inc. is the parent of NRG Power Marketing LLC, GenOn Energy Management, LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC, NRG Delta LLC, NRG Marsh Landing LLC, NRG California South LP, High Plains Ranch II, LLC, Long Beach Generation LLC, NRG Solar Alpine LLC, NRG Solar Borrego I LLC, NRG Solar Blythe LLC, NRG Solar Roadrunner LLC and Avenal Solar Holdings LLC, each of which owns and operates or markets generating resources in California. Because the focus of this proceeding is on California market issues, NRG Energy, Inc. appears on behalf of these entities.
[2] The date on this proposal was mis-labeled as January 16, 2013.

I. REPLY COMMENTS

A. Determining Qualifying Capacity ("QC") For Wind and Solar Resources Through Effective Load Carrying Capability ("ELCC") Analysis

A number of parties offer comments about Staff's proposal for using ELCC analysis to set QC values for wind and solar resources:

- The Large Scale Solar Association and Solar Energy Industries Association (together, "LSA-SEIA") note disadvantages to the proposal to develop QC values on an aggregate basis,[3] recommend creating additional technology categories,[4] and recommend holding additional workshops on these topics.[5]
- Like LSA-SEIA, the Concentrating Solar Power Alliance ("CSPA") supports the creation of additional technology categories.[6] CSPA also noted that using a single region for the Southern California Edison Company ("SCE") service area was insufficient.[7]
- The Pacific Gas & Electric Company ("PG&E"), while generally supporting the use of ELCC analysis, asserted that ELCC analysis should not be used to determine QC values for 2016.[8] Additionally, PG&E held that the process of

---

[3] *Comments of the Large-Scale Solar Association and the Solar Energy Industries Association on the Staff Proposal on Effective Load Carrying Capacity and Qualifying Capacity Calculation Methodology for Wind and Solar Resources* ("LSA-SEIA Comments") at 13-14.
[4] *Id.* at 12.
[5] *Id.* at 1-2, 20.
[6] *Comments of the Concentrating Solar Power Alliance on the Energy Division Staff Draft Proposal on Effective Load Carrying Capacity Assessment of Wind and Solar Resources* ("CSPA Comments") at 3-5.
[7] *Id.* at 5-6.
[8] *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* ("PG&E Comments") at 3.

moving from the current QC technique to the ELCC technique should take place over a transition period that would end in 2022.[9]

- The Southern California Edison Company ("SCE") advocated calculating project-specific QC values through ELCC analysis[10] (in contrast to Staff's proposal to calculate aggregated regional ELCC values) and urged greater transparency into the ELCC analysis.[11]
- Conversely, the California Wind Energy Association ("CalWEA") advocated calculating ELCC on both regional and system-wide bases to capture the geographic diversity benefit.[12]
- The Utility Reform Network ("TURN"), while expressing general support for the ELCC approach, asked for additional transparency and details regarding Staff's analysis.[13]
- A number of parties also provided comments with regards to the topic of the number of hours over which the ELCC analysis should be conducted. CSPA asserts that it is premature to move to 8760-hour ELCC analysis at this time.[14] In contrast, CalWEA holds that 8760-hour ELCC analysis is the proper method.[15] LSA-SEIA notes that the Staff Proposal does not explain why the ELCC assessment could be done over the current set of Availability Assessment Hours

---

[9] Id. at 3-4.
[10] *Southern California Edison Company's (U-338-E) Post-Workshop Comments* at 5-6.
[11] Id. at 4-8.
[12] *Comments of the California Wind Energy Association on Staff's Proposed ELCC Methodology ("CalWEA Comments") at 5-6.*
[13] *Post-Workshop Comments of The Utility Reform Network* at 2-3.
[14] CPSA Comments at 6.
[15] CalWEA Comments at 5.

and observes that the right subset of hours over which to calculate the analysis might change over time.[16]

From these comments, a few general themes emerge. *First,* no party seems to be pressing to use ELCC analysis as presented for 2015. *Second,* several parties request additional transparency into, and additional workshops on, the specifics of the analysis. *Third,* there is no consensus on some matters important to the design of the ELCC analysis. *Finally,* several parties (PG&E,[17] NRG,[18] and LSA-SEIA[19]) note that it is not possible to determine whether the ELCC methodology proposed by staff is reasonable until results of that analysis can be reviewed.

