

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking to Consider Refinements to and Further Development of the Commission's Resource Adequacy Requirements Program.

Rulemaking R.05-12-013
(December 15, 2005)

**COMMENTS OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
ON STAFF'S MODIFIED CENTRALIZED MARKET PROPOSAL**

Pursuant to the September 17, 2008 Notice to Parties by the Assigned Administrative Law Judge for the California Public Utility Commission ("Commission" or "CPUC"), the California Independent System Operator Corporation ("CAISO") submits the following comments on Energy Divisions Staff's "Additional Information on the Modified Centralized Market Proposal As Presented in California Public Utilities Commission Proceeding R.05-12-013" dated September 12, 2008 ("Updated MCM Proposal").

I. INTRODUCTION

The CAISO appreciates the opportunity to comment on the CPUC Staff's Updated MCM Proposal. The workshops conducted by the Staff on August 22 and 25, 2008 and the Updated MCM Proposal have helped to clarify certain aspects of Staff's original MCM proposal. However, many elements of the MCM Proposal remain unclear and, more importantly, significant features of the overall MCM design continue to raise doubts about whether this proposal – in either its original or updated form – can provide an effective basis for a successful long-term Resource Adequacy ("LTRA") program.

To summarize the CAISO views which are elaborated later in these comments,

at the highest conceptual level the MCM Proposal is a positive direction for LTRA to the extent that it adopts (1) a multi-year forward process for estimating RA capacity requirements and procuring RA capacity, and (2) a central capacity market as a mechanism for procuring RA capacity. However, at the next level of detail, the MCM Proposal recommends structural features for an RA capacity procurement process which the CAISO believes will (1) undermine the ability of the central market element to provide accurate price signals for new investment, (2) discourage market-based investment which could otherwise shift some investment risk from ratepayers to investors, and (3) introduce complexities which create complicated and inefficient incentives for both buyers and suppliers without offering any countervailing benefits. In this regard, the most problematic feature of the MCM proposal is its bifurcation of RA procurement into two separate tracks which will result in the procurement of two different RA products and cause participation in the central market element to be too thin to provide either meaningful price signals or needed market transparency.

The CAISO, therefore, recommends that the CPUC not adopt the MCM proposal as a basis for its LTRA framework. If the CPUC decides to adopt an effective central capacity market as a key element of LTRA – a decision which the CAISO supports – then the conceptual proposal offered by the CFCMA group¹ provides a comprehensive, well-structured model that would be suitable for California's LTRA program and would not compromise the CPUC's ability to direct the bilateral procurement activities of its jurisdictional entities.

¹ See Comments of the California Forward Capacity Market Advocates on Staff Report Providing Recommendations on Capacity Market Structure, filed in this docket on February 29, 2008, and Reply Comments of the California Forward Capacity Market Advocates on Staff Report Providing Recommendations on Capacity Market Structure, filed on March 14, 2008.

That said, the CAISO emphasizes the urgency for prompt action by the CPUC to initiate needed development activity on the core elements of the LTRA framework, specifically the two high-level aspects of the Updated MCM Proposal with which the CAISO agrees, as noted above. The first of these is a multi-year forward framework for the procurement and identification of RA capacity to serve consumers within the CAISO Balancing Authority Area. The CAISO believes that the single most important action needed from the CPUC at this time is to establish a multi-year forward framework as a fundamental feature of the RA program. Such a framework will require careful, collaborative development of certain key elements – most notably an ongoing process for conducting a multi-year forward assessment of RA capacity needs – regardless of how the specific design for the RA procurement mechanisms, bilateral or centralized, proceeds. Once the CPUC adopts a multi-year forward RA program, the CAISO, the CPUC and the California Energy Commission (“CEC”) can begin designing and developing the central requirements of a multi-year forward RA needs assessment and capacity showing, giving market participants some certainty over those aspects of the LTRA program.

Second, the CPUC should decide to adopt a centralized capacity market as a core component of the long-term RA framework. A centralized capacity market will provide transparent prices which allow economic trade-offs among investments in new generation, demand response and transmission, will provide transparent and reliable price signals for new investment in constrained areas of the grid, and will simplify RA procurement for smaller load serving entities (“LSEs”) that may face greater uncertainty about the magnitude of their customer base several years ahead of the delivery period.

Although the CAISO does not endorse the specific market design of the Updated MCM Proposal, there is no need for the CPUC to start over with a clean slate because the CFCMA proposal offers a solid basis for developing an effective central capacity market design.

