BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
04-15-13
04:59 PM

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

REPLY COMMENTS OF THE DIVISION OF RATEPAYER ADVOCATES ON FLEXIBLE CAPACITY PROCUREMENT WORKSHOP ISSUES

PETER H. SPENCER
ALAN WECKER
Analysts for the Division of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-2109
E-mail: phs@cpuc.ca.gov

MATT MILEY
Attorney for the Division of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-3066
Fax: (415) 703-2262
E-mail: mm2@cpuc.ca.gov

April 15, 2013

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I. INTRODUCTION

Pursuant to the March 11, 2013 *Administrative Law Judge's Ruling Resetting Schedule for Comments on Phase 2 Resource Adequacy Issues and Scheduling a Prehearing Conference* (ALJ Ruling), the Division of Ratepayer Advocates (DRA) submits these reply comments on the issue of flexible capacity procurement as discussed at the workshops held on January 23, 2013 and March 20, 2013.

II. DISCUSSION

A. The Commission should not adopt "mandatory" flexible capacity procurement obligations for 2014.

Parties' opening comments reveal a growing consensus opposed to mandatory LSE flexible capacity procurement obligations in 2014.[1] A variety of concerns remain unresolved

[1] See e.g., EnerNOC, Inc. (EnerNOC) Opening Comments, p. 5; California Large Energy Consumers Association (CLECA) Opening Comments, p. 2; Shell Energy North America (Shell Energy) Opening Comments, p. 2; NRG Energy, Inc. (NRG) Opening Comments, p. 2; The Utility Reform Network (TURN) Opening Comments, p. 2; Western Power Trading Forum (WPTF) Opening Comments, p. 3; Independent Energy Producers Association (IEP) Opening Comments, p. 2; Large-Scale Solar Association (LSA) Opening Comments, p. 3; Vote Solar Initiative (Vote Solar) Opening Comments, p. 2; City and County of San Francisco Opening Comments, p. 1; Distributed Energy Consumer Advocates (DECA) Opening Comments, p. 8; and Clean Coalition Opening Comments, p. 4.

including implementation of an enhanced must offer obligation (MOO),[2] contract modifications that account for flexible capacity,[3] enforcement issues,[4] and undetermined cost implications.[5] The proposals under consideration do not sufficiently address these concerns. The more prudent course of action would be to implement for 2014 mandatory LSE flexible capacity reporting requirements, coupled with an enforcement mechanism, but no new flexible capacity procurement obligation.

B. DRA and other parties agree that the Commission should impose mandatory LSE flexible capacity reporting requirements for 2014.

As discussed in DRA's opening comments,[6] and echoed by similar proposals in other parties' opening comments, LSEs should be required to submit timely Resource Adequacy (RA) filings for 2014 that include information on the effective flexible capacity in their current RA portfolio. Other parties' opening comments – specifically, The Utility Reform Network (TURN),[7] Independent Energy Producers Association (IEP),[8] Clean Coalition,[9] and Western Power Trading Forum (WPTF)[10] – independently called for RA filings without procurement obligations for 2014. It should be mandatory

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[2] See e.g., EnerNOC Opening Comments, p. 15; TURN Opening Comments, p. 10; Calpine Corporation (Calpine) Opening Comments, p. 7; WPTF Opening Comments, p. 5; and Clean Coalition Opening Comments, p. 7.

[3] See e.g., Pacific Gas & Electric Company (PG&E) Opening Comments, p. 27; San Diego Gas &Electric Company (SDG&E) Opening Comments, p. 6; Southern California Edison Company (SCE) Opening Comments, p. 8; Shell Energy Opening Comments, p. 8; WPTF Opening Comments, p. 8; and IEP Opening Comments, p. 6.

[4] See e.g., Shell Energy Opening Comments, p. 10; WPTF Opening Comments, p. 3; and NRG Opening Comments, p.10.

[5] See e.g., CLECA Opening Comments, pp. 10-11; and Shell Energy Opening Comments, p. 8.

