

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

Flexible and Local Resources Needed for) Docket No. AD13-5-000
Reliability in the California Wholesale)
Electric Market)

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on Behalf of the
California Municipal Utilities Association

On behalf of the municipal utility community in California, the California Municipal Utilities Association (CMUA) appreciates the opportunity to provide input at this important Technical Conference on resource adequacy issues in California.

Since the Commission issued its Order convening this Technical Conference, much has transpired. Notably, the Staffs of the California Public Utilities Commission (CPUC) and the California Independent System Operator Corporation (ISO) have developed a Joint Reliability Framework (Framework) that is intended to address both longer-term procurement obligations and the need for flexible capacity to integrate renewable resources. Before launching to CMUA’s views on the Framework, of which we are supportive, some background and context is appropriate.

CMUA is a statewide organization of local public agencies in California that provide water, gas, and electricity service to California consumers. CMUA members own or have rights to significant interregional transmission facilities, as well as local and regional generation assets. Several CMUA members have transferred Operational Control of their transmission facilities and entitlements to the CAISO, and are Participating Transmission Owners. Relevant for this discussion, all of CMUA’s members located in the ISO Balancing Authority Area must comply with the applicable Resource Adequacy rules contained in the Tariff. Those CMUA members in the ISO Balancing Authority Area have adopted Resource Adequacy policies, including overall policies on reserve margins and resource adequacy counting rules.

California’s power resource mix is undergoing significant transformation that makes our issues unique. Among the energy policies articulated for California are:

- A 33% RPS mandate for 2020;
- 12,000 MW of installed renewable Distributed Generation by 2020;
- A reduction in Greenhouse Gas Emissions (GHG) to 1990 levels by 2020, in relevant part through implementation of a Cap and Trade Auction, with stretch goals of a reduction in GHG emissions to 80% below 1990 levels by 2050;
- Implementation of a loading order that emphasizes preferred resources such as demand side programs and renewable resources; and

- An emissions performance standard that bars investment in longer-term baseload resources with emission rates above 1100 pounds of CO₂ per MWh of energy produced.

While achieving these goals, the California grid has unique operational characteristics:

- 14,000 MW of hydroelectric facilities¹ which, while highly flexible, must operate consistent with environmental and water delivery requirements, rather than power production as the first priority. As such, they are use limited. Significant thermal capacity is also “use limited” due to air permit run-time or start limitations;
- The recent closure of the San Onofre Nuclear Generating Station; and
- A mandate to retire or repower significant existing capacity located in the coastal area, most notably the Los Angeles Basin Local Reliability Area, that use ocean water to provide cooling to the generating units. The LA Basin also has restrictions on allocation of air emission credits to new generation that currently are the subject of legal dispute.

The questions for the afternoon panel that were included in the Notice of Technical Conference issued July 11, 2013, focus on revenue adequacy for suppliers. But, the question about how to ensure reliable grid operation within the ISO Balancing Authority is not just about revenue adequacy. The confluence of the policy objectives enumerated above, the characteristics of the existing fleet, and the specific needs of the LA Basin, mean that any Resource Adequacy structure must be California-centric. The solution to ensure Resource Adequacy, which must certainly include adequate revenues for suppliers, must also be able to take into account all of these policy objectives as part of an integrated plan. That is one reason why CMUA believes a California regulatory approach is best suited to achieving these ends.

CMUA Supports the Joint Reliability Framework

CMUA supports the Framework. We recognize the Framework still has several open implementation questions, all of which are important to crafting a just and reasonable package solution. CMUA supports three-year ahead forward procurement requirements to augment the current year-ahead requirements. CMUA supports continuation of a Local Capacity Requirement, although CMUA urges that the contingency performance levels be revisited as part of these Resource Adequacy reforms to ensure that reliability benefits are commensurate with costs. Properly designed, CMUA supports a Flexible Capacity obligation allocated according to cost causation principles.