II. SUMMARY OF CAISO OBJECTIVES AND DESIGN PRINCIPLES

In this section, the CAISO offers a series of high-level objectives and design principles for a long-term RA framework to provide some context and criteria for the CAISO's evaluation of the design of the Updated MCM Proposal and recommendations to the Commission. The CAISO believes that these objectives and principles provide a practical set of criteria against which to evaluate alternative long-term RA design alternatives, and the CAISO encourages the Commission to utilize them in its deliberations.

As the CAISO has previously mentioned, the overarching goal of developing a long-term RA program is to facilitate open and efficient competition to produce an efficient, cost-effective mix of infrastructure investments sufficient to meet end-use demand at stable and reasonable prices, provide for the operating and reliability requirements of the CAISO Balancing Authority Area, and achieve the state's environmental goals. The CAISO believes that an effective long-term RA framework must (1) permit meaningful competition among potential investments in generation, demand response and transmission projects to meet future power supply needs, and (2) enable these options to be compared using transparent market-based mechanisms so that investors will come forward with high-quality offers and the most cost-effective alternatives can be selected. The CAISO also believes that a transparent, competitive,

market-based framework for long-term RA can be structured in a manner that is fully compatible with the Commission's regulation of procurement by its jurisdictional LSEs and supports the state's environmental policy goals.

To provide a practical basis for accomplishing this goal, the CAISO offers the following set of design principles and objectives. These can be seen as complementary to the Staff Report's metrics for analysis, but with a focus on specific long-term RA framework elements.

1. Establish a Multi-year Forward RA Framework. The single most important enhancement to the RA framework that is needed at this time is to expand today's one-year ahead RA showing process into a multi-year forward RA framework, on the order of 5-6 years ahead of the delivery year. Such a timeframe will allow for timely investment decisions based on meaningful cost-benefit comparison among viable alternatives, including new generating plants, retirement or repowering of existing plants, new demand response technologies, and transmission upgrades. To be fully effective the multi-year forward RA framework must have two key elements, a multi-year forward assessment of capacity needs, and a multi-year forward mechanism for committing specific resources to provide RA capacity, including commitments to invest and build new infrastructure in time for the delivery year.

2. Shift Investment Risk from Ratepayers to Investors. The second most significant change needed to the current RA framework is to shift the allocation of new investment risk from ratepayers toward investors. A primary motive behind electric restructuring in the 1990s was to shift investment risk from ratepayers to investors, yet today's practices rely disproportionately on ratepayer risk to underwrite new

infrastructure investment. The long-term RA framework should explicitly recognize this original restructuring goal and should be crafted to facilitate competition from market-based investment. This type of framework would build upon the products and transparent pricing inherent in the redesign of the CAISO wholesale markets, which will enhance the ability of firms to identify and finance efficient market-based investments.

3. Expand Demand Response. The framework should enable both demand response and imports to participate and compete on an equal basis with internal generating resources to provide RA capacity. Consistent with the state's loading order policy, demand participation in the electricity markets must be expanded by creating incentives to invest in greater demand response capability along with new wholesale demand response products and services that can compete with traditional generating resources to meet the CAISO's operational needs for balancing energy and reserves. Demand participation should also be expanded through investments in infrastructure that enable consumers to respond to spot market prices. Such responsiveness would promote more effective competition between demand and supply, to mitigate potential supplier market power by allowing consumers to play a greater role in setting wholesale spot prices.

4. Build Upon the CAISO Market Redesign. The long-term RA framework should build upon the benefits that will be provided by the new spot market structure being implemented by the CAISO under the Market Redesign and Technology Upgrade ("MRTU") project, including price transparency and efficient commitment and dispatch of resources. The new day-ahead and real-time spot market structure under MRTU will provide an effective platform to support the objectives listed above.

5. Incorporate the Standard Capacity Product. The long-term RA framework should incorporate by reference the standard RA product definition that is currently being developed through a CAISO stakeholder process. The standard RA capacity product will provide for greater liquidity in the market for capacity, and will support reliable operation by establishing clear performance requirements and compliance incentives for RA capacity.

6. Recognize the Role of CAISO Backstop Procurement. The long-term RA framework should also recognize the need for the CAISO to operate a transparent, tariff-based backstop capacity procurement mechanism, to enable the CAISO to “backstop” any shortfalls resulting from the primary RA procurement mechanisms and to respond to changed market and grid conditions as the delivery year approaches.²

7. Promote Innovation. The long-term RA framework should promote innovation in energy products, services and technology.

8. Adapt to New Market and Regulatory Changes. The long-term RA framework should be flexible to accommodate future market reforms and policy initiatives both within California and in coordination with other states in the western region.