[6] Division of Ratepayer Advocates (DRA) Opening Comments, pp. 14-16.

[7] See TURN Opening Comments, pp. 9-10.

[8] See IEP Opening Comments, pp. 2-4.

[9] See Clean Coalition Opening Comments, pp. 6-7.

[10] See WPTF Opening Comments, pp. 3-5.

to include in RA filings information about effective flexible capacity, and this informational requirement should be enforced under the current RA enforcement guidelines as adopted in Resolution E-4195. Public Utilities Code Section 380 requires the Commission to establish and enforce an RA program. In D.04-10-035, D.05-10-42, and D.06-06-064, the Commission developed requirements for LSEs to submit certain compliance filings, including Year-Ahead System RA Compliance Filings; Year-Ahead Local RA Compliance Filings; and Month-Ahead System RA Compliance Filings. Entities required to file may be fined if they file late or if their filings fail to meet requirements. In contrast, the Energy Division (ED) Revised Proposal for flexible capacity explicitly calls for no penalties or enforcement of mandatory procurement obligations in 2014.[11] Timely filings that include flexible capacity information will assist the Commission and parties in refining the interim flexible capacity requirement called for by the California Independent System Operator (CAISO),[12] and will provide the "operational experience" called for in Pacific Gas and Electric Company's (PG&E's) opening comments.[13] Moreover, as addressed in the next section, the information in these filings is needed to address a variety of issues and concerns raised by various parties in opening comments.

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[11] Energy Division Flexible Capacity Procurement Revised Proposal (ED Revised Proposal), p. 7. Shell Energy in its opening comments on page 10 correctly notes that "mandatory" obligations require associated enforcement protocols. Requiring LSEs to procure flexible capacity in 2014 in the absence of a mechanism to enforce those obligations is effectively a voluntary program that is difficult to differentiate from a trial run.

[12] CAISO Opening Comments, p. 2.

[13] PG&E Opening Comments, p. 11.

C. DRA's ex-post simulation proposal can provide important data to inform the development of future flexible capacity procurement.

DRA's proposal for an ex-post economic dispatch simulation, discussed in DRA's opening comments,[14] can provide valuable information to address concerns raised by various parties in opening comments. A number of parties point to issues that require further development to aid the Commission in determining next steps in the evolution of an RA framework that accommodates the need for flexible capacity. Below we provide examples of these issues and how DRA's ex-post simulation could help address them:[15]

1. Planned outages and maintenance scheduling

Outages and maintenance scheduling can be estimated based on how often each resource is run in the ex-post simulation. Estimates for outages will allow parties to understand the programmatic modifications that may be needed in the future to address outages.[16] This solution will also provide a better sense of when outages will likely occur compared to the CAISO's suggested 8% forced outage rate, which parties have disputed.[17]

2. Hydro resources management in real time markets

Use-limited hydroelectric resources can indicate daily individual constraints and, as a result, the ex-post simulation output can determine the six hours when flexible services can be provided. CAISO and PG&E express a need for operational experience with integration of hydro resources into the real-time market.[18] Simulating these resources can provide the operational experience without altering

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[14] DRA Opening Comments, p. 16.

[15] The list of examples is illustrative but not exhaustive. As DRA explained in its opening comments at pp.16-17, the use of the ex-post simulation would benefit from further refinement and the input of other parties.

[16] See SDG&E Comments, p.7.

[17] See TURN Comments, p. 7; and CLECA Comments, p. 7.

how the physical resources are run. An ex-post simulation will allow experimentation on different combinations of operational decisions to determine the most efficient way to operate these resources.