While the QC values produced by ELCC analysis are not yet known, these values must be compared against the QC values currently produced. If the values differ significantly, the reason for the difference should be explored and fully understood. This understanding will help staff and parties determine what QC method is most consistent with the fundamental purpose and design of the Resource Adequacy ("RA") program.

How ELCC analysis aligns with the current design of the RA program is an important consideration. The current approximation technique used to assign QC values for wind and solar resources - an "exceedence" methodology focused on super-peak hours – would, arguably, develop QC values that appropriately value the contribution that resources make towards serving load in high demand hours more than the contributions made in low demand hours. This result seems perfectly consistent with the current design of the RA program. Properly designed and executed, ELCC analysis should also disproportionally value the contributions that resources make to serving load in high demand hours. Whether this valuation occurs naturally through the

[16] LSA-SEIA Comments at 14-17.
[17] PG&E Comments at 3.
[18] *Comments Of NRG Energy, Inc. On Phase 3 Workshop Topics* at 4.
[19] LSA-SEIA Comments at 15.

ELCC method itself, or needs to be encouraged through the selection of a particular set of study hours, is a topic worthy of further discussion.

NRG agrees that additional work to discuss and refine the important details of this process is needed. NRG supports deferring the development of QC values for wind and solar resources through ELCC analysis for use with the 2016 compliance year. NRG also supports holding additional workshops to (1) review initial results, (2) further refine the study methodologies, and (3) discuss the commercial ramifications of using ELCC analysis to set monthly QC values.

B. Allocating the RA Benefits of Combined Heat and Power ("CHP") and Cost Allocation Mechanism ("CAM") Resources Within the Transmission Access Charge ("TAC") Area

While no party submitted comments supporting the proposal to limit the RA benefits of CHP resources to the Investor Owned Utility in whose TAC area the CHP was located, a large number of parties submitted comments opposing that proposal.[20] With no party supporting staff's proposal, NRG respectfully requests that this proposal not be adopted.

C. Local Area Aggregation

AReM,[21] PG&E,[22] and SDG&E[23] all object to the proposal to allow Load Serving Entities in the SCE and SDG&E services areas to aggregate their local capacity requirements if those requirements are less than five MW. While expressing concern that this proposal could encourage LSEs to procure less expensive local capacity in other local areas, SCE felt that the

[20] The Alliance for Retail Energy Markets, Cogeneration Association of California, the California Cogeneration Council, the Calpine Corporation, NRG, Pacific Gas & Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and the Utility Reform Network all opposed this proposal.
[21] *Comments of the Alliance for Retail Energy Markets on Energy Division's Proposals* at 7-8.
[22] PG&E Comments at 15.
[23] *Opening Comments of San Diego Gas & Electric Company (U-902-E) on Phase 3 Resource Adequacy Issues* at 10-11.

proposal would be unlikely to have a detrimental impact due to the small number of affected parties, and did not object to the proposal.[24]

Staff's proposal on this topic notes that "one key motive for this proposed rule is to limit administrative obligations where LSEs need to procure small quantities of Local RA resources in two Local Areas, when they could instead procure a larger amount in one single area."[25] While NRG agrees with SCE that the impact of allowing this aggregation is probably small, NRG repeats its observation that there is no technical merit to allowing capacity in one local area to count towards meeting local capacity requirements in another area. Given the lack of any technical merit, and further given that the local capacity procurement obligations at issue are already small, the value of this proposal seems similarly small.

[24] SCE Comments at 18.
[25] January 16, 2014 RA Implementation Staff Proposals at 9.

II. CONCLUSION

NRG thanks the Commission for this opportunity to submit these reply comments and respectfully asks the Commission to consider these comments in making its decisions on these matters.

Respectfully submitted,

/s/ Brian Theaker

Brian Theaker
NRG Energy, Inc.
P.O. Box 192
Pittsburg, CA 94565
Telephone: (530) 295-3305
Email: Brian.Theaker@nrgenergy.com

For
NRG ENERGY, INC.

March 3, 2014