

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.

Rulemaking 11-10-023
(Filed October 20, 2011)

CLEAN COALITION'S COMMENTS ON ENERGY DIVISION FLEXIBLE CAPACITY
PROCUREMENT REVISED PROPOSAL

Kenneth Sahm White
Clean Coalition
2 Palo Alto Square
3000 El Camino Real, Suite 500
Palo Alto, CA 94306
510-334-5890
Sahm@clean-coalition.org

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Pursuant to the December 6, 2012 Phase 2 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge and revised filing date issued by Administrative Law Judge Gamson by email on March 11th, 2013, the Clean Coalition respectfully submits the following comments related to the proposals on Flexible Resource Adequacy and workshops of January 23rd and March 20th, 2013.

I. Introduction

The Clean Coalition is a California-based nonprofit organization whose mission is to accelerate the transition to local energy systems through innovative policies and programs that deliver cost-effective renewable energy, strengthen local economies, foster environmental sustainability, and enhance energy security. To achieve this mission, the Clean Coalition promotes proven best practices, including the vigorous expansion of Wholesale Distributed Generation (WDG) connected to the distribution grid and serving local load.

The Clean Coalition drives policy innovation to remove major barriers to the procurement, interconnection, and financing of WDG projects and supports complementary Intelligent Grid (IG) market solutions such as demand response, energy storage, forecasting, and communications. The Clean Coalition is active in numerous proceedings before the California Public Utilities Commission and other state and federal agencies throughout the United States, in

addition to work in the design and implementation of WDG and IG programs for local utilities and governments. The Clean Coalition is highly sensitive to the need to strengthen the grid in tandem with increased intermittent renewable generation and seeks to discuss how the Joint Parties' Proposal may impact the future market for clean, local energy.

Summary

- The Commission should not impose a flexible capacity requirement before 2015.
- The Commission should take steps to establish mechanisms for qualification of flexible capacity and allocation of procurement requirements to allow all participants to prepare.
- The Commission should ensure as a matter of policy that preferred resources are fully recognized for their ability to contribute to system needs, including flexible or scheduled ramping, including the potential to use these resources in combination without requiring a priori aggregation of such resources and should adopt a policy decision in support of this.
- The Commission should adopt for all such resources the approach to inclusion of use limited resources developed by PG&E for obtaining flexible capacity from hydro resources, as appropriate for each resource.
- Further consideration of WECC interconnections and the potential for Energy Imbalance Markets should be incorporated in both determining flexible ramping needs and solutions.
- Improved forecasting and scheduling, combined with Intelligent Grid capabilities for monitoring and control of distributed supply and demand should be incorporated into calculations of need and available flexible capacity.

Discussion

A. The Commission should not impose a flexible capacity requirement before 2015.

The record does not show need for separate procurement of flexible capacity within the current Resource Adequacy (RA) process prior to 2015.¹, in particular due to the unresolved question of how flexible capacity should be defined and therefore how much is expected to be available to meet projected needs. CAISO has also created a proposal to procure backstop flexible capacity in the short term.²

It should further be noted that the projected need has been factually disputed by parties and a motion for evidentiary hearings on this has been submitted. While the Commission should move forward in assessing and addressing the needs projected by CAISO, the current proposals for changes to RA are neither sufficiently developed to avoid discrimination against viable preferred resource contributions and participation, nor have the potential market impacts and environmental consequences of these dramatic changes to RA procurement been evaluated and vetted. Serious potential ramifications have been raised by parties relating to market disruptions in energy pricing among the various energy supply technologies and the creation of market concentration and market power within this subset of RA providers, in addition to serious potential long-term impacts on development of preferred resources and emissions from increased reliance on fossil fuel generation.

¹ Joint Parties' Proposal, page 5

² <http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleCapacityProcurement.aspx>

The creation of the flexible capacity requirement will create differentiated value for energy supplies deemed flexible or generic, and the resulting likely over supply of generic sources will reduce the value of these resources. This is an appropriate market mechanism to drive development or retrofitting of facilities to meet flexibility requirements. However, unless regulated, the decreased demand for generic capacity may result in early retirement of some facilities and depressed development of preferred resources not categorized as flexible. In particular, to the extent that the shift in demand between these artificially defined categories creates a pricing signal, the market will respond by providing less preferred resource capacity if this capacity is valued less.

The CPUC should consider that an interim approach may eventually become the default approach due to the difficulty of breaking contracts, policies and other agreements made during the interim period. An interim approach that is not carefully implemented may make it difficult to change the approach in the future. In addition, an interim approach creates uncertainty for participants, which may prevent the solution from being effective.

An interim approach which does not take into account preferred resources and other resources such as storage will also encourage the continuation of traditional resources and may delay the innovation and development of preferred resources for this purpose. The CPUC should consider whether this approach will slow the achievement of policy goals through the procurement of additional thermal generation. As such, we recommend pursuing the minimum necessary procurement until these issues are resolved.

The Clean Coalition believes it would be prudent to fully examine alternatives to flexible capacity procurement and develop counting conventions for demand response and storage resources and creating a fully fleshed out proposal for 2015. The Energy Storage proceeding

(R.10-12-007) may produce insights that will assist in creating counting conventions for energy storage resources. It might also be advisable to wait for the resolution of the deliverability for distributed generation initiative to see how these resources could participate in providing flexible capacity. The Energy Division's Revised Proposal (EDP) improves upon the detailed work of the prior proposals and is an appropriate basis for further evaluation and development, however it is premature to adopt at this time.

B. The Commission should take steps to establish mechanisms for qualification of flexible capacity and allocation of procurement requirements.