9. Coordinate With Transmission Planning. The long-term RA framework should provide for effective coordination with the transmission planning process, including the ability for transmission upgrades to compete with new generating resources to meet the needs of constrained areas of the grid.

² In this regard, we note that the CAISO’s recently filed “interim” backstop approach, now pending before FERC in *California Independent System Operator Corp.*, Docket No. ER08-556-000, et al., will sunset at the end of 2010. The CPUC, the CAISO and the market participants are aware that the backstop price, as the only transparent, non-negotiable capacity price in California, has become highly influential in the negotiation of prices for forward RA contracts.

10. Allow For Market Power Mitigation. The long-term RA framework should allow for effective market power mitigation, particularly with respect to capacity needed in constrained local areas of the grid where the potential for new entry may not be sufficiently feasible to ensure competitive prices.

11. Support Hedging Strategies. The long-term RA framework should be compatible with effective energy-hedging strategies by LSEs.

The CAISO recommends that the Commission take into consideration all of the above objectives and principles in developing its decisions on long-term Resource Adequacy. As indicated above, the CAISO believes that the CFCMA proposal offers a solid basis for developing an effective central capacity market design consistent with the aforementioned principles. On the other hand, the Updated MCM Proposal does not provide a sufficient basis for meeting these principles.

III. COMMENTS ON THE UPDATED MCM PROPOSAL

Although the CAISO strongly supports a multi-year forward RA process and a central capacity market as core LTRA framework elements, we believe that the structure of the Updated MCM Proposal does not provide a basis for a well-functioning, efficient RA capacity market.³ The CAISO is particularly concerned about the bifurcation the proposal contemplates between the Preliminary Capacity Showing (“PCS”) and the Central Forward Reserve Market (“CFRM”), which in turn bifurcates the RA capacity product into two forms, including a “minimum requirements” RA product to be procured

³ Because core elements of the MCM proposal remain unchanged from the original Staff Report, the instant comments reiterate key recommendations and questions discussed by the CAISO in its Comments submitted on February 29, 2008 and Reply Comments submitted on March 14, 2008 in response to that report.

bilaterally for the PCS and a Standard Capacity Product (“SCP”) to be cleared through the CFRM. As discussed in greater detail below, the CAISO’s threshold concern is that the bifurcated MCM could create pricing outcomes and contracting and investment incentives that actually run counter to the state’s long-term efficiency, reliability and environmental objectives for the California power sector. For example, extreme care needs to be taken in the design process so that the resulting long-term RA program creates meaningful price signals when new investment is needed in constrained areas of the grid, and then enables market-based investment to compete with rate-based investment by investor owned utilities (“IOUs”), thus shifting investment risk from ratepayers to suppliers. As we discuss more fully below, the Updated MCM Proposal does not adequately address these concerns.

In addition to our concern about the bifurcated market structure of the Updated MCM Proposal, there are other features of the proposal that are either unclear or are presented without sufficient elaboration to reveal the difficult issues that would have to be addressed in implementing them. The CAISO discusses these concerns and deficiencies in this section of its comments.

A. Bifurcation into PCS and CFRM Continues to be Problematic

As pointed out by the CAISO and other parties in comments and reply comments to the original Staff Report, the market bifurcation inherent in the MCM proposal is likely to increase transaction costs by creating two different RA processes and supporting both standard and non-standard products which LSEs will have to transact and the CAISO will have to implement. At the same time, the bifurcated RA process will not provide much if any opportunity for buyer cost savings as it would not inhibit

convergence of RA prices between the PCS and the CFRM. Moreover, it would likely create incentives for LSEs or suppliers to avoid the CFRM, which would undermine the very policy objectives, such as robust and transparent price signals for new investment, which would be the benefits of a well-designed central capacity market.

It is important to emphasize that the CAISO's strong support for an effective central capacity market should not be interpreted to mean that bilateral procurement of RA capacity should be impeded or avoided in the LTRA design. To the contrary, the CAISO fully supports an RA procurement process that relies primarily on bilateral arrangements between LSEs and suppliers overseen by the CPUC or other local regulatory authorities ("LRAs"). As the CAISO recommended in its previous comments, the appropriate treatment of bilateral procurement, consistent with a well-functioning central capacity market, would be for LSEs to offer it as "self-supply" rather than bypass the central capacity market. As long as self-supplied RA capacity meets the deliverability and other requirements of the RA program and does not exceed the market demand, it would clear at and be paid the same market clearing price that is charged to the LSE in accordance with its RA requirement, for a net zero financial settlement for this capacity.