While CMUA believes the existing Resource Adequacy regime has worked extremely well, given the challenges of renewable resource integration and related grid reforms within the ISO Balancing Authority Area, the Framework should result in improvements and provide greater certainty of forward resource availability. The strength of the Framework is that it

¹ Some of these resources are outside the ISO Balancing Authority Area, but may be contractually committed to Load Serving Entities within the ISO.

provides a forward commitment more in keeping with the long-term capital needs of supply resources than the current one-year Resource Adequacy framework.

Issues that CMUA Will Prioritize in Deliberations to Develop the Framework

How the Determination of Need is Made. The Framework proposes a collaborative approach of state energy agencies and the ISO to determine need. CMUA members are governed by elected and appointed boards and are responsible for adopting Resource Adequacy policies. The Local Regulatory Authorities that govern CMUA members must be part of the team that makes the need determination.

Cost Causation Must be Followed. CMUA has raised this issue in the context of the Flexible Resource Adequacy Criteria Must Offer Obligation stakeholder initiative commenced by the ISO in late 2012. It is not appropriate to spread flexible capacity obligations and costs simply on a load ratio share basis; there must be a link between allocating the obligations and the underlying procurement behavior and resource attributes that cause the need for the flexible capacity. To illustrate this, CMUA had developed its own “Duck Curve,” attached, which shows the net load calculation for CMUA members in the ISO BA. The graph was developed attempting to replicate as closely as possible the ISO methodology for their “Duck Curve.” It is evident at a glance that the Net Load shapes for CMUA members are not similar to the system issues the CAISO has identified. There are likely several contributing factors, including the renewable resource mix procured by CMUA members that differs markedly from that procured by other Load Serving Entities, and which is less reliant upon intermittent resources.

Clear Product Definitions. Products must be defined up front. Also, in order to bring maximum flexible capacity to help meet needs in a cost effective matter, CMUA believes products more granular than a single 3-hour ramping product should be identified. Many types of resources may be able to contribute to ramping needs, but not meet the current ISO definition. Similarly, and consistent with the need to address other market issues associated with renewable integration needs, the functioning of the current Energy and Ancillary Services markets should be reviewed.

Reliability Services Auction. CMUA is open to this concept, but the details matter. A partial list of issues that must be addressed include: (1) Explaining the objective of creating a voluntary auction, which may give direction to certain design elements. Revenue adequacy, for example, will be supplied by the forward procurement requirement, not this voluntary residual auction; (2) ensuring that it is truly voluntary and does not include mandatory minimum participation as part of the tariff design; (3) no inclusion of a Minimum Offer Price Rule or other artificial constructs; and (4) ensuring that the auction is a backstop or augmentation to procurement efforts, and is not designed to provide incentives for new construction or other goals for which primary procurement mechanisms are designed.

Durability. Procurement rules that are continuously modified do not provide certainty that is the underpinning for investment. CMUA members do not want to re-plow this ground a few short years from now. Legal structures must be considered to make the Framework durable for a period of years, at a minimum. Such structures can include: (1) an ISO waiver of Section 205 rights on relevant tariff provisions; (2) submittal of the package as an Offer of Settlement to FERC; and/or (3) Mobile-Sierra protections.

Other Market Rules Must Dovetail with the Framework. CMUA is aware of and supports the ISO's commitment to examine relevant aspects of its market design to ensure that each element is working toward the same objectives. Developing the Must Offer Obligations to provide appropriate protections for use-limited resources, the current Resource Adequacy counting rules at Interties, Default Energy Bid rules and other market design elements must be designed to work in tandem with the Framework. In addition, there are certain enhancements and improvements that can be made to the existing ISO Energy and Ancillary Services markets that will improve incentives for resources to supply flexible capacity, and will therefore improve a resource's ability to earn fair compensation for the services provided. For example, CMUA members have observed a troubling settlement outcome associated with the provision of Regulation Up and Regulation Down services that creates an inequitable balance of risks and rewards that may create disincentives for resources to supply regulation services. This is particularly concerning because regulation service is the most flexible product currently available to CAISO to manage the grid in real-time. CMUA members have observed a number of instances where resources received Energy and Regulation Down awards in the Day Ahead market, were dispatched into the Regulation Down capacity range, and were forced to buy back Real Time Energy at many multiples of the Day Ahead Energy price they received. The end result is that the resource providing the valuable Regulation service was financially penalized, even though the resource followed the ISO's dispatch instructions to the letter. This is a simple example meant to illustrate that the operation of the Energy and Ancillary Services markets also need to be examined to ensure that commercial incentives are in place for resources to provide valuable integration services.

