CAISO Comments in Response to "Opinion on Long Term Resource Adequacy under MRTU" Issued by the Market Surveillance Committee, November 5, 2007

The current proceeding of the California Public Utilities Commission (CPUC) on Long Term Resource Adequacy (LT-RA) is considering, among other things, whether to adopt a central capacity market (CCM) as a central element of its LT-RA framework, and if so, what should be the main design features of a CCM. Underlying these questions is the recognition that enhancements to the current one-year-ahead RA framework are needed to better ensure the commitment of sufficient supply capacity – including investment in new generating plants, demand response, and imports – to meet the expected demand of the CPUC's jurisdictional load serving entities (LSEs) cost-effectively and support the reliable operation of the CAISO transmission system. As discussed further below, enhancements to the current RA structure are driven largely by the need for a more forward assessment of capacity committed to the CAISO control area to allow effective planning for reliability needs, particularly as the composition of supply resources is changing to incorporate more demand response and renewable resources. In addition, the RA framework needs to provide transparent capacity prices and stable rules and procedures in order to create an environment attractive to market-based investment.

The opinion offered by the Market Surveillance Committee (MSC) of the CAISO argues that only some refinements to the current RA framework are warranted, and urges the CPUC not to adopt a CCM nor make any substantial changes to the RA framework at this time. The MSC argues that substantial changes to the current RA framework are not appropriate at this time because of uncertainties regarding the future (a) performance of the CAISO's redesigned MRTU market structure, (b) performance of the new capacity market designs being implemented by the eastern ISOs, and (c) structure of Direct Access (i.e., retail competition) in California. In support of its "wait and see" recommendation the MSC asserts that existing state policies with respect to energy efficiency and renewable portfolio standards will elicit sufficient new generation and demand response investment to meet load growth through 2020, thereby obviating the need for any additional new market-based investment that might be stimulated by a CCM. In summary, the MSC states that "a far more prudent and cost-effective course of action at this point is to refine the current RA paradigm to correct known flaws rather than completely overhaul it, while preserving the option of a full redesign at a later date."

The CAISO appreciates the involvement of MSC members in the CAISO stakeholder process to address CCM design issues, as well as the MSC's October 1 all-day meeting held at the CPUC devoted entirely to LT-RA, and the helpful insights and recommendations expressed in its November 5 formal opinion on LT-RA matters. It is important to recognize that the MSC is fully independent of CAISO management and advises the CAISO Board of Governors and, in the course of doing so, offers the benefits of its expertise to policy makers and the stakeholder community. As such the MSC's views do not reflect and need not align with the views of CAISO management. Moreover, the present LT-RA proceeding is somewhat unusual in that both CAISO management and the MSC are providing recommendations to the CPUC to be considered in its upcoming decision on the design of a LT-RA framework. The CAISO believes it is important, therefore, to clarify certain areas where its views are not in agreement with the MSC's November 5 opinion, which is the purpose of the present CAISO comments.

The CAISO believes that the CPUC should not postpone making key decisions on the design of the LT-RA framework with the idea of keeping such decisions open for a major redesign at a later time. Rather, significant enhancements to the current RA framework are needed and

should be addressed within the current CPUC proceeding. The CAISO's views are further elaborated in the following key points.

1. Market participants and investors need greater certainty about the Long Term Resource Adequacy framework.

Market participants and potential investors need greater clarity and certainty regarding the LT-RA framework sooner rather than later in order to provide a stable environment to attract market-based investment in the power sector. A major reason for electricity restructuring has been to attract market-based investment rather than continuing to rely mainly on rate-based investment by the regulated utilities. Market-based investment benefits electricity consumers by allocating investment risk more broadly and efficiently across industry participants rather than allocating it entirely to ratepayers. For market-based investment to grow and succeed in California, however, it will require resolution of the remaining industry structure and policy issues that have been open and under debate since the 2000-1 crisis, in a manner that supports markets through transparent pricing and competitive procurement mechanisms. Rather than postponing the resolution of the remaining issues, the CPUC should address the key decisions needed to define a LT-RA program that can provide, in combination with the CAISO's comprehensive MRTU market redesign, a stable electricity market structure and an attractive environment for market-based investment.

2. Resource Adequacy capacity should be committed and identified several years ahead of the delivery year.

The CAISO believes that today's RA framework should be enhanced by establishing a multiyear forward (MYF) process for identifying resources that are actually committed to serve the CAISO control area and assessing their sufficiency relative to a MYF assessment of capacity needs developed by the state agencies and the CAISO. Such a process will allow transparent. open competition between existing resources and new market-based investment to provide specified quantities of capacity at the system level and for each local capacity area. This process can also encompass decisions to repower or retire existing generation and to invest in new demand response capability, and can even be linked explicitly to decisions whether to upgrade transmission into constrained areas of the grid. The MSC states that they could be supportive of a more forward RA compliance process than exists today, but only after a demonstration that firms are not sufficiently contracting on their own. The CAISO does not believe that conditioning the LT-RA design on such a demonstration is practical or desirable because (a) by the time such a demonstration were made it would likely be too late to take any remedial action that could include competition from new entry, and (b) a significant effort would be needed just to specify criteria for such a demonstration and for any subsequent decision to establish a MYF compliance process. The CAISO therefore believes this element of LT-RA should be addressed in the current proceeding.