3. Enhanced MOO's effects on economic dispatch of use-limited resources

Ex-post simulations can include hypothetical constraints of use-limited resources. This input will indicate each resource's unique operational and contractual constraints, which include start-up times, number of starts and stops, and emission requirements. The results of such a simulation will take into account these constraints and provide a more accurate assessment of the existing fleet's capability to provide flexible capacity. Parties suggested in their comments that a MOO that fails to account for these constraints could potentially destabilize the RA program.[19]

4. Benefits of modifying the CAISO market optimization protocols to achieve efficient market outcomes

Ex-post simulations could indicate positive changes in the market optimization protocols designed to reduce the need for generators to self-schedule.[20] These optimization changes could be quantified by assuming that currently self-scheduled resources are optimally dispatched in the simulation. Failures to take all costs into account in CAISO energy market bids should be further examined.

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[18] See CAISO Opening Comments, p. 25; and PG&E Comments, pp. 14-15.

[19] See WPTF Opening Comments, p. 5; and IEP Opening Comments, p 2.

[20] See WPTF Opening Comments, p. 6.

5. Benefit of a change to 15-minute scheduling

Ex-post simulations can take into account 15-minute scheduling, as proposed by CAISO,[21] by simulating how non-RA resources would optimally bid in the new market structure. Various parties cited the uncertainty around this change as a reason to delay implementation of a flexible capacity procurement requirement.[22] This simulation output would provide a basic characterization of how much ramping need could be addressed with this scheduling change to the CAISO day-ahead and real-time energy markets.

6. Benefits of an Energy Imbalance Market with PacifiCorp

Ex-post simulations can show the benefits of an energy imbalance market between CAISO and PacifiCorp when determining how non-RA resources would optimally bid. Various parties questioned implementation of a flexible capacity requirement prior to accounting for the potential impacts of this issue.[23] A simulation could provide a basic characterization of ramping needs which may be addressed with this market change to the CAISO day-ahead and real-time energy markets.

7. Contract modifications

Ex-post simulations can give both LSEs and generators an indication of how resources will be run, thereby helping to inform potential renegotiation of existing contracts as well as specific flexible capacity provisions in new contracts. DRA's proposal to run ex-post simulations would allow generators to understand the

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[21] CAISO 15-min scheduling FERC Order 764 proposal, available at http://www.caiso.com/Documents/DraftFinalProposal-FERC-Order764MarketChanges.pdf.

[22] See LSA Opening Comments, p. 5; Shell Energy Opening Comments, p. 5; Clean Coalition Opening Comments, p. 9; California Wind Energy Association Opening Comments, p. 8; and Vote Solar Opening Comments, p. 4.

[23] See e.g., LSA Opening Comments, p. 5; Shell Energy Opening Comments, p. 5; Clean Coalition Opening Comments, p. 9; and Center for Energy Efficiency and Renewable Technologies (CEERT) Opening Comments, p 9.

frequency and magnitude of ramping services that may be required under the proposed enhanced MOO. A number of parties' opening comments expressed concern over the uncertainty regarding contracts.[24]

8. Effects of imports

Ex-post simulations may quantify the economic dispatch of imports in tandem with RA resources that economically bid based on an enhanced MOO. Various parties indicated that imports are not reasonably quantified in the Joint Parties' Proposal (JPP).[25] Simulation would allow stakeholders to determine how much flexibility need could be contributed by imports. An additional benefit from ex-post simulations is the ability to determine if imports may exacerbate a flexibility problem if they are not properly instructed to deliver ramping services.

Ex-post simulations that utilize information supplied in LSE filings can add important data for consideration by the Commission and all parties in an effort to address the above concerns. Simulations are a common practice when attempting to predict how a complex modification will impact an electric grid. For example, similar simulations are currently underway in the current Long Term Procurement Planning proceeding (R.12-03-014) through the Operational Flexibility Model. Similarly, power flow modeling is a simulation of how the grid will change when resources are added or removed. Moreover, application of the particular type of simulation proposed here by DRA, an ex-post economic simulation, is similar to academic research that involves ex-post optimal bidding strategies. This research often attempts to determine how generator bidding behavior affects spot market pricing.[26] For the reasons discussed above and in DRA's

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[24] See e.g., PG&E Opening Comments, p. 27; SDG&E Opening Comments, p. 6; SCE Opening Comments, p. 8; Shell Energy Opening Comments, p. 8; WPTF Opening Comments, p. 8; and IEP Opening Comments, p. 6.