The Staff's PCS recommendation introduces a problematic variation on this idea, namely, the requirement for a specific amount of each IOU's bilaterally procured RA capacity to "opt out" of the CFRM and hence out of the CFRM settlement. Although the opt-out concept may not seem dramatically different than the self-supply concept, a careful examination of the PCS proposal reveals its potential to diminish the intended benefits and relevance of the central capacity market element. At a minimum, the

CAISO continues to be concerned about (a) the idea of setting a hard target, i.e., both a minimum and a maximum, on the portion of each IOU's RA requirement that must opt out of the CFRM, and specifically how such a hard target would be applied and enforced, (b) whether the value of 90 percent of forecast load for such a target would be so high as to undermine the value of the CFRM clearing price as a signal for new investment, (c) the potential for non-IOU LSEs to opt out completely from the CFRM, thus diminishing its depth and liquidity even further, (d) the differences between the RA capacity products traded in the PCS versus the CFRM, and how these might impact incentives for suppliers to transact in one venue or the other, and (e) how to manage the potential capacity inadequacy and the associated backstop cost allocation impacts in the event that some of the opt-out RA capacity fails to materialize when the delivery period arrives. These concerns are elaborated below in our discussion of some of the design details of the PCS as described in the Updated MCM Proposal.

B. The Capacity Product

The CAISO supports in principle Staff's view in the Updated MCM Proposal that the "capacity product traded in the MCM must meet specified minimum requirements, and would have a geographic component."⁴ The CAISO agrees that close coordination is needed with the CPUC and CEC to ensure that capacity procured under the MCM meets system requirements. Moreover, we agree with Staff that the Standard Capacity Product ("SCP") under development by the CAISO is "envisioned to be the metric by which capacity procurement is measured relative to the RAR." However, this statement is then qualified by Staff's observation that "not all capacity necessarily needs to meet

⁴ Updated MCM Proposal, p. 5.

the exact terms of the CAISO's SCP. Rather, capacity that is procured bilaterally is expected to meet minimum reliability characteristics, while the SCP will be purchased in the CFRM."⁵

The Staff does not make clear what characteristics would differentiate the non-standard PCS product from the SCP. With respect to minimum standards for capacity, the CAISO generally agrees with Staff that they should include NQC counting conventions, must offer obligations, and penalties for non-performance.⁶ With the exception of "dispatchability" these are the core elements under discussion for the SCP.⁷ Given the CAISO's support for an SCP design based on these elements, the CAISO is not certain what non-standard terms Staff means to suggest. Absent clarification by the Energy Division Staff clarify as to which SCP characteristics it believes are non-standard and need not be met by bilaterally procured RA capacity, it is not possible to assess the impacts of bifurcating the RA capacity product under the Updated MCM Proposal.

In addition to being unclear about the non-standard characteristics of the PCS product, the Updated MCM Proposal raises concerns that non-standard products will dominate the RA market, due to the high volume transacted under the PCS structure. Read literally, the statement that the SCP will be "purchased" in the CFRM – a market which after self-supply could amount to no more than 5% of each IOU's RA requirement -- implies that very little RA could be required to be qualified as SCP. Even

5 Ibid.

6 Id.at 5-6.

7 We note that "dispatchability" is generally not considered to be a minimum standard because many RA resources are not dispatchable. Such resources are self-scheduled through the market with the intention of not being dispatchable, except for reliability reasons. Dispatchability may thus be a desirable performance attribute for future RA resources, but would not typically be a minimum standard required of all RA capacity.

if the SCP is applied to all capacity cleared (rather than necessarily purchased) through the CFRM, it would still only be 25% of each IOU's RA requirement.

The CAISO's initial approach to the SCP in stakeholder discussions is that it would encompass most if not all RA capacity and would thus be incorporated into any bilateral trading that takes place outside the centralized market, as well through the centralized market. In this regard, the Updated MCM Proposal appears to run counter to the expectations of most market participants in the SCP stakeholder discussion.

Finally, under the assumption that SCP performance requirements and incentives will extend to the PCS capacity, it is not clear in the Updated MCM Proposal whether Staff intends that any SCP-related performance penalties for PCS capacity would be processed through CAISO settlement, even though the RA capacity payment would not. The CAISO is concerned that processing performance penalties through its settlement system for PCS capacity whose RA capacity payment is outside that system will require the implementation of differential credit requirements for PCS versus market-cleared RA capacity.