Responses to Questions Contained in the Technical Conference Notice

1. What are the preferred market-based solutions that could be used to address the forward flexible and local reliability concerns raised in the FLRR proceeding?

CMUA Response: While implementation details remain, the Joint Reliability Framework provides the underlying procurement mechanisms, the foundation for a bilateral market for capacity, and a voluntary auction that will backstop procurement or allow willing parties to trade through the auction. This should address all concerns.

2. How would a forward procurement requirement, along with specific procurement targets for flexible and local resources, affect bilateral contract prices?

CMUA Response: All things being equal, if greater percentages of forward needs are required to be met, prices should rise. However, this assumes that the three and two-year procurement percentage requirements will be higher than current procurement. There are no facts on the record to suggest that the forward procurement is inadequate, and an examination of current procurement data should be undertaken. Going forward, the interaction between the voluntary auction and bilateral market prices will be critical.

3. Would the joint proposal's combination of multi-year ahead flexible capacity obligations procured through bi-lateral contracts, or via CAISO backstop procurement, provide sufficient revenues to resources?

CMUA Response: There is no evident reason why it would not.

4. Will the joint proposal's limited forward procurement of flexible and local capacity pursuant to a three-year forward resource adequacy obligation backed by a market-based CAISO backstop procurement mechanism provide sufficient procurement tools and sufficient additional revenue to mitigate the risk of retirement and retain needed flexible and local resources?

CMUA Response: The Framework is a market-based solution that combines mandatory procurement through bilateral markets with optional auction mechanisms. This question assumes failure at some point in the process, whether it be the determination of forward procurement percentages, and/or the forecasted needs determination. All mechanisms that project a requirement multiple years in advance of the operational period are likely to have some degree of error, either above or below actual realized need. This is not an indictment of any forward procurement mechanism, be it bilaterally- or centrally-based.

Nevertheless, CMUA supports an adequate forward requirement that will provide long-term revenue streams through bilateral contracts, and enable prudent planning and contracting.

5. Will the joint proposal's voluntary backstop capacity market, along with market power mitigation measures, provide sufficient replacement for the capacity procurement mechanism when it sunsets in 2015? If a mechanism like the joint proposal were implemented, would CAISO still need an interim risk-of-retirement backstop mechanism and what would any such backstop mechanism look like?

CMUA Response: No interim backstop mechanism is needed, and in any event no mechanism could be designed in any more expeditious manner than the planned durable Framework. The 2014 Resource Adequacy showings are due in roughly two months. Recreating old disputes that were evident in the FLRR docket will simply set back progress that has been made to develop the Framework.

6. Is there a mechanism needed prior to the potential implementation of the joint proposal? For instance, is an interim mechanism necessary to procure resources at risk of retirement that are needed for flexibility? If so, what kind of mechanism?

CMUA Response: There has been no empirical showing that an interim mechanism is needed for 2014 for flexible capacity. Indeed, the CAISO's own documents do not allege any need until later in this decade.

7. With respect to the goal of retaining flexible and local resources for reliability purposes that may be at risk of retirement, what alternatives to the joint proposal should be considered?

CMUA Response: The Framework appears to have widespread support and represents the work of the staffs from the ISO and the CPUC. It should be given every chance to succeed.

Conclusion

CMUA appreciates the opportunity to participate in the Technical Conference. We support the efforts of the CPUC and ISO Staffs to develop the Framework, and look forward to active and constructive engagement in the proceedings and stakeholder processes that will be necessary to bring the Framework to fruition.

POU Aggregated Forecasted Net Load
Typical March Day
No Substantial Change, 2012-2017