[25] See e.g., DECA Opening Comments, p. 7; CEERT Opening Comments, p. 14; CLECA Opening Comments, p. 7; and TURN Opening Comments, p. 7.

[26] An example of this form of research is Hortacsu, A. & Puller, S.L. "Testing Strategic Models of Firm

Footnote continued on next page

opening comments, ex-post economic simulations should become part of the ongoing efforts to incorporate flexible capacity into the RA program.

D. Work on flexible capacity should continue in 2013.

DRA concurs with the parties that recommend ongoing efforts in 2013 as necessary to further develop the flexible capacity process. Parties presented different procedural mechanisms to address this concern. For example, TURN and the Sierra Club requested evidentiary hearings,[27] while other parties have called for workshops or other forums.[28]

The proposal for workshops to address demand response (DR) following the June 2013 decision, as called for in PG&E's comments,[29] is particularly compelling. DRA agrees with the urgency that PG&E's comments expressed on this issue, and urges the Commission to order workshops addressing DR in its RA 2013 decision. The Commission's DR programs run on three-year cycles and the next 2015-2017 DR program design will be conducted in a stakeholder process at the Commission this fall.[30] DR resources have a potential to provide flexible capacity; potential that cannot be realized without clear guidance from the Commission on how DR will participate in RA flexible capacity. EnerNOC's opening comments suggested that utilities will be locked into inflexible DR for the next three years if the Commission is unable to adopt DR flexible eligibility requirements.[31] Without further discussions in 2013, the Commission

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Behavior in Restructured Electricity Markets: A Case Study of ERCOT," available at http://www.ucei.berkeley.edu/ucei/PDF/csemwp125.pdf

[27] Request for Evidentiary Hearings of Sierra Club and TURN, filed March 7, 2013.

[28] See PG&E Opening Comments, p. 10; SCE Opening Comments, p. 3, Calpine Opening Comments, p. 8, California Wind Energy Association (CalWEA) Opening Comments, p. 6; and CEERT Opening Comments, p. 17.

[29] PG&E Comments, pp. 10-11.

[30] PG&E Comments, pp. 10-11.

[31] EnerNOC Comments, p. 14.

will not have an opportunity to change DR programs for another three years and ratepayers will not receive full value for their investment in DR programs.[32]

EnerNOC's statement serves to emphasize that development of flexible capacity in the RA program will be hampered if nothing further is done prior to next year's RA proceeding. Performing ex-post simulations is one example of a method that can be further developed and refined to deliver even more benefits with Commission and party involvement ahead of the 2014 RA compliance year. Parties generally concur that significant work is necessary to properly develop flexible capacity protocols. Many parties advocate for additional workshops in 2013. DRA supports ongoing efforts prior to next year's RA proceeding to hasten the development of RA flexible capacity protocols.

III. CONCLUSION

For the reasons detailed above, and in DRA's opening comments, DRA recommends that the Commission:

- Adopt a basic framework for flexible capacity procurement as part of the Commission's RA program;
- Adopt the proposed 3-hour continuous ramping metric to define an overall operational need;
- Support an annual flexible capacity technical study process led by the CAISO;
- Adopt modifications to the MOO to allow for hydroelectric generation participation;
- Conclude that mandatory procurement of flexible capacity is premature for 2014; and
- Require LSEs to file amended RA templates that include

[32] PG&E Comments, pp. 10-11.

flexible capacity information.

Moving forward expeditiously with these steps will allow the Commission and stakeholders to implement a flexible capacity procurement mechanism that meets California ratepayers' energy needs at a reasonable cost, without compromising California's commitment to environmental goals.

Respectfully submitted,

/s/ MATT MILEY
MATT MILEY

Staff Counsel
Attorney for Division of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-3066
Fax: (415) 703-2262
Email: mm2@cpuc.ca.gov

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