C. The PCS Design Needs Further Clarification

If Energy Division Staff recommends adopting a PCS, then a number of clarifications are still necessary to assess the degree to which the PCS design could undermine the function and objectives of the CFRM. These include how the PCS target would be allocated among LSEs' local and system RA requirements, how penalties for not meeting PCS requirements would be established, and what potential incentives would be created by the "opt-out" approach.

In our prior comments, the CAISO noted that it is not clear whether the 90 percent PCS target would apply only at the system level or would apply to each Local Capacity Area (“LCA”).⁸ This lack of specificity has not been resolved. In the Updated MCM Proposal, Energy Division Staff indicates that “such a level of detail [does] not yet exist in the MCM. It is expected that the LRA’s resource adequacy mechanism would address local capacity concerns. Additionally, the CFRM would provide an additional mechanism to address local capacity requirements.”⁹

How the 90 percent is applied could have significant impact on the functioning of the CFRM and needs to be determined. Specifically, the CAISO is concerned that if the 90 percent target is intended to apply only at the system level, then the IOUs could completely ignore their Local Capacity Requirements (“LCR”) in meeting the 90 percent target. The CFRM, however, would be designed to clear both system-wide and LCA demand quantities, which means that the impact on the performance of the CFRM of an opt-out target that applied only at the system level could be very different for different grid areas. For example, the volume of RA capacity that opts out of the CFRM could be very large in a particular LCA, driving the CFRM demand in that LCA to zero or close to zero, thereby eliminating any potential value of a CFRM price to signal a need for investment in that LCA.

The CAISO believes that a primary reason to establish a centralized capacity market is to provide transparent, competitively driven prices in each LCA that will signal the need for investment and will facilitate efficient competition between generation investment, demand response and transmission upgrades into constrained areas of the

8 CAISO Comments, p. 17.

9 Updated MCM Proposal, p. 10.

grid. The potential for the opt-out provision to undermine this objective is therefore a significant concern. Alternatively, if the 90 percent target is intended to apply in each LCA, then the question of how this requirement will be enforced on the LSEs becomes particularly important.

In our prior comments, the CAISO observed that Staff's MCM proposal did not specify how the CPUC would enforce the 90 percent PCS target; specifically, what consequences an IOU would face if it procures less than the target value.¹⁰ If the 90 percent requirement is applied in each LCA, the penalty the CPUC would impose on the IOU and the terms under which an IOU may be granted a waiver of the 90 percent requirement would be material to the bilateral contracting strategies of both IOUs and suppliers. By raising this issue, the CAISO is not necessarily urging the CPUC to specify all these details in its decision; rather, the CAISO is suggesting that specifying a hard target (simultaneous maximum and minimum) amount of each IOU's opt out of the CFRM may be a problematic way to try to structure the bilateral procurement of its regulated LSEs, for example, because of the complex incentives it creates for both buyers and suppliers and the resulting potential for unintended consequences.

The Updated MCM Proposal indicates that "if an LSE's load share obligation in the delivery year is more than [the] capacity commitment provided through the PCS the LRA must pay its load share obligation for the capacity committed through the CFRM."¹¹ This statement provides clarification that at least one penalty for failure to meet the PCS is exposure to the CFRM. However, the ability of the CFRM to correct for an LSE's

10. The CAISO understands that if the IOU procures more capacity than the 90 percent target, only the 90 percent target value would be eligible to opt out of the CFRM, and the rest of the capacity would be offered into the CFRM as self-supply up to the 5 percent threshold for required exposure to the CFRM price. The CAISO requests that Staff confirm that this is correct.

11. Updated MCM Proposal, p. 6.

failure to meet the PCS target will occur over a period of time. It will not address problems that arise in instances where capacity committed under the opt-out provision fails to become available in the delivery period. If an IOU procures new generation under the 90 percent rule, how would the new generator's construction milestones be monitored and what criteria and procedures would be followed to determine if the new resource becomes unable to meet its delivery commitment? When and how would backstop capacity be procured in the event the generator's commercial operation date becomes unachievable? How would the costs of such backstop procurement be allocated?