While it is premature to fully implement a flexible capacity RA procurement requirement at this time, it is important to begin establishing the mechanisms and processes for such procurement allow CAISO, Load Serving Entities (LSEs) and providers to prepare for changes in procurement opportunities and requirements and trial such procedures before 2015.

It is reasonable to implement a pilot program to develop experience with operation under new standards, requirements, and reporting the year before it is needed. Such a pilot program may register qualifying flexible capacity to establish processes and potential participation without requiring specific flexible contracting by LSEs for 2014, or offering differentiated pricing at this time. Such registration would inform LSEs and CAISO of qualifying capacity within existing RA portfolios and identify shortfalls in these portfolios requiring subsequent contracting starting in 2015. Facilities should be incentivized to register as qualifying to provided flexible capacity to ensure full counting; one approach would be to limit or reduce future

compensation for facilities that failed to register but did qualify without subsequent modification in the standards or the facilities themselves.

C. The Commission should adopt for all such resources the approach to inclusion of use limited resources developed by PG&E for obtaining flexible capacity from hydro resources, as appropriate for each resource.

Procurement mechanisms should be designed to reflect Loading Order for preferred resources consistent with state policy. It is wholly inappropriate to impose unnecessary restrictions on the definition of flexible resources so as to artificially limit the apparent available flexible capacity. The proposed definition of flexible capacity, including the ramp rates, start times, 3 hour period of continuous operation and year round daily availability requirements are operational characteristics of gas turbines. It is not necessary to restrict participation to products offering this full set of operational requirements – facilities offering a portion of these can each provide a subset of the operational needs even if they do not individually meet all of the needs.

A simple analogy could be made to transportation choices – in seeking to get from point A to point B, the Joint Proposal calls for on-demand direct, non-stop, door to door service such as is provided by a taxi. Public transit services are available for the journey, but would require working with the available route schedules and changing buses along the way. Public transit is not always as convenient, but has other important advantages, including lower emissions, reduced congestion, and lower cost. As public transit is used more heavily, not only are these other advantages realized, but more buses and more routes are added to the system.

In defining flexible capacity as it has, the Joint Proposal supports fossil fuel powered taxi service at the expense of utilizing available public transportation powered by preferred resources. While many available facilities may not meet the proposed definition for flexible capacity, together they can provide the services actually needed. We do not need the full door-to-door package from each facility contributing flexible capacity, we can combine available components to get where we need to go. Using these facilities will require some additional accounting compared to the JP approach, but this is warranted – simplicity has value, but that value must be measured against higher costs and policy consequences, particularly the impact of disadvantaging and failing to utilize preferred resources.

D. Further consideration of WECC interconnections and the potential for Energy Imbalance Markets should be incorporated in both determining flexible ramping needs and solutions.

California should make full use of all resources, including regional interconnections to integrate and schedule import and export of energy. As noted in the DECA presentation, matching short term (1 hour) import and export scheduling with use limited short term resources avoids creation of apparent flexibility shortages that result from failure to recognize such capacity. Working across balancing authorities substantially increases the opportunities to offset and balance ramping requirements at lower cost than developing such capacities within each balancing authority in isolation.

E. Improved forecasting and scheduling, combined with Intelligent Grid capabilities for monitoring and control of distributed supply and demand should be incorporated into calculations of need and available flexible capacity.

There are several alternatives to flexible capacity procurement which may be more cost-effective and less detrimental to state policy goals and should be examined in detail before beginning a process which may have long-term impacts if it encourages the construction of additional 'flexible' generation from non-preferred resources. Forecast accuracy is steadily improving, allowing more precise scheduling of dispatchable generation and Demand Response to meet needs with less reserve. Forecasting has played a critical role in German wind and solar integration, eliminating additional wind integration reserve requirements previously anticipated through 2020 according to the CEC commissioned 2011 KEMA report 'Distributed Generation in Europe – Network Planning and Operational Impacts'. Improved forecasting is already being trialed with CAISO, as is 15 minute scheduling, and these should provide substantial increases in meeting ramping requirements without the need for procuring additional resources.

Additional options not envisioned in the current proposals include renewable curtailment, advanced inverter generation control, short term (less than three hour) energy storage systems which allow resources to better control their ramp rates, a new market for flexible ramping³, Dispatchable Intermittent Resources as employed by MISO, or Demand Response procurement as employed by PJM, and increased awareness of resources at the distribution level. Curtailment can be economically applied to address rare instances of ramping needs not met by other resources.

Renewable curtailment could be viewed as another form of flexible capacity and be procured as such through incentives in renewable contracts. This would reduce ramping requirements in the system, especially for solar, and maintain the incentive to produce for renewable operators. This option should be compared to the price of procuring additional flexible capacity and should

³ <http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleRampingProduct.aspx>

be closely integrated with available improvements in forecasting. Clean Coalition recommends that these alternatives be examined along with the determination of flexibility need that CAISO is undertaking for the flexible capacity proposal.

II. Conclusion

The Commission should ensure that preferred resources are fully recognized for their ability to contribute to system needs, including flexible or scheduled ramping, including the potential to use these resources in combination without requiring a priori aggregation of such resources, and should adopt for all such resources the approach to inclusion of use limited resources developed by PG&E for obtaining flexible capacity from hydro resources. The Commission should not impose a flexible capacity requirement on LSEs before 2015.

The Clean Coalition appreciates this opportunity to provide comments and looks forward to working with the Commission and other stakeholders on these issues.

Respectfully submitted,

/s/ Kenneth Sahm White
Clean Coalition
2 Palo Alto Square
3000 El Camino Real, Suite 500
Palo Alto, CA 94306
510-334-5890
Sahm@clean-coalition.org

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