3. A central capacity market can eliminate the need to enforce individual LSE RA requirements in a multi-year forward RA framework.

Although a MYF process to identify committed capacity does not necessarily require a CCM, there are some advantages to adopting a CCM in conjunction with the MYF process. Under a MYF requirement to demonstrate actual capacity commitments, there is clearly much more uncertainty about each LSE's system and local capacity requirements for the delivery year than under today's one-year forward requirement. The possibility of expanded direct access load migration further increases the uncertainty, which may make MYF showings particularly burdensome for smaller LSEs and an impediment to the success of direct access. From the perspective of overall supply sufficiency, however, what is important is that the total system and local requirements are met, irrespective of each LSE's share of those requirements. The

process can therefore be made less burdensome on LSEs and administratively simpler if it is structured to ensure sufficient capacity procurement in the aggregate (for the system and for each local area) without imposing exact quantity requirements on each LSE several years in advance of the delivery period. The CAISO believes that a CCM could be an efficient and transparent way to accomplish this objective. Under such a system, the LSEs would still have the opportunity to engage in bilateral procurement in accordance with the rules and procedures established by the CPUC or their local regulatory authorities, and to self-supply such capacity into the CCM thereby managing their exposure to CCM prices, but each LSE's ultimate obligation would need to be determined only in the period when the capacity is actually delivered.

4. A central capacity market with reconfiguration auctions simplifies backstop procurement and capacity trading by LSEs.

Another benefit of a CCM in conjunction with MYF commitments of capacity is that the CCM effectively and automatically fills the role of a "backstop" mechanism for procuring additional capacity to meet any shortfall in LSE procurement. Because the CCM's procurement targets are set to meet the total system and local requirements for all LSEs in the aggregate, it will procure the difference between those requirements and the total LSE self-supply quantities, and will do so without having to assess the sufficiency of each LSE's capacity procurement. Additionally, any LSEs that have bilaterally procured more system or local capacity than they expect to need for the delivery period may offer their excess capacity into the CCM. Finally, by holding a series of "reconfiguration" markets between the primary CCM and the delivery period it will be possible for individual LSEs, for suppliers, and for the CAISO on behalf of the system as a whole to adjust the quantities of committed capacity to reflect new information on the actual requirements for the delivery period.

5. The RA Must Offer Obligation provides an effective basis for standardizing the RA capacity product and should be retained for all RA capacity.

The CAISO recognizes and affirms the need to develop further details of the specification of the standard capacity product, and in this regard strongly recommends against any dilution of the RA Must Offer Obligation (RA-MOO). There are several reasons for this position. First, although the RA-MOO does present some challenges due to the fact that different types of capacity have different availability characteristics, at present there is no basis other than the RA-MOO on which to standardize the capacity product. Since the RA framework was first implemented, the standard service that RA capacity provides in exchange for the RA capacity payments it receives is its compliance with the RA-MOO provisions of the CAISO tariff. While it may be possible to develop an alternative basis for the standard RA product, that would not be a minor fix but would involve a substantial rework of the RA framework. Second, the fact that different types of capacity have different performance characteristics does not undermine the value of the RA-MOO. Provided that the RA-MOO tariff provisions and the rules for counting qualifying capacity are realistically based on each resource type's actual characteristics, it is possible to utilize the RA-MOO-based structure to achieve the target level of reliability. In particular, it is possible to define qualifying rules for RA imports to obtain RA-MOO performance that is equivalent to that of internal resources. Third, retaining the RA-MOO as the basis of the RA product definition is not incompatible with the MSC's suggestion to identify new ancillary services that may be needed to support grid reliability as the nature of the system resource mix evolves. The CAISO has already acknowledged that this effort will be undertaken after the startup of the MRTU markets. With this approach, the additional performance value provided by AScapable resources can be compensated directly through the AS markets.

In conclusion, the CAISO emphasizes the need for the CPUC's current LT-RA proceeding to provide greater certainty and stability than exists today regarding the regulatory framework that will guide long-term investment and contracting to meet California's electricity needs. The CAISO recognizes that these matters are complex and involve the interplay of multiple policy objectives. At the same time, the California framework has been developing at a careful and deliberate pace while functioning with many "interim" measures since the 2000-1 crisis. We have now had several years of experience with the current RA rules, plus several years of lessons learned from the various RA approaches tried by the other ISOs, and are approaching the go-live of the CAISO's six-year market redesign effort based on the best-practices of other successful ISO market designs. The CAISO believes therefore that it is timely for the CPUC to provide its LT-RA vision through its ruling in this proceeding.