Energy Division Staff clarify that the timeline for the PCS and CFRM will be established in the CAISO Tariff and governed by the time needed to “perform administrative functions relative to LRAs’ approval of showings and coordination between LRAs and the CAISO.”¹² This approach seems appropriate in the context of a bifurcated market; however, key ambiguities still remain in the MCM design. For example, the Updated MCM Proposal states that an LRA “may simply certify to the CAISO that capacity has been procured by its jurisdictional entities.”¹³ This statement fails to recognize the process by which RA capacity is identified by the CAISO as meeting local or only system requirements, as well as the process of conducting LCR analysis to ensure reliability. Under the CAISO’s process, all RA capacity whether system or local must identify the specific resource that will supply the capacity. Moreover, all RA capacity located in LCAs is subject to further analysis of its “effectiveness” in the event of contingencies and LSEs may be required subsequently to

¹² Ibid.

¹³ Ibid.

adjust their RA portfolio. The PCS portfolio will be subject to this same analysis, but such analysis requires consideration of the full portfolio (PCS plus CFRM), and so would appear to be an after the fact analysis under the bifurcation model. Hence, there is ambiguity as to the meaning of the proposed simple certification and its value for demonstrating achievement of the targeted planning reserve margin.

As was discussed in the workshop by participants, in the alternative that LSEs would have to self-supply their bilaterally procured RA capacity through a central capacity market, the LCA analysis could be undertaken within the forward central market time-frame through a network analysis (and not only after the RA showing, as is done today and would be continued under the bifurcated market). A comprehensive LCA analysis under a central capacity market would allow for a more flexible accommodation of the impact of transmission constraints on RA effectiveness and more time to reconfigure the overall RA portfolio in the LCA if necessary. The bifurcation model as presented appears less adaptable to this potential improvement in the RA program.

We note further that the Updated MCM Proposal appears to assume that if an LRA has PCS RA capacity in excess of its load share obligation in the delivery year, “the LRA does not receive any compensation.” In fact, this potential stranding of RA capacity is exactly the kind of market inefficiency that an SCP and a liquid central capacity market could remedy; i.e., they would provide a mechanism through which excess capacity could be traded and the LSE could be compensated. Under the central capacity market structure, an LSE could buy out of an RA capacity commitment through a buy-back bid in a reconfiguration auction.

The Updated MCM Proposal states that “while bilateral procurement of capacity can occur at any time for any given delivery year... the PCS is expected to occur in the year prior to the initial auction of the CFRM.”¹⁴ While the CAISO recognizes the flexibility this statement would afford bilateral contracting, the proposal does not clarify how such procurement at “any time” would be factored into the sequence of the PCS and CFRM initial and reconfiguration auctions. The CAISO assumes that the initial CFRM auction would be based on the net requirements after the initial PCS showing by all LSEs. Any RA capacity procured bilaterally after that time thus could not be used to reduce an LSE’s obligation to pay costs incurred in the initial auction. Rather, if RA capacity is procured bilaterally after the initial PSC showing, it must be offered as self-supply into a reconfiguration auction and must clear that auction in order to count toward the LSE’s RA capacity commitment. The CAISO requests that Staff affirm the principle that LSEs should not be able to bypass CFRM cost allocation through subsequent bilateral procurement.

As in our prior comments on Staff’s initial MCM proposal, the CAISO’s major concern with the PCS target and the incentives created by the “opt-out” approach is whether the 90 percent value – even if applied to each LCA and at the system level – is so large that it would cause all new investment to enter the market through bilateral arrangements, which would preclude new entry resources from setting prices in the CFRM. In other words, too high a level of the PCS target has the potential to undermine the value of the CFRM price as a signal for new investment in any given LCA and even at the system level. This concern is compounded by the ex-post PER

14 Updated MCM Proposal, p. 7.

deduction proposed by Staff as a feature of the CFRM payment – combined with the absence of such a deduction on the payment to capacity that the LSEs opt out of the CFRM – which will also likely provide a strong incentive for suppliers of new capacity to seek bilateral arrangements to avoid participation in the CFRM.

Finally, the CAISO believes that, if IOUs are permitted to opt out of the CFRM for 90 percent of their load forecast, then all LSEs would be allowed to opt out of the CFRM in order to maintain a level playing field and avoid discriminatory treatment, with the likely end result that the CFRM would be completely optional except to the extent that participation is required by the various LRAs. However, this would exacerbate the CAISO's concern about undermining the value of the CFRM clearing price as a signal and incentive for new investment. The Updated MCM Proposal does not explain this aspect of the opt-out feature. To the contrary, the Updated MCM Proposal further clouds the issue by indicating that each LRA will govern the extent of participation in a PCS. This implies that for non-CPUC jurisdictional LSEs, PCS participation could potentially be 100% of their RA requirements. This outcome would diminish the volume of the CFRM further than envisioned in Staff's original proposal and create additional concerns, as discussed below, about the viability of the CFRM.

In sum, the CAISO recommends self-supply as the mechanism by which LSEs would present their owned or contracted RA capacity through the central capacity market. If the CPUC continues with the "opt-out" approach, however, the concerns that raised by the CAISO must be addressed to ensure that this component of the long-term RA program not create incentives that undermine the potential benefits of the central market-based component of the program.

D. The CFRM Has Some Supportable Elements But Its Final Design Should Be Developed in a Comprehensive Manner

The design details of the CFRM do not appear to have changed significantly from the original Staff Report. The CAISO continues to support certain elements of the CFRM, but believes that these and other design elements should be determined through a comprehensive central capacity market design process. The CAISO reiterates its support of Staff's recommended high-level structure of the CFRM, specifically a primary auction conducted approximately four years ahead of each delivery year, followed by a sequence of reconfiguration auctions through which LSEs and suppliers can buy and sell RA capacity to adjust their holdings and meet unforeseen needs. The CAISO believes that the reconfiguration auctions also provide a natural and transparent "backstop" mechanism to compensate for any identified procurement shortfall or change in market or grid conditions at the system level or in an LCA.

The CAISO also continues to support the use of a vertical (rather than sloped) demand curve in the central capacity market and the use of Cost of New Entry ("CONE") as the reference point for bids by new resources. We also support a price ceiling and perhaps a price floor to be determined as part of the design process of a central capacity market. However, as we stated in our prior comments and reiterate here, predetermining these parameters and imposing the requirement of a PER deduction in a piecemeal fashion rather than through a fully comprehensive design process could lead to unforeseen internal contradictions or inefficiencies and thereby disrupt the design of a well functioning centralized market.

Turning first to the CONE, the CAISO believes that the comprehensive

centralized capacity market design process would be the appropriate venue to work out needed details such as which entity has the responsibility for formulating the CONE estimates, what would be the frequency of revising the estimates, and how would revised CONE estimates be used versus previous centralized capacity market clearing prices for setting the demand curve or any applicable price floors or ceilings in reconfiguration auctions or in primary auctions beyond the first year of operation of the centralized capacity market. The process could also be used to determine how the cap would be set. It is simply unclear in the Updated MCM Proposal what is meant by the statement that “staff supports a cap on CONE that is lower than the cap on net CONE that exists in other capacity markets.”¹⁵ The CAISO suggests, and requests Staff to confirm, that the statement refers to the multiplier used in setting the cap rather than the cap itself.

Another significant concern of the CAISO is the effect of the 5 percent level of required IOU exposure on the functioning and effectiveness of the CFRM in meeting market design and policy objectives. As with the 90 percent opt-out target, it is not clear whether the 5 percent required exposure of each IOU to the CFRM clearing price would apply only at the system level, or would apply to each LCA. If it is applied on an average basis, i.e., averaged across the system-wide and all LCA auctions, then the CFRM prices could be systematically driven down in capacity-tight areas to undermine the value of the locational capacity price signals. Alternatively, even if the 5 percent is applied to the system level and to each LCA auction, the 5 percent value appears to be arbitrary and lack analytic support and justification. Further, it may not be sufficient to

¹⁵ Id. at 8.

prevent IOU monopsony power from systematically driving the CFRM price to near zero if the IOUs acquire all needed new generation bilaterally within the 110 percent upper limit on bilateral procurement (i.e., all but the top 5 percent of the 115 percent load forecast plus planning reserve margin RA requirement).

E. Requiring an Ex Post PER Deduction is Premature and May Have Serious Negative Impacts on the CFRM

In the Updated MCM Proposal, Energy Division Staff affirm that the CFRM will include an ex post PER deduction.¹⁶ The CAISO reiterates its concern that a decision to incorporate a PER deduction mechanism into the CFRM settlement structure is premature at this time. As noted in the recommendations we provided for inclusion in the Staff Report, it is the CAISO's opinion that the matter of PER deduction should not be decided apart from the comprehensive capacity market design process.

There are significant reasons to doubt that the PER deduction is a good idea. The capacity payment will be uncertain and will only be known on a month-by-month basis as actual delivery of the capacity occurs. That uncertainty, coupled with the fact that the factors contributing to the monthly price variation are beyond the control of the capacity supplier, will increase the risk of new investment and will at best result in a risk premium being added to capacity offer prices. A less optimistic scenario is that the PER deduction will create a strong incentive for investors to avoid the CFRM entirely, with the result that all new generation investment will occur through bilateral contracts with the IOUs and the value of creating the CFRM will be undermined. Given that a large proportion of RA capacity procurement will occur through bilateral transactions anyway,

¹⁶ Ibid.

the LSEs and their regulators will have complete flexibility to determine their preferred forms and quantities of energy hedge through their regulated procurement processes.

Further, the complexities and controversies to be addressed in designing an acceptable PER calculation method should not be minimized. Among the major issues are the determination of the reference unit, the selection of appropriate fuel prices (locational and temporal aspects), allowance for emissions permit costs, and any special provisions that will be argued for in applying these cost components for a gas-thermal unit to other types of capacity.

With regard to the specifics of Staff's PER proposal, there are several additional points of concern. First, the Staff's discussion of the PER deduction states that capacity payments are not necessary for an adequately resourced market when energy revenues are periodically at some high level. However, the inefficient marginal unit used to measure the PER deduction will likely operate only during peak months during scarcity periods. Hence, while an ex post PER will reduce capacity payments in those months, it is unlikely to lead to the general outcome envisioned by Staff of eliminating capacity payments in an adequately resourced market.

Second, while Staff did not clarify the exact "moderately inefficient marginal unit's heat rate," to be used for calculating the PER deduction, the proposal does reference the heat rate of 22,000 Btu/kWh used to calculate PER in the ISO-New England FCM. The CAISO seeks clarification from Staff that it is proposing use of that heat rate for its PER calculation.

Third, we seek further explanation and detail about the proposed settlement of the PER deduction. The Updated MCM Proposal states that "in general the settlement

process is expected to occur monthly...¹⁷ However, footnote 1 in the proposal also states that “the PER deduction may be calculated over a period of time that extends beyond a month.” This appears to be inconsistent. The CAISO believes that monthly settlement after each delivery month is an effective and administratively efficient way to settle the centralized capacity market, because it allows for payment to suppliers based on actual delivery and charges to LSEs based on actual load. It is unclear whether and how the Updated MCM Proposal would maintain this principle while applying a PER deduction that is calculated over a multi-month period.

F. The Relationship of De-list Bids and Price Floors in the CFRM Remains Unclear

The initial Staff Report recommended that there would be no price floor in the CFRM. Instead, all existing resources would be required to submit list/de-list bids into the CFRM, in the absence of which they would be considered price-takers. De-list bids would be capped at 0.7 times CONE; higher bids would be subject to a cost review by the CAISO market monitor. In the recent workshops and in the Updated MCM Proposal, Energy Division Staff clarified that de-list bids would set a “market based floor/clearing price during periods of oversupply of capacity (unless a new generation unit with a lower bid sets the market price).¹⁸ The CAISO is concerned about the absence of a price floor, with known properties, in the CFRM. We urge Staff to revisit this issue, especially since, for the reasons noted above, new generation may rarely or never set CFRM prices.

With regard to de-listing, the CAISO agrees with the CPUC Staff that it is

17 Ibid.

18 Id. at 21.

important to include a list/de-list mechanism as an element of the CFRM, but given the Staff's emphasis on designing the list/de-list mechanism to prevent economic withholding, the CAISO is concerned that this mechanism may not be adequate to ensure that CFRM prices realistically reflect the economics of RA procurement. The requirement that all existing generation submit a de-list bid seems like nothing more than requiring all capacity to be offered into CFRM if not already procured bilaterally. Energy Division Staff should clarify what the difference is between a de-list bid and an offer into the market. In other markets, such as ISO New England, there are different categories of de-list bids, some of which signal a de-list from the current iteration of the capacity market while others signal permanent de-list. It is not clear the extent to which Energy Division Staff contemplated that distinction, and whether it views offering into and failing to clear the market as the same as de-listing.

IV. CONCLUSION

For the foregoing reasons, the CAISO respectfully requests that the Commission adopt the CAISO's positions and recommendations in this matter, and establish a long-term RA framework with the discussion in these comments.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT ON OCTOBER 1, 2008, I SERVED, BY ELECTRONIC MAIL AND UNITED STATES MAIL, A COPY OF COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON STAFF'S MODIFIED CENTRALIZED MARKET PROPOSAL IN DOCKET NUMBER R.05-12-013.

DATED at Folsom, California on October 1, 2008.

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